



Delaware River  
Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

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Submitted on behalf of  
The Chemours Company

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## Acronym List

Acronym	Explanation
µg/kg	Microgram per Kilogram
µg/L	Microgram per Liter
µm	Micrometers
ADQM	Analytical Data Quality Management
AOC	Area of Concern
ATSDR	Agency for Toxic Substances and Disease Registry
AUF	Area Use Factor
AWQC	Ambient Water Quality Criteria
BAZ	Biologically Active Zone
BEE	Baseline Ecological Evaluation
BHC	B-hexachlorocyclohexane
BSAF	Biota-Sediment Accumulation Factor
BTAG	Biological Technical Assistance Group
BTV	Background Threshold Value
BW	Body Weight
CCME	Canadian Council of Ministers of the Environment
CFC	Chlorofluorocarbons
cfs	Cubic Feet per Second
COI	Constituent of Interest
COPEC	Constituent of Potential Ecological Concern
CRG	Corporate Remediation Group
CSIA	Compound Specific Isotope Analysis
CSM	Conceptual Site Model
DCE	Dichloroethene
DDE	Dichlorodiphenyldichloroethene
DEBI	Delaware Estuary Benthic Inventory
DGW	Discharge to Groundwater
DIVER	Data Integration Visualization Exploration and Reporting
DNAPL	Dense Non-Aqueous Phase Liquid
DNT	Dinitrotoluene
DRBC	Delaware River Basin Commission
DSW	Discharge to Surface Water
DuPont	E.I. du Pont de Nemours and Company
DVM	Data Verification Model
ECSM	Ecological Conceptual Site Model
EDD	Estimated Daily Dose
EI	Environmental Indicator
EPA	U.S. Environmental Protection Agency
EPC	Exposure Point Concentration
EPI	Estimation Programs Interface
EqP	Equilibrium Partitioning
ERAGS	Ecological Risk Assessment Guidance for Superfund
ESA	Environmentally Sensitive Area
ESB	Equilibrium Partitioning Sediment Benchmark
ESBTU	Equilibrium-Partitioning Sediment Benchmark Toxic Unit
ESV	Ecological Screening Value
FCV	Final Chronic Value
$f_{oc}$	Fraction Organic Carbon
GOF	Goodness of Fit
HMW	High Molecular Weight

<b>Acronym</b>	<b>Explanation</b>
HQ	Hazard Quotient
ISM	Interim Stabilization Measure
IWS	Interceptor Well System
IWTU	Interstitial Water Toxic Unit
K <sub>oc</sub>	Organic Carbon-Water Partitioning Coefficient
K <sub>ow</sub>	n-Octanol/Water Partition Coefficient
L/kg	Liter per Kilogram
LC <sub>50</sub>	Lethal concentration for 50 percent of test organisms
LEL	Lowest Effects Level
LMW	Low Molecular Weight
LOAEL	Lowest Observed Adverse Effect Level
log	Base 10 Logarithm
MDL	Method Detection Limit
mg/kg	Milligrams per Kilograms
mm	Millimeters
MS	Matrix Spike
MSD	Matrix Spike Duplicate
N.J.A.C.	New Jersey Administrative Code
NAPL	Non-Aqueous Phase Liquid
NAVD	North American Vertical Datum
NEL	No Effect Level
NGVD	National Geodetic Vertical Datum
NJDEP	New Jersey Department of Environmental Protection
NJPDES	New Jersey Pollutant Discharge Elimination System
NJTRSR	New Jersey Technical Requirements for Site Remediation
NJWQS	New Jersey Surface Water Quality Standards
NOAA	National Oceanic and Atmospheric Administration
NOAEL	No Observed Adverse Effects Level
NOEC	No Observed Effects Concentration
NRWQC	National Recommended Water Quality Criteria
NSOC	Natural Sedimentary Organic Carbon
ORP	Oxidation-Reduction Potential
PAH	Polycyclic Aromatic Hydrocarbon
PAR	Preliminary Assessment Report
PCA	p-Chloroaniline
PCB	Polychlorinated Biphenyl
PFAS	Poly- and Perfluoroalkyl Substance
PP	Priority Pollutant
PPT	Parts per thousand
R.M.	River Mile
RCRA	Resource Conservation and Recovery Act
RESV	Refined ESV
RFI	RCRA Facility Investigation
RIR	Remedial Investigation Report
RIWP	Remedial Investigation Work Plan
RME	Reasonable Maximum Exposure
RPD	Relative Percent Difference
SCV	Secondary Chronic Value
SLERA	Screening Level Ecological Risk Assessment
SMDP	Scientific Management Decision Point
SPB	Sheet-Pile Barrier
SQB	Sediment Quality Benchmark

<b>Acronym</b>	<b>Explanation</b>
SVOC	Semi-Volatile Organic Compound
SWI	Sediment-Surface Water Interface
SWMU	Solid Waste Management Unit
TAL	Target Analyte List
TCB	Trichlorobenzene
TCE	Trichloroethene
TEL	Tetraethyl Lead
TOC	Total Organic Carbon
TRV	Toxicity Reference Value
TU	Toxic Unit
UCL <sub>mean</sub>	Upper Confidence Limit of Mean
UF	Uncertainty Factor
UPL	Upper Prediction Limit
USACE	U.S. Army Corps of Engineers
USCG	U.S. Coast Guard
USGS	U.S. Geological Survey
USL	Upper Simultaneous Limit
UTL	Upper Threshold Limit
VOC	Volatile Organic Compound
WHO	World Health Organization
WQB	Water Quality Benchmark

## Executive Summary

The *Delaware River Screening Level Ecological Risk Assessment* (SLERA) was prepared on behalf of The Chemours Company (Chemours) to evaluate potential ecological exposure in the Delaware River adjacent to Chambers Works (the site) located in Deepwater, New Jersey. The U.S. Environmental Protection Agency (EPA) requested that a SLERA be completed for the Delaware River in comments provided on the *Comprehensive RCRA Facility Investigation (RFI) Report* (URS, 2014). The RFI Report described impacted groundwater, including dense non-aqueous phase liquid (DNAPL) in the shallow aquifer, that has the potential to discharge to the Delaware River. The RFI Report and 2011 *Delaware River Remedial Investigation Report* (RIR) recommended further evaluation of ecological exposure to sediment in the Delaware River adjacent to Chambers Works following the attainment of hydraulic control at the site perimeter (URS, 2011; URS, 2014).

Engineering controls, including an interceptor well system (IWS) operating since 1970 and a perimeter sheet pile barrier (SBP) system installed between 2015 and 2018, have been implemented to control the off-site migration of groundwater to the Delaware River. Based on the recommendations in the RFI and RIR and in response to the request from EPA, this SLERA was prepared to evaluate potential risks to ecological receptors exposed to site-related constituents in the Delaware River adjacent to Chambers Works. The SLERA was conducted in accordance with EPA Ecological Risk Assessment Guidance for Superfund (ERAGS; EPA, 1997a) and New Jersey Department of Environmental Protection (NJDEP) *Ecological Evaluation Technical Guidance*, where applicable (NJDEP, 2018).

Primary site-related constituents of potential concern (COPECs) include metals, volatile organic compounds (VOCs), and semi-volatile organic compounds (SVOCs) including polycyclic aromatic hydrocarbons (PAHs). Based on the phases of investigations conducted to date, four exposure areas were identified in the Manufacturing Zone and Carneys Point Zone of the Delaware River for evaluation in the SLERA:

- Manufacturing Zone – Jackson Labs/TEL Area
- Manufacturing Zone – Fluoroproducts Area
- Manufacturing Zone – SWMU 5/Henby Creek Area
- Carneys Point Zone

Primary migration pathways from source areas to exposure areas in the Delaware River include historical groundwater discharge, current and historical discharge from outfalls, and current and historical surface water drainage.

Ecological receptor groups evaluated in the in the SLERA include the following:

- Benthic invertebrate community
- Fish community
- Semi-aquatic bird populations: Black Duck (*Anas rubripes*) and Double-crested Cormorant (*Phalacrocorax auritus*).

Potential ecological exposure was evaluated using relevant surface water and sediment data from previous investigations conducted in the Delaware River and the Tidal Reach of Salem Canal. Ecological exposure was assessed based on screening-level exposure estimates that quantified potential risk using the most conservative exposure scenario

and refined exposure estimates that quantified potential risk based on site-specific inputs (e.g., sediment organic carbon) and more representative exposure assumptions (e.g., upper confidence limit of the mean exposure point concentrations). A summary of the findings of the SLERA findings and recommendations is presented below for the Manufacturing Zone and Carneys Point Zone.

## Manufacturing Zone

The results of the refined risk characterization for the Manufacturing Zone indicated the potential for adverse effects to benthic invertebrate receptors in spatially-limited areas along the Delaware River shoreline. The refined risk characterization for fish and semi-aquatic wildlife indicate limited potential for adverse effects.

Spatially-limited areas along the Delaware River shoreline adjacent to the Manufacturing Zone have the potential to adversely affect benthic invertebrate communities through direct contact exposure pathways based on equilibrium partitioning sediment benchmarks (ESBs) used in the refined risk estimates. Specific exposure areas with the greatest potential for adverse effects to benthic invertebrate receptors include:

- Fluoroproducts Area: Potential exposure to benthic invertebrates in the Manufacturing Zone is greatest in four nearshore grid cells adjacent to AOC 1 centered near stations DER15-BOR-19 and DER15-BOR-17 where the sum of non-PAH Narcotic equilibrium partitioning sediment benchmark toxic units ( $\sum$ ESBTU) values exceed 1 within the biologically active zone (BAZ). Primary narcotic constituents contributing to non-PAH Narcotic  $\sum$ ESBTU values greater than 1 include chlorobenzene, dichlorobenzenes, and benzene. Sampling stations with non-PAH Narcotic  $\sum$ ESBTU values indicating the potential for adverse effects are bounded in each direction by stations with non-PAH Narcotic  $\sum$ ESBTU values < 1, indicating that the area of potential benthic invertebrate community impacts is defined based on existing bulk sediment data.
- Jackson Labs/TEL Area: Potential exposure to site-related organic COPECs, particularly 1,2,4-trichlorobenzene and chlorobenzene, is greatest in a localized nearshore area near sampling station DER2-05-SD. Localized areas of elevated concentrations of select metals, including chromium and lead, and PAHs were also identified in nearshore areas of the Salem Canal Tidal Reach.

Except for the nearshore grid band of the Fluoroproducts Area and spatially-limited nearshore areas within the Jackson Labs/TEL Area, potential risk to benthic invertebrates are low in other areas of the Manufacturing Zone. Refined exposure estimates for exposure to other COPECs within the BAZ indicate spatially limited exceedances with hazard quotients (HQs) or ESBTU values generally less than 5.

Preliminary exposure estimates indicate that constituents detected in surface water pose negligible risk to fish communities. Exceedances of ecological screening values (ESVs) for aluminum and iron were ubiquitous in the Delaware River surface water dataset in the Manufacturing Zone and Carneys Point Zone, indicating that concentrations of these metals are likely related to regional water quality conditions. Single sample exceedances of lead (dissolved) and 1,4-dichlorobenzene in surface water samples within the Manufacturing Area were infrequent and did not substantially exceed conservative ESVs (HQs < 1.6) to result in adverse effects to fish communities.

Refined exposure estimates indicate negligible site-related risk to semi-aquatic wildlife that may potentially forage throughout the Delaware River. Site-related constituents generally have limited potential for bioaccumulation and, therefore, limited potential for

exposure to upper trophic wildlife receptors through bioaccumulation and ingestion pathways.

Based on the SLERA findings for the Manufacturing Zone, further evaluation of the potential for adverse effects to benthic invertebrate receptors is recommended in localized areas identified in the Fluoroproducts Area and Jackson Labs/TEL Area. A tiered approach is recommended to further evaluate benthic invertebrate exposure to nonionic organic COPECs based on ESBTUs and the direct measurement of freely dissolved pore water concentrations. The results of the tiered evaluation will be used to inform the need for further assessment or remedial decision-making. Targeted sampling has also been proposed in the Salem Canal Tidal Reach to further characterize the spatial extent and assess potential impacts of elevated concentrations of lead and PAHs.

No further evaluation of exposure to fish or semi-aquatic wildlife receptors is warranted in the Manufacturing Zone adjacent to Chambers Works.

### **Carneys Point Zone**

The refined risk characterization for the Carneys Point Zone indicated limited potential for adverse effects to ecological receptor groups. Based on direct contact pathways, risk to benthic invertebrates is low. Refined exposure estimates indicate that exceedances of refined ecological screening values (RESVs) in the BAZ were spatially limited and HQs or ESBTU values were low (generally less than 3).

Preliminary exposure estimates indicate that constituents detected in surface water pose negligible risk to fish communities. Exceedances of ESVs for aluminum and iron were ubiquitous in the Delaware River surface water dataset in the Manufacturing Zone and Carneys Point Zone, indicating that concentrations of these metals are likely related to regional water quality conditions. No other COPECs were identified in surface water in the Carneys Point Zone.

Refined exposure estimates indicate negligible site-related risk to semi-aquatic wildlife that may potentially forage throughout the Delaware River. Site-related constituents generally have limited potential for bioaccumulation and, therefore, limited potential for exposure to upper trophic wildlife receptors through bioaccumulation and ingestion pathways.

Based on the findings of the refined risk characterization, no further evaluation of exposure is warranted in the Carneys Point Zone for the primary ecological receptor groups evaluated in the SLERA.

## 1.0 Introduction

The *Delaware River Screening Level Ecological Risk Assessment* (SLERA) was prepared on behalf of The Chemours Company (Chemours) to evaluate potential ecological exposure in the Delaware River adjacent to the Chambers Works Complex (the site) located in Deepwater, New Jersey (Figure 1). Chemours assumed operations and environmental investigations at Chambers Works from E.I. du Pont de Nemours and Company (DuPont) in 2015.

The SLERA was prepared in response to U.S. Environmental Protection Agency (EPA) and New Jersey Department of Environmental Protection (NJDEP) comments on the *Comprehensive RCRA Facility Investigation (RFI) Report* that was completed for Chambers Works in 2014 (URS, 2014). The RFI Report described impacted groundwater, including dense non-aqueous phase liquid (DNAPL) in the shallow aquifer, that has the potential to discharge to the Delaware River. In comments on the RFI dated March 23, 2018, EPA requested that a SLERA be completed based on current sample results. EPA stated that the findings of the ecological risk assessment may affect the remedial approach for addressing impacted sediments in the Delaware River.

Multiple environmental investigations have been conducted in the Delaware River adjacent to Chambers Works as part of remedial investigations and interim remedial actions in solid waste management units (SWMUs) on the shoreline. A phased remedial investigation was conducted in the Delaware River between 2009 and 2010 consistent with NJDEP *Technical Requirements for Site Remediation* (URS, 2011). The phased remedial investigation was conducted in accordance with the *Delaware River Remedial Investigation Work Plan* (RIWP), which was developed based on recommendations presented in the *Delaware River Baseline Ecological Evaluation* (BEE) to conduct additional sediment and surface water characterization to support ecological investigations (URS, 2009).

The *Delaware River Remedial Investigation Report* (RIR) presented the findings of the additional sediment and surface water characterization conducted between 2009 and 2010 (URS, 2011). The RIR identified concentrations of site-related volatile organic compounds (VOCs) and semi-volatile organic compounds (SVOCs) in sediment exceeding refined sediment benchmarks in spatially focused nearshore areas of the Delaware River. The exceedances of site-related VOCs and SVOCs in sediment were generally consistent with constituents measured in groundwater and subsurface sediments and indicated that the upward migration of constituents to surficial sediments may be a primary migration pathway. The RIR recommended further evaluation of ecological exposure to sediment in the Delaware River following the attainment of hydraulic control at the site perimeter (URS, 2011). The RFI Report provided a similar recommendation and indicated that an investigation work plan would be developed to address issues identified by EPA and NJDEP regarding the presence of potential site-related constituents in deeper sediment intervals and the potential sub-surface migration pathways to the Delaware River (URS, 2014).

Focused investigations were conducted to define the nature and extent of potential site-related constituent sources that may have the potential for off-site migration and to evaluate potential remedial alternatives to address off-site groundwater migration (URS, 2010; Geosyntec, 2012). In addition, a phased investigation was conducted to delineate the extent of DNAPL in the aquifer under the Delaware River adjacent to Chambers Works (AECOM, 2017a; AECOM, 2018a). The findings of these investigations indicated

that off-site groundwater migration is largely contained by the interceptor well system (IWS) that has been in operation at Chambers Works since 1970, except for a small area of the Manufacturing Zone along the western perimeter of the site where the shallowest aquifer discharges to the Delaware River. Based on these findings, engineering controls were implemented to prevent the off-site migration of impacted groundwater in areas where groundwater discharge to the Delaware River was not contained by the IWS. Engineering controls included the installation of sheet pile barriers (SPBs) to prevent the off-site discharge of groundwater to the Delaware River and on-site pumping of the IWS to provide hydraulic control. Phased installation of the SPB along the Delaware River shoreline was initiated in 2015 and completed in 2018. A remedial action report describing the installation of the SPB is pending.

Given that the installation of the SPB was completed in 2018 to attain hydraulic control in areas not previously contained by the IWS, recommendations in the Delaware River RIR and RFI regarding further ecological evaluation were revisited. In response to the request from EPA in comments on the RFI, relevant surface water and sediment data from the Delaware River were compiled and a SLERA was conducted, as presented in this document.

In addition to comments on the RFI, comments provided by NJDEP on the Delaware River RIR were also revisited in preparation of the SLERA. Key issues identified by NJDEP in a letter dated September 27, 2012 include:

- Additional vertical characterization of potential site-related constituents following the attainment of hydraulic control at the site perimeter.
- Further characterization of constituents, including perfluorooctanoic acid (PFOA), daughter products, bi-products, breakdown products, etc., following the attainment of hydraulic control at the site perimeter.
- Re-evaluation of the background dataset used to establish site-specific background for sediment adjacent to the site.
- Updated references to NJDEP guidance documents and ecological screening criteria (ESCs).

This SLERA addresses the re-evaluation of background datasets (Section 7.2.3) and provides updated references to NJDEP Ecological Evaluation Technical Guidance (NJDEP, 2018). In addition, further vertical characterization has been completed in the Delaware River offshore of the Fluoroproducts Area (AECOM, 2017; AECOM, 2018a); however, additional vertical characterization has not been completed to date in other areas investigated in the RIR. Select sediment and surface water samples collected during the Delaware River Remedial Investigation (URS, 2011), Salem Canal Investigation (AECOM and EHS Support, 2017), and Delaware River Non-Aqueous Phase Liquid (NAPL) Investigation (AECOM, 2018a; AECOM, 2017) were analyzed for perfluorinated compounds. These results are not included in the ecological exposure evaluations presented in the SLERA due to the lack of reliable ecotoxicity data for these constituents. However, sediment and surface water data for perfluorinated compounds in the Delaware River have been presented in the Conceptual Model (CSM) for Poly- and Perfluoroalkyl Substances (PFAS), which provides a detailed discussion of the distribution of these constituents in the Delaware River in the context of potential sources and migration pathways from Chambers Works (AECOM, 2017b).

## 1.1 Scope and Objectives

The purpose of this SLERA is to evaluate potential risks to ecological receptors exposed to site-related constituents in the Delaware River adjacent to Chambers Works. The SLERA was conducted in accordance with EPA *Ecological Risk Assessment Guidance for Superfund* (ERAGS; EPA, 1997a). The scope of the SLERA includes Steps 1 and 2 of the ERAGS guidance. Steps 1 and 2 were used to identify constituents of potential ecological concern (COPECs) in bulk sediment and surface water to support a scientific management decision point (SMDP) regarding the need for further risk characterization.

Further refinement of exposure assumptions, consistent with the re-evaluation procedures prescribed in ERAGS Section 3.2, were also conducted as part of the Delaware River SLERA to focus the assessment on those COPECs and exposure pathways that may require further investigation. The refined ecological exposure evaluation involves using more realistic exposure assumptions and refined exposure point concentrations (EPCs) based on conservative estimates of average exposure scenarios. In addition, the refinement step also allows for the use of background, frequency and magnitude of detection, and dietary considerations to be used to focus the list of COPECs. The refined ecological exposure evaluation also provides spatial context to areas of greater potential exposure that may be the focus of further investigation. In addition to EPA ERAGS, exposure evaluations were consistent with NJDEP *Ecological Evaluation Technical Guidance*, where applicable (NJDEP, 2018).

Specific objectives for each exposure area include the following:

- Identify COPECs in relevant exposure media, including bulk sediment and surface water.
- Identify ecological receptors that may be exposed to COPECs.
- Refine the list of COPECs using exposure assumptions that are more representative of site-specific exposure conditions.
- Recommend a SMDP regarding the need for further evaluation of ecological risk, if warranted.

## 1.2 Report Organization

The SLERA is organized into the following sections:

- Section 2.0 presents the environmental setting.
- Section 3.0 describes the investigation background.
- Section 4.0 summarizes the screening-level problem formulation and effects evaluation.
- Section 5.0 describes the screening-level ecological exposure evaluation.
- Section 6.0 presents the screening-level exposure estimate and risk characterization.
- Section 7.0 presents the refined ecological exposure evaluation.
- Section 8.0 presents the refined exposure estimate and risk characterization.
- Section 9.0 presents the uncertainty analysis.
- Section 10.0 presents conclusions and recommendations.

- Section 11.0 lists the references cited in the SLERA.

## 2.0 Environmental Setting

A detailed description of the physical setting of the Chambers Works Complex, the Delaware River, and the regional geologic and hydrologic setting of the site, has been submitted previously in the *Comprehensive RCRA Facility Investigation Report* (URS, 2014) and supporting documents (DuPont Corporate Remediation Group [CRG], 2008; URS, 2010). Pertinent information on the physical setting of the Delaware River as it specifically relates to this SLERA is provided below.

### 2.1 Site Description

The 1,455-acre site occupies approximately 3.3 miles of shoreline on the tidal Delaware River. Chambers Works is located on the northwestern side of Salem County, New Jersey north of the Delaware Memorial Bridge (Figure 2). The site consists of the former Carneys Point Works Area and the Chambers Works Manufacturing Area.

#### 2.1.1 Operational History

A complete description of operational, regulatory, and investigation history at the site has been previously submitted in Section 6.0 of the *Preliminary Assessment Report* (PAR) (DuPont CRG, 2006b). Brief operational histories of the former Carneys Point Works and the Manufacturing Area are provided below.

The Carneys Point Works operated from 1892 to 1978 and produced smokeless gunpowder, nitrocellulose, and related products (DuPont CRG, 2006b). In the early 1900s, production lines in the Carneys Point Works were increased. In 1914, new plants were constructed to supply gunpowder to Allied Troops in World War I. Plant 1 in Carneys Point Works operated continuously making nitrocellulose and smokeless gunpowder from World War I until 1977, with increased production from 1938 to 1945 during World War II. Spin-offs of nitrocellulose production included nitrate film (celluloid), carboxy methyl cellulose, lacquer, cellulose acetate, and rayon. Cellulose (cotton or wood fibers), alcohols, and acids were primarily used as part of the manufacturing process. Production at the Carneys Point Works ceased in 1978, and decommissioning of the plant was completed around 1979.

The Chambers Works Manufacturing Area began producing dye in 1917 and gradually expanded as other product lines were added, including Performance Chemicals, aramids, fluorochemicals, motor fuel antiknocks, and polymers. The Manufacturing Area produced more than 500 finished products used to make clothing, textiles, computer chips, personal care products, agricultural chemicals, and paint. A brief summary of operations within primary areas of concern (AOCs) in the Manufacturing Area adjacent to the Delaware River (Figure 2) is provided below and discussed in detail in URS (2014):

- AOC 1 (Fluoroproducts Area): This area of the site was used historically by the DuPont Explosives Department to produce picric acid. Following the cessation of picric acid production, ethyl alcohol, butyl alcohol, acetone, and isopropyl alcohol were produced in the Alcohol Plant located in the southern portion of AOC 1. The former Kinetic Area (later re-named the Fluoroproducts Area) was located in the northern portion of AOC 1 and was used for nitrating and sulfur black production, as well as fluoroproducts (Freon®) production. Freon production began in 1930 and continued until the 1980s, producing at least six Freon refrigerants: Freon 11 (trichlorofluoromethane), Freon 12

(dichlorodifluoromethane), Freon 113 (1,1,2-trichloro-1,2,2,-trifluoroethane), Freon 114 (1,2-dichlorotetrafluoroethane), Freon 22 (chlorodifluoromethane), and Freon 21 (dichlorofluoromethane). Common organics used in Freon production included carbon tetrachloride, chloroform, and tetrachloroethene.

- AOC 2 (TEL Area): Motor-fuel antiknock compounds were manufactured in AOC 2 using tetraethyl lead (TEL) and related compounds from 1923 to 1991.
- AOC 3 (Jackson Labs): AOC 3 includes Jackson Laboratory and Technical Laboratory, which were constructed in 1917 to support research and development activities for the Deepwater Dye Works. The laboratories grew to support other products, including petroleum additives, synthetic rubber (Neoprene), Freon, plasticizers, Teflon, Nomex, and Kevlar. The Semi-Works area of AOC 3 was initiated in 1920 and included process development and pilot-scale production of dyes and other products developed in Jackson Labs.

### 2.1.2 Surrounding Land Use

Chambers Works is in a moderately populated area consisting of light to heavy industry, recreational areas, community-service areas, and residential neighborhoods. Situated south of the Chambers Works site is the former Calpine Deepwater Energy Center. East of the Chambers Works site are light industrial residential and recreational areas. North of the site lies community service and residential areas. West of the site is the Delaware River. More detailed site description information has previously been presented as part of the PAR (DuPont CRG, 2006b), *Phase IV RFI Report* (DuPont CRG, 2005b) and *Phase IV Supplemental RFI Report* (DuPont CRG, 2007a).

## 2.2 Surface Water Features

The primary surface water features located on or adjacent to Chambers Works<sup>1</sup> include (Figure 2):

- Delaware River, which borders the west and northwest edges of the site
- Salem Canal, which crosses the southern area of the site
- Bouttown Creek, which bisects the former Carneys Point Works
- Henby Creek, which divides the former Carneys Point Works from the Manufacturing Area

The following sections provide specific details pertaining to the primary surface water features on the site in relation to the Delaware River.

### 2.2.1 Delaware River

The site is located on the Delaware River within the Delaware River Basin Commission (DRBC) Interstate Water Quality Management Zone 5 approximately between DRBC River Miles 68.7 and 72. This portion of the Delaware River has been influenced by historical and current industrialization, as well as intensive upstream urban development associated with Philadelphia, Pennsylvania and Camden, New Jersey.

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<sup>1</sup> It should be noted that Henby Creek is incorrectly identified as Bouttown Creek, and Bouttown Creek is incorrectly labeled Whopping John Creek on the U.S. Geological Survey (USGS) topographic map. Figures within the report contain the correct labeling of the surface waters.

## Hydrology

At Chambers Works, the Delaware River has a tidal range of approximately 6 feet, with an average amplitude of approximately 2.6 feet (ENVIRON, 1999), an average reported high tide elevation of 3.3 feet National Geodetic Vertical Datum (NGVD) 29, and mean tide elevation of 0.4 feet NGVD 29 (Woodward Clyde Consultants, 1989). These elevations are equivalent to a high tide elevation of 2.0 feet on the North American Vertical Datum (NAVD) 88 and a mean tide elevation of -0.67 feet NAVD 88.

Adjacent to Chambers Works, the Delaware River is generally an oligosaline environment, which represents a transitional zone between the tidal freshwater and estuarine environments. Salinities in this zone are controlled by the input of freshwater from the upper watershed and are tidally, seasonally, and annually variable. Chambers Works is located within the median monthly salt front location range (DRBC RM 67 to 76), which represents upstream extent of chloride concentrations of 250 mg/L [approximately 0.45 parts per thousand (ppt) salinity] (DRBC, 2018). Salinities in the Cherry Island Subzone of the Delaware River, where Chambers Works is located, are generally below 3.5 parts per thousand, which represents the threshold for saline waters reported in the New Jersey Surface Water Quality Standards (NJWQS).

## Physical Features

The shoreline and habitats of the Delaware River and estuary have undergone substantial changes since the beginning of western colonization of the region; however, much of the region remains lined with wetlands and tidal marshes. Along the perimeter of Chambers Works, the shoreline of the Delaware River has been modified with a seawall and engineered riprap to prevent wave-action erosion in the prevailing wind direction (i.e., west to east).

Delaware River substrates were characterized along the entire shoreline of Chambers Works as part of the *Delaware River Groundwater to Surface-Water Investigation Report* (DuPont CRG, 2008). Substrate types were mapped using side-scan sonar imagery and calibrated with sounding, sub-bottom profile, push probe, and grab sample data. The results of the substrate mapping indicate that three types of sediment classes exist in the survey area (Figure 2):

- Type I: Finer sediments with dominant size ranging from clay to fine sand.
- Type II: Medium sediments with dominant size ranging from fine to coarse sand to gravel, may include fractions of finer and coarser sediments and cobbles (small rocks).
- Type III: A wide range of sediments from clay to gravel and isolated small rocks possible; patchy distribution of sediment types observed.

## Designated Uses

The site is located at river mile (R.M.) 69.5 within DRBC Zone 5, which extends from R.M. 48.1 near Middletown, Delaware upstream to R.M. 78.7 near the Pennsylvania-Delaware border. The Delaware River is not used for drinking water purposes in Zone 5 due to its brackish water quality; however, the Delaware River is used for industrial purposes, including commercial shipping and recreation. As described in DRBC Water Quality Regulations, 'the quality of waters in Zone 5 shall be maintained in a safe and satisfactory condition for the following uses' (18 CFR PART 410 Section 3.30.5):

1. a. industrial water supplies after reasonable treatment;

2. a. maintenance of resident fish and other aquatic life,
  - b. propagation of resident fish from R.M. 70.0 to R.M. 48.2,
  - c. passage of anadromous fish,
  - d. wildlife;
3. a. recreation;
4. a. navigation.

Based on these designated uses, the evaluation of potential ecological exposure pathways is the focus of investigation in the Delaware River adjacent to Chambers Works.

### **2.2.2 Salem Canal**

The Salem Canal traverses the southern end of the Chambers Works site for approximately 2,000 feet. The Salem Canal is a freshwater, manmade canal that is approximately 7,000 feet long and approximately 200 feet wide. Salem Canal was originally excavated to a depth of between 12 and 14 feet below ground surface to an estimated elevation of -6 (NAVD 88). The Munson Dam was constructed in 1933, isolating the freshwater of the canal from the brackish tidal water of the Delaware River (Figure 2).

### **2.2.3 Henby and Bouttown Creeks**

Henby Creek was historically a tributary of the Delaware River. It originates off-site and traverses through the middle of the site in a southeast to northwest direction, south of the former Carneys Point Works (Figure 2). Henby Creek was a former tidal creek but is now isolated from the Delaware River by a flapper gate. The flapper gate opens at low tide, allowing Henby Creek to drain into the Delaware River. The operation of the flapper gate at low tide prevents substantial tidal influx into the creek.

Bouttown Creek, the other surface water body located in the Carneys Point area, formerly discharged directly into the Delaware River via Helms Basin (Figure 2). However, in 1974 the northern discharge of Bouttown Creek to Helms Basin was blocked and a drainage canal was created diverting Bouttown Creek into Henby Creek to the south. The shorelines of Henby and Bouttown Creeks are bordered by wetlands across most of the site.

## **2.3 Geology and Hydrogeology**

Detailed descriptions of the geology and hydrogeology of the site have been submitted in previous reports (URS, 2014; DuPont CRG, 2006b; DuPont CRG, 2008; URS, 2010). A summary of geological and hydrogeological information pertinent to the Delaware River investigation is provided below.

### **2.3.1 Geology and Hydrogeology**

Chambers Works is located in the Delaware River Basin near the northwestern edge of the Atlantic Coastal Plain physiographic province, approximately 3.5 miles southeast of the Piedmont Province. In general, Chambers Works is underlain by approximately 500 feet of unconsolidated Coastal Plain sediment deposited during the Holocene epoch (<10,000 years ago), Pleistocene epoch (10,000 to 1.5 million years ago) of the

Quaternary period and Cretaceous period (100 million years ago). The sedimentary units thin rapidly to the northwest and thicken rapidly to the southeast. The sediment regionally dips to the southeast. The Holocene and Pleistocene sediments are fluvial (river), estuarine, and marginal marine origin. The ancestral Delaware River cut down into the underlying sand and clay sediments during the Pleistocene, and after sea level rise the river channel was filled in with silts and mud. Sediments within the Delaware River and on-site are characterized by deposition and erosion features associated with sea-level fluctuations during Quaternary glaciations. Deposits of Holocene or recent age are mostly fine-grained and occur immediately along the Delaware River or its tributaries and overlie the Pleistocene age or older sediments.

Groundwater investigations at Chambers Works developed an informal aquifer classification and nomenclature system. The hydrogeology nomenclature includes a designation of an A Zone, aquifers by letters B through F, and confining units described by the letter designations of the bounding aquifers (i.e., C/D confining unit lies between the C and D Aquifers). A summary of the A Zone, the A/B confining unit, and the B Aquifer, which are relevant to the Delaware River investigation, is presented below; additional detail may be found in the *Delaware River Groundwater to Surface Water Investigation Report, Perimeter Investigation Report*, and RFI (DuPont CRG 2008; URS 2010; URS, 2014, respectively):

- A Zone: The thickness of the A Zone ranges from 0 feet to approximately 10 feet not including landfill areas of the site. This zone generally consists of fill material that was introduced to the site as manufacturing processes expanded and low-lying areas were reclaimed. A Zone groundwater near the Delaware River is essentially dammed behind the existing seawall structure and has limited response to tidal fluctuations.
- A/B Aquitard: The A/B aquitard unit consists of silt, organic clays, and peat. The unit occurs at an average elevation of 0 feet (NAVD88); however, in the southern portion of the Manufacturing Area the top of the A/B aquitard ranges from -5 to +7 feet (NAVD88). The A/B unit is not continuous throughout the site and ranges in thickness from 0 feet to up to 11 feet. In areas, where the A/B confining unit consists mainly of clay, it may act as a semi-confining unit for the underlying B Aquifer.
- B Aquifer: Based on current geologic understanding, the B Aquifer occurs along the margin of the Chambers Works site and is inferred to continue beneath the Delaware River. The B Aquifer consists of fine to medium-grained sand that is interbedded with silts, and some clay. Typically, at the southern portion of the site, the B Aquifer consists of fine-grained unconsolidated sand, an interbedded B silty clay unit at approximately 7 to 15 feet below ground surface and a deeper coarse sand and gravel zone. In the DNAPL investigation area, the base of the B Aquifer is approximately 15 feet below the bed of the Delaware River. Results of tidal studies completed at the site since 1989 indicate that both time lag and tidal efficiency vary with distance from the river and that groundwater flow in the B Aquifer is generally toward the interior of the site.

Without the pumping of the IWS, it is expected that the Delaware River would be a point of groundwater discharge. However, an IWS was installed by DuPont in 1970 in response to identified impacted groundwater to collect most of the groundwater at the site and, therefore, restrict the off-site migration of groundwater. Details regarding the IWS are described in the most recent semi-annual report of the *New Jersey Pollutant*

*Discharge Elimination System – Discharge to Groundwater* (NJPDES-DGW), which was submitted by Chemours to NJDEP in October 2018 (AECOM, 2018b). The IWS is a pump-and-treat system that recovers more than 1.2 million gallons of groundwater each day and transfers the groundwater to an on-site wastewater treatment plant; treated water is discharged to the Delaware River authorized under a NJPDES-DGW permit.

Groundwater flow in the B Aquifer is influenced by the IWS pumping in the underlying aquifers, and the groundwater discharge from the B Aquifer to the Delaware River is largely contained, except for the following four distinct areas that historically discharged groundwater to the Delaware River (DuPont CRG, 2005b):

- Salem Canal Area, located along Salem Canal in the southern portion of the active Chambers Works Manufacturing Area
- TEL Area, located along the Delaware River in the western portion of the active Chambers Works Manufacturing Area
- Fluoroproducts Area, located along the Delaware River in the northern portion of the active Chambers Works Manufacturing Area
- Northern portion of the former Carneys Point Works along the Delaware River

Engineering controls have been implemented to control the off-site migration of groundwater from the B Aquifer to the Delaware River. Engineering controls include the installation of SPBs to prevent the off-site discharge of groundwater from the B Aquifer and on-site pumping of the IWS to provide hydraulic control (Figure 2). SPBs were installed between 2009 and 2018 in sections extending along the Salem Canal and western perimeter of Chambers Works (Figure 2). Further detail regarding the installation of SPB along the site perimeter is provided in Section 3.5.3.

Groundwater elevation contour maps for the C and D Aquifers indicate inward gradients along the entire perimeter of the Manufacturing Area (URS, 2014). This indicates that the IWS effectively contains groundwater in the C and D aquifers, located below the B Aquifer.

### 2.3.2 Groundwater Quality

General groundwater quality information for Chambers Works is summarized in the *Comprehensive RCRA Facility Investigation Report* (URS, 2014) and groundwater quality information related to off-site discharge pathways to the Delaware River is provided in the *Delaware River Groundwater-to-Surface Water Investigation Report* (DuPont CRG, 2008), 2010 *Perimeter Investigation Report* (URS, 2010), and NAPL Delineation Reports (AECOM, 2017a; AECOM, 2018a). This section presents a discussion of groundwater quality as it pertains to potential historical interactions with the Delaware River prior to the installation of SPBs to prevent the off-site discharge of groundwater from the B Aquifer.

The Perimeter Investigation evaluated groundwater quality in the B Aquifer at the site perimeter, with emphasis on areas that are not hydraulically controlled due to incomplete capture by the IWS (URS, 2010). The primary organic constituents measured in the B Aquifer include:

Freon 113	Benzene	Cis-1,2-dichloroethene (DCE)
Chlorobenzene	Carbon tetrachloride	Vinyl chloride
1,2-Dichlorobenzene	Chloroform	4-Chloroaniline

1,4-Dichlorobenzene	Tetrachloroethene	Aniline
1,2,4-Trichlorobenzene	Trichloroethene (TCE)	Nitrobenzene

Detailed discussions regarding the nature and extent of these constituents in groundwater at the perimeter are presented in the *Groundwater-to-Surface Water Investigation Report* (URS, 2010), *Perimeter Investigation Report* (URS, 2010) and NAPL Delineation Reports, which are summarized in Section 3.1 to Section 3.4.

### 3.0 Investigation Background

Multiple environmental investigations have been conducted in the Delaware River adjacent to Chambers Works as part of remedial investigations and interim remedial actions in SWMUs on the shoreline. This section provides a summary of previous investigations and remedial actions conducted in the Delaware River adjacent to Chambers Works. Additional detail regarding these investigations is provided in supporting investigation documents (DuPont CRG, 2006, 2008; URS, 2010, 2011, 2014; AECOM, 2017, 2018).

#### 3.1 Delaware River Groundwater-to-Surface Water Investigation

The Delaware River Groundwater-to-Surface Water Investigation was initiated by DuPont in 2005 in response to the NJDEP Delaware River Initiative (NJDEP correspondence to DuPont dated April 6, 2005). This investigation was conducted to further evaluate the groundwater-to-surface water interface in the Delaware River adjacent to the site, which includes the B Aquifer subcrop zone beneath the river and the seawall that separates the shallow A Zone from the river. As presented in detail in the *Delaware River Groundwater-to-Surface Water Investigation Report*, the findings of the investigation indicate that portions of the B Aquifer along the site perimeter adjacent to the river are not hydraulically contained by the IWS and may discharge to the river (DuPont CRG, 2008). Data collected during investigations of groundwater-to-surface water interactions between the site and the Delaware River indicate that groundwater discharge is largely contained by the IWS, except for small portions of the groundwater to surface water interface in the B Aquifer (DuPont CRG, 2008; see Section 2.3.1).

In March 2008, groundwater sampling conducted as part of the Delaware River Groundwater-to-Surface Water Investigation identified a small amount of NAPL in a sample collected at a depth of 10 to 14 feet below the river bottom adjacent to the Fluoroproducts Area of the site. A subsequent investigation was conducted in March 2009 to confirm the detection of NAPL and to define the nature and extent of the NAPL below the river bottom (DuPont CRG, 2009b).

Evaluations of potential effects of groundwater to surface water discharge have been performed as part of a Resource Conservation and Recovery Act (RCRA)/EPA Environmental Indicator code CA750 (EI CA750) determination. Based on groundwater to surface water dilution calculations and fate and transport modeling, surface water concentrations resulting from potential discharge of site-related constituents from the B Aquifer are not expected to exceed ambient water quality criteria (AWQC). A positive EI CA750 determination indicating that the migration of contaminated groundwater is under control was issued for Chambers Works on September 2, 2004. As discussed in Sections 2.3.1 and 3.5.3, engineering controls have since been implemented to control off-site groundwater migration, including the installation of perimeter SPBs and on-site pumping of the IWS to provide hydraulic control.

#### 3.2 Delaware River Remedial Investigation

The Delaware River Remedial Investigation was conducted from September 2009 to November 2010 to collect adequate sediment and surface water data to characterize the nature and extent of potential releases and ecological exposure to site-related constituents to the Delaware River adjacent to Chambers Works. As part of the Delaware River RIWP, a BEE was prepared in accordance with the New Jersey

Technical Requirements for Site Remediation (NJTRSR). The BEE identified the Delaware River as an environmentally sensitive area (ESA) and identified the co-occurrence of potentially site-related COPECs and potentially complete migration pathways from Chambers Works to the Delaware River (URS, 2009). Further investigation was recommended in the BEE to characterize the nature and extent and potential exposure to site-related constituents in sediment and surface water in the Delaware River adjacent to Chambers Works.

Based on the recommendations in the BEE, a phased remedial investigation design was developed and implemented between September 2009 and November 2010. A grid sampling design was developed to enable systematic characterization of sediment and surface water quality adjacent to Chambers Works. A total of 87 surficial sediment samples and 37 surface water samples were collected during the three phases of the investigation. Surficial sediment samples were analyzed for target analyte list (TAL) metals plus tin, priority pollutant (PP) SVOCs plus additional site-related SVOCs. Additional analyses to characterize sediments included total organic carbon (TOC) content, black carbon content, and sediment grain size distribution. In addition, polychlorinated biphenyl (PCB) congener analyses (EPA Method 1668B) were conducted on surficial sediment samples from select sampling stations. Consistent with NJDEP guidance, VOCs and TOC were analyzed in the subsurface (0.5 to 1.0 feet) interval (NJDEP, 2018; NJDEP, 1998).

The findings of the remedial investigation indicated that elevated concentrations of site-related constituents are spatially focused near the shore adjacent to the Fluoroproducts Area and Jackson Labs/TEL Area. Site-related VOCs and SVOCs were the primary constituents of concern. Elevated concentrations of similar compounds detected in groundwater samples collected adjacent to areas of elevated sediment concentrations indicated the potential for groundwater-to-sediment migration pathways. The Delaware River RIR recommended the re-evaluation of exposure to COPECs in sediment and surface water following the attainment of hydraulic control at the site perimeter.

### 3.3 Perimeter Investigation

Soil and groundwater investigations were conducted in November and December 2009 along the site perimeter to define the nature and extent of potential contaminant sources, with emphasis on fate and transport of constituents that may have the potential for off-site migration. For the purposes of the investigation, the site perimeter was defined as the area between the site property line and the groundwater divide, which represents the extent of groundwater capture by the IWS. The location of the groundwater divide, which was previously estimated based on a March 2009 potentiometric surface map, was also revised during the perimeter investigation. The results of the perimeter investigation are presented in detail in the *Perimeter Investigation Report* (URS, 2010) and summarized below.

The perimeter investigation identified and characterized three groundwater plumes (detailed as areas of concern [AOCs] 1, 2, and 3 below) in the Manufacturing Area that historically migrated to the Delaware River due to incomplete capture by the IWS (URS, 2010):

- AOC 1 (Fluoroproducts Area): A multi-component plume consisting mainly of fluoroproducts-related constituents (e.g., Freon) originates from residual DNAPL

present at two on-site source locations near the Delaware River boundary. DNAPL is present as residual DNAPL and, therefore, is not mobile. Some residual DNAPL is present in the B Aquifer beneath the Delaware River because of historical migration from near-shore sources or possible historical discharges from outfalls.

- AOC 2 (TEL Area): A smaller plume consisting of 4-chloroaniline and other constituents may have historically discharged to the Delaware River. The source of the plume is a former Chloroamines manufacturing plant. DNAPL has not been identified in or beneath the Delaware River adjacent to AOC 2.
- AOC 3 (Jackson Labs Area): A multi-component plume consisting mainly of chlorofluorocarbons may have historically discharged to the Delaware River originating from a process wastewater ditch associated with the former Freon laboratory. DNAPL has not been identified in or beneath the Delaware River adjacent to AOC 3.

In Carneys Point, no significant new findings were identified at the site perimeter; groundwater quality in the B Aquifer at the perimeter of Carneys Point was adequately characterized such that locations of plume transport to the river have been identified.

### 3.4 Delaware River DNAPL Delineation

A multi-phase study was conducted to delineate the DNAPL in the B Aquifer in the Delaware River offshore from AOC 1 (AECOM, 2017; AECOM, 2018). Ninety-two sediment samples from 18 boring stations were collected during Phase I and Phase II investigations to delineate DNAPL and confirm previous detections of site-related constituents. An additional 66 sediment samples from 13 boring stations were collected during the Phase III investigation of the DNAPL delineation (AECOM, 2018). For all three phases, additional constituents (other than DNAPL and related constituents) were included in the analytical program for shallow (i.e., 0 to 1 foot) sediment samples for use in other evaluations, including ecological risk assessment. Based on the findings of the Phase III delineation sampling, horizontal and vertical delineation of residual DNAPL in shallow and deep sediments in the Fluoroproducts Area was completed (AECOM, 2018). The *2017 Delaware River NAPL Delineation – Data Gap Phase III Report* recommended that on-going treatability studies to address Freon-containing NAPL be completed (AECOM, 2018).

### 3.5 Summary of Remedial Actions

SWMU 5, SWMU 43, and SWMU 52, located along the Delaware River shoreline, have been investigated and remediated. In addition, remedial actions have been implemented along the site perimeter to prevent the off-site migration of groundwater. The following sections briefly describe the remedial investigations and activities completed to mitigate site-related migration pathways to the Delaware River.

#### 3.5.1 SWMU 5/SWMU 43

SWMU 5 and adjacent SWMU 43 are located along the shoreline of the Delaware River in the Manufacturing Area (Figure 2). Historically, SWMU 5 was an uplands area used for disposal of waste material associated with the former dye manufacturing process (DuPont CRG, 2006b). Constituents from waste exposed by the erosive forces of tidal action along the shoreline migrated into adjacent sediment layers in the Delaware River.

SWMU 43, located at the eastern edge of SWMU 5, was a former tidal channel that was diked prior to 1936 to create the former Unified Basin. Wastewater was discharged to the Delaware River through this tidal channel via pipes with one-way flapper gates until 1973 when the former Unified Basin was diverted into the overflow A Basin and B Basin (DuPont CRG, 2002).

DuPont began remedial investigations within the SWMU 5/43 area in 1994 (DuPont CRG, 2006b). In the fourth quarter of 1994, a slurry wall was installed in SWMU 5 as an interim stabilization measure (ISM) to mitigate the potential migration of perched water into the Delaware River (DuPont CRG, 1999). Multiple delineation investigations conducted following the installation of the slurry wall identified the primary constituents of interest (COIs) as chlorobenzene, 1,2-dichlorobenzene, nitrobenzene, 4-chloroaniline, lead, 1-naphthylamine, and 2-naphthylamine (DuPont CRG, 2001a; DuPont CRG, 2001b; DuPont CRG, 2000; DuPont CRG, 1999).

Remedial activities completed in 2002 in SWMU 5 included the installation of a permanent SPB and sediment removal (DuPont CRG, 2002). An approximately 1,400-foot permanent SPB with riprap scour protection was installed along the shoreline through SWMU 5 to prevent further shoreline erosion and to contain groundwater along the site perimeter. In addition to the SPB installation, approximately 11,368 cubic yards of sediments were excavated from SWMU 5. Remedial activities in SWMU 43 included the dewatering of the basin, capturing/releasing aquatic fauna, backfilling with clean fill, and restoration (DuPont CRG, 2002).

### 3.5.2 SWMU 52

SWMU 52 is located along the Delaware River shoreline in the Carneys Point Zone (Figure 2). SWMU 52 was formerly used as a burning ground for wastes generated from the former Carneys Point Plant (DuPont CRG, 2006b). The historical burning ground became exposed in the intertidal zone of the Delaware River through shoreline erosion. Slag-like brown material and metal debris were identified as potential sources of metals to sediment and surface water in the adjacent Delaware River. Investigations initiated in 1995 identified lead, chromium, zinc, arsenic, cadmium, mercury, nickel, and nitrocellulose as the primary constituents in soil and sediment (DuPont CRG, 2006b).

In 2004, an ISM was implemented to eliminate potential sources and migration pathways from SWMU 52 to the Delaware River (DuPont CRG, 2007c). The ISM included the removal of agglomerated material, fill material, and sediments above the A/B confining unit in the sub-tidal and intertidal zones and shoreline stabilization with riprap. Approximately 2.5 acres of non-native fill was stabilized *in situ* to minimize potential lead migration from the upland area via leaching into groundwater or mobilization by surface water runoff.

### 3.5.3 Perimeter Remedial Actions

As discussed in Section 2.3.1, SPBs have been installed along the site perimeter to prevent the off-site discharge of groundwater from the B Aquifer (Figure 2). In 2008, a 900-foot long section of SPB was installed on the northern side of the Salem Canal to prevent groundwater discharge (along the AOC 6 boundary) from the B Aquifer to the Salem Canal. The SPB was extended westward along the Salem Canal approximately 300 feet to the Munson Dam in 2012 and approximately 200 feet westward from the Munson Dam in 2014 to control groundwater, stabilize the canal bank, and to control erosion.

The *Perimeter Investigation Report* identified three groundwater plumes in the B Aquifer that migrate from the perimeter areas of AOCs 1, 2, and 3 to the Delaware River due to incomplete capture by the IWS (URS, 2010). As described in the *Perimeter Area (AOCs 1, 2, and 3) Remedial Action Selection Report*, further extension of the Salem Canal SPB along the Delaware River shoreline adjacent to AOCs 1, 2, and 3 was identified as a remedial action to prevent the off-site migration of groundwater from the B Aquifer (Geosyntec, 2012). Extension of the SPB westward to the mouth of the Salem Canal and northward along the Delaware River shoreline to SWMU 40 was completed in 2015. Further extension of the SPB along the Delaware River shoreline to include AOC 1 was initiated in September 2017 and completed in 2018 (Figure 2). In AOC 1, SPB installation penetrated the deeper C and D Aquifers to limit the on-shore flow of Delaware River water resulting from IWS pumping. A remedial action report describing the installation of the SPB is pending.

## 4.0 Screening-Level Problem Formulation and Effects Evaluation

This section presents a screening-level problem formulation to guide the risk evaluation process for the Delaware River (EPA, 1997a). The screening-level problem formulation develops a conceptual model for exposure at the site that addresses the following:

- Defines ecological exposure areas for assessment in the screening-level exposure evaluation based on existing data and site understanding (Section 4.1).
- Identifies potential source areas and complete migration pathways from potential source areas to ecological exposure media within the Delaware River (Section 4.2).
- Identifies COPECs that are known or suspected to exist in source areas and migration pathways that may be present in exposure media within the Delaware River (Section 4.3).
- Describes fate and transport characteristics of known or suspected COPECs that may exist within the identified exposure areas (Section 4.4).
- Describes the mechanisms of ecotoxicity associated with known or suspected COPECs to guide the selection of receptors and assessment endpoints (Section 4.5).
- Identifies likely ecological receptors of concern and potentially complete exposure pathways, including primary ecological exposure routes (Section 4.6).
- Defines assessment endpoints for the screening-level exposure evaluation and specific measurement endpoints to evaluate assessment endpoints (Section 4.7).
- Presents a screening-level effects evaluation to establish screening-level benchmarks to assess the potential for adverse ecological effects (Section 4.8).

Key elements of the ecological conceptual site model (ECSM) for potential source areas and complete migration/exposure pathways for ecological receptors are illustrated in Figure 3 for constituents known or suspected to exist in the Delaware River. The following subsections define the exposure areas and describe key elements of the ECSM and SLERA problem formulation described above, including assessment endpoints and measurement endpoints identified for primary ecological exposure pathways and receptors.

### 4.1 Exposure Areas

Based on the phases of investigations conducted to date (Section 3.0), four primary exposure areas in the Delaware River extending along the approximately 3.3-mile shoreline adjacent to Chambers Works were identified for evaluation in the SLERA (Figure 4):

- Manufacturing Zone – Jackson Labs/TEL Area (Jackson Labs/TEL Area)
- Manufacturing Zone – Fluoroproducts Area (Fluoroproducts Area)
- Manufacturing Zone – SWMU 5/Henby Creek Area (SWMU 5/Henby Creek Area)
- Carneys Point Zone

These zones were originally established and systematically characterized in the Delaware RIR based on conceptual migration pathways from potential site-related source areas (URS, 2011). Additional data have been collected in targeted exposure areas in subsequent environmental investigations (e.g., NAPL Delineation in the Fluoroproducts Area). Consistent with responses to EPA and NJDEP comments on the Salem Canal SLERA, the Jackson Labs/TEL Area has been expanded in the Delaware River SLERA to include the Tidal Reach of the Salem Canal extending from Munson Dam to the mouth of the Salem Canal (Figure 4). The Tidal Reach of the Salem Canal is included in the evaluation of ecological exposure in the Delaware River due to the tidal influence of the Delaware River in this area.

## 4.2 Potential Source Areas and Conceptual Migration Pathways

The primary sources of site-related constituents to the Delaware River are associated with historical manufacturing activities and practices in the Manufacturing Area and Carneys Point Area (URS, 2011). A detailed description of process areas and related constituents is provided in the PAR (DuPont CRG, 2006b).

Potentially complete migration pathways from these source areas to the Delaware River include:

- Historical groundwater discharge
- Current and historical outfalls
- Current and historical surface water discharge
- Direct surface water runoff
- Adjacent SWMUs

The following sections describe potential source areas and conceptual historical migration pathways identified from Chambers Works to exposure areas in the Delaware River that have since been eliminated due to remedial activities.

### 4.2.1 Manufacturing Zone – Jackson Labs/TEL Area

The Jackson Labs/TEL Area may have been influenced by historical sources originating in AOC 3 (Jackson Labs Area) and AOC 2 (TEL Area) located in the southwestern portion of the Manufacturing Area (Figure 4). Potential migration pathways from on-site source areas to this zone included:

- Historical groundwater discharge: A multi-component groundwater plume consisting mainly of chlorofluorocarbons historically discharged from AOC 3 to the Delaware River. A smaller plume consisting of 4-chloroaniline and other constituents historically discharged from AOC 2 to the Delaware River. Construction of the SPB along the shoreline of the Jackson Labs/TEL Area in 2015 and on-site pumping of the IWS prevent the off-site discharge of groundwater from the B Aquifer to the Delaware River (see Section 3.4.3).
- Current and historical outfalls: Historical process waste and stormwater outfalls represent potential point source contaminant migration pathways from the site operation areas to the Delaware River. Figure 4 illustrates the locations of historical and current outfalls within the Jackson Labs/TEL Area.
- Current surface water discharge: Salem Canal represents a potential surface water migration pathway from the site to the Delaware River due to its current

and historical hydrological connection with the Delaware River. Prior to the construction of Munson Dam in 1933, the Salem Canal was a tidal water body connecting the Delaware River to the tidal wetlands of Salem Creek. Discharge from historical process outfalls, current stormwater outfalls, a permitted outfall, surface runoff, and groundwater migration are potentially complete migration pathways identified between the site and the Salem Canal (DuPont CRG, 2007b).

- Direct surface water runoff: Direct surface water runoff associated with precipitation events represents a relatively minor contaminant migration pathway from the site to the Delaware River. In the Manufacturing Area, surface water runoff is managed in accordance with the NJDEP-approved New Jersey Pollution Discharge Elimination System – Discharge to Surface Water (NJPDES-DSW permit NJ0005100 (effective April 1, 2018)).

#### **4.2.2 Manufacturing Zone – Fluoroproducts Area**

The Fluoroproducts Area of the Delaware River may have been influenced by historical sources originating in AOC 1 (Fluoroproducts Area) located in the northwestern portion of the Manufacturing Area (Figure 4). Potential migration pathways from on-site source areas to this zone include:

- Historical groundwater discharge: A multi-component plume consisting mainly of fluoroproducts-related constituents such as Freon and chlorinated benzenes originates from residual DNAPL present at two on-site source locations near the Delaware River boundary; residual DNAPL is present near the base of the B Aquifer that is approximately 15 feet below the bed of the Delaware River. Horizontal and vertical delineation of residual DNAPL in shallow and deep sediments in the Fluoroproducts Area was completed in phased delineations in 2016 and 2017 (AECOM, 2016; AECOM, 2017). Construction of the SPB along the shoreline of the Jackson Labs, TEL Area, and Fluoroproducts Area from 2015 to 2018 now prevents the off-site discharge of groundwater from the B Aquifer to the Delaware River (see Section 3.4.3).
- Current and historical outfalls: Historical and current process waste and stormwater outfalls, represent potential point source contaminant migration pathways from the site operation areas to the Delaware River. Prior to 1958, process wastewater was discharged directly to the Delaware River through outfalls in the seawall (AECOM, 2017a). The process waste outfalls were sealed between 1958 and 1975 when process wastewater was diverted to the wastewater treatment plant for treatment (URS, 2006). Figure 4 illustrates the locations of historical and current outfalls within the Fluoroproducts Area.
- Direct surface water runoff: Direct surface water runoff associated with precipitation events represents a relatively minor contaminant migration pathway from the Fluoroproducts Area to the Delaware River. Surface water runoff is managed in accordance with the NJDEP- DSW permit NJ0005100 (effective April 1, 2018).

#### **4.2.3 Manufacturing Zone – SWMU 5/Henby Creek Area**

The SWMU 5/Henby Creek Area may have been influenced by discharge from historical outfalls, current and historical surface water drainage, and localized migration from adjacent SWMUs (Figure 4):

- Historical outfalls: As discussed in Section 3.4.1, wastewater was historically discharged to the Delaware River until 1973 through the tidal channel in SWMU 43 via pipes with one-way flapper gates. This migration pathway was eliminated in 1973 when wastewater was diverted into the overflow A Basin and B Basin (DuPont CRG, 2002).
- Current and historical surface water discharge: Henby Creek represents a current surface water migration pathway from the Carneys Point Works to the SWMU 5/Henby Creek Area in the Delaware River. Henby Creek, which has received surface water discharge from Bouttown Creek since 1974, represents the primary surface water drainage pathway from the Carneys Point Works (URS, 2010). Henby Creek currently discharges to the Delaware River at low tide via a flapper gate and represents a current surface water migration pathway. However, the findings of the site-wide Ecological Investigation indicated that current surface water migration pathway from Henby Creek to the Delaware River may be limited. No surface water COPECs were identified in Henby Creek as part of the exposure evaluations in the Ecological Investigation. Six metals, n-nitrosodiphenylamine, and 2,4- dinitrotoluene (DNT) were initially identified as sediment COPECs in Henby Creek in a conservative screening evaluation; however, further exposure analyses indicated no unacceptable risk. Based on the findings of the Ecological Investigation, no further ecological investigations were proposed for Henby Creek (DuPont CRG, 2009a).

Whopping John Creek represents an historical surface water migration pathway from the site to the SWMU 5/Henby Creek Area. Prior to approximately 1968, Whopping John Creek flowed from the southeastern border of the site, northwest across the site, into the wastewater storage basins, and then discharged to the Delaware River through the SWMU 5 area (DuPont CRG, 2006b). By 1968, the outlet to the Delaware River was dammed, and the drainage was diverted to a pipeline discharge. Whopping John Creek no longer discharges to the Delaware River, but is considered an historical surface water migration pathway.

- Adjacent SWMUs: SWMU 5 is located along the shoreline of the Delaware River in the SWMU 5/Henby Creek Area. As discussed in Section 3.4.1, waste disposed of in SWMU 5 became exposed through shoreline erosion and migrated into the Delaware River. The migration of waste-related constituents from SWMU 5 is considered a historical migration pathway to the Delaware River that has been addressed by remedial actions implemented in 2002 (see Section 3.4.1).
- Direct surface water runoff: Direct surface water runoff associated with precipitation events represents a relatively minor contaminant migration pathway from on-site areas adjacent to the SWMU 5/Henby Creek Area. Surface water runoff is managed in accordance with the NJDEP- DSW permit NJ0005100 (effective April 1, 2018).

#### 4.2.4 Carneys Point Zone

The Carneys Point Area of the Delaware River may have been influenced by historical surface water discharge, discharge from historical outfalls, localized migration from adjacent SWMUs, and direct surface water runoff:

- Historical surface water discharge: Bouttown Creek represents a historical surface water migration pathway between former operations in the Carneys Point

Works and the Carneys Point Area of the Delaware River. Bouttown Creek was the primary receiving water body associated with SWMUs within the Carneys Point Works, given that most operations were in areas west of the creek. Prior to 1974, Bouttown Creek discharged to the north through a sluice gate to the Delaware River via Helms Basin (Figure 2). Sediment and surface water data collected in Helms Basin (the former Bouttown Creek discharge) as part of the Chambers Works Ecological Investigation indicate that the historical migration pathway from Bouttown Creek to the Delaware River may be limited, as sediment and surface water concentrations of constituents associated with the Carneys Point Works were below ecological screening values or background concentrations in Helms Basin (DuPont CRG, 2009a).

- Historical outfalls: Historical process waste and stormwater outfalls represent potential point source contaminant migration pathways from Carneys Point Works to the Carneys Point Area of the Delaware River. Figure 4 illustrates the locations of historical outfalls within the Carneys Point Area.
- Adjacent SWMUs: SWMU 52 is located along the Delaware River shoreline in the Carneys Point Zone (Figure 2). As discussed in Section 3.5.2, wastes from the historical burning ground in SWMU 52 became exposed in the intertidal zone of the Delaware River through shoreline erosion, which represented a source of metals to sediment and surface water in the adjacent Delaware River. This historical migration pathway was eliminated through remedial action in 2004 (see Section 3.5.2).
- Direct surface water runoff: Direct surface water runoff from the Carneys Point Area to the Delaware River is limited. Within the Carneys Point Area, surface water generally flows to Bouttown Creek and Henby Creek in the interior of the site. As part of the site-wide BEE investigation, SWMUs in the Carneys Point Area were inspected to evaluate the potential for complete stormwater migration pathways to adjacent surface water features (DuPont CRG, 2006a). The results of the pathway evaluation for three SWMUs located adjacent to the Delaware River (SWMUs 45-1, 45-5, and 48-3) indicated incomplete stormwater migration pathways due to flat topography or other physical barriers that impede surface runoff (DuPont CRG, 2006a).

### 4.3 Constituents of Potential Ecological Concern

This section provides a summary of general constituent groups that may be identified as COPECs in exposure media within exposure areas in the Delaware River adjacent to Chambers Works. This general list of constituent groups was compiled based on information from previous investigations related to source areas and potential migration pathways. Previous investigations indicate that site-related organic compounds are the primary COPEC groups in surficial sediments adjacent to Chambers Works. Key constituents within each COPEC group are listed in the general summary; however, this list is not intended to be comprehensive. Please note that a compilation of currently available data and an updated list of specific COPECs for the Delaware River adjacent to Chambers Works are presented in Section 6.1.1. A summary of primary constituent groups that may be identified as COPECs in exposure media within Delaware River exposure zone includes:

Constituent Group	Manufacturing Zone						Carneys Point Zone	
	Jackson Labs/ TEL Area		Fluoroproducts		SWMU 5/ Henby Creek		Sediment	Surface Water
	Sediment	Surface Water	Sediment	Surface Water	Sediment	Surface Water		
<b>Metals</b> Arsenic Chromium Copper Lead Mercury Nickel Zinc	●	●	●		●		●	
<b>VOCs</b> Benzene Chlorobenzene CFCs Dichlorobenzenes	●	●	●	●	●			
<b>SVOCs</b> PAHs 1,2,4-Trichlorobezene 2,4-DNT 2,6-DNT 4-chloroaniline Hexachlorobenzene Nitrobenzene	●		●		●			
<b>Pesticides</b>	●							
<b>PCBs</b>	●		●					

CFC = chlorofluorocarbons  
 DNT = dinitrotoluene  
 PAH = polycyclic aromatic hydrocarbons  
 PCB = polychlorinated biphenyl  
 SVOC = semi-volatile organic compound  
 TEL = tetraethyl lead  
 VOC = volatile organic compound

#### 4.4 Fate and Transport Characteristics

Once introduced into the river environment, site-related constituents may be transported between various media. As illustrated in Figure 3, the fate and transport of constituents between potential exposure media within the river include the following:

- Surface water: Site-related constituents may be discharged directly to surface water via historical or current outfalls, on-site surface water features, direct stormwater runoff, or groundwater/sediment pore water flux. Depending on solubility, site-related constituents may remain in solution or sorb to particulate matter. Particle-bound constituents may be transported with tidal flow and deposited in sediments in low energy areas of the river. Solubilization, suspension, and subsequent vaporization is likely a primary fate process for site-related VOCs (e.g., chlorobenzene) in surface water.
- Sediment: Site-related constituents may be transported to river sediments via deposition of particulate-bound constituents in surface water or through partitioning of constituents from sediment pore water to components of the sediment matrix (e.g., TOC). Constituents adsorbed to sediments may be re-suspended into surface water through sediment disturbance or may desorb from

sediments into sediment pore water. In depositional environments, the burial of COPECs at depths below the biologically active zone (BAZ) may be an important fate process in sediments.

- Sediment pore water: Site-related constituents may be transported to sediment pore water through the discharge of groundwater through sediments or the dissolution of constituents bound in the sediment matrix. Constituents may be transported from sediment pore water through partitioning/adsorption to the sediment matrix (e.g., total organic carbon) or flux from pore water to overlying surface water.
- Biota (micro and macro): Constituents may bioaccumulate in micro- and macro-organisms exposed to surface water or sediment pore water; however, it should be noted that the bioaccumulation potential is low for many of the site-related constituents based on low octanol-water partitioning coefficients ( $K_{ow}$ ). Biodegradation of constituents by microorganisms may be an important fate process for some site-related constituents (e.g., benzene, chlorobenzene), while the biodegradation potential is uncertain for other site-related constituents (e.g., chlorofluorocarbons).

Environmental fate and transport characteristics for the general COPEC groups identified in previous section are described in the following sections.

#### 4.4.1 Metals

Fate and transport processes are important in controlling the distribution of metals discharged to the aquatic environment. In aquatic systems, metals are distributed between the dissolved and particulate phases. Dissolved metal ions are the most available for biological uptake and the most toxic metal form (John and Leventhal, 1995). However, under circumneutral pH conditions found in most natural waters, metals are primarily complexed by colloids or bound to particulates (Morel and Hering, 1993).

Particulate-bound metals in surface water are deposited in sediments in low-energy environments. Sediment metals may partition to pore water, colloidal material, ligands, or the mineral matrix. The labile pool of metals in sediment is subject to speciation in the aqueous phase within pore water and sorption to solid phases (EPA, 2007a). In pore water, metals will react or bind with ligands in accordance with the pH, redox, ionic strength, and abundance of the ligands (EPA, 2007a).

#### 4.4.2 Volatile and Semi-Volatile Organic Constituents

Nonionic organic constituents in sediment partition between sediment organic carbon, pore water, and benthic organisms. Estimation of the freely dissolved concentration of nonionic organic constituents in pore water is a better surrogate than bulk sediment concentration for the fraction of the constituent that is bioavailable and toxic to benthic organisms (EPA, 2012a). At equilibrium, partitioning between phases can be predicted using equilibrium partitioning (EqP) theory if the concentration in any one phase is known (EPA, 2012a). Constituent-specific organic carbon-water partitioning coefficients ( $K_{oc}$ ) may be used to predict partitioning to sediment pore water. However, the partitioning of nonionic organic constituents to pore water can vary substantially depending on the type of carbon available in the sediment matrix. Black carbon represents the fraction of pyrogenic carbon and residues of incomplete combustion that may be ubiquitous in sediment environments, especially in urban industrial environments. The sorption of nonionic organic constituents to black carbon has been

observed to be up to 10-1,000 times greater than sorption to natural sedimentary organic carbon (NSOC), which includes diagenic organic carbon, such as plant material (EPA, 2012a). Therefore, the quantity of black carbon in sediment may substantially affect the bioavailability and toxicity of nonionic organic constituents to benthic organisms within the BAZ.

The biodegradation of site-related VOCs and SVOCs has been documented as an important fate process in the Salem Canal at Chambers Works. Multiple lines of evidence including the findings of a literature review, laboratory studies, and field studies of potential biodegradation in site-specific groundwater and pore water samples indicate that site-related VOCs and SVOCs are susceptible to biodegradation (URS, 2013; URS, 2015; AECOM and EHS Support, 2017). Research conducted on the biodegradation of these constituents in the Salem Canal is summarized below, as it provides insight into potential fate processes for similar constituents identified in the Delaware River.

Research conducted in the Salem Canal indicates the potential for anaerobic and aerobic transformation of chlorinated benzene compounds. An evaluation of *in situ* conditions in the Salem Canal indicate the potential for anaerobic dechlorination of chlorinated benzenes to an end-product of methane. The findings also indicate that while low levels of chlorobenzene may persist, dichlorobenzene and benzene are degradable to concentrations below detection limits under anaerobic conditions. Most sediment volatile- and semi-volatile COPECs are known to readily biodegrade in the presence of oxygen. Site-specific studies indicate that shallow sediment at the sediment-surface water interface (SWI) contains an abundance of aerobic chlorobenzene degrading bacteria. In sufficient oxygen conditions, chlorobenzene degradation at the SWI could result in complete mineralization within the upper 2 to 3 millimeters (mm) of sediment (URS, 2013; and Kurt et al., 2012).

Dye components including, aniline, and 4-chloroaniline (or p-chloroaniline [PCA]), have also been documented to biotransform under aerobic conditions; however, the fate of these compounds is less understood under anaerobic or reduced conditions. Biological microcosms using aquifer material and sediment from the Salem Canal were established under aerobic, Fe (III)-reducing, nitrate-reducing, sulfate-reducing, and methanogenic conditions. Aniline was degraded anaerobically under nitrate-reducing, iron-reducing, sulfate-reducing, and methanogenic conditions. PCA was degraded under nitrate-reducing conditions. Investigation of aniline and PCA degradation pathways and further characterization of the microbial community are described in URS (2013), Li et al. (2008a), and Li et al. (2008b).

The biodegradation of site-related VOCs and SVOCs in groundwater has also been evaluated in the Salem Canal. Compound specific isotope analyses (CSIA) indicate that spatial and temporal patterns of carbon isotope enrichment in 1,2-dichlorobenzene, 1,4-dichlorobenzene, and 1,2,4- trichlorobenzene (TCB) are consistent with *in situ* biodegradation of these compounds under anaerobic conditions.

#### 4.4.3 Pesticides

The fate and transport of pesticides in aquatic environments varies considerably depending on the physical and chemical properties of the compound. These properties determine whether the pesticide quickly breaks down, adsorbs strongly to suspended solids and sediments, diffuses into the water column, or rapidly volatilizes to the air. Persistence in the environment depends on how quickly the pesticide degrades, which is largely a function of its chemical composition and environmental conditions. Pesticides

are degraded by chemical and biological processes, such as photochemical degradation, hydrolysis, oxidation, reduction, and microbial decay (Reese et al., 1972; WHO, 1986; Helfrich et al., 2009).

#### 4.4.4 PCBs

PCBs are a group of 209 synthetic halogenated aromatic hydrocarbons that have been used extensively in the electricity generating industry as insulating or cooling agents in transformers and capacitors (Eisler, 1986). The fate and transport of PCBs in aquatic environments are influenced by varying physical, chemical, and biological processes and are largely dependent on the location and degree of chlorination of the biphenyl molecule. In general, when PCBs, particularly the higher chlorinated congeners, are introduced into aquatic environments they tend to adsorb strongly to suspended solids and sediments, especially those high in organic carbon (World Health Organization [WHO], 1993; Agency for Toxic Substances and Disease Registry [ATSDR], 2000; Canadian Council of Ministers of the Environment [CCME], 2009). Although adsorption in sediment can immobilize PCBs for relatively long periods, de-sorption into the water column may occur by both abiotic and biotic routes. Sediments can therefore act as both an environmental sink and reservoir of PCBs for organisms (WHO, 1993).

### 4.5 Aquatic Ecotoxicity

This section summarizes the bioaccumulation potential and general ecotoxicological effects associated with COPECs.

#### 4.5.1 Bioaccumulation

Bioaccumulation is the incorporation of COPECs from environmental media into biological tissues. The following subsections provide a brief overview of the bioaccumulation potential of COPEC groups that may be present in exposure media within the Delaware River.

##### Metals

The availability of metals to be incorporated into biological tissues does not necessarily correspond with the total concentration of metals in sediment or surface water. Metal bioaccumulation is a function of metal bioavailability, which is directly related to the metal speciation. For most divalent metals, the most bioavailable and toxic forms are metal ions or small metal-anion complexes, which are typically present at very low concentrations in the environment. Most metals in sediment are not bioavailable for uptake due to strong complexation by solid phases. For example, metals precipitated as metal-sulfide ligands may be resistant to solubilization under typical geochemical conditions observed in sediment or sediment pore water (Sigg and Behra, 2005). Mercury bioaccumulation is increased by the methylation of inorganic forms of mercury into methylmercury, an organic form that is more bioavailable and has been demonstrated to biomagnify with increasing trophic levels (i.e., concentrations increase with increasing trophic levels).

##### Volatile and Semi-Volatile Organic Compounds

An evaluation of the chemical characteristics of volatile and semi-volatile COPECs indicates limited potential for bioaccumulation and, therefore, limited potential for exposure to upper trophic wildlife receptors through bioaccumulation and ingestion pathways.

Semi-volatile organic constituents were identified as potentially bioaccumulative constituents based on EPA (2000). SVOCs specifically listed as important bioaccumulative constituents in EPA (2000) or SVOCs with base 10 logarithm (log) octanol-water partitioning coefficient (log  $K_{ow}$ ) octanol-water partitioning coefficients greater than 3.5 have a strong potential to partition into the lipids of organisms, and were identified as potentially bioaccumulative constituents (EPA, 2000). The primary source for  $K_{ow}$  values was the EPA KOWWIN v. 1.68 application within the Estimation Programs Interface (EPI) Suite software package (EPA, 2012b).

Some SVOCs with log  $K_{ow}$  values greater than 3.5 have chemical-specific properties that limit their potential to bioaccumulate. For example, higher trophic level organisms, including birds and mammals, can metabolize polycyclic aromatic hydrocarbons (PAHs) and eliminate the by-products; therefore, transfer to upper trophic wildlife receptors is anticipated to be minimal for these chemicals. Specifically, unsubstituted PAHs do not accumulate in fish adipose tissues, despite their high lipid solubility, because they are quickly metabolized (Eisler, 1987); aquatic invertebrate communities do not metabolize PAHs as readily and may have some potential to bioaccumulate.

Although some VOCs have log  $K_{ow}$  values greater than 3.5, VOCs typically do not bioaccumulate sufficiently in prey tissue to pose a risk to upper trophic wildlife consumers (EPA, 1997b). Therefore, VOC exposure to upper trophic receptors via bioaccumulation pathways is considered minimal and is not further evaluated in this SLERA. Direct contact toxicity of volatile COPECs to sediment-dwelling organisms is the primary exposure route for VOCs evaluated in the SLERA (see Section 4.5.2).

### **Pesticides**

Two key properties of pesticides that control their bioaccumulation in aquatic biota are hydrophobicity and persistence. Compounds that break down slowly and are persistent in the environment are generally more bioaccumulative. Pesticides are accumulated in body tissues, especially fats, of aquatic organisms either directly through ingestion or absorption of contaminated water or indirectly by consumption of contaminated food or sediment.

### **PCBs**

The primary ecological concern for PCBs is their high bioaccumulation capacity due to their high lipid solubility and slow rate of metabolism and elimination. There are multiple mechanisms influencing the bioaccumulation of PCBs in aquatic biota. These mechanisms can include direct uptake from the water column across gills or epidermis (i.e., bioconcentration), direct contact with contaminated sediments, and consumption of contaminated food or sediment (WHO, 1993). Due to their extremely high liposolubility, PCBs have been shown to biomagnify with increasing trophic levels within the food chain (Eisler, 1986).

## **4.5.2 Ecotoxicity**

This section summarizes information regarding the ecotoxicity of COPECs in sediment and surface water. The general mode of toxicity for various classes of compounds is presented below.

### **Metals**

The soluble phase of metal ions in sediment pore water is generally the most bioavailable and potentially toxic form to ecological receptors. As a result, the

bioavailability and toxicity of metals in sediments is correlated with the fraction of metals in sediment pore water rather than total metal concentrations in bulk sediment (EPA, 2007a; EPA, 2005a; Di Toro et al., 2005; Ankley et al., 2006; Hansen et al., 1996; Ankley et al., 1991; Di Toro et al., 1992; and Luoma, 1989). Most metals in pore water are complexed by colloids and do not exist as freely dissolved metal – ion complexes (Burgess et al., 1996). Sulfide is an important control on metal bioavailability and toxicity (Burton, 2010; EPA, 2007a; EPA, 2005a). In the aerobic portion of the sediment, dissolved and exchangeable metals are efficiently scavenged by iron and manganese oxides, thereby limiting the bioavailability and toxicity of metals (DiToro et al., 1990). In addition to redox, pH controls metal speciation and binding by affecting the species distribution of dissolved ligands and the surface charge of binding sites (EPA, 2007a). Generally, metal mobility, and associated toxicity, increases at low pH and decreases as pH increases, at which point greater sorption occurs (EPA, 2007a).

### **Volatile and Semi-Volatile Organic Constituents**

Many of the Tier 2 Equilibrium Partitioning Sediment Benchmark (ESB) nonionic organic chemicals identified by EPA (2008), such as key site-related constituent groups including chlorinated benzenes, express toxicity through narcosis (EPA, 2008). Narcosis, which results in the degradation of cell membranes, is the primary mode of toxic action for benthic invertebrates exposed to narcotic chemicals (Burgess, 2009).

Chlorobenzene is moderately toxic to aquatic organisms with toxicity generally occurring within the >1,000 micrograms per liter ( $\mu\text{g/L}$ ) to 100,000  $\mu\text{g/L}$  range (EPA, 1995a). A 96- to 98-hour no observed effect concentration (NOEC) reported for sediment-dwelling organisms including *Chironomus thummi* (midge) was 720  $\mu\text{g/L}$  (van der Zandt et al., 1994). The chronic toxicity value used to derive the Tier 2 ESB for chlorobenzene published in *Procedures for the Derivation of Equilibrium Partitioning Sediment Benchmarks (ESBs) for the Protection of Benthic Organisms: Compendium of Tier 2 Values for Nonionic Organics* is 880  $\mu\text{g/L}$  (EPA, 2008). Acute toxicity data for chlorobenzene obtained from studies of the warmwater fish species *Lepomis macrochirus* (bluegill) yielded a 96-hour lethal concentration to 50 percent ( $\text{LC}_{50}$ ) of juvenile test organisms that ranged from 4,500  $\mu\text{g/L}$  (Bailey et al., 1985) to 16,000  $\mu\text{g/L}$  (Buccafusco et al., 1981).

As previously discussed, VOCs generally do not bioaccumulate to any significant degree; therefore, they do not typically pose a risk via trophic transfer to wildlife receptors. Due to the low potential to bioconcentrate and the absence of these compounds from river surface water at elevated concentrations, fish are also not expected to be adversely affected by VOCs.

PAHs occur in the environment as complex mixtures (Burgess, 2009) and are considered Type I narcotic chemicals (Verhaar et al., 1992). The predominant mechanism of PAH toxicity to invertebrates is narcosis, which can result in mild toxic effects or mortality depending upon the duration and intensity of the exposure (Burgess, 2009). The potential effects of PAH-induced narcosis on benthic invertebrate communities can include decreased abundance, diversity, and growth (Environment Canada, 1999).

The direct contact toxicity of PAHs is additive and predicted more accurately by dissolved concentration in pore water when compared to bulk sediment samples (EPA, 2003a; Di Toro et al. 1991). Dissolved PAH constituents in sediment pore water represent the bioavailable and more toxic phase (DiToro et al., 1991). It is widely recognized that pore water concentrations more accurately predict observed community

level effects than do bulk sediment concentrations for nonionic compounds (NJDEP, 2018). Based on the additive toxicity of PAHs in pore water and the occurrence of PAHs as mixtures in the environment, EPA guidance recommends the evaluation of direct contact toxicity of PAH mixtures based on the sum of toxic units (TUs) for individual PAHs estimated in pore water using an EqP approach (EPA, 2003a).

### **Pesticides**

The toxicological effects of pesticides are a function of toxicity, exposure time, dose rate, and persistence in the environment and can range from acute effects, such as immediate fish kills, to chronic effects that may affect the vitality of developing larvae or impair reproduction (Reese et al., 1972; WHO, 1986). The chemical degradation products of certain pesticides may be more toxic than the parent compounds.

### **PCBs**

The presence of PCBs in biological organisms at elevated concentrations has been associated with reproductive failure, birth defects, skin lesions, tumors, liver disorders, and, among sensitive species, death (Eisler, 1986). Ecological exposure to PCBs is primarily an issue of bioaccumulation rather than direct toxicity (Section 4.5.1). The toxicological properties of PCBs are influenced primarily by the partitioning coefficient based on solubility in  $K_{ow}$  and steric factors, resulting from different patterns of chlorine substitution. Typically, PCB isomers with high  $K_{ow}$  values, and high numbers of substituted chlorines in adjacent positions, constitute the greatest environmental concern (Eisler, 1986).

## **4.6 Receptors of Concern and Primary Exposure Routes**

As described in Section 2.2.1, Chambers Works is located within a salinity transition zone of the Delaware River. Within this transitional zone, salinities fluctuate between freshwater and oligosaline conditions, depending on the location of the salt front controlled by freshwater input from the upper watershed. As a result, this transitional zone supports aquatic communities, including benthic invertebrates and fish communities, that are relatively tolerant of a range of salinities. Consistent with typical estuarine environments, benthic species richness in the Delaware River declines in the transitional zone with decreasing salinity (Miller and Padeletti, 2017). As reflected in its designated use (Section 2.2.1), Zone 5 of the Delaware River supports the maintenance and propagation of estuarine fish species. However, an existing use evaluation of important estuarine fish species indicated that Striped Bass (*Morone saxatilis*) were the only species expected to use the lower portion of Zone 5 as a core part of its spawning (DRBC, 2015). Marine or brackish fish species were expected to spawn farther down-estuary from the salt front in areas with greater salinities; freshwater species were expected to use areas upstream of the salt front with more consistent freshwater input (DRBC, 2015). In addition to aquatic life, wildlife receptors, including semi-aquatic birds and mammals, also forage within the Delaware River and along its shoreline.

Receptors of concern identified for evaluation in the SLERA include the following:

- Benthic invertebrate community
- Fish community
- Wildlife populations, including semi-aquatic birds

The following subsections discuss primary exposure routes for receptors groups that may be exposed to COPECs in the Delaware River.

#### 4.6.1 Benthic Invertebrates

Primary exposure routes for benthic invertebrates include the following:

- Bulk sediment: direct contact/absorption within the BAZ; direct/incidental ingestion
- Sediment pore water: direct contact/absorption within BAZ

Benthic invertebrates are the most susceptible to the effects of sediment-related COPECs because of their sedentary nature and direct exposure to sediment and sediment pore water. Because of this exposure, benthic invertebrates are sensitive to both acute and chronic changes in sediment quality. For benthic invertebrates, exposure occurs within the BAZ of sediment, which operationally extends from the SWI to a depth of approximately 0.5 feet (6 inches) for freshwater sediment (EPA, 2005b; EPA, 2015a).

Direct contact exposure to COPECs in pore water is a more relevant exposure route for benthic invertebrates when compared to bulk sediment exposure. Numerous studies indicate that pore water concentrations are a better predictor of constituent bioavailability and toxicity to benthic invertebrate receptors when compared to bulk sediment concentrations (EPA, 2005a; EPA, 2003a; NJDEP, 2018; Parkerton and Maruya, 2013). The bioavailability and toxicity of COPECs in sediment are influenced by sediment physiochemical characteristics, including the quantity and type of organic carbon, which affects the partitioning of constituents between sediment and pore water. Site-specific measurements of freely dissolved concentrations in sediment pore water ( $C_{free}$ ) are the most direct indicator of constituent bioavailability and partitioning (Department of Defense, 2009; Parkerton and Maruya, 2013). However, in the absence of site-specific pore water measurements, EqP approaches may be used to estimate  $C_{free}$  in pore water.

#### 4.6.2 Fish

Fish were selected as receptors of concern because of continuous contact with surface water. Direct contact/absorption of surface water is the primary exposure route for fish evaluated in the SLERA. Demersal fish may also be exposed to COPECs through the direct ingestion of sediment-associated prey and the incidental ingestion of sediment and pore water while foraging in sediment. However, exposure via these routes is likely secondary and is not quantitatively evaluated in the SLERA.

#### 4.6.3 Wildlife

The Delaware River adjacent to Chambers Works provides suitable habitat for wildlife such as semi-aquatic birds that may forage within the river. Semi-aquatic mammals were not selected because the modified shoreline (e.g., seawall) and water depth along the Chambers Works shoreline limits regular exposure to potential mammalian receptors such as American Mink (*Neovison vison*) and Raccoon (*Procyon lotor*) that forage on stream edges or in shallow water bodies. Semi-aquatic mammals that may dive deeply enough to be exposed to the sediment, such as North American River Otter (*Lontra canadensis*), are unlikely to be present in this portion of the Delaware River due to the industrial/developed shoreline and regular disturbance from human activity. Therefore, the representative species used in the SLERA to evaluate potential exposure to semi-aquatic wildlife receptors include:

- Piscivorous bird: Double-crested Cormorant (*Phalacrocorax auritus*)
- Omnivorous bird: Black Duck (*Anas rubripes*)

These representative wildlife receptors may be exposed to bioaccumulative COPECs through the following primary exposure routes:

- Dietary items: Direct ingestion
- Bulk sediment: Incidental ingestion

Wildlife may also be exposed through the direct and incidental ingestion of surface water from the Delaware River. However, this exposure route provides a negligible contribution to the total receptor dose when compared to the direct ingestion of dietary items and the incidental ingestion of bulk sediment. Wildlife ingestion of surface water is not an exposure route that is quantitatively evaluated in the SLERA.

## 4.7 Assessment and Measurement Endpoints

Assessment endpoints are explicit expressions of environmental values to be protected (EPA, 1998). Measurement endpoints represent measurable responses to a stressor that are related to the values specified as assessment endpoints (EPA, 1992). Table 1 identifies the assessment endpoints and associated measurement endpoints selected for the exposure areas identified in the SLERA.

The benthic invertebrate community assessment endpoint is evaluated using a weight-of-evidence approach that considers the relevance of each measurement endpoint in estimating the bioavailability and toxicity of COPECs. As discussed in Section 4.5.2, pore water concentrations are a better predictor of constituent bioavailability and toxicity to benthic invertebrate receptors when compared to bulk sediment concentrations (EPA, 2005a; EPA, 2003a; NJDEP, 2018; Parkerton and Maruya, 2013). Therefore, the measurement endpoint based on estimated exposure to pore water using an EqP approach is afforded greater weight in estimating exposure and characterizing risk to benthic invertebrate communities.

## 4.8 Screening-Level Effects Evaluation

The screening-level effects evaluation establishes benchmark concentrations to assess the potential for adverse effects to selected receptor groups. The following sections discuss the conservative NOEC screening criteria established for the selection of COPECs and additional receptor-specific ecotoxicological data that may be used in exposure estimation and risk characterization for each receptor group. The following sections identify the hierarchy of ecological screening values (ESVs) that were used to evaluate COPEC exposure from relevant media.

### 4.8.1 Sediment

The screening of constituent concentrations in sediment included a quantitative assessment of direct contact toxicity to benthic invertebrates. Sediment ESVs used in the screening-level exposure evaluation are summarized in Table 2. The following sources were used in the selection of ESVs for sediment:

- NJDEP (2009): Freshwater Criteria Lowest Effects Levels (LELs)
- MacDonald et al. (2000): Consensus-based sediment quality guidelines for freshwater ecosystems
- EPA (2003b): Region 5 Ecological Screening Levels (Sediment)

- EPA (2006): EPA Region 3 Biological Technical Assistance Group (BTAG) Freshwater Benchmarks
- Washington State No Effect Level (NEL) Sediment Quality Standards
- Calculated ESVs based on an EqP model (DuPont CRG, 1999)

#### **4.8.2 Surface Water**

The screening of constituent concentrations in surface water included a quantitative assessment of direct contact toxicity to water column invertebrates and aquatic wildlife. Surface water ESVs used in the screening-level exposure evaluation are summarized in Table 3. The following sources were used in the selection of ESVs for surface water:

- NJDEP (2016): Freshwater (FW2) Chronic Aquatic Criteria
- NJDEP (2016): NJDEP Surface Water Quality Standards
- EPA (2009b): National Recommended Water Quality Criteria (NRWQC)
- EPA (2003b): Region 5 Ecological Screening Levels (Water)
- EPA (2006): EPA Region 3 BTAG Freshwater Benchmarks
- EPA (1995b): Region 4 Chronic Surface Water Screening Benchmarks
- EPA (2001b): Region 6 Surface Water Screening Benchmark
- Suter, G.W., II, and C.L. Tsao. (1996): Tier II Secondary Chronic Values (SCVs)
- EPA (2011): Great Lakes Initiative Toxicity Data Clearinghouse aquatic life, chronic concentrations

## 5.0 Screening-Level Ecological Exposure Evaluation Approach

This section describes the methodology used to conduct screening-level exposure estimates and risk calculations for selected receptor categories, consistent with Step 2 of ERAGS (EPA, 1997a). This section describes the data used to conduct the SLERA, specifies the criteria for COPEC selection, and establishes the basis for exposure estimation and risk characterization.

### 5.1 Data Used to Characterize Ecological Exposure

The following sections describe the bulk sediment and surface water datasets collected during multiple historical investigations to conduct the screening-level evaluation of exposure in the four exposure areas identified in the Delaware River adjacent to Chambers Works (Section 4.1):

- Manufacturing Zone – Jackson Labs/TEL Area
- Manufacturing Zone – Fluoroproducts Area
- Manufacturing Zone – SWMU 5/Henby Creek Area
- Carneys Point Zone.

Bulk sediment and surface water samples used in the SLERA are summarized by exposure area in Table 4. Documentation of sampling objectives and analytical results are reported separately in the following reports for each investigation, listed in reverse chronological order:

- AECOM (2018): *2017 Delaware River NAPL Delineation Report – Data Gap Phase III Report*. April 2018.
- AECOM (2017): *2016 Delaware River NAPL Delineation Report*. April 2017.
- AECOM and EHS Support (2017): *2017 Salem Canal Investigation Summary Report*. February 2017.
- URS (2011): *Delaware River Remedial Investigation Report*. June 2011.
- DuPont CRG (2009): *Delaware River Groundwater to Surface Water Investigation –Supplemental NAPL Delineation Work Plan*. January 2009.
- DuPont CRG (2007): *SWMU 52 ISM Remedial Action Report*. March 2007.
- DuPont CRG (2002): *SWMU 5 and 43 ISM Findings/Remedial Action Report*. July 2002.

The following subsections describe the bulk sediment and surface water data included in the screening-level exposure evaluation for the Delaware River.

#### 5.1.1 Bulk Sediment

Direct contact ecological exposure to bulk sediment was conservatively evaluated at the 0 to 0.5-foot and 0.5 to 1.0-foot sampling intervals. As previously discussed in Section 4.6.1, benthic invertebrate receptors are exposed in the BAZ, which operationally extends from the SWI to a maximum depth of 0.5 feet below the SWI. In addition to evaluating sediment samples collected within the BAZ, sediment data from the sampling interval immediately below the BAZ (0.5 to 1.0 foot) were evaluated consistent with

NJDEP *Ecological Evaluation Technical Guidance* (NJDEP, 2018). NJDEP (2018) recommends the evaluation of both sampling intervals to conservatively evaluate exposure at sites where groundwater-to-surface water discharge may be a predominant current or historical transport pathway (Section 4.2).

Analytical results from the RIR (URS, 2011) and DNAPL investigations (AECOM, 2018; AECOM, 2017) comprise most sediment data used in the exposure evaluation, supplemented by samples collected during the delineation and remediation activities within the Delaware River for SWMU 5/43 (DuPont CRG, 2002) and SWMU 52 (Figures 5 through 8; DuPont CRG, 2007c). The analytical scope for sediment samples included in the exposure evaluation is summarized on a sample-specific basis in Table 4. A summary of sediment analytical data used in the screening-level exposure evaluation is provided in Appendix A.

Select sediment samples collected during the Delaware River Remedial Investigation (URS, 2011), Salem Canal Investigation (AECOM and EHS Support, 2017), and Delaware River NAPL Investigation (AECOM, 2018; AECOM, 2017) were analyzed for perfluorinated compounds. These results are not included in the ecological exposure evaluations presented in the SLERA. Further discussion of the distribution of perfluorinated compounds in sediment in the Delaware River in the context of potential sources and migration pathways from Chambers Works is presented in the *Conceptual Model (CSM) for Poly- and Perfluoroalkyl Substances (PFAS)* (AECOM, 2017b).

### 5.1.2 Surface Water

Surface water samples collected during the Delaware River Remedial Investigation (URS, 2011) and Salem Canal Investigation (AECOM and EHS Support, 2017) were used to characterize surface water exposure in the SLERA. Near-bottom surface water samples were collected at approximately 1 foot above the SWI or at mid-water interval for stations with total water depth less than 3 feet (Figures 5 through 8). The analytical scope for surface water samples included in the exposure evaluation is summarized on a sample-specific basis in Table 4. Surface water analysis for metals was conducted on filtered (0.45- $\mu\text{m}$  [micrometer] filter) and unfiltered samples. A summary of surface water analytical data used in the screening-level exposure evaluation is provided in Appendix A.

In addition to chemical analyses, *in situ* measurements of near-bottom surface water parameters were recorded at each surface water and sediment sampling station in the Delaware River Remedial Investigation (URS, 2011). Surface water parameters, including temperature, pH, dissolved oxygen, conductivity, oxidation-reduction potential (ORP) and salinity, were measured with a YSI 556 multi-parameter water quality meter.

Select surface water samples collected during the Delaware River Remedial Investigation (URS, 2011) and Salem Canal Investigation (AECOM and EHS Support, 2017) were analyzed for perfluorinated compounds. These results are not included in the ecological exposure evaluations presented in the SLERA. Further discussion of the distribution of perfluorinated compounds in surface water in the Delaware River in the context of potential sources and migration pathways from Chambers Works is presented in the *Conceptual Model (CSM) for Poly- and Perfluoroalkyl Substances (PFAS)* (AECOM, 2017b).

### 5.1.3 Data Usability

The AECOM Analytical Data Quality Management (ADQM) Group conducted data validation on electronic data deliverables using the data verification model (DVM) process for the datasets included in the SLERA (Section 5.1). This process reviews and evaluates laboratory data including hold time criteria, blank contamination, matrix spike/matrix spike duplicate (MS/MSD) recoveries, duplicate sample relative percent difference (RPD), and surrogate recoveries. Based on the DVM process, the following qualifiers were assigned to the sediment and surface water data as applicable:

Qualifier	Definition
R	Unusable result. Analyte may or may not be present in the sample.
J	Analyte present. Reported value may not be accurate or precise.
UJ	Not detected. Reporting limit may not be accurate or precise.

Results that were not R-qualified in the DVM were considered usable for the purposes of the SLERA. Complete analytical data packages, ADQM data review narratives, and NJDEP HazSite deliverables for data used for this SLERA are provided in the original investigation reports (Section 5.1).

## 5.2 Exposure Estimate Methodology

The following sections describe the methodologies used to conduct the screening-level exposure evaluation based on the available data described in the previous section.

### 5.2.1 Direct Contact Screening Evaluation

The preliminary screening-level exposure evaluation involved comparing maximum concentrations observed in bulk sediment and surface water with the previously described medium-specific ESVs (Section 4.8). The preliminary exposure estimate presents the most conservative exposure scenario based on the most conservative exposure assumptions. Preliminary exposure assumptions based on comparison to maximum EPCs for each exposure area are presented below for each receptor category:

- **Benthic Invertebrate Community:** Comparisons of maximum COPEC concentrations measured in bulk sediment to conservative ESVs.
- **Fish Community:** Comparisons of maximum COPEC concentrations in surface water to conservative ESVs.

### 5.2.2 Wildlife Ingestion Pathway Evaluation

Wildlife ingestion pathways were evaluated for exposure to constituents with the potential to bioaccumulate. As presented in Table 5, bioaccumulative constituents for wildlife ingestion pathway evaluation were identified as organic constituents with log  $K_{ow}$  values greater than 3.5 based on EPA (2000) (Section 4.5.1) and inorganic constituents identified by EPA as important bioaccumulative constituents (EPA, 2000).

Deterministic dose rate models were developed to calculate an estimated daily dose (EDD) that semi-aquatic wildlife receptors may receive through foraging activities in the Delaware River. Wildlife receptors that may be present in the Delaware River would likely forage over a broad area. Therefore, the deterministic models estimated EDDs within each of the four individual exposure areas in the Delaware River (Section 4.1) and

summed the spatially weighted EDDs from the four exposure areas to evaluate aggregate exposure along the entire Chambers Works shoreline.

For the screening-level evaluation, deterministic models were based on the most conservative EPCs that a wildlife receptor may receive assuming typical exposure factors to ensure that initial estimates of ecological risk to represent the reasonable maximum exposure (RME).

EDDs were compared to conservative toxicity reference values (TRVs) based on survival, growth, or reproduction endpoints. Two tiers of chronic TRVs representing no observed adverse effects levels ( $TRV_{NOAEL}$ ) and lowest observed adverse effect levels ( $TRV_{LOAEL}$ ) were identified. Only  $TRV_{NOAEL}$  values were used in the screening-level exposure evaluation. If the conservative estimates of exposures are below TRVs that are not known to cause adverse effects, then the potential for adverse effects is not likely. If the EDD exceeds the  $TRV_{NOAEL}$  based on the RME, the deterministic model is refined to reflect more realistic exposure scenarios (Section 8.1.2).

### Overview of Dietary Exposure Models

The follow equation forms the basis for the point exposure estimate for a given receptor:

$$EDD_{total} = \frac{IR_{diet} \times \sum (BSAF_{dw} \times C_{substrate} \times DF_i) \times AUF}{BW} + \frac{IR_{substrate} \times C_{substrate} \times AUF}{BW}$$

where:

$EDD_{total}$  = Estimated daily dose (mg COPEC/kg BW wet weight/day)

$BW$  = Body weight (kg wet weight)

$IR_{diet}$  = Ingestion rate of food [kg food/day, dry weight (dw)]

$BSAF_{dw}$  = Biota-sediment accumulation factor (BSAF), specific to prey type and COPEC (kg sediment/kg tissue, dw)

$C_{sediment}$  = COPEC concentration in sediment (mg COPEC/kg, dw)

$DF_i$  = Dietary fraction of item  $i$  in total diet (proportion)

$IR_{sediment}$  = Incidental ingestion rate of sediment (kg/day, dw)

AUF = Area use factor for exposure area

General discussion of parameter estimation is provided below; additional details regarding the parameterization of the deterministic models are provided in Appendix B.

### Exposure Parameter Estimation

The deterministic model was used in the screening-level evaluation to estimate an RME for a typical representative receptor. Therefore, average and/or typical values of exposure factors were used (e.g., mean body weight [BW] and typical dietary preference). Various literature sources were reviewed to select the receptor-specific exposure factors, including the Wildlife Exposure Factors Handbook (EPA, 1993b). An area use factor (AUF) of 1 was assumed in the screening-level evaluation. Receptor-specific values for exposure factors used in the deterministic models are presented in Appendix B.

## Estimation of Exposure Point Concentrations

For the screening-level exposure evaluation, EPCs were estimated in the deterministic models based on maximum COPEC concentrations in sediment samples collected within the BAZ (0 to 0.5-foot sampling interval) in the Delaware River for each exposure area. COPEC concentrations in dietary items were estimated based on BSAFs obtained from literature sources (e.g., DiToro and McGrath, 2000, Bechtel, 1998) or the U.S. Army Corps of Engineers BSAF Database (USACE, 2017). Further detail regarding the estimation of EPCs is provide in Appendix B.

## Toxicity Reference Values

The EDD is compared to conservative  $TRV_{NOAEL}$  values to evaluate the potential for adverse effects to wildlife receptors. Consistent with NJDEP (2018), the selection of TRVs to evaluate the potential for adverse effects to wildlife receptors was based on a tiered approach. In the screening-level evaluation, TRVs were selected from first-tier TRV sources identified by NJDEP (Table 1 in NJDEP 2018). In the absence of TRVs from NJDEP (2018), alternate TRVs were primarily obtained from second tier sources including compilations of toxicity data for EPA Ecological Soil Screening Levels (Eco-SSLs; EPA (2005c)) and other sources including EPA (2007b) and Sample et al. (1996). For constituents with EDDs exceeding first-tier TRVs in the screening-level exposure evaluation, alternative TRVs were considered in the refined exposure evaluation (Section 7.3.3). Appendix B contains a summary of selected TRVs and associated sources.

## 5.3 Risk Characterization

Potential risks associated with screening-level ecological exposure estimates were expressed as hazard quotient (HQs), which represent the ratio of the EPC to ESV for direct contact pathways or the ratio of the EDD to the TRV for wildlife ingestion pathways:

$$HQ = \frac{EPC}{ESV} \text{ or } \frac{EDD}{TRV}$$

Potential direct contact risk may be characterized based on HQs, as follows:

- HQs less than 1.0 indicate limited potential for adverse effects because COPEC concentrations result in an exposure that has not been demonstrated to cause adverse ecological effects.
- HQs greater than 1.0 indicate that an EPC for the COPEC exceeds an ecological benchmark representing a NOEC or NOAEL. Therefore, the potential for adverse effects cannot be dismissed; further evaluation of exposure may be warranted.

## 5.4 COPEC Selection

Constituents were retained as COPECs for further evaluation when:

- The maximum detected concentration exceeded the ESV.
- No ESV was available.

The exclusion of constituents with method detection limits (MDLs) above the ESV is a source of uncertainty in the exposure assessment that is discussed further in the uncertainty evaluation presented in Section 9.0.

## 6.0 Screening-Level Exposure Estimate and Risk Characterization

This section identifies COPECs and presents screening-level exposure estimates for the ecological receptors that may be exposed to COPECs in surface water and sediment in exposure areas of the Delaware River adjacent to Chambers Works. As discussed in the preliminary problem formulation (Section 4.6), the assessment for the Delaware River includes screening-level exposure evaluations for the following receptor groups:

- Benthic invertebrate community
- Fish
- Semi-aquatic wildlife

### 6.1 COPEC Identification

The results of the preliminary comparisons of maximum EPCs to conservative ESVs were used to identify sediment and surface water COPECs for further evaluation.

#### Bulk Sediment

The results of the screening-level evaluation are presented in the following tables for bulk sediment by exposure area:

- Jackson Labs/TEL Area: Table 6 (0-0.5-foot) and Table 7 (0.5-1-foot)
- Fluoroproducts Area: Table 8 (0-0.5-foot) and Table 9 (0.5-1-foot)
- SWMU 5/Henby Creek Area: Table 10 (0-0.5-foot) and Table 11 (0.5-1-foot)
- Carneys Point Zone: Table 12 (0-0.5-foot) and Table 13 (0.5-1-foot)

A summary of constituents identified as COPECs based on maximum concentrations exceeding conservative ESVs is presented in Table 14 by exposure area and sampling interval. In addition to the constituents identified as COPECs based on maximum concentrations exceeding ESVs, VOCs, SVOCs, pesticides, and metals lacking ESVs from the sources listed in Section 4.8 are also identified in Table 14. Potential exposure to constituents lacking ESVs is addressed as an uncertainty in the SLERA (Section 9.1.1).

#### Surface Water

The results of the screening-level evaluation for surface water are presented in Table 15 (Jackson Labs/TEL Area), Table 16 (Fluoroproducts Area), Table 17 (SWMU5/Henby Creek Area), and Table 18 (Carneys Point Zone).

Aluminum and iron in unfiltered samples were the only constituents with maximum concentrations exceeding conservative ESVs in each exposure area. The filtered concentration of lead exceeded its ESV in a single sample in the Jackson Labs/TEL Area.

Only one organic constituent, 1,4-dichlorobenzene, was detected in surface water samples at a concentration exceeding its conservative ESV. This site-related contaminant was detected in a single surface water sample in the Fluoroproducts Area at a concentration of 14 µg/L, which slightly exceeded its ESV of 9.4 µg/L. Limited detections of other organic constituents including pesticides, VOCs, SVOCs, and total

PCBs were observed in the Delaware River; however, no constituents were detected at concentrations exceeding conservative ESVs.

## 6.2 Screening-Level Exposure Estimate

The following sections present the results of screening-level exposure estimates for exposure areas identified in the Delaware River adjacent to Chambers Works.

### 6.2.1 Jackson Labs/TEL Area

The following sections identify COPECs and present the screening-level exposure estimates for the benthic invertebrate and fish communities that may be exposed to COPECs in sediment and surface water in the Jackson Labs/TEL Area.

#### Benthic Invertebrates

Preliminary exposure estimates for benthic invertebrates exposed to COPECs in bulk sediment in the BAZ (0 to 0.5 foot) and the 0.5 to 1-foot interval within the Jackson Labs/TEL Area are summarized in Tables 6 and 7, respectively. Figure 9 illustrates the location of samples with metal constituents exceeding preliminary ESVs within the Jackson Labs/TEL Area; Figure 10 illustrates the location of samples with organic constituents exceeding preliminary ESVs.

Maximum concentrations of metals, VOCs, PAHs, SVOCs, pesticides, and total PCBs, exceeded preliminary ESVs in samples collected from the BAZ in the Jackson Labs/TEL Area. Maximum concentrations of 14 metals exceeded ESVs (Table 6). HQs based on maximum concentrations ( $HQ_{Max}$ ) for most metals in Jackson Labs/TEL Area sediment were below 10, except for chromium ( $HQ_{Max}=45$ ), lead ( $HQ_{Max}=39$ ), and mercury ( $HQ_{Max}=55.2$ ). Seven VOCs had HQs greater than 1, and four VOCs (1,2-dichlorobenzene  $HQ_{Max}=18.7$ ; 1,4-dichlorobenzene  $HQ_{Max}=14.2$ ; acetone  $HQ_{Max}=25.3$ ; chloroform  $HQ_{Max}=12.4$ ) had  $HQ_{Max}$  that exceeded 10. Chloroform was only detected in 1 out of 9 samples, however. Based on maximum concentrations of SVOCs, 15 of 16 individual PAH compounds and total PAHs ( $HQ_{Max}=6.3$ ) exceeded ESVs. Maximum concentrations of seven non-PAH SVOCs also exceeded preliminary ESVs. The only  $HQ_{Max}$  for non-PAH SVOCs that exceeded 10 was for 2,4-dinitrotoluene (2,4-DNT) ( $HQ_{Max}=16.7$ ); however, 2,4-DNT was only detected in 1 out of 37 samples (Table 6). Pesticides were generally detected at low concentrations relative to ESVs, with  $HQ_{Max}$  values based on maximum detected concentrations at or below 5 for the two pesticides (beta-B-hexachlorocyclohexane [beta-BHC], and endosulfan I) with maximum concentrations exceeding ESVs. Total PCBs exceeded the preliminary ESV at 2 of 9 stations, with a  $HQ_{Max}$  of 4.5 (Table 6).

COPEC concentrations were generally lower in the 0.5 to 1-foot interval below the BAZ in the Jackson Labs/TEL Area (Table 7). Maximum concentrations of 12 metals exceeded preliminary ESVs. The greatest  $HQ_{Max}$  for metals was observed for chromium ( $HQ_{Max}=22$ ), which was the only metal with an HQ greater than 10; except for iron, the remaining metal  $HQ_{Max}$  were below 5 (Table 7). Five maximum VOC concentrations exceeded ESVs, but only acetone ( $HQ_{Max}=19.2$ ) and chlorobenzene ( $HQ_{Max}=16.8$ ), exceeded 10. Acetone was detected in 33 out of 37 samples at concentrations that exceeded its ESV; however, acetone is also widely recognized as a laboratory contaminant. Chlorobenzene is a site-related constituent that was detected in only 3 of 37 samples at concentrations exceeding its preliminary ESV. Maximum concentrations of 15 of the 16 individual PAHs exceeded ESVs; total PAHs exceeded the ESV in 1 of 9 samples, with an  $HQ_{Max}$  of 3.7 (Table 7), which was approximately half of the HQ for the

BAZ. 2-methylnaphthalene had a maximum concentration that was comparable to the preliminary ESV. A single pesticide (4,4'-Dichlorodiphenyldichloroethene [DDE]) had a maximum concentration that marginally exceeded its preliminary ESV ( $HQ_{Max}=2$ ). Total PCBs in the 0.5 to 1-foot interval marginally exceeded the ESV ( $HQ_{Max}=2$ ).

An evaluation of the spatial distribution of COPEC exceedances within the BAZ in the Jackson Labs/TEL Area indicates that most exceedances of metals in sediment samples were relatively low (i.e., less than five times the preliminary ESVs), and were primarily located in the fine-coarse sand/gravel sediments (Type II) in the nearshore grid band (Figure 9). Maximum concentrations of many metals were observed at stations (SC-231, SC-234, and SC-237) in the Salem Canal Tidal Reach (Figure 9; Tables 6 and 7). Metals exceedances in the mid and outer grid bands were less frequent and tended to only slightly exceed preliminary ESVs (Figure 9).

The spatial distribution of organic constituents with maximum concentrations exceeding preliminary ESVs was consistent with the spatial distribution of metals exceedances, with a higher number of exceedances and a greater magnitude of exceeding ESVs in the fine-coarse sand/gravel sediments (Type II) in the nearshore grid band. Maximum VOC and SVOC concentrations were identified in samples collected from Type II fine-coarse sand-gravel stations (DER2-05-SD, DER3-19, DER1-07, DER3-04, and DER3-06) in the near-shore sample grid band (Figure 10). Maximum concentrations of benzene, chlorobenzene, dichlorobenzenes, and 1,2,4-trichlorobenzenes were observed within these stations. The maximum total PAH concentration (25.2 milligrams per kilogram [mg/kg]) was observed at station SC-236 near the mouth of the Salem Canal; total PAH concentrations exceeding the preliminary ESV were also located at stations in the Salem Canal Tidal reach adjacent to SC-236 and at stations in the nearshore grid band in the Delaware River (DER2-31-SD, DER3-04, and DER1-10; Figure 10). Total PCBs exceeded the preliminary ESV at two stations located near the mouth of the Salem Canal (DER1-01 and SC-236) and at station DER2-11-SD in the northern portion of the Jackson Labs/TEL Area. Pesticides were analyzed in two samples in the Salem Canal Tidal Reach of the Salem Canal; maximum concentrations exceeding preliminary ESVs were detected at SC-236 (Figure 10).

## **Fish**

The results of the screening-level exposure estimate for fish based on surface water samples in the Jackson Labs/TEL Area is summarized in Table 15 and illustrated in Figure 11.

Preliminary exposure estimates for fish indicate negligible exposure to site-related constituents at concentrations exceeding preliminary ESVs in the Jackson Labs/TEL Area. Maximum concentrations in surface water were lower than preliminary ESVs for all constituents, except aluminum, iron, and lead. The maximum lead concentration slightly exceeded the preliminary ESV in one of 17 filtered samples, resulting in an  $HQ_{Max}$  of 1.6. The single lead exceedance was observed at station DER1-03 located in the nearshore grid band adjacent to Jackson Labs (Figure 11). Exceedances of aluminum and iron were consistent throughout the Jackson Labs/TEL Area. These COPECs are not considered to be significant site-related constituents and may be related to regional surface water quality.

## 6.2.2 Fluoroproducts Area

The following sections identify COPECs and present the screening-level exposure estimates for the benthic invertebrate and fish communities that may be exposed to COPECs in sediment and surface water in the Fluoroproducts Area.

### Benthic Invertebrates

The results of the screening-level exposure estimate for benthic invertebrates in the Fluoroproducts Area are summarized in Tables 8 and 9 for the BAZ and 0.5 to 1-foot interval, respectively. Figures 12A and 12B illustrate the location of samples with metals concentrations exceeding preliminary ESVs in the Fluoroproducts Area; Figures 13A and 13B illustrate the location of samples with organic concentrations exceeding preliminary ESVs.

Exceedances of preliminary ESVs were observed in the Fluoroproducts Area for metals, VOCs, SVOCs including PAHs, and PCBs (Tables 8 and 9). Thirteen metals had maximum concentrations greater than ESVs in samples collected in the BAZ, but the only metal with an  $HQ_{Max}$  greater than 10 was mercury with an HQ of 30.8 (Table 8). Several VOCs were present at elevated concentrations in Fluoroproducts Area sediment, with 16 chemicals having maximum concentrations that exceeded ESVs in the BAZ. 1,2-Dichlorobenzene, 1,4-dichlorobenzene, and chlorobenzene had  $HQ_{S_{Max}}$  greater than 100 based on preliminary ESVs; 1,1-dichloroethane, acetone, benzene, ethylbenzene, tetrachloroethene, and xylenes had HQs greater than 10 (Table 8). Fifteen of 16 individual PAH compounds were detected at maximum concentrations greater than the ESV; total PAHs exceeded the ESV in five samples ( $HQ_{Max}=13$ ). Fourteen non-PAH SVOCs were detected at maximum concentrations exceeding ESVs within the BAZ. Aniline was the only SVOC with an HQ greater than 100;  $HQ_{S_{Max}}$  for 2,4-DNT, 4-chloroaniline, hexachlorobenzene, and nitrobenzene were greater than 10 (Table 8). Total PCB concentrations exceeded the preliminary ESV in 28 of 37 samples, with an  $HQ_{Max}$  of 16.3.

COPEC concentrations were generally greater in the 0.5 to 1-foot interval relative to the BAZ for most constituent groups, particularly for VOCs. Maximum concentrations of 14 metals exceeded preliminary ESVs, with the maximum aluminum concentration being comparable to the preliminary ESV.  $HQ_{S_{Max}}$  were greater than 10 for copper ( $HQ=18.5$ ), ( $HQ=18.2$ ), and mercury ( $HQ=16.6$ ; Table 9). Maximum VOC concentrations resulting in  $HQ_{S_{Max}}$  greater than 100 based on preliminary ESVs were observed for acetone, 1,2-dichlorobenzene, 1,4-dichlorobenzene, chlorobenzene, cumene, and tetrachloroethene (Table 9). VOCs with  $HQ_{S_{Max}}$  greater than 10 included 1,1-dichloroethane, benzene, chloroform, and TCE (Table 9). Maximum concentrations of 16 individual PAHs exceeded preliminary ESVs and total PAHs exceeded the preliminary ESV in 4 of 32 samples, with an  $HQ_{Max}$  of 63.4 (Table 9). Fourteen non-PAH SVOCs were detected at maximum concentrations exceeding ESVs, with  $HQ_{S_{Max}}$  exceeding 100 for chloroaniline, and hexachlorobenzene;  $HQ_{S_{Max}}$  for 2,4-DNT, 2-methylnaphthalene, bis(2-ethylhexyl) phthalate, and nitrobenzene had HQs greater than 10. Total PCB concentrations exceeded the preliminary ESV in 18 of 27 samples, with an  $HQ_{Max}$  of 49.5 (Table 9).

The greatest concentrations of COPECs exceeding preliminary ESVs were primarily located in nearshore and mid grid bands adjacent to Chambers Works. Maximum concentrations for VOCs in the BAZ were primarily detected at NAPL Delineation stations that were sampled to horizontally and vertically delineate NAPL in sediments (Section 3.4). Maximum concentrations of 10 of 16 VOCs exceeding preliminary ESVs were located at D15-BOR-17 and D15-BOR-22, which are in the same nearshore grid in

the center of the Fluoroproducts Area where the Type 1 clay-fine sand and Type II fine-course sand-gravel transition (Figure 12A). Maximum concentrations of chlorinated benzenes (1,2-dichlorobenzene, 1,4-dichlorobenzene, and chlorobenzene) were observed at D15-BOR-17. Stations adjacent to D15-BOR-17 also had elevated chlorinated benzene concentrations relative to preliminary ESVs, particularly D15-BOR-04, D15-BOR-06, D15-BOR-19, D15-BOR-14, D15-BOR-15, and D15-BOR-16 (Figures 10A and 10B). The maximum total PAH concentration was observed at DER2-20-SD; other stations exceeding preliminary ESVs for total PAHs were in the mid grid band (D15-BOR-7 and DER2-15-SD) and the outer grid band (DER1-14 and DER3-09). The greatest total PCB concentration was observed at D15-BOR-15, located in Type II fine-course sand-gravel in the nearshore grid band near the center of the exposure zone (Figure 12A).

## Fish

The results of the screening-level exposure estimate for fish based on surface water samples in the Fluoroproducts Area is summarized in Table 16 and illustrated in Figure 14.

Preliminary exposure estimates for fish indicate negligible exposure to site-related constituents at concentrations exceeding preliminary ESVs in the Fluoroproducts Area. Maximum concentrations in surface water were lower than preliminary ESVs for all constituents, except aluminum, iron, and 1,4-dichlorobenzene. The maximum 1,4-dichlorobenzene concentration slightly exceeded the preliminary ESV in 1 of 18 samples, resulting in an  $HQ_{Max}$  of 1.5 (Table 16). The single 1,4-dichlorobenzene exceedance was observed at station DER2-18 located in the nearshore grid band (Figure 14). Exceedances of aluminum and iron were consistent throughout the Fluoroproducts Area. These COPECs are not considered to be significant site-related constituents and may be related to regional surface water quality.

### 6.2.3 SWMU 5/Henby Creek Area

The following sections identify COPECs and present the screening-level exposure estimates for the benthic invertebrate and fish communities that may be exposed to COPECs in sediment and surface water in the SWMU 5/Henby Creek Area.

#### Benthic Invertebrates

The results of the screening-level exposure estimate for benthic invertebrates in the SWMU 5/Henby Creek Area are summarized in Tables 10 and 11 for the BAZ and 0.5 to 1-foot interval, respectively. Figure 15 illustrates the location of samples with metals concentrations exceeding preliminary ESVs in the SWMU 5/Henby Creek Area; Figure 16 illustrates the location of samples with organic concentrations exceeding preliminary ESVs.

Exceedances of ESVs were observed in the SWMU 5/Henby Creek Area BAZ for metals, SVOCs including PAHs, and VOCs (Table 10). Twelve metals had maximum concentrations greater than preliminary ESVs in samples collected in the BAZ.  $HQ_{Max}$  values for metals were below 5, except for mercury ( $HQ_{Max}=15.3$ ). Maximum concentrations of three VOCs (1,2-dichlorobenzene, 1,4-dichlorobenzene, acetone) exceeded preliminary ESVs, with  $HQ_{Max}$  values less than 10 (Table 9). Total PAHs exceeded the preliminary ESV in 2 of 13 samples. Maximum concentration of 5 non-PAH SVOCs exceeded preliminary ESVs within the BAZ; however,  $HQ_{Max}$  values exceeded 10 only for 2,4-DNT and nitrobenzene (Table 10). PCBs were detected in the

two samples analyzed for PCB congeners, but total PCB concentrations did not exceed the preliminary ESV in either sample.

In the 0.5 to 1-foot interval, maximum concentrations exceeded preliminary ESVs for one metal (lead  $HQ_{Max}=4.6$ ), five VOCs, and one non-PAH SVOC (nitrobenzene  $HQ_{Max}=2.5$ ). Except for acetone, organic COPECs only exceeded preliminary ESVs in one or two samples (Table 11).

The distribution of metal COPECs with concentrations exceeding preliminary ESVs did not indicate a discernable spatial pattern. Except for the maximum mercury concentration (DER2-21-SD) and copper concentrations (DER2-25-SD), most metals concentrations were consistently distributed at concentrations within two times the preliminary ESV ( $HQ_{Max}<2$ ). Maximum concentrations of two of the four VOCs with concentrations exceeding their ESV were located at DER2-23 (1,2-dichlorobenzene and 1,4-dichlorobenzene), with the other two occurring at DER3-15 (acetone) and DER3-13 (dichlorofluoromethane). PAHs were detected in multiple sample locations; however, total PAH concentrations exceeded preliminary ESVs only at DER2-21 and DER2-23. Only two non-PAH SVOCs had maximum concentrations resulting in  $HQ_{Max}$  values greater than 2; maximum concentrations of nitrobenzene and 2,4-DNT were observed at DER3-13 and DER1-18, respectively (Figure 16).

## Fish

The results of the screening-level exposure estimate for fish based on surface water samples in the SWMU 5/Henby Creek Area is summarized in Table 17 and illustrated in Figure 17.

Preliminary exposure estimates for fish indicate negligible exposure to site-related constituents at concentrations exceeding preliminary ESVs in the SWMU 5/Henby Creek Area. Maximum concentrations in surface water were lower than preliminary ESVs for all constituents, except aluminum and iron. Exceedances of aluminum and iron were consistent throughout the SWMU 5/Henby Creek Area and may be related to regional surface water quality.

### 6.2.4 Carneys Point Zone

The following sections identify COPECs and present the screening-level exposure estimates for the benthic invertebrate and fish communities that may be exposed to COPECs in sediment and surface water in the Carneys Point Zone.

#### Benthic Invertebrates

The results of the screening-level exposure estimate for benthic invertebrates in the Carneys Point Zone are summarized in Tables 12 and 13 for the BAZ and 0.5 to 1-foot interval, respectively. Figure 18 illustrates the location of samples with metals concentrations exceeding preliminary ESVs in the Carneys Point Zone; Figure 19 illustrates the location of samples with organic concentrations exceeding preliminary ESVs.

Exceedances of preliminary ESVs in the BAZ were primarily associated with metals; ESV exceedances were limited for organic constituents, including VOCs, SVOCs, and total PCBs (Table 12). Maximum concentrations of 10 metals exceeded preliminary ESVs in samples collected within the BAZ. The greatest  $HQ_{Max}$  value for metals was 7.2 for mercury. For organic constituents, only three VOCs, two non-PAH SVOCs, and total PCB exceeded preliminary ESVs. Maximum concentrations exceeded preliminary ESVs

for 1,2-dichlorobenzene ( $HQ_{Max}=1.7$ ), 1,4-dichlorobenzene ( $HQ_{Max}=3.8$ ), and acetone ( $HQ_{Max}=15.2$ ). Maximum concentrations of bis(2-ethylhexyl)phthalate and nitrobenzene exceeded preliminary ESVs, resulting in  $HQ_{Max}$  values of 2.3 and 2.9, respectively (Table 13). The maximum total PCB concentration in the BAZ slightly exceeded the preliminary ESV ( $HQ_{Max}=1.2$ ).

VOCs were the only constituents analyzed in the 0.5 to 1-foot interval in the Carneys Point Zone. Acetone exceeded the preliminary ESV in 14 of 16 samples; however, as previously stated, the presence of acetone in sediment samples may be related to potential laboratory contamination (Table 13).

The spatial distribution of COPEC exceedances within the BAZ in the Carneys Point Zone varied by constituent. Maximum concentrations of most exceeding preliminary ESVs were located at DER1-27 in clay-fine sand (Type I) sediment near the northern tip of Carneys Point (Figure 18); maximum concentrations of other metals were observed in samples collected from similar Type I sediment in the middle sampling grid band (DER1-20, DER1-27, DER3-17). Maximum concentrations of two site-related VOCs (1,2-dichlorobenzene and 1,4-dichlorobenzene) that exceeded preliminary ESVs in the BAZ were detected at DER2-29, located in Helms Cove (Figure 19).

## Fish

The results of the screening-level exposure estimate for fish based on surface water samples in the Carneys Point Area is summarized in Table 18 and illustrated in Figure 20.

Preliminary exposure estimates for fish indicate negligible exposure to site-related constituents at concentrations exceeding preliminary ESVs in the Carneys Point Area. Maximum concentrations in surface water were lower than preliminary ESVs for all constituents, except aluminum and iron. Exceedances of aluminum and iron were consistent throughout the Carneys Point Area and may be related to regional surface water quality.

### 6.2.5 Shoreline Wildlife Exposure

Screening-level exposure estimates for semi-aquatic wildlife potentially exposed to bioaccumulative COPECs were assessed using deterministic dose rate models based on maximum exposure assumptions. Details for exposure parameters and model calculations are provided in Appendix B and summarized below.

The results of the screening-level evaluation of wildlife potentially foraging along the Delaware River shoreline adjacent to Chambers Works indicate the potential for adverse effects to semi-aquatic wildlife based on the maximum exposure scenario that assumes maximum EPC and first-tier TRVs. HQs exceeding TRVs for any constituents based on modeled doses to the double-crested cormorant or black duck are summarized in the following table. Based on conservative screening-level exposure assumptions, EDDs for all other bioaccumulative COPECs were lower than  $TRV_{NOAEL}$  values (Appendix B); no further evaluation of wildlife ingestion pathways was conducted for these COPECs.

Analyte	Double-crested Cormorant							
	Jackson Labs/TEL Area		Fluoroproducts Area		SWMU 5/Henby Creek Area		Carneys Point Zone	
	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>
Chromium	<1	<1	<1	<1	<1	<1	<1	<1
Copper	<1	<1	<1	<1	<1	<1	<1	<1
Lead	37.0	3.7	2.3	<1	2.8	<1	1.8	<1
Mercury	87.7	43.9	48.9	24.4	24.4	12.2	11.5	5.8
Total LMW PAHs	3.3	<1	5.5	<1	9.9	<1	<1	<1
Total HMW PAHs	149	14.9	180	18.0	289	28.8	10.8	1.1
Butyl Benzyl Phthalate	--	--	4.3	<1	--	--	--	--
Di-N-Butyl Phthalate	1.0	<1	<1	<1	5.8	<1	--	--
Analyte	Black Duck							
	Jackson Labs/TEL Area		Fluoroproducts Area		SWMU 5/Henby Creek Area		Carneys Point Zone	
	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>
Chromium	22.2	3.8	1.4	<1	<1	<1	1.0	<1
Copper	4.8	2.4	4.2	2.0	4.5	2.2	4.3	2.1
Lead	54.1	5.4	3.3	<1	4.1	<1	2.6	<1
Mercury	105	52.7	58.7	29.4	29.3	14.7	13.8	6.9
Total LMW PAHs	3.2	<1	5.4	<1	9.6	<1	<1	<1
Total HMW PAHs	144	14.4	175	17.5	280	28.0	10.5	1.1
Butyl Benzyl Phthalate	--	--	4.2	<1	--	--	--	--
Di-N-Butyl Phthalate	<1	<1	<1	<1	5.7	<1	--	--

-- (dash) = Chemical not detected

HMW = High molecular weight

HQ = Hazard quotient

LMW = Low molecular weight

PAH = Polycyclic aromatic hydrocarbons

SWMU = Solid waste management unit

TEL = Tetraethyl lead

Based on maximum EPCs, estimated doses of chromium, copper, lead, mercury, total low molecular weight (LMW) PAHs, total high molecular weight (HMW) PAHs, butyl benzyl phthalate, and di-n-butyl phthalate exceeded NOAEL-based TRVs (i.e.,  $HQ_{NOAEL} > 1$ ) for at least one receptor and exposure area. Except for LMW PAHs, butyl benzyl phthalate, and di-n-butyl phthalate, estimated doses for these COPECs also exceeded the high TRV (i.e.,  $HQ_{NOAEL} > 1$ ) based on maximum exposure assumptions. Under the maximum exposure scenario, the greatest HQs were observed for mercury and total HMW PAHs. Elevated HQs for mercury are attributed to the first-tier TRVs for mercury in NJDEP (2018) that are based on methylmercury. The comparison of EDDs

modeled based on total mercury sediment concentration to TRVs based on methylmercury greatly overestimates exposure to wildlife. Further, TRVs for total HMW PAHs are substantially lower than TRVs available from other sources (EPA, 2007b). Further refinement of deterministic models for semi-aquatic birds, as described in Section 7.3, was conducted to provide refined exposure estimates that are more representative of likely exposure conditions in the Delaware River adjacent to Chambers Works.

## 6.3 Screening-Level Risk Characterization

The screening-level exposure estimates presented in the previous section represent the most conservative exposure scenarios based on the comparisons of maximum COPEC concentrations to preliminary ESVs. A preliminary characterization of potential risks is presented based on these conservative exposure assumptions to identify exposure pathways that may warrant further evaluation. This preliminary characterization of potential risks is summarized below by receptor category.

### 6.3.1 Benthic Invertebrates

A conservative evaluation of measurement endpoints for benthic invertebrates indicates the potential for adverse ecological effects resulting from exposure to COPECs in bulk sediment in focused exposure areas within the Delaware River. Maximum concentrations of several metals, PCBs, PAHs, SVOCs, and VOCs in bulk sediment exceeded preliminary ESVs.

Evaluations of the spatial distributions of COPEC exceedances within the BAZ in the Delaware River indicate that maximum concentrations were generally observed at stations in the inner or mid grid bands in focused areas along the shoreline. Greatest concentrations of site-related organic constituents were observed in nearshore grid bands in the Fluoroproducts Area. Maximum metals concentrations were observed in a focused nearshore area in the Salem Canal. In general, stations in the outer grid band had relatively few exceedances of ESVs based on the screening-level evaluation.

Based on the screening-level exposure evaluation, a refined direct contact evaluation for bulk sediment is warranted consistent with ERAGS Section 3.2 to further evaluate potential effects to benthic invertebrates associated with COPECs in exposure areas adjacent to Chambers Works. Exposure estimates for bulk sediment were refined using more representative EPCs and more site-specific ESVs (Section 7.0).

### 6.3.2 Fish

Preliminary exposure estimates presented in Section 6.2 and in Figures 16 through 19 indicate that constituents detected in surface water pose a negligible risk to fish communities. Exceedances of aluminum and iron were ubiquitous in the Delaware River surface water data set, but these metals are likely related to regional water quality conditions. Aluminum and iron were identified as COPECs in each exposure area (Tables 13 through 16). Across all exposure areas, all 42 aluminum results exceeded its ESV of 87 µg/L, and 36 of the 42 iron results exceeded its ESV of 1,000 µg/L (all results unfiltered). The average concentrations of aluminum and iron were comparable across all four exposure areas, and no obvious concentration gradients were observed for either metal. Lead and 1,4-dichlorobenzene were detected too infrequently at concentrations exceeding ESVs (1 of 18 samples) to adversely affect fish populations. Dissolved lead was detected in a single sample in the Jackson Labs/TEL Area at a concentration (8.7

µg/L) that marginally exceeded its ESV (5.4 µg/L). One site-related VOC, 1,4-dichlorobenzene, also had a single detection (14 µg/L) that marginally exceeded its ESV of 9.4 µg/L in the Fluoroproducts Area. Based on these results, potential risks to fish exposed to site-related constituents in surface water are negligible.

As discussed in the problem formulation in Section 4.6.2, demersal fish may also be exposed to COPECs through the direct ingestion of sediment-associated prey. This pathway has not been quantitatively evaluated in the SLERA; however, as discussed in Section 4.5.1, constituents in surface water associated with groundwater and outfalls have limited potential to bioaccumulate due to relatively low  $K_{ow}$  values ( $\log K_{ow} < 3.5$ ). Therefore, it is unlikely that site-related constituents bioaccumulate substantially in the prey items of fish to adversely affect fish communities adjacent to Chambers Works. Furthermore, the estimated bioaccumulation of other persistent bioaccumulative constituents, including pesticides and PCBs, into benthic invertebrates and fish did not result in doses that are expected to cause adverse effects in wildlife. In addition to ingestion of prey, demersal fish may also be exposed to COPECs in sediment through the incidental ingestion of sediment while foraging. Exposure via these routes is likely secondary and was not quantitatively evaluated in the SLERA. Based on the evaluation of direct contact exposure to surface water, it is not likely that fish in the Delaware River are adversely affected by COPECs in surface water or sediment. Therefore, no further evaluation of exposure pathways for fish communities are warranted adjacent to Chambers Works.

### 6.3.3 Semi-Aquatic Wildlife

The results of deterministic dose rate models using maximum exposure assumptions indicate the potential for adverse effects to semi-aquatic wildlife receptors. Of the bioaccumulative COPECs identified in the Delaware River sediment datasets, chromium, copper, lead, mercury, total LMW PAHs, HMW PAHs, butyl benzyl phthalate, and di-n-butyl phthalate based on maximum EPCs resulted in HQs greater than 1. Estimated doses for all other bioaccumulative COPECs were lower than  $TRV_{NOAEL}$  values based on maximum exposure assumptions. Potential risks associated with  $HQ_{NOAEL} < 1$  based on screening-level exposure assumptions are considered to be negligible; therefore, no further evaluation of these COPECs is warranted.

Given that the conservative exposure assumptions of exposure to the maximum EPC do not accurately reflect likely exposure conditions for wildlife foraging throughout the Delaware River, a refined exposure evaluation is warranted consistent with ERAGS Section 3.2 to further evaluate potential effects to semi-aquatic wildlife associated with exposure to COPECs in sediment within the Delaware River. Refined deterministic exposure models incorporate EPCs that are more representative of likely exposure resulting from random foraging throughout the Delaware River and TRVs that are more representative of exposure to the form of the constituent used as the basis for EPCs (Section 7.3).

## 7.0 Refined Ecological Exposure Evaluation Approach

SLERA Steps 1 and 2 were used to identify COPECs and preliminarily evaluate ecological risk using the most conservative exposure assumptions. The conservative assumptions of the preliminary evaluation are intended to minimize the potential for excluding a COPEC that may cause an adverse effect; however, the most conservative exposure scenario more likely overestimates exposure and potential risk. Further refinement of exposure assumptions, consistent with the re-evaluation procedures prescribed in ERAGS Section 3.2, is conducted as part of the Delaware River SLERA to focus the assessment on those COPECs and exposure pathways that may require further investigation.

The refined ecological exposure evaluation involves using more realistic exposure assumptions and comparisons of refined EPCs (mean and/or upper confidence limits of the mean [ $UCL_{mean}$ ]) with ESVs and TRVs. In addition, this step also allows for the use of background, frequency and magnitude of detection, and dietary considerations to be used to focus the list of COPECs. The refined ecological exposure evaluation also provides spatial context to areas of greater potential exposure that may be the focus of further investigation.

The elements of the refined ecological exposure evaluation for the four exposure areas identified in the Delaware River adjacent to Chambers Works include:

- Refined direct contact exposure evaluation for benthic invertebrate communities.
- Refined deterministic dose rate models to evaluate potential exposure to semi-aquatic wildlife foraging along the shoreline adjacent to Chambers Works.

### 7.1 Data Used to Refine Ecological Exposure Estimates

The refined ecological exposure evaluation includes exposure estimates that are more representative of site-specific exposure conditions for benthic invertebrates and semi-aquatic wildlife. The refined direct contact evaluation includes the development and application of ecological benchmarks that include site-specific inputs (e.g., sediment organic carbon), if relevant, and more representative exposure assumptions (e.g.,  $UCL_{mean}$  EPCs). The refined exposure evaluation for wildlife includes deterministic dose rate models based on  $UCL_{mean}$  EPCs to more accurately estimate average exposure resulting from potential wildlife foraging along the Chambers Works shoreline and throughout the Delaware River. AUFs are also used to adjust estimated dietary exposure based on the proportion of the exposure area relative to the home ranges of the receptors.

### 7.2 Refined Direct Contact Exposure Estimate Methodology

The following subsections describe the methods used to refine the screening-level exposure evaluations based on the datasets identified in the previous section.

#### 7.2.1 Exposure Point Concentrations

The EPCs for COPECs in bulk sediment were refined to include the  $UCL_{mean}$ . The EPA-developed software program ProUCL Ver. 5.1 (EPA, 2015b) was used to calculate EPCs based on the  $UCL_{mean}$  using the mode that considers results that are below the analytical detection limit. Analytical results below detection limits were input into ProUCL at the analytical detection limit and coded as non-detected results.  $UCL_{mean}$  values were

calculated from each dataset and used to represent EPCs in the refined exposure estimation.  $UCL_{mean}$  EPCs were compared with refined ESVs and benchmark concentrations. Documentation of the ProUCL calculations is provided in Appendix C.

## 7.2.2 Frequency of Detection

COPECs with detection frequencies of less than 5 percent were not evaluated further in the refined exposure estimation. Exclusion of these constituents based on low detection frequencies is consistent with EPA guidance on the refinement of COPECs (EPA, 2001c).

## 7.2.3 Comparison to Background Threshold Values

The refined exposure evaluation included comparisons to background threshold values (BTVs) to assess whether site-related COPECs contribute to ecological exposure beyond regional conditions. Background concentrations may be used in the COPEC refinement step to effectively focus the ecological risk assessment (EPA, 2001c). The use of background datasets is also incorporated into NJDEP *Ecological Evaluation Technical Guidance* to refine the COPEC list, to assess whether COPECs may be site-related, and to evaluate site COPEC concentrations relative to regional COPEC concentrations (NJDEP, 2018). For the refined exposure estimates in the SLERA, maximum and refined EPCs were compared to BTVs to evaluate site data in the context of regional conditions.

Regional sediment data obtained from the National Oceanic and Atmospheric Administration (NOAA) Data Integration Visualization Exploration and Reporting (DIVER) database were used to estimate representative background concentrations for comparisons with sediment concentrations measured within exposure areas (Figure 21). Available data for Zone 5 of the Delaware River were downloaded from the DIVER database on September 21, 2018 and imported into ArcGIS (ESRI). Surficial sediment samples (0 to 2 centimeters) collected after 2000 were the focus of the evaluation based on the availability of surficial data in DIVER. Sediment samples collected within the section of Zone 5 adjacent to Chambers Works, from the Delaware Memorial Bridge north to Carneys Point, were excluded from the background assessment to minimize the potential influence of the site on the estimation of representative background concentrations (Figure 21). Constituents of interest in the sediment background assessment included: select metals, PCBs, and PAHs. Metals data from the Delaware Benthic Inventory (DEBI) Project 2008 were not retained in the evaluation due to the use of an inconsistent chemical extraction procedure.

Post-2000 surficial sediment sample (0 to 2 centimeters) data obtained for DRBC Zone 5 from the DIVER database were used to develop BTVs for metals, PCBs, and PAHs. Goodness of fit (GOF) testing and calculation of BTVs and 95th percentile  $UCL_{mean}$  was conducted in EPA ProUCL Software Version 5.1 (EPA, 2015b). The distribution type identified during GOF testing was used to select the most appropriate BTV for each compound. BTVs for datasets that were not aligned with normal, log-normal, or gamma distributions were obtained using the 95% Chebyshev approach. A complete summary of the BTVs developed for the Delaware River SLERA can be found in Table 19. The 95<sup>th</sup> percentile upper prediction limits (UPLs), upper threshold limits (UTLs), and upper simultaneous limits (USLs) of the distribution were calculated for each compound. The UPL was adopted as the BTV for all constituents except iron, which used the more conservative UTL value. A summary of selected BTVs and associated summary statistics using data from the DIVER database are presented in Table 19.

In the refined exposure evaluation, maximum EPCs within an exposure area were compared to BTVs representing the upper bound of the background dataset from the DIVER database. COPECs with maximum EPCs below the BTVs were considered to be within the range of regional background concentrations and were not evaluated further in the SLERA.

## 7.2.4 Refined Bulk Sediment Quality Benchmarks

Refined ESVs (RESVs) were developed to provide more representative, site-specific sediment benchmarks to evaluate chronic direct contact exposure to benthic invertebrates (Table 20). For metals and PCBs, alternate LEL values provided in NJDEP (2009) were selected as RESVs. The EqP approach described by EPA was used to develop ESBs for PAHs (EPA, 2003a) and non-ionic organic constituents (EPA, 2008). Documentation of the technical approach for deriving ESBs and detailed calculations are provided in Appendix D. A summary of the approach for calculating ESBs is provided below for non-PAH nonionic organic constituents and PAHs.

### Non-PAH Nonionic Organic Constituents

ESB values represent concentrations of nonionic organic constituents in bulk sediment that, at equilibrium, would result in partitioning to sediment pore water at concentrations equivalent to NOEC water quality benchmarks ( $WQB_{NOEC}$ ) based on constituent-specific  $K_{oc}$  values:

$$ESB_{NOEC} = (f_{oc} \times K_{oc} \times WQB_{NOEC})$$

where:

$ESB_{NOEC}$	= Equilibrium-partitioning sediment benchmark based on NOEC aqueous toxicity data (microgram per kilogram [ $\mu\text{g}/\text{kg}$ ] dry weight sediment)
$f_{oc}$	= Fraction of organic carbon in sediment
$K_{oc}$	= Organic carbon-water partitioning coefficient (liter per kilogram [ $\text{L}/\text{kg}$ ])
$WQB_{NOEC}$	= Water quality benchmark based on a chronic NOEC ( $\mu\text{g}/\text{L}$ )

ESBs for nonionic constituents were calculated on a sample-specific basis using chronic NOECs and sample specific-TOC measurements. Detailed procedures and sample-specific ESB calculations are presented in Appendix D. Table 20 summarizes example ESB values for non-ionic organic constituents expressed on a dry weight sediment basis assuming 1 percent organic carbon in sediment.

Analogous to hazard quotients (Section 5.3), potential risks to benthic invertebrates exposed to non-ionic organic COPECs were estimated based on equilibrium-partitioning sediment benchmark toxic units (ESBTUs) calculated as the ratio of the dry weight sediment concentration to the dry weight ESB concentration:

$$ESBTU_i = \frac{C_s}{ESB_{NOEC}}$$

where:

$ESBTU_i$	= Equilibrium-partitioning sediment benchmark toxic unit for non-ionic constituent $i$ (unitless)
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$C_S$	= Concentration of non-ionic organic constituent in sediment (mg/kg dry weight sediment)
$ESB_{NOEC}$	= Equilibrium-partitioning sediment benchmark based on NOEC aqueous toxicity data (mg/kg dry weight sediment)

The additive toxicity of nonionic organic constituents with narcosis as a primary mode of toxic action for benthic invertebrates was estimated as the sum of ESB toxic units for constituents within a sample, calculated as the ratio of dry weight concentration to the sample-specific ESB (dry weight):

$$\text{Non-PAH Narcotic } \sum ESBTU = \sum_{i=1}^n \frac{C_{S,i}}{ESB_{NOEC,i}}$$

where:

Non-PAH $\sum ESBTU$	= Equilibrium-partitioning sediment benchmark toxic unit for nonionic organic constituents (unitless)
$C_S$	= Concentration of nonionic organic constituent $i$ in sediment (mg/kg dry weight sediment)
$ESB_{NOEC,i}$	= Equilibrium-partitioning sediment benchmark for nonionic constituent $i$ based on NOEC aqueous toxicity data (mg/kg dry weight sediment)

Non-PAH Narcotic  $\sum ESBTU$  values less than 1 are considered to be protective of benthic invertebrate communities (EPA, 2012a).

## PAHs

Benthic invertebrate exposure to PAHs was evaluated using the following EqP models depending on the availability of sample-specific carbon data (Appendix D):

- One-Carbon Model: For samples with only TOC analyses, a one-carbon model was applied consistent with the *Procedures for the Derivation of Equilibrium Partitioning Sediment Benchmarks for the Protection of Benthic Organisms: PAH Mixtures* (EPA, 2003a).
- Two-Carbon Model: For samples with TOC and black carbon analyses, a two-carbon model was applied consistent with the *Equilibrium Partitioning Sediment Benchmarks (ESBs) for the Protection of Benthic Organisms: Procedures for the Determination of Freely Dissolved Interstitial Water Concentrations of Nonionic Organics* (EPA, 2012a) to complement the one-carbon model.

The one-carbon EqP model was based on ESBs derived in EPA (2003a) to estimate the potential narcotic effects of PAHs in sediment based on theoretical partitioning of PAH compounds between sediment organic carbon and pore water. Concentrations of individual PAHs measured in sediment were normalized based on the sample-specific TOC fraction ( $C_{OC,PAHi}$  mg PAH/kg TOC) and compared to the organic carbon-normalized PAH-specific critical sediment concentration ( $C_{ocPAHi,FCVi}$  mg PAH/kg TOC) derived in EPA (2003a) using the PAH-specific final chronic value (FCV). ESBTU values for each individual PAH were calculated as the ratio of the organic carbon normalized concentration of the measured PAH compound to the organic carbon-normalized PAH-specific critical sediment concentration. Exposure to mixture of PAH compounds in sediment evaluated based on the sum of PAH  $\sum ESBTU$ s calculated from individual PAH compounds:

$$PAH \sum ESBTU_{FCV,Total} = \sum_{i=1}^{13} \frac{C_{oc,PAHi}}{C_{oc,PAHi,FCVi}} \times UF$$

Where:

- PAH  $\sum ESBTU_{FCV,Total}$  = Sum of ESBTUs for the PAH mixture (unitless)
- $C_{oc,PAHi}$  = Organic carbon normalized concentration of PAH  $i$  (mg PAH/kg TOC)
- $C_{oc,PAHi,FCVi}$  = Organic carbon normalized critical concentration of PAH  $i$  based on the final chronic value (mg PAH/kg TOC)
- UF = Uncertainty factor to estimate the toxicity of total PAHs (based on 34 PAHs – 18 parent and 16 alkylated compounds) using measurements of 13 PAHs in bulk sediment in the Delaware River

$\sum ESBTU_{FCV,Total}$  values were calculated based on 13 PAH compounds measured in sediment samples from the Delaware River; however, EPA (2003a) estimates  $\sum ESBTU_{FCV,Total}$  based on the analysis of 34 PAH compounds. To account for unmeasured PAH compounds estimation of  $\sum ESBTU_{FCV,Total}$  in the SLERA, an uncertainty factor (UF) of 2.75 was applied to the summed toxic units calculated based on 13 PAHs compounds ( $\sum ESBTU_{FCV,13}$ ). A UF of 2.75 corresponds to the median (50<sup>th</sup> percentile) of the distribution of  $\sum ESBTU_{FCV,Total} / \sum ESBTU_{FCV,13}$  evaluated in EPA (2003a).  $\sum ESBTU_{FCV,Total}$  values less than 1.0 are considered to be protective of benthic invertebrate communities; values exceeding 1.0 indicate the potential for narcotic effects in benthic invertebrates (EPA, 2012a; EPA, 2003a).

The two-carbon EqP model was applied to Delaware River Remedial Investigation samples analyzed for PAHs, TOC, and black carbon (URS, 2011) to complement the one-carbon model and better estimate site-specific partitioning. As previously stated, black carbon represents the fraction of pyrogenic carbon present in sediment. Incorporation of the black carbon fraction into the EqP model provides a more accurate estimate of site-specific partitioning behavior that may be substantially different between diagenic organic carbon (e.g., plant material) and pyrogenic carbon (Burgess et al., 2004). The two-carbon model accounts for PAH partitioning to the fraction of black carbon in sediment ( $f_{BC}$ ) and the fraction of natural sedimentary organic carbon ( $f_{NSOC}$ ), which is calculated as the difference between  $f_{OC}$  and  $f_{BC}$ .

The two-carbon model estimates the dissolved phase concentration ( $C_d$ ) of PAH  $i$  in pore water based on the general EqP model and sediment-pore water partitioning coefficient ( $K_p$ ) that accounts for partitioning to NSOC and black carbon (EPA, 2012a; Accardi-Dey and Gschwend, 2002<sup>2</sup>):

<sup>2</sup> A modification of the two-carbon model proposed by Accardi-Dey and Gschwend (2002) uses the Freundlich exponent to account for non-linear sorption behavior of PAHs. This modification reduces the estimated dissolved phase concentration in pore water by accounting for simultaneous partitioning of PAHs between NSOC and black carbon. However, this modification requires iterative calculation of a variable that appears on both sides of the model equation, which was not practical for sample-specific calculations presented in the SLERA. As demonstrated in Figure 5 in Accardi-Dey and Gschwend (2002), omitting the Freundlich exponent modification likely overestimates the dissolved phase PAH concentration in pore water; therefore, exposure estimates based on the two-carbon model presented in the SLERA are considered conservative.

$$C_{d,PAHi} = \frac{C_{s,PAHi}}{K_P} = \frac{C_{s,PAHi}}{f_{NSOC} \times K_{OC} + f_{BC} \times K_{BC}}$$

Where:

$C_{d,PAHi}$	= Dissolved phase concentration of PAH <i>i</i> in pore water (µg/L)
$C_{s,PAHi}$	= Concentration of PAH <i>i</i> in sediment (mg/Kg, dry weight)
$K_P$	= Sediment-water partitioning coefficient (L/Kg)
$f_{NSOC}$	= Fraction of natural sedimentary organic carbon (Kg NSOC/Kg dry weight)
$K_{OC}$	= Organic carbon-water partitioning coefficient (L/Kg)
$f_{BC}$	= Fraction of black carbon (Kg black carbon/Kg dry weight)
$K_{BC}$	= Black carbon-water partitioning coefficient (L/Kg)

Partitioning coefficients ( $K_{OC}$  and  $K_{BC}$ ) used in the two-carbon model were consistent with the values developed by EPA (EPA, 2012a; EPA, 2003a).

Interstitial water (i.e., pore water) toxic units (IWTUs) were calculated by dividing the PAH-specific dissolved phase concentration estimated using the two-carbon model by the PAH-specific FCV developed by EPA (EPA, 2003a; EPA, 2012a). IWTUs were summed for each sample to estimate the additive narcotic toxicity of the PAH mixture:

$$\sum IWTU_{FCV} = \sum_{i=1}^{15} \frac{C_{d,PAHi}}{C_{d,PAHi,FCVi}} \times UF$$

where:

$\sum IWTU_{FCV}$	= Sum of IWTUs for the PAH mixture (unitless)
$C_{d,PAHi}$	= Pore water concentrations of PAH <i>i</i> (µg/L)
$C_{d,PAHi,FCVi}$	= Pore water critical concentration of PAH <i>i</i> based on the FCV (µg/L)
UF	= Uncertainty factor to estimate the toxicity of total PAHs (based on 34 PAHs) based on estimated $C_d$ for 15 PAHs

Consistent with the estimation of  $\sum$ ESBTU values, an uncertainty factor of 2.75 was applied to the  $\sum$ IWTU calculated based on 15 PAHs measured in sediment in the Delaware River to account for the potential toxicity of unmeasured PAHs. Application of this UF assumes a similar relationship between estimation of toxic units based on bulk sediment and pore water.  $\sum$ IWTU values less than or equal to 1.0 are considered acceptable for the protection of benthic invertebrate receptors (EPA, 2012a); values exceeding 1.0 indicate a potential for narcotic effects in benthic receptors.

### 7.3 Refined Wildlife Ingestion Pathway Evaluation

Chemicals that had wildlife HQs exceeding 1 using the conservative screening-level assumptions in the wildlife ingestion model were evaluated further using a refined model that incorporates more realistic assumptions. Chromium, copper, lead, mercury, tin, LMW PAHs, HMW PAHs, butyl benzyl phthalate, and di-n-butyl phthalate all had HQs that exceeded 1 for the double-crested cormorant and/or the black duck in one or more exposure zones. Therefore, they were carried forward for a refined evaluation. The

refined evaluation estimated risks within each exposure zone as well as total risk across the site area (i.e., the Delaware River adjacent to the Chambers Works facility). The latter was performed by summing the spatially-weighted HQs across the four exposure zones for each receptor.

### 7.3.1 Exposure Parameter Estimation

As described in Appendix B, the exposure parameters for the refined wildlife ingestion model were identical to the screening-level evaluation, except for the AUF. Based on the maximum exposure scenario in the screening-level exposure evaluation, receptors were assumed to obtain 100 percent of the EDD from foraging exclusively within each exposure area (AUF = 1). In the refined exposure evaluation, a representative exposure scenario was used that assumed that receptors forage randomly throughout their foraging range. Based on this scenario, the AUF for each exposure area was estimated as the proportion of the foraging range that was represented by the size of each exposure area (AUF = area of exposure area/area of foraging range). Potential risk to semi-aquatic birds that may be attributed to foraging along the shoreline adjacent to Chambers Works was estimated based on the sum of HQs calculated based on the AUF-adjusted EDDs for the four exposure areas (Appendix B).

### 7.3.2 Exposure Point Concentrations

The refined wildlife ingestion model used the 95<sup>th</sup> percentile  $UCL_{mean}$  COPEC concentration measured in the BAZ (0 to 0.5-foot) within each exposure zone as the refined EPC to calculate EDDs. A daily dose estimated based on the  $UCL_{mean}$  EPC is more representative of the average dose that a receptor is likely to obtain while foraging randomly throughout an exposure area. The  $UCL_{mean}$  is a value that, when calculated repeatedly for randomly drawn subsets of site data, equals or exceeds the true mean 95 percent of the time (EPA, 2002). The use of the maximum measured concentration as an EPC is not representative or realistic of likely exposure to mobile receptors that would forage randomly throughout the Delaware River. Therefore, the  $UCL_{mean}$  EPCs used in the refined wildlife ingestion pathway evaluation provide a more representative of likely exposure to semi-aquatic birds foraging along the Chambers Works shoreline.

### 7.3.3 Toxicity Reference Values

For some COPECs, the TRVs used in the refined wildlife ingestion model were consistent with the TRVs used in the screening-level model. However, alternate TRVs that are considered protective of chronic exposure were selected for some COPECs in the refined exposure evaluation. Consistent with the recommendations in the NJDEP *Ecological Evaluation Technical Guidance* (NJDEP, 2018), first-tier TRVs developed in EPA (2014) were used in the screening-level exposure estimate. The first-tier TRVs are considered to be conservative and not likely to result in a false negative determination of risk (i.e., erroneously eliminate a constituent from further evaluation when adverse effects occur).

Alternate TRVs were selected for copper, lead, mercury, total LMW PAHs, and total HMW PAHs (Appendix B). Alternate TRVs for copper and lead, were selected from studies accepted by EPA in the derivation of Eco-SSLs, which is considered to be a second-tier source in NJDEP (2018).  $TRV_{NOAEL}$  and  $TRV_{LOAEL}$  for copper and lead were derived as the geometric mean of growth and reproduction NOAEL and LOAEL endpoints, respectively, from accepted Eco-SSL studies. Alternate TRVs for total HMW PAHs were selected from a bounded study by Trust et al. (1994), which was the only

bounded study of avian exposure to HMW PAHs that was accepted by EPA for the derivation of Eco-SSLs. For LMW PAHs, bounded endpoints from a study by Patton and Dieter (1980) was selected as alternate TRVs. For mercury, alternate TRVs were selected to represent exposure to inorganic mercury, which is more representative of the total mercury concentrations measured in sediment. A bounded study of avian exposure to mercuric chloride was used to from Hill and Schaffner (1976), as cited in Sample et al. (1996) was used as the basis for alternate TRVs for total mercury. Further detail regarding the selection of alternate TRVs is provided in Appendix B.

## 7.4 Scientific Management Decision Point

The SMDP is a determination made at the completion of Step 2 of the SLERA process that states whether there is sufficient information to support risk management decision-making (EPA, 1997a). The screening-level risk evaluation will be used to support one of the following decision points regarding the need for further risk evaluation:

- There is adequate information to conclude that ecological risks are negligible; therefore, there is no need for remediation on the basis of ecological risk.
- The information is not adequate to make a decision at this point, and the ecological risk assessment process will continue.
- The information indicates a potential for adverse ecological effects, and a more thorough assessment is warranted.

## 8.0 Refined Exposure Estimate and Risk Characterization

The refined exposure estimates and risk characterization for benthic invertebrates and wildlife exposed to sediment COPECs in exposure areas within the Delaware River adjacent to Chambers Works are presented in the following sections.

### 8.1 Refined Exposure Estimates

The following sections present refined exposure estimates and risk characterizations for benthic invertebrates and semi-aquatic wildlife potentially exposed to COPECs in sediment within Delaware River exposure areas adjacent to Chambers Works.

#### 8.1.1 Benthic Invertebrates

Screening-level exposure estimates for benthic invertebrates were refined using assumptions that are more representative of average exposure concentrations, site-specific exposure conditions, and regional conditions (Section 7.0). COPECs with maximum concentrations exceeding preliminary ESVs in the screening-level exposure estimate are included in the refined exposure evaluation. Sediment COPECs for which ESVs were not identified in the screening-level exposure evaluation or were not calculated with refined sediment benchmarks in Appendix D are addressed as uncertainties (Section 9.1.1). These COPECs are not included in the refined exposure estimates due to a lack of toxicological information. The following subsections summarize refined exposure estimates for benthic invertebrates by exposure area.

##### Jackson Labs/TEL Area

Refined bulk sediment exposure estimates for benthic invertebrates in the BAZ (0 to 0.5 foot) and the 0.5 to 1-foot interval within the Jackson Labs/TEL Area are summarized in Tables 21 and 22, respectively. Figure 22 illustrates the location of exceedances of ESVs and BTVs in the Jackson Labs/TEL Area based on the refined exposure evaluation.

The results of the refined exposure assessment for the BAZ (0 to 0.5-foot sampling interval) identified a limited number of metals, SVOCs including PAHs, pesticides, and PCBs as COPECs (Table 21). Nine metals were detected at maximum concentrations exceeding RESVs and available BTVs. Hazard quotients based on the  $UCL_{\text{mean}}$  EPCs ( $HQ_{UCL}$ ) were less than 5 for metals, except for chromium ( $HQ_{UCL}=7$ ) and lead ( $HQ_{UCL}=6.2$ ). PAH  $\sum ESBTU_{FCV,Total}$  values exceeded 1 at 10 of 37 sampling stations, with a  $UCL_{\text{mean}}$  PAH  $\sum ESBTU_{FCV,Total}$  value of 15.3. 2-methylphenol (O-Cresol) concentrations exceeded the RESV in 2 of 9 samples and 4-methylphenol (P-Cresol) concentrations exceeded the RESVs in 3 of 9 samples. Endosulfan I was the only pesticide with a maximum EPC exceeding the RESV ( $HQ_{\text{Max}}=2.3$ ). Total PCB concentrations exceeded the RESV in 1 of 9 samples, resulting in an  $HQ_{\text{Max}}$  of 3.8. Maximum EPCs for VOCs were below RESVs.

The results of the refined exposure assessment for the 0.5 to 1.0-foot sampling interval identified a limited number of metals, SVOCs including PAHs, pesticides, and PCBs as COPECs (Table 22). Eight metals were detected at maximum concentrations exceeding RESVs and available BTVs.  $HQ_{UCL}$  values were less than 5 for metals, except for chromium ( $HQ_{UCL}=7.2$ ). Chlorobenzene concentrations exceeded RESVs in the 0.5 to 1-foot interval at two stations (DER1-07 and DER3-06). Maximum PAH  $\sum ESBTU_{FCV,Total}$  values exceeded 1 at 2 of 9 sampling stations, with a maximum PAH  $\sum ESBTU_{FCV,Total}$  value of 4.7 (Table 22). 4-methylphenol (p-Cresol) was the only non-PAH SVOC with

concentrations exceeding RESVs ( $HQ_{UCL}=3.8$ ). 4,4'-DDE and total PCB concentrations slightly exceeded RESVs at one station each, with  $HQ_{Max}$  values of 1.2 and 1.7, respectively (Table 22).

Exceedances of RESVs in the Jackson Labs/TEL Area were primarily associated with nearshore grids in the Delaware River adjacent to AOC 2/AOC 3 and nearshore areas within the Salem Canal Tidal Reach adjacent to AOC 3 (Figure 22). The greatest metals concentrations exceeding RESVs and BTVs were associated with chromium (station SC-234) and lead (station SC-231) samples collected from the Tidal Reach (Figure 22). Stations with potentially site-related organic constituents exceeding RESVs were centered in Type II fine-coarse sand-gravel in the nearshore grid band at stations DER2-05-SD, DER3-19, DER1-07, DER3-04, and DER3-06 (Figure 22).

The potential for adverse effects associated with exposure to potentially site-related organic COPECs in the Jackson Labs/TEL Area is limited to select stations along the shoreline. Based on the one-carbon EqP model (Section 7.2.4),  $\sum ESBTU_{FCV,Total}$  values within the BAZ were greater than 1 at five stations in the nearshore grid band (Figure 23); however,  $\sum IW TU_{FCV}$  values based on the two-carbon model only exceeded 1 at station DER1-09. The total PAH concentration at this station (2.8 mg/kg) was below the RESV for total PAHs (4 mg/kg); however, sediment organic carbon at this station was also relatively low (0.4 percent). Non-PAH Narcotic  $\sum ESBTU$  values were less than 1 in samples collected within the BAZ at all stations within the Jackson Labs/TEL Area, except for station DER2-05-SD. Figure 24 presents non-PAH Narcotic  $\sum ESBTU$  values and lists the five narcotic constituents with the greatest contribution to the Narcotic  $\sum ESBTU$  value. The non-PAH Narcotic  $\sum ESBTU$  value at station DER2-05-SD was 4.73, with 1,2,4-trichlorobenzene contributing 3.41 ESBTUs to the total value.

### Fluoroproducts Area

Refined bulk sediment exposure estimates for benthic invertebrates in the BAZ (0 to 0.5 foot) and the 0.5 to 1-foot interval within the Fluoroproducts Area are summarized in Tables 23 and 24, respectively. Figures 25A and 25B illustrate the location of exceedances of ESVs and BTVs in the Fluoroproducts Area based on the refined exposure evaluation.

The results of the refined exposure assessment for the BAZ (0 to 0.5-foot sampling interval) identified metals, VOCs, SVOCs including PAHs, and PCBs as COPECs (Table 23). Six metals were detected at maximum concentrations exceeding RESVs and available BTVs. However,  $HQ_{UCL}$  were 2.5 or lower for metals with maximum concentrations exceeding BTVs. Maximum concentrations of 13 VOCs exceeded RESVs, with  $HQ_{UCL}$  values greater than 1 for chlorobenzene, 1,4-dichlorobenzene, carbon disulfide, 1,2-dichlorobenzene, and benzene.  $\sum ESBTU_{FCV,Total}$  values exceeded 1 in 11 of 49 samples, with a  $UCL_{mean}$   $\sum ESBTU_{FCV,Total}$  of 18.3. Eleven non-PAH SVOCs exceeded RESVs based on maximum concentrations; however,  $UCL_{mean}$  concentrations exceeded RESVs for only five non-PAH SVOC COPECs ( $HQ_{UCL}$  from 1.1 to 5.6; Table 23). Total PCB concentrations exceeded the RESV in 28 of 37 samples; however, the  $HQ_{UCL}$  for total PCBs was 2.8.

The results of the refined exposure assessment for the 0.5 to 1.0-foot sampling interval identified metals, VOCs, SVOCs including PAHs, and PCBs as COPECs in the Fluoroproducts Area (Table 24). Nine metals were detected at maximum concentrations exceeding RESVs and available BTVs.  $HQ_{UCL}$  values were less than 5 for metals, except for lead ( $HQ_{UCL}=5.7$ ). Consistent with the screening-level exposure evaluation, exceedances of RESVs for VOCs and SVOCs were greater in the 0.5 to 1.0-foot

sampling interval relative to the BAZ. Maximum concentrations of 32 VOCs exceeded RESVs, with detection frequencies greater than 5 percent and  $HQ_{UCL}$  values greater than 1 for 31 VOCs (Table 24). Maximum PAH  $\sum ES\text{BTU}_{FCV,Total}$  values exceeded 1 at 12 of 31 sampling stations, with a  $UCL_{mean}$  PAH  $\sum ES\text{BTU}_{FCV,Total}$  value of 9.0 (Table 24). Maximum concentrations of 7 non-PAH SVOCs exceeded RESVs, with detection frequencies greater than 5 percent and  $HQ_{UCL}$  values greater than 1 for 6 of 7 non-PAH SVOCs.  $HQ_{UCL}$  values for non-PAH SVOCs were 2 or lower, except for carbazole ( $HQ_{UCL}=14.2$ ) and phenol ( $HQ_{UCL}=23.6$ ). Total PCB concentrations exceeded the RESV in 18 of 27 samples collected from the 0.5 to 1-foot interval, with an  $HQ_{UCL}$  of 9.5.

Exceedances of RESVs in the Fluoroproducts Area were primarily associated with nearshore and mid sampling grids near the center of AOC 1 (Figures 25A and 25B). The greatest exceedances of RESVs were associated with potentially site-related VOCs and SVOCs in the nearshore grid containing D15-BOR-19, D15-BOR-17, D15-BOR-16, D15-BOR-15, and D15-BOR-06 (Figure 25A).

Based on the one-carbon EqP model, PAH  $\sum ES\text{BTU}_{FCV,Total}$  values within the BAZ were between 1 and 10 at eight stations in the nearshore and mid grid band adjacent to AOC 1; additional samples with PAH  $\sum ES\text{BTU}_{FCV,Total}$  greater than 1 were observed at DER3-09 ( $\sum ES\text{BTU}_{FCV,Total}=1.8$ ), DER1-14 ( $\sum ES\text{BTU}_{FCV,Total}=141$ ), and DER2-20 ( $\sum ES\text{BTU}_{FCV,Total}=12.9$ ; Figure 23). The two-carbon EqP model indicated lower  $\sum IW\text{TU}_{FCV}$  values relative to PAH  $\sum ES\text{BTU}_{FCV,Total}$  values; however,  $\sum IW\text{TU}_{FCV}$  values slightly exceeded 1 at DER1-14 ( $\sum IW\text{TU}_{FCV}=1.04$ ) and DER2-20 ( $\sum IW\text{TU}_{FCV}=1.3$ ; Figure 26).

The greatest potential for adverse effects to benthic invertebrate communities within the Fluoroproducts Area is associated exposure to site-related organic COPECs within the nearshore grid band near the center of AOC 1. Non-PAH Narcotic  $\sum ES\text{BTU}$  values within the BAZ exceeded 1 in samples collected from four nearshore grid bands, with the greatest non-PAH Narcotic  $\sum ES\text{BTU}$  value of 122 at station DER15-BOR-19 (Figure 27). Non-PAH Narcotic  $\sum ES\text{BTU}$  values were greater than 10 at adjacent stations D15-BOR-15 (Narcotic  $\sum ES\text{BTU}=32$ ), D15-BOR-16 (Narcotic  $\sum ES\text{BTU}=21.4$ ), D15-BOR-17 (Narcotic  $\sum ES\text{BTU}=33.5$ ). Non-PAH Narcotic  $\sum ES\text{BTU}$  values between 1 and 10 were observed in adjacent stations and sampling grids along the shoreline; however, stations with Non-PAH Narcotic  $\sum ES\text{BTU}$  values less than 1 spatially bounded these exceedances in each direction (Figure 27). Chlorobenzene, dichlorobenzenes, and benzene were the primary narcotic constituents contributing to non-PAH Narcotic  $\sum ES\text{BTU}$  values greater than 1.

### **SWMU 5/Henby Creek**

Refined bulk sediment exposure estimates for benthic invertebrates in the BAZ (0 to 0.5 foot) and the 0.5 to 1-foot interval within the SWMU 5/Henby Creek Area are summarized in Tables 25 and 26, respectively. Figure 28 illustrates the location of exceedances of ESVs and BTVs in the SWMU 5/Henby Creek Area based on the refined exposure evaluation.

The results of the refined exposure assessment for the BAZ (0 to 0.5-foot sampling interval) identified a limited number of metals and SVOCs including PAHs as COPECs (Table 25). Five metals were detected at maximum concentrations exceeding RESVs and available BTVs.  $UCL_{mean}$  EPCs exceeded RESVs for iron ( $HQ_{UCL}=1.1$ ), lead ( $HQ_{UCL}=1.6$ ), and mercury ( $HQ_{UCL}=6.8$ ). PAH  $\sum ES\text{BTU}_{FCV,Total}$  values exceeded 1 in samples within the BAZ at 7 of 13 stations, with a  $UCL_{mean}$  PAH  $\sum ES\text{BTU}_{FCV,Total}$  value of 3.8 (Table 25). Concentrations of four non-PAH SVOCs exceeded RESVs.

Concentrations of 2,4-DNT exceeded RESVs at 5 of 13 stations with a  $HQ_{Max}$  of 10.8; however, other non-PAH SVOCs exceeded RESVs at only two stations and had  $HQ_{Max}$  values less than 2 (Table 25).

The results of the refined exposure assessment for the 0.5 to 1.0-foot sampling interval identified a limited number of samples with concentrations exceeding RESVs. Lead, 1,2-dichlorobenzene, 1-naphthylamine, and nitrobenzene exceeded RESVs in one sample for each COPEC (Table 26). Concentrations of other preliminary COPECs were below RESVs.

Exceedances of RESVs in the SWMU 5/Henby Creek Area were primarily associated with nearshore and mid grids (Figure 28). Metals concentrations exceeding RESVs and BTVs were distributed between fine- and coarse-grained sampling stations with no distinct spatial distribution. Surface (0 to 0.5-foot) samples with 2,4-DNT and 2,6-DNT concentrations exceeding RESVs were located near the Henby Creek sluice gate (Figure 28). Maximum total PAH concentrations were observed at a fine-grained sediment station (DER2-23-SD) adjacent to the Henby Creek sluice gate (Figure 28).

The potential for adverse effects associated with exposure to organic COPECs in the SWMU 5/Henby Creek Area is limited to select stations in nearshore and mid grids. Based on the one-carbon EqP model, PAH  $\sum ESBTU_{FCV,Total}$  values within the BAZ were between 1 and 10 at seven stations in the nearshore and mid grid band (Figure 29). However,  $\sum IWTU_{FCV}$  values based on the two-carbon model only exceeded 1 at five stations, with no  $\sum IWTU_{FCV}$  values exceeding 10. The greatest  $\sum IWTU_{FCV}$  values were observed at station DER2-21-SD ( $\sum IWTU_{FCV}=8.55$ ) and DER2-21-SD ( $\sum IWTU_{FCV}=8.14$ ). For non-PAH narcotic constituents,  $\sum ESBTU$  values for samples within the BAZ were less than 1 at all stations in the SWMU 5/Henby Creek Area (Figure 30).

### Carneys Point Zone

Refined bulk sediment exposure estimates for benthic invertebrates in the BAZ (0 to 0.5 foot) and the 0.5 to 1-foot interval within the Carneys Point Area are summarized in Tables 27 and 28, respectively. Figure 31 illustrates the location of exceedances of ESVs and BTVs in the Carneys Point Area based on the refined exposure evaluation.

The results of the refined exposure assessment for the BAZ (0 to 0.5-foot sampling interval) identified a limited number of metals and total PAHs as COPECs (Table 27). Maximum concentrations of three metals exceeded RESVs and BTVs; the maximum tin concentration exceeded the BTV in 2 of 16 samples (Table 27).  $UCL_{mean}$  EPCs exceeded RESVs for iron ( $HQ_{UCL}=1.1$ ) and mercury ( $HQ_{UCL}=2.8$ ). Total PCB concentrations slightly exceeded RESV in 2 of 5 samples, with a  $HQ_{Max}$  of 2.0.

No COPECs were identified in the refined exposure evaluation for the 0.5 to 1-foot sampling interval (Table 28). Acetone concentrations were below RESVs in all 16 samples in the 0.5 to 1-foot interval in Carneys Point.

Exceedances of RESVs in the Carneys Point Area were limited to samples from four stations (Figure 31). Three of four stations with concentrations exceeding RESVs were located in fine-grained sediment sampling stations in the southern portion of the Carneys Point Area, adjacent to the SWMU 5/Henby Creek Area (Figure 31).

The potential for adverse effects to benthic invertebrates associated with exposure to organic COPECs in the Carneys Point Area is limited. Although total PAH concentrations were below the RESV in all samples collected within the BAZ in Carneys Point Area, PAH  $\sum ESBTU_{FCV,Total}$  values slightly exceeded 1 (1.30 to 1.85) at three stations (Figure

32). Exceedances of PAH  $\sum$ ESBTU<sub>FCV,Total</sub> values at these stations is attributed to low TOC concentrations (0.2 to 0.5 percent) and the application of a UF of 2.75 to account for unmeasured PAH compounds in the sample (Section 7.2.4). The two-carbon model indicated  $\sum$ IWTU<sub>FCV</sub> values below 1 for all samples that had available black carbon data, including one (DER1-29) of the three stations where PAH  $\sum$ ESBTU<sub>FCV,Total</sub> values exceeded 1 (Figure 32). For non-PAH narcotic constituents,  $\sum$ ESBTU values for samples within the BAZ were less than 1 at all stations in the Carneys Point Area (Figure 33).

### 8.1.2 Semi-Aquatic Wildlife

Refined exposure estimates indicate that exposure to COPECs in the Delaware River adjacent to Chambers Works are not likely to result in adverse effects to semi-aquatic wildlife. As discussed in Section 7.3, refined exposure assumptions included UCL<sub>mean</sub> sediment concentrations as EPCs, alternate TRVs, and AUF-adjusted doses. HQS<sub>NOAEL</sub> for modeled doses to the double-crested cormorant and black duck for COPECs that were carried forward into the refined food chain model for each exposure zone. In addition, the sum of HQS<sub>NOAEL</sub> calculated based on AUF-adjusted doses was equal to or less than 1, indicating negligible risk to double-crested cormorant and black duck populations that may forage along the shoreline of Chambers Works. Detailed model calculations are provided in Appendix B and summarized below:

Analyte	Double-crested Cormorant									
	Jackson Labs/ TEL Area		Fluoroproducts Area		SWMU 5/Henby Creek Area		Carneys Point Zone		Area-Weighted $\sum$ HQ	
	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>
Chromium	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Copper	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Mercury	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total LMW PAHs	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total HMW PAHs	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl Benzyl Phthalate	--	--	<1	<1	--	--	--	--	<1	<1
Di-N-Butyl Phthalate	<1	<1	<1	<1	<1	<1	--	--	<1	<1

Analyte	Black Duck									
	Jackson Labs/ TEL Area		Fluoroproducts Area		SWMU 5/Henby Creek Area		Carneys Point Zone		Area-Weighted $\sum$ HQ	
	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>
Chromium	<1	<1	<1	<1	<1	<1	<1	<1	1.0	<1
Copper	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Mercury	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total LMW PAHs	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total HMW PAHs	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl Benzyl Phthalate	--	--	<1	<1	--	--	--	--	<1	<1
Di-N-Butyl Phthalate	<1	<1	<1	<1	<1	<1	--	--	<1	<1

-- (dash) = Constituent not detected  
HMW = High molecular weight  
HQ = Hazard quotient  
LMW = Low molecular weight  
PAH = Polycyclic aromatic hydrocarbons  
SWMU = Solid waste management unit  
TEL = Tetraethyl lead

As described in Section 7.3.3, alternate TRVs were identified and used in the refined exposure estimates to evaluate exposure to copper, lead, mercury, LMW PAHs, and HMW PAHs that had HQs greater than 1 in the screening-level exposure estimate. Alternate TRVs were selected from second-tier and third-tier sources based on established and accepted source documents and were considered to be adequately protection of chronic endpoints for avian growth and reproduction endpoints. When evaluated relative to alternate TRVs, estimated doses resulted in HQs<sub>NOAEL</sub> below 1 for all five COPECs.

## 8.2 Refined Risk Characterization

The refined exposure estimates for bulk sediment indicates localized potential for adverse effects to benthic invertebrates and negligible potential for adverse effects to semi-aquatic wildlife potentially foraging along the shoreline of the Delaware River adjacent to Chambers Works. The refined risk characterization is based on estimated exposure within the BAZ (0 to 0.5-foot) where the greatest potential for ecological exposure occurs.

### 8.2.1 Benthic Invertebrates

The results of the refined exposure estimate indicate spatially limited areas along the Delaware River shoreline adjacent to Chambers Works with the potential for adverse effects to the benthic invertebrate community.

Potential exposure to benthic invertebrates was greatest for site-related organic constituents within four nearshore grid cells in the Fluoroproducts Area adjacent to AOC 1. Maximum non-PAH Narcotic  $\sum$ ESBTU values in the BAZ were centered at station DER15-BOR-19 ( $\sum$ ESBTU=122) near the middle of the Fluoroproducts Area, with non-PAH Narcotic  $\sum$ ESBTU values exceeding 10 in adjacent sampling stations (Figure 27). Non-PAH Narcotic  $\sum$ ESBTU values between 1 and 10 were observed in adjacent stations within four nearshore sampling grids along the shoreline (Figure 27). Chlorobenzene, dichlorobenzenes, and benzene were the primary narcotic constituents contributing to non-PAH Narcotic  $\sum$ ESBTU values greater than 1 at these stations. The spatial extent of non-PAH Narcotic  $\sum$ ESBTU values greater than 1 within the BAZ was bounded by adjacent samples in each direction with non-PAH Narcotic  $\sum$ ESBTU values less than 1, indicating concentrations that are protective of benthic invertebrate receptors (Figure 27).

The potential for adverse effects to benthic invertebrates was also identified in localized nearshore sampling stations within the Jackson Labs/TEL Area. Exposure estimates for site-related organic COPECs in the BAZ indicate non-PAH Narcotic  $\sum$ ESBTU values greater than 1 at DER2-05-SD (Figure 22). In addition, limited exceedances of RESVs for chlorobenzene were observed in 0.5 to 1.0-foot samples in nearshore stations (DER1-07 and DER3-06).

As indicated in the Delaware River RIR, exceedances of sediment benchmarks at localized nearshore stations within the Jackson Labs/TEL Area may be indicative of

historical groundwater discharge pathways. Substrate characteristics in the nearshore grid band of the Jackson Labs/TEL Area in the vicinity of stations DER1-07 and DER2-05 are predominantly Type I coarse sand and gravel/cobble substrates (URS, 2011). For example, the sample collected in the BAZ at station DER2-05 contained 14 percent fine-grained sediments and 0.78 percent TOC content. Constituents would not preferentially sorb to coarser sediments with limited TOC content. Given the coarse-grained, low organic carbon substrates in the nearshore area of the Jackson Labs/TEL Area, potential groundwater discharge at the time of sampling may be contributing to elevated concentrations of site-specific VOCs and SVOCs in sediment samples. Groundwater data from shallow temporary well points (B08-P01B and B10-P01B) beneath the Delaware River adjacent to the Jackson Labs/TEL Area and perimeter wells indicated elevated chlorobenzene concentrations in perimeter groundwater, consistent with areas of elevated sediment concentrations at stations DER1-07 and DER2-05 (Figure 9-1 in URS, 2011).

Groundwater-to-surface water pathways in the Jackson Labs/TEL Area and Fluoroproducts Area have been mitigated by the installation of SPBs designed to prevent the off-site migration of groundwater from the B Aquifer to the Delaware River (Figure 2; see Section 3.5.3). As discussed in Section 4.2.2, direct discharge pathways through outfalls in the seawall of AOC 1 were discontinued and the outfalls were sealed between 1958 and 1975.

Given that potential sources of site-related constituents via groundwater discharge and direct discharge pathways have been eliminated, on-going sediment exposure is associated with residual COPEC concentrations remaining within sediment in the BAZ. Following attainment of source control, potential exposure to residual COPECs is expected to be greatest in four nearshore grid bands identified in the Fluoroproducts Area (centered near station DER15-BOR-19) where greater COPEC concentrations may remain in finer-grained, higher organic carbon sediments (Figure 27). Potential exposure to residual COPECs in the Jackson Labs/TEL Area is expected to be limited in localized, nearshore areas where coarse-grained, low organic carbon substrates are present. As discussed in Section 4.4.2, the biodegradation of site-related VOCs and SVOCs, particularly chlorinated benzene compounds, has been documented as an important fate process in sediments in the Salem Canal sediments and is likely an important fate process in the Delaware River.

### 8.2.2 Semi-Aquatic Wildlife

The results of the refined exposure evaluation presented in Section 8.1.2 indicate negligible site-related risk to semi-aquatic wildlife that may potentially forage throughout the Delaware River. AUF-adjusted doses for semi-aquatic wildlife foraging at EPCs based on  $UCL_{mean}$  concentrations resulted in negligible risk (i.e.,  $HQ \leq 1$ ) for all COPECs when alternate TRVs were used in the refined exposure estimate. A full discussion for all COPECs evaluated in the refined wildlife ingestion model is presented in Appendix B.

## 8.3 Scientific Management Decision Point

The preceding sections presented screening-level and refined exposure estimates and risk characterization for the primary ecological receptor groups potentially exposed to site-related COPECs in the Delaware River adjacent to Chambers Works. The refined exposure estimates and risk characterization for bulk sediment indicates localized potential for adverse effects to benthic invertebrates and negligible potential for adverse effects to semi-aquatic wildlife potentially foraging along the shoreline adjacent to

Chambers Works. As indicated in the screening-level risk characterization, it is not likely that exposure to COPECs in surface water or sediment adversely affects fish communities in the Delaware River adjacent to Chambers Works (Section 6.3.2).

Based on the findings of the screening-level and refined exposure estimates, the following SMDPs are recommended for the primary ecological receptor groups evaluated in the Delaware River SLERA:

- Fish and semi-aquatic wildlife: There is adequate information to conclude that ecological risks are negligible; therefore, there is no need for remediation on the basis of ecological risk.
- Benthic invertebrate communities: The information indicates a potential for adverse ecological effects, and a more thorough assessment is warranted.

## 9.0 Uncertainty

An uncertainty analysis was performed to identify assumptions and procedures that may result in uncertainty in the estimation of exposure or the characterization of risk.

Uncertainty in the SLERA is assessed with respect to the following:

- Exposure and effects assessment
- Risk characterization

Assumptions and other factors that tend to overestimate, underestimate, or have an unknown effect on the findings of the primary phases of the SLERA are presented and discussed in the following subsections.

### 9.1 Exposure and Effects Assessment

Sources of uncertainty related to the exposure assessment include (1) sediment quality benchmarks and (2) absorption from ingested doses.

#### 9.1.1 Screening and Sediment Quality Benchmarks

The ecological screening levels presented in this SLERA are conservative and directed at identifying the presence/absence of risk of adverse ecological harm. However, the screening benchmarks do not reflect site-specific conditions such as the effects of habitat properties or potentially antagonistic or synergistic effects between different compounds.

RESVs for select constituents were derived using a combination of site-specific data and laboratory data. Although intended to reflect a realistic exposure scenario, inputs to the derivation of the revised ESVs were conservative. Because of the conservatism of the model used to develop the refined ESVs, the derived ESVs are deemed adequate and are not likely to underestimate exposure.

Uncertainty is introduced into the risk assessment process when insufficient toxicological data exist to develop benchmarks. Detected constituents lacking established criteria cannot be quantitatively assessed; exposure to these constituents must be considered an uncertainty in the SLERA.

The uncertainty associated with insufficient toxicological data is low and is not likely to influence the findings and conclusions of the SLERA due to low detection frequencies of constituents without ESVs. Table 29 summarizes the constituents for which ESVs were not available. COPECs without ESVs were detected infrequently within the Delaware River exposure areas. Pesticides, SVOCs, and 24 of 30 VOCs lacking sediment ESVs were not detected in any samples within the four exposure areas adjacent to Chambers Works; detection frequencies were low (<5 percent) for the six VOCs detected in sediment samples (Table 29). As expected, detection frequencies were high for naturally occurring metals in sediment in the Delaware River. When available, representative background concentrations were used to evaluate potential exposure relative to regional conditions. Regional background data were not available for six metals presented in Table 29; therefore, potential exposure to these metals is an uncertainty. Given the limited detection frequencies of constituents without ESVs, it is not likely that the uncertainty associated with these constituents would drive risk or alter the conclusions presented in the SLERA.

Toxicological information was available for the primary constituents (e.g., metals, VOCs, SVOCs, pesticides, PCBs) that have been demonstrated to cause adverse ecological effects. The influence of the uncertainties of insufficient toxicological information on the evaluation of ecological exposure is unknown, but the lack of toxicological benchmarks may underestimate risk.

### 9.1.2 Constituent Bioavailability

Chemical analyses of surface water and bulk sediment measured the total levels of the COPECs rather than the bioavailable toxic forms. The availability and assessment using total concentrations assume that the entire fraction is bioavailable and toxic. This is likely a conservative assumption that varies from constituent to constituent. It is also likely that, to some degree, COPECs adsorb to fine-grained particles and/or complex with chemical agents and organic ligands in bulk sediments. Such actions may change the chemical speciation of the COPEC to a less toxic form or reduce the concentrations of bioavailable chemicals.

The use of the total concentrations to estimate exposure does not consider these changes in speciation or reductions in toxicity and, therefore, likely overestimates risk when compared to toxicological benchmarks derived from more bioavailable and toxic forms. The EqP assessments used to develop refined ESVs for organic constituents likely reduced uncertainty associated with bioavailability.

Under or over-estimating risk can also occur because of differences in absorption rates observed at the site and laboratory studies used to determine uptake for semi-aquatic wildlife. In this regard, 100 percent bioavailability (relative to the test compounds in the underlying toxicity studies) was assumed at the site. Thus, if the absorption observed at the site is the same as that observed in the laboratory test, then the prediction of adverse effects will be accurate. If absorption at the site is greater, the prediction of adverse effects may be underestimated. However, if the absorption of the chemical at the site is lower than observed in the laboratory study, exposure will be overestimated. The assumption made in this SLERA that site-related compounds are 100 percent bioavailable is more likely to overestimate exposure to COPECs in sediments. The effects on the SLERA results associated with the assumptions regarding uptake and absorption are uncertain although they are likely to overestimate risk.

Exposures to ecological receptors in the Fluoroproducts Area and Jackson Labs/TEL Area involve more than one type of contaminant. Synergistic or antagonistic interactions might occur when receptors are exposed to constituent mixtures in sediment. For PAHs and other non-PAH narcotic COPECs, the uncertainty in the potential effects of the additive toxicity of narcotic constituents is estimated based on  $\sum$ ESBTU values. However, for other modes of toxicity, data are generally not adequate to permit any quantitative adjustment in toxicity values or risk calculations based on interactions between different compounds. If other COPECs act by a similar toxic mode of action, total risks may be greater than estimated. Conversely, if COPECs act antagonistically, total risks may be lower than estimated.

### 9.1.3 Deterministic Exposure Models

There is inherent uncertainty in estimating potential exposure to wildlife using the deterministic dietary models presented in the SLERA. Unlike probabilistic exposure modeling, deterministic models do not account for the variability in the selection of receptor-specific exposure factors or exposure variables. To minimize the uncertainty in

selecting static exposure parameters and exposure variables, the models were parameterized with conservative exposure assumptions intended to minimize the probability of underestimating exposure to wildlife via ingestion pathways. Key uncertainties associated with model parameters that may overestimate, underestimate, or have an unknown effect on the estimation of exposure to wildlife receptors are discussed in detail in Appendix B. Given the conservative parameters included in the deterministic exposure models, it is not likely that dietary exposures to wildlife were underestimated in the SLERA.

## 9.2 Risk Characterization

The application of HQs to quantify potential ecological risk has certain limitations although the EPA recommends the approach for the screening-level risk calculation. One of the advantages is that the procedure intentionally overestimates risks to “*ensure that potential ecological threats are not overlooked*” (EPA, 1997a). However, the HQ method does limit the information because it provides only a single point of comparison for the exposure-response relationship.

Given the use of conservative assumptions regarding exposure and potential toxicological effects, there is minimal uncertainty that the potential ecological risks from site-related COPECs went undetected in the SLERA. Conversely, there is the possibility of a false positive determination of risk (i.e., concluding there is risk when adverse effects do not occur). Further evaluation of site-specific exposure may be warranted to further assess ecological risk for constituent-receptor interactions that indicated the potential for adverse effects in the SLERA.

## 9.3 Summary

In general, conservative estimates or assumptions were made for most parameters associated with ecological exposures and effects in the screening-level and refined exposure evaluations. Therefore, confidence is high that the conclusions regarding the potential for adverse ecological harm are adequately conservative to quantify potential risks to ecological receptors.

## 10.0 Conclusions and Recommendations

The purpose of this SLERA is to evaluate potential risks to ecological receptors exposed to potential site-related constituents in sediment and surface water within four exposure areas in the Delaware River adjacent to Chambers Works. Potential ecological exposure was evaluated using available sediment and surface water data based on screening-level exposure estimates that quantified potential risk using the most conservative exposure scenario and refined exposure estimates that quantified potential risk based on site-specific inputs (e.g., sediment organic carbon) and more representative exposure assumptions (e.g.,  $UCL_{\text{mean}}$  EPCs). Conclusions and recommendations based on the findings of the screening-level and refined exposure estimates and risk characterizations are presented below for the Manufacturing Zone and Carneys Point Zone.

### 10.1 Manufacturing Zone

The following sections present the SLERA conclusions for the Manufacturing Zone and provide recommendations regarding the need for further ecological investigation.

#### 10.1.1 Conclusions

The following sections present conclusions for primary receptor groups based on the findings of the screening-level and refined exposure estimates and risk characterizations for exposure areas within the Manufacturing Zone.

##### Benthic Invertebrates

Spatially-limited areas along the Delaware River shoreline adjacent to the Manufacturing Zone have the potential to adversely affect benthic invertebrate communities through direct contact exposure pathways based on ESBs. Specific exposure areas with the greatest potential for adverse effects to benthic invertebrate receptors include:

- Fluoroproducts Area: Potential exposure to benthic invertebrates in the Manufacturing Zone is greatest in four nearshore grid cells adjacent to AOC 1 centered near stations DER15-BOR-19 and DER15-BOR-17 where non-PAH Narcotic  $\sum$ ESBTU values exceed 1 within the BAZ (Figure 27). Primary narcotic constituents contributing to non-PAH Narcotic  $\sum$ ESBTU values greater than 1 include chlorobenzene, dichlorobenzenes, and benzene. Sampling stations with non-PAH Narcotic  $\sum$ ESBTU values indicating the potential for adverse effects are bounded in each direction by stations with non-PAH Narcotic  $\sum$ ESBTU values < 1, indicating that the area of potential benthic invertebrate community impacts is defined based on existing bulk sediment data.
- Jackson Labs/TEL Area: Potential exposure to site-related organic COPECs, particularly 1,2,4-trichlorobenzene and chlorobenzene, is greatest in a localized nearshore area near sampling station DER2-05-SD (Figure 24). Localized areas of elevated concentrations of select metals, including chromium and lead, and PAHs were also identified in nearshore areas of the Salem Canal Tidal Reach.

Following attainment of source control, potential exposure to residual COPECs is expected to be greatest in four nearshore grid bands identified in the Fluoroproducts Area where greater COPEC concentrations and finer-grained, higher organic carbon sediments are present. Potential exposure to residual COPECs is expected to be limited in localized, nearshore areas of the Jackson Labs/TEL Area where coarse-grained, low organic carbon substrates are present. If historical groundwater discharge was a primary

migration pathway from AOC 2/3 to these localized stations within the Jackson Labs/TEL Area, it is anticipated that the installation of the SPB and IWS pumping will reduce future exposure in the BAZ due to the low TOC and coarse-grained sediment in these areas. As discussed in Section 4.4.2, the biodegradation of site-related VOCs and SVOCs, particularly chlorinated benzene compounds, is an important fate process in Salem Canal sediments. Similar processes that degrade chlorinated benzene concentrations in the Salem Canal will also likely degrade these compounds within the BAZ in the Delaware River.

Except for the nearshore grid band of the Fluoroproducts Area and spatially-limited nearshore areas within the Jackson Labs/TEL Area, potential risk to benthic invertebrates are low within the Manufacturing Zone. Refined exposure estimates for exposure to other COPECs within the BAZ indicate spatially limited exceedances with HQs or ESBTU values generally less than 5.

### **Fish**

Preliminary exposure estimates indicate that constituents detected in surface water pose negligible risk to fish communities; therefore, no further evaluation of exposure to fish communities is warranted in the Manufacturing Zone. Exceedances of ESVs for aluminum and iron were ubiquitous in the Delaware River surface water dataset in the Manufacturing Zone and Carneys Point Zone, indicating that concentrations of these metals are likely related to regional water quality conditions. Single sample exceedances of lead (dissolved) and 1,4-dichlorobenzene in samples within the Manufacturing Area were infrequent (1 of 18 samples) and did not substantially exceed conservative ESVs (HQs < 1.6) to result in adverse effects to fish communities.

### **Semi-Aquatic Wildlife**

Refined exposure estimates indicate negligible site-related risk to semi-aquatic wildlife that may potentially forage throughout the Delaware River. Site-related constituents generally have limited potential for bioaccumulation and, therefore, limited potential for exposure to upper trophic wildlife receptors through bioaccumulation and ingestion pathways. Based on these findings, no further evaluation of exposure to semi-aquatic wildlife receptors is warranted adjacent to Chambers Works.

## **10.1.2 Recommendations**

Based on the conclusions presented in the preceding section, further evaluation of the potential for adverse effects to benthic invertebrate receptors is recommended in localized areas identified in the Fluoroproducts Area and Jackson Labs/TEL Area. A tiered approach is recommended to further evaluate benthic invertebrate exposure to nonionic organic COPECs based on freely dissolved pore water concentrations (EPA, 2012a; Burgess, 2009):

- Tier 1: EqP-based ESBs to assess the likelihood of toxicity to benthos; ESBTU values less than 1 are considered unimpacted and require no further consideration;
- Tier 2: Pore water assessment to generate empirical IWTU values; ESBTU values less than 1 are considered unimpacted and require no further consideration;

The refined exposure estimates presented in this SLERA provide Tier 1 estimates of the likelihood of benthic toxicity based on existing data. The findings of the refined exposure

estimates using EqP-based ESBs provide the basis for the design of the Tier 2 assessment.

Data generated using the tiered approach will be used in a weight-of-evidence evaluation to further assess the potential for site-related nonionic COPECs to adversely impact benthic invertebrate communities in the localized exposure areas identified in the SLERA (EPA, 2012a). The results of the weight-of-evidence approach will be used to inform the need for further assessment or remedial decision-making in the Delaware River adjacent to Chambers Works.

In addition to the tiered assessment of non-ionic organic COPEC exposure in the Fluoroproducts Area and Jackson Labs/TEL Area, targeted sampling has also been proposed in the Salem Canal Tidal Reach to further characterize the spatial extent of elevated concentrations of lead and PAHs (AECOM, 2018c). Data from the additional characterization sampling will be used to assess the potential impacts of these localized areas on the ecological receptors identified in the Delaware River SLERA and the revised Salem Canal SLERA (EHS Support, 2017). Data from the additional characterization sampling will also be used to evaluate the localized areas as potential hot spots in accordance with Section 6.4.4 of the NJDEP *Ecological Evaluation Technical Guidance* (NJDEP, 2018).

Based on the findings of the refined risk characterization presented in the SLERA, no further evaluation of ecological exposure is warranted in the Manufacturing Zone for fish and semi-aquatic wildlife.

## 10.2 Carneys Point Zone

The following sections present the SLERA conclusions for the Carneys Point Zone and provide recommendations regarding the need for further ecological investigation.

### 10.2.1 Conclusions

The following sections present conclusions for primary receptor groups based on the findings of the screening-level and refined exposure estimates and risk characterizations for exposure areas within the Carneys Point Zone.

#### **Benthic Invertebrates**

The potential for adverse effects to benthic invertebrates associated with direct contact exposure to sediment COPECs is low in the Carneys Point Zone; therefore, no further evaluation of benthic invertebrate exposure is warranted. Refined exposure estimates indicate that exceedances of RESVs in the BAZ were spatially limited and HQs or ESBTU values were low (generally less than 3).

#### **Fish**

Preliminary exposure estimates indicate that constituents detected in surface water pose negligible risk to fish communities; therefore, no further evaluation of exposure to fish communities is warranted in the Carneys Point Zone. Exceedances of ESVs for aluminum and iron were ubiquitous in the Delaware River surface water dataset in the Manufacturing Zone and Carneys Point Zone, indicating that concentrations of these metals are likely related to regional water quality conditions. No other COPECs were identified in surface water in the Carneys Point Zone.

### **Semi-Aquatic Wildlife**

Refined exposure estimates indicate negligible site-related risk to semi-aquatic wildlife that may potentially forage throughout the Delaware River. Site-related constituents generally have limited bioaccumulation potential and, therefore, limited potential for exposure to upper trophic wildlife receptors through bioaccumulation and ingestion pathways. Based on these findings, no further evaluation of exposure to semi-aquatic wildlife receptors is warranted adjacent to Chambers Works.

#### **10.2.2 Recommendations**

Based on the findings of the refined risk characterization presented in the SLERA, no further evaluation of exposure is warranted in the Carneys Point Zone for the primary ecological receptor groups.

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## Tables

**Table 1**  
**Assessment Endpoints and Measurement Endpoints**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Exposure Area	Assessment Endpoints	Measurement Endpoints
Delaware River (Manufacturing Zone - Jackson Labs/TEL Area, Fluoroproducts Area, SWMU 5/Henby Creek Area, and Carneys Point Zone)	Survival, growth, and reproduction of the benthic invertebrate community.	<ol style="list-style-type: none"> <li>1. Comparison of measured COPEC concentrations in bulk sediment to ecotoxicity benchmarks for benthic invertebrates.</li> <li>2. Comparisons of estimated COPEC concentrations in pore water to ecotoxicity benchmarks for benthic invertebrates.</li> </ol>
	Survival, growth, and reproduction of the fish community	<ol style="list-style-type: none"> <li>1. Comparison of COPEC concentrations in surface water to ecotoxicity benchmarks for fish.</li> </ol>
	Survival, growth, and reproduction of populations of semi-aquatic birds (e.g., black duck, double-crested cormorant)	<ol style="list-style-type: none"> <li>1. Comparison of estimated daily doses (EDDs) of bioaccumulative COPECs to toxicity reference values (TRVs) protective of survival, growth, and reproductive endpoints.</li> </ol>

**Notes:**

COPEC: Constituent of Potential Ecological Concern

**Table 2**  
**Preliminary Ecological Screening Values - Bulk Sediment**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Ecological Screening Value	Source
<b>Metals (mg/kg)</b>		
Aluminum	25,500	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Antimony	2	EPA Region 3 BTAG Freshwater Sediment Screening Benchmark
Arsenic	10	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Barium	NESV	NESV: No Ecological Screening Value Available
Beryllium	NESV	NESV: No Ecological Screening Value Available
Cadmium	0.6	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Chromium	26	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Cobalt	50	EPA Region 3 BTAG Freshwater Sediment Screening Benchmark
Copper	16	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Iron	20,000	EPA Region 3 BTAG Freshwater Sediment Screening Benchmark
Lead	31	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Manganese	630	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Mercury	0.17	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Nickel	16	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Selenium	2	EPA Region 3 BTAG Freshwater Sediment Screening Benchmark
Silver	0.5	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Thallium	NESV	NESV: No Ecological Screening Value Available
Tin	NESV	NESV: No Ecological Screening Value Available
Titanium	NESV	NESV: No Ecological Screening Value Available
Vanadium	NESV	NESV: No Ecological Screening Value Available
Zinc	120	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
<b>Volatile Organic Compounds (mg/kg)</b>		
1,1,1-Trichloroethane	0.213	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
1,1,2,2-Tetrachloroethane	0.85	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
1,1,2-Trichloroethane	0.518	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
1,1,2-Trichlorotrifluoroethane	NESV	NESV: No Ecological Screening Value Available
1,1-Dichloroethane	0.000575	EPA 2003 Region 5 Ecological Screening Levels
1,1-Dichloroethene	0.0194	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
1,2,4-Trimethylbenzene	NESV	NESV: No Ecological Screening Value Available
1,2-Dichloroethane	0.26	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
1,2-Dichloroethene	NESV	NESV: No Ecological Screening Value Available
1,2-Dichloropropane	0.333	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
1,3,5-Trimethylbenzene	NESV	NESV: No Ecological Screening Value Available
2-Chlorotoluene	NESV	NESV: No Ecological Screening Value Available
4-Chlorotoluene	NESV	NESV: No Ecological Screening Value Available
4-Isopropyltoluene	NESV	NESV: No Ecological Screening Value Available
Acetone	0.0099	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Acrolein	0.00000152	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Acrylonitrile	0.0012	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Benzene	0.142	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Bromodichloromethane	NESV	NESV: No Ecological Screening Value Available
Bromoform	0.492	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Carbon disulfide	0.0239	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Carbon tetrachloride	1.45	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Chlorobenzene	0.291	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Chlorodibromomethane	NESV	NESV: No Ecological Screening Value Available
Chloroform	0.121	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
cis-1,2 Dichloroethene	0.654	EPA 2003 Region 5 Ecological Screening Levels
cis-1,3-Dichloropropene	NESV	NESV: No Ecological Screening Value Available
Cumene	0.086	EPA Region 3 BTAG Freshwater Sediment Screening Benchmark
Dichlorodifluoromethane	NESV	NESV: No Ecological Screening Value Available
Dichlorofluoromethane	NESV	NESV: No Ecological Screening Value Available
Ethyl chloride	NESV	NESV: No Ecological Screening Value Available
Ethylbenzene	0.175	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Hexane	0.0396	EPA Region 3 BTAG Freshwater Sediment Screening Benchmark
Meta- and para-xylene	NESV	NESV: No Ecological Screening Value Available
Methyl bromide	0.00137	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Methyl chloride	NESV	NESV: No Ecological Screening Value Available
Methyl ethyl ketone	0.0424	EPA Region 3 BTAG Freshwater Sediment Screening Benchmark
Methylene chloride	0.159	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
N-butylbenzene	NESV	NESV: No Ecological Screening Value Available
N-propylbenzene	NESV	NESV: No Ecological Screening Value Available
Ortho-xylene	NESV	NESV: No Ecological Screening Value Available
Sec-butylbenzene	NESV	NESV: No Ecological Screening Value Available
Tert-butylbenzene	NESV	NESV: No Ecological Screening Value Available
Tetrachloroethene	0.99	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Toluene	1.22	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
trans-1,2-Dichloroethene	0.654	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
trans-1,3-Dichloropropene	NESV	NESV: No Ecological Screening Value Available
Trichloroethene	0.112	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Trichlorofluoromethane	NESV	NESV: No Ecological Screening Value Available

**Table 2**  
**Preliminary Ecological Screening Values - Bulk Sediment**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Ecological Screening Value	Source
Vinyl chloride	0.202	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Xylenes	0.433	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
<b>Semi-Volatile Organic Compounds (mg/kg)</b>		
1,2,4-Trichlorobenzene	5.062	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
1,2-Dichlorobenzene	0.294	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
1,2-Diphenylhydrazine	NESV	NESV: No Ecological Screening Value Available
1,3-Dichlorobenzene	1.315	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
1,4-Dichlorobenzene	0.318	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
1-Naphthylamine	NESV	NESV: No Ecological Screening Value Available
2,4,6-Trichlorophenol	0.208	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
2,4-Dichlorophenol	0.0817	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
2,4-Dimethylphenol	0.304	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
2,4-Dinitrophenol	0.00621	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
2,4-Dinitrotoluene	0.0144	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
2,6-Dinitrotoluene	0.0398	EPA 2003 Region 5 Ecological Screening Levels
2-Chloroethyl vinyl ether	NESV	NESV: No Ecological Screening Value Available
2-Chlorophenol	0.0319	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
2-Methylnaphthalene	0.07	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
2-Methylphenol (o-cresol)	NESV	NESV: No Ecological Screening Value Available
2-Naphthylamine	NESV	NESV: No Ecological Screening Value Available
2-Nitrophenol	NESV	NESV: No Ecological Screening Value Available
3,3'-Dichlorobenzidine	0.127	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
4,6-Dinitro-2-methylphenol	NESV	NESV: No Ecological Screening Value Available
4-Aminobiphenyl	NESV	NESV: No Ecological Screening Value Available
4-Bromophenyl phenyl ether	1.55	EPA 2003 Region 5 Ecological Screening Levels
4-Chloro-3-methylphenol	NESV	NESV: No Ecological Screening Value Available
4-Chloroaniline	0.146	EPA 2003 Region 5 Ecological Screening Levels
4-Chlorophenyl phenyl ether	NESV	NESV: No Ecological Screening Value Available
4-Methylphenol (p-cresol)	NESV	NESV: No Ecological Screening Value Available
4-Nitrophenol	0.0133	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Aniline	0.001	Calculated using equilibrium partitioning (DuPont CRG, 1999)
Benzidine	NESV	NESV: No Ecological Screening Value Available
Biphenyl	1.22	EPA Region 3 BTAG Freshwater Sediment Screening Benchmark
Bis(2-chloroethoxy)methane	NESV	NESV: No Ecological Screening Value Available
Bis(2-chloroethyl)ether	3.52	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Bis(2-chloroisopropyl)ether	NESV	NESV: No Ecological Screening Value Available
Bis(2-ethylhexyl)phthalate	0.182	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Butyl benzyl phthalate	1.97	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Carbazole	NESV	NESV: No Ecological Screening Value Available
Dibenzofuran	2	EPA Ecotox Thresholds Sediment Screening Benchmark
Diethyl phthalate	0.295	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Dimethyl phthalate	0.53	Washington Department of Ecology 2001. Washington NEL Sediment Quality Standards (WAC 172-204-320)
Di-N-butyl phthalate	1.114	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Di-N-octylphthalate	4.06	EPA 2003 Region 5 Ecological Screening Levels
Diphenyl ether	NESV	NESV: No Ecological Screening Value Available
Hexachlorobenzene	0.02	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Hexachlorobutadiene	0.0265	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Hexachlorocyclopentadiene	0.901	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Hexachloroethane	0.584	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Hexane	0.0396	EPA Region 3 BTAG Freshwater Sediment Screening Benchmark
Isophorone	0.432	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
N-Dioctyl phthalate	NESV	NESV: No Ecological Screening Value Available
Nitrobenzene	0.145	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
N-Nitrosodimethylamine	NESV	NESV: No Ecological Screening Value Available
N-Nitrosodi-N-propylamine	NESV	NESV: No Ecological Screening Value Available
N-Nitrosodiphenylamine	2.68	EPA 2006: EPA Region 3 BTAG Freshwater Sediment Benchmarks
O-Toluidine	NESV	NESV: No Ecological Screening Value Available
PCN-2 (2-Chloronaphthalene)	0.417	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Pentachlorobenzene	0.69	EPA Ecotox Thresholds Sediment Screening Benchmark
Pentachlorophenol	23	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Phenol	0.0491	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
<b>Polycyclic Aromatic Hydrocarbons, PAHs (mg/kg)</b>		
Acenaphthene	0.00671	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Acenaphthylene	0.00587	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Anthracene	0.22	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Benzo(a)anthracene	0.32	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Benzo(b)fluoranthene	10.4	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Benzo(g,h,i)perylene	0.17	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Benzo(k)fluoranthene	0.24	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Benzo[a]pyrene	0.37	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Chrysene	0.34	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)

**Table 2**  
**Preliminary Ecological Screening Values - Bulk Sediment**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Ecological Screening Value	Source
Dibenz(a,h)anthracene	0.06	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Fluoranthene	0.75	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Fluorene	0.19	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Indeno (1,2,3-cd) pyrene	0.2	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Naphthalene	0.176	EPA 2003 Region 5 Ecological Screening Levels
Phenanthrene	0.56	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Pyrene	0.49	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Total PAHs (detections only)	4	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Total PAHs (detections + 1/2 mdl)	4	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
<b>Pesticides (mg/kg)</b>		
4,4'-DDD	0.00488	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
4,4'-DDE	0.00316	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
4,4'-DDT	0.00416	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Total DDx	0.007	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Alpha chlordane	NESV	NESV: No Ecological Screening Value Available
Alpha-BHC	0.006	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Beta-BHC	0.005	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Delta-BHC	NESV	NESV: No Ecological Screening Value Available
Dieldrin	0.0019	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Endosulfan I	0.0029	EPA 2006: EPA Region 3 BTAG Freshwater Sediment Benchmarks
Endosulfan sulfate	0.0346	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Endrin	0.00222	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Endrin aldehyde	0.48	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Endrin ketone	NESV	NESV: No Ecological Screening Value Available
Gamma chlordane	NESV	NESV: No Ecological Screening Value Available
Heptachlor	0.068	EPA 2006: EPA Region 3 BTAG Freshwater Sediment Benchmarks
Heptachlor epoxide	0.00247	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
Lindane	0.003	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)
<b>Polychlorinated Biphenyls, PCBs (mg/kg)</b>		
Total PCB (congeners)	0.059	NJDEP 2009: Freshwater Criteria Lowest Effects Levels (LELs)

**Notes:**

ESV: Ecological Screening Value

LEL: Lowest effects level

MDL: Method Detection Limit

NESV: No Ecological Screening level

**Table 3**  
**Preliminary Ecological Screening Values - Surface Water**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Ecological Screening Value		Source
	Total	Dissolved	
<b>Metals (µg/L)</b>			
Aluminum	87	NESV	DRBC 2010: DRBC SQO
Antimony	NESV	30	Suter and Tsao 1996: Tier II SCV
Arsenic	NESV	150	NJDEP 2016: NJSWQS; DRBC 2010: DRBC SQO
Barium	NESV	220	USEPA Region V ESL: ESL
Beryllium	3.6	NESV	NJDEP 2009: Ecological Screening Criteria
Cadmium	0.81	0.54 <sup>a</sup>	NJDEP 2016: NJSWQS; DRBC 2010: DRBC SQO
Calcium	NESV	NESV	--
Chromium	290	18.83 <sup>a</sup>	NJDEP 2016: NJSWQS; DRBC 2010: DRBC SQO
Cobalt	NESV	23	Suter and Tsao 1996: Tier II SCV
Copper	33.1	9.64 <sup>a</sup>	NJDEP 2016: NJSWQS; DRBC 2010: DRBC SQO
Iron	1000	NESV	US EPA 2006: NRWQC
Lead	NESV	5.4	NJDEP 2016: NJSWQS; DRBC 2010: DRBC SQO
Magnesium	--	--	--
Manganese	NESV	120	Suter and Tsao 1996: Tier II SCV
Mercury	NESV	0.77	NJDEP 2016: NJSWQS; DRBC 2010: DRBC SQO
Nickel	183	38.91 <sup>a</sup>	NJDEP 2016: NJSWQS; DRBC 2010: DRBC SQO
Potassium	NESV	NESV	--
Selenium	NESV	5	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Sodium	NESV	NESV	--
Thallium	10	NESV	NJDEP 2009: Ecological Screening Criteria
Tin	180	NESV	NJDEP 2009: Ecological Screening Criteria
Titanium	100	NESV	Nagpal et al. 2001: British Columbia Water Quality Guidelines
Vanadium	NESV	20	Suter and Tsao 1996: Tier II SCV
Zinc	420	88.47 <sup>a</sup>	NJDEP 2016: NJSWQS; DRBC 2010: DRBC SQO
<b>Volatile Organic Compounds (µg/L)</b>			
1,1,1-Trichloroethane	76		NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
1,1,2,2-Tetrachloroethane	380		NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
1,1-Dichloroethane	47		EPA 2006: EPA Region 3 BTAG Freshwater Benchmarks
1,1-Dichloroethene	65		NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
1,2-Dichloroethane	910		NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
1,2-Dichloropropane	360		NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Acrolein	0.19		NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Acrylonitrile	66		NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Benzene	114		NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Bromodichloromethane	340		EPA 2011 Great Lakes Initiative Toxicity Data Clearinghouse
Bromoform	230		NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Carbon Tetrachloride	240		NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Chlorobenzene	47		NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Chlorodibromomethane	NESV		NESV: No Ecological Screening Value Available
Chloroform	140		NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Cis-1,2 Dichloroethene	590		Tier II SCV. Suter, G.W. , II, and C.L. Tsao. 1996.
Cis-1,3-Dichloropropene	0.055		Tier II SCV. Suter, G.W. , II, and C.L. Tsao. 1996.
Ethyl Chloride	NESV		NESV: No Ecological Screening Value Available
Ethylbenzene	14		NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Methyl Bromide	16		NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Methyl Chloride	5500		EPA Region 4 Chronic surface water screening benchmark
Methylene Chloride	940		NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Tetrachloroethylene	45		NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Toluene	253		NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Trans-1,2-Dichloroethene	970		NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Trans-1,3-Dichloropropene	0.055		Tier II SCV. Suter, G.W. , II, and C.L. Tsao. 1996.

**Table 3**  
**Preliminary Ecological Screening Values - Surface Water**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Ecological Screening Value	Source
Trichloroethene	47	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Trichlorofluoromethane	1740	EPA Region 6 Surface Water Screening Benchmarks
Vinyl Chloride	930	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Xylenes	27	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
1,1,2-Trichloroethane	500	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
1,1,2-Trichlorotrifluoroethane	NESV	NESV: No Ecological Screening Value Available
Acetone	1500	EPA 2006: EPA Region 3 BTAG Freshwater Benchmarks
Carbon Disulfide	0.92	Suter, G.W. , II, and C.L. Tsao. 1996. Tier II SCV
Dichlorodifluoromethane	1960	EPA Region 6 Surface Water Screening Benchmarks
Dichlorofluoromethane	NESV	NESV: No Ecological Screening Value Available
<b>Semi-Volatile Organic Compounds (µg/L)</b>		
1,2-Dichlorobenzene	14	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
1,3-Dichlorobenzene	38	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
1,4-Dichlorobenzene	9.4	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
1,2,4-Trichlorobenzene	30	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
1,2-Diphenylhydrazine	2.7	EPA Region 4 Chronic surface water screening benchmark
1-Naphthylamine	NESV	NESV: No Ecological Screening Value Available
2,4,6-Trichlorophenol	4.9	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
2,4-Dichlorophenol	11	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
2-Chloroethyl Vinyl Ether	3540	EPA Region 4 Chronic surface water screening benchmark
3,3'-Dimethylbenzidine	100	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
2,4-Dinitrophenol	19	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
2,4-Dinitrotoluene	44	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
2,6-Dinitrotoluene	81	EPA 2003 Region V Ecological Screening Levels
2-Chlorophenol	24	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
2-Naphthylamine	NESV	NESV: No Ecological Screening Value Available
2-Nitrophenol	1920	EPA 2006: EPA Region 3 BTAG Freshwater Benchmarks
3,3'-Dichlorobenzidine	4.5	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
4,6-Dinitro-2-Methylphenol	NESV	NESV: No Ecological Screening Value Available
4-Aminobiphenyl	NESV	NESV: No Ecological Screening Value Available
4-Bromophenyl Phenyl Ether	1.5	EPA 2003 Region V Ecological Screening Levels
4-Chloro-3-Methylphenol	NESV	NESV: No Ecological Screening Value Available
4-Chloroaniline	232	EPA 2003 Region V Ecological Screening Levels
4-Chlorophenyl Phenyl Ether	NESV	NESV: No Ecological Screening Value Available
4-Nitrophenol	60	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Aniline	4.1	EPA 2003 Region V Ecological Screening Levels
Benzidine	3.9	EPA 2006: EPA Region 3 BTAG Freshwater Benchmarks
Bis(2-Chloroethoxy)Methane	NESV	NESV: No Ecological Screening Value Available
Bis(2-Chloroethyl)Ether	1900	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Bis(2-Chloroisopropyl)Ether	NESV	NESV: No Ecological Screening Value Available
Bis(2-Ethylhexyl)Phthalate	16	EPA 2006: EPA Region 3 BTAG Freshwater Benchmarks
Butyl Benzyl Phthalate	23	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Carbazole	NESV	NESV: No Ecological Screening Value Available
Diethyl Phthalate	110	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Dimethyl Phthalate	330	EPA Region 4 Chronic surface water screening benchmark
Di-N-Butyl Phthalate	9.7	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Hexachlorobenzene	0.0003	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Hexachlorobutadiene	0.053	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Hexachlorocyclopentadiene	77	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Hexachloroethane	8	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Isophorone	920	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
N-Dioctyl Phthalate	NESV	NESV: No Ecological Screening Value Available

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**Preliminary Ecological Screening Values - Surface Water**  
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Constituent	Ecological Screening Value	Source
Nitrobenzene	220	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
N-Nitrosodimethylamine	117	EPA 2006: EPA Region 3 BTAG Freshwater Benchmarks
N-Nitrosodi-N-Propylamine	20	EPA Region 6 Surface Water Screening Benchmarks
N-Nitrosodiphenylamine	210	EPA 2006: EPA Region 3 BTAG Freshwater Benchmarks
O-Toluidine	NESV	NESV: No Ecological Screening Value Available
Pentachlorophenol	15	EPA National Recommended Water Quality Criteria 2011
Phenol	180	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Di-N-Octylphthalate	22	EPA 2006: EPA Region 3 BTAG Freshwater Benchmarks
Pcn-2 (2-Chloronaphthalene)	0.396	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
<b>Polycyclic Aromatic Hydrocarbons (µg/L)</b>		
Acenaphthene	38	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Acenaphthylene	4840	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Anthracene	0.035	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Benzo(A)Anthracene	0.025	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Benzo(B)Fluoranthene	9.07	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Benzo(G,H,I)Perylene	7.64	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Benzo(K)Fluoranthene	NESV	NESV: No Ecological Screening Value Available
Benzo[A]Pyrene	0.014	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Chrysene	7	EPA Region 6 Surface Water Screening Benchmarks
Dibenzo(A,H)Anthracene	5	EPA Region 6 Surface Water Screening Benchmarks
Fluoranthene	1.9	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Fluorene	19	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Indeno (1,2,3-cd) Pyrene	4.31	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Naphthalene	13	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Phenanthrene	3.6	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Pyrene	0.3	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
<b>Pesticides (µg/L)</b>		
Beta-BHC	0.495	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Endosulfan I	0.056	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Heptachlor	0.0038	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Heptachlor Epoxide	0.0038	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
Lindane	0.026	NJDEP 2016: Freshwater (FW2) Chronic Aquatic Criteria
<b>Polychlorinated Biphenyls (µg/L)</b>		
Total PCB (congeners)	0.014	NJDEP 2016: Freshwater Criteria Lowest Effects Levels (LELs)

**Notes:**

ESV: Ecological Screening Value

DRBC SQO: Delaware River Basin Commission Stream Quality Objectives

ESL: Ecological Screening Level

NESV: No Ecological Screening Value

NJSWQS: New Jersey Surface Water Quality Standards

Tier II SCV: Tier II Secondary Chronic Value

a: Hardness dependent criterion calculated based on the

geometric mean of April hardness (as CaCO<sub>3</sub>) in the Delaware River of 87.1 mg/L.

**Table 4**  
**Sediment and Surface Water Sample Inventory**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Station	NAD 1983 NJ State Plane Northing (feet)	NAD 1983 NJ State Plane Easting (feet)	Sample ID	Medium	Sample Date	Sample Time	Surface Water				Sediment																
							TAL metals +Sn	PP VOCs +	PP SVOCs +	Pest and Herb	Total Hardness	TAL metals +Sn	PP VOCs +	PP SVOCs +	Grain Size	PCB Congeners	Pest and Herb	Total organic carbon	Black carbon								
<b>Manufacturing Zone - Jackson Labs/TEL Area</b>																											
<b>Remedial Investigation Phase I - September 2009</b>																											
DER1-01	312140.9	207924.3	CWK-E-DER1-01(0.0-0.5)	Sediment	9/21/2009	15:00																					
			CWK-E-DER1-01(0.5-1.0)	Sediment																							
			CWK-W-DER1-01	Surface Water (UNF)	9/22/2009	9:25																					
			CWK-W-DER1-01-DIS	Surface Water (FIL)																							
DER1-02	NA	NA	CWK-E-DER1-02(0.0-0.5)	Sediment	No sample - no sediment recovery																						
			CWK-E-DER1-02(0.5-1.0)	Sediment	No sample - no sediment recovery																						
DER1-03	312745.9	207912.9	CWK-E-DER1-03(0.0-0.5)	Sediment	No sample - no sediment recovery																						
			CWK-E-DER1-03(0.5-1.0)	Sediment	No sample - no sediment recovery																						
			CWK-W-DER1-03	Surface Water (UNF)	9/22/2009	9:05																					
			CWK-W-DER1-03-DIS	Surface Water (FIL)																							
DER1-04	313058.5	207933.6	CWK-E-DER1-04(0.0-0.5)	Sediment	9/24/2009	11:30																					
			CWK-E-DER1-04(0.5-1.0)	Sediment																							
DER1-05	313343.9	207962.3	CWK-E-DER1-05(0.0-0.5)	Sediment	9/21/2009	13:30																					
			CWK-E-DER1-05(0.5-1.0)	Sediment																							
			CWK-W-DER1-05	Surface Water (UNF)	9/22/2009	9:00																					
			CWK-W-DER1-05-DIS	Surface Water (FIL)																							
DER1-06	313651.3	207975.1	CWK-E-DER1-06(0.0-0.5)	Sediment	9/24/2009	9:00																					
			CWK-E-DER1-06(0.5-1.0)	Sediment																							
DER1-07	313952.4	208006.1	CWK-E-DER1-07(0.0-0.5)	Sediment	9/21/2009	12:30																					
			CWK-E-DER1-07(0.5-1.0)	Sediment																							
			CWK-W-DER1-07	Surface Water (UNF)	9/22/2009	8:45																					
			CWK-W-DER1-07-DIS	Surface Water (FIL)																							
DER1-08	314247.9	208020.7	CWK-E-DER1-08(0.0-0.5)	Sediment	9/24/2009	8:30																					
			CWK-E-DER1-08(0.5-1.0)	Sediment																							
DER1-09	314564.1	208012.4	CWK-E-DER1-09(0.0-0.5)	Sediment	9/21/2009	11:30																					
			CWK-E-DER1-09(0.5-1.0)	Sediment																							
			CWK-W-DER1-09	Surface Water (UNF)	9/22/2009	8:35																					
			CWK-W-DER1-09-DIS	Surface Water (FIL)																							
DER1-10	314843.6	207861.6	CWK-E-DER1-10(0.0-0.5)	Sediment	9/24/2009	8:00																					
			CWK-E-DER1-10(0.5-1.0)	Sediment																							
			CWK-E-DER1-10(0.5-1.0)-DUP	Sediment	9/24/2009	8:00																					
DER1-11	315148.3	207864.7	CWK-E-DER1-11(0.0-0.5)	Sediment	9/21/2009	10:30																					
			CWK-E-DER1-11(0.5-1.0)	Sediment																							
			CWK-W-DER1-11	Surface Water (UNF)	9/22/2009	8:20																					
			CWK-W-DER1-11-DIS	Surface Water (FIL)																							
<b>Remedial Investigation Phase II - April 2010</b>																											
DER2-01	312097.1	207825.3	CWK-E-DER2-01(0.0-0.5)	Sediment	4/21/2010	10:50																					
			CWK-E-DER2-01(0.5-1.0)	Sediment																							
DER2-02	312426.7	207662.8	CWK-E-DER2-02(0.0-0.5)	Sediment	No sample - no sediment recovery																						
			CWK-E-DER2-02(0.5-1.0)	Sediment	No sample - no sediment recovery																						
			CWK-W-DER2-02	Surface Water (UNF)	4/21/2010	11:40																					
			CWK-W-DER2-02-DIS	Surface Water (FIL)																							
DER2-03	312755.1	207621.3	CWK-E-DER2-03(0.0-0.5)	Sediment	4/22/2010	09:48																					
			CWK-E-DER2-03(0.5-1.0)	Sediment																							
DER2-04	NA	NA	CWK-E-DER2-04(0.0-0.5)	Sediment	No sample - no sediment recovery																						
			CWK-E-DER2-04(0.5-1.0)	Sediment	No sample - no sediment recovery																						
DER2-05	313242.0	207957.4	CWK-E-DER2-05(0.0-0.5)	Sediment	4/27/2010	09:45																					
			CWK-E-DER2-05(0.5-1.0)	Sediment																							
			CWK-W-DER2-05	Surface Water (UNF)	4/21/2010	11:54																					
			CWK-W-DER2-05-DIS	Surface Water (FIL)																							
DER2-06	313353.3	207670.0	CWK-E-DER2-06(0.0-0.5)	Sediment	4/23/2010	09:30																					
			CWK-E-DER2-06(0.5-1.0)	Sediment																							
DER2-07	313674.7	207739.6	CWK-E-DER2-07(0.0-0.5)	Sediment	4/22/2010	11:20																					
			CWK-E-DER2-07(0.5-1.0)	Sediment																							
			CWK-W-DER2-07	Surface Water (UNF)	4/21/2010	12:00																					
			CWK-W-DER2-07-DIS	Surface Water (FIL)																							
DER2-08	313947.8	207734.6	CWK-E-DER2-08(0.0-0.5)	Sediment	4/23/2010	10:00																					
			CWK-E-DER2-08(0.5-1.0)	Sediment																							
DER2-09	314246.4	207797.4	CWK-E-DER2-09(0.0-0.5)	Sediment	4/21/2010	15:18																					
			CWK-E-DER2-09(0.5-1.0)	Sediment																							

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Station	NAD 1983 NJ State Plane Northing (feet)	NAD 1983 NJ State Plane Easting (feet)	Sample ID	Medium	Sample Date	Sample Time	Surface Water					Sediment								
							TAL metals +Sn	PP VOCs +	PP SVOCs +	Pest and Herb	Total Hardness	TAL metals +Sn	PP VOCs +	PP SVOCs +	Grain Size	PCB Congeners	Pest and Herb	Total organic carbon	Black carbon	
DER2-10	314552.9	207811.5	CWK-E-DER2-10(0.0-0.5)	Sediment	4/20/2010	15:34														
			CWK-E-DER2-10(0.5-1.0)																	
DER2-11	314838.6	207642.7	CWK-E-DER2-11(0.0-0.5)	Sediment	4/20/2010	13:00														
			CWK-E-DER2-11(0.5-1.0)																	
DER2-12	315107.8	207704.7	CWK-E-DER2-12(0.0-0.5)	Sediment	4/20/2010	12:10														
			CWK-E-DER2-12(0.5-1.0)																	
			CWK-W-DER2-12	Surface Water (UNF)	4/21/2010	12:29														
DER2-30	314016.9	208009.5	CWK-W-DER2-12-DIS	Surface Water (FIL)																
			CWK-E-DER2-30(0.0-0.5)	Sediment	4/27/2010	08:30														
CWK-E-DER2-30(0.5-1.0)																				
DER2-31	313891.8	208013.1	CWK-E-DER2-31(0.0-0.5)	Sediment	4/27/2010	09:15														
			CWK-E-DER2-31(0.5-1.0)																	
<b>Salem Canal Tidal Reach - 2016 Canal-Wide Investigation</b>																				
SC-229	311998.9	209109.8	SC-229-TRT4S(0-0.5)	Sediment	8/24/2016															
			SC-229-TRT4S(0.5-0.8)																	
SC-230	312128.4	209043.9	SC-230-OutT3-(0-0.5)	Sediment	8/25/2016															
			SC-230-OutT3-(0.5-1.0)																	
SC-231	312123.6	209002.7	SC-231-Out013-(0-0.5)	Sediment	8/25/2016															
			SC-231-Out013-(0.5-1.0)																	
SC-232	312186.3	208869.3	SC-232-OutT3W(0-0.5)	Sediment	8/25/2016															
			SC-232-OutT3W(0.5-1.0)																	
SC-233	312192.5	208839.8	SC-233-OutDRO13C(0-0.5)	Sediment	8/25/2016															
			SC-233-OutDRO13C(0.5-1.0)																	
SC-234	312122.7	208819.3	SC-234-TRT3WM(0-0.5)	Sediment	8/24/2016															
			SC-234-TRT3WM(0.5-1.0)																	
SC-235	312051.2	208841.3	SC-235-TRT3WS(0-0.5)	Sediment	8/25/2016															
			SC-235-TRT3WS(0.5-1.0)																	
SC-236	312234.8	208622.3	SC-236-OutT2(0-0.5)	Sediment	8/25/2016															
			SC-236-OutT2(0.5-1.0)																	
SC-237	312162.8	208589.5	SC-237-TRT2M(0.5-1.0)	Sediment	8/24/2016															
			SC-237-TRT2M(0-0.5)																	
SC-240	312155.15	208605.67	SC-240-SW(082616)	Surface Water (UNF)	08/26/2016															
			SC-240-SW(082616)-Z	Surface Water (FIL)	08/26/2016															
SC-241	312119.12	208840.38	SC-241-SW(082616)	Surface Water (UNF)	08/26/2016															
			SC-241-SW(082616)-Z	Surface Water (FIL)	08/26/2016															
SC-242	312064.87	209098.93	SC-242-SW(082616)	Surface Water (UNF)	08/26/2016															
			SC-242-SW(082616)-Z	Surface Water (FIL)	08/26/2016															
<b>Remedial Investigation Phase III - November 2010</b>																				
DER3-01	312728.5	207354.3	CWK-E-DER3-01(0.0-0.5)	Sediment	11/16/2010	10:30														
			CWK-E-DER3-01(0.5-1.0)																	
DER3-02	313147.2	207943.4	CWK-E-DER3-02(0.0-0.5)	Sediment	11/16/2010	10:00														
			CWK-E-DER3-02(0.5-1.0)																	
DER3-03	313320.2	207397.1	CWK-E-DER3-03(0.0-0.5)	Sediment	11/16/2010	11:00														
			CWK-E-DER3-03(0.5-1.0)																	
DER3-04	313804.9	208025.0	CWK-E-DER3-04(0.0-0.5)	Sediment	11/15/2010	14:00														
			CWK-E-DER3-04(0.5-1.0)																	
DER3-05	313946.3	207539.2	CWK-E-DER3-05(0.0-0.5)	Sediment	11/16/2010	11:30														
			CWK-E-DER3-05(0.5-1.0)																	
DER3-06	314098.6	208016.7	CWK-E-DER3-06(0.0-0.5)	Sediment	11/15/2010	13:20														
			CWK-E-DER3-06(0.5-1.0)																	
DER3-07	314492.6	207587.3	CWK-E-DER3-07(0.0-0.5)	Sediment	11/16/2010	12:00														
			CWK-E-DER3-07(0.5-1.0)																	
DER3-19	313242.8	207955.4	CWK-E-DER3-19(0.0-0.5)	Sediment	11/18/2010	13:12														
			CWK-W-DER3-19	Surface Water (UNF)	11/15/2010	12:45														
			CWK-W-DER3-19-DIS	Surface Water (FIL)																
DER3-20	313954.9	208025.6	CWK-E-DER3-20(0.0-0.5)	Sediment	11/18/2010	13:25														
			CWK-W-DER3-20	Surface Water (UNF)	11/15/2010	12:55														
			CWK-W-DER3-20-DIS	Surface Water (FIL)																
<b>Manufacturing Zone - Fluoroproducts Area</b>																				
<b>Remedial Investigation Phase I - September 2009</b>																				
DER1-12	315583.0	208290.7	CWK-E-DER1-12(0.0-0.5)	Sediment	9/24/2009	11:00														
			CWK-E-DER1-12(0.5-1.0)																	

**Table 4**  
**Sediment and Surface Water Sample Inventory**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Station	NAD 1983 NJ State Plane Northing (feet)	NAD 1983 NJ State Plane Easting (feet)	Sample ID	Medium	Sample Date	Sample Time	Surface Water					Sediment						
							TAL metals +Sn	PP VOCs +	PP SVOCs +	Pest and Herb	Total Hardness	TAL metals +Sn	PP VOCs +	PP SVOCs +	Grain Size	PCB Congeners	Pest and Herb	Total organic carbon
DER1-13	316459.7	208673.4	CWK-E-DER1-13(0.0-0.5)	Sediment	9/22/2009	10:45												
			CWK-E-DER1-13(0.5-1.0)															
			CWK-W-DER1-13	Surface Water (UNF)														
DER1-14	316722.4	208374.9	CWK-W-DER1-13-DIS	Surface Water (FIL)	9/23/2009	9:40												
			CWK-E-DER1-14(0.0-0.5)	Sediment														
			CWK-E-DER1-14(0.5-1.0)															
DER1-15	316747.8	209645.8	CWK-W-DER1-14	Surface Water (UNF)	9/23/2009	9:30												
			CWK-W-DER1-14-DIS	Surface Water (FIL)														
			CWK-E-DER1-15(0.0-0.5)	Sediment														
DER1-30	316069.9	208493.3	CWK-E-DER1-15(0.5-1.0)		9/22/2009	11:25												
			CWK-W-DER1-15	Surface Water (UNF)														
			CWK-W-DER1-15-DIS	Surface Water (FIL)														
DER1-31	315971.4	208570.9	CWK-W-DER1-30	Surface Water (UNF)	9/23/2009	10:10												
			CWK-W-DER1-30-DIS	Surface Water (FIL)														
			CWK-W-DER1-31	Surface Water (UNF)														
DER1-32	316103.5	208655.3	CWK-W-DER1-31-DIS	Surface Water (FIL)	9/23/2009	10:15												
			CWK-W-DER1-32	Surface Water (UNF)														
			CWK-W-DER1-32-DIS	Surface Water (FIL)														
DER1-33	316004.6	208724.9	CWK-W-DER1-33	Surface Water (UNF)	9/23/2009	9:50												
			CWK-W-DER1-33-DIS	Surface Water (FIL)														
<b>Remedial Investigation Phase II - April 2010</b>																		
DER2-13	315681.7	208098.8	CWK-E-DER2-13(0.0-0.5)	Sediment	4/23/2010	11:20												
			CWK-E-DER2-13(0.5-1.0)															
DER2-14	315748.7	208413.5	CWK-E-DER2-14(0.0-0.5)	Sediment	4/23/2010	10:35												
			CWK-E-DER2-14(0.5-1.0)															
			CWK-W-DER2-14	Surface Water (UNF)														
DER2-15	315910.0	208294.3	CWK-W-DER2-14-DIS	Surface Water (FIL)	4/21/2010	14:48												
			CWK-E-DER2-15(0.0-0.5)	Sediment														
			CWK-E-DER2-15(0.5-1.0)															
DER2-16	316197.5	208456.1	CWK-E-DER2-16(0.0-0.5)	Sediment	4/20/2010	14:49												
			CWK-E-DER2-16(0.5-1.0)															
			CWK-W-DER2-16	Surface Water (UNF)														
DER2-17	316250.2	208787.8	CWK-W-DER2-16-DIS	Surface Water (FIL)	4/21/2010	13:00												
			CWK-E-DER2-17(0.0-0.5)	Sediment														
			CWK-E-DER2-17(0.5-1.0)															
DER2-18	316456.9	209122.5	CWK-W-DER2-17-DIS	Surface Water (FIL)	4/21/2010	14:30												
			CWK-E-DER2-18(0.0-0.5)	Sediment														
			CWK-E-DER2-18(0.5-1.0)															
DER2-19	316529.4	209300.7	CWK-W-DER2-16	Surface Water (UNF)	4/21/2010	14:15												
			CWK-W-DER2-16-DIS	Surface Water (FIL)														
			CWK-E-DER2-19(0.0-0.5)	Sediment														
DER2-20	316858.5	209546.8	CWK-E-DER2-19(0.5-1.0)		4/27/2010	11:20												
			CWK-W-DER2-16	Surface Water (UNF)														
			CWK-W-DER2-16-DIS	Surface Water (FIL)														
DER3-08	316368.0	208721.8	CWK-E-DER2-20(0.0-0.5)	Sediment	5/4/2010	12:10												
			CWK-E-DER2-20(0.5-1.0)															
<b>Remedial Investigation Phase III - November 2010</b>																		
DER3-08	316368.0	208721.8	CWK-E-DER3-08(0.0-0.5)	Sediment	11/16/2010	12:45												
			CWK-E-DER3-08(0.5-1.0)															
DER3-09	316567.2	208283.8	CWK-E-DER3-09(0.0-0.5)	Sediment	11/16/2010	13:30												
			CWK-E-DER3-09(0.5-1.0)															
DER3-10	316790.0	208495.5	CWK-E-DER3-10(0.0-0.5)	Sediment	11/18/2010	12:45												
			CWK-E-DER3-10(0.5-1.0)															
DER3-11	316622.8	208982.2	CWK-E-DER3-11(0.0-0.5)	Sediment	11/18/2010	10:50												
			CWK-E-DER3-11(0.5-1.0)															
DER3-12	317200.9	209319.2	CWK-E-DER3-12(0.0-0.5)	Sediment	11/18/2010	10:15												
			CWK-E-DER3-12(0.5-1.0)															
DER3-21	315751.1	208418.3	CWK-E-DER3-21(0.0-0.5)	Sediment	11/18/2010	12:30												
			CWK-W-DER3-21	Surface Water (UNF)														
DER3-22	316017.5	208698.7	CWK-W-DER3-21-DIS	Surface Water (FIL)	11/15/2010	11:30												
			CWK-E-DER3-22(0.0-0.5)	Sediment														
			CWK-W-DER3-22	Surface Water (UNF)														
			CWK-W-DER3-22-DIS	Surface Water (FIL)	11/15/2010	11:45												

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**Sediment and Surface Water Sample Inventory**  
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**Chemours Chambers Works**  
**Deepwater, New Jersey**

Station	NAD 1983 NJ State Plane Northing (feet)	NAD 1983 NJ State Plane Easting (feet)	Sample ID	Medium	Sample Date	Sample Time	Surface Water					Sediment						
							TAL metals +Sn	PP VOCs +	PP SVOCs +	Pest and Herb	Total Hardness	TAL metals +Sn	PP VOCs +	PP SVOCs +	Grain Size	PCB Congeners	Pest and Herb	Total organic carbon
DER3-23	316184.2	208446.0	CWK-E-DER3-23(0.0-0.5)	Sediment	11/18/2010	12:00												
			CWK-W-DER3-23	Surface Water (UNF)	11/15/2010	12:00	✓	✓			✓							
DER3-24	316250.9	208785.1	CWK-E-DER3-24(0.0-0.5)	Sediment	11/18/2010	11:50												
			CWK-W-DER3-24	Surface Water (UNF)	11/15/2010	12:15	✓	✓			✓							
DER3-25	316451.0	209092.5	CWK-E-DER3-25(0.0-0.5)	Sediment	11/18/2010	11:40												
			CWK-W-DER3-25	Surface Water (UNF)	11/15/2010	12:25	✓	✓			✓							
DER3-26	316529.5	209299.8	CWK-E-DER3-26(0.0-0.5)	Sediment	11/18/2010	11:15												
			CWK-W-DER3-26	Surface Water (UNF)	11/15/2010	12:35	✓	✓			✓							
<b>NAPL Delineation Samples</b>																		
D15-BOR-01	316089.85	208505.32	21583283	Sediment	03/28/2009							✓	✓	✓	✓	✓	✓	✓
			21585997	Sediment	03/27/2009								✓	✓	✓	✓	✓	✓
D15-BOR-02	316006.32	208668.75	21583286	Sediment	03/28/2009							✓	✓	✓	✓	✓	✓	✓
			21585999	Sediment	03/27/2009								✓	✓	✓	✓	✓	✓
D15-BOR-03	315986.97	208697.46	21583288	Sediment	03/28/2009							✓	✓	✓	✓	✓	✓	✓
			21586002	Sediment	03/27/2009								✓	✓	✓	✓	✓	✓
D15-BOR-04	316048.10	208594.0	21556137	Sediment	03/25/2009							✓	✓	✓	✓	✓	✓	✓
D15-BOR-06	316102.74	208669.1	21563389	Sediment	03/25/2009							✓	✓	✓	✓	✓	✓	✓
D15-BOR-07	316142.39	208581.84	21563395	Sediment	03/25/2009							✓	✓	✓	✓	✓	✓	✓
			21583290	Sediment	03/28/2009								✓	✓	✓	✓	✓	✓
D15-BOR-09	315961.36	208564.0	21563400	Sediment	03/26/2009							✓	✓	✓	✓	✓	✓	✓
D15-BOR-10	316013.58	208497.9	21563405	Sediment	03/26/2009							✓	✓	✓	✓	✓	✓	✓
D15-BOR-11	316325.37	208949.66	21583292	Sediment	03/28/2009							✓	✓	✓	✓	✓	✓	✓
			21586006	Sediment	03/27/2009								✓	✓	✓	✓	✓	✓
D15-BOR-13	316362.53	209086.3	21586014	Sediment	03/27/2009							✓	✓	✓	✓	✓	✓	✓
			21583294	Sediment	03/28/2009								✓	✓	✓	✓	✓	✓
E16-BOR-02	315838.89	208500.10	21586024	Sediment	03/26/2009							✓	✓	✓	✓	✓	✓	✓
			D15-BOR-14-(0-0.5)	Sediment	10/26/2016								✓	✓	✓	✓	✓	✓
D15-BOR-14	315921.4	208622.0	D15-BOR-14-(0.5-1.0)	Sediment	10/26/2016							✓	✓	✓	✓	✓	✓	✓
			D15-BOR-15-(0-0.5)	Sediment	10/27/2016								✓	✓	✓	✓	✓	✓
D15-BOR-15	316003.1	208653.6	D15-BOR-15-(0.5-1.0)	Sediment	10/27/2016							✓	✓	✓	✓	✓	✓	✓
			D15-BOR-16(0-0.5)	Sediment	11/1/2016								✓	✓	✓	✓	✓	✓
D15-BOR-16	315961.0	208542.7	D15-BOR-16(0.5-1.0)	Sediment	11/1/2016							✓	✓	✓	✓	✓	✓	✓
			D15-BOR-17(0-0.5)	Sediment	10/31/2016								✓	✓	✓	✓	✓	✓
D15-BOR-17	316108.5	208653.8	D15-BOR-17(0.5-1.0)	Sediment	10/31/2016							✓	✓	✓	✓	✓	✓	✓
			D15-BOR-18(0-0.5)	Sediment	10/27/2016								✓	✓	✓	✓	✓	✓
D15-BOR-18	315975.5	208692.2	D15-BOR-18(0.5-1.0)	Sediment	10/27/2016							✓	✓	✓	✓	✓	✓	✓
			D15-BOR-19(0-0.5)	Sediment	10/29/2016								✓	✓	✓	✓	✓	✓
D15-BOR-19	316052.4	208608.2	D15-BOR-19(0.5-1.0)	Sediment	10/29/2016							✓	✓	✓	✓	✓	✓	✓
			D15-BOR-20(0-0.5)	Sediment	10/25/2016								✓	✓	✓	✓	✓	✓
D15-BOR-20	316104.9	208516.9	D15-BOR-20(0.5-1.0)	Sediment	10/25/2016							✓	✓	✓	✓	✓	✓	✓
			D15-BOR-21(0-0.5)	Sediment	11/4/2017								✓	✓	✓	✓	✓	✓
D15-BOR-21	316176.7	208667.3	D15-BOR-21(0.5-1.0)	Sediment	11/4/2017							✓	✓	✓	✓	✓	✓	✓
			D15-BOR-22(0-0.5)	Sediment	11/3/2017								✓	✓	✓	✓	✓	✓
D15-BOR-22	316149.0	208717.7	D15-BOR-22(0.5-1.0)	Sediment	11/3/2017							✓	✓	✓	✓	✓	✓	✓
			D15-BOR-23(0-0.5)	Sediment	11/3/2017								✓	✓	✓	✓	✓	✓
D15-BOR-23	316202.5	208737.4	D15-BOR-23(0.5-1.0)	Sediment	11/3/2017							✓	✓	✓	✓	✓	✓	✓
			D15-BOR-24(0-0.5)	Sediment	11/1/2017								✓	✓	✓	✓	✓	✓
D15-BOR-24	315925.4	208484.5	D15-BOR-24(0.5-1.0)	Sediment	11/1/2017							✓	✓	✓	✓	✓	✓	✓
			D16-BOR-02(0-0.5)	Sediment	11/1/2016								✓	✓	✓	✓	✓	✓
D16-BOR-02	316275.0	208858.0	D16-BOR-02(0.5-1.0)	Sediment	11/1/2016							✓	✓	✓	✓	✓	✓	✓
			D16-BOR-03(0-0.5)	Sediment	11/1/2016								✓	✓	✓	✓	✓	✓
D16-BOR-03	316355.2	208803.9	D16-BOR-03(0.5-1.0)	Sediment	11/1/2016							✓	✓	✓	✓	✓	✓	✓
			D16-BOR-04(0-0.5)	Sediment	10/31/2016								✓	✓	✓	✓	✓	✓
D16-BOR-04	316436.2	208755.3	D16-BOR-04(0.5-1.0)	Sediment	10/31/2016							✓	✓	✓	✓	✓	✓	✓
			D16-BOR-05(0-0.5)	Sediment	11/2/2016								✓	✓	✓	✓	✓	✓
D16-BOR-05	316404.6	208875.4	D16-BOR-05(0.5-1.0)	Sediment	11/2/2016							✓	✓	✓	✓	✓	✓	✓
			D16-BOR-06(0-0.5)	Sediment	10/25/2016								✓	✓	✓	✓	✓	✓
D16-BOR-06	316530.2	208872.4	D16-BOR-06(0.5-1.0)	Sediment	10/25/2016							✓	✓	✓	✓	✓	✓	✓
			D16-BOR-07(0-0.5)	Sediment	10/25/2016								✓	✓	✓	✓	✓	✓
D16-BOR-07	316222.2	208777.6	D16-BOR-07(0.5-1.0)	Sediment	10/25/2016							✓	✓	✓	✓	✓	✓	✓
			D16-BOR-08(0-0.5)	Sediment	10/25/2016								✓	✓	✓	✓	✓	✓
D16-BOR-08	316280.0	208639.8	D16-BOR-08(0.5-1.0)	Sediment	10/25/2016							✓	✓	✓	✓	✓	✓	✓



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Station	NAD 1983 NJ State Plane Northing (feet)	NAD 1983 NJ State Plane Easting (feet)	Sample ID	Medium	Sample Date	Sample Time	Surface Water					Sediment					
							TAL metals +Sn	PP VOCs +	PP SVOCs +	Pest and Herb	Total Hardness	TAL metals +Sn	PP VOCs +	PP SVOCs +	Grain Size	PCB Congeners	Pest and Herb
DER3-14	317476.8	209811.4	CWK-E-DER3-14(0.0-0.5)	Sediment	11/18/2010	09:30											
			CWK-E-DER3-14(0.5-1.0)														
DER3-15	317741.4	210772.1	CWK-E-DER3-15(0.0-0.5)	Sediment	11/18/2010	08:45											
			CWK-E-DER3-15(0.5-1.0)														
DER3-16	318365.9	211368.6	CWK-E-DER3-160.0-0.5)	Sediment	11/16/2010	09:00											
			CWK-E-DER3-16(0.5-1.0)														
<b>Carneys Point Zone</b>																	
<b>SWMU 52 Investigation</b>																	
52-R-1	319902.79	212596.03	10896467	Sediment	10/31/2000												
52-R-2	319869.35	212575.6	10896541	Sediment	10/31/2000												
52-R-3	319832.84	212554.0	10896835	Sediment	10/31/2000												
52-R-7	319592.28	212488.3	10897412	Sediment	11/01/2000												
52-R-8	319503.76	212527.3	10897489	Sediment	11/01/2000												
R-16	319679.96	212464.1	12421076	Sediment	10/16/2003												
R-9	319845.32	212530.8	11251514	Sediment	05/21/2003												
<b>Remedial Investigation Phase I - September 2009</b>																	
DER1-20	319158.9	212259.8	CWK-E-DER1-20(0.0-0.5)	Sediment	9/23/2009	11:10											
			CWK-E-DER1-20(0.5-1.0)														
			CWK-W-DER1-20				Surface Water (UNF)	9/24/2009	9:50								
DER1-21	320256.6	212754.8	CWK-E-DER1-21(0.0-0.5)	Sediment	9/25/2009	9:00											
			CWK-E-DER1-21(0.5-1.0)														
			CWK-W-DER1-21				Surface Water (FIL)	9/24/2009	10:15								
DER1-22	321467.1	213291.2	CWK-E-DER1-22(0.0-0.5)	Sediment	9/23/2009	11:40											
			CWK-E-DER1-22(0.5-1.0)														
			CWK-W-DER1-22				Surface Water (UNF)	9/24/2009	10:15								
DER1-23	321724.1	213414.6	CWK-E-DER1-23(0.0-0.5)	Sediment	9/25/2009	8:20											
			CWK-E-DER1-23(0.5-1.0)														
			CWK-W-DER1-23-DIS				Surface Water (FIL)	9/24/2009	10:15								
DER1-24	321997.3	213595.7	CWK-E-DER1-24(0.0-0.5)	Sediment	9/23/2009	14:30											
			CWK-E-DER1-24(0.5-1.0)														
			CWK-W-DER1-24				Surface Water (UNF)	9/23/2009	13:45								
DER1-25	322248.0	213765.1	CWK-E-DER1-25(0.0-0.5)	Sediment	9/23/2009	13:15											
			CWK-E-DER1-25(0.5-1.0)														
			CWK-W-DER1-25				Surface Water (UNF)	9/23/2009	12:30								
DER1-26	322461.1	213962.0	CWK-E-DER1-26(0.0-0.5)	Sediment	9/23/2009	12:30											
			CWK-E-DER1-26(0.5-1.0)														
			CWK-W-DER1-26-DIS				Surface Water (FIL)	9/23/2009	12:30								
DER1-27	322732.6	214123.1	CWK-E-DER1-27(0.0-0.5)	Sediment	9/23/2009	12:30											
			CWK-E-DER1-27(0.5-1.0)														
			CWK-W-DER1-27-DUP				Surface Water (UNF)	9/23/2009	8:35								
DER1-28	323171.8	214758.5	CWK-E-DER1-28(0.0-0.5)	Sediment	9/22/2009	13:45											
			CWK-E-DER1-28(0.5-1.0)														
			CWK-W-DER1-28-DIS				Surface Water (FIL)	9/23/2009	8:20								
DER1-29	322850.9	215547.3	CWK-E-DER1-29(0.0-0.5)	Sediment	9/22/2009	14:40											
			CWK-E-DER1-29(0.5-1.0)														
			CWK-W-DER1-29-DIS				Surface Water (UNF)	9/23/2009	8:20								
<b>Remedial Investigation Phase II - April 2010</b>																	
DER2-26	318685.5	211781.3	CWK-E-DER2-26(0.0-0.5)	Sediment	5/4/2010	9:20											
			CWK-E-DER2-26(0.5-1.0)														
DER2-27	319627.4	212171.5	CWK-E-DER2-27(0.0-0.5)	Sediment	5/4/2010	9:03											
			CWK-E-DER2-27(0.5-1.0)														
DER2-28	320365.0	212498.4	CWK-E-DER2-28(0.0-0.5)	Sediment	4/22/2010	14:30											
			CWK-E-DER2-28(0.5-1.0)														
DER2-29	322454.8	216009.3	CWK-E-DER2-29(0.0-0.5)	Sediment	4/21/2010	09:10											
			CWK-E-DER2-29(0.5-1.0)														
<b>Remedial Investigation Phase III - November 2010</b>																	
DER3-17	318336.6	211779.2	CWK-E-DER3-17(0.0-0.5)	Sediment	11/15/2010	10:35											
			CWK-E-DER3-17(0.5-1.0)														
DER3-18	322440.6	216010.2	CWK-E-DER3-18(0.0-0.5)	Sediment	11/15/2010	09:45											
			CWK-E-DER3-18(0.5-1.0)														
DER3-27	319302.0	212073.5	CWK-E-DER3-27(0.0-0.5)	Sediment	11/16/2010	09:45											

**Notes:**  
 FIL: Filtered  
 MZ-JL/TEL = Manufacturing Zone - Jackson Labs/TEL Area; MZ-FPA = Manufacturing Zone - Fluoroproducts Area;  
 MZ-SWMU5/HC = Manufacturing Zone - SWMU 5/Henby Creek Area; CPZ = Carneys Point Zone  
 NAPL: Non-Aqueous Phase Liquid  
 PCB: Polychlorinated Biphenyl  
 PP: Primary Pollutant  
 SMWU: Solid-Waste Management Unit  
 Sn: Tin  
 SVOCs: Semi-Volatile Organic Compounds  
 TAL: Target Analyte List  
 UNF: Unfiltered  
 VOCs: Volatile Organic Compounds

**Table 5**  
**Summary of Bioaccumulative COPECs for Evaluation in Wildlife Exposure Modeling**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Log Octanol-Water Partitioning Coefficient (log K <sub>ow</sub> ) EPA EPISUITE	Important Bioaccumulative Constituent (EPA, 2000)	log K <sub>ow</sub> > 3.5	Bioaccumulative COPEC
<b>Metals</b>				
Aluminum	NA	No	No	No
Antimony	NA	No	No	No
Arsenic	NA	Yes	No	Yes
Barium	NA	No	No	No
Beryllium	NA	No	No	No
Cadmium	NA	Yes	No	Yes
Calcium	NA	No	No	No
Chromium	NA	Yes	No	Yes
Cobalt	NA	No	No	No
Copper	NA	Yes	No	Yes
Iron	NA	No	No	No
Lead	NA	Yes	No	Yes
Magnesium	NA	No	No	No
Manganese	NA	No	No	No
Mercury	NA	Yes	No	Yes
Nickel	NA	Yes	No	Yes
Potassium	NA	No	No	No
Selenium	NA	Yes	No	Yes
Silver	NA	Yes	No	Yes
Sodium	NA	No	No	No
Thallium	NA	No	No	No
Tin	NA	Yes	No	Yes
Titanium	NA	No	No	No
Vanadium	NA	No	No	No
Zinc	NA	Yes	No	Yes
<b>Polycyclic Aromatic Hydrocarbons</b>				
Acenaphthene	4.15	Yes	Yes	Yes
Acenaphthylene	3.22	Yes	No	Yes
Anthracene	4.53	Yes	Yes	Yes
Benzo(A)Anthracene	6.71	Yes	Yes	Yes
Benzo(B)Fluoranthene	6.27	Yes	Yes	Yes
Benzo(G,H,I)Perylene	6.51	Yes	Yes	Yes
Benzo(K)Fluoranthene	6.29	Yes	Yes	Yes
Benzo[A]Pyrene	6.11	No	Yes	Yes
Benzo[e]pyrene	6.11	No	Yes	Yes
Chrysene	5.71	Yes	Yes	Yes
Dibenz(A,H)Anthracene	6.71	Yes	Yes	Yes
Fluoranthene	5.08	Yes	Yes	Yes
Fluorene	4.21	Yes	Yes	Yes
Indeno (1,2,3-cd) Pyrene	6.72	No	Yes	Yes
Naphthalene	3.36	Yes	No	Yes
Phenanthrene	4.57	Yes	Yes	Yes
Pyrene	4.92	Yes	Yes	Yes
<b>Semi-Volatile Organic Compounds</b>				
1,2,4-Trichlorobenzene	3.93	Yes	Yes	Yes
1,2-Diphenylhydrazine	3.06	No	No	No
1,3-Dichlorobenzene	3.28	Yes	No	Yes
1-Naphthylamine	2.25	No	No	No
2,4-Dichlorophenol	2.80	No	No	No
2,4-Dinitrotoluene	2.18	No	No	No
2,6-Dinitrotoluene	2.18	No	No	No
2-Chlorophenol	2.16	No	No	No

**Table 5**  
**Summary of Bioaccumulative COPECs for Evaluation in Wildlife Exposure Modeling**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Log Octanol-Water Partitioning Coefficient (log K <sub>ow</sub> ) EPA EPISUITE	Important Bioaccumulative Constituent (EPA, 2000)	log K <sub>ow</sub> > 3.5	Bioaccumulative COPEC
2-Methylnaphthalene	3.72	No	Yes	<b>Yes</b>
2-Methylphenol (O-Cresol)	2.06	No	No	No
4-Chloroaniline	1.72	No	No	No
4-Methylphenol (P-Cresol)	2.06	No	No	No
Acetophenone	1.67	No	No	No
Aniline	1.08	No	No	No
Biphenyl	3.76	No	Yes	<b>Yes</b>
Bis(2-Ethylhexyl)Phthalate	8.39	No	Yes	<b>Yes</b>
Butyl Benzyl Phthalate	4.84	No	Yes	<b>Yes</b>
Carbazole	3.23	No	No	No
Dibenzofuran	3.71	No	Yes	<b>Yes</b>
Diethyl Phthalate	2.65	No	No	No
Di-N-Butyl Phthalate	4.61	No	Yes	<b>Yes</b>
Diphenyl Ether	4.05	No	Yes	<b>Yes</b>
Hexachlorobenzene	5.86	Yes	Yes	<b>Yes</b>
Hexachlorobutadiene	4.72	Yes	Yes	<b>Yes</b>
N-Dioctyl Phthalate	8.54	No	Yes	<b>Yes</b>
Nitrobenzene	1.81	No	No	No
N-Nitrosodiphenylamine	3.16	No	No	No
2-Chloronaphthalene	3.81	No	Yes	<b>Yes</b>
Pentachlorobenzene	5.22	No	Yes	<b>Yes</b>
Phenol	1.51	No	No	No
<b>Pesticides</b>				
4,4'-DDE	6.00	Yes	Yes	<b>Yes</b>
4,4'-DDT	6.79	Yes	Yes	<b>Yes</b>
Alpha-BHC	4.26	Yes	Yes	<b>Yes</b>
beta-BHC	4.26	Yes	Yes	<b>Yes</b>
delta-BHC	4.26	Yes	Yes	<b>Yes</b>
Endosulfan I	3.50	Yes	No	<b>Yes</b>
Endosulfan Sulfate	3.64	No	Yes	<b>Yes</b>
Heptachlor	5.86	Yes	Yes	<b>Yes</b>
<b>Polychlorinated Biphenyls</b>				
Total PCB (congeners)	NA	Yes	Yes	<b>Yes</b>

**Notes:**

COPEC: Constituent of Potential Ecological Concern

NA: Not Available

**Table 6**  
**Jackson Labs/TEL Area Screening-Level Exposure Estimate for Bulk Sediment (0-0.5 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
<b>Metals (mg/kg)</b>											
Aluminum	37	37	3,380	16,493	56,900	25,500	2.2	4	SC-237	Yes	[Maximum] > ESV
Antimony	37	11	0.159	1.251	6.55	2	3.3	1	SC-231	Yes	[Maximum] > ESV
Arsenic	37	37	1.29	9.54	65	9.979	6.5	15	SC-231	Yes	[Maximum] > ESV
Barium	37	37	16	110	541	NESV	---	---	SC-237	Yes	No ESV Available
Beryllium	37	36	0.0878	1.3768	7.26	NESV	---	---	SC-237	Yes	No ESV Available
Cadmium	37	34	0.0449	0.5716	1.67	0.6	2.8	14	DER2-08-SD	Yes	[Maximum] > ESV
Calcium	37	37	763	4,423	21,300	NESV	---	---	SC-234	No	Essential Nutrient
Chromium	37	37	8.66	136.36	1,170	26	45	34	SC-234	Yes	[Maximum] > ESV
Cobalt	37	37	2.05	10.88	40.2	50	<1	0	SC-237	No	[Maximum] < ESV
Copper	37	37	7.21	28.82	87.8	16	5.5	29	SC-231	Yes	[Maximum] > ESV
Iron	37	37	5,940	26,858	112,000	20,000	5.6	21	SC-231	Yes	[Maximum] > ESV
Lead	37	37	10.3	81.5	1,210	31	39	30	SC-231	Yes	[Maximum] > ESV
Magnesium	37	37	801	3,917	8,350	NESV	---	---	DER1-10	No	Essential Nutrient
Manganese	37	37	43.4	578.7	1,720	630	2.7	13	DER2-09-SD	Yes	[Maximum] > ESV
Mercury	37	35	0.0236	0.6155	9.6	0.174	55.2	18	DER2-05-SD	Yes	[Maximum] > ESV
Nickel	37	37	5.21	24.87	76	16	4.8	25	SC-237	Yes	[Maximum] > ESV
Potassium	37	37	560	2,371	4,600	NESV	---	---	SC-234	No	Essential Nutrient
Selenium	37	11	0.133	1.332	4.41	2	2.2	4	DER2-08-SD	Yes	[Maximum] > ESV
Silver	37	12	0.0255	0.3151	1.08	0.5	2.2	3	SC-231	Yes	[Maximum] > ESV
Sodium	37	37	120	792	2,130	NESV	---	---	SC-237	No	Essential Nutrient
Thallium	37	12	0.0393	0.9179	4.21	NESV	---	---	DER2-12-SD	Yes	No ESV Available
Tin	28	28	1.91	5.03	9.87	NESV	---	---	DER2-12-SD	Yes	No ESV Available
Titanium	9	9	218	1,443	4,440	NESV	---	---	SC-231	Yes	No ESV Available
Vanadium	37	37	11.5	45	108	NESV	---	---	SC-237	Yes	No ESV Available
Zinc	37	37	23.5	112.1	284	120	2.4	14	DER2-12-SD	Yes	[Maximum] > ESV
<b>Volatile Organic Compounds (mg/kg)</b>											
1,1,1-Trichloroethane	9	0	ND	ND	ND	0.213	---	0	---	No	100% Non-Detect
1,1,2,2-Tetrachloroethane	9	0	ND	ND	ND	0.85	---	0	---	No	100% Non-Detect
1,1,2-Trichloroethane	9	0	ND	ND	ND	0.518	---	0	---	No	100% Non-Detect
1,1,2-Trichlorotrifluoroethane	9	1	2.4	2.4	2.4	NESV	---	---	DER3-19	Yes	No ESV Available
1,1-Dichloroethane	9	0	ND	ND	ND	0.000575	---	0	---	No	100% Non-Detect
1,1-Dichloroethene	9	0	ND	ND	ND	0.0194	---	0	---	No	100% Non-Detect
1,2-Dichlorobenzene	28	8	0.048	1.159	5.5	0.294	18.7	4	DER2-05-SD	Yes	[Maximum] > ESV
1,2-Dichloroethane	9	0	ND	ND	ND	0.26	---	0	---	No	100% Non-Detect
1,2-Dichloropropane	9	0	ND	ND	ND	0.333	---	0	---	No	100% Non-Detect
1,3-Dichlorobenzene	28	2	0.24	0.34	0.45	1.315	<1	0	DER3-04	No	[Maximum] < ESV
1,4-Dichlorobenzene	28	6	0.063	1.223	4.2	0.318	13.2	3	DER3-04	Yes	[Maximum] > ESV
2-Chloroethyl Vinyl Ether	1	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Acetone	9	7	0.013	0.089	0.25	0.0099	25.3	7	DER3-07	Yes	[Maximum] > ESV
Acrolein	9	0	ND	ND	ND	0.00000152	---	0	---	No	100% Non-Detect

**Table 6**  
**Jackson Labs/TEL Area Screening-Level Exposure Estimate for Bulk Sediment (0-0.5 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
Acrylonitrile	9	0	ND	ND	ND	0.0012	---	0	---	No	100% Non-Detect
Benzene	9	0	ND	ND	ND	0.142	---	0	---	No	100% Non-Detect
Bromodichloromethane	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Bromoform	9	0	ND	ND	ND	0.492	---	0	---	No	100% Non-Detect
Carbon Disulfide	9	7	0.003	0.022	0.068	0.0239	2.8	3	DER3-07	Yes	[Maximum] > ESV
Carbon Tetrachloride	9	0	ND	ND	ND	1.45	---	0	---	No	100% Non-Detect
Chlorobenzene	9	1	2.7	2.7	2.7	0.291	9.3	1	DER3-19	Yes	[Maximum] > ESV
Chlorodibromomethane	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Chloroform	9	1	1.5	1.5	1.5	0.121	12.4	1	DER3-19	Yes	[Maximum] > ESV
cis-1,2 Dichloroethene	9	0	ND	ND	ND	0.654	---	0	---	No	100% Non-Detect
cis-1,3-Dichloropropene	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Dichlorodifluoromethane	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Dichlorofluoromethane	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Ethyl Chloride	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Ethylbenzene	9	0	ND	ND	ND	0.175	---	0	---	No	100% Non-Detect
Methyl Bromide	9	0	ND	ND	ND	0.00137	---	0	---	No	100% Non-Detect
Methyl Chloride	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Methylene Chloride	9	0	ND	ND	ND	0.159	---	0	---	No	100% Non-Detect
Tetrachloroethene	9	2	0.002	0.206	0.41	0.99	<1	0	DER3-19	No	[Maximum] < ESV
Toluene	9	1	0.15	0.15	0.15	1.22	<1	0	DER3-19	No	[Maximum] < ESV
trans-1,2-Dichloroethene	9	0	ND	ND	ND	0.654	---	0	---	No	100% Non-Detect
trans-1,3-Dichloropropene	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Trichloroethene	9	1	0.82	0.82	0.82	0.112	7.3	1	DER3-19	Yes	[Maximum] > ESV
Trichlorofluoromethane	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Vinyl Chloride	9	0	ND	ND	ND	0.202	---	0	---	No	100% Non-Detect
Xylenes	9	0	ND	ND	ND	0.433	---	0	---	No	100% Non-Detect
<b>Polycyclic Aromatic Hydrocarbons (mg/kg)</b>											
Acenaphthene	37	8	0.017	0.122	0.63	0.00671	93.9	8	DER2-31-SD	Yes	[Maximum] > ESV
Acenaphthylene	37	7	0.004	0.057	0.27	0.00587	46	5	SC-237	Yes	[Maximum] > ESV
Anthracene	37	12	0.007	0.192	0.98	0.22	4.5	3	SC-236	Yes	[Maximum] > ESV
Benzo(A)Anthracene	37	17	0.019	0.324	2.3	0.32	7.2	6	SC-236	Yes	[Maximum] > ESV
Benzo(B)Fluoranthene	37	21	0.033	0.274	2.3	10.4	<1	0	SC-236	No	[Maximum] < ESV
Benzo(G,H,I)Perylene	37	14	0.016	0.179	1.1	0.17	6.5	4	SC-236	Yes	[Maximum] > ESV
Benzo(K)Fluoranthene	37	13	0.014	0.18	1.3	0.24	5.4	2	SC-236	Yes	[Maximum] > ESV
Benzo[A]Pyrene	37	18	0.021	0.264	2	0.37	5.4	2	SC-236	Yes	[Maximum] > ESV
Chrysene	37	20	0.034	0.355	2	0.34	5.9	6	SC-236	Yes	[Maximum] > ESV
Dibenz(A,H)Anthracene	37	8	0.004	0.055	0.21	0.06	3.5	3	SC-236	Yes	[Maximum] > ESV
Fluoranthene	37	22	0.008	0.488	5.5	0.75	7.3	1	SC-236	Yes	[Maximum] > ESV
Fluorene	37	10	0.004	0.101	0.4	0.19	2.1	2	DER2-31-SD	Yes	[Maximum] > ESV
Indeno (1,2,3-cd) Pyrene	37	14	0.012	0.142	1	0.2	5	2	SC-236	Yes	[Maximum] > ESV
Naphthalene	37	14	0.006	0.289	1.5	0.176	8.5	3	SC-231	Yes	[Maximum] > ESV

**Table 6**  
**Jackson Labs/TEL Area Screening-Level Exposure Estimate for Bulk Sediment (0-0.5 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
Phenanthrene	37	20	0.006	0.312	2.1	0.56	3.8	3	SC-236	Yes	[Maximum] > ESV
Pyrene	37	24	0.012	0.483	4	0.49	8.2	7	SC-236	Yes	[Maximum] > ESV
Total PAHs (Detections + 1/2 MDL)	37	25	0.26	2.95	25.2	4	6.3	6	SC-236	Yes	[Maximum] > ESV
Total PAHs (Detections Only)	37	25	0.05	2.71	25.2	4	6.3	6	SC-236	Yes	[Maximum] > ESV
<b>Semi-Volatile Organic Compounds (mg/kg)</b>											
1,2,4-Trichlorobenzene	37	3	0.1	9.2	27	5.062	5.3	1	DER2-05-SD	Yes	[Maximum] > ESV
1,2-Diphenylhydrazine	37	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
1,4-Dioxane	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
1-Naphthylamine	36	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2,3,4,6-Tetrachlorophenol	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2,4,5-Trichlorophenol	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2,4,6-Trichlorophenol	37	0	ND	ND	ND	0.208	---	0	---	No	100% Non-Detect
2,4-Dichlorophenol	37	0	ND	ND	ND	0.0817	---	0	---	No	100% Non-Detect
2,4-Dimethylphenol	37	0	ND	ND	ND	0.304	---	0	---	No	100% Non-Detect
2,4-Dinitrophenol	36	0	ND	ND	ND	0.00621	---	0	---	No	100% Non-Detect
2,4-Dinitrotoluene	37	1	0.24	0.24	0.24	0.0144	16.7	1	DER1-10	Yes	[Maximum] > ESV
2,6-Dinitrotoluene	37	0	ND	ND	ND	0.0398	---	0	---	No	100% Non-Detect
2-Chloronaphthalene	37	0	ND	ND	ND	0.417	---	0	---	No	100% Non-Detect
2-Chlorophenol	37	0	ND	ND	ND	0.0319	---	0	---	No	100% Non-Detect
2-Methylnaphthalene	9	6	0.009	0.065	0.18	0.07	2.6	2	SC-231	Yes	[Maximum] > ESV
2-Methylphenol (O-Cresol)	9	1	0.067	0.067	0.067	NESV	---	---	SC-229	Yes	No ESV Available
2-Naphthylamine	35	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2-Nitroaniline	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2-Nitrophenol	37	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
3,3'-Dichlorobenzidine	37	0	ND	ND	ND	0.127	---	0	---	No	100% Non-Detect
3-Nitroaniline	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4,6-Dinitro-2-Methylphenol	37	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Aminobiphenyl	36	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Bromophenyl Phenyl Ether	37	0	ND	ND	ND	1.55	---	0	---	No	100% Non-Detect
4-Chloro-3-Methylphenol	37	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Chloroaniline	37	3	0.41	0.8	1.1	0.146	7.5	3	DER2-31-SD	Yes	[Maximum] > ESV
4-Chlorophenyl Phenyl Ether	37	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Methylphenol (P-Cresol)	9	3	0.031	0.455	1.3	NESV	---	---	SC-231	Yes	No ESV Available
4-Nitroaniline	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Nitrophenol	37	0	ND	ND	ND	0.0133	---	0	---	No	100% Non-Detect
Acetophenone	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Aniline	36	0	ND	ND	ND	0.001	---	0	---	No	100% Non-Detect
Benzidine	31	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Biphenyl	9	0	ND	ND	ND	1.22	---	0	---	No	100% Non-Detect
Bis(2-Chloro-1-Methylethyl) Ether	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Bis(2-Chloroethoxy)Methane	37	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect

**Table 6**  
**Jackson Labs/TEL Area Screening-Level Exposure Estimate for Bulk Sediment (0-0.5 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
Bis(2-Chloroethyl)Ether	37	0	ND	ND	ND	3.52	---	0	---	No	100% Non-Detect
Bis(2-Chloroisopropyl)Ether	28	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Bis(2-Ethylhexyl)Phthalate	37	4	0.21	0.3	0.41	0.182	2.3	4	DER2-09-SD	Yes	[Maximum] > ESV
Butyl Benzyl Phthalate	37	0	ND	ND	ND	1.97	---	0	---	No	100% Non-Detect
Carbazole	37	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Dibenzofuran	9	0	ND	ND	ND	2	---	0	---	No	100% Non-Detect
Diethyl Phthalate	37	1	0.2	0.2	0.2	0.295	<1	0	DER2-12-SD	No	[Maximum] < ESV
Dimethyl Phthalate	37	0	ND	ND	ND	0.53	---	0	---	No	100% Non-Detect
Di-N-Butyl Phthalate	37	2	0.11	0.26	0.41	1.114	<1	0	DER1-10	No	[Maximum] < ESV
Diphenyl Ether	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Hexachlorobenzene	37	1	0.049	0.049	0.049	0.02	2.5	1	DER1-06	Yes	[Maximum] > ESV
Hexachlorobutadiene	37	0	ND	ND	ND	0.0265	---	0	---	No	100% Non-Detect
Hexachlorocyclopentadiene	31	0	ND	ND	ND	0.901	---	0	---	No	100% Non-Detect
Hexachloroethane	36	0	ND	ND	ND	0.584	---	0	---	No	100% Non-Detect
Isophorone	37	0	ND	ND	ND	0.432	---	0	---	No	100% Non-Detect
N-Dioctyl Phthalate	36	1	0.66	0.66	0.66	NESV	---	---	DER2-07-SD	Yes	No ESV Available
Nitrobenzene	37	5	0.2	0.4	0.84	0.145	5.8	5	DER3-01	Yes	[Maximum] > ESV
N-Nitrosodimethylamine	37	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
N-Nitrosodi-N-Propylamine	37	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
N-Nitrosodiphenylamine	37	5	0.14	0.25	0.4	2.68	<1	0	DER3-04	No	[Maximum] < ESV
O-Toluidine	37	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Parathion	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Pentachlorobenzene	9	0	ND	ND	ND	0.69	---	0	---	No	100% Non-Detect
Pentachlorophenol	37	0	ND	ND	ND	23	---	0	---	No	100% Non-Detect
Phenol	37	0	ND	ND	ND	0.0491	---	0	---	No	100% Non-Detect
<b>Pesticides and Herbicides (mg/kg)</b>											
4,4'-DDD	2	0	ND	ND	ND	0.00488	---	0	---	No	100% Non-Detect
4,4'-DDE	2	1	0.0011	0.0011	0.0011	0.00316	<1	0	SC-233	No	[Maximum] < ESV
4,4'-DDT	2	1	0.0012	0.0012	0.0012	0.00416	<1	0	SC-233	No	[Maximum] < ESV
Aldrin	2	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Alpha Chlordane	2	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Alpha-BHC	2	1	0.0029	0.0029	0.0029	0.006	<1	0	SC-233	No	[Maximum] < ESV
beta-BHC	2	1	0.025	0.025	0.025	0.005	5	1	SC-236	Yes	[Maximum] > ESV
delta-BHC	2	1	0.0016	0.0016	0.0016	NESV	---	---	SC-233	Yes	No ESV Available
Dieldrin	2	0	ND	ND	ND	0.0019	---	0	---	No	100% Non-Detect
Endosulfan I	2	2	0.0031	0.0061	0.0092	0.0029	3.2	2	SC-236	Yes	[Maximum] > ESV
Endosulfan II	2	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Endosulfan Sulfate	2	1	0.0018	0.0018	0.0018	0.0346	<1	0	SC-233	No	[Maximum] < ESV
Endrin	2	0	ND	ND	ND	0.00222	---	0	---	No	100% Non-Detect
Endrin Aldehyde	2	0	ND	ND	ND	0.48	---	0	---	No	100% Non-Detect
Endrin Ketone	2	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect

**Table 6**  
**Jackson Labs/TEL Area Screening-Level Exposure Estimate for Bulk Sediment (0-0.5 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
Gamma Chlordane	2	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Heptachlor	2	2	0.0049	0.0299	0.055	0.068	<1	0	SC-236	No	[Maximum] < ESV
Heptachlor Epoxide	2	0	ND	ND	ND	0.00247	---	0	---	No	100% Non-Detect
Lindane	2	0	ND	ND	ND	0.003	---	0	---	No	100% Non-Detect
Methoxychlor	2	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Toxaphene	2	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
<b>Polychlorinated Biphenyls (mg/kg)</b>											
Total Monochlorobiphenyls (congeners)	9	7	0.0000705	0.0012229	0.00428	NESV	---	---	DER1-01	Yes	No ESV Available
Total Dichlorobiphenyls (congeners)	9	8	0.0001	0.0095	0.0635	NESV	---	---	DER1-01	Yes	No ESV Available
Total Trichlorobiphenyls (congeners)	7	7	0.000138	0.023933	0.152	NESV	---	---	DER1-01	Yes	No ESV Available
Trichlorobiphenyl (total)	2	1	0.000289	0.000289	0.000289	NESV	---	---	SC-236	Yes	No ESV Available
Tetrachlorobiphenyl	2	2	0.00176	0.00345	0.00515	NESV	---	---	SC-233	Yes	No ESV Available
Total Tetrachlorobiphenyls (congeners)	7	7	0.000276	0.008248	0.0373	NESV	---	---	DER1-01	Yes	No ESV Available
Pentachlorobiphenyl	2	2	0.00359	0.00637	0.00916	NESV	---	---	SC-233	Yes	No ESV Available
Total Pentachlorobiphenyls (congeners)	7	7	0.000513	0.004416	0.0119	NESV	---	---	DER2-11-SD	Yes	No ESV Available
Hexachlorobiphenyl	2	2	0.00532	0.00791	0.0105	NESV	---	---	SC-233	Yes	No ESV Available
Total Hexachlorobiphenyls (congeners)	7	7	0.000645	0.004042	0.0112	NESV	---	---	DER2-11-SD	Yes	No ESV Available
Heptachlorobiphenyl	2	2	0.00304	0.00485	0.00667	NESV	---	---	SC-233	Yes	No ESV Available
Total Heptachlorobiphenyls (congeners)	7	7	0.000356	0.001902	0.00502	NESV	---	---	DER2-11-SD	Yes	No ESV Available
Octachlorobiphenyl	2	2	0.000801	0.00143	0.00206	NESV	---	---	SC-233	Yes	No ESV Available
Total Octachlorobiphenyls (congeners)	7	7	0.000233	0.001253	0.00373	NESV	---	---	DER2-11-SD	Yes	No ESV Available
Total Nonachlorobiphenyls (congeners)	9	9	0.000504	0.002515	0.00721	NESV	---	---	DER2-11-SD	Yes	No ESV Available
Total Decachlorobiphenyls (congeners)	2	2	0.00159	0.00224	0.00289	NESV	---	---	SC-236	Yes	No ESV Available
Total PCB (congeners)	9	9	0.0033496	0.054045	0.264599	0.059	4.5	3	DER1-01	Yes	[Maximum] > ESV
<b>Other Parameters</b>											
Total Organic Carbon (mg/kg)	39	37	1,120	10,490	25,600	NESV	---	---	SC-231	---	---
Black Carbon (mg/kg)	28	28	155	2,044	7,360	NESV	---	---	DER3-01	---	---
Percent Fines (% <0.064 mm)	36	36	0.5	35.8	96	NESV	---	---	DER1-10	---	---
Percent Moisture (%)	46	46	8.9	36.8	69.5	NESV	---	---	DER2-09-SD	---	---
Percent Solids (%)	2	2	61.5	69.2	76.8	NESV	---	---	SC-233	---	---

**Notes:**

---, Not applicable.  
COPEC, Constituent of Potential Ecological Concern  
[Maximum], Maximum concentration  
ND, Not detected  
NESV, No Ecological Screening Value

**Table 7**  
**Jackson Labs/TEL Area Screening-Level Exposure Estimate for Bulk Sediment (0.5-1.0 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
<b>Metals (mg/kg)</b>											
Aluminum	9	9	4,140	14,311	31,600	25,500	1.2	1	SC-237	Yes	[Maximum] > ESV
Antimony	9	9	0.126	0.732	2.94	2	1.5	1	SC-231	Yes	[Maximum] > ESV
Arsenic	9	9	1.66	12.92	45.8	9.979	4.6	4	SC-231	Yes	[Maximum] > ESV
Barium	9	9	15.2	148.5	361	NESV	---	---	SC-237	Yes	No ESV Available
Beryllium	9	9	0.291	1.906	5.71	NESV	---	---	SC-237	Yes	No ESV Available
Cadmium	9	9	0.0395	0.2396	0.901	0.6	1.5	1	SC-236	Yes	[Maximum] > ESV
Calcium	9	9	373	5,243	14,800	NESV	---	---	SC-237	No	Essential Nutrient
Chromium	9	9	10.9	185.5	573	26	22	6	SC-237	Yes	[Maximum] > ESV
Cobalt	9	9	3.96	12.07	27.2	50	<1	0	SC-237	No	[Maximum] < ESV
Copper	9	9	5.42	27.93	61.9	16	3.9	6	SC-237	Yes	[Maximum] > ESV
Iron	9	9	4,000	30,787	118,000	20,000	5.9	5	SC-231	Yes	[Maximum] > ESV
Lead	9	9	8.59	52.93	125	31	4	4	SC-236	Yes	[Maximum] > ESV
Magnesium	9	9	1,240	1,950	4,260	NESV	---	---	SC-236	No	Essential Nutrient
Manganese	9	9	63.8	206.8	506	630	<1	0	SC-231	No	[Maximum] < ESV
Mercury	9	7	0.0147	0.1816	0.486	0.174	2.8	3	SC-231	Yes	[Maximum] > ESV
Nickel	9	9	9.24	26.32	53.5	16	3.3	6	SC-237	Yes	[Maximum] > ESV
Potassium	9	9	484	1,621	3,240	NESV	---	---	SC-237	No	Essential Nutrient
Selenium	9	8	0.0839	0.4593	1.11	2	<1	0	SC-231	No	[Maximum] < ESV
Silver	9	6	0.0286	0.218	0.592	0.5	1.2	1	SC-231	Yes	[Maximum] > ESV
Sodium	9	9	130	641	1,530	NESV	---	---	SC-237	No	Essential Nutrient
Thallium	9	9	0.0576	0.1275	0.213	NESV	---	---	SC-236	Yes	No ESV Available
Titanium	9	9	280	847	1,980	NESV	---	---	SC-237	Yes	No ESV Available
Vanadium	9	9	16.8	50.5	99.1	NESV	---	---	SC-236	Yes	No ESV Available
Zinc	9	9	19.3	68.9	215	120	2	2	SC-236	Yes	[Maximum] > ESV
<b>Volatile Organic Compounds (mg/kg)</b>											
1,1,1,2-Tetrachloroethane	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
1,1,1-Trichloroethane	37	1	0.003	0.003	0.003	0.213	<1	0	DER2-05-SD	No	[Maximum] < ESV
1,1,2,2-Tetrachloroethane	37	0	ND	ND	ND	0.85	---	0	---	No	100% Non-Detect
1,1,2-Trichloroethane	37	0	ND	ND	ND	0.518	---	0	---	No	100% Non-Detect
1,1,2-Trichlorotrifluoroethane	37	2	0.029	0.434	0.84	NESV	---	---	DER2-05-SD	Yes	No ESV Available
1,1-Dichloroethane	37	0	ND	ND	ND	0.000575	---	0	---	No	100% Non-Detect
1,1-Dichloroethene	37	1	0.005	0.005	0.005	0.0194	<1	0	DER2-05-SD	No	[Maximum] < ESV
1,1-Dichloropropene	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
1,2,4-Trimethylbenzene	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
1,2-Dibromoethane (EDB)	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
1,2-Dichlorobenzene	9	3	0.003	0.015	0.032	0.294	<1	0	SC-236	No	[Maximum] < ESV
1,2-Dichloroethane	37	1	0.005	0.005	0.005	0.26	<1	0	DER2-05-SD	No	[Maximum] < ESV
1,2-Dichloroethene	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
1,2-Dichloropropane	37	0	ND	ND	ND	0.333	---	0	---	No	100% Non-Detect
1,3,5-Trimethylbenzene	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect

**Table 7**  
**Jackson Labs/TEL Area Screening-Level Exposure Estimate for Bulk Sediment (0.5-1.0 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
1,3-Dichlorobenzene	9	2	0.002	0.004	0.005	1.315	<1	0	SC-236	No	[Maximum] < ESV
1,4-Dichlorobenzene	9	2	0.004	0.005	0.006	0.318	<1	0	SC-237	No	[Maximum] < ESV
2-Chlorotoluene	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2-Hexanone	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Chlorotoluene	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Isopropyltoluene	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Acetone	37	34	0.009	0.062	0.19	0.0099	19.2	33	DER1-10	Yes	[Maximum] > ESV
Acrolein	28	0	ND	ND	ND	0.00000152	---	0	---	No	100% Non-Detect
Acrylonitrile	28	0	ND	ND	ND	0.0012	---	0	---	No	100% Non-Detect
Benzene	37	8	0.0008	0.2547	1.4	0.142	10	2	DER3-06	Yes	[Maximum] > ESV
Bromodichloromethane	37	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Bromoform	28	0	ND	ND	ND	0.492	---	0	---	No	100% Non-Detect
Carbon Disulfide	37	30	0.0009	0.0088	0.06	0.0239	3	2	DER2-05-SD	Yes	[Maximum] > ESV
Carbon Tetrachloride	37	1	0.26	0.26	0.26	1.45	<1	0	DER2-05-SD	No	[Maximum] < ESV
Chlorobenzene	37	16	0.001	0.622	4.9	0.291	17	3	DER1-07	Yes	[Maximum] > ESV
Chlorodibromomethane	37	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Chloroform	37	2	0.004	0.602	1.2	0.121	10	1	DER2-05-SD	Yes	[Maximum] > ESV
cis-1,2 Dichloroethene	37	2	0.003	0.007	0.01	0.654	<1	0	DER2-05-SD	No	[Maximum] < ESV
cis-1,3-Dichloropropene	37	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Cumene	9	0	ND	ND	ND	0.086	---	0	---	No	100% Non-Detect
Dichlorodifluoromethane	37	1	0.036	0.036	0.036	NESV	---	---	DER2-05-SD	Yes	No ESV Available
Dichlorofluoromethane	37	2	0.002	0.003	0.003	NESV	---	---	DER3-02	Yes	No ESV Available
Ethyl Chloride	37	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Ethylbenzene	37	4	0.003	0.005	0.006	0.175	<1	0	DER2-05-SD	No	[Maximum] < ESV
Hexane	9	0	ND	ND	ND	0.0396	---	0	---	No	100% Non-Detect
Isobutyl Alcohol	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Meta- And Para-Xylene	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Methacrylonitrile	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Methyl Bromide	28	0	ND	ND	ND	0.00137	---	0	---	No	100% Non-Detect
Methyl Chloride	37	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Methyl Ethyl Ketone	9	5	0.006	0.013	0.023	0.0424	<1	0	SC-229	No	[Maximum] < ESV
Methyl Isobutyl Ketone	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Methyl Methacrylate	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Methyl Tertiary Butyl Ether	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Methylene Chloride	37	5	0.003	0.009	0.016	0.159	<1	0	SC-237	No	[Maximum] < ESV
N-Butylbenzene	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
N-Propylbenzene	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Ortho-Xylene	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Propionitrile	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
sec-Butylbenzene	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Styrene	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect

**Table 7**  
**Jackson Labs/TEL Area Screening-Level Exposure Estimate for Bulk Sediment (0.5-1.0 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
tert-Butylbenzene	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Tetrachloroethene	37	1	0.2	0.2	0.2	0.99	<1	0	DER2-05-SD	No	[Maximum] < ESV
Tetrahydrofuran	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Toluene	37	9	0.001	0.011	0.063	1.22	<1	0	DER2-05-SD	No	[Maximum] < ESV
trans-1,2-Dichloroethene	37	2	0.002	0.005	0.007	0.654	<1	0	DER2-05-SD	No	[Maximum] < ESV
trans-1,3-Dichloropropene	28	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Trichloroethene	37	2	0.004	0.01	0.016	0.112	<1	0	DER2-05-SD	No	[Maximum] < ESV
Trichlorofluoromethane	37	1	0.04	0.04	0.04	NESV	---	---	DER2-05-SD	Yes	No ESV Available
Vinyl Chloride	37	3	0.002	0.016	0.045	0.202	<1	0	DER3-02	No	[Maximum] < ESV
Xylenes	37	4	0.006	0.018	0.028	0.433	<1	0	DER2-05-SD	No	[Maximum] < ESV
<b>Polycyclic Aromatic Hydrocarbons (mg/kg)</b>											
Acenaphthene	9	3	0.068	0.099	0.15	0.00671	22	3	SC-236	Yes	[Maximum] > ESV
Acenaphthylene	9	2	0.004	0.008	0.012	0.00587	2	1	SC-229	Yes	[Maximum] > ESV
Anthracene	9	6	0.007	0.113	0.51	0.22	2	1	SC-236	Yes	[Maximum] > ESV
Benzo(A)Anthracene	9	8	0.005	0.199	1.3	0.32	4	1	SC-236	Yes	[Maximum] > ESV
Benzo(B)Fluoranthene	9	9	0.004	0.179	1.2	10.4	<1	0	SC-236	No	[Maximum] < ESV
Benzo(G,H,I)Perylene	9	6	0.009	0.124	0.56	0.17	3	1	SC-236	Yes	[Maximum] > ESV
Benzo(K)Fluoranthene	9	6	0.004	0.125	0.6	0.24	3	1	SC-236	Yes	[Maximum] > ESV
Benzo[A]Pyrene	9	8	0.004	0.147	0.9	0.37	2	1	SC-236	Yes	[Maximum] > ESV
Chrysene	9	7	0.007	0.207	1.1	0.34	3.2	1	SC-236	Yes	[Maximum] > ESV
Dibenz(A,H)Anthracene	9	4	0.005	0.035	0.11	0.06	2	1	SC-236	Yes	[Maximum] > ESV
Fluoranthene	9	8	0.005	0.487	3.3	0.75	4	1	SC-236	Yes	[Maximum] > ESV
Fluorene	9	4	0.005	0.077	0.22	0.19	1	1	SC-236	Yes	[Maximum] > ESV
Indeno (1,2,3-CD) Pyrene	9	6	0.006	0.101	0.45	0.2	2	1	SC-236	Yes	[Maximum] > ESV
Naphthalene	9	7	0.006	0.063	0.19	0.176	1	1	SC-236	Yes	[Maximum] > ESV
Phenanthrene	9	7	0.004	0.302	1.8	0.56	3	1	SC-236	Yes	[Maximum] > ESV
Pyrene	9	9	0.007	0.36	2.5	0.49	5	1	SC-236	Yes	[Maximum] > ESV
Total PAHs (Detections + 1/2 MDL)	9	9	0.04	2.13	14.906	4	4	1	SC-236	Yes	[Maximum] > ESV
Total PAHs (Detections Only)	9	9	0.012	2.119	14.89	4	4	1	SC-236	Yes	[Maximum] > ESV
<b>Semi-Volatile Organic Compounds (mg/kg)</b>											
1,2,4-Trichlorobenzene	9	2	0.028	0.062	0.097	5.062	<1	0	SC-237	No	[Maximum] < ESV
1,2-Diphenylhydrazine	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
1,4-Dioxane	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
1-Naphthylamine	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2,3,4,6-Tetrachlorophenol	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2,4,5-Trichlorophenol	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2,4,6-Trichlorophenol	9	0	ND	ND	ND	0.208	---	0	---	No	100% Non-Detect
2,4-Dichlorophenol	9	0	ND	ND	ND	0.0817	---	0	---	No	100% Non-Detect
2,4-Dimethylphenol	9	0	ND	ND	ND	0.304	---	0	---	No	100% Non-Detect
2,4-Dinitrophenol	9	0	ND	ND	ND	0.00621	---	0	---	No	100% Non-Detect
2,4-Dinitrotoluene	9	0	ND	ND	ND	0.0144	---	0	---	No	100% Non-Detect

**Table 7**  
**Jackson Labs/TEL Area Screening-Level Exposure Estimate for Bulk Sediment (0.5-1.0 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
2,6-Dinitrotoluene	9	0	ND	ND	ND	0.0398	---	0	---	No	100% Non-Detect
2-Chloronaphthalene	9	0	ND	ND	ND	0.417	---	0	---	No	100% Non-Detect
2-Chlorophenol	9	0	ND	ND	ND	0.0319	---	0	---	No	100% Non-Detect
2-Methylnaphthalene	9	6	0.005	0.035	0.086	0.07	1	2	SC-236	Yes	[Maximum] > ESV
2-Methylphenol (O-Cresol)	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2-Naphthylamine	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2-Nitroaniline	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2-Nitrophenol	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
3,3'-Dichlorobenzidine	9	0	ND	ND	ND	0.127	---	0	---	No	100% Non-Detect
3-Nitroaniline	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4,6-Dinitro-2-Methylphenol	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Aminobiphenyl	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Bromophenyl Phenyl Ether	9	0	ND	ND	ND	1.55	---	0	---	No	100% Non-Detect
4-Chloro-3-Methylphenol	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Chloroaniline	9	0	ND	ND	ND	0.146	---	0	---	No	100% Non-Detect
4-Chlorophenyl Phenyl Ether	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Methylphenol (P-Cresol)	9	2	0.24	0.26	0.27	NESV	---	---	SC-231	Yes	No ESV Available
4-Nitroaniline	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Nitrophenol	9	0	ND	ND	ND	0.0133	---	0	---	No	100% Non-Detect
Acetophenone	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Aniline	9	0	ND	ND	ND	0.001	---	0	---	No	100% Non-Detect
Benzidine	8	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Biphenyl	9	0	ND	ND	ND	1.22	---	0	---	No	100% Non-Detect
Bis(2-Chloro-1-Methylethyl) Ether	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Bis(2-Chloroethoxy)Methane	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Bis(2-Chloroethyl)Ether	9	0	ND	ND	ND	3.52	---	0	---	No	100% Non-Detect
Bis(2-Ethylhexyl)Phthalate	9	0	ND	ND	ND	0.182	---	0	---	No	100% Non-Detect
Butyl Benzyl Phthalate	9	0	ND	ND	ND	1.97	---	0	---	No	100% Non-Detect
Carbazole	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Dibenzofuran	9	0	ND	ND	ND	2	---	0	---	No	100% Non-Detect
Diethyl Phthalate	9	0	ND	ND	ND	0.295	---	0	---	No	100% Non-Detect
Dimethyl Phthalate	9	0	ND	ND	ND	0.53	---	0	---	No	100% Non-Detect
Di-N-Butyl Phthalate	9	0	ND	ND	ND	1.114	---	0	---	No	100% Non-Detect
Diphenyl Ether	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Hexachlorobenzene	9	0	ND	ND	ND	0.02	---	0	---	No	100% Non-Detect
Hexachlorobutadiene	9	0	ND	ND	ND	0.0265	---	0	---	No	100% Non-Detect
Hexachlorocyclopentadiene	8	0	ND	ND	ND	0.901	---	0	---	No	100% Non-Detect
Hexachloroethane	9	0	ND	ND	ND	0.584	---	0	---	No	100% Non-Detect
Isophorone	9	0	ND	ND	ND	0.432	---	0	---	No	100% Non-Detect
N-Dioctyl Phthalate	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Nitrobenzene	9	0	ND	ND	ND	0.145	---	0	---	No	100% Non-Detect

**Table 7**  
**Jackson Labs/TEL Area Screening-Level Exposure Estimate for Bulk Sediment (0.5-1.0 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
N-Nitrosodimethylamine	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
N-Nitrosodi-N-Propylamine	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
N-Nitrosodiphenylamine	9	0	ND	ND	ND	2.68	---	0	---	No	100% Non-Detect
O-Toluidine	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Parathion	9	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Pentachlorobenzene	9	0	ND	ND	ND	0.69	---	0	---	No	100% Non-Detect
Pentachlorophenol	9	0	ND	ND	ND	23	---	0	---	No	100% Non-Detect
Phenol	9	0	ND	ND	ND	0.0491	---	0	---	No	100% Non-Detect
<b>Pesticides and Herbicides (mg/kg)</b>											
4,4'-DDD	2	1	0.0036	0.0036	0.0036	0.00488	<1	0	SC-236	No	[Maximum] < ESV
4,4'-DDE	2	1	0.0062	0.0062	0.0062	0.00316	2	1	SC-236	Yes	[Maximum] > ESV
4,4'-DDT	2	1	0.0015	0.0015	0.0015	0.00416	<1	0	SC-236	No	[Maximum] < ESV
Aldrin	2	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Alpha Chlordane	2	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Alpha-BHC	2	1	0.0023	0.0023	0.0023	0.006	<1	0	SC-236	No	[Maximum] < ESV
beta-BHC	2	1	0.0017	0.0017	0.0017	0.005	<1	0	SC-236	No	[Maximum] < ESV
delta-BHC	2	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Dieldrin	2	0	ND	ND	ND	0.0019	---	0	---	No	100% Non-Detect
Endosulfan I	2	1	0.0015	0.0015	0.0015	0.0029	<1	0	SC-236	No	[Maximum] < ESV
Endosulfan II	2	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Endosulfan Sulfate	2	1	0.0061	0.0061	0.0061	0.0346	<1	0	SC-236	No	[Maximum] < ESV
Endrin	2	0	ND	ND	ND	0.00222	---	0	---	No	100% Non-Detect
Endrin Aldehyde	2	0	ND	ND	ND	0.48	---	0	---	No	100% Non-Detect
Endrin Ketone	2	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Gamma Chlordane	2	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Heptachlor	2	1	0.0012	0.0012	0.0012	0.068	<1	0	SC-236	No	[Maximum] < ESV
Heptachlor Epoxide	2	0	ND	ND	ND	0.00247	---	0	---	No	100% Non-Detect
Lindane	2	0	ND	ND	ND	0.003	---	0	---	No	100% Non-Detect
Methoxychlor	2	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Toxaphene	2	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
<b>Polychlorinated Biphenyls (mg/kg)</b>											
Total Monochlorobiphenyls (congeners)	2	1	0.0024	0.0024	0.0024	NESV	---	---	SC-236	Yes	No ESV Available
Total Dichlorobiphenyls (congeners)	2	1	0.0113	0.0113	0.0113	NESV	---	---	SC-236	Yes	No ESV Available
Trichlorobiphenyl (total)	2	1	0.0162	0.0162	0.0162	NESV	---	---	SC-236	Yes	No ESV Available
Tetrachlorobiphenyl	2	1	0.0171	0.0171	0.0171	NESV	---	---	SC-236	Yes	No ESV Available
Pentachlorobiphenyl	2	1	0.0177	0.0177	0.0177	NESV	---	---	SC-236	Yes	No ESV Available
Hexachlorobiphenyl	2	1	0.0198	0.0198	0.0198	NESV	---	---	SC-236	Yes	No ESV Available
Heptachlorobiphenyl	2	1	0.0114	0.0114	0.0114	NESV	---	---	SC-236	Yes	No ESV Available
Octachlorobiphenyl	2	1	0.00666	0.00666	0.00666	NESV	---	---	SC-236	Yes	No ESV Available
Total Nonachlorobiphenyls (congeners)	2	1	0.00892	0.00892	0.00892	NESV	---	---	SC-236	Yes	No ESV Available
Total Decachlorobiphenyls (congeners)	2	1	0.00691	0.00691	0.00691	NESV	---	---	SC-236	Yes	No ESV Available

**Table 7**  
**Jackson Labs/TEL Area Screening-Level Exposure Estimate for Bulk Sediment (0.5-1.0 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
Total PCB (congeners)	2	1	0.118	0.118	0.118	0.059	2	1	SC-236	Yes	[Maximum] > ESV
<b>Other Parameters</b>											
Total Organic Carbon (mg/kg)	30	28	361	9,940	30,800	NESV	---	---	SC-231	---	---
Black Carbon (mg/kg)	9	9	400	2,604	8,705	NESV	---	---	DER1-09	---	---
Percent Fines (% <0.064 mm)	10	10	1	14	45	NESV	---	---	SC-236	---	---
Percent Moisture (%)	40	40	6.6	33.6	67.1	NESV	---	---	DER1-10	---	---
Percent Solids (%)	2	2	52.1	68	83.9	NESV	---	---	SC-233	---	---

**Notes:**

---, Not applicable.

COPEC, Constituent of Potential Ecological Concern

[Maximum], Maximum concentration

ND, Not detected

NESV, No Ecological Screening Value

**Table 8**  
**Fluoroproducts Area Screening-Level Exposure Estimate for Bulk Sediment (0-0.5 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
<b>Metals (mg/kg)</b>											
Aluminum	50	50	2,920	13,702	22,100	25,500	<1	0	D15-BOR-17	No	[Maximum] < ESV
Antimony	50	29	0.22	0.71	3.71	2	1.9	2	DER1-14	Yes	[Maximum] > ESV
Arsenic	50	50	2.82	9.23	45.7	9.979	4.6	19	D15-BOR-14	Yes	[Maximum] > ESV
Barium	50	50	14.5	75.3	127	NESV	---	---	D16-BOR-03	Yes	No ESV Available
Beryllium	50	49	0.134	0.762	1.3	NESV	---	---	DER2-15-SD	Yes	No ESV Available
Cadmium	50	44	0.0518	0.5874	1.6	0.6	2.7	19	DER2-15-SD	Yes	[Maximum] > ESV
Calcium	50	50	209	3,539	10,000	NESV	---	---	DER2-20-SD	No	Essential Nutrient
Chromium	50	50	16.2	40.2	73.6	26	2.8	42	E16-BOR-06	Yes	[Maximum] > ESV
Cobalt	50	50	2.13	10.09	19.4	50	<1	0	E16-BOR-06	No	[Maximum] < ESV
Copper	50	50	9.95	26.97	53.1	16	3.3	38	DER2-18-SD	Yes	[Maximum] > ESV
Iron	50	50	8,330	22,166	43,900	20,000	2.2	29	D15-BOR-14	Yes	[Maximum] > ESV
Lead	50	50	12.3	40	74.8	31	2.4	34	DER1-15	Yes	[Maximum] > ESV
Magnesium	50	50	564	3,879	6,330	NESV	---	---	DER2-16-SD	No	Essential Nutrient
Manganese	50	50	79.3	602.7	1,180	630	1.9	24	D16-BOR-03	Yes	[Maximum] > ESV
Mercury	50	49	0.0226	0.4203	5.35	0.174	30.7	34	D15-BOR-02	Yes	[Maximum] > ESV
Nickel	50	50	4.47	21.28	38.8	16	2.4	35	E16-BOR-06	Yes	[Maximum] > ESV
Potassium	50	50	508	2,354	4,210	NESV	---	---	DER2-20-SD	No	Essential Nutrient
Selenium	50	27	0.0762	0.6661	3.26	2	1.6	2	DER1-13	Yes	[Maximum] > ESV
Silver	50	31	0.0363	0.3647	1.44	0.5	2.9	9	D16-BOR-10	Yes	[Maximum] > ESV
Sodium	50	50	123	617	1,790	NESV	---	---	E16-BOR-06	No	Essential Nutrient
Thallium	50	27	0.038	0.159	0.247	NESV	---	---	D15-BOR-17, D15-BOR-19	Yes	No ESV Available
Tin	23	23	3.73	7.51	18	NESV	---	---	DER1-15	Yes	No ESV Available
Vanadium	50	50	14.5	39.2	67.8	NESV	---	---	D15-BOR-17	Yes	No ESV Available
Zinc	50	50	27.9	124.5	216	120	2	28	DER2-18-SD	Yes	[Maximum] > ESV
<b>Volatile Organic Compounds (mg/kg)</b>											
1,1,1,2-Tetrachloroethane	27	1	0.004	0.004	0.004	NESV	---	---	D15-BOR-22	Yes	No ESV Available
1,1,1-Trichloroethane	38	0	ND	ND	ND	0.213	---	0	--	No	100% Non-Detect
1,1,1-Trichlorotrifluoroethane	27	9	0.011	0.3	1.3	NESV	---	---	D15-BOR-17	Yes	No ESV Available
1,1,2,2-Tetrachloroethane	38	1	0.008	0.008	0.008	0.85	<1	0	D15-BOR-22	No	[Maximum] < ESV
1,1,2-Trichloroethane	38	0	ND	ND	ND	0.518	---	0	--	No	100% Non-Detect
1,1,2-Trichlorotrifluoroethane	38	18	0.007	2.102	14	NESV	---	---	D15-BOR-17	Yes	No ESV Available
1,1,2-Trifluoroethane	27	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
1,1-Dichloro-1-Fluoroethane	27	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
1,1-Dichloroethane	38	1	0.006	0.006	0.006	0.000575	10	1	DER3-24	Yes	[Maximum] > ESV
1,1-Dichloroethene	38	3	0.003	0.027	0.068	0.0194	4	1	D15-BOR-22	Yes	[Maximum] > ESV
1,1-Dichloropropene	27	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
1,2,4-Trimethylbenzene	27	3	0.015	0.078	0.18	NESV	---	---	D15-BOR-15	Yes	No ESV Available
1,2-Dibromoethane (EDB)	27	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
1,2-Dichloro-1,1,2-Trifluoroethane	27	16	0.003	0.302	1.6	NESV	---	---	E16-BOR-07	Yes	No ESV Available
1,2-Dichloro-1-Fluoroethane	27	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
1,2-Dichlorobenzene	50	47	0.002	5.007	130	0.294	442	29	D15-BOR-17	Yes	[Maximum] > ESV

**Table 8**  
**Fluoroproducts Area Screening-Level Exposure Estimate for Bulk Sediment (0-0.5 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
1,2-Dichloroethane	38	0	ND	ND	ND	0.26	---	0	--	No	100% Non-Detect
1,2-Dichloroethene	27	4	0.003	0.152	0.36	NESV	---	---	E16-BOR-06	Yes	No ESV Available
1,2-Dichloropropane	38	0	ND	ND	ND	0.333	---	0	--	No	100% Non-Detect
1,2-Dichlorotetrafluoroethane	27	15	0.003	0.155	0.96	NESV	---	---	E16-BOR-06	Yes	No ESV Available
1,3,5-Trimethylbenzene	27	2	0.006	0.007	0.007	NESV	---	---	D15-BOR-14	Yes	No ESV Available
1,3-Dichlorobenzene	50	18	0.002	0.839	9.3	1.315	7.1	1	D15-BOR-17	Yes	[Maximum] > ESV
1,4-Dichlorobenzene	50	41	0.002	8.82	230	0.318	723	24	D15-BOR-17	Yes	[Maximum] > ESV
1-Chloro-1,1-Difluoroethane	27	1	0.006	0.006	0.006	NESV	---	---	D15-BOR-23	Yes	No ESV Available
2,2-Dichloro-1,1,1-Trifluoroethane	27	15	0.006	0.299	2.1	NESV	---	---	D15-BOR-23	Yes	No ESV Available
2-Chloro-1,1,1-Trifluoroethane	27	6	0.009	0.182	1	NESV	---	---	E16-BOR-06	Yes	No ESV Available
2-Chlorotoluene	27	3	0.001	0.054	0.15	NESV	---	---	D15-BOR-23	Yes	No ESV Available
2-Hexanone	27	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
4-Chlorotoluene	27	1	0.004	0.004	0.004	NESV	---	---	D15-BOR-22	Yes	No ESV Available
4-Isopropyltoluene	27	2	0.002	0.008	0.014	NESV	---	---	D15-BOR-22	Yes	No ESV Available
Acetone	38	26	0.016	0.092	0.43	0.0099	43	26	D15-BOR-22	Yes	[Maximum] > ESV
Acrolein	11	0	ND	ND	ND	0.00000152	---	0	--	No	100% Non-Detect
Acrylonitrile	11	0	ND	ND	ND	0.0012	---	0	--	No	100% Non-Detect
Benzene	38	20	0.0008	0.4955	4	0.142	28	7	DER3-24	Yes	[Maximum] > ESV
Bromodichloromethane	38	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Bromoform	11	0	ND	ND	ND	0.492	---	0	--	No	100% Non-Detect
Carbon Disulfide	38	26	0.002	0.014	0.083	0.0239	4	3	D15-BOR-22	Yes	[Maximum] > ESV
Carbon Tetrachloride	38	2	0.005	0.021	0.037	1.45	<1	0	D15-BOR-14	No	[Maximum] < ESV
CFC-1113	27	2	0.026	0.038	0.051	NESV	---	---	E16-BOR-05	Yes	No ESV Available
Chlorobenzene	38	35	0.002	11.39	170	0.291	584	14	D15-BOR-17	Yes	[Maximum] > ESV
Chlorodibromomethane	38	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Chlorodifluoromethane	27	3	0.006	0.008	0.01	NESV	---	---	E16-BOR-08	Yes	No ESV Available
Chlorofluoromethane	27	12	0.004	0.137	0.77	NESV	---	---	E16-BOR-06	Yes	No ESV Available
Chloroform	38	12	0.002	0.166	0.76	0.121	6.3	5	D15-BOR-16	Yes	[Maximum] > ESV
Chloropentafluoroethane	27	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
cis-1,2 Dichloroethene	38	6	0.002	0.104	0.36	0.654	<1	0	E16-BOR-06	No	[Maximum] < ESV
cis-1,3-Dichloropropene	38	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Cumene	27	5	0.003	0.344	0.71	0.086	8.3	3	E16-BOR-07	Yes	[Maximum] > ESV
Dichlorodifluoromethane	38	1	0.034	0.034	0.034	NESV	---	---	D15-BOR-22	Yes	No ESV Available
Dichlorofluoromethane	38	15	0.005	0.89	5.3	NESV	---	---	E16-BOR-07	Yes	No ESV Available
Ethyl Chloride	38	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Ethylbenzene	38	6	0.004	0.422	2	0.175	11.4	3	D15-BOR-17	Yes	[Maximum] > ESV
Fluoromethane	27	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Hexane	27	0	ND	ND	ND	0.0396	---	0	--	No	100% Non-Detect
Isobutyl Alcohol	27	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Meta- And Para-Xylene	27	8	0.002	1.186	7.5	NESV	---	---	D15-BOR-17	Yes	No ESV Available
Methacrylonitrile	27	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Methyl Bromide	11	0	ND	ND	ND	0.00137	---	0	--	No	100% Non-Detect
Methyl Chloride	38	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect

**Table 8**  
**Fluoroproducts Area Screening-Level Exposure Estimate for Bulk Sediment (0-0.5 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
Methyl Ethyl Ketone	27	11	0.007	0.015	0.034	0.0424	<1	0	D15-BOR-22	No	[Maximum] < ESV
Methyl Isobutyl Ketone	27	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Methyl Methacrylate	27	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Methyl Tertiary Butyl Ether	27	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Methylene Chloride	38	4	0.002	0.094	0.36	0.159	2	1	D15-BOR-23	Yes	[Maximum] > ESV
N-Butylbenzene	27	1	0.004	0.004	0.004	NESV	---	---	D15-BOR-22	Yes	No ESV Available
N-Propylbenzene	27	2	0.001	0.006	0.01	NESV	---	---	D15-BOR-22	Yes	No ESV Available
Ortho-Xylene	27	8	0.002	0.41	2.7	NESV	---	---	D15-BOR-17	Yes	No ESV Available
Propionitrile	27	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
sec-Butylbenzene	27	1	0.014	0.014	0.014	NESV	---	---	D15-BOR-22	Yes	No ESV Available
Styrene	27	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
tert-Butylbenzene	27	1	0.008	0.008	0.008	NESV	---	---	D15-BOR-22	Yes	No ESV Available
Tetrachloroethene	38	20	0.003	1.992	17	0.99	17.2	7	D15-BOR-17	Yes	[Maximum] > ESV
Tetrahydrofuran	27	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Toluene	38	18	0.001	0.078	0.63	1.22	<1	0	D15-BOR-19	No	[Maximum] < ESV
trans-1,2-Dichloroethene	38	0	ND	ND	ND	0.654	---	0	--	No	100% Non-Detect
trans-1,3-Dichloropropene	11	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Trichloroethene	38	9	0.001	0.145	0.45	0.112	4	5	E16-BOR-06	Yes	[Maximum] > ESV
Trichlorofluoromethane	38	15	0.005	0.773	4	NESV	---	---	E16-BOR-03	Yes	No ESV Available
Vinyl Chloride	38	2	0.004	0.005	0.006	0.202	<1	0	D15-BOR-22	No	[Maximum] < ESV
Vinyl Fluoride	27	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Xylenes	38	13	0.002	0.972	10	0.433	23	2	D15-BOR-17	Yes	[Maximum] > ESV
<b>Polycyclic Aromatic Hydrocarbons (mg/kg)</b>											
Acenaphthene	50	28	0.008	0.106	0.73	0.00671	109	28	DER2-20-SD	Yes	[Maximum] > ESV
Acenaphthylene	50	27	0.005	0.034	0.19	0.00587	32	26	DER1-14	Yes	[Maximum] > ESV
Anthracene	50	29	0.009	0.144	1.9	0.22	9	4	DER2-20-SD	Yes	[Maximum] > ESV
Benzo(A)Anthracene	50	40	0.009	0.327	5.3	0.32	17	6	DER2-20-SD	Yes	[Maximum] > ESV
Benzo(B)Fluoranthene	50	40	0.01	0.33	4.5	10.4	<1	0	DER2-20-SD	No	[Maximum] < ESV
Benzo(G,H,I)Perylene	50	32	0.004	0.153	1.8	0.17	11	6	DER2-20-SD	Yes	[Maximum] > ESV
Benzo(K)Fluoranthene	50	31	0.004	0.151	1.7	0.24	7	4	DER2-20-SD	Yes	[Maximum] > ESV
Benzo[A]Pyrene	50	38	0.008	0.272	4	0.37	11	4	DER2-20-SD	Yes	[Maximum] > ESV
Chrysene	50	42	0.014	0.516	9.5	0.34	28	9	DER2-20-SD	Yes	[Maximum] > ESV
Dibenz(A,H)Anthracene	50	26	0.005	0.055	0.66	0.06	11	4	DER2-20-SD	Yes	[Maximum] > ESV
Fluoranthene	50	43	0.008	0.463	6.3	0.75	8	4	DER2-20-SD	Yes	[Maximum] > ESV
Fluorene	50	29	0.011	0.095	0.64	0.19	3	5	DER2-20-SD	Yes	[Maximum] > ESV
Indeno (1,2,3-CD) Pyrene	50	30	0.008	0.144	1.7	0.2	9	4	DER2-20-SD	Yes	[Maximum] > ESV
Naphthalene	50	36	0.007	0.468	7.4	0.176	42	18	D16-BOR-03	Yes	[Maximum] > ESV
Phenanthrene	50	39	0.022	0.33	4.5	0.56	8	5	DER2-20-SD	Yes	[Maximum] > ESV
Pyrene	50	44	0.01	0.49	6.7	0.49	14	7	DER2-20-SD	Yes	[Maximum] > ESV
Total PAHs (Detections + 1/2 MDL)	50	45	0.037	3.711	51.17	4	13	7	DER2-20-SD	Yes	[Maximum] > ESV
Total PAHs (Detections Only)	50	45	0.007	3.464	51.17	4	12.8	5	DER2-20-SD	Yes	[Maximum] > ESV
<b>Semi-Volatile Organic Compounds (mg/kg)</b>											
1,2,4-Trichlorobenzene	50	33	0.021	0.308	2	5.062	<1	0	D15-BOR-22	No	[Maximum] < ESV

**Table 8**  
**Fluoroproducts Area Screening-Level Exposure Estimate for Bulk Sediment (0-0.5 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
1,2-Diphenylhydrazine	50	1	0.025	0.025	0.025	NESV	---	---	D15-BOR-14	Yes	No ESV Available
1,4-Dioxane	27	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
1-Naphthylamine	50	1	0.43	0.43	0.43	NESV	---	---	DER2-20-SD	Yes	No ESV Available
2,3,4,6-Tetrachlorophenol	27	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
2,4,5-Trichlorophenol	27	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
2,4,6-Trichlorophenol	50	0	ND	ND	ND	0.208	---	0	--	No	100% Non-Detect
2,4-Dichlorophenol	50	3	0.049	0.075	0.12	0.0817	2	1	D15-BOR-17	Yes	[Maximum] > ESV
2,4-Dimethylphenol	50	0	ND	ND	ND	0.304	---	0	--	No	100% Non-Detect
2,4-Dinitrophenol	49	0	ND	ND	ND	0.00621	---	0	--	No	100% Non-Detect
2,4-Dinitrotoluene	50	1	0.47	0.47	0.47	0.0144	33	1	E16-BOR-04	Yes	[Maximum] > ESV
2,6-Dinitrotoluene	50	1	0.04	0.04	0.04	0.0398	1	1	E16-BOR-04	Yes	[Maximum] > ESV
2-Chloronaphthalene	50	1	0.1	0.1	0.1	0.417	<1	0	DER2-20-SD	No	[Maximum] < ESV
2-Chlorophenol	50	6	0.042	0.092	0.23	0.0319	7	6	D15-BOR-17	Yes	[Maximum] > ESV
2-Methylnaphthalene	27	25	0.027	0.096	0.38	0.07	5	12	D16-BOR-12	Yes	[Maximum] > ESV
2-Methylphenol (O-Cresol)	27	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
2-Naphthylamine	50	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
2-Nitroaniline	27	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
2-Nitrophenol	50	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
3,3'-Dichlorobenzidine	50	0	ND	ND	ND	0.127	---	0	--	No	100% Non-Detect
3-Nitroaniline	27	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
4,6-Dinitro-2-Methylphenol	50	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
4-Aminobiphenyl	49	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
4-Bromophenyl Phenyl Ether	50	0	ND	ND	ND	1.55	---	0	--	No	100% Non-Detect
4-Chloro-3-Methylphenol	50	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
4-Chloroaniline	50	8	0.098	0.83	2.3	0.146	16	7	DER2-20-SD	Yes	[Maximum] > ESV
4-Chlorophenyl Phenyl Ether	50	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
4-Methylphenol (P-Cresol)	27	13	0.028	0.065	0.12	NESV	---	---	D16-BOR-12	Yes	No ESV Available
4-Nitroaniline	27	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
4-Nitrophenol	50	0	ND	ND	ND	0.0133	---	0	--	No	100% Non-Detect
Acetophenone	27	4	0.025	0.033	0.045	NESV	---	---	E16-BOR-03	Yes	No ESV Available
Aniline	50	1	0.39	0.39	0.39	0.001	390	1	DER1-15	Yes	[Maximum] > ESV
Benzidine	48	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Biphenyl	27	11	0.022	0.061	0.12	1.22	<1	0	D15-BOR-22	No	[Maximum] < ESV
Bis(2-Chloro-1-Methylethyl) Ether	27	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Bis(2-Chloroethoxy)Methane	50	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Bis(2-Chloroethyl)Ether	50	0	ND	ND	ND	3.52	---	0	--	No	100% Non-Detect
Bis(2-Chloroisopropyl)Ether	23	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Bis(2-Ethylhexyl)Phthalate	50	7	0.089	0.363	1.2	0.182	7	4	DER2-18-SD	Yes	[Maximum] > ESV
Butyl Benzyl Phthalate	50	3	0.27	1.12	2.8	1.97	1	1	DER2-18-SD	Yes	[Maximum] > ESV
Carbazole	50	9	0.022	0.085	0.35	NESV	---	---	DER2-20-SD	Yes	No ESV Available
Dibenzofuran	27	9	0.034	0.119	0.28	2	<1	0	D15-BOR-22	No	[Maximum] < ESV
Diethyl Phthalate	50	4	0.36	0.78	1.5	0.295	5	4	DER2-19-SD	Yes	[Maximum] > ESV
Dimethyl Phthalate	50	0	ND	ND	ND	0.53	---	0	--	No	100% Non-Detect

**Table 8**  
**Fluoroproducts Area Screening-Level Exposure Estimate for Bulk Sediment (0-0.5 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
Di-N-Butyl Phthalate	50	4	0.19	0.36	0.59	1.114	<1	0	E16-BOR-04	No	[Maximum] < ESV
Diphenyl Ether	27	7	0.026	0.065	0.17	NESV	---	---	D16-BOR-03	Yes	No ESV Available
Hexachlorobenzene	50	4	0.006	0.105	0.4	0.02	20	1	D16-BOR-02	Yes	[Maximum] > ESV
Hexachlorobutadiene	50	1	0.13	0.13	0.13	0.0265	5	1	D15-BOR-22	Yes	[Maximum] > ESV
Hexachlorocyclopentadiene	50	0	ND	ND	ND	0.901	---	0	--	No	100% Non-Detect
Hexachloroethane	50	0	ND	ND	ND	0.584	---	0	--	No	100% Non-Detect
Isophorone	50	0	ND	ND	ND	0.432	---	0	--	No	100% Non-Detect
N-Dioctyl Phthalate	50	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Nitrobenzene	50	6	0.061	0.738	2.2	0.145	15	5	DER3-08	Yes	[Maximum] > ESV
N-Nitrosodimethylamine	50	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
N-Nitrosodi-N-Propylamine	50	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
N-Nitrosodiphenylamine	50	9	0.03	0.16	0.55	2.68	<1	0	DER2-20-SD	No	[Maximum] < ESV
O-Toluidine	50	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Parathion	27	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Pentachlorobenzene	27	3	0.02	0.04	0.057	0.69	<1	0	D15-BOR-15	No	[Maximum] < ESV
Pentachlorophenol	50	0	ND	ND	ND	23	---	0	--	No	100% Non-Detect
Phenol	50	9	0.028	0.079	0.14	0.0491	2.9	6	DER2-20-SD	Yes	[Maximum] > ESV
<b>Polychlorinated Biphenyls (mg/kg)</b>											
Total Monochlorobiphenyls (congeners)	31	31	0.000621	0.043417	0.424	NESV	---	---	D15-BOR-15	Yes	No ESV Available
Total Dichlorobiphenyls (congeners)	31	31	0.00193	0.04515	0.482	NESV	---	---	D15-BOR-15	Yes	No ESV Available
Total Trichlorobiphenyls (congeners)	31	31	0.000879	0.018233	0.13	NESV	---	---	D16-BOR-03	Yes	No ESV Available
Total Tetrachlorobiphenyls (congeners)	31	31	0.000147	0.012938	0.0692	NESV	---	---	D16-BOR-06	Yes	No ESV Available
Total Pentachlorobiphenyls (congeners)	31	31	0.0000816	0.0100244	0.0415	NESV	---	---	D16-BOR-06	Yes	No ESV Available
Total Hexachlorobiphenyls (congeners)	31	31	0.0000522	0.008754	0.0244	NESV	---	---	D15-BOR-17	Yes	No ESV Available
Total Heptachlorobiphenyls (congeners)	31	31	0.0000248	0.0051683	0.0226	NESV	---	---	D15-BOR-22	Yes	No ESV Available
Total Octachlorobiphenyls (congeners)	31	31	0.0000112	0.0030948	0.00903	NESV	---	---	D15-BOR-22	Yes	No ESV Available
Total Nonachlorobiphenyls (congeners)	31	31	0.0000127	0.0044664	0.0109	NESV	---	---	D15-BOR-17	Yes	No ESV Available
Total PCB (congeners)	37	37	0.0089834	0.1444618	0.96003	0.059	16.3	28	D15-BOR-15	Yes	[Maximum] > ESV
<b>Other Parameters</b>											
Total Organic Carbon (mg/kg)	56	53	315	16,440	34,200	NESV	---	---	DER3-26	---	---
Black Carbon (mg/kg)	17	17	185	3,134	9,000	NESV	---	---	DER2-18-SD	---	---
Percent Fines (% <0.064 mm)	53	53	0.5	52.7	92	NESV	---	---	D15-BOR-01	---	---
Percent Moisture (%)	74	74	9.6	43.4	68.1	NESV	---	---	D15-BOR-07	---	---

**Notes:**

---, Not applicable.

COPEC, Constituent of Potential Ecological Concern

[Maximum], Maximum concentration

ND, Not detected

NESV, No Ecological Screening Value

**Table 9**  
**Fluoroproducts Area Screening-Level Exposure Estimate for Bulk Sediment (0.5-1.0 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
<b>Metals (mg/kg)</b>											
Aluminum	27	27	3,760	13,989	25,900	25,500	1.0	1	D16-BOR-12	Yes	[Maximum] > ESV
Antimony	27	26	0.134	0.97	4.05	2	2.0	5	E16-BOR-04	Yes	[Maximum] > ESV
Arsenic	27	27	1.98	11.26	32.7	9.979	3.3	11	D16-BOR-12	Yes	[Maximum] > ESV
Barium	27	27	26.8	77.7	142	NESV	---	---	D16-BOR-10	Yes	No ESV Available
Beryllium	27	27	0.212	0.757	1.64	NESV	---	---	E16-BOR-05	Yes	No ESV Available
Cadmium	27	22	0.0492	0.725	2.02	0.6	3.4	12	D16-BOR-10	Yes	[Maximum] > ESV
Calcium	27	27	109	2,471	4,820	NESV	---	---	D16-BOR-11	No	Essential Nutrient
Chromium	27	27	13	56	149	26	5.7	20	E16-BOR-05	Yes	[Maximum] > ESV
Cobalt	27	27	3.33	11.13	19.1	50	<1	0	D16-BOR-12	No	[Maximum] < ESV
Copper	27	27	6.59	55.41	296	16	18.5	18	E16-BOR-07	Yes	[Maximum] > ESV
Iron	27	27	5,240	21,518	41,900	20,000	2.1	12	D16-BOR-12	Yes	[Maximum] > ESV
Lead	27	27	6.11	123.07	563	31	18.2	16	D16-BOR-12	Yes	[Maximum] > ESV
Magnesium	27	27	538	3,415	7,140	NESV	---	---	E16-BOR-08	No	Essential Nutrient
Manganese	27	27	41.3	524.2	2,470	630	3.9	11	E16-BOR-08	Yes	[Maximum] > ESV
Mercury	23	21	0.0759	0.6639	2.88	0.174	16.6	16	E16-BOR-04	Yes	[Maximum] > ESV
Nickel	27	27	8.22	24.59	48.3	16	3.0	19	D16-BOR-11	Yes	[Maximum] > ESV
Potassium	27	27	487	2,176	4,080	NESV	---	---	D16-BOR-09	No	Essential Nutrient
Selenium	27	19	0.153	1.161	3.17	2	1.6	5	D16-BOR-12	Yes	[Maximum] > ESV
Silver	27	21	0.0271	0.6314	1.95	0.5	3.9	11	E16-BOR-07	Yes	[Maximum] > ESV
Sodium	27	27	54.9	447.5	955	NESV	---	---	D16-BOR-11	No	Essential Nutrient
Thallium	27	27	0.0767	0.1711	0.39	NESV	---	---	E16-BOR-04	Yes	No ESV Available
Vanadium	27	27	17	50	109	NESV	---	---	E16-BOR-05	Yes	No ESV Available
Zinc	27	27	17.5	140.2	342	120	3	12	D16-BOR-09	Yes	[Maximum] > ESV
<b>Volatile Organic Compounds (mg/kg)</b>											
1,1,1,2-Tetrachloroethane	27	1	0.003	0.003	0.003	NESV	---	---	D15-BOR-22	Yes	No ESV Available
1,1,1-Trichloroethane	55	0	ND	ND	ND	0.213	---	0	---	No	100% Non-Detect
1,1,1-Trichlorotrifluoroethane	27	7	0.011	0.284	1.3	NESV	---	---	E16-BOR-04	Yes	No ESV Available
1,1,2,2-Tetrachloroethane	55	0	ND	ND	ND	0.85	---	0	---	No	100% Non-Detect
1,1,2-Trichloroethane	55	0	ND	ND	ND	0.518	---	0	---	No	100% Non-Detect
1,1,2-Trichlorotrifluoroethane	55	20	0.002	36.4	670	NESV	---	---	E16-BOR-04	Yes	No ESV Available
1,1,2-Trifluoroethane	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
1,1-Dichloro-1-Fluoroethane	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
1,1-Dichloroethane	55	0	ND	ND	ND	0.000575	---	0	---	No	100% Non-Detect
1,1-Dichloroethene	55	4	0.003	0.493	1.9	0.0194	98	2	E16-BOR-04	Yes	[Maximum] > ESV
1,1-Dichloropropene	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
1,2,4-Trimethylbenzene	27	4	0.004	0.169	0.66	NESV	---	---	D16-BOR-11	Yes	No ESV Available
1,2-Dibromoethane (EDB)	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
1,2-Dichloro-1,1,2-Trifluoroethane	27	13	0.002	0.03	0.13	NESV	---	---	D16-BOR-02	Yes	No ESV Available
1,2-Dichloro-1-Fluoroethane	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
1,2-Dichlorobenzene	32	30	0.006	12.71	290	0.294	986	17	E16-BOR-04	Yes	[Maximum] > ESV
1,2-Dichloroethane	55	1	0.001	0.001	0.001	0.26	<1	0	D15-BOR-19	No	[Maximum] < ESV
1,2-Dichloroethene	27	1	0.035	0.035	0.035	NESV	---	---	E16-BOR-06	Yes	No ESV Available
1,2-Dichloropropane	55	0	ND	ND	ND	0.333	---	0	---	No	100% Non-Detect

**Table 9**  
**Fluoroproducts Area Screening-Level Exposure Estimate for Bulk Sediment (0.5-1.0 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
1,2-Dichlorotetrafluoroethane	27	11	0.004	0.105	0.39	NESV	---	---	E16-BOR-04	Yes	No ESV Available
1,3,5-Trimethylbenzene	27	3	0.003	0.105	0.31	NESV	---	---	D16-BOR-11	Yes	No ESV Available
1,3-Dichlorobenzene	32	18	0.001	0.529	5.3	1.315	4	1	D15-BOR-17	Yes	[Maximum] > ESV
1,4-Dichlorobenzene	32	31	0.004	7.047	120	0.318	377.4	16	D15-BOR-17	Yes	[Maximum] > ESV
1-Chloro-1,1-Difluoroethane	27	1	0.002	0.002	0.002	NESV	---	---	D16-BOR-14	Yes	No ESV Available
2,2-Dichloro-1,1,1-Trifluoroethane	27	12	0.003	0.194	1.3	NESV	---	---	E16-BOR-06	Yes	No ESV Available
2-Chloro-1,1,1-Trifluoroethane	27	5	0.039	0.099	0.3	NESV	---	---	E16-BOR-06	Yes	No ESV Available
2-Chloroethyl Vinyl Ether	7	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2-Chlorotoluene	27	5	0.004	0.125	0.6	NESV	---	---	D16-BOR-11	Yes	No ESV Available
2-Hexanone	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Chlorotoluene	27	1	0.3	0.3	0.3	NESV	---	---	D16-BOR-11	Yes	No ESV Available
4-Isopropyltoluene	27	2	0.002	0.306	0.61	NESV	---	---	D16-BOR-11	Yes	No ESV Available
Acetone	55	33	0.01	0.39	10	0.0099	1,010	33	E16-BOR-04	Yes	[Maximum] > ESV
Acrolein	28	0	ND	ND	ND	0.00000152	---	0	---	No	100% Non-Detect
Acrylonitrile	28	0	ND	ND	ND	0.0012	---	0	---	No	100% Non-Detect
Benzene	55	32	0.0006	0.3092	2.6	0.142	18	8	DER2-17-SD	Yes	[Maximum] > ESV
Bromodichloromethane	55	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Bromoform	28	0	ND	ND	ND	0.492	---	0	---	No	100% Non-Detect
Carbon Disulfide	55	27	0.002	0.01	0.11	0.0239	5	1	D15-BOR-14	Yes	[Maximum] > ESV
Carbon Tetrachloride	55	2	0.001	0.245	0.49	1.45	<1	0	D15-BOR-14	No	[Maximum] < ESV
CFC-1113	27	4	0.01	0.11	0.33	NESV	---	---	E16-BOR-06	Yes	No ESV Available
Chlorobenzene	55	50	0.001	8.398	110	0.291	378	24	D15-BOR-06	Yes	[Maximum] > ESV
Chlorodibromomethane	55	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Chlorodifluoromethane	27	2	0.005	0.011	0.017	NESV	---	---	E16-BOR-08	Yes	No ESV Available
Chlorofluoromethane	27	10	0.003	0.022	0.045	NESV	---	---	D15-BOR-24, D16-BOR-12	Yes	No ESV Available
Chloroform	55	12	0.002	0.311	2.4	0.121	19.8	4	E16-BOR-04	Yes	[Maximum] > ESV
Chloropentafluoroethane	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
cis-1,2 Dichloroethene	55	2	0.035	1.867	3.7	0.654	5.7	1	DER2-18-SD	Yes	[Maximum] > ESV
cis-1,3-Dichloropropene	55	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Cumene	27	8	0.003	5.21	39	0.086	453.5	5	D16-BOR-11	Yes	[Maximum] > ESV
Dichlorodifluoromethane	55	1	0.007	0.007	0.007	NESV	---	---	D16-BOR-12	Yes	No ESV Available
Dichlorofluoromethane	55	10	0.003	0.727	4.2	NESV	---	---	E16-BOR-04	Yes	No ESV Available
Ethyl Chloride	55	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Ethylbenzene	55	8	0.002	0.19	0.79	0.175	4.5	2	D15-BOR-06	Yes	[Maximum] > ESV
Fluoromethane	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Hexane	27	0	ND	ND	ND	0.0396	---	0	---	No	100% Non-Detect
Isobutyl Alcohol	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Meta- And Para-Xylene	27	12	0.001	0.109	0.32	NESV	---	---	D15-BOR-16	Yes	No ESV Available
Methacrylonitrile	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Methyl Bromide	28	0	ND	ND	ND	0.00137	---	0	---	No	100% Non-Detect
Methyl Chloride	55	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Methyl Ethyl Ketone	27	7	0.008	0.022	0.047	0.0424	1.1	1	D16-BOR-13	Yes	[Maximum] > ESV
Methyl Isobutyl Ketone	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect

**Table 9**  
**Fluoroproducts Area Screening-Level Exposure Estimate for Bulk Sediment (0.5-1.0 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
Methyl Methacrylate	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Methyl Tertiary Butyl Ether	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Methylene Chloride	55	14	0.003	0.062	0.56	0.159	4	2	DER2-17-SD	Yes	[Maximum] > ESV
N-Butylbenzene	27	1	0.28	0.28	0.28	NESV	---	---	D16-BOR-11	Yes	No ESV Available
N-Propylbenzene	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Ortho-Xylene	27	10	0.001	0.099	0.65	NESV	---	---	D16-BOR-11	Yes	No ESV Available
Propionitrile	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
sec-Butylbenzene	27	1	0.23	0.23	0.23	NESV	---	---	D16-BOR-11	Yes	No ESV Available
Styrene	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
tert-Butylbenzene	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Tetrachloroethene	55	19	0.001	12.755	230	0.99	232.3	6	E16-BOR-04	Yes	[Maximum] > ESV
Tetrahydrofuran	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Toluene	55	25	0.001	0.106	1.3	1.22	1	1	DER2-18-SD	Yes	[Maximum] > ESV
trans-1,2-Dichloroethene	55	0	ND	ND	ND	0.654	---	0	---	No	100% Non-Detect
trans-1,3-Dichloropropene	28	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Trichloroethene	55	5	0.008	0.335	1.5	0.112	13	1	DER2-18-SD	Yes	[Maximum] > ESV
Trichlorofluoromethane	55	15	0.004	27.626	390	NESV	---	---	E16-BOR-04	Yes	No ESV Available
Vinyl Chloride	55	4	0.006	0.192	0.72	0.202	4	1	DER2-18-SD	Yes	[Maximum] > ESV
Vinyl Fluoride	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Xylenes	55	29	0.001	0.257	3.4	0.433	8	4	D15-BOR-06	Yes	[Maximum] > ESV
<b>Polycyclic Aromatic Hydrocarbons (mg/kg)</b>											
Acenaphthene	32	22	0.005	0.376	3.7	0.00671	551	21	E16-BOR-04	Yes	[Maximum] > ESV
Acenaphthylene	32	18	0.01	0.11	0.89	0.00587	152	18	E16-BOR-04	Yes	[Maximum] > ESV
Anthracene	32	24	0.006	0.296	4.4	0.22	20	3	E16-BOR-04	Yes	[Maximum] > ESV
Benzo(A)Anthracene	32	25	0.01	1.13	25	0.32	78	4	E16-BOR-04	Yes	[Maximum] > ESV
Benzo(B)Fluoranthene	32	26	0.005	0.758	16	10.4	1.5	1	E16-BOR-04	Yes	[Maximum] > ESV
Benzo(G,H,I)Perylene	32	23	0.011	0.293	5.2	0.17	31	2	E16-BOR-04	Yes	[Maximum] > ESV
Benzo(K)Fluoranthene	32	22	0.007	0.443	8.3	0.24	35	2	E16-BOR-04	Yes	[Maximum] > ESV
Benzo[A]Pyrene	32	25	0.012	0.698	15	0.37	41	1	E16-BOR-04	Yes	[Maximum] > ESV
Chrysene	32	27	0.004	3.358	84	0.34	247	4	E16-BOR-04	Yes	[Maximum] > ESV
Dibenz(A,H)Anthracene	32	16	0.007	0.196	2.8	0.06	47	2	E16-BOR-04	Yes	[Maximum] > ESV
Fluoranthene	32	26	0.011	1.076	22	0.75	29	2	E16-BOR-04	Yes	[Maximum] > ESV
Fluorene	32	24	0.004	0.357	4.3	0.19	23	6	E16-BOR-04	Yes	[Maximum] > ESV
Indeno (1,2,3-CD) Pyrene	32	22	0.007	0.267	4.7	0.2	24	1	E16-BOR-04	Yes	[Maximum] > ESV
Naphthalene	32	28	0.023	0.591	6.1	0.176	35	16	E16-BOR-04	Yes	[Maximum] > ESV
Phenanthrene	32	28	0.005	1.169	22	0.56	39	5	E16-BOR-04	Yes	[Maximum] > ESV
Pyrene	32	27	0.019	1.313	29	0.49	59	4	E16-BOR-04	Yes	[Maximum] > ESV
Total PAHs (Detections + 1/2 MDL)	32	30	0.066	10.711	253.39	4	63	4	E16-BOR-04	Yes	[Maximum] > ESV
Total PAHs (Detections Only)	32	30	0.04	10.67	253.39	4	63.3	4	E16-BOR-04	Yes	[Maximum] > ESV
<b>Semi-Volatile Organic Compounds (mg/kg)</b>											
1,2,4-Trichlorobenzene	32	22	0.034	0.321	2.2	5.062	<1	0	E16-BOR-04	No	[Maximum] < ESV
1,2-Diphenylhydrazine	32	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
1,4-Dioxane	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
1-Naphthylamine	32	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect

**Table 9**  
**Fluoroproducts Area Screening-Level Exposure Estimate for Bulk Sediment (0.5-1.0 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
2,3,4,6-Tetrachlorophenol	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2,4,5-Trichlorophenol	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2,4,6-Trichlorophenol	32	0	ND	ND	ND	0.208	---	0	---	No	100% Non-Detect
2,4-Dichlorophenol	32	2	0.055	0.065	0.075	0.0817	<1	0	D15-BOR-16	No	[Maximum] < ESV
2,4-Dimethylphenol	32	0	ND	ND	ND	0.304	---	0	---	No	100% Non-Detect
2,4-Dinitrophenol	32	0	ND	ND	ND	0.00621	---	0	---	No	100% Non-Detect
2,4-Dinitrotoluene	32	1	1	1	1	0.0144	69	1	E16-BOR-04	Yes	[Maximum] > ESV
2,6-Dinitrotoluene	32	0	ND	ND	ND	0.0398	---	0	---	No	100% Non-Detect
2-Chloronaphthalene	32	1	0.046	0.046	0.046	0.417	<1	0	D16-BOR-06	No	[Maximum] < ESV
2-Chlorophenol	32	7	0.019	0.065	0.14	0.0319	4	5	D15-BOR-24	Yes	[Maximum] > ESV
2-Methylnaphthalene	27	25	0.005	0.399	3.3	0.07	47	12	E16-BOR-04	Yes	[Maximum] > ESV
2-Methylphenol (O-Cresol)	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2-Naphthylamine	32	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2-Nitroaniline	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2-Nitrophenol	32	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
3,3'-Dichlorobenzidine	32	0	ND	ND	ND	0.127	---	0	---	No	100% Non-Detect
3-Nitroaniline	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4,6-Dinitro-2-Methylphenol	32	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Aminobiphenyl	32	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Bromophenyl Phenyl Ether	32	0	ND	ND	ND	1.55	---	0	---	No	100% Non-Detect
4-Chloro-3-Methylphenol	32	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Chloroaniline	32	12	0.074	2.811	18	0.146	123	9	D16-BOR-11	Yes	[Maximum] > ESV
4-Chlorophenyl Phenyl Ether	32	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Methylphenol (P-Cresol)	27	13	0.022	0.183	0.48	NESV	---	---	E16-BOR-05	Yes	No ESV Available
4-Nitroaniline	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Nitrophenol	32	0	ND	ND	ND	0.0133	---	0	---	No	100% Non-Detect
Acetophenone	27	5	0.022	0.09	0.24	NESV	---	---	E16-BOR-04	Yes	No ESV Available
Aniline	32	0	ND	ND	ND	0.001	---	0	---	No	100% Non-Detect
Benzidine	32	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Biphenyl	27	12	0.028	0.32	1.4	1.22	1	1	E16-BOR-04	Yes	[Maximum] > ESV
Bis(2-Chloro-1-Methylethyl) Ether	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Bis(2-Chloroethoxy)Methane	32	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Bis(2-Chloroethyl)Ether	32	0	ND	ND	ND	3.52	---	0	---	No	100% Non-Detect
Bis(2-Chloroisopropyl)Ether	5	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Bis(2-Ethylhexyl)Phthalate	32	12	0.13	0.62	2.4	0.182	13	9	D16-BOR-11	Yes	[Maximum] > ESV
Butyl Benzyl Phthalate	32	6	0.097	1.323	6	1.97	3	1	D16-BOR-11	Yes	[Maximum] > ESV
Carbazole	32	5	0.028	0.302	0.93	NESV	---	---	E16-BOR-04	Yes	No ESV Available
Dibenzofuran	27	10	0.019	0.593	3.2	2	2	1	E16-BOR-04	Yes	[Maximum] > ESV
Diethyl Phthalate	32	1	0.094	0.094	0.094	0.295	<1	0	D16-BOR-02	No	[Maximum] < ESV
Dimethyl Phthalate	32	0	ND	ND	ND	0.53	---	0	---	No	100% Non-Detect
Di-N-Butyl Phthalate	32	2	0.15	3.17	6.2	1.114	6	1	E16-BOR-04	Yes	[Maximum] > ESV
Diphenyl Ether	27	12	0.023	0.224	0.86	NESV	---	---	D16-BOR-11	Yes	No ESV Available
Hexachlorobenzene	32	3	0.008	0.803	2	0.02	100	2	E16-BOR-04	Yes	[Maximum] > ESV
Hexachlorobutadiene	32	0	ND	ND	ND	0.0265	---	0	---	No	100% Non-Detect

**Table 9**  
**Fluoroproducts Area Screening-Level Exposure Estimate for Bulk Sediment (0.5-1.0 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
Hexachlorocyclopentadiene	31	0	ND	ND	ND	0.901	---	0	---	No	100% Non-Detect
Hexachloroethane	32	0	ND	ND	ND	0.584	---	0	---	No	100% Non-Detect
Isophorone	32	0	ND	ND	ND	0.432	---	0	---	No	100% Non-Detect
N-Dioctyl Phthalate	32	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Nitrobenzene	32	5	0.025	1.255	5.3	0.145	37	2	E16-BOR-04	Yes	[Maximum] > ESV
N-Nitrosodimethylamine	32	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
N-Nitrosodi-N-Propylamine	32	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
N-Nitrosodiphenylamine	32	12	0.036	0.272	1.2	2.68	<1	0	E16-BOR-04	No	[Maximum] < ESV
O-Toluidine	32	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Parathion	27	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Pentachlorobenzene	27	1	0.25	0.25	0.25	0.69	<1	0	E16-BOR-04	No	[Maximum] < ESV
Pentachlorophenol	32	0	ND	ND	ND	23	---	0	---	No	100% Non-Detect
Phenol	32	5	0.039	0.216	0.47	0.0491	9.6	4	D16-BOR-11	Yes	[Maximum] > ESV
<b>Polychlorinated Biphenyls (mg/kg)</b>											
Total Monochlorobiphenyls (congeners)	27	27	0.000666	0.035465	0.432	NESV	---	---	E16-BOR-07	Yes	No ESV Available
Total Dichlorobiphenyls (congeners)	27	27	0.0016	0.0912	1.5	NESV	---	---	E16-BOR-07	Yes	No ESV Available
Total Trichlorobiphenyls (congeners)	27	27	0.000694	0.076546	0.665	NESV	---	---	E16-BOR-07	Yes	No ESV Available
Total Tetrachlorobiphenyls (congeners)	27	27	0.000163	0.075544	0.315	NESV	---	---	E16-BOR-05	Yes	No ESV Available
Total Pentachlorobiphenyls (congeners)	27	27	0.0000917	0.0496758	0.211	NESV	---	---	E16-BOR-05, E16-BOR-06	Yes	No ESV Available
Total Hexachlorobiphenyls (congeners)	27	27	0.0000499	0.0300177	0.135	NESV	---	---	E16-BOR-05	Yes	No ESV Available
Total Heptachlorobiphenyls (congeners)	27	27	0.0000271	0.014203	0.0686	NESV	---	---	E16-BOR-05	Yes	No ESV Available
Total Octachlorobiphenyls (congeners)	27	27	0.0000171	0.0061403	0.0252	NESV	---	---	E16-BOR-07	Yes	No ESV Available
Total Nonachlorobiphenyls (congeners)	27	27	0.0000117	0.0064163	0.0211	NESV	---	---	E16-BOR-07	Yes	No ESV Available
Total PCB (congeners)	27	27	0.0069633	0.3923523	2.9175	0.059	49.4	18	E16-BOR-07	Yes	[Maximum] > ESV
<b>Other Parameters</b>											
Total Organic Carbon (mg/kg)	39	32	550	23,607	84,400	NESV	---	---	D16-BOR-11	---	---
Black Carbon (mg/kg)	3	3	185	1,497	3,110	NESV	---	---	DER1-14	---	---
Percent Fines (% <0.064 mm)	30	30	1	43	88	NESV	---	---	D16-BOR-13	---	---
Percent Moisture (%)	58	58	8.2	33.5	61.1	NESV	---	---	DER1-13	---	---

**Notes:**

---, Not applicable.  
COPEC, Constituent of Potential Ecological Concern  
[Maximum], Maximum concentration  
ND, Not detected  
NESV, No Ecological Screening Value

**Table 10**  
**SWMU 5/Henby Creek Area Screening-Level Exposure Estimate for Bulk Sediment (0-0.5 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
<b>Metals (mg/kg)</b>											
Aluminum	13	13	1,450	10,205	24,300	25,500	<1	0	DER2-23-SD	No	[Maximum] < ESV
Antimony	13	5	1.61	2.1	2.75	2	1.4	3	DER2-25-SD	Yes	[Maximum] > ESV
Arsenic	13	13	1.99	5.41	13.5	9.979	1.4	2	DER2-23-SD	Yes	[Maximum] > ESV
Barium	13	13	13.9	61.1	97.7	NESV	---	---	DER2-23-SD	Yes	No ESV Available
Beryllium	13	12	0.107	0.52	1.12	NESV	---	---	DER2-23-SD	Yes	No ESV Available
Cadmium	13	11	0.177	0.518	0.985	0.6	1.6	5	DER3-13	Yes	[Maximum] > ESV
Calcium	13	13	379	5,111	17,400	NESV	---	---	DER2-22-SD	No	Essential Nutrient
Chromium	13	13	11.3	29.7	49.6	26	1.9	8	DER2-23-SD	Yes	[Maximum] > ESV
Cobalt	13	13	1.43	5.19	10.2	50	<1	0	DER3-16	No	[Maximum] < ESV
Copper	13	13	12	22	71.4	16	4.5	8	DER2-25-SD	Yes	[Maximum] > ESV
Iron	13	13	7,390	16,492	36,900	20,000	1.8	5	DER2-22-SD	Yes	[Maximum] > ESV
Lead	16	16	17.8	44.7	92.6	31	3	12	DER1-19	Yes	[Maximum] > ESV
Magnesium	13	13	351	2,595	6,670	NESV	---	---	DER2-23-SD	No	Essential Nutrient
Manganese	13	13	66.6	296.8	768	630	1.2	1	DER3-13	Yes	[Maximum] > ESV
Mercury	13	13	0.0787	0.7287	2.67	0.174	15.3	11	DER2-21-SD	Yes	[Maximum] > ESV
Nickel	13	13	5.06	13.65	24.8	16	1.6	5	DER2-23-SD	Yes	[Maximum] > ESV
Potassium	13	13	223	1,949	4,670	NESV	---	---	DER2-23-SD	No	Essential Nutrient
Selenium	13	1	1.74	1.74	1.74	2	<1	0	DER2-23-SD	No	[Maximum] < ESV
Silver	13	2	0.367	0.454	0.542	0.5	1.1	1	DER3-13	Yes	[Maximum] > ESV
Sodium	13	11	86.7	449.7	867	NESV	---	---	DER2-22-SD	No	Essential Nutrient
Thallium	13	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Tin	13	13	3.33	11.09	26.3	NESV	---	---	DER2-22-SD	Yes	No ESV Available
Vanadium	13	13	8.34	25.04	51.1	NESV	---	---	DER2-23-SD	Yes	No ESV Available
Zinc	13	13	59.5	94.5	141	120	1.2	3	DER3-16	Yes	[Maximum] > ESV
<b>Volatile Organic Compounds (mg/kg)</b>											
1,1,1-Trichloroethane	4	0	ND	ND	ND	0.213	---	0	--	No	100% Non-Detect
1,1,2,2-Tetrachloroethane	4	0	ND	ND	ND	0.85	---	0	--	No	100% Non-Detect
1,1,2-Trichloroethane	4	0	ND	ND	ND	0.518	---	0	--	No	100% Non-Detect
1,1,2-Trichlorotrifluoroethane	4	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
1,1-Dichloroethane	4	0	ND	ND	ND	0.000575	---	0	--	No	100% Non-Detect
1,1-Dichloroethene	4	0	ND	ND	ND	0.0194	---	0	--	No	100% Non-Detect
1,2-Dichlorobenzene	13	8	0.053	0.562	2.2	0.294	7.5	4	DER2-23-SD	Yes	[Maximum] > ESV
1,2-Dichloroethane	4	0	ND	ND	ND	0.26	---	0	--	No	100% Non-Detect
1,2-Dichloropropane	4	0	ND	ND	ND	0.333	---	0	--	No	100% Non-Detect
1,3-Dichlorobenzene	13	0	ND	ND	ND	1.315	---	0	--	No	100% Non-Detect
1,4-Dichlorobenzene	13	5	0.24	0.44	1	0.318	3.1	3	DER2-23-SD	Yes	[Maximum] > ESV
Acetone	4	2	0.023	0.027	0.031	0.0099	3.1	2	DER3-15	Yes	[Maximum] > ESV
Acrolein	4	0	ND	ND	ND	0.0000152	---	0	--	No	100% Non-Detect
Acrylonitrile	4	0	ND	ND	ND	0.0012	---	0	--	No	100% Non-Detect
Benzene	4	0	ND	ND	ND	0.142	---	0	--	No	100% Non-Detect

**Table 10**  
**SWMU 5/Henby Creek Area Screening-Level Exposure Estimate for Bulk Sediment (0-0.5 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
Bromodichloromethane	4	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Bromoform	4	0	ND	ND	ND	0.492	---	0	--	No	100% Non-Detect
Carbon Disulfide	4	4	0.002	0.006	0.008	0.0239	<1	0	DER3-13	No	[Maximum] < ESV
Carbon Tetrachloride	4	0	ND	ND	ND	1.45	---	0	--	No	100% Non-Detect
Chlorobenzene	4	1	0.024	0.024	0.024	0.291	<1	0	DER3-13	No	[Maximum] < ESV
Chlorodibromomethane	4	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Chloroform	4	0	ND	ND	ND	0.121	---	0	--	No	100% Non-Detect
cis-1,2 Dichloroethene	4	0	ND	ND	ND	0.654	---	0	--	No	100% Non-Detect
cis-1,3-Dichloropropene	4	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Dichlorodifluoromethane	4	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Dichlorofluoromethane	4	1	0.008	0.008	0.008	NESV	---	---	DER3-13	Yes	No ESV Available
Ethyl Chloride	4	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Ethylbenzene	4	0	ND	ND	ND	0.175	---	0	--	No	100% Non-Detect
Methyl Bromide	4	0	ND	ND	ND	0.00137	---	0	--	No	100% Non-Detect
Methyl Chloride	4	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Methylene Chloride	4	0	ND	ND	ND	0.159	---	0	--	No	100% Non-Detect
Tetrachloroethene	4	0	ND	ND	ND	0.99	---	0	--	No	100% Non-Detect
Toluene	4	1	0.005	0.005	0.005	1.22	<1	0	DER3-13	No	[Maximum] < ESV
trans-1,2-Dichloroethene	4	0	ND	ND	ND	0.654	---	0	--	No	100% Non-Detect
trans-1,3-Dichloropropene	4	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Trichloroethene	4	0	ND	ND	ND	0.112	---	0	--	No	100% Non-Detect
Trichlorofluoromethane	4	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Vinyl Chloride	4	0	ND	ND	ND	0.202	---	0	--	No	100% Non-Detect
Xylenes	4	0	ND	ND	ND	0.433	---	0	--	No	100% Non-Detect
<b>Polycyclic Aromatic Hydrocarbons (mg/kg)</b>											
Acenaphthene	13	2	0.053	0.256	0.46	0.00671	68.6	2	DER2-23-SD	Yes	[Maximum] > ESV
Acenaphthylene	13	0	ND	ND	ND	0.00587	---	0	--	No	100% Non-Detect
Anthracene	13	3	0.15	1	2.7	0.22	12.3	1	DER2-23-SD	Yes	[Maximum] > ESV
Benzo(A)Anthracene	13	11	0.07	0.6	4.6	0.32	14.4	3	DER2-23-SD	Yes	[Maximum] > ESV
Benzo(B)Fluoranthene	13	12	0.054	0.376	2.4	10.4	<1	0	DER2-23-SD	No	[Maximum] < ESV
Benzo(G,H,I)Perylene	13	9	0.047	0.234	1.2	0.17	7.1	3	DER2-23-SD	Yes	[Maximum] > ESV
Benzo(K)Fluoranthene	13	6	0.042	0.238	1.1	0.24	4.6	1	DER2-23-SD	Yes	[Maximum] > ESV
Benzo[A]Pyrene	13	10	0.064	0.464	3.1	0.37	8.4	2	DER2-23-SD	Yes	[Maximum] > ESV
Chrysene	13	11	0.057	0.994	7.4	0.34	21.8	3	DER2-23-SD	Yes	[Maximum] > ESV
Dibenz(A,H)Anthracene	13	1	0.05	0.05	0.05	0.06	<1	0	DER2-21-SD	No	[Maximum] < ESV
Fluoranthene	13	11	0.075	0.584	4	0.75	5.3	1	DER2-23-SD	Yes	[Maximum] > ESV
Fluorene	13	2	0.052	0.526	1	0.19	5.3	1	DER2-23-SD	Yes	[Maximum] > ESV
Indeno (1,2,3-CD) Pyrene	13	7	0.043	0.209	0.94	0.2	4.7	1	DER2-23-SD	Yes	[Maximum] > ESV
Naphthalene	18	5	0.05	0.46	1.9	0.176	10.8	1	DER2-23-SD	Yes	[Maximum] > ESV
Phenanthrene	13	9	0.053	0.953	7.6	0.56	13.6	1	DER2-23-SD	Yes	[Maximum] > ESV
Pyrene	13	13	0.054	0.84	7.3	0.49	14.9	3	DER2-23-SD	Yes	[Maximum] > ESV

**Table 10**  
**SWMU 5/Henby Creek Area Screening-Level Exposure Estimate for Bulk Sediment (0-0.5 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
Total PAHs (Detections + 1/2 MDL)	13	13	0.4445	5.3617	45.88	4	11.5	3	DER2-23-SD	Yes	[Maximum] > ESV
Total PAHs (Detections Only)	13	13	0.14	4.96	45.7	4	11.4	2	DER2-23-SD	Yes	[Maximum] > ESV
<b>Semi-Volatile Organic Compounds (mg/kg)</b>											
1,2,4-Trichlorobenzene	13	3	0.094	0.538	1.4	5.062	<1	0	DER2-23-SD	No	[Maximum] < ESV
1,2-Diphenylhydrazine	13	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
1-Naphthylamine	17	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
2,4,6-Trichlorophenol	13	0	ND	ND	ND	0.208	---	0	--	No	100% Non-Detect
2,4-Dichlorophenol	13	0	ND	ND	ND	0.0817	---	0	--	No	100% Non-Detect
2,4-Dimethylphenol	13	0	ND	ND	ND	0.304	---	0	--	No	100% Non-Detect
2,4-Dinitrophenol	13	0	ND	ND	ND	0.00621	---	0	--	No	100% Non-Detect
2,4-Dinitrotoluene	13	2	0.22	0.33	0.45	0.0144	31.3	2	DER1-18	Yes	[Maximum] > ESV
2,6-Dinitrotoluene	13	1	0.042	0.042	0.042	0.0398	1.1	1	DER1-18	Yes	[Maximum] > ESV
2-Chloronaphthalene	13	1	0.37	0.37	0.37	0.417	<1	0	DER2-23-SD	No	[Maximum] < ESV
2-Chlorophenol	13	0	ND	ND	ND	0.0319	---	0	--	No	100% Non-Detect
2-Naphthylamine	17	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
2-Nitrophenol	13	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
3,3'-Dichlorobenzidine	12	0	ND	ND	ND	0.127	---	0	--	No	100% Non-Detect
3,3'-Dimethylbenzidine	5	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
4,6-Dinitro-2-Methylphenol	13	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
4-Aminobiphenyl	12	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
4-Bromophenyl Phenyl Ether	13	0	ND	ND	ND	1.55	---	0	--	No	100% Non-Detect
4-Chloro-3-Methylphenol	13	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
4-Chloroaniline	23	4	0.068	0.147	0.21	0.146	1.4	3	5B-P3-17	Yes	[Maximum] > ESV
4-Chlorophenyl Phenyl Ether	13	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
4-Nitrophenol	13	0	ND	ND	ND	0.0133	---	0	--	No	100% Non-Detect
Aniline	23	0	ND	ND	ND	0.001	---	0	--	No	100% Non-Detect
Benzidine	11	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Bis(2-Chloroethoxy)Methane	13	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Bis(2-Chloroethyl)Ether	13	0	ND	ND	ND	3.52	---	0	--	No	100% Non-Detect
Bis(2-Chloroisopropyl)Ether	13	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Bis(2-Ethylhexyl)Phthalate	13	2	0.1	0.1	0.13	0.182	<1	0	DER2-25-SD	No	[Maximum] < ESV
Butyl Benzyl Phthalate	13	0	ND	ND	ND	1.97	---	0	--	No	100% Non-Detect
Carbazole	13	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Diethyl Phthalate	13	0	ND	ND	ND	0.295	---	0	--	No	100% Non-Detect
Dimethyl Phthalate	13	0	ND	ND	ND	0.53	---	0	--	No	100% Non-Detect
Di-N-Butyl Phthalate	13	5	0.25	0.76	1.8	1.114	1.6	1	DER2-24-SD	Yes	[Maximum] > ESV
Hexachlorobenzene	13	0	ND	ND	ND	0.02	---	0	--	No	100% Non-Detect
Hexachlorobutadiene	13	0	ND	ND	ND	0.0265	---	0	--	No	100% Non-Detect
Hexachlorocyclopentadiene	12	0	ND	ND	ND	0.901	---	0	--	No	100% Non-Detect
Hexachloroethane	13	0	ND	ND	ND	0.584	---	0	--	No	100% Non-Detect
Isophorone	13	0	ND	ND	ND	0.432	---	0	--	No	100% Non-Detect

**Table 10**  
**SWMU 5/Henby Creek Area Screening-Level Exposure Estimate for Bulk Sediment (0-0.5 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
N-Dioctyl Phthalate	13	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Nitrobenzene	18	4	0.064	1.318	3	0.145	20.7	3	DER3-13	Yes	[Maximum] > ESV
N-Nitrosodimethylamine	13	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
N-Nitrosodi-N-Propylamine	13	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
N-Nitrosodiphenylamine	13	8	0.047	0.19	0.54	2.68	<1	0	DER2-23-SD	No	[Maximum] < ESV
O-Toluidine	13	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
Pentachlorophenol	13	0	ND	ND	ND	23	---	0	--	No	100% Non-Detect
Phenol	13	0	ND	ND	ND	0.0491	---	0	--	No	100% Non-Detect
<b>Polychlorinated Biphenyls (mg/kg)</b>											
Total Monochlorobiphenyls (congeners)	2	2	0.000168	0.000267	0.000366	NESV	---	---	DER1-18	Yes	No ESV Available
Total Dichlorobiphenyls (congeners)	2	2	0.0005	0.0008	0.00108	NESV	---	---	DER1-18	Yes	No ESV Available
Total Trichlorobiphenyls (congeners)	2	2	0.000937	0.000953	0.000969	NESV	---	---	DER2-23-SD	Yes	No ESV Available
Total Tetrachlorobiphenyls (congeners)	2	2	0.00156	0.0019	0.00225	NESV	---	---	DER2-23-SD	Yes	No ESV Available
Total Pentachlorobiphenyls (congeners)	2	2	0.00281	0.00291	0.00302	NESV	---	---	DER1-18	Yes	No ESV Available
Total Hexachlorobiphenyls (congeners)	2	2	0.00272	0.0031	0.00348	NESV	---	---	DER1-18	Yes	No ESV Available
Total Heptachlorobiphenyls (congeners)	2	2	0.00131	0.00139	0.00147	NESV	---	---	DER1-18	Yes	No ESV Available
Total Octachlorobiphenyls (congeners)	2	2	0.000732	0.000744	0.000756	NESV	---	---	DER2-23-SD	Yes	No ESV Available
Total Nonachlorobiphenyls (congeners)	2	2	0.000962	0.001266	0.00157	NESV	---	---	DER2-23-SD	Yes	No ESV Available
Total PCB (congeners)	2	2	0.014357	0.014615	0.014873	0.059	<1	0	DER2-23-SD	No	[Maximum] < ESV
<b>Other Parameters</b>											
Total Organic Carbon (mg/kg)	18	18	360	7,210	44,850	NESV	---	---	DER2-22-SD	---	---
Black Carbon (mg/kg)	12	12	125	1,723	5,820	NESV	---	---	DER2-22-SD	---	---
Percent Fines (% <0.064 mm)	18	18	1	40	88	NESV	---	---	SS-42	---	---
Percent Moisture (%)	25	25	16.5	35.7	76.4	NESV	---	---	5B-P3-8	---	---

**Notes:**

---, Not applicable.  
COPEC, Constituent of Potential Ecological Concern  
[Maximum], Maximum concentration  
ND, Not detected  
NESV, No Ecological Screening Value

**Table 11**  
**SWMU 5/Henby Creek Area Screening-Level Exposure Estimate for Bulk Sediment (0.5-1.0 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
<b>Metals (mg/kg)</b>											
Lead	1	1	141	141	141	31	4.5	1	SS-18	Yes	[Maximum] > ESV
<b>Volatile Organic Compounds (mg/kg)</b>											
1,1,1-Trichloroethane	13	0	ND	ND	ND	0.213	---	0	---	No	100% Non-Detect
1,1,2,2-Tetrachloroethane	13	0	ND	ND	ND	0.85	---	0	---	No	100% Non-Detect
1,1,2-Trichloroethane	13	0	ND	ND	ND	0.518	---	0	---	No	100% Non-Detect
1,1,2-Trichlorotrifluoroethane	13	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
1,1-Dichloroethane	13	0	ND	ND	ND	0.000575	---	0	---	No	100% Non-Detect
1,1-Dichloroethene	13	0	ND	ND	ND	0.0194	---	0	---	No	100% Non-Detect
1,2-Dichlorobenzene	1	1	1.9	1.9	1.9	0.294	6.5	1	SS-18	Yes	[Maximum] > ESV
1,2-Dichloroethane	13	1	0.003	0.003	0.003	0.26	<1	0	DER3-13	No	[Maximum] < ESV
1,2-Dichloropropane	13	0	ND	ND	ND	0.333	---	0	---	No	100% Non-Detect
1,4-Dichlorobenzene	1	1	0.49	0.49	0.49	0.318	1.5	1	SS-18	Yes	[Maximum] > ESV
Acetone	13	12	0.009	0.054	0.38	0.0099	38.4	10	DER3-15	Yes	[Maximum] > ESV
Acrolein	13	0	ND	ND	ND	0.00000152	---	0	---	No	100% Non-Detect
Acrylonitrile	13	0	ND	ND	ND	0.0012	---	0	---	No	100% Non-Detect
Benzene	13	4	0.003	0.004	0.005	0.142	<1	0	DER2-21-SD, DER3-15	No	[Maximum] < ESV
Bromodichloromethane	13	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Bromoform	13	0	ND	ND	ND	0.492	---	0	---	No	100% Non-Detect
Carbon Disulfide	13	10	0.001	0.007	0.028	0.0239	1.2	1	DER3-15	Yes	[Maximum] > ESV
Carbon Tetrachloride	13	0	ND	ND	ND	1.45	---	0	---	No	100% Non-Detect
Chlorobenzene	14	6	0.02	0.21	0.57	0.291	2	2	DER3-15	Yes	[Maximum] > ESV
Chlorodibromomethane	13	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Chloroform	13	2	0.001	0.006	0.01	0.121	<1	0	DER3-13	No	[Maximum] < ESV
cis-1,2 Dichloroethene	13	1	0.003	0.003	0.003	0.654	<1	0	DER2-21-SD	No	[Maximum] < ESV
cis-1,3-Dichloropropene	13	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Dichlorodifluoromethane	13	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Dichlorofluoromethane	13	2	0.003	0.008	0.013	NESV	---	---	DER3-13	Yes	No ESV Available
Ethyl Chloride	13	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Ethylbenzene	13	0	ND	ND	ND	0.175	---	0	---	No	100% Non-Detect
Methyl Bromide	13	0	ND	ND	ND	0.00137	---	0	---	No	100% Non-Detect
Methyl Chloride	13	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Methylene Chloride	13	2	0.003	0.005	0.006	0.159	<1	0	DER2-21-SD	No	[Maximum] < ESV
Tetrachloroethene	13	1	0.001	0.001	0.001	0.99	<1	0	DER3-13	No	[Maximum] < ESV
Toluene	13	3	0.001	0.004	0.01	1.22	<1	0	DER3-15	No	[Maximum] < ESV
trans-1,2-Dichloroethene	13	0	ND	ND	ND	0.654	---	0	---	No	100% Non-Detect
trans-1,3-Dichloropropene	13	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Trichloroethene	13	1	0.002	0.002	0.002	0.112	<1	0	DER2-21-SD	No	[Maximum] < ESV
Trichlorofluoromethane	13	1	0.031	0.031	0.031	NESV	---	---	DER3-13	Yes	No ESV Available
Vinyl Chloride	13	1	0.001	0.001	0.001	0.202	<1	0	DER2-21-SD	No	[Maximum] < ESV

**Table 11**  
**SWMU 5/Henby Creek Area Screening-Level Exposure Estimate for Bulk Sediment (0.5-1.0 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
Xylenes	13	3	0.002	0.008	0.016	0.433	<1	0	DER3-15	No	[Maximum] < ESV
<b>Polycyclic Aromatic Hydrocarbons (mg/kg)</b>											
Naphthalene	1	1	1.9	1.9	1.9	0.176	10.8	1	SS-18	Yes	[Maximum] > ESV
<b>Semi-Volatile Organic Compounds (mg/kg)</b>											
1,2,4-Trichlorobenzene	1	0	ND	ND	ND	5.062	---	0	---	No	100% Non-Detect
1-Naphthylamine	1	1	2	2	2	NESV	---	---	SS-18	Yes	No ESV Available
2-Naphthylamine	1	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
3,3'-Dimethylbenzidine	1	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Chloroaniline	1	0	ND	ND	ND	0.146	---	0	---	No	100% Non-Detect
Aniline	1	0	ND	ND	ND	0.001	---	0	---	No	100% Non-Detect
Nitrobenzene	1	1	0.36	0.36	0.36	0.145	2.5	1	SS-18	Yes	[Maximum] > ESV
<b>Other Parameters</b>											
Total Organic Carbon (mg/kg)	9	9	535	18,152	95,350	NESV	---	---	DER2-22-SD	---	---
Black Carbon (mg/kg)	4	3	540	925	1,400	NESV	---	---	DER1-17	---	---
Percent Fines (% <0.064 mm)	1	1	2.5	2.5	2.5	NESV	---	---	SS-18	---	---
Percent Moisture (%)	14	14	13.6	32.7	80.9	NESV	---	---	DER3-15	---	---

**Notes:**

---, Not applicable.

COPEC, Constituent of Potential Ecological Concern

[Maximum], Maximum concentration

ND, Not detected

NESV, No Ecological Screening Value

**Table 12**  
**Carneys Point Zone Screening-Level Exposure Estimate for Bulk Sediment (0-0.5 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
<b>Metals (mg/kg)</b>											
Aluminum	16	16	3,530	12,216	21,100	25,500	<1	0	DER1-27	No	[Maximum] < ESV
Antimony	21	2	0.12	0.47	0.82	2	<1	0	52-R-3	No	[Maximum] < ESV
Arsenic	21	21	1.76	5.59	9.63	9.979	<1	0	DER1-27	No	[Maximum] < ESV
Barium	16	16	17.3	65.1	135	NESV	---	---	DER1-27	Yes	No ESV Available
Beryllium	21	17	0.115	0.595	0.97	NESV	---	---	52-R-8	Yes	No ESV Available
Cadmium	21	17	0.012	0.472	1.06	0.6	1.8	7	DER3-18	Yes	[Maximum] > ESV
Calcium	16	16	442	2,424	5,210	NESV	---	---	DER3-17	No	Essential Nutrient
Chromium	21	21	9.41	31.18	54	26	2.1	11	DER1-27	Yes	[Maximum] > ESV
Cobalt	16	16	2.48	7.64	14.1	50	<1	0	DER1-27	No	[Maximum] < ESV
Copper	21	21	6	18	57.4	16	3.6	8	DER3-17	Yes	[Maximum] > ESV
Iron	16	16	5,110	19,041	33,000	20,000	1.7	8	DER1-27	Yes	[Maximum] > ESV
Lead	22	22	4.6	26.4	57.6	31	1.9	7	DER3-17	Yes	[Maximum] > ESV
Magnesium	16	16	926	3,428	6,190	NESV	---	---	DER1-27	No	Essential Nutrient
Manganese	16	16	63	502	1,200	630	1.9	5	DER1-27	Yes	[Maximum] > ESV
Mercury	23	21	0.02	0.27	1.26	0.174	7.2	8	DER1-20	Yes	[Maximum] > ESV
Nickel	21	21	5.34	16	28.9	16	1.8	10	DER1-27	Yes	[Maximum] > ESV
Potassium	16	16	602	2,015	3,490	NESV	---	---	DER1-27	No	Essential Nutrient
Selenium	21	6	0.16	0.54	2.07	2	1	1	DER2-27-SD	Yes	[Maximum] > ESV
Silver	16	0	ND	ND	ND	0.5	---	0	---	No	100% Non-Detect
Sodium	16	16	87.7	331.9	655	NESV	---	---	DER3-17	No	Essential Nutrient
Thallium	16	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Tin	16	16	2.34	5.79	17.1	NESV	---	---	DER1-20	Yes	No ESV Available
Vanadium	16	16	9.12	29.93	52.1	NESV	---	---	DER1-27	Yes	No ESV Available
Zinc	21	21	22.6	97.6	223	120	1.9	7	DER1-27	Yes	[Maximum] > ESV
<b>Volatile Organic Compounds (mg/kg)</b>											
1,1,1-Trichloroethane	3	0	ND	ND	ND	0.213	---	0	---	No	100% Non-Detect
1,1,2,2-Tetrachloroethane	3	0	ND	ND	ND	0.85	---	0	---	No	100% Non-Detect
1,1,2-Trichloroethane	3	0	ND	ND	ND	0.518	---	0	---	No	100% Non-Detect
1,1,2-Trichlorotrifluoroethane	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
1,1-Dichloroethane	3	0	ND	ND	ND	0.000575	---	0	---	No	100% Non-Detect
1,1-Dichloroethene	3	0	ND	ND	ND	0.0194	---	0	---	No	100% Non-Detect
1,2-Dichlorobenzene	16	3	0.1	0.4	0.5	0.294	1.7	2	DER2-29-SD, DER3-17	Yes	[Maximum] > ESV
1,2-Dichloroethane	3	0	ND	ND	ND	0.26	---	0	---	No	100% Non-Detect
1,2-Dichloropropane	3	0	ND	ND	ND	0.333	---	0	---	No	100% Non-Detect
1,3-Dichlorobenzene	16	0	ND	ND	ND	1.315	---	0	---	No	100% Non-Detect
1,4-Dichlorobenzene	16	3	0.14	0.5	1.2	0.318	3.8	1	DER2-29-SD	Yes	[Maximum] > ESV
Acetone	3	3	0.016	0.077	0.15	0.0099	15.2	3	DER3-27	Yes	[Maximum] > ESV
Acrolein	3	0	ND	ND	ND	0.00000152	---	0	---	No	100% Non-Detect
Acrylonitrile	3	0	ND	ND	ND	0.0012	---	0	---	No	100% Non-Detect

**Table 12**  
**Carneys Point Zone Screening-Level Exposure Estimate for Bulk Sediment (0-0.5 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
Benzene	3	1	0.002	0.002	0.002	0.142	<1	0	DER3-17	No	[Maximum] < ESV
Bromodichloromethane	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Bromoform	3	0	ND	ND	ND	0.492	---	0	---	No	100% Non-Detect
Carbon Disulfide	3	3	0.005	0.011	0.022	0.0239	<1	0	DER3-27	No	[Maximum] < ESV
Carbon Tetrachloride	3	0	ND	ND	ND	1.45	---	0	---	No	100% Non-Detect
Chlorobenzene	3	0	ND	ND	ND	0.291	---	0	---	No	100% Non-Detect
Chlorodibromomethane	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Chloroform	3	0	ND	ND	ND	0.121	---	0	---	No	100% Non-Detect
cis-1,2 Dichloroethene	3	0	ND	ND	ND	0.654	---	0	---	No	100% Non-Detect
cis-1,3-Dichloropropene	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Dichlorodifluoromethane	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Dichlorofluoromethane	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Ethyl Chloride	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Ethylbenzene	3	0	ND	ND	ND	0.175	---	0	---	No	100% Non-Detect
Methyl Bromide	3	0	ND	ND	ND	0.00137	---	0	---	No	100% Non-Detect
Methyl Chloride	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Methylene Chloride	3	0	ND	ND	ND	0.159	---	0	---	No	100% Non-Detect
Tetrachloroethene	3	0	ND	ND	ND	0.99	---	0	---	No	100% Non-Detect
Toluene	3	0	ND	ND	ND	1.22	---	0	---	No	100% Non-Detect
trans-1,2-Dichloroethene	3	0	ND	ND	ND	0.654	---	0	---	No	100% Non-Detect
trans-1,3-Dichloropropene	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Trichloroethene	3	0	ND	ND	ND	0.112	---	0	---	No	100% Non-Detect
Trichlorofluoromethane	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Vinyl Chloride	3	0	ND	ND	ND	0.202	---	0	---	No	100% Non-Detect
Xylenes	3	0	ND	ND	ND	0.433	---	0	---	No	100% Non-Detect
<b>Polycyclic Aromatic Hydrocarbons (mg/kg)</b>											
Acenaphthene	21	0	ND	ND	ND	0.00671	---	0	---	No	100% Non-Detect
Acenaphthylene	21	1	0.099	0.099	0.099	0.00587	16.9	1	DER2-26-SD	<b>Yes</b>	[Maximum] > ESV
Anthracene	21	1	0.082	0.082	0.082	0.22	<1	0	DER1-22	No	[Maximum] < ESV
Benzo(A)Anthracene	21	8	0.059	0.146	0.34	0.32	1.1	1	DER1-22	<b>Yes</b>	[Maximum] > ESV
Benzo(B)Fluoranthene	21	10	0.066	0.17	0.35	10.4	<1	0	DER1-22	No	[Maximum] < ESV
Benzo(G,H,I)Perylene	21	6	0.053	0.102	0.17	0.17	1	0	DER1-22	No	[Maximum] < ESV
Benzo(K)Fluoranthene	21	4	0.051	0.088	0.14	0.24	<1	0	DER1-22	No	[Maximum] < ESV
Benzo[A]Pyrene	21	8	0.061	0.155	0.27	0.37	<1	0	DER1-22	No	[Maximum] < ESV
Chrysene	21	8	0.064	0.173	0.37	0.34	1.1	1	DER1-22	<b>Yes</b>	[Maximum] > ESV
Dibenz(A,H)Anthracene	21	0	ND	ND	ND	0.06	---	0	---	No	100% Non-Detect
Fluoranthene	21	11	0.083	0.22	0.66	0.75	<1	0	DER1-22	No	[Maximum] < ESV
Fluorene	16	0	ND	ND	ND	0.19	---	0	---	No	100% Non-Detect
Indeno (1,2,3-CD) Pyrene	21	3	0.077	0.111	0.16	0.2	<1	0	DER1-22	No	[Maximum] < ESV
Naphthalene	21	3	0.089	0.1	0.12	0.176	<1	0	DER3-18	No	[Maximum] < ESV
Phenanthrene	21	7	0.061	0.137	0.24	0.56	<1	0	DER1-22	No	[Maximum] < ESV

**Table 12**  
**Carneys Point Zone Screening-Level Exposure Estimate for Bulk Sediment (0-0.5 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
Pyrene	21	12	0.061	0.216	0.53	0.49	1.1	1	DER1-22	Yes	[Maximum] > ESV
Total PAHs (Detections + 1/2 MDL)	21	12	0.406	1.523	3.4545	4	<1	0	DER1-22	No	[Maximum] < ESV
Total PAHs (Detections Only)	21	12	0.061	1.104	3.312	4	<1	0	DER1-22	No	[Maximum] < ESV
<b>Semi-Volatile Organic Compounds (mg/kg)</b>											
1,2,4-Trichlorobenzene	16	1	0.22	0.22	0.22	5.062	<1	0	DER2-29-SD	No	[Maximum] < ESV
1,2-Diphenylhydrazine	16	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
1-Naphthylamine	16	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2,4,6-Trichlorophenol	16	0	ND	ND	ND	0.208	---	0	---	No	100% Non-Detect
2,4-Dichlorophenol	16	0	ND	ND	ND	0.0817	---	0	---	No	100% Non-Detect
2,4-Dimethylphenol	16	0	ND	ND	ND	0.304	---	0	---	No	100% Non-Detect
2,4-Dinitrophenol	16	0	ND	ND	ND	0.00621	---	0	---	No	100% Non-Detect
2,4-Dinitrotoluene	21	0	ND	ND	ND	0.0144	---	0	---	No	100% Non-Detect
2,6-Dinitrotoluene	21	0	ND	ND	ND	0.0398	---	0	---	No	100% Non-Detect
2-Chloronaphthalene	16	0	ND	ND	ND	0.417	---	0	---	No	100% Non-Detect
2-Chlorophenol	16	0	ND	ND	ND	0.0319	---	0	---	No	100% Non-Detect
2-Naphthylamine	16	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2-Nitrophenol	16	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
3,3'-Dichlorobenzidine	16	0	ND	ND	ND	0.127	---	0	---	No	100% Non-Detect
4,6-Dinitro-2-Methylphenol	16	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Aminobiphenyl	16	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Bromophenyl Phenyl Ether	16	0	ND	ND	ND	1.55	---	0	---	No	100% Non-Detect
4-Chloro-3-Methylphenol	16	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Chloroaniline	16	0	ND	ND	ND	0.146	---	0	---	No	100% Non-Detect
4-Chlorophenyl Phenyl Ether	16	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Nitrophenol	16	0	ND	ND	ND	0.0133	---	0	---	No	100% Non-Detect
Aniline	16	0	ND	ND	ND	0.001	---	0	---	No	100% Non-Detect
Benzidine	15	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Bis(2-Chloroethoxy)Methane	16	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Bis(2-Chloroethyl)Ether	16	0	ND	ND	ND	3.52	---	0	---	No	100% Non-Detect
Bis(2-Chloroisopropyl)Ether	16	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Bis(2-Ethylhexyl)Phthalate	21	2	0.23	0.32	0.41	0.182	2.3	2	DER2-29-SD	Yes	[Maximum] > ESV
Butyl Benzyl Phthalate	16	0	ND	ND	ND	1.97	---	0	---	No	100% Non-Detect
Carbazole	16	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Diethyl Phthalate	16	0	ND	ND	ND	0.295	---	0	---	No	100% Non-Detect
Dimethyl Phthalate	16	0	ND	ND	ND	0.53	---	0	---	No	100% Non-Detect
Di-N-Butyl Phthalate	21	0	ND	ND	ND	1.114	---	0	---	No	100% Non-Detect
Hexachlorobenzene	16	0	ND	ND	ND	0.02	---	0	---	No	100% Non-Detect
Hexachlorobutadiene	16	0	ND	ND	ND	0.0265	---	0	---	No	100% Non-Detect
Hexachlorocyclopentadiene	14	0	ND	ND	ND	0.901	---	0	---	No	100% Non-Detect
Hexachloroethane	16	0	ND	ND	ND	0.584	---	0	---	No	100% Non-Detect
Isophorone	16	0	ND	ND	ND	0.432	---	0	---	No	100% Non-Detect

**Table 12**  
**Carneys Point Zone Screening-Level Exposure Estimate for Bulk Sediment (0-0.5 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
N-Dioctyl Phthalate	16	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Nitrobenzene	16	2	0.16	0.29	0.42	0.145	2.9	2	DER3-17	Yes	[Maximum] > ESV
N-Nitrosodimethylamine	16	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
N-Nitrosodi-N-Propylamine	16	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
N-Nitrosodiphenylamine	21	2	0.12	0.13	0.14	2.68	<1	0	DER3-17	No	[Maximum] < ESV
O-Toluidine	16	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Pentachlorophenol	16	0	ND	ND	ND	23	---	0	---	No	100% Non-Detect
Phenol	16	0	ND	ND	ND	0.0491	---	0	---	No	100% Non-Detect
<b>Polychlorinated Biphenyls (mg/kg)</b>											
Total Monochlorobiphenyls (congeners)	5	5	0.000172	0.000351	0.000542	NESV	---	---	DER2-29-SD	Yes	No ESV Available
Total Dichlorobiphenyls (congeners)	5	5	0.00067	0.00131	0.00213	NESV	---	---	DER2-29-SD	Yes	No ESV Available
Total Trichlorobiphenyls (congeners)	5	5	0.000861	0.00237	0.00371	NESV	---	---	DER2-29-SD	Yes	No ESV Available
Total Tetrachlorobiphenyls (congeners)	5	5	0.00131	0.00513	0.00915	NESV	---	---	DER2-29-SD	Yes	No ESV Available
Total Pentachlorobiphenyls (congeners)	5	5	0.00182	0.00747	0.013	NESV	---	---	DER2-29-SD	Yes	No ESV Available
Total Hexachlorobiphenyls (congeners)	5	5	0.00214	0.00749	0.0131	NESV	---	---	DER2-29-SD	Yes	No ESV Available
Total Heptachlorobiphenyls (congeners)	5	5	0.00103	0.00359	0.00567	NESV	---	---	DER2-29-SD	Yes	No ESV Available
Total Octachlorobiphenyls (congeners)	5	5	0.000541	0.00208	0.00347	NESV	---	---	DER2-29-SD	Yes	No ESV Available
Total Nonachlorobiphenyls (congeners)	5	5	0.00132	0.00512	0.0104	NESV	---	---	DER1-27	Yes	No ESV Available
Total PCB (congeners)	5	5	0.011606	0.041885	0.071702	0.059	1.2	2	DER1-27	Yes	[Maximum] > ESV
<b>Other Parameters</b>											
Total Organic Carbon (mg/kg)	22	22	860	17,178	136,000	NESV	---	---	52-R-7	---	---
Black Carbon (mg/kg)	7	7	475	3,044	6,850	NESV	---	---	DER3-18	---	---
Percent Fines (% <0.064 mm)	22	22	8	44	86	NESV	---	---	52-R-8	---	---
Percent Moisture (%)	27	27	18.1	43	82.9	NESV	---	---	R-16	---	---

**Notes:**

---, Not applicable.  
COPEC, Constituent of Potential Ecological Concern  
[Maximum], Maximum concentration  
ND, Not detected  
NESV, No Ecological Screening Value

**Table 13**  
**Carneys Point Zone Screening-Level Exposure Estimate for Bulk Sediment (0.5-1.0 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Minimum Concentration	Mean Concentration	Maximum Concentration	Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
<b>Volatile Organic Compounds (mg/kg)</b>											
1,1,1-Trichloroethane	16	0	ND	ND	ND	0.213	---	0	---	No	100% Non-Detect
1,1,2,2-Tetrachloroethane	16	0	ND	ND	ND	0.85	---	0	---	No	100% Non-Detect
1,1,2-Trichloroethane	16	0	ND	ND	ND	0.518	---	0	---	No	100% Non-Detect
1,1,2-Trichlorotrifluoroethane	16	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
1,1-Dichloroethane	16	0	ND	ND	ND	0.000575	---	0	---	No	100% Non-Detect
1,1-Dichloroethene	16	0	ND	ND	ND	0.0194	---	0	---	No	100% Non-Detect
1,2-Dichloroethane	16	0	ND	ND	ND	0.26	---	0	---	No	100% Non-Detect
1,2-Dichloropropane	16	0	ND	ND	ND	0.333	---	0	---	No	100% Non-Detect
Acetone	16	14	0.013	0.093	0.88	0.0099	89	14	DER1-20	Yes	[Maximum] > ESV
Acrolein	15	0	ND	ND	ND	0.00000152	---	0	---	No	100% Non-Detect
Acrylonitrile	16	0	ND	ND	ND	0.0012	---	0	---	No	100% Non-Detect
Benzene	16	1	0.0009	0.0009	0.0009	0.142	<1	0	DER3-17	No	[Maximum] < ESV
Bromodichloromethane	16	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Bromoform	16	0	ND	ND	ND	0.492	---	0	---	No	100% Non-Detect
Carbon Disulfide	16	10	0.002	0.007	0.018	0.0239	<1	0	DER1-20	No	[Maximum] < ESV
Carbon Tetrachloride	16	0	ND	ND	ND	1.45	---	0	---	No	100% Non-Detect
Chlorobenzene	16	2	0.012	0.014	0.015	0.291	<1	0	DER2-26-SD	No	[Maximum] < ESV
Chlorodibromomethane	16	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Chloroform	16	0	ND	ND	ND	0.121	---	0	---	No	100% Non-Detect
cis-1,2 Dichloroethene	16	0	ND	ND	ND	0.654	---	0	---	No	100% Non-Detect
cis-1,3-Dichloropropene	16	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Dichlorodifluoromethane	16	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Dichlorofluoromethane	16	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Ethyl Chloride	16	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Ethylbenzene	16	0	ND	ND	ND	0.175	---	0	---	No	100% Non-Detect
Methyl Bromide	16	0	ND	ND	ND	0.00137	---	0	---	No	100% Non-Detect
Methyl Chloride	16	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Methylene Chloride	16	4	0.002	0.003	0.004	0.159	<1	0	DER1-25	No	[Maximum] < ESV
Tetrachloroethene	16	0	ND	ND	ND	0.99	---	0	---	No	100% Non-Detect
Toluene	16	3	0.001	0.007	0.019	1.22	<1	0	DER1-20	No	[Maximum] < ESV
trans-1,2-Dichloroethene	16	0	ND	ND	ND	0.654	---	0	---	No	100% Non-Detect
trans-1,3-Dichloropropene	16	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Trichloroethene	16	0	ND	ND	ND	0.112	---	0	---	No	100% Non-Detect
Trichlorofluoromethane	16	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Vinyl Chloride	16	0	ND	ND	ND	0.202	---	0	---	No	100% Non-Detect
Xylenes	16	0	ND	ND	ND	0.433	---	0	---	No	100% Non-Detect
<b>Other Parameters</b>											
Total Organic Carbon (mg/kg)	14	14	335	11,461	87,950	NESV	---	---	DER2-27-SD	---	---
Black Carbon (mg/kg)	4	4	145	443	645	NESV	---	---	DER1-29	---	---
Percent Moisture (%)	16	16	12.7	32.2	76.4	NESV	---	---	DER1-20	---	---

**Notes:**

---, Not applicable.

COPEC, Constituent of Potential Ecological Concern

[Maximum], Maximum concentration

ND, Not detected

NESV, No Ecological Screening Value

Table 14  
 Summary of Sediment COPECs by Exposure Area and Sampling Interval  
 Delaware River Screening-Level Ecological Risk Assessment  
 Chemours Chambers Works  
 Deepwater, New Jersey

Constituent	River Zone	Jackson Labs/ TEL Area		Fluoroproducts Area		SW MU 5/ HenbyCreek Area		Carneys Point Zone	
	Sample Depth (feet)	0-0.5	0.5-1	0-0.5	0.5-1	0-0.5	0.5-1	0-0.5	0.5-1
<b>Metals</b>									
Aluminum		●	●		●		NA		NA
Antimony		●	●	●	●	●	NA		NA
Arsenic		●	●	●	●	●	NA		NA
Cadmium		●	●	●	●	●	NA	●	NA
Chromium		●	●	●	●	●	NA	●	NA
Copper		●	●	●	●	●	NA	●	NA
Iron		●	●	●	●	●	NA	●	NA
Lead		●	●	●	●	●	●	●	NA
Manganese		●		●	●	●	NA	●	NA
Mercury		●	●	●	●	●	NA	●	NA
Nickel		●	●	●	●	●	NA	●	NA
Selenium		●		●	●		NA	●	NA
Silver		●	●	●	●	●	NA		NA
Zinc		●	●	●	●	●	NA	●	NA
<b>Volatile Organic Compounds</b>									
1,1-Dichloroethane				●					
1,1-Dichloroethene				●	●				
1,2-Dichlorobenzene		NA	●	●	●		NA	NA	NA
1,3-Dichlorobenzene		NA		●	●	NA	NA	NA	NA
1,4-Dichlorobenzene		NA		●	●	NA		NA	NA
Acetone		●	●	●	●	●	●	●	●
Benzene			●	●	●				
Carbon Disulfide		●	●	●	●		●		
Chlorobenzene		●	●	●	●		●		
Chloroform		●	●	●	●				
cis-1,2 Dichloroethene					●				
Cumene		NA		●	●	NA	NA	NA	NA
Ethylbenzene				●	●				
Methyl Ethyl Ketone		NA			●	NA	NA	NA	NA
Methylene Chloride				●	●				
Naphthalene		NA		NA	●	NA	NA	NA	NA
Tetrachloroethene				●	●				
Toluene					●				
Trichloroethene		●		●	●				
Vinyl Chloride					●				
Xylenes				●	●				
<b>Polycyclic Aromatic Hydrocarbons</b>									
Acenaphthene		●	●	●	●	●	NA		NA
Acenaphthylene		●	●	●	●		NA	●	NA
Anthracene		●	●	●	●	●	NA		NA
Benzo(A)Anthracene		●	●	●	●	●	NA		NA
Benzo(B)Fluoranthene					●		NA		NA
Benzo(G,H,I)Perylene		●	●	●	●	●	NA		NA
Benzo(K)Fluoranthene		●	●	●	●	●	NA		NA
Benzo[A]Pyrene		●	●	●	●	●	NA		NA
Dibenzo(A,H)Anthracene		●	●	●	●		NA		NA
Chrysene		●	●	●	●	●	NA		NA
Fluoranthene		●	●	●	●	●	NA		NA

**Table 14**  
**Summary of Sediment COPECs by Exposure Area and Sampling Interval**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	River Zone	Jackson Labs/ TEL Area		Fluoroproducts Area		SW MU 5/ HenbyCreek Area		Carneys Point Zone	
	Sample Depth (feet)	0-0.5	0.5-1	0-0.5	0.5-1	0-0.5	0.5-1	0-0.5	0.5-1
Fluorene		●	●	●	●	●	NA		NA
Indeno (1,2,3-CD) Pyrene		●	●	●	●	●	NA		NA
Naphthalene		●	●	●	●	●	●		NA
Phenanthrene		●	●	●	●	●	NA		NA
Pyrene		●	●	●	●	●	NA		NA
Total PAHs (Detections Only)		●	●	●	●	●	NA		NA
Total PAHs (Detections + 1/2 MDL)		●	●	●	●	●	NA		NA
<b>Semi-Volatile Organic Compounds</b>									
1,2,4-Trichlorobenzene		●							NA
1,2-Dichlorobenzene		●	NA	●	●	●	●	●	NA
1,4-Dichlorobenzene		●	NA	●	●	●	●	●	NA
2,4-Dichlorophenol				●			NA		NA
2,4-Dinitrotoluene		●		●	●	●	NA		NA
2,6-Dinitrotoluene				●		●	NA		NA
2-Chlorophenol				●	●		NA		NA
2-Methylnaphthalene		●	●	●	●	NA	NA	NA	NA
4-Chloroaniline		●		●	●	●			NA
Biphenyl					●	NA	NA	NA	NA
Bis(2-Ethylhexyl)Phthalate		●		●	●		NA	●	NA
Butyl Benzyl Phthalate				●	●		NA		NA
Dibenzofuran					●	NA	NA	NA	NA
Diethyl Phthalate				●			NA		NA
Di-N-Butyl Phthalate					●	●	NA		NA
Hexachlorobenzene		●		●	●		NA		NA
Hexachlorobutadiene				●			NA		NA
Nitrobenzene		●		●	●	●	●	●	NA
Phenol				●	●		NA		NA
<b>Pesticides</b>									
4,4'-DDE			●	NA	NA	NA	NA	NA	NA
beta-BHC		●		NA	NA	NA	NA	NA	NA
Endosulfan I		●		NA	NA	NA	NA	NA	NA
<b>Polychlorinated Biphenyls</b>									
Total PCBs		●	●	●	●		NA	●	NA

**Notes:**

MDL: Method Detection Limit

NA = Analyte was not analyzed in depth interval.

Blank cells indicate that the constituent was not identified as a constituent of potential ecological concern (COPEC) in the exposure area/sampling interval.

**Table 15**  
**Jackson Labs/TEL Area Screening-Level Exposure Estimate for Surface Water**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Fraction	Number of Samples	Number of Detections	Exposure Concentration			Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
				Minimum	Mean	Maximum						
<b>Metals (µg/L)</b>												
Aluminum	D	17	3	111	257	393	NESV	---	---	SC-241	Yes	[Maximum] > ESV
	T	17	17	425	1,234	2,250	87	25.9	17	DER3-20		
Antimony	D	17	1	0.53	0.53	0.53	30	<1	0	SC-240	No	[Maximum] < ESV
	T	17	1	0.48	0.48	0.48	NESV	---	---	SC-241		
Arsenic	D	17	3	1.5	1.6	1.8	150	<1	0	SC-241	No	[Maximum] < ESV
	T	17	3	2	2.2	2.4	NESV	---	---	SC-241		
Barium	D	17	17	21	25.1	33.7	220	<1	0	SC-242	No	[Maximum] < ESV
	T	17	17	26.1	32.5	39.1	NESV	---	---	SC-241		
Beryllium	D	17	2	1.6	1.6	1.6	NESV	---	---	DER3-19, DER3-20	No	100% Non-Detect
	T	17	0	ND	ND	ND	3.6	---	0	---		
Cadmium	D	17	0	ND	ND	ND	0.5	---	0	--	No	100% Non-Detect
	T	17	0	ND	ND	ND	0.81	---	0	---		
Calcium	D	17	17	18,700	30,800	43,700	NESV	---	---	SC-242	No	Essential Nutrient
	T	17	17	19,100	31,288	43,400	NESV	---	---	DER3-20		
Chromium	D	17	1	0.86	0.86	0.86	18.8	<1	0	SC-241	No	[Maximum] < ESV
	T	17	10	2.1	3.57	5.9	289.82	<1	0	DER2-02		
Cobalt	D	17	0	ND	ND	ND	23	---	0	--	No	100% Non-Detect
	T	17	3	0.47	0.5	0.53	NESV	---	---	SC-241		
Copper	D	17	4	2	2.45	3	9.6	<1	0	DER2-02	No	[Maximum] < ESV
	T	17	11	2.7	3.4	5.8	33.07	<1	0	DER2-31		
Iron	D	17	6	52.3	190.3	456	NESV	---	---	SC-241	Yes	[Maximum] > ESV
	T	17	17	575	1,377	2,400	1,000	2.4	14	DER3-19		
Lead	D	17	3	0.19	3.16	8.7	5.4	1.6	1	DER1-03	Yes	[Maximum] > ESV
	T	17	3	1.7	1.9	2.1	NESV	---	---	SC-241		
Magnesium	D	17	17	6,070	37,325	83,200	NESV	---	---	SC-242	No	Essential Nutrient
	T	17	17	6310	38424.7059	84300	NESV	---	---	SC-242		
Manganese	D	17	17	3.3	10.1	51.5	120	<1	0	SC-242	No	[Maximum] < ESV
	T	17	17	32.1	59.9	91.8	NESV	---	---	DER1-01		
Mercury	D	17	1	0.094	0.094	0.094	0.77	<1	0	DER1-03	No	[Maximum] < ESV
	T	17	2	0.063	0.070	0.076	NESV	---	---	DER1-09		
Nickel	D	17	4	1.5	1.8	2.5	38.9	<1	0	DER2-02	No	[Maximum] < ESV
	T	17	15	1.8	2.6	3.4	182.58	<1	0	DER2-02		
Potassium	D	17	17	2,040	12,882	27,400	NESV	---	---	SC-242	No	Essential Nutrient
	T	17	17	2,210	13,111	27,600	NESV	---	---	SC-242		
Selenium	D	17	0	ND	ND	ND	5	---	0	--	No	100% Non-Detect
	T	17	1	0.45	0.45	0.45	NESV	---	---	SC-240		
Silver	D	17	0	ND	ND	ND	0.12	---	0	--	No	100% Non-Detect
	T	17	0	ND	ND	ND	NESV	---	---	---		
Sodium	D	17	17	25,100	283,047	629,000	NESV	---	---	SC-242	No	Essential Nutrient
	T	17	17	24,900	293,029	676,000	NESV	---	---	SC-242		
Thallium	D	17	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
	T	17	0	ND	ND	ND	10	---	0	---		
Tin	D	14	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
	T	14	0	ND	ND	ND	180	---	0	---		
Titanium	D	3	1	12.7	12.7	12.7	NESV	---	---	SC-241	No	[Maximum] < ESV
	T	3	3	36.7	40.6	45.6	100	<1	0	SC-241		
Vanadium	D	17	4	1.5	1.95	2.7	20	<1	0	DER2-02	No	[Maximum] < ESV
	T	17	16	2.6	3.6	4.8	NESV	---	---	DER3-19		
Zinc	D	17	1	13.3	13.3	13.3	88.5	<1	0	DER2-05	No	[Maximum] < ESV
	T	17	16	8.3	12.1	19	420.18	<1	0	DER3-20		
<b>Volatile Organic Compounds (µg/L)</b>												
1,1,1,2-Tetrachloroethane	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect

**Table 15**  
**Jackson Labs/TEL Area Screening-Level Exposure Estimate for Surface Water**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Fraction	Number of Samples	Number of Detections	Exposure Concentration			Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
				Minimum	Mean	Maximum						
1,1,1-Trichloroethane	T	17	0	ND	ND	ND	76	---	0	---	No	100% Non-Detect
1,1,2,2-Tetrachloroethane	T	17	0	ND	ND	ND	380	---	0	---	No	100% Non-Detect
1,1,2-Trichloroethane	T	17	0	ND	ND	ND	500	---	0	---	No	100% Non-Detect
1,1,2-Trichlorotrifluoroethane	T	17	1	20	20	20	NESV	---	---	DER1-05	Yes	No ESV Available
1,1-Dichloroethane	T	17	0	ND	ND	ND	47	---	0	---	No	100% Non-Detect
1,1-Dichloroethene	T	17	0	ND	ND	ND	65	---	0	---	No	100% Non-Detect
1,1-Dichloropropene	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
1,2,4-Trimethylbenzene	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
1,2-Dibromoethane (EDB)	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
1,2-Dichlorobenzene	T	17	0	ND	ND	ND	14	---	0	---	No	100% Non-Detect
1,2-Dichloroethane	T	17	0	ND	ND	ND	910	---	0	---	No	100% Non-Detect
1,2-Dichloroethene	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
1,2-Dichloropropane	T	17	0	ND	ND	ND	360	---	0	---	No	100% Non-Detect
1,3,5-Trimethylbenzene	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
1,3-Dichlorobenzene	T	17	0	ND	ND	ND	38	---	0	---	No	100% Non-Detect
1,4-Dichlorobenzene	T	17	0	ND	ND	ND	9.4	---	0	---	No	100% Non-Detect
2-Chloroethyl Vinyl Ether	T	14	0	ND	ND	ND	3,540	---	0	---	No	100% Non-Detect
2-Chlorotoluene	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2-Hexanone	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Chlorotoluene	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Isopropyltoluene	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Acetone	T	17	0	ND	ND	ND	1,500	---	0	---	No	100% Non-Detect
Acrolein	T	8	0	ND	ND	ND	0.19	---	0	---	No	100% Non-Detect
Acrylonitrile	T	8	0	ND	ND	ND	66	---	0	---	No	100% Non-Detect
Benzene	T	17	0	ND	ND	ND	114	---	0	---	No	100% Non-Detect
Bromodichloromethane	T	17	0	ND	ND	ND	340	---	0	---	No	100% Non-Detect
Bromoform	T	14	0	ND	ND	ND	230	---	0	---	No	100% Non-Detect
Carbon Disulfide	T	17	0	ND	ND	ND	0.92	---	0	---	No	100% Non-Detect
Carbon Tetrachloride	T	17	0	ND	ND	ND	240	---	0	---	No	100% Non-Detect
Chlorobenzene	T	17	1	1	1	1	47	<1	0	SC-242	No	[Maximum] < ESV
Chlorodibromomethane	T	17	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Chloroform	T	17	0	ND	ND	ND	140	---	0	---	No	100% Non-Detect
cis-1,2 Dichloroethene	T	17	0	ND	ND	ND	590	---	0	---	No	100% Non-Detect
cis-1,3-Dichloropropene	T	17	0	ND	ND	ND	0.055	---	0	---	No	100% Non-Detect
Cumene	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Dichlorodifluoromethane	T	17	0	ND	ND	ND	1,960	---	0	---	No	100% Non-Detect
Dichlorofluoromethane	T	17	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Ethyl Chloride	T	17	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Ethylbenzene	T	17	0	ND	ND	ND	14	---	0	---	No	100% Non-Detect
Hexane	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Isobutyl Alcohol	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Meta- And Para-Xylene	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Methacrylonitrile	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect

**Table 15**  
**Jackson Labs/TEL Area Screening-Level Exposure Estimate for Surface Water**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Fraction	Number of Samples	Number of Detections	Exposure Concentration			Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
				Minimum	Mean	Maximum						
Methyl Bromide	T	14	0	ND	ND	ND	16	---	0	---	No	100% Non-Detect
Methyl Chloride	T	17	0	ND	ND	ND	5,500	---	0	---	No	100% Non-Detect
Methyl Ethyl Ketone	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Methyl Isobutyl Ketone	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Methyl Methacrylate	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Methyl Tertiary Butyl Ether	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Methylene Chloride	T	17	0	ND	ND	ND	940	---	0	---	No	100% Non-Detect
N-Butylbenzene	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
N-Propylbenzene	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Ortho-Xylene	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Propionitrile	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
sec-Butylbenzene	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Styrene	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
tert-Butylbenzene	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Tetrachloroethene	T	17	0	ND	ND	ND	45	---	0	---	No	100% Non-Detect
Tetrahydrofuran	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Toluene	T	17	1	0.8	0.8	0.8	253	<1	0	DER1-05	No	[Maximum] < ESV
trans-1,2-Dichloroethene	T	17	0	ND	ND	ND	970	---	0	---	No	100% Non-Detect
trans-1,3-Dichloropropene	T	14	0	ND	ND	ND	0.055	---	0	---	No	100% Non-Detect
Trichloroethene	T	17	0	ND	ND	ND	47	---	0	---	No	100% Non-Detect
Trichlorofluoromethane	T	17	0	ND	ND	ND	1,740	---	0	---	No	100% Non-Detect
Vinyl Chloride	T	17	0	ND	ND	ND	930	---	0	---	No	100% Non-Detect
Xylenes	T	17	0	ND	ND	ND	27	---	0	---	No	100% Non-Detect
<b>Polycyclic Aromatic Hydrocarbons (µg/L)</b>												
Acenaphthene	T	15	0	ND	ND	ND	38	---	0	---	No	100% Non-Detect
Acenaphthylene	T	15	0	ND	ND	ND	4,840	---	0	---	No	100% Non-Detect
Anthracene	T	15	0	ND	ND	ND	0.035	---	0	---	No	100% Non-Detect
Benzo(A)Anthracene	T	15	0	ND	ND	ND	0.025	---	0	---	No	100% Non-Detect
Benzo(B)Fluoranthene	T	15	0	ND	ND	ND	9.07	---	0	---	No	100% Non-Detect
Benzo(K)Fluoranthene	T	15	0	ND	ND	ND	0	---	0	---	No	100% Non-Detect
Benzo(A)Pyrene	T	15	0	ND	ND	ND	0.014	---	0	---	No	100% Non-Detect
Chrysene	T	15	0	ND	ND	ND	7	---	0	---	No	100% Non-Detect
Dibenz(A,H)Anthracene	T	15	0	ND	ND	ND	5	---	0	---	No	100% Non-Detect
Fluoranthene	T	15	1	0.2	0.2	0.2	1.9	<1	0	SC-240	No	[Maximum] < ESV
Fluorene	T	15	0	ND	ND	ND	19	---	0	---	No	100% Non-Detect
Indeno (1,2,3-CD) Pyrene	T	15	0	ND	ND	ND	4.31	---	0	---	No	100% Non-Detect
Naphthalene	T	15	0	ND	ND	ND	13	---	0	---	No	100% Non-Detect
Phenanthrene	T	15	1	0.1	0.1	0.1	3.6	<1	0	SC-240	No	[Maximum] < ESV
Pyrene	T	15	1	0.2	0.2	0.2	0.3	<1	0	SC-240	No	[Maximum] < ESV
<b>Semi-Volatile Organic Compounds (µg/L)</b>												
1,2,4-Trichlorobenzene	T	15	0	ND	ND	ND	30	---	0	---	No	100% Non-Detect
1,2-Diphenylhydrazine	T	15	0	ND	ND	ND	2.7	---	0	---	No	100% Non-Detect
1,4-Dioxane	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect

**Table 15**  
**Jackson Labs/TEL Area Screening-Level Exposure Estimate for Surface Water**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Fraction	Number of Samples	Number of Detections	Exposure Concentration			Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
				Minimum	Mean	Maximum						
1-Naphthylamine	T	15	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2,3,4,6-Tetrachlorophenol	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2,4,5-Trichlorophenol	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2,4,6-Trichlorophenol	T	15	0	ND	ND	ND	4.9	---	0	---	No	100% Non-Detect
2,4-Dichlorophenol	T	15	0	ND	ND	ND	11	---	0	---	No	100% Non-Detect
2,4-Dimethylphenol	T	15	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2,4-Dinitrophenol	T	15	0	ND	ND	ND	19	---	0	---	No	100% Non-Detect
2,4-Dinitrotoluene	T	15	0	ND	ND	ND	44	---	0	---	No	100% Non-Detect
2,6-Dinitrotoluene	T	15	0	ND	ND	ND	81	---	0	---	No	100% Non-Detect
2-Chloronaphthalene	T	15	0	ND	ND	ND	0.396	---	0	---	No	100% Non-Detect
2-Chlorophenol	T	15	0	ND	ND	ND	24	---	0	---	No	100% Non-Detect
2-Methylnaphthalene	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2-Methylphenol (O-Cresol)	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2-Naphthylamine	T	15	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2-Nitroaniline	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2-Nitrophenol	T	15	0	ND	ND	ND	1,920	---	0	---	No	100% Non-Detect
3,3'-Dichlorobenzidine	T	15	0	ND	ND	ND	4.5	---	0	---	No	100% Non-Detect
3-Nitroaniline	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4,6-Dinitro-2-Methylphenol	T	15	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Aminobiphenyl	T	15	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Bromophenyl Phenyl Ether	T	15	0	ND	ND	ND	1.5	---	0	---	No	100% Non-Detect
4-Chloro-3-Methylphenol	T	15	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Chloroaniline	T	15	0	ND	ND	ND	232	---	0	---	No	100% Non-Detect
4-Chlorophenyl Phenyl Ether	T	15	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Methylphenol (P-Cresol)	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Nitroaniline	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Nitrophenol	T	15	0	ND	ND	ND	60	---	0	---	No	100% Non-Detect
Acetophenone	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Aniline	T	15	0	ND	ND	ND	4.1	---	0	---	No	100% Non-Detect
Benzidine	T	15	0	ND	ND	ND	3.9	---	0	---	No	100% Non-Detect
Benzo(G,H,I)Perylene	T	15	0	ND	ND	ND	7.64	---	0	---	No	100% Non-Detect
Biphenyl	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Bis(2-Chloro-1-Methylethyl) Ether	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Bis(2-Chloroethoxy)Methane	T	15	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Bis(2-Chloroethyl)Ether	T	15	0	ND	ND	ND	1,900	---	0	---	No	100% Non-Detect
Bis(2-Chloroisopropyl)Ether	T	12	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Bis(2-Ethylhexyl)Phthalate	T	15	0	ND	ND	ND	16	---	0	---	No	100% Non-Detect
Butyl Benzyl Phthalate	T	15	0	ND	ND	ND	23	---	0	---	No	100% Non-Detect
Carbazole	T	15	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Dibenzofuran	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Diethyl Phthalate	T	15	0	ND	ND	ND	110	---	0	---	No	100% Non-Detect
Dimethyl Phthalate	T	15	0	ND	ND	ND	330	---	0	---	No	100% Non-Detect
Di-N-Butyl Phthalate	T	15	0	ND	ND	ND	9.7	---	0	---	No	100% Non-Detect

**Table 15**  
**Jackson Labs/TEL Area Screening-Level Exposure Estimate for Surface Water**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Fraction	Number of Samples	Number of Detections	Exposure Concentration			Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
				Minimum	Mean	Maximum						
Diphenyl Ether	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Hexachlorobenzene	T	15	0	ND	ND	ND	0.0003	---	0	---	No	100% Non-Detect
Hexachlorobutadiene	T	15	0	ND	ND	ND	0.053	---	0	---	No	100% Non-Detect
Hexachlorocyclopentadiene	T	15	0	ND	ND	ND	77	---	0	---	No	100% Non-Detect
Hexachloroethane	T	15	0	ND	ND	ND	8	---	0	---	No	100% Non-Detect
Isophorone	T	15	0	ND	ND	ND	920	---	0	---	No	100% Non-Detect
N-Dioctyl Phthalate	T	15	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Nitrobenzene	T	15	0	ND	ND	ND	220	---	0	---	No	100% Non-Detect
N-Nitrosodimethylamine	T	15	0	ND	ND	ND	117	---	0	---	No	100% Non-Detect
N-Nitrosodi-N-Propylamine	T	15	0	ND	ND	ND	20	---	0	---	No	100% Non-Detect
N-Nitrosodiphenylamine	T	15	0	ND	ND	ND	210	---	0	---	No	100% Non-Detect
O-Toluidine	T	15	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Parathion	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Pentachlorobenzene	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Pentachlorophenol	T	15	0	ND	ND	ND	15	---	0	---	No	100% Non-Detect
Phenol	T	15	0	ND	ND	ND	180	---	0	---	No	100% Non-Detect
<b>Pesticides and Herbicides (µg/L)</b>												
4,4'-DDD	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4,4'-DDE	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4,4'-DDT	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Aldrin	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Alpha Chlordane	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Alpha-BHC	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
beta-BHC	T	3	0	ND	ND	ND	0.495	---	0	---	No	100% Non-Detect
delta-BHC	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Dieldrin	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Endosulfan I	T	3	1	0.0051	0.0051	0.0051	0.056	<1	0	SC-242	No	[Maximum] < ESV
Endosulfan II	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Endosulfan Sulfate	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Endrin	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Endrin Aldehyde	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Endrin Ketone	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Gamma Chlordane	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Heptachlor	T	3	0	ND	ND	ND	0.0038	---	0	---	No	100% Non-Detect
Heptachlor Epoxide	T	3	0	ND	ND	ND	0.0038	---	0	---	No	100% Non-Detect
Lindane	T	3	0	ND	ND	ND	0.026	---	0	---	No	100% Non-Detect
Methoxychlor	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Toxaphene	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
<b>Polychlorinated Biphenyls (µg/L)</b>												
Total Monochlorobiphenyls	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Total Dichlorobiphenyls	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Trichlorobiphenyl	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Tetrachlorobiphenyl	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect

**Table 15**  
**Jackson Labs/TEL Area Screening-Level Exposure Estimate for Surface Water**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Fraction	Number of Samples	Number of Detections	Exposure Concentration			Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
				Minimum	Mean	Maximum						
Pentachlorobiphenyl	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Hexachlorobiphenyl	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Heptachlorobiphenyl	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Octachlorobiphenyl	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Total Nonachlorobiphenyls	T	3	1	0.0024	0.0024	0.0024	NESV	---	---	SC-240	Yes	No ESV Available
Total Decachlorobiphenyls	T	3	2	0.000291	0.0015755	0.00286	NESV	---	---	SC-240	Yes	No ESV Available
Total PCBs	T	3	2	0.000291	0.0027755	0.00526	0.014	<1	0	SC-240	No	[Maximum] < ESV
<b>Other Parameters (µg/L)</b>												
Dissolved Organic Carbon	D	3	3	3,300	3,500	3,600	---	---	---	SC-240, SC-241	---	---
Total Hardness (as CaCO <sub>3</sub> )	T	17	17	74,400	240,212	462,000	---	---	---	SC-242	---	---
Total Suspended Solids	T	3	3	27,700	32,067	39,600	---	---	---	SC-240	---	---

**Notes:**

---: No Result

COPEC: Constituent of Potential Ecological Concern

[Maximum]: Maximum concentration

ND: No Detections

NESV: No Ecological Screening Value

**Table 16**  
**Fluoroproducts Area Screening-Level Exposure Estimate for Surface Water**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Fraction	Number of Samples	Number of Detections	Exposure Concentration			Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
				Minimum	Mean	Maximum						
<b>Metals (µg/L)</b>												
Aluminum	D	18	7	95	151.9	225	NESV	---	---	--	<b>Yes</b>	[Maximum] > ESV
	T	18	18	495	1,977	3,580	87	41.1	18	DER2-19		
Antimony	D	18	0	ND	ND	ND	30	---	0	--	No	100% Non-Detect
	T	18	0	ND	ND	ND	NESV	---	---	---		
Arsenic	D	18	0	ND	ND	ND	150	---	0	--	No	100% Non-Detect
	T	18	0	ND	ND	ND	NESV	---	---	---		
Barium	D	18	18	20.5	25.8	42.6	220	<1	0	DER2-16	No	[Maximum] < ESV
	T	18	18	27.7	36.7	52.8	NESV	---	---	DER2-19		
Beryllium	D	18	6	1.6	1.6	1.6	NESV	---	---	DER3-21 to -26	No	100% Non-Detect
	T	18	0	ND	ND	ND	3.6	---	0	---		
Cadmium	D	18	0	ND	ND	ND	0.54	---	0	--	No	100% Non-Detect
	T	18	0	ND	ND	ND	0.81	---	0	---		
Calcium	D	18	18	19,400	46,217	90,400	NESV	---	---	DER2-16	No	Essential Nutrient
	T	18	18	19,500	45,183	92,700	NESV	---	---	DER2-16		
Chromium	D	18	0	ND	ND	ND	18.8	---	0	--	No	Essential Nutrient
	T	18	13	4.7	6.3	12	289.82	<1	0	DER2-19		
Cobalt	D	18	0	ND	ND	ND	23	---	0	--	No	100% Non-Detect
	T	18	0	ND	ND	ND	NESV	---	---	---		
Copper	D	18	13	2.8	3.5	4.7	9.6	<1	0	DER1-13	No	[Maximum] < ESV
	T	18	15	3.1	4.28	7.4	33.07	<1	0	DER1-14		
Iron	D	18	16	63.5	122.5	284	NESV	---	---	DER3-23	<b>Yes</b>	[Maximum] > ESV
	T	18	18	643	2,489	5,130	1,000	5.1	16	DER2-19		
Lead	D	18	0	ND	ND	ND	5.4	---	0	--	No	100% Non-Detect
	T	18	1	8	8	8	NESV	---	---	DER2-19		
Magnesium	D	18	18	6,710	25,804	39,000	NESV	---	---	DER3-21	No	Essential Nutrient
	T	18	18	6,710	25,404	39,000	NESV	---	---	DER3-22		
Manganese	D	18	18	6.8	21.1	63.8	120	<1	0	DER2-16	No	Essential Nutrient
	T	18	18	47.8	106.1	215	NESV	---	---	DER2-19		
Mercury	D	18	0	ND	ND	ND	0.77	---	0	--	No	100% Non-Detect
	T	18	0	ND	ND	ND	NESV	---	---	---		
Nickel	D	18	5	2	3.46	5.6	38.9	<1	0	DER2-16	No	[Maximum] < ESV
	T	18	17	1.8	4.0	6.3	182.58	<1	0	DER2-16		
Potassium	D	18	18	2,290	9,961	14,700	NESV	---	---	DER3-21	No	Essential Nutrient
	T	18	18	2,470	9,986	14,900	NESV	---	---	DER3-22		
Selenium	D	18	0	ND	ND	ND	5	---	0	--	No	Essential Nutrient
	T	18	0	ND	ND	ND	NESV	---	---	---		
Silver	D	18	0	ND	ND	ND	0.12	---	0	--	No	100% Non-Detect
	T	18	0	ND	ND	ND	NESV	---	---	---		
Sodium	D	18	18	28,200	177,850	280,000	NESV	---	---	DER3-22	No	Essential Nutrient
	T	18	18	27,100	187,228	298,000	NESV	---	---	DER3-22		
Thallium	D	18	0	ND	ND	ND	NESV	---	0	--	No	100% Non-Detect
	T	18	0	ND	ND	ND	10	---	---	---		

**Table 16**  
**Fluoroproducts Area Screening-Level Exposure Estimate for Surface Water**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Fraction	Number of Samples	Number of Detections	Exposure Concentration			Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
				Minimum	Mean	Maximum						
Tin	D	18	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
	T	18	0	ND	ND	ND	180	---	0	---		
Vanadium	D	18	2	2.5	3.05	3.6	20	<1	0	DER2-16	No	[Maximum] < ESV
	T	18	14	3.7	5.8	11.1	NESV	---	---	DER2-19		
Zinc	D	18	2	9.1	9.3	9.5	88.5	<1	0	DER3-26	No	[Maximum] < ESV
	T	18	18	8.9	19.4	43.3	420	<1	0	DER2-19		
<b>Volatile Organic Compounds (µg/L)</b>												
1,1,1-Trichloroethane	T	18	0	ND	ND	ND	76	---	0	---	No	100% Non-Detect
1,1,2,2-Tetrachloroethane	T	18	0	ND	ND	ND	380	---	0	---	No	100% Non-Detect
1,1,2-Trichloroethane	T	18	0	ND	ND	ND	500	---	0	---	No	100% Non-Detect
1,1,2-Trichlorotrifluoroethane	T	18	8	3	34.75	170	NESV	---	---	DER2-19	Yes	No ESV Available
1,1-Dichloroethane	T	18	0	ND	ND	ND	47	---	0	---	No	100% Non-Detect
1,1-Dichloroethene	T	18	0	ND	ND	ND	65	---	0	---	No	100% Non-Detect
1,2-Dichlorobenzene	T	18	3	1	4.3	8	14	<1	0	DER2-18	No	[Maximum] < ESV
1,2-Dichloroethane	T	18	0	ND	ND	ND	910	---	0	---	No	100% Non-Detect
1,2-Dichloropropane	T	18	0	ND	ND	ND	360	---	0	---	No	100% Non-Detect
1,3-Dichlorobenzene	T	18	0	ND	ND	ND	38	---	0	---	No	100% Non-Detect
1,4-Dichlorobenzene	T	18	2	1	7.5	14	9.4	1.5	1	DER2-18	Yes	[Maximum] > ESV
2-Chloroethyl Vinyl Ether	T	17	0	ND	ND	ND	3,540	---	0	---	No	100% Non-Detect
Acetone	T	18	0	ND	ND	ND	1,500	---	0	---	No	100% Non-Detect
Acrolein	T	11	0	ND	ND	ND	0.19	---	0	---	No	100% Non-Detect
Acrylonitrile	T	11	0	ND	ND	ND	66	---	0	---	No	100% Non-Detect
Benzene	T	18	5	0.5	2.74	10	114	<1	0	DER2-18	No	[Maximum] < ESV
Bromodichloromethane	T	18	0	ND	ND	ND	340	---	0	---	No	100% Non-Detect
Bromoform	T	18	0	ND	ND	ND	230	---	0	---	No	100% Non-Detect
Carbon Disulfide	T	18	0	ND	ND	ND	0.92	---	0	---	No	100% Non-Detect
Carbon Tetrachloride	T	18	3	3	14.3	36	240	<1	0	DER2-18	No	[Maximum] < ESV
Chlorobenzene	T	18	9	0.8	9.6	35	47	<1	0	DER1-31, DER2-18	No	[Maximum] < ESV
Chlorodibromomethane	T	18	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Chloroform	T	18	4	0.9	4.225	11	140	<1	0	DER2-18	No	[Maximum] < ESV
cis-1,2 Dichloroethene	T	18	0	ND	ND	ND	590	---	0	---	No	100% Non-Detect
cis-1,3-Dichloropropene	T	18	0	ND	ND	ND	0.055	---	0	---	No	100% Non-Detect
Dichlorodifluoromethane	T	18	0	ND	ND	ND	1,960	---	0	---	No	100% Non-Detect
Dichlorofluoromethane	T	18	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Ethyl Chloride	T	18	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Ethylbenzene	T	18	1	1	1	1	14	<1	0	DER2-18	No	[Maximum] < ESV
Methyl Bromide	T	18	0	ND	ND	ND	16	---	0	---	No	100% Non-Detect
Methyl Chloride	T	18	0	ND	ND	ND	5,500	---	0	---	No	100% Non-Detect
Methylene Chloride	T	18	0	ND	ND	ND	940	---	0	---	No	100% Non-Detect
Tetrachloroethene	T	18	4	0.8	3.95	11	45	<1	0	DER2-19	No	[Maximum] < ESV
Toluene	T	18	2	2	5.5	9	253	<1	0	DER2-18	No	[Maximum] < ESV

**Table 16**  
**Fluoroproducts Area Screening-Level Exposure Estimate for Surface Water**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Fraction	Number of Samples	Number of Detections	Exposure Concentration			Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
				Minimum	Mean	Maximum						
trans-1,2-Dichloroethene	T	18	0	ND	ND	ND	970	---	0	---	No	100% Non-Detect
trans-1,3-Dichloropropene	T	18	0	ND	ND	ND	0.055	---	0	---	No	100% Non-Detect
Trichloroethene	T	18	0	ND	ND	ND	47	---	0	---	No	100% Non-Detect
Trichlorofluoromethane	T	18	6	4	22.5	76	1,740	<1	0	DER2-19	No	[Maximum] < ESV
Vinyl Chloride	T	18	0	ND	ND	ND	930	---	0	---	No	100% Non-Detect
Xylenes	T	18	2	1	4	7	27	<1	0	DER2-18	No	[Maximum] < ESV
<b>Polycyclic Aromatic Hydrocarbons (µg/L)</b>												
Acenaphthene	T	12	0	ND	ND	ND	38	---	0	---	No	100% Non-Detect
Acenaphthylene	T	12	0	ND	ND	ND	4,840	---	0	---	No	100% Non-Detect
Anthracene	T	12	0	ND	ND	ND	0.035	---	0	---	No	100% Non-Detect
Benzo(A)Anthracene	T	12	0	ND	ND	ND	0.025	---	0	---	No	100% Non-Detect
Benzo(B)Fluoranthene	T	12	0	ND	ND	ND	9.07	---	0	---	No	100% Non-Detect
Benzo(K)Fluoranthene	T	12	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Benzo[A]Pyrene	T	12	0	ND	ND	ND	0.014	---	0	---	No	100% Non-Detect
Chrysene	T	12	0	ND	ND	ND	7	---	0	---	No	100% Non-Detect
Dibenz(A,H)Anthracene	T	12	0	ND	ND	ND	5	---	0	---	No	100% Non-Detect
Fluoranthene	T	12	0	ND	ND	ND	1.9	---	0	---	No	100% Non-Detect
Fluorene	T	12	0	ND	ND	ND	19	---	0	---	No	100% Non-Detect
Indeno (1,2,3-CD) Pyrene	T	12	0	ND	ND	ND	4.31	---	0	---	No	100% Non-Detect
Naphthalene	T	12	0	ND	ND	ND	13	---	0	---	No	100% Non-Detect
Phenanthrene	T	12	0	ND	ND	ND	3.6	---	0	---	No	100% Non-Detect
Pyrene	T	12	0	ND	ND	ND	0.3	---	0	---	No	100% Non-Detect
<b>Semi-Volatile Organic Compounds (µg/L)</b>												
1,2,4-Trichlorobenzene	T	12	0	ND	ND	ND	30	---	0	---	No	100% Non-Detect
1,2-Diphenylhydrazine	T	12	0	ND	ND	ND	2.7	---	0	---	No	100% Non-Detect
1-Naphthylamine	T	12	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2,4,6-Trichlorophenol	T	12	0	ND	ND	ND	4.9	---	0	---	No	100% Non-Detect
2,4-Dichlorophenol	T	12	0	ND	ND	ND	11	---	0	---	No	100% Non-Detect
2,4-Dimethylphenol	T	12	0	ND	ND	ND	0	---	0	---	No	100% Non-Detect
2,4-Dinitrophenol	T	12	0	ND	ND	ND	19	---	0	---	No	100% Non-Detect
2,4-Dinitrotoluene	T	12	0	ND	ND	ND	44	---	0	---	No	100% Non-Detect
2,6-Dinitrotoluene	T	12	0	ND	ND	ND	81	---	0	---	No	100% Non-Detect
2-Chloronaphthalene	T	12	0	ND	ND	ND	0.396	---	0	---	No	100% Non-Detect
2-Chlorophenol	T	12	0	ND	ND	ND	24	---	0	---	No	100% Non-Detect
2-Naphthylamine	T	12	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2-Nitrophenol	T	12	0	ND	ND	ND	1,920	---	0	---	No	100% Non-Detect
3,3'-Dichlorobenzidine	T	12	0	ND	ND	ND	4.5	---	0	---	No	100% Non-Detect
4,6-Dinitro-2-Methylphenol	T	12	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Aminobiphenyl	T	12	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Bromophenyl Phenyl Ether	T	12	0	ND	ND	ND	1.5	---	0	---	No	100% Non-Detect
4-Chloro-3-Methylphenol	T	12	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect

**Table 16**  
**Fluoroproducts Area Screening-Level Exposure Estimate for Surface Water**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Fraction	Number of Samples	Number of Detections	Exposure Concentration			Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
				Minimum	Mean	Maximum						
4-Chloroaniline	T	12	0	ND	ND	ND	232	---	0	---	No	100% Non-Detect
4-Chlorophenyl Phenyl Ether	T	12	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Nitrophenol	T	12	0	ND	ND	ND	60	---	0	---	No	100% Non-Detect
Aniline	T	12	0	ND	ND	ND	4.1	---	0	---	No	100% Non-Detect
Benzidine	T	12	0	ND	ND	ND	3.9	---	0	---	No	100% Non-Detect
Benzo(G,H,I)Perylene	T	12	0	ND	ND	ND	7.64	---	0	---	No	100% Non-Detect
Bis(2-Chloroethoxy)Methane	T	12	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Bis(2-Chloroethyl)Ether	T	12	0	ND	ND	ND	1,900	---	0	---	No	100% Non-Detect
Bis(2-Chloroisopropyl)Ether	T	12	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Bis(2-Ethylhexyl)Phthalate	T	12	0	ND	ND	ND	16	---	0	---	No	100% Non-Detect
Butyl Benzyl Phthalate	T	12	0	ND	ND	ND	23	---	0	---	No	100% Non-Detect
Carbazole	T	12	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Diethyl Phthalate	T	12	0	ND	ND	ND	110	---	0	---	No	100% Non-Detect
Dimethyl Phthalate	T	12	0	ND	ND	ND	330	---	0	---	No	100% Non-Detect
Di-N-Butyl Phthalate	T	12	0	ND	ND	ND	9.7	---	0	---	No	100% Non-Detect
Hexachlorobenzene	T	12	0	ND	ND	ND	0.0003	---	0	---	No	100% Non-Detect
Hexachlorobutadiene	T	12	0	ND	ND	ND	0.053	---	0	---	No	100% Non-Detect
Hexachlorocyclopentadiene	T	12	0	ND	ND	ND	77	---	0	---	No	100% Non-Detect
Hexachloroethane	T	12	0	ND	ND	ND	8	---	0	---	No	100% Non-Detect
Isophorone	T	12	0	ND	ND	ND	920	---	0	---	No	100% Non-Detect
N-Dioctyl Phthalate	T	12	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Nitrobenzene	T	12	0	ND	ND	ND	220	---	0	---	No	100% Non-Detect
N-Nitrosodimethylamine	T	12	0	ND	ND	ND	117	---	0	---	No	100% Non-Detect
N-Nitrosodi-N-Propylamine	T	12	0	ND	ND	ND	20	---	0	---	No	100% Non-Detect
N-Nitrosodiphenylamine	T	12	0	ND	ND	ND	210	---	0	---	No	100% Non-Detect
O-Toluidine	T	12	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Pentachlorophenol	T	12	0	ND	ND	ND	15	---	0	---	No	100% Non-Detect
Phenol	T	12	0	ND	ND	ND	180	---	0	---	No	100% Non-Detect
<b>Other Parameters (µg/L)</b>												
Total Hardness (as CaCO <sub>3</sub> )	T	18	18	76,200	217,411	309,000	---	---	---	DER3-26	---	---

**Notes:**

---: No Result

COPEC: Constituent of Potential Ecological Concern

[Maximum]: Maximum concentration

ND: No Detections

NESV: No Ecological Screening Value

**Table 17**  
**SWMU 5/Henby Creek Area Screening-Level Exposure Estimate for Surface Water**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Fraction	Number of Samples	Number of Detections	Exposure Concentration			Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
				Minimum	Mean	Maximum						
<b>Metals (µg/L)</b>												
Aluminum	D	3	1	236	236	236	NESV	---	---	DER1-18	Yes	[Maximum] > ESV
	T	3	3	313	1,004	1,450	87	16.7	3	DER2-24		
Antimony	D	3	0	ND	ND	ND	30	---	0	--	No	100% Non-Detect
	T	3	0	ND	ND	ND	NESV	---	---	---		
Arsenic	D	3	0	ND	ND	ND	150	---	0	--	No	100% Non-Detect
	T	3	0	ND	ND	ND	NESV	---	---	---		
Barium	D	3	3	19.6	22.3	26.9	220	<1	0	DER1-18	No	[Maximum] < ESV
	T	3	3	27.5	31.7	36.6	NESV	---	---	DER2-24		
Beryllium	D	3	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
	T	3	0	ND	ND	ND	3.6	---	0	---		
Cadmium	D	3	0	ND	ND	ND	0.54	---	0	--	No	100% Non-Detect
	T	3	0	ND	ND	ND	0.81	---	0	---		
Calcium	D	3	3	16,200	20,300	26,900	NESV	---	---	DER1-18	No	Essential Nutrient
	T	3	3	18,200	19,367	21,400	NESV	---	---	DER1-18		
Chromium	D	3	0	ND	ND	ND	18.83	---	0	--	No	100% Non-Detect
	T	3	2	3.7	4.75	5.8	289.82	<1	0	DER2-24		
Cobalt	D	3	0	ND	ND	ND	23	---	0	--	No	100% Non-Detect
	T	3	0	ND	ND	ND	NESV	---	---	---		
Copper	D	3	1	3	3	3	9.64	<1	0	DER1-18	No	[Maximum] < ESV
	T	3	2	3.2	3.5	3.8	33.07	<1	0	DER1-18		
Iron	D	3	2	263	282.5	302	NESV	---	---	DER1-18	Yes	[Maximum] > ESV
	T	3	3	466	1,732	2,480	1,000	3	2	DER2-24		
Lead	D	3	0	ND	ND	ND	5.4	---	0	--	No	100% Non-Detect
	T	3	0	ND	ND	ND	NESV	---	---	---		
Magnesium	D	3	3	5200	13367	29000	NESV	---	---	DER1-18	No	Essential Nutrient
	T	3	3	5,850	10,497	19,500	NESV	---	---	DER1-18		
Manganese	D	3	3	2.7	16.8	27.9	120	<1	0	DER1-18	No	[Maximum] < ESV
	T	3	3	30.9	88.3	121	NESV	---	---	DER2-24		
Mercury	D	3	0	ND	ND	ND	0.77	---	0	--	No	100% Non-Detect
	T	3	0	ND	ND	ND	NESV	---	---	---		
Nickel	D	3	0	ND	ND	ND	38.91	---	0	--	No	100% Non-Detect
	T	3	1	2.8	2.8	2.8	182.58	<1	0	DER2-24		
Potassium	D	3	3	1,720	4,643	10,100	NESV	---	---	DER1-18	No	Essential Nutrient
	T	3	3	2,030	3,970	7,350	NESV	---	---	DER1-18		
Selenium	D	3	0	ND	ND	ND	5	---	0	--	No	100% Non-Detect
	T	3	0	ND	ND	ND	NESV	---	---	---		
Silver	D	3	0	ND	ND	ND	0.12	---	0	--	No	100% Non-Detect
	T	3	0	ND	ND	ND	NESV	---	---	---		

**Table 17**  
**SWMU 5/Henby Creek Area Screening-Level Exposure Estimate for Surface Water**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Fraction	Number of Samples	Number of Detections	Exposure Concentration			Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
				Minimum	Mean	Maximum						
Sodium	D	3	3	18,900	82,100	205,000	NESV	---	---	DER1-18	No	Essential Nutrient
	T	3	3	20,700	59,800	137,000	NESV	---	---	DER1-18		
Thallium	D	3	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
	T	3	0	ND	ND	ND	10	---	0	---		
Tin	D	3	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
	T	3	0	ND	ND	ND	180	---	0	---		
Vanadium	D	3	1	3.1	3.1	3.1	20	<1	0	DER2-24	No	[Maximum] < ESV
	T	3	3	2.6	4	6.1	NESV	---	---	DER2-24		
Zinc	D	3	0	ND	ND	ND	88.47	---	0	--	No	100% Non-Detect
	T	3	2	11.8	14.75	17.7	420.18	<1	0	DER2-24		
<b>Volatile Organic Compounds (µg/L)</b>												
1,1,1-Trichloroethane	T	3	0	ND	ND	ND	76	---	0	---	No	100% Non-Detect
1,1,2,2-Tetrachloroethane	T	3	0	ND	ND	ND	380	---	0	---	No	100% Non-Detect
1,1,2-Trichloroethane	T	3	0	ND	ND	ND	500	---	0	---	No	100% Non-Detect
1,1,2-Trichlorotrifluoroethane	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
1,1-Dichloroethane	T	3	0	ND	ND	ND	47	---	0	---	No	100% Non-Detect
1,1-Dichloroethene	T	3	0	ND	ND	ND	65	---	0	---	No	100% Non-Detect
1,2-Dichlorobenzene	T	3	0	ND	ND	ND	14	---	0	---	No	100% Non-Detect
1,2-Dichloroethane	T	3	0	ND	ND	ND	910	---	0	---	No	100% Non-Detect
1,2-Dichloropropane	T	3	0	ND	ND	ND	360	---	0	---	No	100% Non-Detect
1,3-Dichlorobenzene	T	3	0	ND	ND	ND	38	---	0	---	No	100% Non-Detect
1,4-Dichlorobenzene	T	3	0	ND	ND	ND	9.4	---	0	---	No	100% Non-Detect
2-Chloroethyl Vinyl Ether	T	1	0	ND	ND	ND	3,540	---	0	---	No	100% Non-Detect
Acetone	T	3	0	ND	ND	ND	1,500	---	0	---	No	100% Non-Detect
Acrolein	T	2	0	ND	ND	ND	0.19	---	0	---	No	100% Non-Detect
Acrylonitrile	T	2	0	ND	ND	ND	66	---	0	---	No	100% Non-Detect
Benzene	T	3	0	ND	ND	ND	114	---	0	---	No	100% Non-Detect
Bromodichloromethane	T	3	0	ND	ND	ND	340	---	0	---	No	100% Non-Detect
Bromoform	T	3	0	ND	ND	ND	230	---	0	---	No	100% Non-Detect
Carbon Disulfide	T	3	0	ND	ND	ND	0.92	---	0	---	No	100% Non-Detect
Carbon Tetrachloride	T	3	0	ND	ND	ND	240	---	0	---	No	100% Non-Detect
Chlorobenzene	T	3	0	ND	ND	ND	47	---	0	---	No	100% Non-Detect
Chlorodibromomethane	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Chloroform	T	3	0	ND	ND	ND	140	---	0	---	No	100% Non-Detect
cis-1,2 Dichloroethene	T	3	0	ND	ND	ND	590	---	0	---	No	100% Non-Detect
cis-1,3-Dichloropropene	T	3	0	ND	ND	ND	0.055	---	0	---	No	100% Non-Detect
Dichlorodifluoromethane	T	3	0	ND	ND	ND	1,960	---	0	---	No	100% Non-Detect
Dichlorofluoromethane	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Ethyl Chloride	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect

Table 17  
**SWMU 5/Henby Creek Area Screening-Level Exposure Estimate for Surface Water**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Fraction	Number of Samples	Number of Detections	Exposure Concentration			Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
				Minimum	Mean	Maximum						
Ethylbenzene	T	3	0	ND	ND	ND	14	---	0	---	No	100% Non-Detect
Methyl Bromide	T	3	0	ND	ND	ND	16	---	0	---	No	100% Non-Detect
Methyl Chloride	T	3	0	ND	ND	ND	5,500	---	0	---	No	100% Non-Detect
Methylene Chloride	T	3	0	ND	ND	ND	940	---	0	---	No	100% Non-Detect
Tetrachloroethene	T	3	0	ND	ND	ND	45	---	0	---	No	100% Non-Detect
Toluene	T	3	0	ND	ND	ND	253	---	0	---	No	100% Non-Detect
trans-1,2-Dichloroethene	T	3	0	ND	ND	ND	970	---	0	---	No	100% Non-Detect
trans-1,3-Dichloropropene	T	3	0	ND	ND	ND	0.055	---	0	---	No	100% Non-Detect
Trichloroethene	T	3	0	ND	ND	ND	47	---	0	---	No	100% Non-Detect
Trichlorofluoromethane	T	3	0	ND	ND	ND	1,740	---	0	---	No	100% Non-Detect
Vinyl Chloride	T	3	0	ND	ND	ND	930	---	0	---	No	100% Non-Detect
Xylenes	T	3	0	ND	ND	ND	27	---	0	---	No	100% Non-Detect
<b>Polycyclic Aromatic Hydrocarbons (µg/L)</b>												
Acenaphthene	T	3	0	ND	ND	ND	38	---	0	---	No	100% Non-Detect
Acenaphthylene	T	3	0	ND	ND	ND	4,840	---	0	---	No	100% Non-Detect
Anthracene	T	3	0	ND	ND	ND	0.035	---	0	---	No	100% Non-Detect
Benzo(A)Anthracene	T	3	0	ND	ND	ND	0.025	---	0	---	No	100% Non-Detect
Benzo(B)Fluoranthene	T	3	0	ND	ND	ND	9.07	---	0	---	No	100% Non-Detect
Benzo(K)Fluoranthene	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Benzo(A)Pyrene	T	3	0	ND	ND	ND	0.014	---	0	---	No	100% Non-Detect
Chrysene	T	3	0	ND	ND	ND	7	---	0	---	No	100% Non-Detect
Dibenz(A,H)Anthracene	T	3	0	ND	ND	ND	5	---	0	---	No	100% Non-Detect
Fluoranthene	T	3	0	ND	ND	ND	1.9	---	0	---	No	100% Non-Detect
Fluorene	T	3	0	ND	ND	ND	19	---	0	---	No	100% Non-Detect
Indeno (1,2,3-CD) Pyrene	T	3	0	ND	ND	ND	4.31	---	0	---	No	100% Non-Detect
Naphthalene	T	3	0	ND	ND	ND	13	---	0	---	No	100% Non-Detect
Phenanthrene	T	3	0	ND	ND	ND	3.6	---	0	---	No	100% Non-Detect
Pyrene	T	3	0	ND	ND	ND	0.3	---	0	---	No	100% Non-Detect
<b>Semi-Volatile Organic Compounds (µg/L)</b>												
1,2,4-Trichlorobenzene	T	3	0	ND	ND	ND	30	---	0	---	No	100% Non-Detect
1,2-Diphenylhydrazine	T	3	0	ND	ND	ND	2.7	---	0	---	No	100% Non-Detect
1-Naphthylamine	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2,4,6-Trichlorophenol	T	3	0	ND	ND	ND	4.9	---	0	---	No	100% Non-Detect
2,4-Dichlorophenol	T	3	0	ND	ND	ND	11	---	0	---	No	100% Non-Detect
2,4-Dimethylphenol	T	3	0	ND	ND	ND	0	---	0	---	No	100% Non-Detect
2,4-Dinitrophenol	T	3	0	ND	ND	ND	19	---	0	---	No	100% Non-Detect
2,4-Dinitrotoluene	T	3	0	ND	ND	ND	44	---	0	---	No	100% Non-Detect
2,6-Dinitrotoluene	T	3	0	ND	ND	ND	81	---	0	---	No	100% Non-Detect
2-Chloronaphthalene	T	3	0	ND	ND	ND	0.396	---	0	---	No	100% Non-Detect

**Table 17**  
**SWMU 5/Henby Creek Area Screening-Level Exposure Estimate for Surface Water**  
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**Deepwater, New Jersey**

Constituent	Fraction	Number of Samples	Number of Detections	Exposure Concentration			Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
				Minimum	Mean	Maximum						
2-Chlorophenol	T	3	0	ND	ND	ND	24	---	0	---	No	100% Non-Detect
2-Naphthylamine	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2-Nitrophenol	T	3	0	ND	ND	ND	1,920	---	0	---	No	100% Non-Detect
3,3'-Dichlorobenzidine	T	3	0	ND	ND	ND	4.5	---	0	---	No	100% Non-Detect
4,6-Dinitro-2-Methylphenol	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Aminobiphenyl	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Bromophenyl Phenyl Ether	T	3	0	ND	ND	ND	1.5	---	0	---	No	100% Non-Detect
4-Chloro-3-Methylphenol	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Chloroaniline	T	3	0	ND	ND	ND	232	---	0	---	No	100% Non-Detect
4-Chlorophenyl Phenyl Ether	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Nitrophenol	T	3	0	ND	ND	ND	60	---	0	---	No	100% Non-Detect
Aniline	T	3	0	ND	ND	ND	4.1	---	0	---	No	100% Non-Detect
Benzidine	T	3	0	ND	ND	ND	3.9	---	0	---	No	100% Non-Detect
Benzo(G,H,I)Perylene	T	3	0	ND	ND	ND	7.64	---	0	---	No	100% Non-Detect
Bis(2-Chloroethoxy)Methane	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Bis(2-Chloroethyl)Ether	T	3	0	ND	ND	ND	1,900	---	0	---	No	100% Non-Detect
Bis(2-Chloroisopropyl)Ether	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Bis(2-Ethylhexyl)Phthalate	T	3	0	ND	ND	ND	16	---	0	---	No	100% Non-Detect
Butyl Benzyl Phthalate	T	3	0	ND	ND	ND	23	---	0	---	No	100% Non-Detect
Carbazole	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Diethyl Phthalate	T	3	0	ND	ND	ND	110	---	0	---	No	100% Non-Detect
Dimethyl Phthalate	T	3	0	ND	ND	ND	330	---	0	---	No	100% Non-Detect
Di-N-Butyl Phthalate	T	3	0	ND	ND	ND	9.7	---	0	---	No	100% Non-Detect
Hexachlorobenzene	T	3	0	ND	ND	ND	0.0003	---	0	---	No	100% Non-Detect
Hexachlorobutadiene	T	3	0	ND	ND	ND	0.053	---	0	---	No	100% Non-Detect
Hexachlorocyclopentadiene	T	3	0	ND	ND	ND	77	---	0	---	No	100% Non-Detect
Hexachloroethane	T	3	0	ND	ND	ND	8	---	0	---	No	100% Non-Detect
Isophorone	T	3	0	ND	ND	ND	920	---	0	---	No	100% Non-Detect
N-Dioctyl Phthalate	T	3	0	ND	ND	ND	0	---	0	---	No	100% Non-Detect
Nitrobenzene	T	3	0	ND	ND	ND	220	---	0	---	No	100% Non-Detect
N-Nitrosodimethylamine	T	3	0	ND	ND	ND	117	---	0	---	No	100% Non-Detect
N-Nitrosodi-N-Propylamine	T	3	0	ND	ND	ND	20	---	0	---	No	100% Non-Detect
N-Nitrosodiphenylamine	T	3	0	ND	ND	ND	210	---	0	---	No	100% Non-Detect
O-Toluidine	T	3	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Pentachlorophenol	T	3	0	ND	ND	ND	15	---	0	---	No	100% Non-Detect
Phenol	T	3	0	ND	ND	ND	180	---	0	---	No	100% Non-Detect

Table 17  
 SWMU 5/Henby Creek Area Screening-Level Exposure Estimate for Surface Water  
 Delaware River Screening-Level Ecological Risk Assessment  
 Chemours Chambers Works  
 Deepwater, New Jersey

Constituent	Fraction	Number of Samples	Number of Detections	Exposure Concentration			Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
				Minimum	Mean	Maximum						
<b>Other Parameters (µg/L)</b>												
Total Hardness As CaCO3	T	3	3	70,400	91,733	134,000	---	---	---	DER1-18	---	---

**Notes:**  
 ---: No Result  
 COPEC: Constituent of Potential Ecological Concern  
 [Maximum]: Maximum concentration  
 ND: No Detections  
 NESV: No Ecological Screening Value

**Table 18**  
**Carneys Point Zone Screening-Level Exposure Estimate for Surface Water**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Fraction	Number of Samples	Number of Detections	Exposure Concentration			Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
				Minimum	Mean	Maximum						
<b>Metals (µg/L)</b>												
Aluminum	D	4	0	ND	ND	ND	NESV	---	---	--	<b>Yes</b>	[Maximum] > ESV
	T	4	4	1,070	1,193	1,350	87	15.5	4	DER1-20		
Antimony	D	4	0	ND	ND	ND	30	---	0	--	No	100% Non-Detect
	T	4	0	ND	ND	ND	NESV	---	---	---		
Arsenic	D	4	0	ND	ND	ND	150	---	0	--	No	100% Non-Detect
	T	4	0	ND	ND	ND	NESV	---	---	---		
Barium	D	4	4	24.4	25.025	26.4	220	<1	0	DER1-29	No	[Maximum] < ESV
	T	4	4	30.3	31.45	32.4	NESV	---	---	DER1-20		
Beryllium	D	4	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
	T	4	0	ND	ND	ND	3.6	---	0	---		
Cadmium	D	4	0	ND	ND	ND	0.54	---	0	--	No	100% Non-Detect
	T	4	0	ND	ND	ND	0.81	---	0	---		
Calcium	D	4	4	25,300	25,775	26,400	NESV	---	---	DER1-20	No	Essential Nutrient
	T	4	4	23,900	25,125	26,200	NESV	---	---	DER1-20		
Chromium	D	4	0	ND	ND	ND	18.83	---	0	--	No	100% Non-Detect
	T	4	0	ND	ND	ND	289.82	---	0	---		
Cobalt	D	4	0	ND	ND	ND	23	---	0	--	No	100% Non-Detect
	T	4	0	ND	ND	ND	NESV	---	---	---		
Copper	D	4	2	3.1	3.3	3.5	9.64	<1	0	DER1-29	No	[Maximum] < ESV
	T	4	3	3.7	3.8	3.9	33.07	<1	0	DER1-28, DER1-29		
Iron	D	4	0	ND	ND	ND	NESV	---	---	--	<b>Yes</b>	[Maximum] > ESV
	T	4	4	1,320	1,538	1,710	1,000	2	4	DER1-20		
Lead	D	4	0	ND	ND	ND	5.4	---	0	--	No	100% Non-Detect
	T	4	0	ND	ND	ND	NESV	---	---	---		
Magnesium	D	4	4	24,400	26,125	27,700	NESV	---	---	DER1-20	No	Essential Nutrient
	T	4	4	23,400	26,200	28,600	NESV	---	---	DER1-22		
Manganese	D	4	4	11.9	15.225	17.3	120	<1	0	DER1-29	No	[Maximum] < ESV
	T	4	4	60.3	69.1	76	NESV	---	---	DER1-28		
Mercury	D	4	0	ND	ND	ND	0.77	---	0	--	No	100% Non-Detect
	T	4	1	0.11	0.11	0.11	NESV	---	---	DER1-20		
Nickel	D	4	0	ND	ND	ND	38.91	---	0	--	No	100% Non-Detect
	T	4	0	ND	ND	ND	182.58	---	0	---		
Potassium	D	4	4	8,760	9,400	9,870	NESV	---	---	DER1-20	No	Essential Nutrient
	T	4	4	8,580	9,540	10,400	NESV	---	---	DER1-22		

**Table 18**  
**Carneys Point Zone Screening-Level Exposure Estimate for Surface Water**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Fraction	Number of Samples	Number of Detections	Exposure Concentration			Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
				Minimum	Mean	Maximum						
Selenium	D	4	0	ND	ND	ND	5	---	0	--	No	100% Non-Detect
	T	4	0	ND	ND	ND	NESV	---	---	---		
Silver	D	4	0	ND	ND	ND	0.12	---	0	--	No	100% Non-Detect
	T	4	0	ND	ND	ND	NESV	---	---	---		
Sodium	D	4	4	162,000	183,750	205,000	NESV	---	---	DER1-20	No	Essential Nutrient
	T	4	4	162,000	185,000	197,000	NESV	---	---	DER1-20		
Thallium	D	4	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
	T	4	0	ND	ND	ND	10	---	0	---		
Tin	D	4	0	ND	ND	ND	NESV	---	---	--	No	100% Non-Detect
	T	4	0	ND	ND	ND	180	---	0	---		
Vanadium	D	4	0	ND	ND	ND	20	---	0	--	No	100% Non-Detect
	T	4	2	2.9	3.1	3.3	NESV	---	---	DER1-28		
Zinc	D	4	0	ND	ND	ND	88.47	---	0	--	No	100% Non-Detect
	T	4	4	11.3	12.175	12.9	420.18	<1	0	DER1-20		
<b>Volatile Organic Compounds (µg/L)</b>												
1,1,1-Trichloroethane	T	4	0	ND	ND	ND	76	---	0	---	No	100% Non-Detect
1,1,2,2-Tetrachloroethane	T	4	0	ND	ND	ND	380	---	0	---	No	100% Non-Detect
1,1,2-Trichloroethane	T	4	0	ND	ND	ND	500	---	0	---	No	100% Non-Detect
1,1,2-Trichlorotrifluoroethane	T	4	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
1,1-Dichloroethane	T	4	0	ND	ND	ND	47	---	0	---	No	100% Non-Detect
1,1-Dichloroethene	T	4	0	ND	ND	ND	65	---	0	---	No	100% Non-Detect
1,2-Dichlorobenzene	T	4	0	ND	ND	ND	14	---	0	---	No	100% Non-Detect
1,2-Dichloroethane	T	4	0	ND	ND	ND	910	---	0	---	No	100% Non-Detect
1,2-Dichloropropane	T	4	0	ND	ND	ND	360	---	0	---	No	100% Non-Detect
1,3-Dichlorobenzene	T	4	0	ND	ND	ND	38	---	0	---	No	100% Non-Detect
1,4-Dichlorobenzene	T	4	0	ND	ND	ND	9.4	---	0	---	No	100% Non-Detect
2-Chloroethyl Vinyl Ether	T	3	0	ND	ND	ND	3,540	---	0	---	No	100% Non-Detect
Acetone	T	4	0	ND	ND	ND	1,500	---	0	---	No	100% Non-Detect
Benzene	T	4	0	ND	ND	ND	114	---	0	---	No	100% Non-Detect
Bromodichloromethane	T	4	0	ND	ND	ND	340	---	0	---	No	100% Non-Detect
Bromoform	T	4	0	ND	ND	ND	230	---	0	---	No	100% Non-Detect
Carbon Disulfide	T	4	0	ND	ND	ND	0.92	---	0	---	No	100% Non-Detect
Carbon Tetrachloride	T	4	0	ND	ND	ND	240	---	0	---	No	100% Non-Detect
Chlorobenzene	T	4	0	ND	ND	ND	47	---	0	---	No	100% Non-Detect
Chlorodibromomethane	T	4	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect

**Table 18**  
**Carneys Point Zone Screening-Level Exposure Estimate for Surface Water**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Fraction	Number of Samples	Number of Detections	Exposure Concentration			Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
				Minimum	Mean	Maximum						
Chloroform	T	4	0	ND	ND	ND	140	---	0	---	No	100% Non-Detect
cis-1,2-Dichloroethene	T	4	0	ND	ND	ND	590	---	0	---	No	100% Non-Detect
cis-1,3-Dichloropropene	T	4	0	ND	ND	ND	0.055	---	0	---	No	100% Non-Detect
Dichlorodifluoromethane	T	4	0	ND	ND	ND	1,960	---	0	---	No	100% Non-Detect
Dichlorofluoromethane	T	4	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Ethyl Chloride	T	4	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Ethylbenzene	T	4	0	ND	ND	ND	14	---	0	---	No	100% Non-Detect
Methyl Bromide	T	4	0	ND	ND	ND	16	---	0	---	No	100% Non-Detect
Methyl Chloride	T	4	0	ND	ND	ND	5,500	---	0	---	No	100% Non-Detect
Methylene Chloride	T	4	0	ND	ND	ND	940	---	0	---	No	100% Non-Detect
Tetrachloroethene	T	4	0	ND	ND	ND	45	---	0	---	No	100% Non-Detect
Toluene	T	4	0	ND	ND	ND	253	---	0	---	No	100% Non-Detect
trans-1,2-Dichloroethene	T	4	0	ND	ND	ND	970	---	0	---	No	100% Non-Detect
trans-1,3-Dichloropropene	T	4	0	ND	ND	ND	0.055	---	0	---	No	100% Non-Detect
Trichloroethene	T	4	0	ND	ND	ND	47	---	0	---	No	100% Non-Detect
Trichlorofluoromethane	T	4	0	ND	ND	ND	1,740	---	0	---	No	100% Non-Detect
Vinyl Chloride	T	4	0	ND	ND	ND	930	---	0	---	No	100% Non-Detect
Xylenes	T	4	0	ND	ND	ND	27	---	0	---	No	100% Non-Detect
<b>Polycyclic Aromatic Hydrocarbons (µg/L)</b>												
Acenaphthene	T	4	0	ND	ND	ND	38	---	0	---	No	100% Non-Detect
Acenaphthylene	T	4	0	ND	ND	ND	4,840	---	0	---	No	100% Non-Detect
Anthracene	T	4	0	ND	ND	ND	0.035	---	0	---	No	100% Non-Detect
Benzo(A)Anthracene	T	4	0	ND	ND	ND	0.025	---	0	---	No	100% Non-Detect
Benzo(B)Fluoranthene	T	4	0	ND	ND	ND	9.07	---	0	---	No	100% Non-Detect
Benzo(K)Fluoranthene	T	4	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Benzo(A)Pyrene	T	4	0	ND	ND	ND	0.014	---	0	---	No	100% Non-Detect
Chrysene	T	4	0	ND	ND	ND	7	---	0	---	No	100% Non-Detect
Dibenz(A,H)Anthracene	T	4	0	ND	ND	ND	5	---	0	---	No	100% Non-Detect
Fluoranthene	T	4	0	ND	ND	ND	1.9	---	0	---	No	100% Non-Detect
Fluorene	T	4	0	ND	ND	ND	19	---	0	---	No	100% Non-Detect
Indeno (1,2,3-CD) Pyrene	T	4	0	ND	ND	ND	4.31	---	0	---	No	100% Non-Detect
Naphthalene	T	4	0	ND	ND	ND	13	---	0	---	No	100% Non-Detect
Phenanthrene	T	4	0	ND	ND	ND	3.6	---	0	---	No	100% Non-Detect
Pyrene	T	4	0	ND	ND	ND	0.3	---	0	---	No	100% Non-Detect

**Table 18**  
**Carneys Point Zone Screening-Level Exposure Estimate for Surface Water**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Fraction	Number of Samples	Number of Detections	Exposure Concentration			Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
				Minimum	Mean	Maximum						
<b>Semi-Volatile Organic Compounds (µg/L)</b>												
1,2,4-Trichlorobenzene	T	4	0	ND	ND	ND	30	---	0	---	No	100% Non-Detect
1,2-Diphenylhydrazine	T	4	0	ND	ND	ND	2.7	---	0	---	No	100% Non-Detect
1-Naphthylamine	T	4	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2,4,6-Trichlorophenol	T	4	0	ND	ND	ND	4.9	---	0	---	No	100% Non-Detect
2,4-Dichlorophenol	T	4	0	ND	ND	ND	11	---	0	---	No	100% Non-Detect
2,4-Dimethylphenol	T	4	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2,4-Dinitrophenol	T	4	0	ND	ND	ND	19	---	0	---	No	100% Non-Detect
2,4-Dinitrotoluene	T	4	0	ND	ND	ND	44	---	0	---	No	100% Non-Detect
2,6-Dinitrotoluene	T	4	0	ND	ND	ND	81	---	0	---	No	100% Non-Detect
2-Chloronaphthalene	T	4	0	ND	ND	ND	0.396	---	0	---	No	100% Non-Detect
2-Chlorophenol	T	4	0	ND	ND	ND	24	---	0	---	No	100% Non-Detect
2-Naphthylamine	T	4	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
2-Nitrophenol	T	4	0	ND	ND	ND	1,920	---	0	---	No	100% Non-Detect
3,3'-Dichlorobenzidine	T	4	0	ND	ND	ND	4.5	---	0	---	No	100% Non-Detect
4,6-Dinitro-2-Methylphenol	T	4	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Aminobiphenyl	T	4	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Bromophenyl Phenyl Ether	T	4	0	ND	ND	ND	1.5	---	0	---	No	100% Non-Detect
4-Chloro-3-Methylphenol	T	4	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Chloroaniline	T	4	0	ND	ND	ND	232	---	0	---	No	100% Non-Detect
4-Chlorophenyl Phenyl Ether	T	4	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
4-Nitrophenol	T	4	0	ND	ND	ND	60	---	0	---	No	100% Non-Detect
Aniline	T	4	0	ND	ND	ND	4.1	---	0	---	No	100% Non-Detect
Benzidine	T	4	0	ND	ND	ND	3.9	---	0	---	No	100% Non-Detect
Benzo(G,H,I)Perylene	T	4	0	ND	ND	ND	7.64	---	0	---	No	100% Non-Detect
Bis(2-Chloroethoxy)Methane	T	4	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Bis(2-Chloroethyl)Ether	T	4	0	ND	ND	ND	1,900	---	0	---	No	100% Non-Detect
Bis(2-Chloroisopropyl)Ether	T	4	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Bis(2-Ethylhexyl)Phthalate	T	4	0	ND	ND	ND	16	---	0	---	No	100% Non-Detect
Butyl Benzyl Phthalate	T	4	0	ND	ND	ND	23	---	0	---	No	100% Non-Detect
Carbazole	T	4	0	ND	ND	ND	NESV	---	---	---	No	100% Non-Detect
Diethyl Phthalate	T	4	0	ND	ND	ND	110	---	0	---	No	100% Non-Detect
Dimethyl Phthalate	T	4	0	ND	ND	ND	330	---	0	---	No	100% Non-Detect
Di-N-Butyl Phthalate	T	4	0	ND	ND	ND	9.7	---	0	---	No	100% Non-Detect
Hexachlorobenzene	T	4	0	ND	ND	ND	0.0003	---	0	---	No	100% Non-Detect

**Table 18**  
**Carneys Point Zone Screening-Level Exposure Estimate for Surface Water**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Fraction	Number of Samples	Number of Detections	Exposure Concentration			Ecological Screening Value (ESV)	Maximum Hazard Quotient (HQ <sub>Max</sub> )	Result Concentrations > ESV	Location of Maximum Concentration	COPEC Decision	COPEC Decision Rationale
				Minimum	Mean	Maximum						
Hexachlorobutadiene	T	4	0	ND	ND	ND	0.053	---	0	---	No	100% Non-Detect
Hexachlorocyclopentadiene	T	4	0	ND	ND	ND	77	---	0	---	No	100% Non-Detect
Hexachloroethane	T	4	0	ND	ND	ND	8	---	0	---	No	100% Non-Detect
Isophorone	T	4	0	ND	ND	ND	920	---	0	---	No	100% Non-Detect
N-Dioctyl Phthalate	T	4	0	ND	ND	ND	0	---	0	---	No	100% Non-Detect
Nitrobenzene	T	4	0	ND	ND	ND	220	---	0	---	No	100% Non-Detect
N-Nitrosodimethylamine	T	4	0	ND	ND	ND	117	---	0	---	No	100% Non-Detect
N-Nitrosodi-N-Propylamine	T	4	0	ND	ND	ND	20	---	0	---	No	100% Non-Detect
N-Nitrosodiphenylamine	T	4	0	ND	ND	ND	210	---	0	---	No	100% Non-Detect
O-Toluidine	T	4	0	ND	ND	ND	0	---	0	---	No	100% Non-Detect
Pentachlorophenol	T	4	0	ND	ND	ND	15	---	0	---	No	100% Non-Detect
Phenol	T	4	0	ND	ND	ND	180	---	0	---	No	100% Non-Detect
<b>Other Parameters (µg/L)</b>												
Total Hardness As CaCO3	T	4	4	156,000	170,750	181,000	---	---	---	DER1-22	---	---

**Notes:**

---: No Result

COPEC: Constituent of Potential Ecological Concern

[Maximum]: Maximum concentration

ND: No Detections

NESV: No Ecological Screening Value

**Table 19**  
**Background Threshold Value Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Distribution	Number of Samples	Number of Detections	Minimum Non-Detect Concentration	Minimum Detected Concentration	Median Detected Concentration	Maximum Non-Detect Concentration	Maximum Detected Concentration	Mean Detected Concentration	Standard Dev. Detected Concentration	UCL Type	95% UCL	95% UPL	UTL - 95% Coverage	95% USL	Recommended BTV	BTV Notes
Aluminum	Normal	17	16	0	4	29,450	0	66,400	34,627	22,575	95% KM (t) UCL	42,525	<b>73,401</b>	89,065	88,810	73,401	1
Antimony	Log-Normal	18	15	0.1	0.2	0.4	0.3	3.0	0.7	0.7	95% KM Adjusted Gamma UCL	1.0	<b>1.7</b>	2.8	3.0	1.7	2
Arsenic	Normal	19	19	--	1.7	8.5	--	20.0	9.2	5.3	95% Student's-t UCL	11.3	<b>18.7</b>	22.1	22.7	18.7	3
Cadmium	Normal	19	17	0.0	0.1	0.6	0.1	2.3	0.7	0.7	95% KM Adjusted Gamma UCL	1.1	<b>1.8</b>	2.2	2.3	1.8	1
Chromium	Normal	17	16	0.0	3.9	71.1	0.0	165.0	69.4	40.5	95% KM (t) UCL	83.4	<b>139.6</b>	168.2	167.7	139.6	1
Copper	Normal	16	15	0.0	1.7	11.1	0.0	43.0	15.1	12.4	95% KM Adjusted Gamma UCL	22.9	<b>36.1</b>	44.8	43.8	36.1	1
Iron	No-Distribution	17	17	--	2,750	35,600	--	48,800	30,921	15,505	95% Chebyshev (Mean, Sd) UCL	47,313	100,465	<b>48,800</b>	48,800	48,800	4
Lead	Normal	16	16	--	5.0	21.7	--	58.3	25.2	16.8	95% Student's-t UCL	32.6	<b>55.6</b>	67.6	66.2	55.6	3
Manganese	Normal	16	16	--	207	884	--	1,790	874	361	95% Student's-t UCL	1,032	<b>1,526</b>	1,785	1,756	1,526	3
Mercury	Log-Normal	18	16	0.016	0.017	0.056	0.017	0.407	0.116	0.131	95% KM (Chebyshev) UCL	0.236	<b>0.395</b>	0.823	0.871	0.395	2
Nickel	Normal	17	17	--	4.5	25.8	--	48.0	25.9	13.2	95% Student's-t UCL	31.5	<b>49.6</b>	58.7	58.5	49.6	3
Selenium	Normal	18	12	0.0	0.2	0.7	0.8	1.7	0.7	0.4	95% KM (t) UCL	0.7	<b>1.3</b>	1.6	1.6	1.3	1
Silver	Log-Normal	18	17	0.0	0.0	0.2	0.0	1.1	0.3	0.3	95% KM Adjusted Gamma UCL	0.4	<b>1.0</b>	2.0	2.1	1.0	2
Tin	Normal	18	18	--	0.8	4.7	--	9.1	4.4	2.0	95% Student's-t UCL	5.2	<b>8.0</b>	9.3	9.4	8.0	3
Zinc	Log-Normal	16	16	--	20	83	--	255	96	64	95% Adjusted Gamma UCL	136	<b>275</b>	453	428	275	5
Total PAHs (detections only)	Normal	18	13	0.00	0.01	0.09	0.01	1.07	0.34	0.42	Gamma Adjusted KM-UCL	0.56	<b>0.91</b>	1.16	1.18	0.91	1
Total PAHs (detections+1/2 mdl)	Normal	18	13	0.00	0.01	0.09	0.01	1.07	0.34	0.42	Gamma Adjusted KM-UCL	0.56	<b>0.91</b>	1.16	1.18	0.91	1
Total PCB (congeners)	Gamma	68	60	0.0001	0.0002	0.0050	0.0120	0.0753	0.0134	0.0173	KM H-UCL	0.0450	<b>0.0462</b>	0.0625	0.1542	0.0462	6

**Notes:**

--: No Result

Dev.: Deviation

KM: Kaplan-Meier

UCL: Upper Confidence Limit

UPL: Upper Prediction Limit

USL: Upper Simultaneous Limit

UTL: Upper Tolerance Limit

1: Kaplan Meier (KM) Background Statistics Assuming Normal Distribution - 95% KM UPL (t), 95% UTL95% Coverage, 95% KM USL

2: Statistics using KM estimates on Logged Data and Assuming Lognormal Distribution - 95% KM UPL (Lognormal), 95% KM UTL (Lognormal)95% Coverage, 95% KM USL (Lognormal)

3: Background Statistics Assuming Normal Distribution - 95% UPL (t), 95% UTL with95% Coverage, 95% USL

4: Nonparametric Upper Limits for Background Threshold Values - 95% Chebyshev UPL, 95% UTL with95% Coverage, 95% USL

5: Background Statistics assuming Lognormal Distribution - 95% UPL (t), 95% UTL with95% Coverage, 95% USL

6: The following statistics are computed using gamma distribution and KM estimates - 95% Approx. Gamma UPL, 95% Approx. Gamma UTL with 95% Coverage, 95% Gamma USL

**Table 20**  
**Refined Ecological Screening Values - Bulk Sediment**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Units	Refined Ecological Screening Values (RESVs)	
		ESV	Source
<b>Metals</b>			
Aluminum	mg/kg dw	25500	NJDEP 2009: Freshwater Criteria Lowest Effects Level (LEL)
Antimony	mg/kg dw	2	USEPA Region 3 BTAG Freshwater Sediment Screening Benchmark
Arsenic	mg/kg dw	9.979	NJDEP 2009: Freshwater Criteria Lowest Effects Level (LEL)
Barium	mg/kg dw	NESV	NESV: No Ecological Screening Value Available
Beryllium	mg/kg dw	NESV	NESV: No Ecological Screening Value Available
Cadmium	mg/kg dw	0.99	NJDEP 2009: Freshwater Criteria Lowest Effects Level (LEL)
Chromium	mg/kg dw	43.4	NJDEP 2009: Freshwater Criteria Lowest Effects Level (LEL)
Copper	mg/kg dw	31.6	NJDEP 2009: Freshwater Criteria Lowest Effects Level (LEL)
Iron	mg/kg dw	20000	USEPA Region 3 BTAG Freshwater Sediment Screening Benchmark
Lead	mg/kg dw	35.8	NJDEP 2009: Freshwater Criteria Lowest Effects Level (LEL)
Manganese	mg/kg dw	630	NJDEP 2009: Freshwater Criteria Lowest Effects Level (LEL)
Mercury	mg/kg dw	0.2	NJDEP 2009: Freshwater Criteria Lowest Effects Level (LEL)
Nickel	mg/kg dw	22.7	NJDEP 2009: Freshwater Criteria Lowest Effects Level (LEL)
Selenium	mg/kg dw	2	USEPA Region 3 BTAG Freshwater Sediment Screening Benchmark
Silver	mg/kg dw	1	NJDEP 2009: Freshwater Criteria Lowest Effects Level (LEL)
Tin	mg/kg dw	NESV	NESV: No Ecological Screening Value Available
Thallium	mg/kg dw	NESV	NESV: No Ecological Screening Value Available
Titanium	mg/kg dw	NESV	NESV: No Ecological Screening Value Available
Vanadium	mg/kg dw	NESV	NESV: No Ecological Screening Value Available
Zinc	mg/kg dw	121	NJDEP 2009: Freshwater Criteria Lowest Effects Level (LEL)
<b>Volatile Organic Compounds</b>			
1-Chloro-1,1-difluoroethane	---	NESV	NESV: No Ecological Screening Value Available
1,1-Dichloroethane	mg/kg dw	0.000575	USEPA 2003 Region 5 Ecological Screening Levels
1,1-Dichloroethene	mg/kg dw @ 1% OC	4.66	EqP See Appendix D
1,1,1-Trichlorotrifluoroethane	mg/kg dw @ 1% OC	14.72	EqP See Appendix D
1,1,2-Trichlorotrifluoroethane	mg/kg dw @ 1% OC	14.72	EqP See Appendix D
1,1,1,2-Tetrachloroethane	---	NESV	NESV: No Ecological Screening Value Available
1,1,2,2-Tetrachloroethane	mg/kg dw	0.85	NJDEP 2009: Freshwater Criteria Lowest Effects Level (LEL)
1,2-Dichlorobenzene	mg/kg dw @ 1% OC	7.9	USEPA 2008: EqP Nonionic Organics; See Appendix D
1,2-Dichloroethene	mg/kg dw @ 1% OC	0.525	EqP See Appendix D
1,2-Dichloro-1,1,2-trifluoroethane	mg/kg dw @ 1% OC	9.227	EqP See Appendix D
1,2-Dichlorotetrafluoroethane	mg/kg dw @ 1% OC	11.842	EqP See Appendix D
1,2,4-Trimethylbenzene	mg/kg dw @ 1% OC	11.5	EqP See Appendix D
1,3,5-Trimethylbenzene	mg/kg dw @ 1% OC	11.5	EqP See Appendix D
1,3-Dichlorobenzene	mg/kg dw @ 1% OC	7.9	USEPA 2008: EqP Nonionic Organics; See Appendix D
1,4-Dichlorobenzene	mg/kg dw @ 1% OC	7.9	USEPA 2008: EqP Nonionic Organics; See Appendix D
2-Chlorotoluene	mg/kg dw @ 1% OC	11.6	EqP See Appendix D
2,2-Dichloro-1,1,1-trifluoroethane	mg/kg dw @ 1% OC	9.2	EqP See Appendix D
2-Chloro-1,1,1-trifluoroethane	mg/kg dw @ 1% OC	7.3	EqP See Appendix D
4-Chlorotoluene	---	NESV	NESV: No Ecological Screening Value Available
4-Isopropyltoluene	mg/kg dw @ 1% OC	7.31	EqP See Appendix D
Acetone	mg/kg dw @ 1% OC	31.2	EqP See Appendix D
Benzene	mg/kg dw @ 1% OC	6.54	EqP See Appendix D
sec-Butylbenzene	---	NESV	NESV: No Ecological Screening Value Available
N-Butylbenzene	---	NESV	NESV: No Ecological Screening Value Available
tert-Butylbenzene	---	NESV	NESV: No Ecological Screening Value Available
Carbon disulfide	mg/kg dw @ 1% OC	0.130	EqP See Appendix D
CFC-1113	mg/kg dw @ 1% OC	14.2	EqP See Appendix D
Chlorobenzene	mg/kg dw @ 1% OC	5.72	USEPA 2008: EqP Nonionic Organics; See Appendix D
Chlorodifluoromethane	mg/kg dw @ 1% OC	13.24	EqP See Appendix D
Chlorofluoromethane	mg/kg dw @ 1% OC	8.81	EqP See Appendix D
Chloroform	mg/kg dw @ 1% OC	5.59	EqP See Appendix D
cis-1,2 dichloroethene	mg/kg dw @ 1% OC	0.525	EqP See Appendix D
Cumene	mg/kg dw @ 1% OC	11.3	EqP See Appendix D
Dichlorodifluoromethane	mg/kg dw @ 1% OC	2.0	EqP See Appendix D
Dichlorofluoromethane	mg/kg dw @ 1% OC	10.7	EqP See Appendix D
Ethylbenzene	mg/kg dw @ 1% OC	9.7	USEPA 2008: EqP Nonionic Organics; See Appendix D
Methylene chloride	mg/kg dw @ 1% OC	3.7	EqP See Appendix D
Methyl ethyl ketone	mg/kg dw @ 1% OC	2.9	EqP See Appendix D

**Table 20**  
**Refined Ecological Screening Values - Bulk Sediment**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Units	Refined Ecological Screening Values (RESVs)	
		ESV	Source
N-Propylbenzene	mg/kg dw @ 1% OC	11.5	EqP See Appendix D
Tetrachloroethene	mg/kg dw @ 1% OC	8.3	USEPA 2008: EqP Nonionic Organics; See Appendix D
Toluene	mg/kg dw @ 1% OC	8.1	USEPA 2008: EqP Nonionic Organics; See Appendix D
Trichloroethene	mg/kg dw @ 1% OC	6.6	USEPA 2008: EqP Nonionic Organics; See Appendix D
Trichlorofluoromethane	mg/kg dw @ 1% OC	2.9	EqP See Appendix D
Vinyl chloride	mg/kg dw @ 1% OC	0.8	EqP See Appendix D
Xylenes	mg/kg dw @ 1% OC	9.7	USEPA 2008: EqP Nonionic Organics; See Appendix D
meta- and para-Xylene	mg/kg dw @ 1% OC	9.8	USEPA 2008: EqP Nonionic Organics; See Appendix D
ortho-Xylene	mg/kg dw @ 1% OC	9.7	USEPA 2008: EqP Nonionic Organics; See Appendix D
1,1,2-Trichlorotrifluoroethane	mg/kg dw @ 1% OC	14.7	EqP See Appendix D
Acetone	mg/kg dw @ 1% OC	31.2	EqP See Appendix D
Carbon disulfide	mg/kg dw @ 1% OC	0.13	EqP See Appendix D
Dichlorodifluoromethane	mg/kg dw @ 1% OC	2.0	EqP See Appendix D
Dichlorofluoromethane	mg/kg dw @ 1% OC	10.7	EqP See Appendix D
<b>Polycyclic Aromatic Hydrocarbons</b>			
Acenaphthene	mg/kg dw @ 1% OC	4.91	USEPA 2003
Acenaphthylene	mg/kg dw @ 1% OC	4.52	USEPA 2003
Anthracene	mg/kg dw @ 1% OC	5.94	USEPA 2003
Benzo(a)anthracene	mg/kg dw @ 1% OC	8.41	USEPA 2003
Benzo(b)fluoranthene	mg/kg dw @ 1% OC	9.79	USEPA 2003
Benzo(g,h,i)perylene	mg/kg dw @ 1% OC	10.95	USEPA 2003
Benzo(k)fluoranthene	mg/kg dw @ 1% OC	9.81	USEPA 2003
Benzo[a]pyrene	mg/kg dw @ 1% OC	9.65	USEPA 2003
Chrysene	mg/kg dw @ 1% OC	8.44	USEPA 2003
Dibenz(a,h)anthracene	mg/kg dw @ 1% OC	11.23	USEPA 2003
Fluoranthene	mg/kg dw @ 1% OC	7.07	USEPA 2003
Fluorene	mg/kg dw @ 1% OC	5.38	USEPA 2003
Indeno (1,2,3-Cd) pyrene	mg/kg dw @ 1% OC	11.15	USEPA 2003
Naphthalene	mg/kg dw @ 1% OC	3.85	USEPA 2003
Phenanthrene	mg/kg dw @ 1% OC	5.96	USEPA 2003
Pyrene	mg/kg dw @ 1% OC	6.97	USEPA 2003
Total PAHs (detections only)	mg/kg dw	4	NJDEP 2009: Freshwater Criteria Lowest Effects Level (LEL)
Total PAHs (detections+1/2 mdl)	mg/kg dw	4	NJDEP 2009: Freshwater Criteria Lowest Effects Level (LEL)
<b>Semi-Volatile Organic Compounds</b>			
1,2,4-Trichlorobenzene	mg/kg dw @ 1% OC	10.2	USEPA 2008: EqP Nonionic Organics; See Appendix D
1,2-Diphenylhydrazine	mg/kg dw @ 1% OC	0.028	EqP See Appendix D
1-Naphthylamine	mg/kg dw @ 1% OC	12.1	EqP See Appendix D
2,4-Dichlorophenol	mg/kg dw	0.1	NJDEP 2009: Freshwater Criteria Lowest Effects Level (LEL)
2,4-Dinitrotoluene	mg/kg dw @ 1% OC	0.4	EqP See Appendix D
2,6-Dinitrotoluene	mg/kg dw @ 1% OC	0.4	EqP See Appendix D
2-Chlorophenol	mg/kg dw @ 1% OC	1.0	EqP See Appendix D
2-Methylnaphthalene	mg/kg dw @ 1% OC	4.47	USEPA 2003; EqP See Appendix D
2-Methylphenol (o-Cresol)	mg/kg dw @ 1% OC	0.6	EqP See Appendix D
4-Chloroaniline	mg/kg dw @ 1% OC	2.6	EqP See Appendix D
4-Methylphenol (p-Cresol)	mg/kg dw @ 1% OC	0.3	EqP See Appendix D
Acetophenone	mg/kg dw @ 1% OC	9.7	EqP See Appendix D
Aniline	mg/kg dw @ 1% OC	0.001	Calculated using equilibrium partitioning (DuPont CRG, 1999)
Biphenyl	mg/kg dw @ 1% OC	15.1	USEPA 2008: EqP Nonionic Organics; See Appendix D
Bis(2-Ethylhexyl)phthalate	mg/kg dw @ 1% OC	530.6	EqP See Appendix D
Butyl benzyl phthalate	mg/kg dw @ 1% OC	10.9	USEPA 2008: EqP Nonionic Organics; See Appendix D
Carbazole	mg/kg dw @ 1% OC	0.1	EqP See Appendix D
Dibenzofuran	mg/kg dw @ 1% OC	16.2	USEPA 2008: EqP Nonionic Organics; See Appendix D
Diethyl phthalate	mg/kg dw @ 1% OC	0.77	USEPA 2008: EqP Nonionic Organics; See Appendix D
DI-N-butyl phthalate	mg/kg dw @ 1% OC	11.9	USEPA 2008: EqP Nonionic Organics; See Appendix D
Diphenyl ether	mg/kg dw @ 1% OC	17.3	EqP See Appendix D
Hexachlorobenzene	mg/kg dw @ 1% OC	33.0	EqP See Appendix D
Hexachlorobutadiene	mg/kg dw	0.0265	NJDEP 2009: Freshwater Criteria Lowest Effects Level (LEL)
N-Dioctyl phthalate	mg/kg dw @ 1% OC	530.6	EqP See Appendix D
Nitrobenzene	mg/kg dw @ 1% OC	1.6	EqP See Appendix D
Phenol	mg/kg dw @ 1% OC	0.1	EqP See Appendix D

**Table 20**  
**Refined Ecological Screening Values - Bulk Sediment**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Units	Refined Ecological Screening Values (RESVs)	
		ESV	Source
<b>Pesticides</b>			
4,4'-DDE	mg/kg dw	0.005	NJDEP 2009: Freshwater Criteria Lowest Effects Level (LEL)
Beta-BHC	mg/kg dw @ 1% OC	0.114	USEPA 2008: EqP Nonionic Organics; See Appendix D
Delta-BHC	mg/kg dw @ 1% OC	0.114	USEPA 2008: EqP Nonionic Organics; See Appendix D
Endosulfan I	mg/kg dw @ 1% OC	0.0033	USEPA 2008: EqP Nonionic Organics; See Appendix D
<b>Polychlorinated Biphenyls</b>			
Total PCB (congeners)	mg/kg dw	0.07	NJDEP 2009: Freshwater Criteria Lowest Effects Level (LEL)

**Notes:**

ESV: Ecological Screening Value  
MDL: Method Detection Limit  
NESV: No Ecological Screening level  
OC: Organic Carbon

**Table 21**  
**Jackson Labs/TEL Area Refined Exposure Estimate for Bulk Sediment (0-0.5 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Detection Frequency	Minimum Concentration	Mean Concentration	Maximum Concentration	Upper Confidence Limit (UCL) Concentration	Background Threshold Value (BTV)	Result Concentrations > BTV	Refined Ecological Screening Value (ESV)	Result Concentrations > Refined ESV	Hazard Quotient (HQ) or ESB Toxic Unit (ESBTU)		COPEC Decision	COPEC Decision Rationale
												HQ <sub>Max</sub> / ESBTU <sub>Max</sub>	HQ <sub>UCL</sub> / ESBTU <sub>UCL</sub>		
<b>Metals (mg/kg)</b>															
Aluminum	37	37	100%	3380	16493	56900	19683	73401	0	25,500	4	2.2	<1	No	[UCL] < Refined ESV; [Max] < BTV
Antimony	37	11	30%	0.159	1.251	6.55	0.884	1.68	3	2	1	3.3	<1	No	[UCL] < Refined ESV;
Arsenic	37	37	100%	1.29	9.54	65	12.63	18.7	2	9,979	15	6.5	1.3	Yes	[Max] > Refined ESV; [Max] > BTV
Barium	37	37	100%	16	110	541	143	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Beryllium	37	36	97%	0.0878	1.3768	7.26	1.92	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Cadmium	37	34	92%	0.0449	0.5716	1.67	0.64	1.78	0	0.99	6	1.7	<1	No	[UCL] < Refined ESV; [Max] < BTV
Chromium	37	37	100%	8.66	136.36	1170	305	139.6	8	43.4	24	27	7	Yes	[Max] > Refined ESV; [Max] > BTV
Copper	37	37	100%	7.21	28.82	87.8	35.1	36.1	6	31.6	7	2.8	1.1	Yes	[Max] > Refined ESV; [Max] > BTV
Iron	37	37	100%	5940	26858	112000	31896	48800	2	20000	21	5.6	1.6	Yes	[Max] > Refined ESV; [Max] > BTV
Lead	37	37	100%	10.3	81.5	1210	220.4	55.6	9	35.8	27	33.8	6.2	Yes	[Max] > Refined ESV; [Max] > BTV
Manganese	37	37	100%	43.4	578.7	1720	965.7	1526.1	2	630	13	2.7	1.5	Yes	[Max] > Refined ESV; [Max] > BTV
Mercury	37	35	95%	0.0236	0.6155	9.6	0.889	0.395	9	0.2	15	4.8	4.4	Yes	[Max] > Refined ESV; [Max] > BTV
Nickel	37	37	100%	5.21	24.87	76	28.92	49.6	2	22.7	21	3.3	1.3	Yes	[Max] > Refined ESV; [Max] > BTV
Selenium	37	11	30%	0.133	1.332	4.41	1.036	1.31	5	2	4	2.2	<1	No	[UCL] < Refined ESV;
Silver	37	12	32%	0.0255	0.3151	1.08	0.25	1.02	1	1	1	1.1	<1	No	[UCL] < Refined ESV;
Thallium	37	12	32%	0.0393	0.9179	4.21	1.31	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Tin	28	28	100%	1.91	5.03	9.87	5.68	7.97	2	NESV	---	---	---	Yes	[Max] > BTV
Titanium	9	9	100%	218	1443	4440	2336	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Vanadium	37	37	100%	11.5	45	108	51.7	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Zinc	37	37	100%	23.5	112.1	284	136.9	274.9	1	121	14	2.3	1.1	Yes	[Max] > Refined ESV; [Max] > BTV
<b>Volatile Organic Compounds (mg/kg)</b>															
1,1,2-Trichlorotrifluoroethane	9	1	11%	2.4	2.4	2.4	NC	NC	---	14.7 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
1,2-Dichlorobenzene	28	8	29%	0.048	1.159	5.5	1.286	NC	---	7.86 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
1,4-Dichlorobenzene	28	6	21%	0.063	1.223	4.2	1.032	NC	---	7.85 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Acetone	9	7	78%	0.013	0.089	0.25	0.136	NC	---	31.2 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Carbon Disulfide	9	7	78%	0.003	0.022	0.068	0.034	NC	---	0.130 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Chlorobenzene	9	1	11%	2.7	2.7	2.7	NC	NC	---	5.72 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Chloroform	9	1	11%	1.5	1.5	1.5	NC	NC	---	5.59 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Trichloroethene	9	1	11%	0.82	0.82	0.82	NC	NC	---	6.59 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
<b>Polycyclic Aromatic Hydrocarbons (mg/kg)</b>															
Acenaphthene	37	8	22%	0.017	0.122	0.63	0.096	NC	---	ESBTU <sub>F<sub>CV</sub>Total</sub> > 1 (See Appendix C)	10	67	15.3	Yes	ESBTU <sub>F<sub>CV</sub>Total</sub> > 1
Acenaphthylene	37	7	19%	0.004	0.057	0.27	0.043	NC	---						
Anthracene	37	12	32%	0.007	0.192	0.98	0.163	NC	---						
Benzo(A)Anthracene	37	17	46%	0.019	0.324	2.3	0.363	NC	---						
Benzo(B)Fluoranthene	37	21	57%	0.033	0.274	2.3	0.209	NC	---						
Benzo(G,H,I)Perylene	37	14	38%	0.016	0.179	1.1	0.177	NC	---						
Benzo(K)Fluoranthene	37	13	35%	0.014	0.18	1.3	0.198	NC	---						
Benzo(A)Pyrene	37	18	49%	0.021	0.264	2	0.314	NC	---						
Chrysene	37	20	54%	0.034	0.355	2	0.38	NC	---						
Dibenz(A,H)Anthracene	37	8	22%	0.004	0.055	0.21	0.034	NC	---						
Fluoranthene	37	22	59%	0.008	0.488	5.5	0.833	NC	---						
Fluorene	37	10	27%	0.004	0.101	0.4	0.074	NC	---						
Indeno (1,2,3-CD) Pyrene	37	14	38%	0.012	0.142	1	0.154	NC	---						
Naphthalene	37	14	38%	0.006	0.289	1.5	0.287	NC	---						
Phenanthrene	37	20	54%	0.006	0.312	2.1	0.372	NC	---						
Pyrene	37	24	65%	0.012	0.483	4	0.652	NC	---						
Total PAHs (Detections + 1/2 MDL)	37	25	68%	0.06	2.95	25.2	4.08	0.91	18						
Total PAHs (Detections Only)	37	25	68%	0.05	2.71	25.2	4.01	0.91	13						
ESBTU <sub>F<sub>CV</sub>13</sub>	37	25	68%	0.009	1.36	24.3	5.6	NC	---						
ESBTU <sub>F<sub>CV</sub>Total</sub>	37	25	68%	0.024	3.74	67.0	15.3	NC	---						
<b>Semi-Volatile Organic Compounds (mg/kg)</b>															
1,2,4-Trichlorobenzene	37	3	8%	0.1	9.2	27	2.2	NC	---	10.2 <sup>a</sup>	1	3.4	<1	No	[UCL] < Refined ESV;
2,4-Dinitrotoluene	37	1	3%	0.24	0.24	0.24	NC	NC	---	0.1 <sup>a</sup>	10	10	---	No	< 5% DF;
2-Methylnaphthalene	9	6	67%	0.009	0.065	0.18	0.148	NC	---	4.47 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
2-Methylphenol (O-Cresol)	9	1	11%	0.067	0.067	0.067	NC	NC	---	0.59 <sup>a</sup>	2	1.7	---	Yes	[Max] > Refined ESV;
4-Chloroaniline	37	3	8%	0.41	0.8	1.1	0.18	NC	---	2.61 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
4-Methylphenol (P-Cresol)	9	3	33%	0.031	0.455	1.3	NC	NC	---	0.29 <sup>a</sup>	3	3.6	2.1	Yes	[Max] > Refined ESV;
Bis(2-Ethylhexyl)Phthalate	37	4	11%	0.21	0.3	0.41	0.13	NC	---	35.374 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Hexachlorobenzene	37	1	3%	0.049	0.049	0.049	NC	NC	---	33.0 <sup>a</sup>	0	<1	---	No	< 5% DF; [Max] < Refined ESV;
N-Diethyl Phthalate	36	1	3%	0.66	0.66	0.66	NC	NC	---	35.374 <sup>a</sup>	0	<1	---	No	< 5% DF; [Max] < Refined ESV;
Nitrobenzene	37	5	14%	0.2	0.4	0.84	0.2	NC	---	0.13 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;

**Table 21**  
**Jackson Labs/TEL Area Refined Exposure Estimate for Bulk Sediment (0-0.5 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Detection Frequency	Minimum Concentration	Mean Concentration	Maximum Concentration	Upper Confidence Limit (UCL) Concentration	Background Threshold Value (BTV)	Result Concentrations > BTV	Refined Ecological Screening Value (ESV)	Result Concentrations > Refined ESV	Hazard Quotient (HQ) or ESB Toxic Unit (ESBTU)		COPEC Decision	COPEC Decision Rationale
												HQ <sub>max</sub> / ESBTU <sub>max</sub>	HQ <sub>UCL</sub> / ESBTU <sub>UCL</sub>		
<b>Pesticides and Herbicides (mg/kg)</b>															
beta-BHC	2	1	50%	0.025	0.025	0.025	NC	NC	---	0.1144 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
delta-BHC	2	1	50%	0.0016	0.0016	0.0016	NC	NC	---	0.1144 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Endosulfan I	2	2	100%	0.0031	0.0061	0.0092	NC	NC	---	0.0033 <sup>a</sup>	2	<b>2.3</b>	---	<b>Yes</b>	[Max] > Refined ESV;
<b>Polychlorinated Biphenyls (mg/kg)</b>															
Total Monochlorobiphenyls (congeners)	9	7	78%	0.0000705	0.0012229	0.00428	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total Dichlorobiphenyls (congeners)	9	8	89%	0.0001	0.0095	0.0635	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total Trichlorobiphenyls (congeners)	7	7	100%	0.000138	0.023933	0.152	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Trichlorobiphenyl (total)	2	1	50%	0.000289	0.000289	0.000289	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Tetrachlorobiphenyl	2	2	100%	0.00176	0.00345	0.00515	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total Tetrachlorobiphenyls (congeners)	7	7	100%	0.000276	0.008248	0.0373	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Pentachlorobiphenyl	2	2	100%	0.00359	0.00637	0.00916	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total Pentachlorobiphenyls (congeners)	7	7	100%	0.000513	0.004416	0.0119	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Hexachlorobiphenyl	2	2	100%	0.00532	0.00791	0.0105	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total Hexachlorobiphenyls (congeners)	7	7	100%	0.000645	0.004042	0.0112	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Heptachlorobiphenyl	2	2	100%	0.00304	0.00485	0.00667	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total Heptachlorobiphenyls (congeners)	7	7	100%	0.000356	0.001902	0.00502	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Octachlorobiphenyl	2	2	100%	0.000801	0.00143	0.00206	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total Octachlorobiphenyls (congeners)	7	7	100%	0.000233	0.001253	0.00373	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total Nonachlorobiphenyls (congeners)	9	9	100%	0.000504	0.002515	0.00721	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total Decachlorobiphenyls (congeners)	2	2	100%	0.00159	0.00224	0.00289	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total PCB (congeners)	9	9	100%	0.003	0.054	0.265	0.156	0.046	2	0.07	1	<b>3.8</b>	<b>2.2</b>	<b>Yes</b>	[Max] > Refined ESV; [Max] > BTV
<b>Other Parameters</b>															
Total Organic Carbon (mg/kg)	39	37	95%	1120	10490	25600	NC	NC	---	NESV	---	---	---	---	---
Black Carbon (mg/kg)	28	28	100%	155	2044	7360	NC	NC	---	NESV	---	---	---	---	---
Percent Fines (% <0.064 mm)	36	36	100%	0.5	35.8	96	NC	NC	---	NESV	---	---	---	---	---
Percent Moisture (%)	46	46	100%	8.9	36.8	69.5	NC	NC	---	NESV	---	---	---	---	---
Percent Solids (%)	2	2	100%	61.5	69.2	76.8	NC	NC	---	NESV	---	---	---	---	---

**Notes:**

---: No Result

a: Indicates a RESV based on sample-specific TOC content; value provided in table represents the RESV concentration on a dry weight basis at 1% TOC.

**Bolded** Detection Frequency: Detection frequency < 5%

**Bolded** HQ: HQ > 1

COPEC: Constituent of Potential Ecological Concern

ESB: Equilibrium Partitioning Sediment Benchmark

[Maximum]: Maximum concentration

MDL: Method Detection Limit

NC: Not Calculated

ND: No Detections

NESV: No Ecological Screening Value

**Table 22**  
**Jackson Labs/TEL Area Refined Exposure Estimate for Bulk Sediment (0.5-1.0 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Detection Frequency	Minimum Concentration	Mean Concentration	Maximum Concentration	Upper Confidence Limit (UCL) Concentration	Background Threshold Value (BTV)	Result Concentrations > BTV	Refined Ecological Screening Value (ESV)	Result Concentrations > Refined ESV	Hazard Quotient (HQ) or ESB Toxic Unit (ESBTU)		COPEC Decision	COPEC Decision Rationale
												HQ <sub>Max</sub> / ESBTU <sub>Max</sub>	HQ <sub>UCL</sub> / ESBTU <sub>UCL</sub>		
<b>Metals (mg/kg)</b>															
Aluminum	9	9	100%	4,140	14,311	31,600	19,596	73,401	0	25,500	1	1.2	<1	No	[UCL] < Refined ESV; [Max] < BTV
Antimony	9	9	100%	0.126	0.732	2.94	1.712	1.683	1	2	1	1.5	<1	No	[UCL] < Refined ESV
Arsenic	9	9	100%	1.66	12.92	45.8	21.5	18.68	2	9.979	4	4.6	2.2	Yes	[Max] > Refined ESV; [Max] > BTV
Barium	9	9	100%	15.2	148.5	361	222	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Beryllium	9	9	100%	0.291	1.906	5.71	4.24	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Cadmium	9	9	100%	0.0395	0.2396	0.901	0.412	1.7784	0	0.99	0	<1	<1	No	[Max] < Refined ESV; [Max] < BTV
Chromium	9	9	100%	10.9	185.5	573	311.8	139.6	4	43.4	6	13.2	7.2	Yes	[Max] > Refined ESV; [Max] > BTV
Copper	9	9	100%	5.42	27.93	61.9	39.98	36.06	4	31.6	4	2	1.3	Yes	[Max] > Refined ESV; [Max] > BTV
Iron	9	9	100%	4,000	30,787	118,000	72,211	48,800	1	20,000	5	5.9	3.6	Yes	[Max] > Refined ESV; [Max] > BTV
Lead	9	9	100%	8.59	52.93	125	83.62	55.6	3	35.8	4	3.5	2.3	Yes	[Max] > Refined ESV; [Max] > BTV
Mercury	9	7	78%	0.0147	0.1816	0.486	0.2564	0.3948	1	0.2	3	2.4	1.3	Yes	[Max] > Refined ESV; [Max] > BTV
Nickel	9	9	100%	9.24	26.32	53.5	36.25	49.6	1	22.7	4	2.4	1.6	Yes	[Max] > Refined ESV; [Max] > BTV
Silver	9	6	67%	0.0286	0.218	0.592	0.2882	1.0248	0	1	0	<1	<1	No	[Max] < Refined ESV; [Max] < BTV
Thallium	9	9	100%	0.0576	0.1275	0.213	0.166	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Titanium	9	9	100%	280	847	1,980	1,208	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Vanadium	9	9	100%	16.8	50.5	99.1	66.7	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Zinc	9	9	100%	19.3	68.9	215	146.2	274.9	0	121	2	1.8	1.2	No	[Max] < BTV
<b>Volatile Organic Compounds (mg/kg)</b>															
1,1,2-Trichlorotrifluoroethane	37	2	5%	0.029	0.434	0.84	0.223	NC	---	14.7 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV
Acetone	37	34	92%	0.009	0.062	0.19	0.07	NC	---	31.2 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV
Benzene	37	8	22%	0.0008	0.2547	1.4	0.2531	NC	---	6.54 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV
Carbon Disulfide	37	30	81%	0.0009	0.0088	0.06	0.012	NC	---	0.13 <sup>a</sup>	1	3	<1	No	[UCL] < Refined ESV
Chlorobenzene	37	16	43%	0.001	0.622	4.9	1.328	NC	---	5.72 <sup>a</sup>	2	3	<1	No	[UCL] < Refined ESV
Chloroform	37	2	5%	0.004	0.602	1.2	0.483	NC	---	5.59 <sup>a</sup>	1	1.4	<1	No	[UCL] < Refined ESV
Dichlorodifluoromethane	37	1	3%	0.036	0.036	0.036	NC	NC	---	2.05 <sup>a</sup>	0	<1	---	No	< 5% DF; [Max] < Refined ESV
Dichlorofluoromethane	37	2	5%	0.002	0.003	0.003	0.0022	NC	---	10.7 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV
Trichlorofluoromethane	37	1	3%	0.04	0.04	0.04	NC	NC	---	2.91 <sup>a</sup>	0	<1	---	No	< 5% DF; [Max] < Refined ESV
<b>Polycyclic Aromatic Hydrocarbons (mg/kg)</b>															
Acenaphthene	9	3	33%	0.068	0.099	0.15	0.073	NC	---	ESBTU <sub>FCV,Total</sub> > 1 (See Appendix C)	2	4.7	3.1	Yes	ESBTU <sub>FCV,Total</sub> > 1
Acenaphthylene	9	2	22%	0.004	0.008	0.012	0.012	NC	---						
Anthracene	9	6	67%	0.007	0.113	0.51	0.555	NC	---						
Benzo(A)Anthracene	9	8	89%	0.005	0.199	1.3	2.847	NC	---						
Benzo(G,H,I)Perylene	9	6	67%	0.009	0.124	0.56	0.803	NC	---						
Benzo(K)Fluoranthene	9	6	67%	0.004	0.125	0.6	1.231	NC	---						
Benzo(A)Pyrene	9	8	89%	0.004	0.147	0.9	1.793	NC	---						
Chrysene	9	7	78%	0.007	0.207	1.1	1.525	NC	---						
Dibenz(A,H)Anthracene	9	4	44%	0.005	0.035	0.11	0.042	NC	---						
Fluoranthene	9	8	89%	0.005	0.487	3.3	7.593	NC	---						
Fluorene	9	4	44%	0.005	0.077	0.22	0.084	NC	---						
Indeno (1,2,3-CD) Pyrene	9	6	67%	0.006	0.101	0.45	0.606	NC	---						
Naphthalene	9	7	78%	0.006	0.063	0.19	0.092	NC	---						
Phenanthrene	9	7	78%	0.004	0.302	1.8	3.564	NC	---						
Pyrene	9	9	100%	0.007	0.36	2.5	1.87	NC	---						
Total PAHs (Detections + 1/2 MDL)	9	9	100%	0.04	2.13	14.906	11.12	0.91	3						
Total PAHs (Detections Only)	9	9	100%	0.012	2.119	14.89	12.035	0.912	3						
ESBTU <sub>FCV,13</sub>	9	9	100%	0.009	0.353	1.70	1.12	NC	---						
ESBTU <sub>FCV,Total</sub>	9	9	100%	0.025	0.970	4.67	3.08	NC	---						
<b>Semi-Volatile Organic Compounds (mg/kg)</b>															
2-Methylnaphthalene	9	6	67%	0.005	0.035	0.086	0.045	NC	---	4.47 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV
4-Methylphenol (P-Cresol)	9	2	22%	0.24	0.26	0.27	0.157	NC	---	0.288 <sup>a</sup>	3	4.2	3.8	Yes	[Max] > Refined ESV
<b>Pesticides and Herbicides (mg/kg)</b>															
4,4'-DDE	2	1	50%	0.0062	0.0062	0.0062	NC	NC	---	0.005	1	1.2	---	Yes	[Max] > Refined ESV
<b>Polychlorinated Biphenyls (mg/kg)</b>															
Total Monochlorobiphenyls (congeners)	2	1	50%	0.0024	0.0024	0.0024	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total Dichlorobiphenyls (congeners)	2	1	50%	0.0113	0.0113	0.0113	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Trichlorobiphenyl (total)	2	1	50%	0.0162	0.0162	0.0162	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Tetrachlorobiphenyl	2	1	50%	0.0171	0.0171	0.0171	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Pentachlorobiphenyl	2	1	50%	0.0177	0.0177	0.0177	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Hexachlorobiphenyl	2	1	50%	0.0198	0.0198	0.0198	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Heptachlorobiphenyl	2	1	50%	0.0114	0.0114	0.0114	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Octachlorobiphenyl	2	1	50%	0.00666	0.00666	0.00666	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV

**Table 22**  
**Jackson Labs/TEL Area Refined Exposure Estimate for Bulk Sediment (0.5-1.0 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Detection Frequency	Minimum Concentration	Mean Concentration	Maximum Concentration	Upper Confidence Limit (UCL) Concentration	Background Threshold Value (BTV)	Result Concentrations > BTV	Refined Ecological Screening Value (ESV)	Result Concentrations > Refined ESV	Hazard Quotient (HQ) or ESB Toxic Unit (ESBTU)		COPEC Decision	COPEC Decision Rationale
												HQ <sub>max</sub> / ESBTU <sub>max</sub>	HQ <sub>UCL</sub> / ESBTU <sub>UCL</sub>		
Total Nonachlorobiphenyls (congeners)	2	1	50%	0.00892	0.00892	0.00892	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total Decachlorobiphenyls (congeners)	2	1	50%	0.00691	0.00691	0.00691	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total PCB (congeners)	2	1	50%	0.118	0.118	0.118	NC	0.046	1	0.07	1	1.7	---	Yes	[Max] > Refined ESV; [Max] > BTV
<b>Other Parameters</b>															
Total Organic Carbon (mg/kg)	30	28	93%	361	9,940	30,800	NC	NC	---	NESV	---	---	---	---	---
Black Carbon (mg/kg)	9	9	100%	400	2,604	8,705	NC	NC	---	NESV	---	---	---	---	---
Percent Fines (% <0.064 mm)	10	10	100%	1	14	45	NC	NC	---	NESV	---	---	---	---	---
Percent Moisture (%)	40	40	100%	6.6	33.6	67.1	NC	NC	---	NESV	---	---	---	---	---
Percent Solids (%)	2	2	100%	52.1	68	83.9	NC	NC	---	NESV	---	---	---	---	---

**Notes:**

---: No Result

a: Indicates a RESV based on sample-specific TOC content; value provided in table represents the RESV concentration on a dry weight basis at 1% TOC.

**Bolded** Detection Frequency: Detection frequency < 5%

**Bolded** HQ: HQ > 1

COPEC: Constituent of Potential Ecological Concern

ESB: Equilibrium Partitioning Sediment Benchmark

[Maximum]: Maximum concentration

MDL: Method Detection Limit

NC: Not Calculated

ND: No Detections

NESV: No Ecological Screening Value

**Table 23**  
**Fluoroproducts Area Refined Exposure Estimate for Bulk Sediment (0-0.5 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Detection Frequency	Minimum Concentration	Mean Concentration	Maximum Concentration	Upper Confidence Limit (UCL) Concentration	Background Threshold Value (BTV)	Result Concentrations > BTV	Refined Ecological Screening Value (ESV)	Result Concentrations > Refined ESV	Hazard Quotient (HQ) or ESB Toxic Unit (ESBTU)		COPEC Decision	COPEC Decision Rationale
												HQ <sub>Max</sub> / ESBTU <sub>Max</sub>	HQ <sub>UCL</sub> / ESBTU <sub>UCL</sub>		
<b>Metals (mg/kg)</b>															
Antimony	50	29	58%	0.22	0.71	3.71	1.05	1.68	3	2	2	1.9	<1	No	[UCL] < Refined ESV;
Arsenic	50	50	100%	2.82	9.23	45.7	10.53	18.68	1	9.979	19	4.6	1.1	Yes	[Max] > Refined ESV; [Max] > BTV
Barium	50	50	100%	14.5	75.3	127	81.6	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Beryllium	50	49	98%	0.134	0.762	1.3	0.816	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Cadmium	50	44	88%	0.0518	0.5874	1.6	0.6154	1.7784	0	0.99	6	1.6	<1	No	[UCL] < Refined ESV; [Max] < BTV
Chromium	50	50	100%	16.2	40.2	73.6	43	139.6	0	43.4	25	1.7	<1	No	[UCL] < Refined ESV; [Max] < BTV
Copper	50	50	100%	9.95	26.97	53.1	29.7	36.06	12	31.6	18	1.7	<1	No	[UCL] < Refined ESV;
Iron	50	50	100%	8,330	22,166	43,900	23,900	48,800	0	20,000	29	2.2	1.2	No	[Max] < BTV
Lead	50	50	100%	12.3	40	74.8	43.9	55.6	8	35.8	31	2.1	1.2	Yes	[Max] > Refined ESV; [Max] > BTV
Manganese	50	50	100%	79.3	602.7	1,180	679.4	1,526	0	630	24	1.9	1.1	No	[Max] < BTV
Mercury	50	49	98%	0.0226	0.4203	5.35	0.5099	0.3948	10	0.2	29	26.8	2.5	Yes	[Max] > Refined ESV; [Max] > BTV
Nickel	50	50	100%	4.47	21.28	38.8	23.03	49.6	0	22.7	22	1.7	1	No	[Max] < BTV
Selenium	50	27	54%	0.0762	0.8661	3.26	0.739	1.3105	2	2	2	1.6	<1	No	[UCL] < Refined ESV;
Silver	50	31	62%	0.0363	0.3647	1.44	0.3562	1.0248	1	1	1	1.4	<1	No	[UCL] < Refined ESV;
Thallium	50	27	54%	0.038	0.159	0.247	0.177	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Tin	23	23	100%	3.73	7.51	18	8.71	7.97	8	NESV	---	---	---	Yes	[Max] > BTV
Vanadium	50	50	100%	14.5	39.2	67.8	42.3	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Zinc	50	50	100%	27.9	124.5	216	137.1	274.9	0	121	28	1.8	1.1	No	[Max] < BTV
<b>Volatile Organic Compounds (mg/kg)</b>															
1,1,1,2-Tetrachloroethane	27	1	4%	0.004	0.004	0.004	NC	NC	---	NESV	---	---	---	No	< 5% DF;
1,1,1-Trichlorotrifluoroethane	27	9	33%	0.011	0.3	1.3	0.195	NC	---	14.7 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
1,1,2-Trichlorotrifluoroethane	38	18	47%	0.007	2.102	14	2.29	NC	---	14.7 <sup>a</sup>	1	1.1	<1	No	[UCL] < Refined ESV;
1,1-Dichloroethane	38	1	3%	0.006	0.006	0.006	NC	NC	---	0.0006 <sup>a</sup>	1	10.4	---	No	< 5% DF;
1,1-Dichloroethene	38	3	8%	0.003	0.027	0.068	0.008	NC	---	4.65 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
1,2,4-Trimethylbenzene	27	3	11%	0.015	0.078	0.18	0.026	NC	---	11.5 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
1,2-Dichloro-1,1,2-Trifluoroethane	27	16	59%	0.003	0.302	1.6	0.462	NC	---	9.23 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
1,2-Dichlorobenzene	50	47	94%	0.002	5.007	130	14.3	NC	---	7.86 <sup>a</sup>	6	9.7	2.4	Yes	[Max] > Refined ESV;
1,2-Dichloroethene	27	4	15%	0.003	0.152	0.36	0.055	NC	---	0.5252 <sup>a</sup>	1	4.4	<1	No	[UCL] < Refined ESV;
1,2-Dichlorotetrafluoroethane	27	15	56%	0.003	0.155	0.96	0.234	NC	---	11.8 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
1,3,5-Trimethylbenzene	27	2	7%	0.006	0.007	0.007	0.003	NC	---	11.5 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
1,3-Dichlorobenzene	50	18	36%	0.002	0.839	9.3	3.468	NC	---	7.86 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
1,4-Dichlorobenzene	50	41	82%	0.002	8.82	230	26.245	NC	---	7.85 <sup>a</sup>	7	17	4.1	Yes	[Max] > Refined ESV;
1-Chloro-1,1-Difluoroethane	27	1	4%	0.006	0.006	0.006	NC	NC	---	NESV	---	---	---	No	< 5% DF;
2,2-Dichloro-1,1,1-Trifluoroethane	27	15	56%	0.006	0.299	2.1	0.559	NC	---	9.23 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
2-Chloro-1,1,1-Trifluoroethane	27	6	22%	0.009	0.182	1	0.225	NC	---	7.27 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
2-Chlorotoluene	27	3	11%	0.001	0.054	0.15	0.020	NC	---	11.6 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
4-Chlorotoluene	27	1	4%	0.004	0.004	0.004	NC	NC	---	NESV	---	---	---	No	< 5% DF;
4-Isopropyltoluene	27	2	7%	0.002	0.008	0.014	NC	NC	---	7.31 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Acetone	38	26	68%	0.016	0.092	0.43	0.118	NC	---	31.2 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Benzene	38	20	53%	0.0008	0.4955	4	1.0353	NC	---	6.54 <sup>a</sup>	1	4.2	1.3	Yes	[Max] > Refined ESV;
Carbon Disulfide	38	26	68%	0.002	0.014	0.083	0.028	NC	---	0.1298 <sup>a</sup>	6	17.9	3.9	Yes	[Max] > Refined ESV;
CFC-1113	27	2	7%	0.026	0.038	0.051	0.014	NC	---	14.7 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Chlorobenzene	38	35	92%	0.002	11.39	170	61.187	NC	---	5.72 <sup>a</sup>	9	73.1	16.3	Yes	[Max] > Refined ESV;
Chlorodifluoromethane	27	3	11%	0.006	0.008	0.01	0.003	NC	---	13.2 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Chlorofluoromethane	27	12	44%	0.004	0.137	0.77	0.229	NC	---	8.81 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Chloroform	38	12	32%	0.002	0.166	0.76	0.146	NC	---	5.59 <sup>a</sup>	1	3.9	<1	No	[UCL] < Refined ESV;
Cumene	27	5	19%	0.003	0.344	0.71	0.137	NC	---	11.3 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Dichlorodifluoromethane	38	1	3%	0.034	0.034	0.034	NC	NC	---	2.05 <sup>a</sup>	0	<1	---	No	< 5% DF; [Max] < Refined ESV;
Dichlorofluoromethane	38	15	39%	0.005	0.89	5.3	1.03	NC	---	10.7 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Ethylbenzene	38	6	16%	0.004	0.422	2	0.36	NC	---	9.70 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Meta- And Para-Xylene	27	8	30%	0.002	1.186	7.5	2.01	NC	---	9.76 <sup>a</sup>	1	1.2	<1	No	[UCL] < Refined ESV;
Methylene Chloride	38	4	11%	0.002	0.094	0.36	0.065	NC	---	3.73 <sup>a</sup>	1	1.2	<1	No	[UCL] < Refined ESV;
N-Butylbenzene	27	1	4%	0.004	0.004	0.004	NC	NC	---	NESV	---	---	---	No	< 5% DF;
N-Propylbenzene	27	2	7%	0.001	0.006	0.01	NC	NC	---	11.5 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Ortho-Xylene	27	8	30%	0.002	0.41	2.7	0.735	NC	---	9.66 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
sec-Butylbenzene	27	1	4%	0.014	0.014	0.014	NC	NC	---	NESV	---	---	---	No	< 5% DF;
tert-Butylbenzene	27	1	4%	0.008	0.008	0.008	NC	NC	---	NESV	---	---	---	No	< 5% DF;
Tetrachloroethane	38	20	53%	0.003	1.992	17	2.819	NC	---	8.29 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Trichloroethane	38	9	24%	0.001	0.145	0.45	0.064	NC	---	6.59 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Trichlorofluoromethane	38	15	39%	0.005	0.773	4	0.675	NC	---	2.91 <sup>a</sup>	2	4.6	1.0	Yes	[Max] > Refined ESV;
Xylenes	38	13	34%	0.002	0.972	10	1.808	NC	---	9.70 <sup>a</sup>	1	1.6	<1	No	[UCL] < Refined ESV;

**Table 23**  
**Fluoroproducts Area Refined Exposure Estimate for Bulk Sediment (0-0.5 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Detection Frequency	Minimum Concentration	Mean Concentration	Maximum Concentration	Upper Confidence Limit (UCL) Concentration	Background Threshold Value (BTV)	Result Concentrations > BTV	Refined Ecological Screening Value (ESV)	Result Concentrations > Refined ESV	Hazard Quotient (HQ) or ESB Toxic Unit (ESBTU)		COPEC Decision	COPEC Decision Rationale
												HQ <sub>max</sub> / ESBTU <sub>max</sub>	HQ <sub>UCL</sub> / ESBTU <sub>UCL</sub>		
<b>Polycyclic Aromatic Hydrocarbons (mg/kg)</b>															
Acenaphthene	50	28	56%	0.008	0.106	0.73	0.1	NC	---	ESBTU <sub>FCV,Total</sub> > 1 (See Appendix C)	11	141	18.3	Yes	ESBTU <sub>FCV,Total</sub> > 1
Acenaphthylene	50	27	54%	0.005	0.034	0.19	0.036	NC	---						
Anthracene	50	29	58%	0.009	0.144	1.9	0.125	NC	---						
Benzo(A)Anthracene	50	40	80%	0.009	0.327	5.3	0.375	NC	---						
Benzo(G,H,I)Perylene	50	32	64%	0.004	0.153	1.8	0.152	NC	---						
Benzo(K)Fluoranthene	50	31	62%	0.004	0.151	1.7	0.144	NC	---						
Benzo(A)Pyrene	50	38	76%	0.008	0.272	4	0.303	NC	---						
Chrysene	50	42	84%	0.014	0.516	9.5	1.29	NC	---						
Dibenz(A,H)Anthracene	50	26	52%	0.005	0.055	0.66	0.099	NC	---						
Fluoranthene	50	43	86%	0.008	0.463	6.3	0.607	NC	---						
Fluorene	50	29	58%	0.011	0.095	0.64	0.142	NC	---						
Indeno (1,2,3-CD) Pyrene	50	30	60%	0.008	0.144	1.7	0.26	NC	---						
Naphthalene	50	36	72%	0.007	0.468	7.4	0.552	NC	---						
Phenanthrene	50	39	78%	0.022	0.33	4.5	0.389	NC	---						
Pyrene	50	44	88%	0.01	0.49	6.7	0.65	NC	---						
Total PAHs (Detections + 1/2 MDL)	50	45	90%	0.037	3.711	51.17	8.18	0.912	43						
Total PAHs (Detections Only)	50	45	90%	0.007	3.464	51.17	7.97	0.912	35						
ESBTU <sub>FCV,13</sub>	49	49	100%	0.022	1.58	51.4	6.66	NC	---						
ESBTU <sub>FCV,Total</sub>	49	49	100%	0.061	4.35	141	18.31	NC	---						
<b>Semi-Volatile Organic Compounds (mg/kg)</b>															
1,2-Diphenylhydrazine	50	1	2%	0.025	0.025	0.025	NC	NC	---	0.028 <sup>a</sup>	0	<1	---	No	< 5% DF; [Max] < Refined ESV
1-Naphthylamine	50	1	2%	0.43	0.43	0.43	NC	NC	---	12.1 <sup>a</sup>	0	<1	---	No	< 5% DF; [Max] < Refined ESV
2,4-Dichlorophenol	50	3	6%	0.049	0.075	0.12	0.031	NC	---	0.082 <sup>a</sup>	28	<b>43.9</b>	<b>5.6</b>	Yes	[Max] > Refined ESV
2,4-Dinitrotoluene	50	1	2%	0.47	0.47	0.47	NC	NC	---	0.061 <sup>a</sup>	1	<b>2.3</b>	---	No	< 5% DF
2,6-Dinitrotoluene	50	1	2%	0.04	0.04	0.04	NC	NC	---	0.113 <sup>a</sup>	0	<1	---	No	< 5% DF; [Max] < Refined ESV
2-Chlorophenol	50	6	12%	0.042	0.092	0.23	0.042	NC	---	1.01 <sup>a</sup>	3	<b>2.7</b>	<1	No	[UCL] < Refined ESV
2-Methylnaphthalene	27	25	93%	0.027	0.096	0.38	0.164	NC	---	4.47 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV
4-Chloroaniline	50	8	16%	0.098	0.83	2.3	0.285	NC	---	2.61 <sup>a</sup>	3	<b>2.1</b>	<1	No	[UCL] < Refined ESV
4-Methylphenol (P-Cresol)	27	13	48%	0.028	0.065	0.12	0.053	NC	---	0.288 <sup>a</sup>	3	<b>3.2</b>	<b>1.1</b>	Yes	[Max] > Refined ESV
Acetophenone	27	4	15%	0.025	0.033	0.045	0.024	NC	---	9.66 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV
Aniline	50	1	2%	0.39	0.39	0.39	NC	NC	---	0.001 <sup>a</sup>	1	<b>390</b>	---	No	< 5% DF
Bis(2-Ethylhexyl)Phthalate	50	7	14%	0.089	0.363	1.2	0.176	NC	---	35.374 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV
Butyl Benzyl Phthalate	50	3	6%	0.27	1.12	2.8	0.25	NC	---	10.9 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV
Carbazole	50	9	18%	0.022	0.085	0.35	0.051	NC	---	0.069 <sup>a</sup>	27	<b>43</b>	<b>5.2</b>	Yes	[Max] > Refined ESV
Diethyl Phthalate	50	4	8%	0.36	0.78	1.5	0.2	NC	---	0.775 <sup>a</sup>	6	<b>6.9</b>	<b>1.6</b>	Yes	[Max] > Refined ESV
Diphenyl Ether	27	7	26%	0.026	0.065	0.17	0.043	NC	---	17.3 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV
Hexachlorobenzene	50	4	8%	0.006	0.105	0.4	0.071	NC	---	33.0 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV
Hexachlorobutadiene	50	1	2%	0.13	0.13	0.13	NC	NC	---	0.027 <sup>a</sup>	1	<b>4.9</b>	---	No	< 5% DF
Nitrobenzene	50	6	12%	0.061	0.738	2.2	0.257	NC	---	0.13 <sup>a</sup>	2	<b>1.7</b>	<1	No	[UCL] < Refined ESV
Phenol	50	9	18%	0.028	0.079	0.14	0.046	NC	---	0.055 <sup>a</sup>	30	<b>49.7</b>	<b>5.5</b>	Yes	[Max] > Refined ESV
<b>Polychlorinated Biphenyls (mg/kg)</b>															
Total Monochlorobiphenyls (congeners)	31	31	100%	0.000621	0.043417	0.424	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total Dichlorobiphenyls (congeners)	31	31	100%	0.00193	0.04515	0.482	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total Trichlorobiphenyls (congeners)	31	31	100%	0.000879	0.018233	0.13	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total Tetrachlorobiphenyls (congeners)	31	31	100%	0.000147	0.012938	0.0692	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total Pentachlorobiphenyls (congeners)	31	31	100%	0.0000816	0.0100244	0.0415	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total Hexachlorobiphenyls (congeners)	31	31	100%	0.0000522	0.008754	0.0244	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total Heptachlorobiphenyls (congeners)	31	31	100%	0.0000248	0.0051683	0.0226	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total Octachlorobiphenyls (congeners)	31	31	100%	0.0000112	0.0030948	0.00903	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total Nonachlorobiphenyls (congeners)	31	31	100%	0.0000127	0.0044664	0.0109	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total PCB (congeners)	37	37	100%	0.0089834	0.1444618	0.96003	0.195	0.046	31	0.07	28	<b>13.7</b>	<b>2.8</b>	Yes	[Max] > Refined ESV; [Max] > BTV
<b>Other Parameters</b>															
Total Organic Carbon (mg/kg)	56	53	95%	315	16,440	34,200	NC	NC	---	NESV	---	---	---	---	---
Black Carbon (mg/kg)	17	17	100%	185	3,134	9,000	NC	NC	---	NESV	---	---	---	---	---
Percent Fines (<0.064 mm)	53	53	100%	0.5	52.7	92	NC	NC	---	NESV	---	---	---	---	---

Notes:  
 ---: No Result  
 a: Indicates a RESV based on sample-specific TOC content; value provided in table represents the RESV concentration on a dry weight basis at 1% TOC.  
**Bolded** Detection Frequency: Detection frequency < 5%  
**Bolded** HQ: HQ > 1  
 COPEC: Constituent of Potential Ecological Concern  
 ESB: Equilibrium Partitioning Sediment Benchmark  
 [Maximum]: Maximum concentration  
 MDL: Method Detection Limit  
 NC: Not Calculated  
 ND: No Detections  
 NESV: No Ecological Screening Value

**Table 24**  
**Fluoroproducts Area Refined Exposure Estimate for Bulk Sediment (0.5-1.0 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Detection Frequency	Minimum Concentration	Mean Concentration	Maximum Concentration	Upper Confidence Limit (UCL) Concentration	Background Threshold Value (BTV)	Result Concentrations > BTV	Refined Ecological Screening Value (ESV)	Result Concentrations > Refined ESV	Hazard Quotient (HQ) or ESB Toxic Unit (ESBTU)		COPEC Decision	COPEC Decision Rationale
												HQ <sub>max</sub> / ESBTU <sub>max</sub>	HQ <sub>UCL</sub> / ESBTU <sub>UCL</sub>		
<b>Metals (mg/kg)</b>															
Aluminum	27	27	100%	3,760	13,989	25,900	16,275	73,401	0	25,500	1	1.0	<1	No	[UCL] < Refined ESV; [Max] < BTV
Antimony	27	26	96%	0.134	0.97	4.05	1.421	1.683	6	2	5	2.0	<1	No	[UCL] < Refined ESV;
Arsenic	27	27	100%	1.98	11.26	32.7	15.45	18.68	7	9,979	11	3.3	1.5	Yes	[Max] > Refined ESV; [Max] > BTV
Barium	27	27	100%	26.8	77.7	142	111	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Beryllium	27	27	100%	0.212	0.757	1.64	0.949	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Cadmium	27	22	81%	0.0492	0.725	2.02	0.7859	1,7784	1	0.99	7	2.0	<1	No	[UCL] < Refined ESV;
Chromium	27	27	100%	13	56	149	72	140	2	43.4	12	3.4	1.7	Yes	[Max] > Refined ESV; [Max] > BTV
Copper	27	27	100%	6.59	55.41	296	79.9	36.06	13	31.6	13	9.4	2.5	Yes	[Max] > Refined ESV; [Max] > BTV
Iron	27	27	100%	5,240	21,518	41,900	27,883	48,800	0	20,000	12	2.1	1.4	No	[Max] < BTV
Lead	27	27	100%	6.11	123.07	563	203.23	55.56	14	35.8	15	15.7	5.7	Yes	[Max] > Refined ESV; [Max] > BTV
Manganese	27	27	100%	41.3	524.2	2,470	765.2	1,526	1	630	11	3.9	1.2	Yes	[Max] > Refined ESV; [Max] > BTV
Mercury	23	21	91%	0.0759	0.6639	2.88	0.9816	0.3948	11	0.2	16	14.4	4.9	Yes	[Max] > Refined ESV; [Max] > BTV
Nickel	27	27	100%	8.22	24.59	48.3	30.35	49.6	0	22.7	12	2.1	1.3	No	[Max] < BTV
Selenium	27	19	70%	0.153	1.161	3.17	1.314	1.31	5	2	5	1.6	<1	No	[UCL] < Refined ESV;
Silver	27	21	78%	0.0271	0.6314	1.95	0.745	1,0248	6	1	6	2.0	<1	No	[UCL] < Refined ESV;
Thallium	27	27	100%	0.0767	0.1711	0.39	0.199	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Vanadium	27	27	100%	17	50	109	59.4	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Zinc	27	27	100%	17.5	140.2	342	195.4	274.9	5	121	12	2.8	1.6	Yes	[Max] > Refined ESV; [Max] > BTV
<b>Volatile Organic Compounds (mg/kg)</b>															
1,1,1,2-Tetrachloroethane	27	1	4%	0.003	0.003	0.003	NC	NC	---	NESV	---	---	---	No	< 5% DF;
1,1,1-Trichlorotrifluoroethane	27	7	26%	0.011	0.284	1.3	0.309	NC	---	14.7 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
1,1,2-Trichlorotrifluoroethane	55	20	36%	0.002	36.4	670	90.6	NC	---	14.7 <sup>a</sup>	5	35.4	8.8	Yes	[Max] > Refined ESV;
1,1-Dichloroethene	55	4	7%	0.003	0.493	1.9	0.239	NC	---	4.65 <sup>a</sup>	2	58.3	7.7	Yes	[Max] > Refined ESV;
1,2,4-Trimethylbenzene	27	4	15%	0.004	0.169	0.66	0.214	NC	---	11.5 <sup>a</sup>	1	23.6	9.6	Yes	[Max] > Refined ESV;
1,2-Dichloro-1,1,2-Trifluoroethane	27	13	48%	0.002	0.03	0.13	0.034	NC	---	9.23 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
1,2-Dichlorobenzene	32	30	94%	0.006	12.71	290	69.2	NC	---	7.86 <sup>a</sup>	9	404	169	Yes	[Max] > Refined ESV;
1,2-Dichloroethene	27	1	4%	0.035	0.035	0.035	NC	NC	---	0.53 <sup>a</sup>	5	516	---	No	< 5% DF;
1,2-Dichlorotetrafluoroethane	27	11	41%	0.004	0.105	0.39	0.114	NC	---	11.8 <sup>a</sup>	1	1.0	---	Yes	[Max] > Refined ESV;
1,3,5-Trimethylbenzene	27	3	11%	0.003	0.105	0.31	0.039	NC	---	11.5 <sup>a</sup>	1	23.5	9.5	Yes	[Max] > Refined ESV;
1,3-Dichlorobenzene	32	18	56%	0.001	0.529	5.3	1.01	NC	---	7.86 <sup>a</sup>	3	35.1	12.2	Yes	[Max] > Refined ESV;
1,4-Dichlorobenzene	32	31	97%	0.004	7.047	120	23.1	NC	---	7.85 <sup>a</sup>	8	796	461	Yes	[Max] > Refined ESV;
1-Chloro-1,1-Difluoroethane	27	1	4%	0.002	0.002	0.002	NC	NC	---	NESV	---	---	---	No	< 5% DF;
2,2-Dichloro-1,1,1-Trifluoroethane	27	12	44%	0.003	0.194	1.3	0.309	NC	---	9.23 <sup>a</sup>	1	6	2.4	Yes	[Max] > Refined ESV;
2-Chloro-1,1,1-Trifluoroethane	27	5	19%	0.039	0.099	0.3	0.095	NC	---	7.27 <sup>a</sup>	2	71.7	29.2	Yes	[Max] > Refined ESV;
2-Chlorotoluene	27	5	19%	0.004	0.125	0.6	0.190	NC	---	11.6 <sup>a</sup>	1	23.3	9.5	Yes	[Max] > Refined ESV;
4-Chlorotoluene	27	1	4%	0.3	0.3	0.3	NC	NC	---	NESV	---	---	---	No	< 5% DF;
4-Isopropyltoluene	27	2	7%	0.002	0.306	0.61	NC	NC	---	7.31 <sup>a</sup>	1	37.1	15.1	Yes	[Max] > Refined ESV;
Acetone	55	33	60%	0.01	0.39	10	0.19	NC	---	31.2 <sup>a</sup>	2	60.1	5.9	Yes	[Max] > Refined ESV;
Benzene	55	32	58%	0.0006	0.3092	2.6	0.6393	NC	---	6.54 <sup>a</sup>	3	20.7	3.6	Yes	[Max] > Refined ESV;
Carbon Disulfide	55	27	49%	0.002	0.01	0.11	0.009	NC	---	0.13 <sup>a</sup>	14	2086	278	Yes	[Max] > Refined ESV;
CFC-1113	27	4	15%	0.01	0.11	0.33	0.051	NC	---	14.7 <sup>a</sup>	1	35.4	14.4	Yes	[Max] > Refined ESV;
Chlorobenzene	55	50	91%	0.001	8.398	110	25.4	NC	---	5.72 <sup>a</sup>	13	976	576	Yes	[Max] > Refined ESV;
Chlorodifluoromethane	27	2	7%	0.005	0.011	0.017	0.006	NC	---	13.2 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Chlorofluoromethane	27	10	37%	0.003	0.022	0.045	0.014	NC	---	8.81 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Chloroform	55	12	22%	0.002	0.311	2.4	0.257	NC	---	5.59 <sup>a</sup>	4	48.5	6.6	Yes	[Max] > Refined ESV;
cis-1,2 Dichloroethene	55	2	4%	0.035	1.867	3.7	0.67	NC	---	0.53 <sup>a</sup>	7	516	68.6	No	< 5% DF;
Cumene	27	8	30%	0.003	5.21	39	11.687	NC	---	11.3 <sup>a</sup>	1	23.9	9.7	Yes	[Max] > Refined ESV;
Dichlorodifluoromethane	55	1	2%	0.007	0.007	0.007	NC	NC	---	2.05 <sup>a</sup>	0	<1	---	No	< 5% DF; [Max] < Refined ESV;
Dichlorofluoromethane	55	10	18%	0.003	0.727	4.2	0.481	NC	---	10.7 <sup>a</sup>	2	48.9	6.5	Yes	[Max] > Refined ESV;
Ethylbenzene	55	8	15%	0.002	0.19	0.79	0.091	NC	---	9.70 <sup>a</sup>	2	27.9	3.8	Yes	[Max] > Refined ESV;
Meta- And Para-Xylene	27	12	44%	0.001	0.109	0.32	0.113	NC	---	9.76 <sup>a</sup>	2	27.8	11.3	Yes	[Max] > Refined ESV;
Methyl Ethyl Ketone	27	7	26%	0.008	0.022	0.047	0.021	NC	---	2.94 <sup>a</sup>	4	373	151	Yes	[Max] > Refined ESV;
Methylene Chloride	55	14	25%	0.003	0.062	0.56	0.07	NC	---	3.73 <sup>a</sup>	5	140	18.6	Yes	[Max] > Refined ESV;
N-Butylbenzene	27	1	4%	0.28	0.28	0.28	NC	NC	---	NESV	---	---	---	No	< 5% DF;
Ortho-Xylene	27	10	37%	0.001	0.099	0.65	0.215	NC	---	9.66 <sup>a</sup>	1	28	11.4	Yes	[Max] > Refined ESV;
sec-Butylbenzene	27	1	4%	0.23	0.23	0.23	NC	NC	---	NESV	---	---	---	No	< 5% DF;
Tetrachloroethene	55	19	35%	0.001	12.755	230	30.976	NC	---	8.29 <sup>a</sup>	3	32.7	7.7	Yes	[Max] > Refined ESV;
Toluene	55	25	45%	0.001	0.106	1.3	0.167	NC	---	8.14 <sup>a</sup>	3	33.3	4.5	Yes	[Max] > Refined ESV;
Trichloroethene	55	5	9%	0.008	0.335	1.5	0.178	NC	---	6.59 <sup>a</sup>	2	41.1	5.5	Yes	[Max] > Refined ESV;
Trichlorofluoromethane	55	15	27%	0.004	27.626	390	53.0	NC	---	2.91 <sup>a</sup>	9	179	24.8	Yes	[Max] > Refined ESV;
Vinyl Chloride	55	4	7%	0.006	0.192	0.72	0.086	NC	---	0.76 <sup>a</sup>	6	355	47.2	Yes	[Max] > Refined ESV;
Xylenes	55	29	53%	0.001	0.257	3.4	0.437	NC	---	9.70 <sup>a</sup>	3	27.9	4.6	Yes	[Max] > Refined ESV;

**Table 24**  
**Fluoroproducts Area Refined Exposure Estimate for Bulk Sediment (0.5-1.0 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Detection Frequency	Minimum Concentration	Mean Concentration	Maximum Concentration	Upper Confidence Limit (UCL) Concentration	Background Threshold Value (BTV)	Result Concentrations > BTV	Refined Ecological Screening Value (ESV)	Result Concentrations > Refined ESV	Hazard Quotient (HQ) or ESB Toxic Unit (ESBTU)		COPEC Decision	COPEC Decision Rationale
												HQ <sub>max</sub> / ESBTU <sub>max</sub>	HQ <sub>UCL</sub> / ESBTU <sub>UCL</sub>		
<b>Polycyclic Aromatic Hydrocarbons (mg/kg)</b>															
Acenaphthene	32	22	69%	0.005	0.376	3.7	0.852	NC	---	ESBTU <sub>FCV,T</sub> total > 1 (See Appendix C)	12	32.1	9.0	Yes	ESBTU <sub>FCV,Total</sub> > 1
Acenaphthylene	32	18	56%	0.01	0.11	0.89	0.2	NC	---						
Anthracene	32	24	75%	0.006	0.296	4.4	0.834	NC	---						
Benzo(A)Anthracene	32	25	78%	0.01	1.13	25	4.29	NC	---						
Benzo(B)Fluoranthene	32	26	81%	0.005	0.758	16	2.792	NC	---						
Benzo(G,H,I)Perylene	32	23	72%	0.011	0.293	5.2	0.252	NC	---						
Benzo(K)Fluoranthene	32	22	69%	0.007	0.443	8.3	0.281	NC	---						
Benzo(A)Pyrene	32	25	78%	0.012	0.698	15	2.589	NC	---						
Chrysene	32	27	84%	0.004	3.358	84	14.285	NC	---						
Dibenz(A,H)Anthracene	32	16	50%	0.007	0.196	2.8	0.488	NC	---						
Fluoranthene	32	26	81%	0.011	1.076	22	3.867	NC	---						
Fluorene	32	24	75%	0.004	0.357	4.3	0.895	NC	---						
Indeno (1,2,3-CD) Pyrene	32	22	69%	0.007	0.267	4.7	0.191	NC	---						
Naphthalene	32	28	88%	0.023	0.591	6.1	1.686	NC	---						
Phenanthrene	32	28	88%	0.005	1.169	22	4.041	NC	---						
Pyrene	32	27	84%	0.019	1.313	29	1.97	NC	---						
Total PAHs (Detections + 1/2 MDL)	32	30	94%	0.066	10.711	253.39	44.414	0.912	18						
Total PAHs (Detections Only)	32	30	94%	0.04	10.67	253.39	44.38	0.91	17						
ESBTU <sub>FCV,t3</sub>	31	31	100%	0.042	1.3	11.7	3.26	NC	---						
ESBTU <sub>FCV,Total</sub>	31	31	100%	0.1155	3.5	32.1	8.97	NC	---						
<b>Semi-Volatile Organic Compounds (mg/kg)</b>															
2,4-Dinitrotoluene	32	1	3%	1	1	1	NC	NC	---	0.061 <sup>a</sup>	0	16.3	---	No	< 5% DF;
2-Chlorophenol	32	7	22%	0.019	0.065	0.14	0.041	NC	---	1.01 <sup>a</sup>	5	3.7	1.4	Yes	[Max] > Refined ESV;
2-Methylnaphthalene	27	25	93%	0.005	0.399	3.3	1.048	NC	---	4.47 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
4-Chloroaniline	32	12	38%	0.074	2.811	18	3.447	NC	---	2.61 <sup>a</sup>	4	12.1	1.4	Yes	[Max] > Refined ESV;
4-Methylphenol (P-Cresol)	27	13	48%	0.022	0.183	0.48	0.144	NC	---	0.288 <sup>a</sup>	8	3.6	2.0	Yes	[Max] > Refined ESV;
Acetophenone	27	5	19%	0.022	0.09	0.24	0.051	NC	---	9.66 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Biphenyl	27	12	44%	0.028	0.32	1.4	0.348	NC	---	15.1 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Bis(2-Ethylhexyl)Phthalate	32	12	38%	0.13	0.62	2.4	0.36	NC	---	35.374 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Butyl Benzyl Phthalate	32	6	19%	0.097	1.323	6	1.194	NC	---	10.9 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Carbazole	32	5	16%	0.028	0.302	0.93	0.120	NC	---	0.069 <sup>a</sup>	18	49.1	14.2	Yes	[Max] > Refined ESV;
Dibenzofuran	27	10	37%	0.019	0.593	3.2	0.759	NC	---	16.2 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Di-N-Butyl Phthalate	32	2	6%	0.15	3.17	6.2	1.93	NC	---	11.9 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Diphenyl Ether	27	12	44%	0.023	0.224	0.86	0.165	NC	---	17.3 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Hexachlorobenzene	32	3	9%	0.008	0.803	2	0.208	NC	---	33.0 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Nitrobenzene	32	5	16%	0.025	1.255	5.3	1.164	NC	---	0.13 <sup>a</sup>	3	2.2	1.1	Yes	[Max] > Refined ESV;
Phenol	32	5	16%	0.039	0.216	0.47	0.082	NC	---	0.055 <sup>a</sup>	18	61.3	23.6	Yes	[Max] > Refined ESV;
<b>Polychlorinated Biphenyls (mg/kg)</b>															
Total Monochlorobiphenyls (congeners)	27	27	100%	0.001	0.035	0.432	NC	NC	---	NESV	NESV	---	---	Uncertainty	No ESV or BTV
Total Dichlorobiphenyls (congeners)	27	27	100%	0.002	0.091	1.50	NC	NC	---	NESV	NESV	---	---	Uncertainty	No ESV or BTV
Total Trichlorobiphenyls (congeners)	27	27	100%	0.001	0.077	0.665	NC	NC	---	NESV	NESV	---	---	Uncertainty	No ESV or BTV
Total Tetrachlorobiphenyls (congeners)	27	27	100%	0.000	0.076	0.315	NC	NC	---	NESV	NESV	---	---	Uncertainty	No ESV or BTV
Total Pentachlorobiphenyls (congeners)	27	27	100%	0.000	0.050	0.211	NC	NC	---	NESV	NESV	---	---	Uncertainty	No ESV or BTV
Total Hexachlorobiphenyls (congeners)	27	27	100%	0.000	0.030	0.135	NC	NC	---	NESV	NESV	---	---	Uncertainty	No ESV or BTV
Total Heptachlorobiphenyls (congeners)	27	27	100%	0.000	0.014	0.069	NC	NC	---	NESV	NESV	---	---	Uncertainty	No ESV or BTV
Total Octachlorobiphenyls (congeners)	27	27	100%	0.000	0.006	0.025	NC	NC	---	NESV	NESV	---	---	Uncertainty	No ESV or BTV
Total Nonachlorobiphenyls (congeners)	27	27	100%	0.000	0.006	0.021	NC	NC	---	NESV	NESV	---	---	Uncertainty	No ESV or BTV
Total PCB (congeners)	27	27	100%	0.007	0.392	2.92	0.666	0.046	20	0.07	18	41.7	9.5	Yes	[Max] > Refined ESV;
<b>Other Parameters</b>															
Total Organic Carbon (mg/kg)	39	32	82%	550	23,607	84,400	NC	NC	---	NESV	---	---	---	---	---
Black Carbon (mg/kg)	3	3	100%	185	1,497	3,110	NC	NC	---	NESV	---	---	---	---	---
Percent Fines (% <0.064 mm)	30	30	100%	1	43	88	NC	NC	---	NESV	---	---	---	---	---

**Notes:**

- : No Result
- a: Indicates a RESV based on sample-specific TOC content; value provided in table represents the RESV concentration on a dry weight basis at 1% TOC.
- Bolded** Detection Frequency: Detection frequency < 5%
- Bolded** HQ: HQ > 1
- COPEC: Constituent of Potential Ecological Concern
- ESB: Equilibrium Partitioning Sediment Benchmark
- [Maximum]: Maximum concentration
- MDL: Method Detection Limit
- NC: Not Calculated
- ND: No Detections
- NESV: No Ecological Screening Value

**Table 25**  
**SWMU 5/Henby Creek Area Refined Exposure Estimate for Bulk Sediment (0-0.5 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Detection Frequency	Minimum Concentration	Mean Concentration	Maximum Concentration	Upper Confidence Limit (UCL) Concentration	Background Threshold Value (BTV)	Result Concentrations > BTV	Refined Ecological Screening Value (ESV)	Result Concentrations > Refined ESV	Hazard Quotient (HQ) or ESB Toxic Unit (ESBTU)		COPEC Decision	COPEC Decision Rationale
												HQ <sub>Max</sub> / ESBTU <sub>Max</sub>	HQ <sub>UCL</sub> / ESBTU <sub>UCL</sub>		
<b>Metals (mg/kg)</b>															
Antimony	13	5	38%	1.61	2.1	2.75	1.95	1.68	3	2	3	<b>1.4</b>	<1	No	[UCL] < Refined ESV;
Arsenic	13	13	100%	1.99	5.41	13.5	8.01	18.68	0	9.979	2	<b>1.4</b>	<1	No	[UCL] < Refined ESV; [Max] < BTV
Barium	13	13	100%	13.9	61.1	97.7	74.5	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Beryllium	13	12	92%	0.107	0.52	1.12	0.667	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Cadmium	13	11	85%	0.177	0.518	0.985	0.61	1.778	0	0.99	0	<1	<1	No	[Max] < Refined ESV; [Max] < BTV
Chromium	13	13	100%	11.3	29.7	49.6	35.6	139.6	0	43.4	1	<b>1.1</b>	<1	No	[UCL] < Refined ESV; [Max] < BTV
Copper	13	13	100%	12	22	71.4	29	36	1	31.6	1	<b>2.3</b>	<1	No	[UCL] < Refined ESV;
Iron	13	13	100%	7,390	16,492	36,900	22,893	48,800	0	20,000	5	<b>1.8</b>	1.1	No	[Max] < BTV
Lead	16	16	100%	17.8	44.7	92.6	58.2	55.6	5	35.8	8	<b>2.6</b>	<b>1.6</b>	Yes	[Max] > Refined ESV; [Max] > BTV
Manganese	13	13	100%	66.6	296.8	768	408.3	1,526	0	630	1	<b>1.2</b>	<1	No	[UCL] < Refined ESV; [Max] < BTV
Mercury	13	13	100%	0.0787	0.7287	2.67	1.3641	0.3948	8	0.2	10	<b>13.4</b>	<b>6.8</b>	Yes	[Max] > Refined ESV; [Max] > BTV
Nickel	13	13	100%	5.06	13.65	24.8	17.33	49.6	0	22.7	1	<b>1.1</b>	<1	No	[UCL] < Refined ESV; [Max] < BTV
Silver	13	2	15%	0.367	0.454	0.542	0.327	1.025	0	1	0	<1	<1	No	[Max] < Refined ESV; [Max] < BTV
Tin	13	13	100%	3.33	11.09	26.3	14.4	7.97	7	NESV	---	---	---	Yes	[Max] > BTV
Vanadium	13	13	100%	8.34	25.04	51.1	31.9	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Zinc	13	13	100%	59.5	94.5	141	107.4	274.9	0	121	3	<b>1.2</b>	<1	No	[UCL] < Refined ESV; [Max] < BTV
<b>Volatile Organic Compounds (mg/kg)</b>															
1,2-Dichlorobenzene	13	8	62%	0.053	0.562	2.2	1.059	NC	---	7.86 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
1,4-Dichlorobenzene	13	5	38%	0.24	0.44	1	0.5	NC	---	7.85 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Acetone	4	2	50%	0.023	0.027	0.031	0.036	NC	---	31.2 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Dichlorofluoromethane	4	1	25%	0.008	0.008	0.008	NC	NC	---	10.7 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
<b>Polycyclic Aromatic Hydrocarbons (mg/kg)</b>															
Acenaphthene	13	2	15%	0.053	0.256	0.46	0.347	NC	---	ESBTU <sub>FCV,Total</sub> > 1 (See Appendix C)	7	<b>8.6</b>	3.8	Yes	ESBTU <sub>FCV,Total</sub> > 1
Anthracene	13	3	23%	0.15	1	2.7	0.69	NC	---						
Benzo(A)Anthracene	13	11	85%	0.07	0.6	4.6	2.02	NC	---						
Benzo(G,H,I)Perylene	13	9	69%	0.047	0.234	1.2	0.566	NC	---						
Benzo(K)Fluoranthene	13	6	46%	0.042	0.238	1.1	0.507	NC	---						
Benzo(A)Pyrene	13	10	77%	0.064	0.464	3.1	1.384	NC	---						
Chrysene	13	11	85%	0.057	0.994	7.4	3.3	NC	---						
Fluoranthene	13	11	85%	0.075	0.584	4	1.795	NC	---						
Fluorene	13	2	15%	0.052	0.526	1	NC	NC	---						
Indeno (1,2,3-CD) Pyrene	13	7	54%	0.043	0.209	0.94	0.821	NC	---						
Naphthalene	18	5	28%	0.05	0.46	1.9	0.65	NC	---						
Phenanthrene	13	9	69%	0.053	0.953	7.6	4.352	NC	---						
Pyrene	13	13	100%	0.054	0.84	7.3	3.206	NC	---						
Total PAHs (Detections + 1/2 MDL)	13	13	100%	0.4445	5.3617	45.88	20.1671	0.9117	11						
Total PAHs (Detections Only)	13	13	100%	0.14	4.96	45.7	19.84	0.91	8						
ESBTU <sub>FCV,13</sub>	13	13	100%	0.004	0.863	3.11	1.39	NC	---						
ESBTU <sub>FCV,Total</sub>	13	13	100%	0.011	2.37	8.55	3.82	NC	---						
<b>Semi-Volatile Organic Compounds (mg/kg)</b>															
2,4-Dinitrotoluene	13	2	15%	0.22	0.33	0.45	0.33	NC	---	0.061 <sup>a</sup>	5	<b>10.8</b>	---	Yes	[Max] > Refined ESV;
2,6-Dinitrotoluene	13	1	8%	0.042	0.042	0.042	NC	NC	---	0.113 <sup>a</sup>	2	<b>1.2</b>	---	Yes	[Max] > Refined ESV;
4-Chloroaniline	23	4	17%	0.068	0.147	0.21	0.096	NC	---	2.61 <sup>a</sup>	2	<b>1.6</b>	<1	No	[Max] > Refined ESV;
Di-N-Butyl Phthalate	13	5	38%	0.25	0.76	1.8	0.63	NC	---	11.9 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV;
Nitrobenzene	18	4	22%	0.064	1.318	3	0.698	NC	---	0.13 <sup>a</sup>	2	<b>1.7</b>	<1	No	[Max] > Refined ESV;
<b>Other Parameters</b>															
Total Organic Carbon (mg/kg)	18	18	100%	360	7,210	44,850	NC	NC	---	NESV	---	---	---	---	---
Black Carbon (mg/kg)	12	12	100%	125	1,723	5,820	NC	NC	---	NESV	---	---	---	---	---
Percent Fines (% <0.064 mm)	18	18	100%	1	40	88	NC	NC	---	NESV	---	---	---	---	---

**Notes:**

---: No Result

a: Indicates a RESV based on sample-specific TOC content; value provided in table represents the RESV concentration on a dry weight basis at 1% TOC.

**Bolded** Detection Frequency: Detection frequency < 5%

**Bolded** HQ: HQ > 1

COPEC: Constituent of Potential Ecological Concern

ESB: Equilibrium Partitioning Sediment Benchmark

[Maximum]: Maximum concentration

MDL: Method Detection Limit

NC: Not Calculated

ND: No Detections

NESV: No Ecological Screening Value

**Table 26**  
**SWMU 5/Henby Creek Area Refined Exposure Estimate for Bulk Sediment (0.5-1.0 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Detection Frequency	Minimum Concentration	Mean Concentration	Maximum Concentration	Upper Confidence Limit (UCL) Concentration	Background Threshold Value (BTV)	Result Concentrations > BTV	Refined Ecological Screening Value (ESV)	Result Concentrations > Refined ESV	Hazard Quotient (HQ) or ESB Toxic Unit (ESBTU)		COPEC Decision	COPEC Decision Rationale
												HQ <sub>max</sub> / ESBTU <sub>max</sub>	HQ <sub>UCL</sub> / ESBTU <sub>UCL</sub>		
<b>Metals (mg/kg)</b>															
Lead	1	1	100%	141	141	141	NC	56	1	35.8	1	3.9	---	Yes	[Max] > Refined ESV; [Max] > BTV
<b>Volatile Organic Compounds (mg/kg)</b>															
1,2-Dichlorobenzene	1	1	100%	1.9	1.9	1.9	NC	NC	---	7.86	1	2.5	---	Yes	[Max] > Refined ESV
1,4-Dichlorobenzene	1	1	100%	0.49	0.49	0.49	NC	NC	---	7.85	0	<1	---	No	[Max] < Refined ESV
Acetone	13	12	92%	0.009	0.054	0.38	0.173	NC	---	31.2	0	<1	---	No	[Max] < Refined ESV
Carbon Disulfide	13	10	77%	0.001	0.007	0.028	0.013	NC	---	0.13	0	<1	---	No	[Max] < Refined ESV
Chlorobenzene	14	6	43%	0.02	0.21	0.57	0.19	NC	---	5.72	0	<1	---	No	[Max] < Refined ESV
Dichlorofluoromethane	13	2	15%	0.003	0.008	0.013	0.008	NC	---	10.7	0	<1	---	No	[Max] < Refined ESV
Trichlorofluoromethane	13	1	8%	0.031	0.031	0.031	NC	NC	---	2.91	0	<1	---	No	[Max] < Refined ESV
<b>Polycyclic Aromatic Hydrocarbons (mg/kg)</b>															
Naphthalene	1	1	100%	1.9	1.9	1.9	NC	NC	---	3.85	0	<1	---	No	[Max] < Refined ESV
<b>Semi-Volatile Organic Compounds (mg/kg)</b>															
1-Naphthylamine	1	1	100%	2	2	2	NC	NC	---	1.17	1	1.7	---	Yes	[Max] > Refined ESV
Nitrobenzene	1	1	100%	0.36	0.36	0.36	NC	NC	---	0.13	1	2.4	---	Yes	[Max] > Refined ESV
<b>Other Parameters</b>															
Total Organic Carbon (mg/kg)	9	9	100%	535	18,152	95,350	NC	NC	---	NESV	---	---	---	---	---
Black Carbon (mg/kg)	4	3	75%	540	925	1,400	NC	NC	---	NESV	---	---	---	---	---
Percent Fines (% <0.064 mm)	1	1	100%	2.5	2.5	2.5	NC	NC	---	NESV	---	---	---	---	---

**Notes:**  
 ---: No Result  
 Bolded Detection Frequency: Detection frequency < 5%  
 Bolded HQ: HQ > 1  
 COPEC: Constituent of Potential Ecological Concern  
 ESB: Equilibrium Partitioning Sediment Benchmark  
 [Maximum]: Maximum concentration  
 MDL: Method Detection Limit  
 NC: Not Calculated  
 ND: No Detections  
 NESV: No Ecological Screening Value

**Table 27**  
**Carneys Point Zone Refined Exposure Estimate for Bulk Sediment (0-0.5 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Detection Frequency	Minimum Concentration	Mean Concentration	Maximum Concentration	Upper Confidence Limit (UCL) Concentration	Background Threshold Value (BTV)	Result Concentrations > BTV	Refined Ecological Screening Value (ESV)	Result Concentrations > Refined ESV	Hazard Quotient (HQ) or ESB Toxic Unit (ESBTU)		COPEC Decision	COPEC Decision Rationale
												HQ <sub>Max</sub> / ESBTU <sub>Max</sub>	HQ <sub>UCL</sub> / ESBTU <sub>UCL</sub>		
<b>Metals (mg/kg)</b>															
Barium	16	16	100%	17.3	65.1	135	77.7	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Beryllium	21	17	81%	0.115	0.595	0.97	0.63	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Cadmium	21	17	81%	0.012	0.472	1.06	0.514	1.778	0	0.99	1	1.1	<1	No	[UCL] < Refined ESV; [Max] < BTV
Chromium	21	21	100%	9.41	31.18	54	35.71	139.64	0	43.4	2	1.2	<1	No	[UCL] < Refined ESV; [Max] < BTV
Copper	21	21	100%	6	18	57.4	23	36	1	31.6	2	1.8	<1	No	[UCL] < Refined ESV
Iron	16	16	100%	5,110	19,041	33,000	22,359	48,800	0	20,000	8	1.7	1.1	No	[Max] < BTV
Lead	22	22	100%	4.6	26.4	57.6	32.3	55.6	2	35.8	6	1.6	<1	No	[UCL] < Refined ESV
Manganese	16	16	100%	63	502	1,200	628	1,526	0	630	5	1.9	<1	No	[UCL] < Refined ESV; [Max] < BTV
Mercury	23	21	91%	0.02	0.27	1.26	0.55	0.39	3	0.2	7	6.3	2.8	Yes	[Max] > Refined ESV; [Max] > BTV
Nickel	21	21	100%	5.34	16	28.9	18.46	49.6	0	22.7	4	1.3	<1	No	[UCL] < Refined ESV; [Max] < BTV
Selenium	21	6	29%	0.16	0.54	2.07	0.83	1.31	1	2	1	1.0	<1	No	[UCL] < Refined ESV
Tin	16	16	100%	2.34	5.79	17.1	7.86	7.97	2	NESV	---	---	---	Yes	[Max] > BTV
Vanadium	16	16	100%	9.12	29.93	52.1	35.1	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Zinc	21	21	100%	22.6	97.6	223	118.2	274.9	0	121	7	1.8	<1	No	[UCL] < Refined ESV; [Max] < BTV
<b>Volatile Organic Compounds (mg/kg)</b>															
1,2-Dichlorobenzene	16	3	19%	0.1	0.4	0.5	0.2	NC	---	7.86	0	<1	---	No	[Max] < Refined ESV
1,4-Dichlorobenzene	16	3	19%	0.14	0.5	1.2	0.28	NC	---	7.85	0	<1	---	No	[Max] < Refined ESV
Acetone	3	3	100%	0.016	0.077	0.15	0.191	NC	---	31.2	0	<1	---	No	[Max] < Refined ESV
<b>Polycyclic Aromatic Hydrocarbons (mg/kg)</b>															
Acenaphthene	21	0	0%	ND	ND	ND	NC	NC	---	ESBTU <sub>FCV,T</sub> total > 1 (See Appendix C)	3	1.9	1.2	Yes	ESBTU <sub>FCV,Total</sub> > 1
Acenaphthylene	21	1	5%	0.099	0.099	0.099	NC	NC	---						
Anthracene	21	1	5%	0.082	0.082	0.082	NC	NC	---						
Benzo(A)Anthracene	21	8	38%	0.059	0.146	0.34	0.113	NC	---						
Benzo(B)Fluoranthene	21	10	48%	0.066	0.17	0.35	0.141	NC	---						
Benzo(G,H,I)Perylene	21	6	29%	0.053	0.102	0.17	0.077	NC	---						
Benzo(K)Fluoranthene	21	4	19%	0.051	0.088	0.14	0.064	NC	---						
Benzo(A)Pyrene	21	8	38%	0.061	0.155	0.27	0.114	NC	---						
Chrysene	21	8	38%	0.064	0.173	0.37	0.128	NC	---						
Dibenz(A,H)Anthracene	21	0	0%	ND	ND	ND	NC	NC	---						
Fluoranthene	21	11	52%	0.083	0.22	0.66	0.194	NC	---						
Fluorene	16	0	0%	ND	ND	ND	NC	NC	---						
Indeno (1,2,3-CD) Pyrene	21	3	14%	0.077	0.111	0.16	0.067	NC	---						
Naphthalene	21	3	14%	0.089	0.1	0.12	0.062	NC	---						
Phenanthrene	21	7	33%	0.061	0.137	0.24	0.098	NC	---						
Pyrene	21	12	57%	0.061	0.216	0.53	0.195	NC	---						
Total PAHs (Detections + 1/2 MDL)	21	12	57%	0.406	1.523	3.4545	1.366	0.912	9						
Total PAHs (Detections Only)	21	12	57%	0.061	1.104	3.312	1.04	0.912	6						
ESBTU <sub>FCV,13</sub>	16	16	100%	0.021	0.226	0.676	0.445	NC	---						
ESBTU <sub>FCV,Total</sub>	16	16	100%	0.058	0.621	1.86	1.224	NC	---						
<b>Semi-Volatile Organic Compounds (mg/kg)</b>															
Bis(2-Ethylhexyl)Phthalate	21	2	10%	0.23	0.32	0.41	0.15	NC	---	35,374	0	<1	---	No	[Max] < Refined ESV
Nitrobenzene	16	2	13%	0.16	0.29	0.42	0.22	NC	---	0.13	0	<1	---	No	[Max] < Refined ESV
<b>Polychlorinated Biphenyls (mg/kg)</b>															
Total Monochlorobiphenyls (congeners)	5	5	100%	0.000172	0.000351	0.000542	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total Dichlorobiphenyls (congeners)	5	5	100%	0.00067	0.00131	0.00213	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total Trichlorobiphenyls (congeners)	5	5	100%	0.000861	0.00237	0.00371	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total Tetrachlorobiphenyls (congeners)	5	5	100%	0.00131	0.00513	0.00915	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total Pentachlorobiphenyls (congeners)	5	5	100%	0.00182	0.00747	0.013	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total Hexachlorobiphenyls (congeners)	5	5	100%	0.00214	0.00749	0.0131	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total Heptachlorobiphenyls (congeners)	5	5	100%	0.00103	0.00359	0.00567	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total Octachlorobiphenyls (congeners)	5	5	100%	0.000541	0.00208	0.00347	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total Nonachlorobiphenyls (congeners)	5	5	100%	0.00132	0.00512	0.0104	NC	NC	---	NESV	---	---	---	Uncertainty	No ESV or BTV
Total PCB (congeners)	5	5	100%	0.011606	0.041885	0.071702	0.06662	0.046209	2	0.07	2.0	1.0	<1	No	[UCL] < Refined ESV

**Table 27**  
**Carneys Point Zone Refined Exposure Estimate for Bulk Sediment (0-0.5 feet)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Detection Frequency	Minimum Concentration	Mean Concentration	Maximum Concentration	Upper Confidence Limit (UCL) Concentration	Background Threshold Value (BTV)	Result Concentrations > BTV	Refined Ecological Screening Value (ESV)	Result Concentrations > Refined ESV	Hazard Quotient (HQ) or ESB Toxic Unit (ESBTU)		COPEC Decision	COPEC Decision Rationale
												HQ <sub>max</sub> / ESBTU <sub>max</sub>	HQ <sub>UCL</sub> / ESBTU <sub>UCL</sub>		
<b>Other Parameters</b>															
Total Organic Carbon (mg/kg)	22	22	100%	860	17,178	136,000	NC	NC	---	NESV	---	---	---	---	---
Black Carbon (mg/kg)	7	7	100%	475	3,044	6,850	NC	NC	---	NESV	---	---	---	---	---
Percent Fines (% <0.064 mm)	22	22	100%	8	44	86	NC	NC	---	NESV	---	---	---	---	---

**Notes:**  
 ---: No Result  
**Bolded** Detection Frequency: Detection frequency < 5%  
**Bolded** HQ: HQ > 1  
 COPEC: Constituent of Potential Ecological Concern  
 ESB: Equilibrium Partitioning Sediment Benchmark  
 [Maximum]: Maximum concentration  
 MDL: Method Detection Limit  
 NC: Not Calculated  
 ND: No Detections  
 NESV: No Ecological Screening Value

Table 28  
 Carneys Point Zone Refined Exposure Estimate for Bulk Sediment (0.5-1.0 feet)  
 Delaware River Screening-Level Ecological Risk Assessment  
 Chemours Chambers Works  
 Deepwater, New Jersey

Constituent	Number of Samples	Number of Detections	Detection Frequency	Minimum Concentration	Mean Concentration	Maximum Concentration	Upper Confidence Limit (UCL) Concentration	Background Threshold Value (BTV)	Result Concentrations > BTV	Refined Ecological Screening Value (ESV)	Result Concentrations > Refined ESV	Hazard Quotient (HQ) or ESB Toxic Unit (ESBTU)		COPEC Decision	COPEC Decision Rationale
												HQ <sub>max</sub> / ESBTU <sub>max</sub>	HQ <sub>UCL</sub> / ESBTU <sub>UCL</sub>		
<b>Volatile Organic Compounds (mg/kg)</b>															
Acetone	16	14	88%	0.013	0.093	0.88	0.317	NC	0	31.2 <sup>a</sup>	0	<1	---	No	[Max] < Refined ESV
<b>Other Parameters</b>															
Total Organic Carbon (mg/kg)	14	14	100%	335	11,461	87,950	NC	NC	---	NESV	---	---	---	---	---
Black Carbon (mg/kg)	4	4	100%	145	443	645	NC	NC	---	NESV	---	---	---	---	---

**Notes:**  
 ---: No Result  
**Bolded** Detection Frequency: Detection frequency < 5%  
**Bolded** HQ: HQ > 1  
 COPEC: Constituent of Potential Ecological Concern  
 ESB: Equilibrium Partitioning Sediment Benchmark  
 [Maximum]: Maximum concentration  
 MDL: Method Detection Limit  
 NC: Not Calculated  
 ND: No Detections  
 NESV: No Ecological Screening Value

**Table 29**  
**Summary of Detection Frequencies for Bulk Sediment Analytes Without Ecological Screening Values (ESVs)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Detection Frequency	Minimum Concentration	Mean Concentration	Maximum Concentration	Location of Maximum Concentration
<b>Metals (mg/kg)</b>							
Barium	152	152	100%	13.9	86.3	541	SC-237
Beryllium	157	150	96%	0.0878	0.9388	7.26	SC-237
Thallium	152	75	49%	0.038	0.281	4.21	DER2-12-SD
Tin	80	80	100%	1.91	6.88	26.3	DER2-22-SD
Titanium	18	18	100%	218	1,145	4,440	SC-231
Vanadium	152	152	100%	8.34	41.08	109	E16-BOR-05
<b>Pesticides and Herbicides (mg/kg)</b>							
Aldrin	4	0	0%	ND	ND	ND	---
Alpha Chlordane	4	0	0%	ND	ND	ND	---
Endosulfan II	4	0	0%	ND	ND	ND	---
Endrin Ketone	4	0	0%	ND	ND	ND	---
Gamma Chlordane	4	0	0%	ND	ND	ND	---
Methoxychlor	4	0	0%	ND	ND	ND	---
Toxaphene	4	0	0%	ND	ND	ND	---
<b>Volatile Organic Compounds (mg/kg)</b>							
1,1,1,2-Tetrachloroethane	63	2	3%	0.003	0.004	0.004	D15-BOR-22
1,1,2-Trifluoroethane	54	0	0%	ND	ND	ND	---
1,1-Dichloro-1-Fluoroethane	54	0	0%	ND	ND	ND	---
1,1-Dichloropropene	63	0	0%	ND	ND	ND	---
1,2-Dibromoethane (EDB)	63	0	0%	ND	ND	ND	---
1,2-Dichloro-1-Fluoroethane	54	0	0%	ND	ND	ND	---
1-Chloro-1,1-Difluoroethane	54	2	4%	0.002	0.004	0.006	D15-BOR-23
2-Chloroethyl Vinyl Ether	8	0	0%	ND	ND	ND	---
2-Hexanone	63	0	0%	ND	ND	ND	---
4-Chlorotoluene	63	2	3%	0.004	0.152	0.3	D16-BOR-11
Bromodichloromethane	175	0	0%	ND	ND	ND	---
Chlorodibromomethane	175	0	0%	ND	ND	ND	---
Chloropentafluoroethane	54	0	0%	ND	ND	ND	---
cis-1,3-Dichloropropene	175	0	0%	ND	ND	ND	---
Ethyl Chloride	175	0	0%	ND	ND	ND	---
Fluoromethane	54	0	0%	ND	ND	ND	---
Isobutyl Alcohol	63	0	0%	ND	ND	ND	---
Methacrylonitrile	63	0	0%	ND	ND	ND	---
Methyl Chloride	175	0	0%	ND	ND	ND	---
Methyl Isobutyl Ketone	63	0	0%	ND	ND	ND	---
Methyl Methacrylate	63	0	0%	ND	ND	ND	---
Methyl Tertiary Butyl Ether	63	0	0%	ND	ND	ND	---
N-Butylbenzene	63	2	3%	0.004	0.142	0.28	D16-BOR-11
Propionitrile	63	0	0%	ND	ND	ND	---
sec-Butylbenzene	63	2	3%	0.014	0.122	0.23	D16-BOR-11
Styrene	63	0	0%	ND	ND	ND	---
tert-Butylbenzene	63	1	2%	0.008	0.008	0.008	D15-BOR-22
Tetrahydrofuran	63	0	0%	ND	ND	ND	---
trans-1,3-Dichloropropene	112	0	0%	ND	ND	ND	---
Vinyl Fluoride	54	0	0%	ND	ND	ND	---
<b>Semi-Volatile Organic Compounds (mg/kg)</b>							
1,4-Dioxane	72	0	0%	ND	ND	ND	---
2,3,4,6-Tetrachlorophenol	72	0	0%	ND	ND	ND	---
2,4,5-Trichlorophenol	72	0	0%	ND	ND	ND	---
2-Naphthylamine	160	0	0%	ND	ND	ND	---
2-Nitroaniline	72	0	0%	ND	ND	ND	---
2-Nitrophenol	157	0	0%	ND	ND	ND	---
3,3'-Dimethylbenzidine	6	0	0%	ND	ND	ND	---
3-Nitroaniline	72	0	0%	ND	ND	ND	---
4,6-Dinitro-2-Methylphenol	157	0	0%	ND	ND	ND	---
4-Aminobiphenyl	154	0	0%	ND	ND	ND	---
4-Chloro-3-Methylphenol	157	0	0%	ND	ND	ND	---
4-Chlorophenyl Phenyl Ether	157	0	0%	ND	ND	ND	---
4-Nitroaniline	72	0	0%	ND	ND	ND	---
Benzidine	145	0	0%	ND	ND	ND	---

**Table 29**  
**Summary of Detection Frequencies for Bulk Sediment Analytes Without Ecological Screening Values (ESVs)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

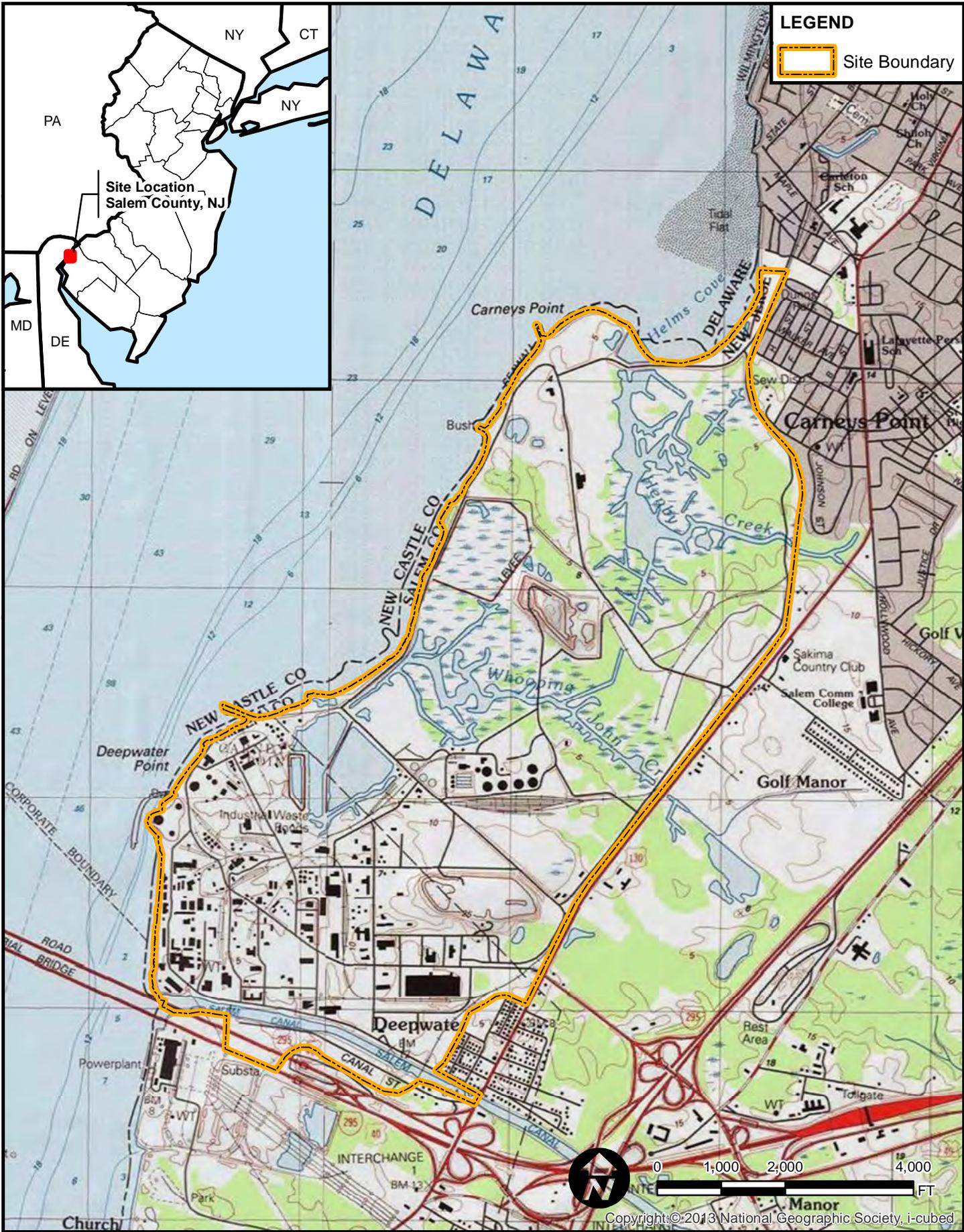
Constituent	Number of Samples	Number of Detections	Detection Frequency	Minimum Concentration	Mean Concentration	Maximum Concentration	Location of Maximum Concentration
Bis(2-Chloro-1-Methylethyl) Ether	72	0	0%	ND	ND	ND	---
Bis(2-Chloroethoxy)Methane	157	0	0%	ND	ND	ND	---
Bis(2-Chloroisopropyl)Ether	85	0	0%	ND	ND	ND	---
N-Nitrosodimethylamine	157	0	0%	ND	ND	ND	---
N-Nitrosodi-N-Propylamine	157	0	0%	ND	ND	ND	---
O-Toluidine	157	0	0%	ND	ND	ND	---
Parathion	72	0	0%	ND	ND	ND	---

**Notes:**

---: No Result

ND: No Detections

# Figures



Reviewed By: G. Long



Chemours Chambers Works  
 Deepwater, New Jersey

Site Location Map  
 Delaware River  
 SLERA Report

**FIGURE 1**



**Legend**

**Outfall Type**

- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls
- ~ OSI Hydrographic Contour (5 ft)

**Sheet Pile Barrier**

- ~ AOC 1
- ~ AOC 2/3
- ~ SWMU 40
- ~ SWMU 5
- ~ Salem Canal

**Substrate Type**

- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable
- Site Boundary

**Site Features Map  
Delaware River  
SLERA Report**

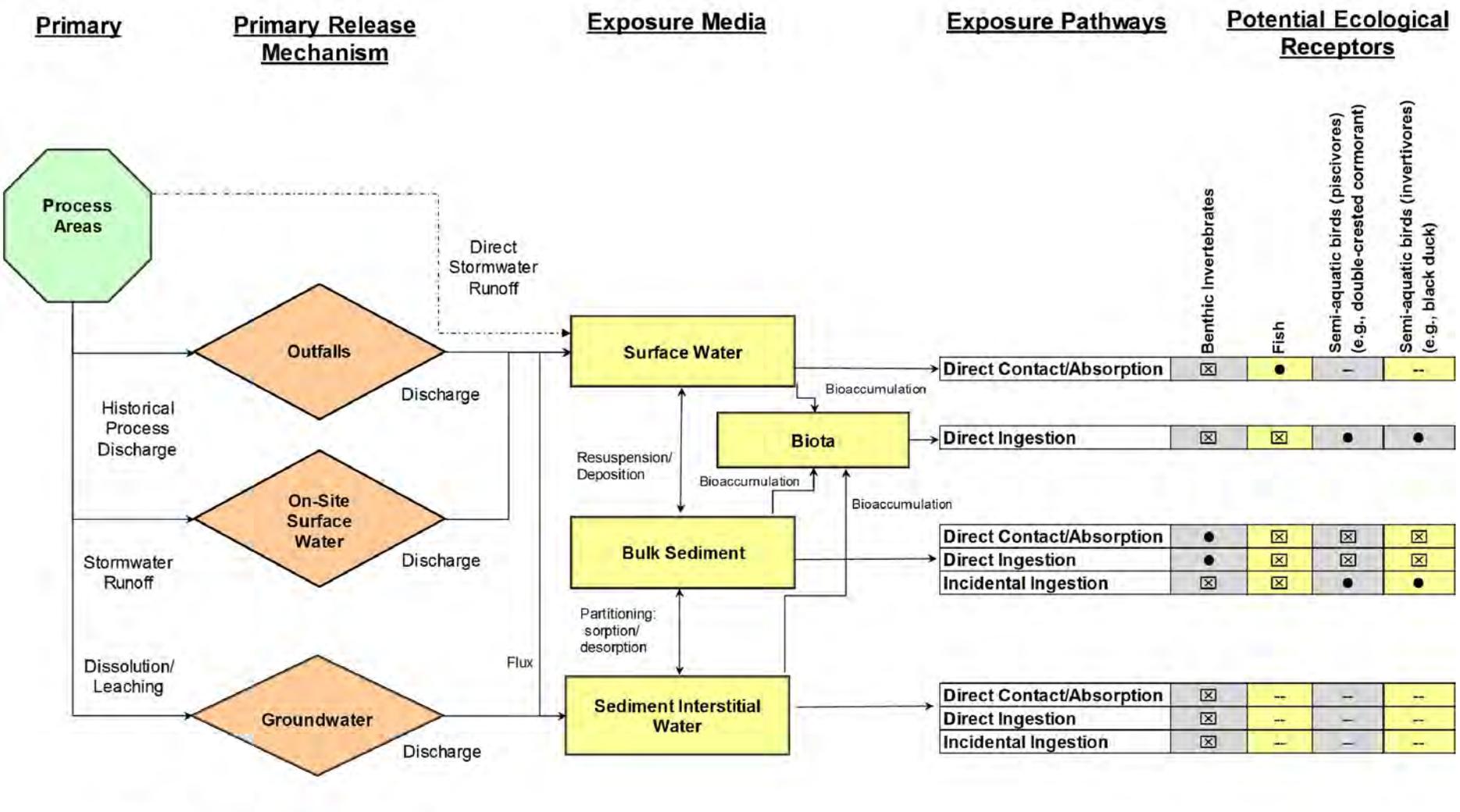
**Chemours Chambers Works  
Deepwater, New Jersey**

**EHS Support** **FIGURE 2**

Reviewed By: G. Long

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Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES



- NOTES:**
- CONTAMINANT MIGRATION PATHWAY
  - POTENTIAL CONTAMINANT MIGRATION PATHWAY
  - POTENTIAL COMPLETE PRIMARY EXPOSURE PATHWAY - QUANTITATIVELY EVALUATED
  - ☒ POTENTIAL COMPLETE EXPOSURE PATHWAY - NOT QUANTITATIVELY EVALUATED
  - EXPOSURE PATHWAY IS COMPLETE AND INSIGNIFICANT

Reviewed By: G. Long



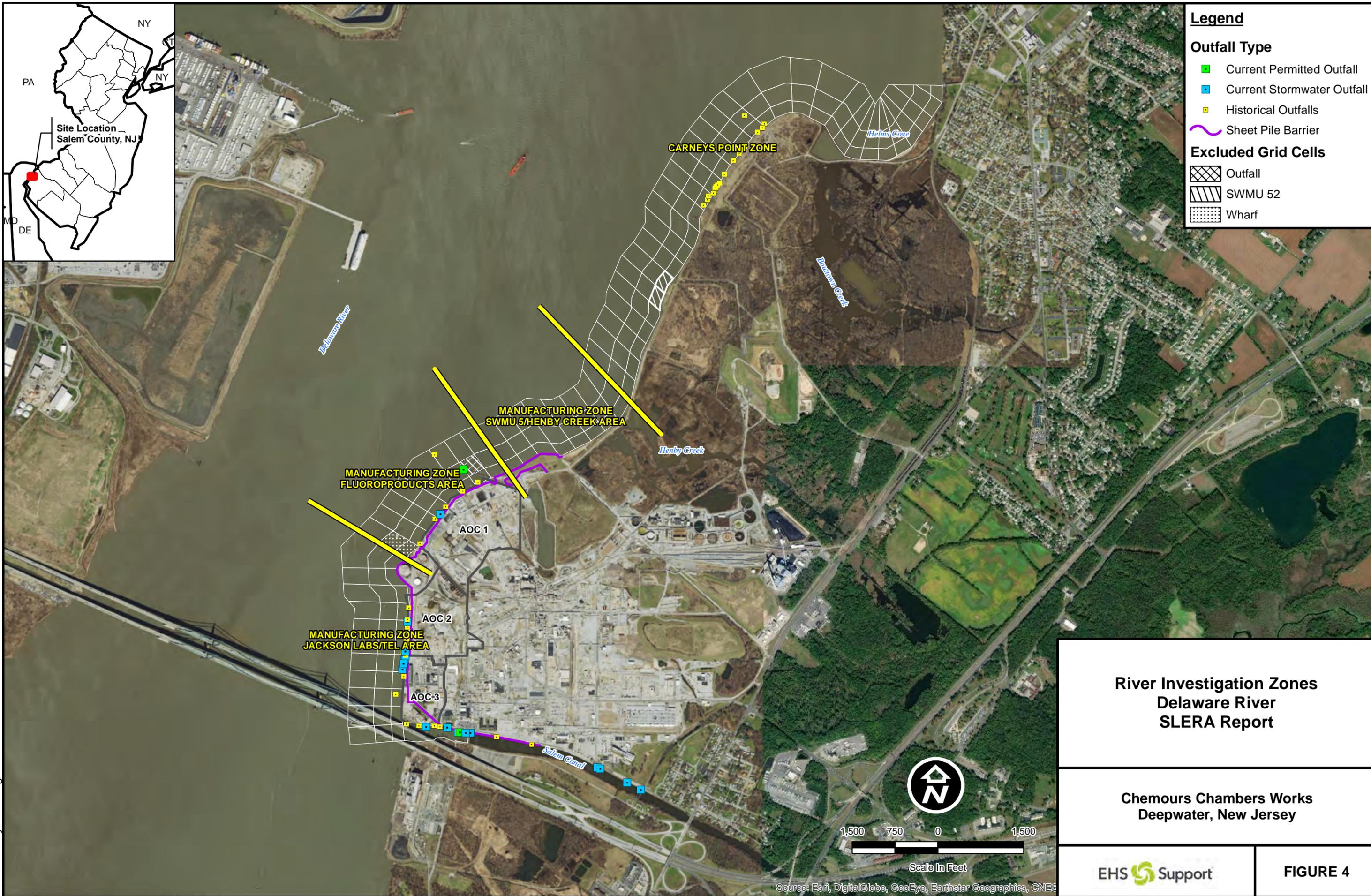
**Legend**

**Outfall Type**

- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls
- ~ Sheet Pile Barrier

**Excluded Grid Cells**

- Outfall
- SWMU 52
- Wharf



**River Investigation Zones  
Delaware River  
SLERA Report**

**Chemours Chambers Works  
Deepwater, New Jersey**

**EHS Support**

**FIGURE 4**



**Legend**

**Sediment Sampling Location**

- Delaware River Remedial Investigation
- Delaware River NAPL Delineation
- SWMU 5 Investigation
- SWMU 52 Investigation
- Salem Canal Investigation
- PCB Sediment Sample

**Surface Water Sampling Location**

- + Delaware River Remedial Investigation
- + Salem Canal Investigation

**Substrate Type**

- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

**Outfall Type**

- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls
- Sheet Pile Barrier

**Excluded Grid Cells**

- Outfall
- SWMU 52
- Wharf

**Manufacturing Zone  
Jackson Labs/TEL Area  
Sediment & Surface Water  
Sampling Locations  
Delaware River  
SLERA Report**

**Chemours Chambers Works  
Deepwater, New Jersey**



**FIGURE 5**





**Legend**

**Sediment Sampling Location**

- Delaware River Remedial Investigation
- Delaware River NAPL Delineation
- SWMU 5 Investigation
- SWMU 52 Investigation
- Salem Canal Investigation
- PCB Sediment Sample

**Surface Water Sampling Location**

- + Delaware River Remedial Investigation
- + Salem Canal Investigation

**Substrate Type**

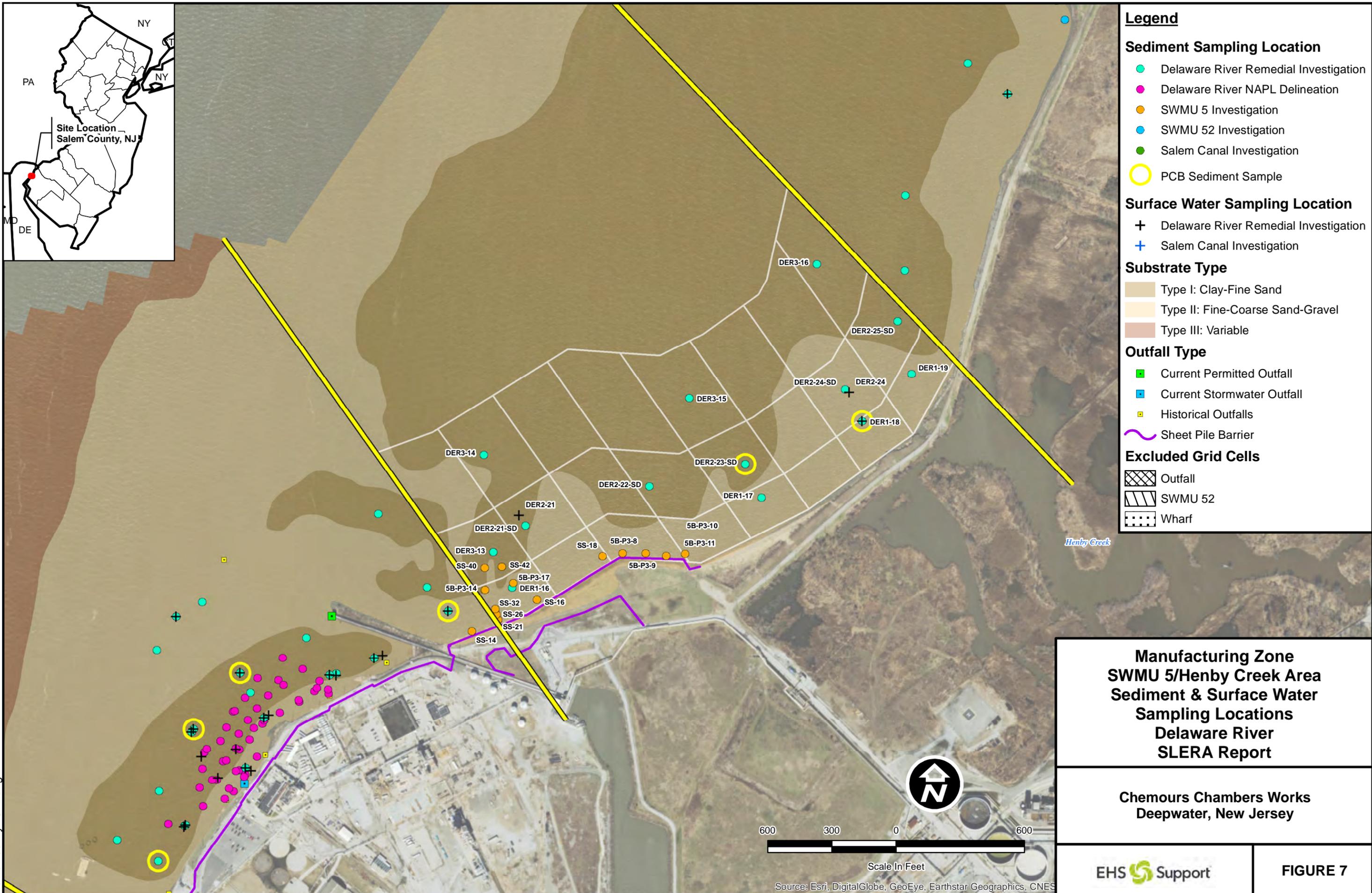
- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

**Outfall Type**

- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls
- Sheet Pile Barrier

**Excluded Grid Cells**

- Outfall
- SWMU 52
- Wharf



**Manufacturing Zone  
SWMU 5/Henby Creek Area  
Sediment & Surface Water  
Sampling Locations  
Delaware River  
SLERA Report**

**Chemours Chambers Works  
Deepwater, New Jersey**

Reviewed By: G. Long

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES

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**Legend**

**Sediment Sampling Location**

- Delaware River Remedial Investigation
- Delaware River NAPL Delineation
- SWMU 5 Investigation
- SWMU 52 Investigation
- Salem Canal Investigation
- PCB Sediment Sample

**Surface Water Sampling Location**

- + Delaware River Remedial Investigation
- + Salem Canal Investigation

**Substrate Type**

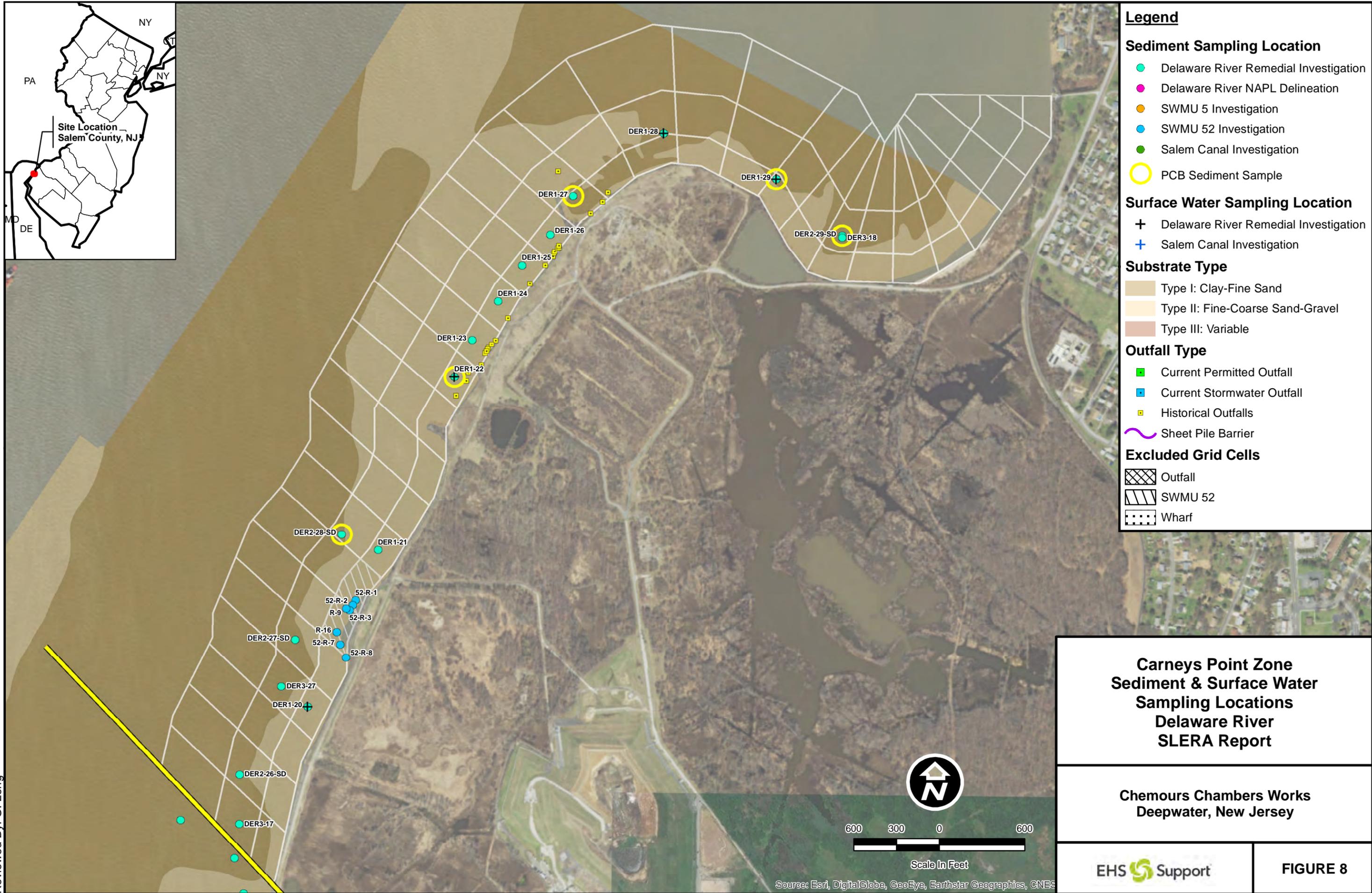
- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

**Outfall Type**

- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls
- Sheet Pile Barrier

**Excluded Grid Cells**

- Outfall
- SWMU 52
- Wharf



**Carneys Point Zone  
Sediment & Surface Water  
Sampling Locations  
Delaware River  
SLERA Report**

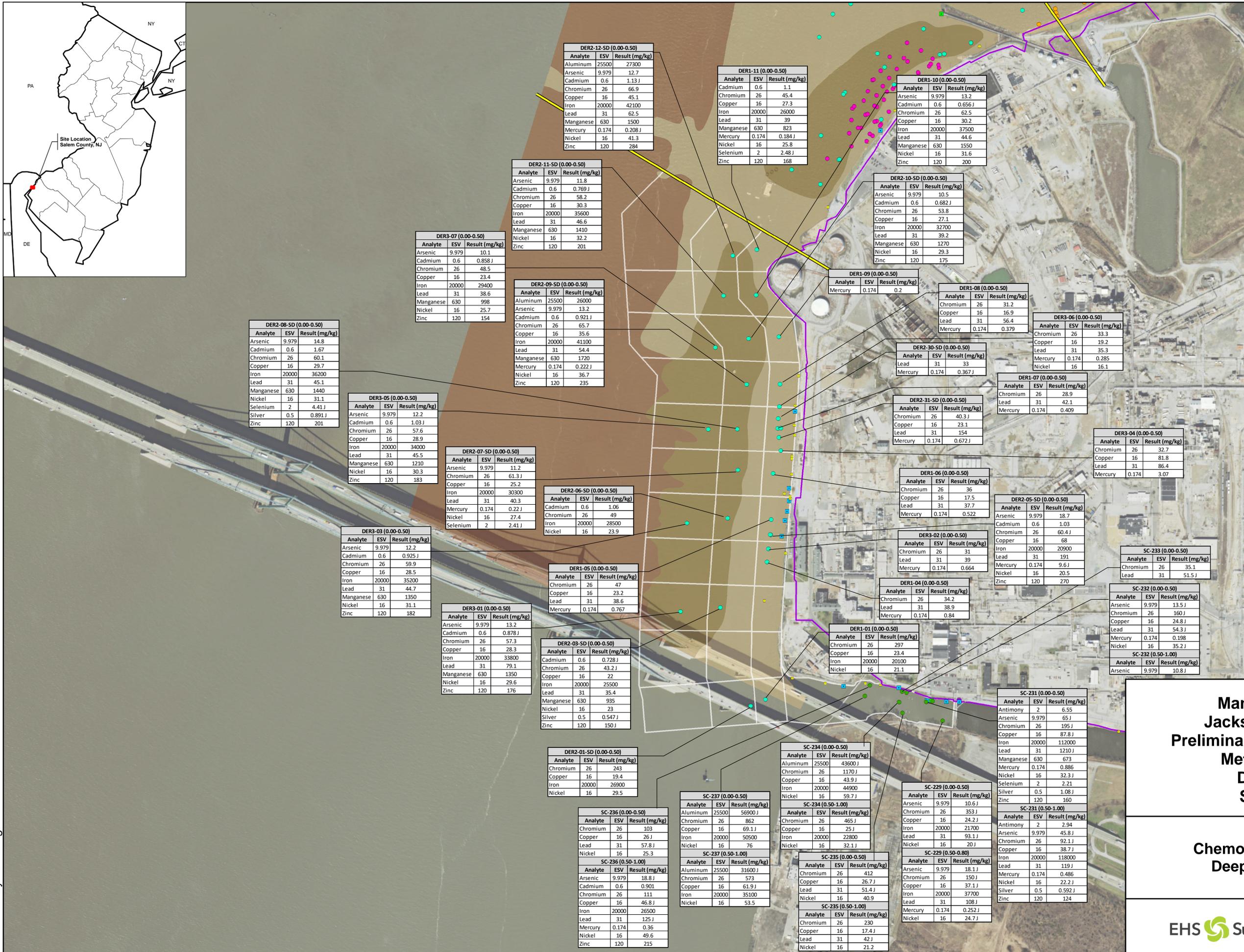
**Chemours Chambers Works  
Deepwater, New Jersey**

**FIGURE 8**

Reviewed By: G. Long

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES

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**Legend**

**Sediment Sampling Location**

- Delaware River Remedial Investigation
- Delaware River NAPL Delineation
- SWMU 5 Investigation
- SWMU 52 Investigation
- Salem Canal Investigation

**Substrate Type**

- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

**Outfall Type**

- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls
- ~ Sheet Pile Barrier

**Excluded Grid Cells**

- Outfall
- Wharf

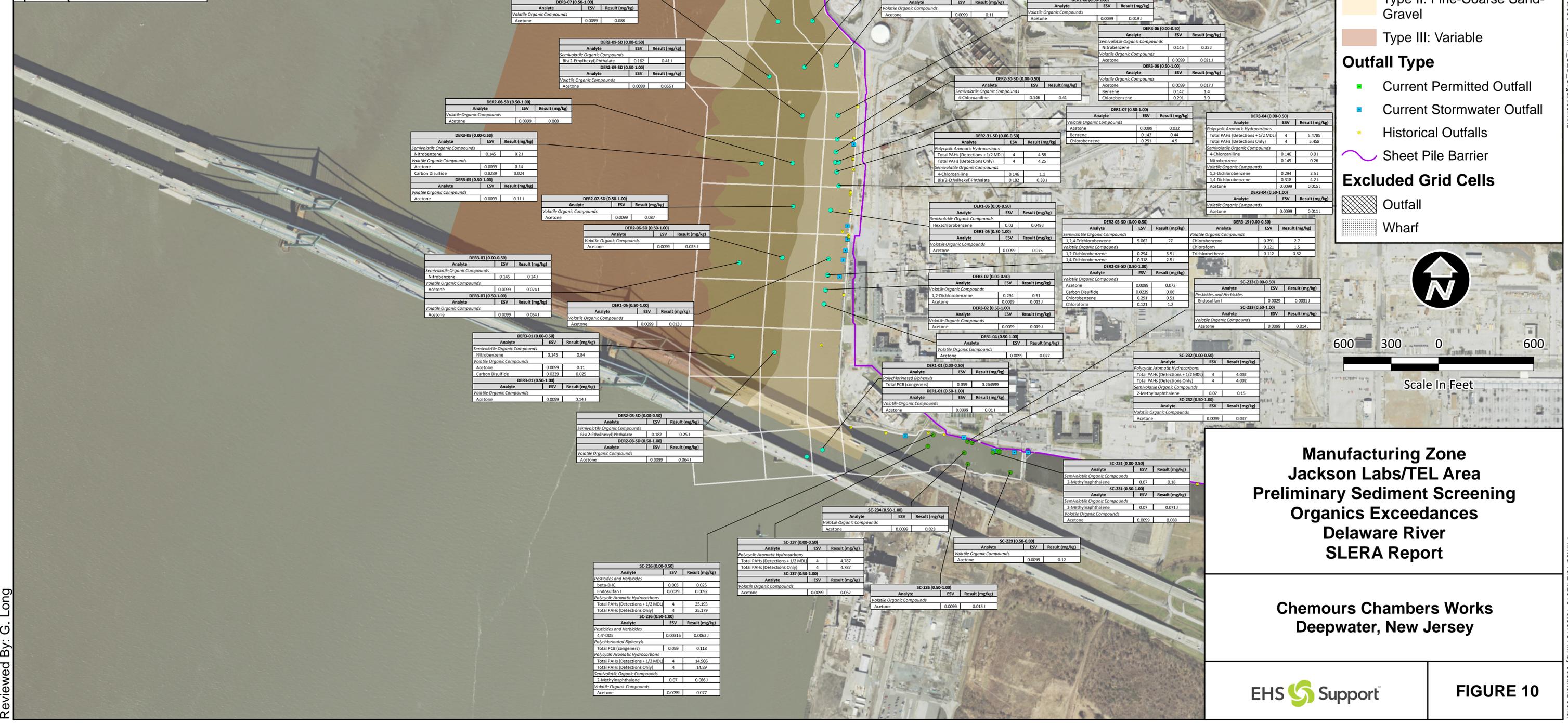
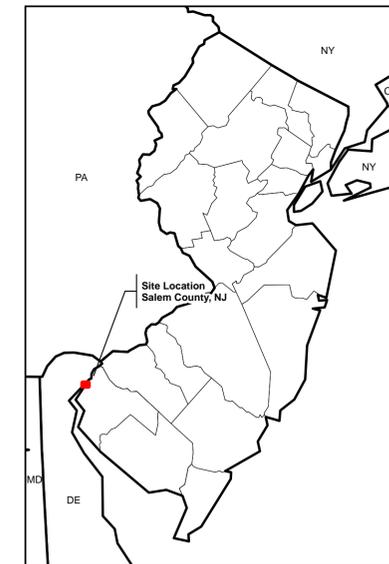


600 300 0 600

Scale In Feet

**Manufacturing Zone  
Jackson Labs/TEL Area  
Preliminary Sediment Screening  
Metal Exceedances  
Delaware River  
SLERA Report**

**Chemours Chambers Works  
Deepwater, New Jersey**



**Legend**

- Delaware River Remedial Investigation
- Delaware River NAPL Delineation
- SWMU 5 Investigation
- SWMU 52 Investigation
- Salem Canal Investigation

**Substrate Type**

- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

**Outfall Type**

- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls
- Sheet Pile Barrier

**Excluded Grid Cells**

- Outfall
- Wharf

600 300 0 600

Scale In Feet

North Arrow

**Manufacturing Zone  
Jackson Labs/TEL Area  
Preliminary Sediment Screening  
Organics Exceedances  
Delaware River  
SLERA Report**

**Chemours Chambers Works  
Deepwater, New Jersey**



**Legend**

**Surface Water Sampling Location**

- + Delaware River Remedial Investigation
- + Salem Canal Investigation

**Substrate Type**

- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

**Outfall Type**

- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls
- Sheet Pile Barrier

**Excluded Grid Cells**

- Outfall
- Wharf

DER1-11		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	1300
Iron	1000	1590

DER2-12		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	728
Iron	1000	1010 J

DER2-30		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	739
Iron	1000	1010 J

DER1-07		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	1280
Iron	1000	1260

DER2-07		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	547

DER1-05		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	1890
Iron	1000	1980

DER2-05		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	425

DER2-02		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	758
Iron	1000	1050 J

DER1-01		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	2040
Iron	1000	2130

DER1-09		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	1570
Iron	1000	1570

DER3-20		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	2250 J
Iron	1000	2350

DER2-31		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	429

DER3-19		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	2160 J
Iron	1000	2400

DER1-03		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	1250
Iron	1000	1250
<i>Metals - Filtered</i>		
Lead	5.4	8.7 J

SC-241		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	1190
Iron	1000	1340

SC-242		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	1200
Iron	1000	1230

SC-240		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	1230
Iron	1000	1320

**Manufacturing Zone  
Jackson Labs/TEL Area  
Preliminary Surface Water Screening  
Exceedances  
Delaware River  
SLERA Report**

**Chemours Chambers Works  
Deepwater, New Jersey**



600 300 0 600

Scale In Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES



**FIGURE 11**

Reviewed By: G. Long

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**Legend**

**Sediment Sampling Location**

- Delaware River Remedial Investigation
- Delaware River NAPL Delineation
- SWMU 5 Investigation
- SWMU 52 Investigation
- Salem Canal Investigation

**Substrate Type**

- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

**Outfall Type**

- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls
- Sheet Pile Barrier

**Excluded Grid Cells**

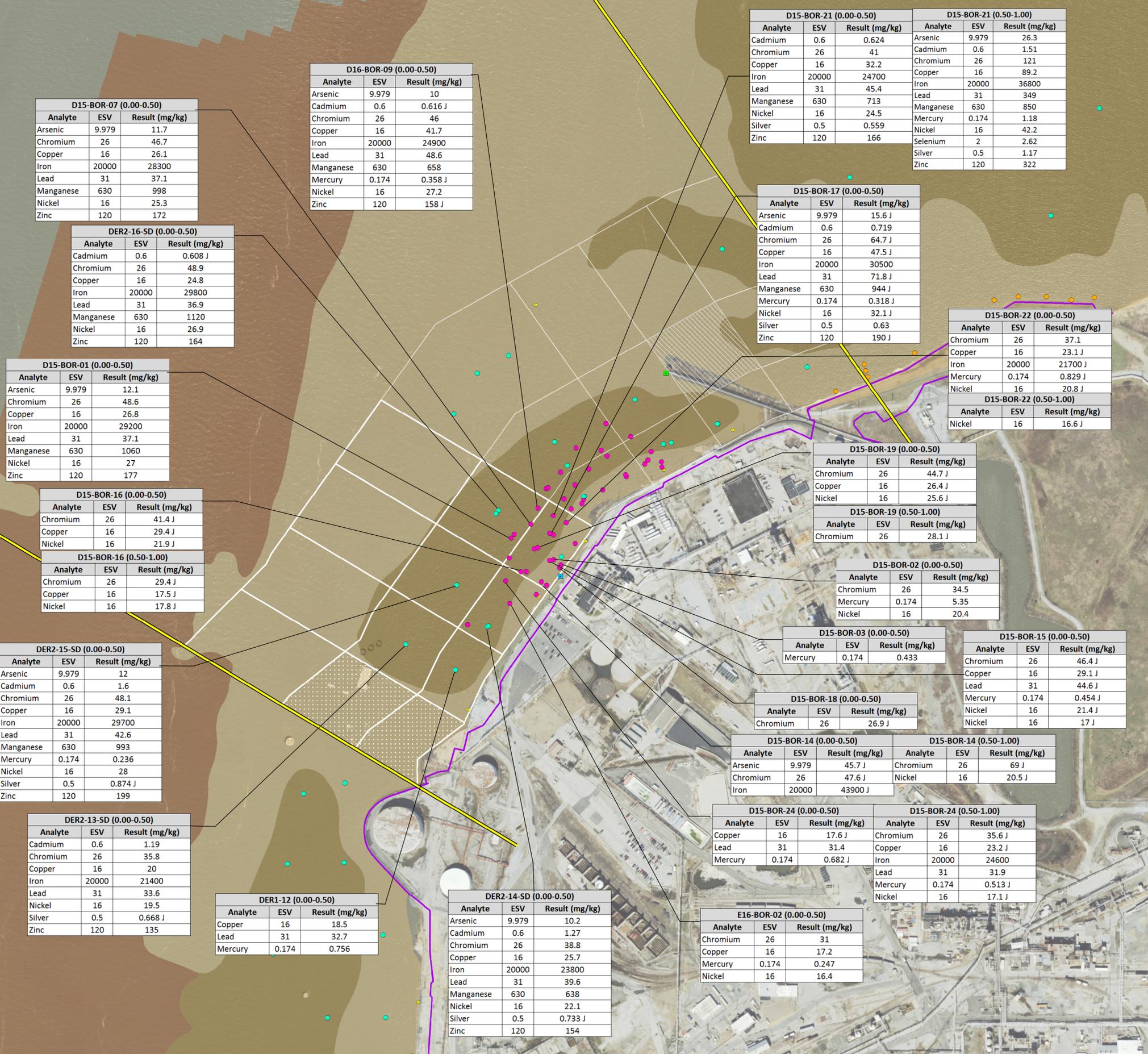
- Outfall
- Wharf



Scale In Feet

**Manufacturing Zone  
Fluoroproducts Area South  
Preliminary Sediment Screening  
Metal Exceedances  
Delaware River  
SLERA Report**

**Chemours Chambers Works  
Deepwater, New Jersey**



**D15-BOR-07 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Arsenic	9.979	11.7
Chromium	26	46.7
Copper	16	26.1
Iron	20000	28300
Lead	31	37.1
Manganese	630	998
Nickel	16	25.3
Zinc	120	172

**D16-BOR-09 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Arsenic	9.979	10
Cadmium	0.6	0.616 J
Chromium	26	46
Copper	16	41.7
Iron	20000	24900
Lead	31	48.6
Manganese	630	658
Mercury	0.174	0.358 J
Nickel	16	27.2
Zinc	120	158 J

**D15-BOR-21 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Cadmium	0.6	0.624
Chromium	26	41
Copper	16	32.2
Iron	20000	24700
Lead	31	45.4
Manganese	630	713
Nickel	16	24.5
Silver	0.5	0.559
Zinc	120	166

**D15-BOR-21 (0.50-1.00)**

Analyte	ESV	Result (mg/kg)
Arsenic	9.979	26.3
Cadmium	0.6	1.51
Chromium	26	121
Copper	16	89.2
Iron	20000	36800
Lead	31	349
Manganese	630	850
Mercury	0.174	1.18
Nickel	16	42.2
Selenium	2	2.62
Silver	0.5	1.17
Zinc	120	322

**DER2-16-SD (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Cadmium	0.6	0.608 J
Chromium	26	48.9
Copper	16	24.8
Iron	20000	29800
Lead	31	36.9
Manganese	630	1120
Nickel	16	26.9
Zinc	120	164

**D15-BOR-17 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Arsenic	9.979	15.6 J
Cadmium	0.6	0.719
Chromium	26	64.7 J
Copper	16	47.5 J
Iron	20000	30500
Lead	31	71.8 J
Manganese	630	944 J
Mercury	0.174	0.318 J
Nickel	16	32.1 J
Silver	0.5	0.63
Zinc	120	190 J

**D15-BOR-22 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Chromium	26	37.1
Copper	16	23.1 J
Iron	20000	21700 J
Mercury	0.174	0.829 J
Nickel	16	20.8 J

**D15-BOR-22 (0.50-1.00)**

Analyte	ESV	Result (mg/kg)
Nickel	16	16.6 J

**D15-BOR-01 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Arsenic	9.979	12.1
Chromium	26	48.6
Copper	16	26.8
Iron	20000	29200
Lead	31	37.1
Manganese	630	1060
Nickel	16	27
Zinc	120	177

**D15-BOR-19 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Chromium	26	44.7 J
Copper	16	26.4 J
Nickel	16	25.6 J

**D15-BOR-19 (0.50-1.00)**

Analyte	ESV	Result (mg/kg)
Chromium	26	28.1 J

**D15-BOR-16 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Chromium	26	41.4 J
Copper	16	29.4 J
Nickel	16	21.9 J

**D15-BOR-16 (0.50-1.00)**

Analyte	ESV	Result (mg/kg)
Chromium	26	29.4 J
Copper	16	17.5 J
Nickel	16	17.8 J

**D15-BOR-02 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Chromium	26	34.5
Mercury	0.174	5.35
Nickel	16	20.4

**DER2-15-SD (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Arsenic	9.979	12
Cadmium	0.6	1.6
Chromium	26	48.1
Copper	16	29.1
Iron	20000	29700
Lead	31	42.6
Manganese	630	993
Mercury	0.174	0.236
Nickel	16	28
Silver	0.5	0.874 J
Zinc	120	199

**D15-BOR-03 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Mercury	0.174	0.433

**D15-BOR-15 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Chromium	26	46.4 J
Copper	16	29.1 J
Lead	31	44.6 J
Mercury	0.174	0.454 J
Nickel	16	21.4 J
Nickel	16	17 J

**D15-BOR-18 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Chromium	26	26.9 J

**D15-BOR-14 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Arsenic	9.979	45.7 J
Chromium	26	47.6 J
Iron	20000	43900 J

**D15-BOR-14 (0.50-1.00)**

Analyte	ESV	Result (mg/kg)
Chromium	26	69 J
Nickel	16	20.5 J

**DER2-13-SD (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Cadmium	0.6	1.19
Chromium	26	35.8
Copper	16	20
Iron	20000	21400
Lead	31	33.6
Nickel	16	19.5
Silver	0.5	0.668 J
Zinc	120	135

**DER1-12 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Copper	16	18.5
Lead	31	32.7
Mercury	0.174	0.756

**DER2-14-SD (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Arsenic	9.979	10.2
Cadmium	0.6	1.27
Chromium	26	38.8
Copper	16	25.7
Iron	20000	23800
Lead	31	39.6
Manganese	630	638
Nickel	16	22.1
Silver	0.5	0.733 J
Zinc	120	154

**D15-BOR-24 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Copper	16	17.6 J
Lead	31	31.4
Mercury	0.174	0.682 J

**D15-BOR-24 (0.50-1.00)**

Analyte	ESV	Result (mg/kg)
Chromium	26	35.6 J
Copper	16	23.2 J
Iron	20000	24600
Lead	31	31.9
Mercury	0.174	0.513 J
Nickel	16	17.1 J

**E16-BOR-02 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Chromium	26	31
Copper	16	17.2
Mercury	0.174	0.247
Nickel	16	16.4

### Legend

#### Sediment Sampling Location

- Delaware River Remedial Investigation
- Delaware River NAPL Delineation
- SWMU 5 Investigation
- SWMU 52 Investigation
- Salem Canal Investigation

#### Substrate Type

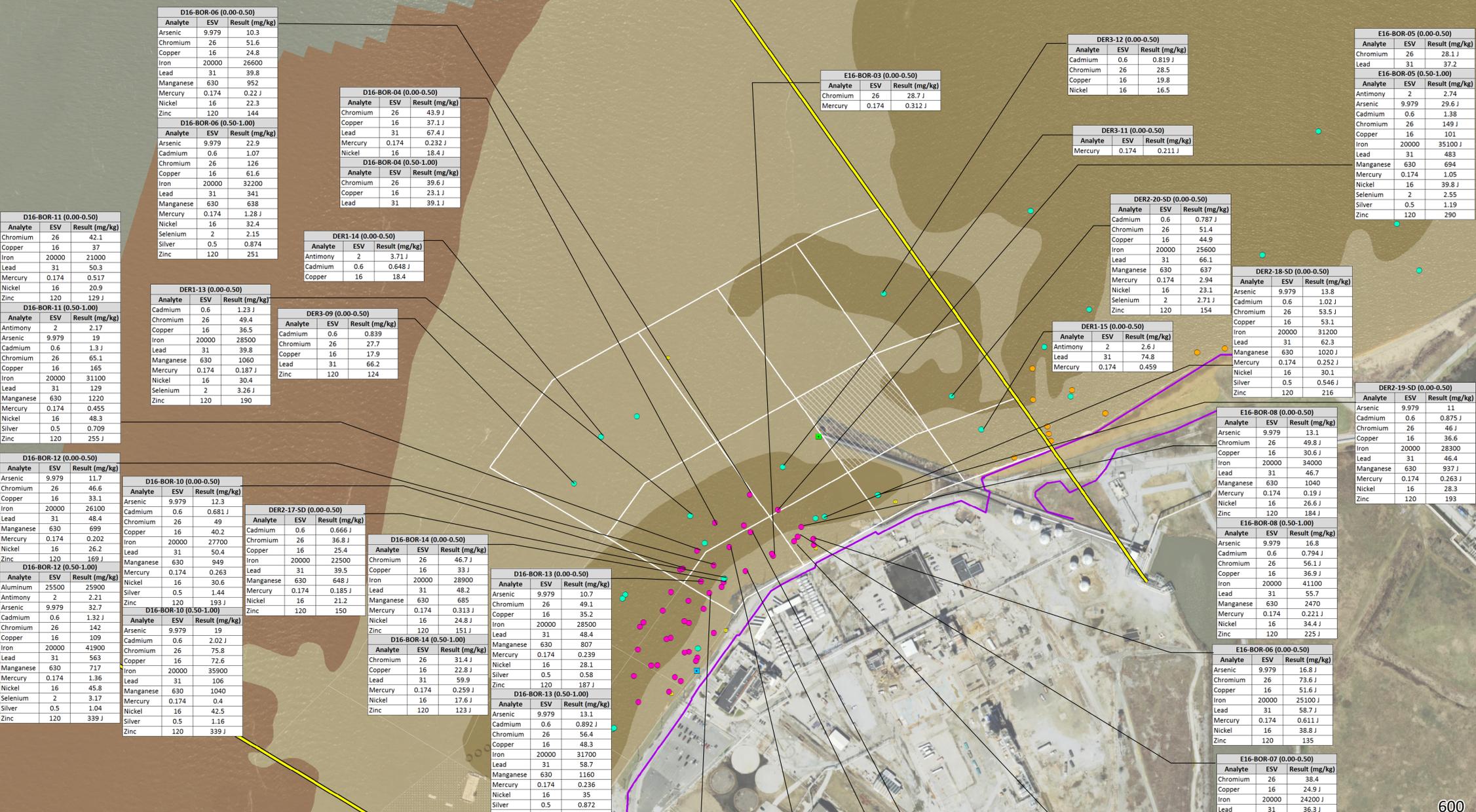
- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

#### Outfall Type

- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls
- Sheet Pile Barrier

#### Excluded Grid Cells

- Outfall
- Wharf



D16-BOR-06 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
Arsenic	9.979	10.3
Chromium	26	51.6
Copper	16	24.8
Iron	20000	26600
Lead	31	39.8
Manganese	630	952
Mercury	0.174	0.22 J
Nickel	16	22.3
Zinc	120	144

D16-BOR-04 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
Chromium	26	49.9 J
Copper	16	37.1 J
Lead	31	67.4 J
Mercury	0.174	0.232 J
Nickel	16	18.4 J

E16-BOR-03 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
Chromium	26	28.7 J
Mercury	0.174	0.312 J

DER3-12 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
Cadmium	0.6	0.819 J
Chromium	26	28.5
Copper	16	19.9
Nickel	16	16.5

E16-BOR-05 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
Chromium	26	28.1 J
Lead	31	37.2

D16-BOR-11 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
Chromium	26	42.1
Copper	16	37
Iron	20000	21000
Lead	31	50.3
Mercury	0.174	0.517
Nickel	16	20.9
Zinc	120	129 J

D16-BOR-06 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
Arsenic	9.979	22.9
Cadmium	0.6	1.07
Chromium	26	126
Copper	16	61.6
Iron	20000	32200
Lead	31	341
Manganese	630	638
Mercury	0.174	1.28 J
Nickel	16	32.4
Selenium	2	2.15
Silver	0.5	0.874
Zinc	120	251

DER1-14 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
Antimony	2	3.71 J
Cadmium	0.6	0.648 J
Copper	16	18.4

D16-BOR-04 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
Chromium	26	39.6 J
Copper	16	23.1 J
Lead	31	39.1 J

DER2-20-SD (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
Cadmium	0.6	0.787 J
Chromium	26	51.4
Copper	16	44.9
Iron	20000	25600
Lead	31	66.1
Manganese	630	637
Mercury	0.174	2.94
Nickel	16	23.1
Selenium	2	2.71 J
Zinc	120	154

DER3-11 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
Mercury	0.174	0.211 J

DER2-20-SD (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
Cadmium	0.6	0.787 J
Chromium	26	51.4
Copper	16	44.9
Iron	20000	25600
Lead	31	66.1
Manganese	630	637
Mercury	0.174	2.94
Nickel	16	23.1
Selenium	2	2.71 J
Zinc	120	154

DER1-15 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
Antimony	2	2.6 J
Lead	31	74.8
Mercury	0.174	0.459

DER2-18-SD (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
Arsenic	9.979	13.8
Cadmium	0.6	1.02 J
Chromium	26	53.5 J
Copper	16	53.1
Iron	20000	31200
Lead	31	62.3
Manganese	630	1020 J
Mercury	0.174	0.252 J
Nickel	16	30.1
Silver	0.5	0.546 J
Zinc	120	216

DER2-19-SD (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
Arsenic	9.979	11
Cadmium	0.6	0.875 J
Chromium	26	46 J
Copper	16	36.6
Iron	20000	28300
Lead	31	46.4
Manganese	630	937 J
Mercury	0.174	0.263 J
Nickel	16	28.3
Zinc	120	193

D16-BOR-12 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
Arsenic	9.979	11.7
Chromium	26	46.6
Copper	16	33.1
Iron	20000	26100
Lead	31	48.4
Manganese	630	699
Mercury	0.174	0.202
Nickel	16	26.2
Zinc	120	169 J

D16-BOR-10 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
Arsenic	9.979	12.3
Cadmium	0.6	0.681 J
Chromium	26	49
Copper	16	40.2
Iron	20000	27700
Lead	31	50.4
Manganese	630	949
Mercury	0.174	0.263
Nickel	16	30.6
Silver	0.5	1.44
Zinc	120	193 J

DER2-17-SD (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
Cadmium	0.6	0.666 J
Chromium	26	36.8 J
Copper	16	25.4
Iron	20000	22500
Lead	31	39.5
Manganese	630	648 J
Mercury	0.174	0.185 J
Nickel	16	21.2
Zinc	120	150

D16-BOR-14 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
Chromium	26	46.7 J
Copper	16	33 J
Iron	20000	28900
Lead	31	48.2
Manganese	630	685
Mercury	0.174	0.313 J
Nickel	16	24.8 J
Zinc	120	151 J

D16-BOR-13 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
Arsenic	9.979	10.7
Chromium	26	49.1
Copper	16	35.2
Iron	20000	28500
Lead	31	48.4
Manganese	630	807
Mercury	0.174	0.239
Nickel	16	28.1
Silver	0.5	0.58
Zinc	120	187 J

D16-BOR-13 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
Arsenic	9.979	13.1
Cadmium	0.6	0.892 J
Chromium	26	56.4
Copper	16	48.3
Iron	20000	31700
Lead	31	58.7
Manganese	630	1160
Mercury	0.174	0.236
Nickel	16	35
Silver	0.5	0.872
Zinc	120	215 J

E16-BOR-08 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
Arsenic	9.979	13.1
Chromium	26	49.8 J
Copper	16	30.6 J
Iron	20000	34000
Lead	31	46.7
Manganese	630	1040
Mercury	0.174	0.19 J
Nickel	16	26.6 J
Zinc	120	184 J

E16-BOR-08 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
Arsenic	9.979	16.8
Cadmium	0.6	0.794 J
Chromium	26	56.1 J
Copper	16	36.9 J
Iron	20000	41100
Lead	31	55.7
Manganese	630	2470
Mercury	0.174	0.221 J
Nickel	16	34.4 J
Zinc	120	225 J

E16-BOR-06 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
Arsenic	9.979	16.8 J
Chromium	26	73.6 J
Copper	16	51.6 J
Iron	20000	25100
Lead	31	58.7 J
Mercury	0.174	0.611 J
Nickel	16	38.8 J
Zinc	120	135

E16-BOR-07 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
Chromium	26	38.4
Copper	16	24.9 J
Iron	20000	24200 J
Lead	31	36.3 J
Manganese	630	743 J
Mercury	0.174	0.213
Nickel	16	22.5 J
Zinc	120	131 J

E16-BOR-07 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
Antimony	2	2.49 J
Chromium	26	29.8
Copper	16	29.6 J
Mercury	0.174	1.31
Silver	0.5	1.95

D15-BOR-23 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
Arsenic	9.979	13
Cadmium	0.6	0.833
Chromium	26	46.8
Copper	16	44.3 J
Iron	20000	26900 J
Lead	31	50.9 J
Manganese	630	888 J
Mercury	0.174	0.192 J
Nickel	16	31.6 J
Silver	0.5	0.58
Zinc	120	186 J

D16-BOR-03 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
Arsenic	9.979	12.2 J
Cadmium	0.6	0.724
Chromium	26	52.2 J
Copper	16	43.2 J
Iron	20000	24700
Lead	31	65.6 J
Manganese	630	1180 J
Mercury	0.174	0.356 J
Nickel	16	24.6 J
Zinc	120	153 J

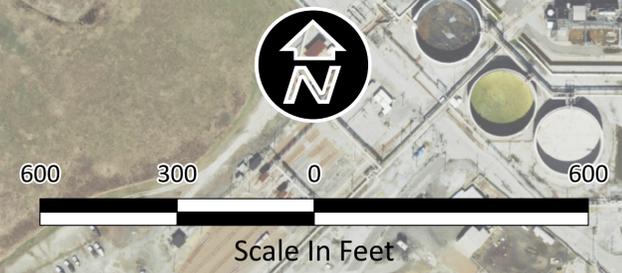
D16-BOR-02 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
Chromium	26	29.2 J
Mercury	0.174	0.21 J

D16-BOR-05 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
Arsenic	9.979	10.6 J
Chromium	26	52 J
Copper	16	33 J
Iron	20000	25800
Lead	31	53.9 J
Manganese	630	768
Mercury	0.174	0.322 J
Nickel	16	28 J
Zinc	120	147

D16-BOR-05 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
Arsenic	9.979	14.7 J
Cadmium	0.6	0.689
Chromium	26	62.4 J
Copper	16	49 J
Iron	20000	28800
Lead	31	74.9 J
Manganese	630	893
Mercury	0.174	0.424 J
Nickel	16	32.2 J
Silver	0.5	0.711
Zinc	120	186

E16-BOR-04 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
Mercury	0.174	0.217

E16-BOR-04 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
Antimony	2	4.05
Cadmium	0.6	0.899
Chromium	26	40.7 J
Copper	16	124 J
Lead	31	281 J
Mercury	0.174	2.88
Nickel	16	24.1 J



## Manufacturing Zone Fluoroproducts Area North Preliminary Sediment Screening Metal Exceedances Delaware River SLERA Report

Chemours Chambers Works  
Deepwater, New Jersey

### Legend

#### Sediment Sampling Location

- Delaware River Remedial Investigation
- Delaware River NAPL Delineation
- SWMU 5 Investigation
- SWMU 52 Investigation
- Salem Canal Investigation

#### Substrate Type

- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

#### Outfall Type

- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls
- Sheet Pile Barrier

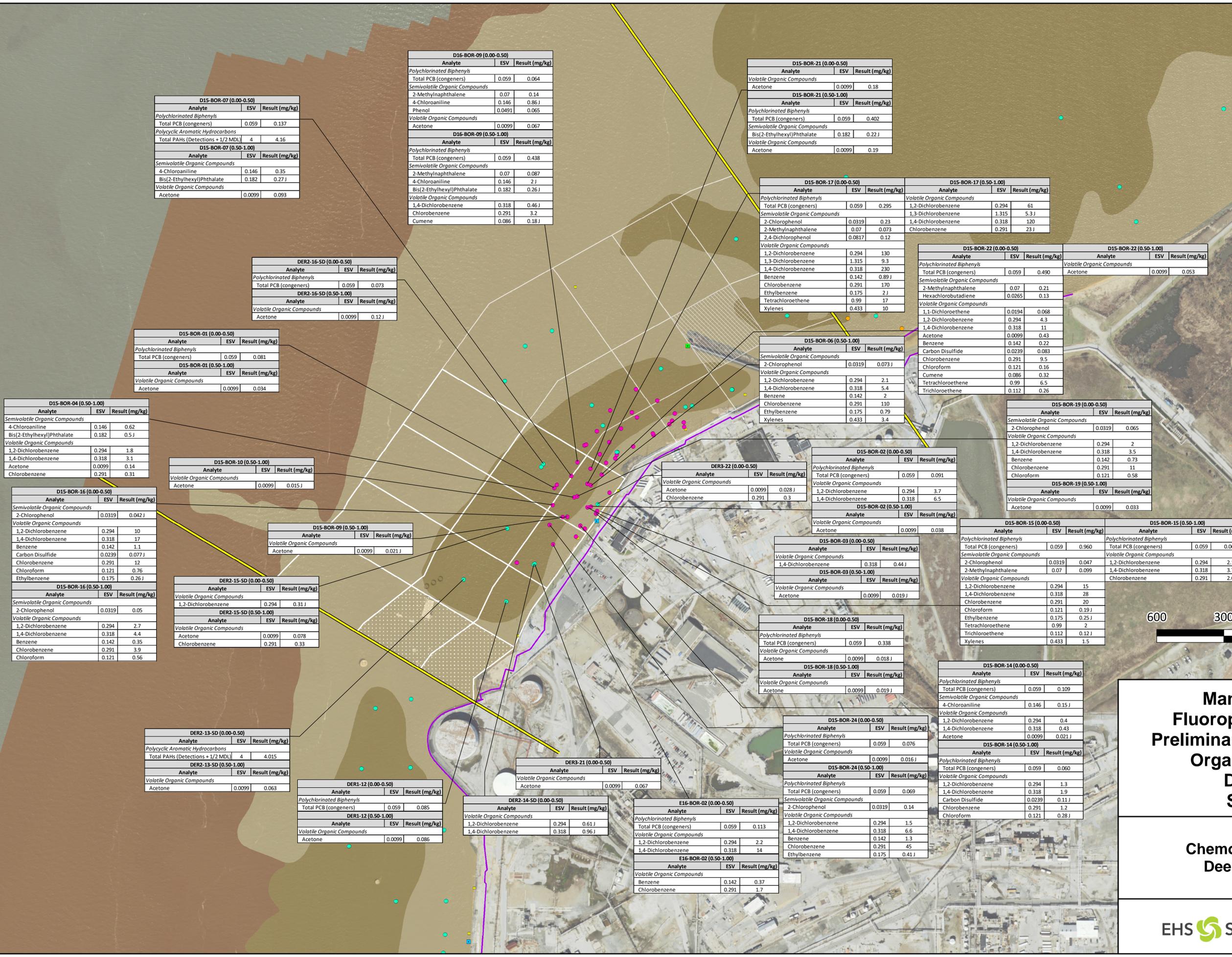
#### Excluded Grid Cells

- Outfall
- Wharf



## Manufacturing Zone Fluoroproducts Area South Preliminary Sediment Screening Organics Exceedances Delaware River SLERA Report

Chemours Chambers Works  
Deepwater, New Jersey



D15-BOR-07 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<b>Polychlorinated Biphenyls</b>		
Total PCB (congeners)	0.059	0.137
<b>Polycyclic Aromatic Hydrocarbons</b>		
Total PAHs (Detections + 1/2 MDL)	4	4.16
<b>D15-BOR-07 (0.50-1.00)</b>		
Analyte	ESV	Result (mg/kg)
<b>Semivolatile Organic Compounds</b>		
4-Chloroaniline	0.146	0.35
Bis(2-Ethylhexyl)Phthalate	0.182	0.27 J
<b>Volatile Organic Compounds</b>		
Acetone	0.0099	0.093

D16-BOR-09 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<b>Polychlorinated Biphenyls</b>		
Total PCB (congeners)	0.059	0.064
<b>Semivolatile Organic Compounds</b>		
2-Methylnaphthalene	0.07	0.14
4-Chloroaniline	0.146	0.86 J
Phenol	0.0491	0.065
<b>Volatile Organic Compounds</b>		
Acetone	0.0099	0.067
<b>D16-BOR-09 (0.50-1.00)</b>		
Analyte	ESV	Result (mg/kg)
<b>Polychlorinated Biphenyls</b>		
Total PCB (congeners)	0.059	0.438
<b>Semivolatile Organic Compounds</b>		
2-Methylnaphthalene	0.07	0.087
4-Chloroaniline	0.146	2 J
Bis(2-Ethylhexyl)Phthalate	0.182	0.26 J
<b>Volatile Organic Compounds</b>		
1,4-Dichlorobenzene	0.318	0.46 J
Chlorobenzene	0.291	3.2
Cumene	0.086	0.18 J

D15-BOR-21 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<b>Polychlorinated Biphenyls</b>		
Total PCB (congeners)	0.059	0.402
<b>Semivolatile Organic Compounds</b>		
Bis(2-Ethylhexyl)Phthalate	0.182	0.22 J
<b>Volatile Organic Compounds</b>		
Acetone	0.0099	0.19

D15-BOR-17 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<b>Polychlorinated Biphenyls</b>		
Total PCB (congeners)	0.059	0.295
<b>Semivolatile Organic Compounds</b>		
2-Chlorophenol	0.0319	0.23
2-Methylnaphthalene	0.07	0.073
2,4-Dichlorophenol	0.0817	0.12
<b>Volatile Organic Compounds</b>		
1,2-Dichlorobenzene	0.294	130
1,3-Dichlorobenzene	1.315	9.3
1,4-Dichlorobenzene	0.318	230
Benzene	0.142	0.89 J
Chlorobenzene	0.291	170
Ethylbenzene	0.175	2 J
Tetrachloroethene	0.99	17
Xylenes	0.433	10

D15-BOR-22 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<b>Polychlorinated Biphenyls</b>		
Total PCB (congeners)	0.059	0.490
<b>Semivolatile Organic Compounds</b>		
2-Methylnaphthalene	0.07	0.21
Hexachlorobutadiene	0.0265	0.13
<b>Volatile Organic Compounds</b>		
1,1-Dichloroethene	0.0194	0.068
1,2-Dichlorobenzene	0.294	4.3
1,4-Dichlorobenzene	0.318	11
Acetone	0.0099	0.43
Benzene	0.142	0.22
Carbon Disulfide	0.0239	0.083
Chlorobenzene	0.291	9.5
Chloroform	0.121	0.16
Cumene	0.086	0.32
Tetrachloroethene	0.99	6.5
Trichloroethene	0.112	0.26

D15-BOR-22 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<b>Polychlorinated Biphenyls</b>		
Total PCB (congeners)	0.059	0.053
<b>Volatile Organic Compounds</b>		
Acetone	0.0099	0.053

D15-BOR-01 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<b>Polychlorinated Biphenyls</b>		
Total PCB (congeners)	0.059	0.081
<b>D15-BOR-01 (0.50-1.00)</b>		
Analyte	ESV	Result (mg/kg)
<b>Volatile Organic Compounds</b>		
Acetone	0.0099	0.034

DER2-16-SD (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<b>Polychlorinated Biphenyls</b>		
Total PCB (congeners)	0.059	0.073
<b>DER2-16-SD (0.50-1.00)</b>		
Analyte	ESV	Result (mg/kg)
<b>Volatile Organic Compounds</b>		
Acetone	0.0099	0.12 J

D15-BOR-06 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<b>Semivolatile Organic Compounds</b>		
2-Chlorophenol	0.0319	0.073 J
<b>Volatile Organic Compounds</b>		
1,2-Dichlorobenzene	0.294	2.1
1,4-Dichlorobenzene	0.318	5.4
Benzene	0.142	2
Chlorobenzene	0.291	110
Ethylbenzene	0.175	0.79
Xylenes	0.433	3.4

D15-BOR-19 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<b>Semivolatile Organic Compounds</b>		
2-Chlorophenol	0.0319	0.065
<b>Volatile Organic Compounds</b>		
1,2-Dichlorobenzene	0.294	2
1,4-Dichlorobenzene	0.318	3.5
Benzene	0.142	0.73
Chlorobenzene	0.291	11
Chloroform	0.121	0.58
<b>D15-BOR-19 (0.50-1.00)</b>		
Analyte	ESV	Result (mg/kg)
<b>Volatile Organic Compounds</b>		
Acetone	0.0099	0.033

DER3-22 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<b>Volatile Organic Compounds</b>		
Acetone	0.0099	0.028 J
Chlorobenzene	0.291	0.3

D15-BOR-02 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<b>Polychlorinated Biphenyls</b>		
Total PCB (congeners)	0.059	0.091
<b>Volatile Organic Compounds</b>		
1,2-Dichlorobenzene	0.294	3.7
1,4-Dichlorobenzene	0.318	6.5
<b>D15-BOR-02 (0.50-1.00)</b>		
Analyte	ESV	Result (mg/kg)
<b>Volatile Organic Compounds</b>		
Acetone	0.0099	0.038

D15-BOR-15 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<b>Polychlorinated Biphenyls</b>		
Total PCB (congeners)	0.059	0.960
<b>Semivolatile Organic Compounds</b>		
2-Chlorophenol	0.0319	0.047
2-Methylnaphthalene	0.07	0.099
<b>Volatile Organic Compounds</b>		
1,2-Dichlorobenzene	0.294	15
1,4-Dichlorobenzene	0.318	28
Chlorobenzene	0.291	20
Chloroform	0.121	0.19 J
Ethylbenzene	0.175	0.25 J
Tetrachloroethene	0.99	2
Trichloroethene	0.112	0.12 J
Xylenes	0.433	1.5

D15-BOR-15 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<b>Polychlorinated Biphenyls</b>		
Total PCB (congeners)	0.059	0.062
<b>Volatile Organic Compounds</b>		
1,2-Dichlorobenzene	0.294	2.1
1,4-Dichlorobenzene	0.318	3.7
Chlorobenzene	0.291	2.6

D15-BOR-10 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<b>Volatile Organic Compounds</b>		
Acetone	0.0099	0.015 J

D15-BOR-09 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<b>Volatile Organic Compounds</b>		
Acetone	0.0099	0.021 J

DER2-15-SD (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<b>Volatile Organic Compounds</b>		
1,2-Dichlorobenzene	0.294	0.31 J
<b>DER2-15-SD (0.50-1.00)</b>		
Analyte	ESV	Result (mg/kg)
<b>Volatile Organic Compounds</b>		
Acetone	0.0099	0.078
Chlorobenzene	0.291	0.33

D15-BOR-03 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<b>Volatile Organic Compounds</b>		
1,4-Dichlorobenzene	0.318	0.44 J
<b>D15-BOR-03 (0.50-1.00)</b>		
Analyte	ESV	Result (mg/kg)
<b>Volatile Organic Compounds</b>		
Acetone	0.0099	0.019 J

D15-BOR-18 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<b>Polychlorinated Biphenyls</b>		
Total PCB (congeners)	0.059	0.338
<b>Volatile Organic Compounds</b>		
Acetone	0.0099	0.018 J
<b>D15-BOR-18 (0.50-1.00)</b>		
Analyte	ESV	Result (mg/kg)
<b>Volatile Organic Compounds</b>		
Acetone	0.0099	0.019 J

D15-BOR-14 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<b>Polychlorinated Biphenyls</b>		
Total PCB (congeners)	0.059	0.109
<b>Semivolatile Organic Compounds</b>		
4-Chloroaniline	0.146	0.15 J
<b>Volatile Organic Compounds</b>		
1,2-Dichlorobenzene	0.294	0.4
1,4-Dichlorobenzene	0.318	0.43
Acetone	0.0099	0.021 J
<b>D15-BOR-14 (0.50-1.00)</b>		
Analyte	ESV	Result (mg/kg)
<b>Volatile Organic Compounds</b>		
Acetone	0.0099	0.060

DER2-13-SD (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<b>Polycyclic Aromatic Hydrocarbons</b>		
Total PAHs (Detections + 1/2 MDL)	4	4.015
<b>DER2-13-SD (0.50-1.00)</b>		
Analyte	ESV	Result (mg/kg)
<b>Volatile Organic Compounds</b>		
Acetone	0.0099	0.063

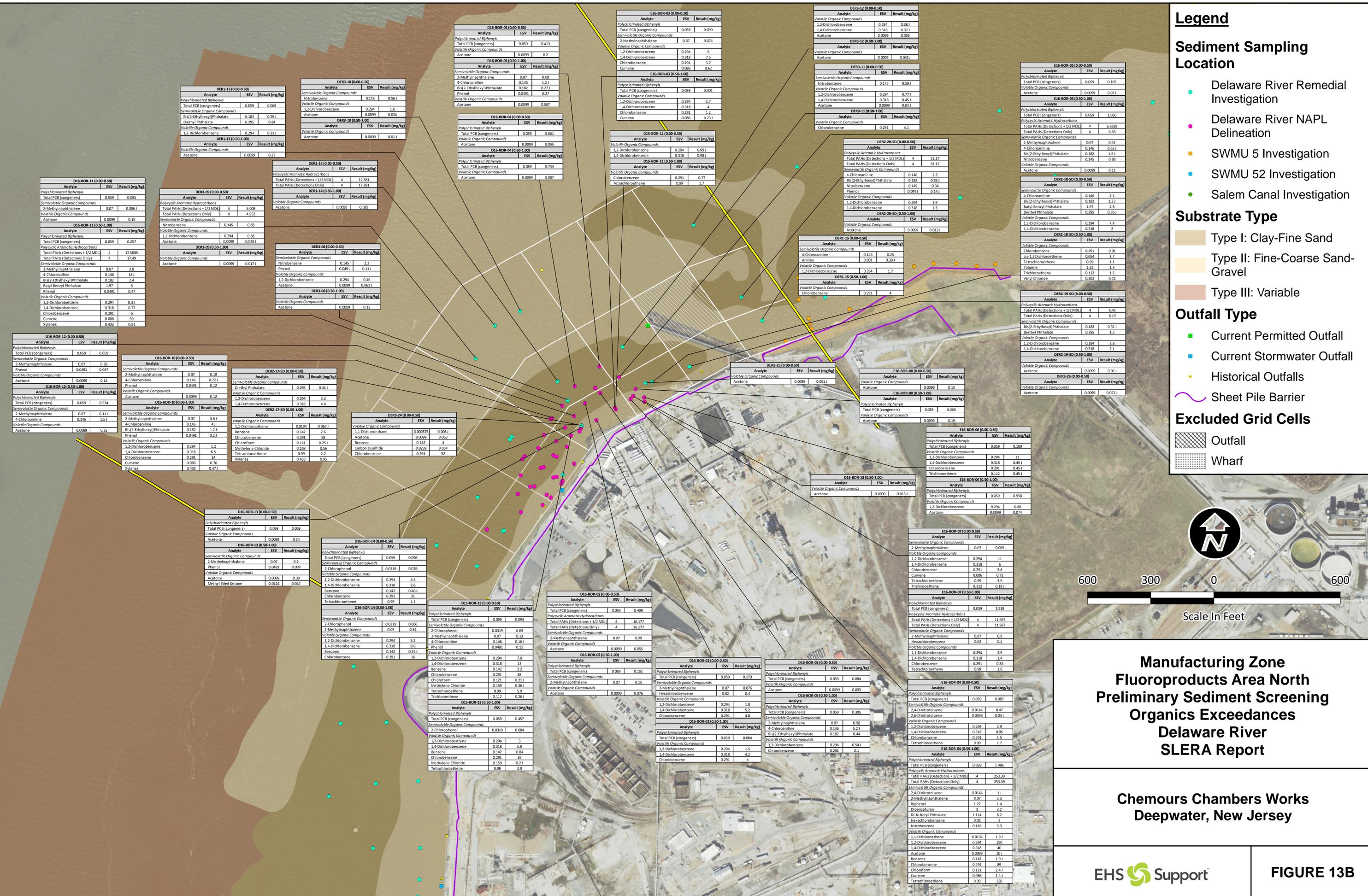
DER3-21 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<b>Volatile Organic Compounds</b>		
Acetone	0.0099	0.067

DER2-14-SD (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<b>Volatile Organic Compounds</b>		
1,2-Dichlorobenzene	0.294	0.61 J
1,4-Dichlorobenzene	0.318	0.96 J

E16-BOR-02 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<b>Polychlorinated Biphenyls</b>		
Total PCB (congeners)	0.059	0.113
<b>Volatile Organic Compounds</b>		
1,2-Dichlorobenzene	0.294	2.2
1,4-Dichlorobenzene	0.318	14
<b>E16-BOR-02 (0.50-1.00)</b>		
Analyte	ESV	Result (mg/kg)
<b>Volatile Organic Compounds</b>		
Benzene	0.142	0.37
Chlorobenzene	0.291	1.7

D15-BOR-24 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<b>Polychlorinated Biphenyls</b>		
Total PCB (congeners)	0.059	0.076
<b>Volatile Organic Compounds</b>		
Acetone	0.0099	0.016 J
<b>D15-BOR-24 (0.50-1.00)</b>		
Analyte	ESV	Result (mg/kg)
<b>Volatile Organic Compounds</b>		
2-Chlorophenol	0.0319	0.14
<b>Volatile Organic Compounds</b>		
1,2-Dichlorobenzene	0.294	1.5
1,4-Dichlorobenzene	0.318	6.6
Benzene	0.142	1.3
Chlorobenzene	0.291	45
Ethylbenzene	0.175	0.41 J

D15-BOR-14 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<b>Polychlorinated Biphenyls</b>		
Total PCB (congeners)	0.059	0.130
<b>Volatile Organic Compounds</b>		
1,2-Dichlorobenzene	0.294	1.3
1,4-Dichlorobenzene	0.318	1.9
Carbon Disulfide	0.0239	0.11 J
Chlorobenzene	0.291	1.2
Chloroform	0.121	0.28 J



### Legend

**Sediment Sampling Location**

- Delaware River Remedial Investigation
- Delaware River NAPL Delineation
- SWMU 5 Investigation
- SWMU 52 Investigation
- Salem Canal Investigation

**Substrate Type**

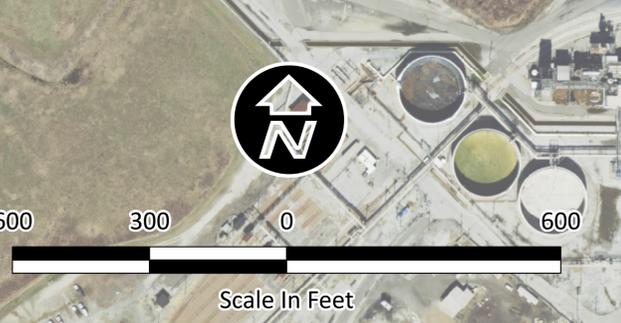
- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

**Outfall Type**

- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls
- Sheet Pile Barrier

**Excluded Grid Cells**

- Outfall
- Wharf



**Manufacturing Zone  
Fluoroproducts Area North  
Preliminary Sediment Screening  
Organics Exceedances  
Delaware River  
SLERA Report**

**Chemours Chambers Works  
Deepwater, New Jersey**



**Legend**

**Surface Water Sampling Location**

- + Delaware River Remedial Investigation

**Substrate Type**

- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

**Outfall Type**

- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls
- Sheet Pile Barrier

**Excluded Grid Cells**

- Outfall
- Wharf

DER1-13		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	1090 J
Iron	1000	1470

DER2-17		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	682

DER1-14		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	3160 J
Iron	1000	4500

DER1-32		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	1720 J
Iron	1000	2280

DER1-15		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	937 J
Iron	1000	1220

DER2-16		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	495

DER2-19		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	3580
Iron	1000	5130 J

DER3-23		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	2790 J
Iron	1000	3220

DER3-26		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	2390 J
Iron	1000	2620

DER1-30		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	1070 J
Iron	1000	1390

DER2-18		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	1180
Iron	1000	1660 J
<i>Semivolatile Organic Compounds - Unfiltered</i>		
1,4-Dichlorobenzene	9.4	14

DER1-31		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	1790 J
Iron	1000	2430

DER3-25		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	2730 J
Iron	1000	3070

DER2-14		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	1260
Iron	1000	2180 J

DER3-24		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	2740 J
Iron	1000	3060

DER3-21		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	3500 J
Iron	1000	3800

DER1-33		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	1100 J
Iron	1000	1480

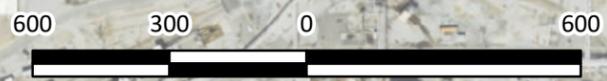
DER3-22		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	3370 J
Iron	1000	3700

**Manufacturing Zone  
Fluoroproducts Area  
Preliminary Surface Water Screening  
Exceedances  
Delaware River  
SLERA Report**

**Chemours Chambers Works  
Deepwater, New Jersey**



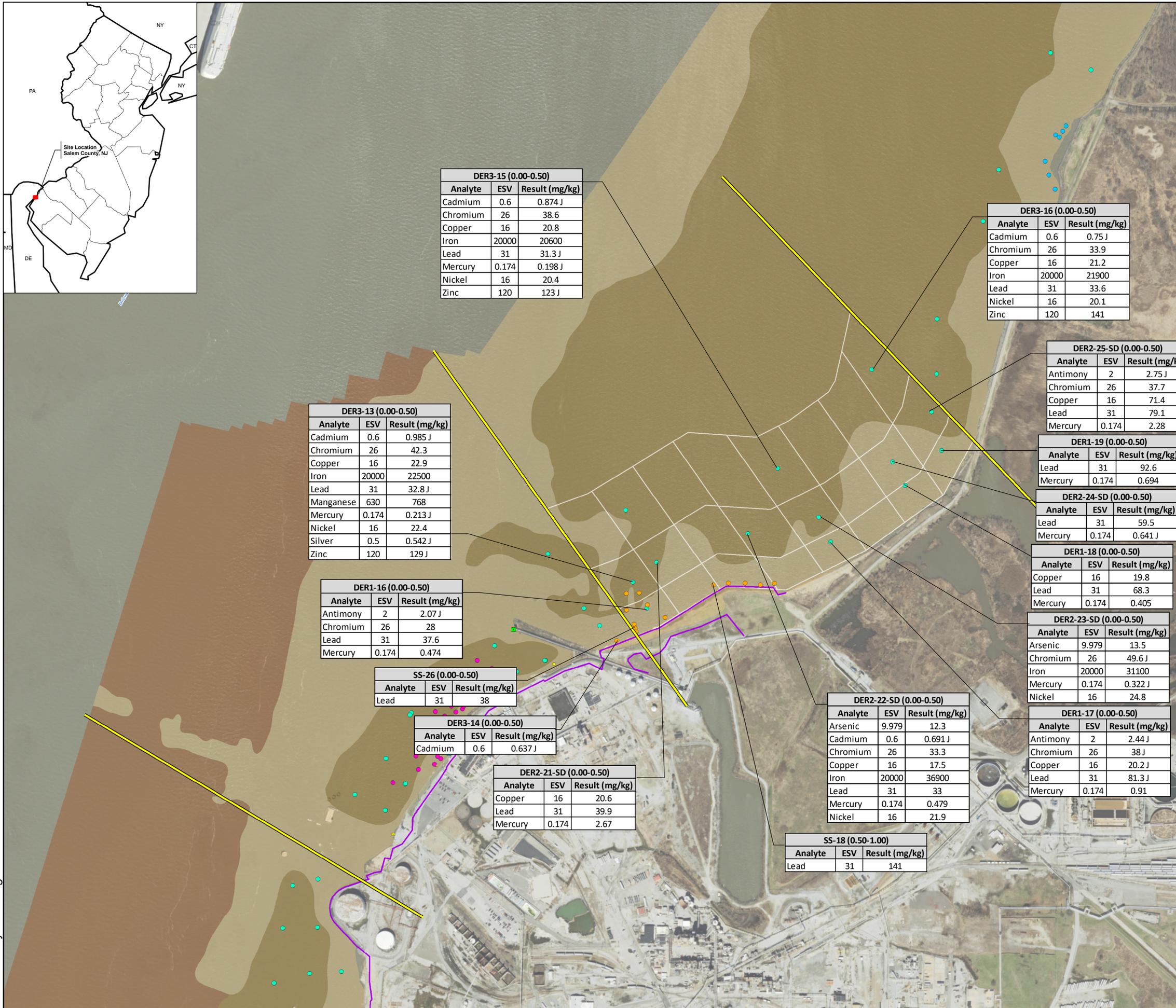
**FIGURE 14**



Scale In Feet  
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES

Reviewed By: G. Long

J:\EHSS\_GIS\OC2329\_ChemoursChambersWorks\01\_ANALYSIS\20180917\_Figures\F14\_MF2\_SWEExceedances.mxd Printed 10/29/2018 9:36:39 AM by Justine Decker



**DER3-15 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Cadmium	0.6	0.874 J
Chromium	26	38.6
Copper	16	20.8
Iron	20000	20600
Lead	31	31.3 J
Mercury	0.174	0.198 J
Nickel	16	20.4
Zinc	120	123 J

**DER3-16 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Cadmium	0.6	0.75 J
Chromium	26	33.9
Copper	16	21.2
Iron	20000	21900
Lead	31	33.6
Nickel	16	20.1
Zinc	120	141

**DER2-25-SD (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Antimony	2	2.75 J
Chromium	26	37.7
Copper	16	71.4
Lead	31	79.1
Mercury	0.174	2.28

**DER1-19 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Lead	31	92.6
Mercury	0.174	0.694

**DER2-24-SD (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Lead	31	59.5
Mercury	0.174	0.641 J

**DER1-18 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Copper	16	19.8
Lead	31	68.3
Mercury	0.174	0.405

**DER2-23-SD (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Arsenic	9.979	13.5
Chromium	26	49.6 J
Iron	20000	31100
Mercury	0.174	0.322 J
Nickel	16	24.8

**DER1-17 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Antimony	2	2.44 J
Chromium	26	38 J
Copper	16	20.2 J
Lead	31	81.3 J
Mercury	0.174	0.91

**DER2-22-SD (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Arsenic	9.979	12.3
Cadmium	0.6	0.691 J
Chromium	26	33.3
Copper	16	17.5
Iron	20000	36900
Lead	31	33
Mercury	0.174	0.479
Nickel	16	21.9

**SS-18 (0.50-1.00)**

Analyte	ESV	Result (mg/kg)
Lead	31	141

**DER3-13 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Cadmium	0.6	0.985 J
Chromium	26	42.3
Copper	16	22.9
Iron	20000	22500
Lead	31	32.8 J
Manganese	630	768
Mercury	0.174	0.213 J
Nickel	16	22.4
Silver	0.5	0.542 J
Zinc	120	129 J

**DER1-16 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Antimony	2	2.07 J
Chromium	26	28
Lead	31	37.6
Mercury	0.174	0.474

**SS-26 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Lead	31	38

**DER3-14 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Cadmium	0.6	0.637 J

**DER2-21-SD (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Copper	16	20.6
Lead	31	39.9
Mercury	0.174	2.67

**Legend**

**Sediment Sampling Location**

- Delaware River Remedial Investigation
- Delaware River NAPL Delineation
- SWMU 5 Investigation
- SWMU 52 Investigation
- Salem Canal Investigation

**Substrate Type**

- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

**Outfall Type**

- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls
- ~ Sheet Pile Barrier

**Excluded Grid Cells**

- Outfall
- Wharf



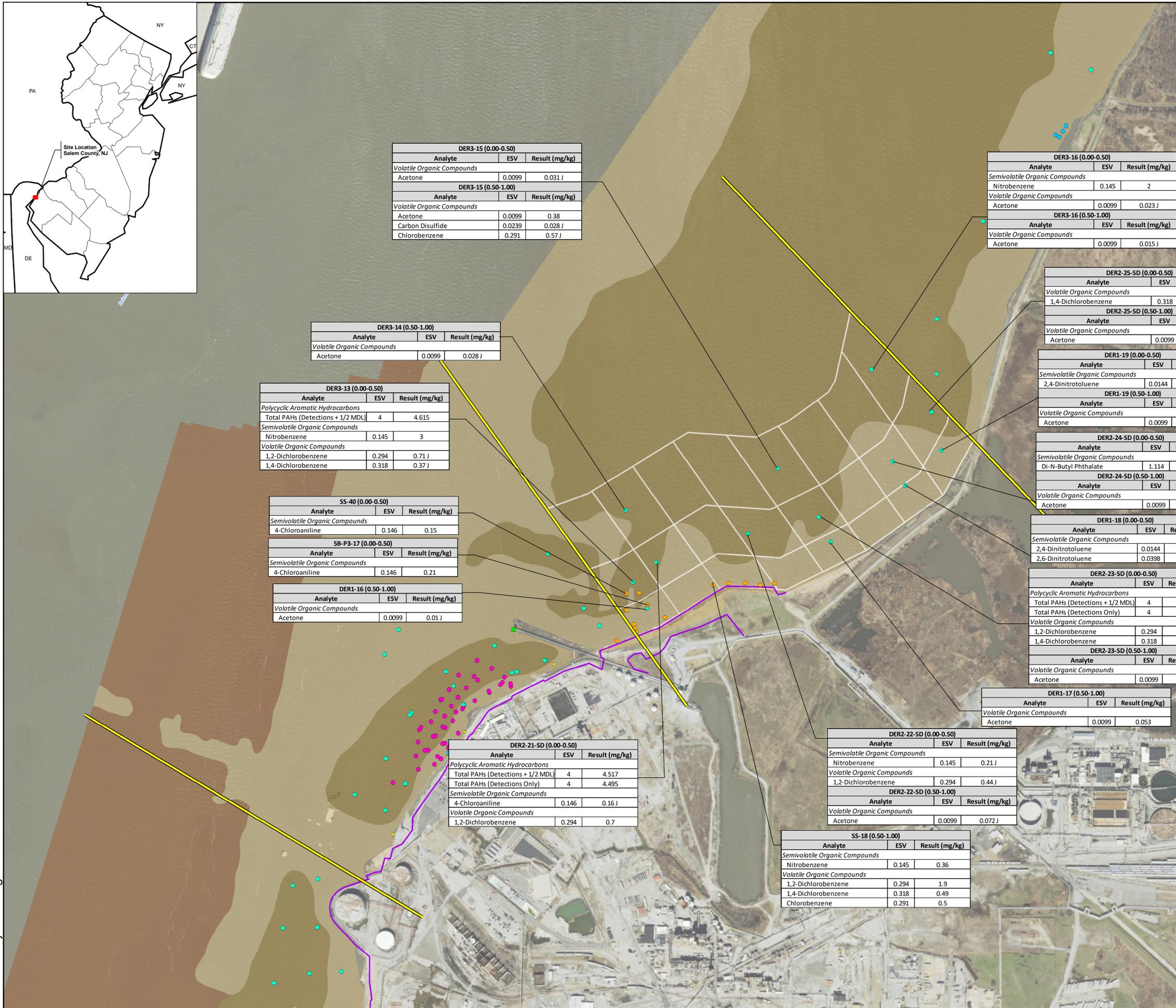
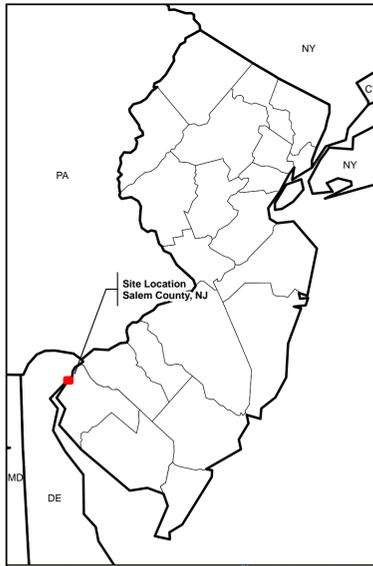
600 300 0 600



Scale In Feet

**Manufacturing Zone  
SWMU 5/Henby Creek Area  
Preliminary Sediment Screening  
Metal Exceedances  
Delaware River  
SLERA Report**

**Chemours Chambers Works  
Deepwater, New Jersey**



**Legend**

**Sediment Sampling Location**

- Delaware River Remedial Investigation
- Delaware River NAPL Delineation
- SWMU 5 Investigation
- SWMU 52 Investigation
- Salem Canal Investigation

**Substrate Type**

- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

**Outfall Type**

- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls
- Sheet Pile Barrier

**Excluded Grid Cells**

- Outfall
- Wharf



600 300 0 600

Scale In Feet

DER3-15 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<i>Volatile Organic Compounds</i>		
Acetone	0.0099	0.031 J
DER3-15 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<i>Volatile Organic Compounds</i>		
Acetone	0.0099	0.38
Carbon Disulfide	0.0239	0.028 J
Chlorobenzene	0.291	0.57 J

DER3-16 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<i>Semivolatile Organic Compounds</i>		
Nitrobenzene	0.145	2
<i>Volatile Organic Compounds</i>		
Acetone	0.0099	0.023 J
DER3-16 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<i>Volatile Organic Compounds</i>		
Acetone	0.0099	0.015 J

DER2-25-SD (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<i>Volatile Organic Compounds</i>		
1,4-Dichlorobenzene	0.318	0.34
DER2-25-SD (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<i>Volatile Organic Compounds</i>		
Acetone	0.0099	0.02 J

DER1-19 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<i>Semivolatile Organic Compounds</i>		
2,4-Dinitrotoluene	0.0144	0.22
DER1-19 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<i>Volatile Organic Compounds</i>		
Acetone	0.0099	0.012

DER2-24-SD (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<i>Semivolatile Organic Compounds</i>		
Di-N-Butyl Phthalate	1.114	1.8
DER2-24-SD (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<i>Volatile Organic Compounds</i>		
Acetone	0.0099	0.014 J

DER1-18 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<i>Semivolatile Organic Compounds</i>		
2,4-Dinitrotoluene	0.0144	0.45
2,6-Dinitrotoluene	0.0398	0.042 J

DER2-23-SD (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<i>Polycyclic Aromatic Hydrocarbons</i>		
Total PAHs (Detections + 1/2 MDL)	4	45.88
Total PAHs (Detections Only)	4	45.7
<i>Volatile Organic Compounds</i>		
1,2-Dichlorobenzene	0.294	2.2
1,4-Dichlorobenzene	0.318	1
DER2-23-SD (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<i>Volatile Organic Compounds</i>		
Acetone	0.0099	0.029 J

DER1-17 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<i>Volatile Organic Compounds</i>		
Acetone	0.0099	0.053

DER2-22-SD (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<i>Semivolatile Organic Compounds</i>		
Nitrobenzene	0.145	0.21 J
<i>Volatile Organic Compounds</i>		
1,2-Dichlorobenzene	0.294	0.44 J
DER2-22-SD (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<i>Volatile Organic Compounds</i>		
Acetone	0.0099	0.072 J

SS-18 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<i>Semivolatile Organic Compounds</i>		
Nitrobenzene	0.145	0.36
<i>Volatile Organic Compounds</i>		
1,2-Dichlorobenzene	0.294	1.9
1,4-Dichlorobenzene	0.318	0.49
Chlorobenzene	0.291	0.5

DER2-21-SD (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<i>Polycyclic Aromatic Hydrocarbons</i>		
Total PAHs (Detections + 1/2 MDL)	4	4.517
Total PAHs (Detections Only)	4	4.495
<i>Semivolatile Organic Compounds</i>		
4-Chloroaniline	0.146	0.16 J
<i>Volatile Organic Compounds</i>		
1,2-Dichlorobenzene	0.294	0.7

DER3-14 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<i>Volatile Organic Compounds</i>		
Acetone	0.0099	0.028 J

DER3-13 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<i>Polycyclic Aromatic Hydrocarbons</i>		
Total PAHs (Detections + 1/2 MDL)	4	4.615
<i>Semivolatile Organic Compounds</i>		
Nitrobenzene	0.145	3
<i>Volatile Organic Compounds</i>		
1,2-Dichlorobenzene	0.294	0.71 J
1,4-Dichlorobenzene	0.318	0.37 J

SS-40 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<i>Semivolatile Organic Compounds</i>		
4-Chloroaniline	0.146	0.15
SB-P3-17 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<i>Semivolatile Organic Compounds</i>		
4-Chloroaniline	0.146	0.21

DER1-16 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<i>Volatile Organic Compounds</i>		
Acetone	0.0099	0.01 J

**Manufacturing Zone  
SWMU 5/Henby Creek Area  
Preliminary Sediment Screening  
Organics Exceedances  
Delaware River  
SLERA Report**

**Chemours Chambers Works  
Deepwater, New Jersey**



**Legend**

**Surface Water Sampling Location**

- + Delaware River Remedial Investigation

**Substrate Type**

- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

**Outfall Type**

- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls
- Sheet Pile Barrier

**Excluded Grid Cells**

- Outfall
- Wharf

DER2-21		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	313

DER2-24		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	1450
Iron	1000	2480 J

DER1-18		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	1250 J
Iron	1000	2250

Henby Creek

**Manufacturing Zone  
SWMU 5/Henby Creek Area  
Preliminary Surface Water Screening  
Exceedances  
Delaware River  
SLERA Report**

**Chemours Chambers Works  
Deepwater, New Jersey**



Scale In Feet

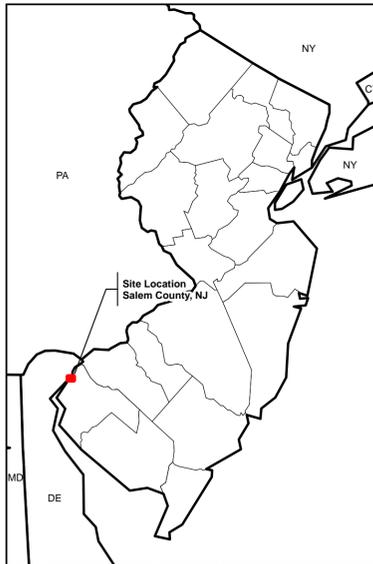
Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES



**FIGURE 17**

Reviewed By: G. Long

J:\EHSS\_GIS\OC2329\_ChemoursChambersWorks\01\_ANALYSIS\20180917\_Figures\F17\_MF3\_SWEExceedances.mxd  
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**Legend**

**Sediment Sampling Location**

- Delaware River Remedial Investigation
- Delaware River NAPL Delineation
- SWMU 5 Investigation
- SWMU 52 Investigation
- Salem Canal Investigation

**Substrate Type**

- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

**Outfall Type**

- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls

**Excluded Grid Cells**

- Outfall
- SWMU 52
- Wharf



600 300 0 600

Scale In Feet

**DER1-28 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Cadmium	0.6	0.988
Chromium	26	34
Copper	16	22.3
Lead	31	36.8
Nickel	16	19
Zinc	120	142

**DER2-29-SD (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Cadmium	0.6	0.685 J
Chromium	26	42.8
Copper	16	28.3
Iron	20000	26400
Lead	31	42.4
Manganese	630	635
Nickel	16	25.4
Zinc	120	182

**DER1-27 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Cadmium	0.6	0.809 J
Chromium	26	54
Copper	16	35.1
Iron	20000	33000
Lead	31	50
Manganese	630	1200
Mercury	0.174	0.25 J
Nickel	16	28.9
Zinc	120	223

**DER3-18 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Cadmium	0.6	1.06
Chromium	26	43.2
Copper	16	30.9
Iron	20000	26100
Lead	31	44.3
Manganese	630	830
Nickel	16	24.4
Zinc	120	176

**DER2-28-SD (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Cadmium	0.6	0.623 J
Chromium	26	33.7 J
Copper	16	17.8
Iron	20000	20400
Nickel	16	18.3
Zinc	120	125 J

**52-R-7 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Chromium	26	43

**52-R-8 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Chromium	26	40.2
Nickel	16	23.4

**DER2-27-SD (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Selenium	2	2.07 J

**DER2-26-SD (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Cadmium	0.6	0.641 J
Chromium	26	37.1
Copper	16	21.9
Iron	20000	20700
Lead	31	33.3
Manganese	630	646
Mercury	0.174	0.756
Nickel	16	17.2
Zinc	120	126

**DER3-17 (0.00-0.50)**

Analyte	ESV	Result (mg/kg)
Cadmium	0.6	0.749 J
Chromium	26	52.6
Copper	16	57.4
Iron	20000	24100
Lead	31	57.6
Manganese	630	799
Mercury	0.174	1.12
Nickel	16	22
Zinc	120	129

**Carneys Point Zone  
Preliminary Sediment Screening  
Metal Exceedances  
Delaware River  
SLERA Report**

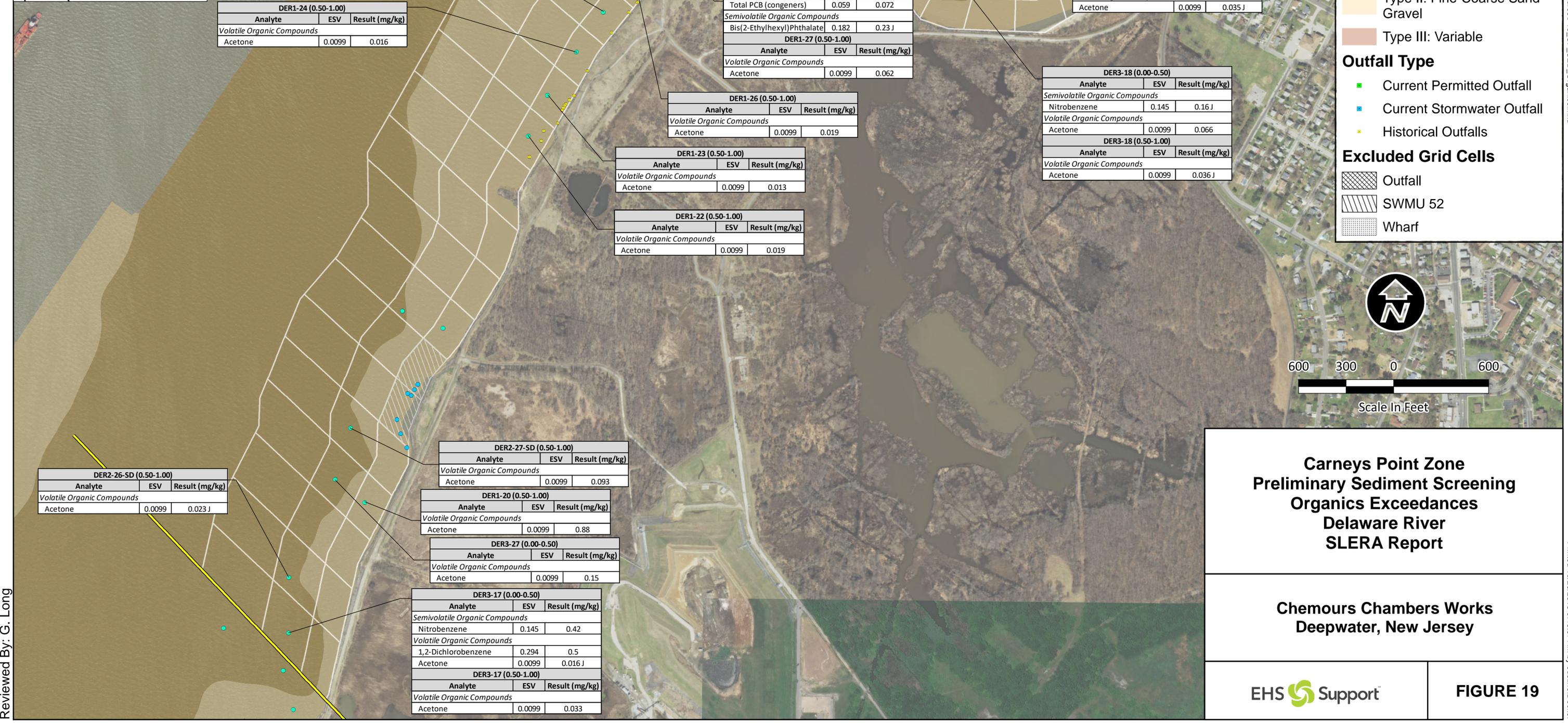
**Chemours Chambers Works  
Deepwater, New Jersey**



**FIGURE 18**

Reviewed By: G. Long

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### Legend

**Sediment Sampling Location**

- Delaware River Remedial Investigation
- Delaware River NAPL Delineation
- SWMU 5 Investigation
- SWMU 52 Investigation
- Salem Canal Investigation

**Substrate Type**

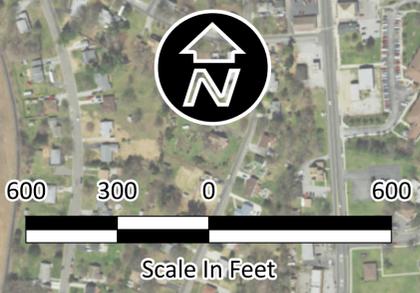
- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

**Outfall Type**

- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls

**Excluded Grid Cells**

- Outfall
- SWMU 52
- Wharf



**Carneys Point Zone  
Preliminary Sediment Screening  
Organics Exceedances  
Delaware River  
SLERA Report**

**Chemours Chambers Works  
Deepwater, New Jersey**

EHS Support **FIGURE 19**

Reviewed By: G. Long

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DER1-25 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<i>Volatile Organic Compounds</i>		
Acetone	0.0099	0.02

DER1-24 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<i>Volatile Organic Compounds</i>		
Acetone	0.0099	0.016

DER2-26-SD (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<i>Volatile Organic Compounds</i>		
Acetone	0.0099	0.023 J

DER2-27-SD (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<i>Volatile Organic Compounds</i>		
Acetone	0.0099	0.093

DER1-20 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<i>Volatile Organic Compounds</i>		
Acetone	0.0099	0.88

DER3-27 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<i>Volatile Organic Compounds</i>		
Acetone	0.0099	0.15

DER3-17 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<i>Semivolatile Organic Compounds</i>		
Nitrobenzene	0.145	0.42
<i>Volatile Organic Compounds</i>		
1,2-Dichlorobenzene	0.294	0.5
Acetone	0.0099	0.016 J

DER3-17 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<i>Volatile Organic Compounds</i>		
Acetone	0.0099	0.033

DER1-26 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<i>Volatile Organic Compounds</i>		
Acetone	0.0099	0.019

DER1-23 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<i>Volatile Organic Compounds</i>		
Acetone	0.0099	0.013

DER1-22 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<i>Volatile Organic Compounds</i>		
Acetone	0.0099	0.019

DER1-27 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<i>Polychlorinated Biphenyls</i>		
Total PCB (congeners)	0.059	0.072
<i>Semivolatile Organic Compounds</i>		
Bis(2-Ethylhexyl)Phthalate	0.182	0.23 J

DER1-27 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<i>Volatile Organic Compounds</i>		
Acetone	0.0099	0.062

DER1-28 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<i>Volatile Organic Compounds</i>		
Acetone	0.0099	0.015 J

DER2-29-SD (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<i>Polychlorinated Biphenyls</i>		
Total PCB (congeners)	0.059	0.065
<i>Semivolatile Organic Compounds</i>		
Bis(2-Ethylhexyl)Phthalate	0.182	0.41 J

DER2-29-SD (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<i>Volatile Organic Compounds</i>		
Acetone	0.0099	0.035 J

DER3-18 (0.00-0.50)		
Analyte	ESV	Result (mg/kg)
<i>Semivolatile Organic Compounds</i>		
Nitrobenzene	0.145	0.16 J
<i>Volatile Organic Compounds</i>		
Acetone	0.0099	0.066

DER3-18 (0.50-1.00)		
Analyte	ESV	Result (mg/kg)
<i>Volatile Organic Compounds</i>		
Acetone	0.0099	0.036 J



DER1-28		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	1240 J
Iron	1000	1690

DER1-29		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	1110 J
Iron	1000	1430

DER1-22		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	1070
Iron	1000	1320 J

DER1-20		
Analyte	ESV	Result (µg/L)
<i>Metals - Unfiltered</i>		
Aluminum	87	1350
Iron	1000	1710 J

**Legend**

**Surface Water Sampling Location**

- + Delaware River Remedial Investigation

**Substrate Type**

- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

**Outfall Type**

- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls

**Excluded Grid Cells**

- Outfall
- SWMU 52
- Wharf

**Carneys Point Zone  
Preliminary Surface Water Screening  
Exceedances  
Delaware River  
SLERA Report**

**Chemours Chambers Works  
Deepwater, New Jersey**



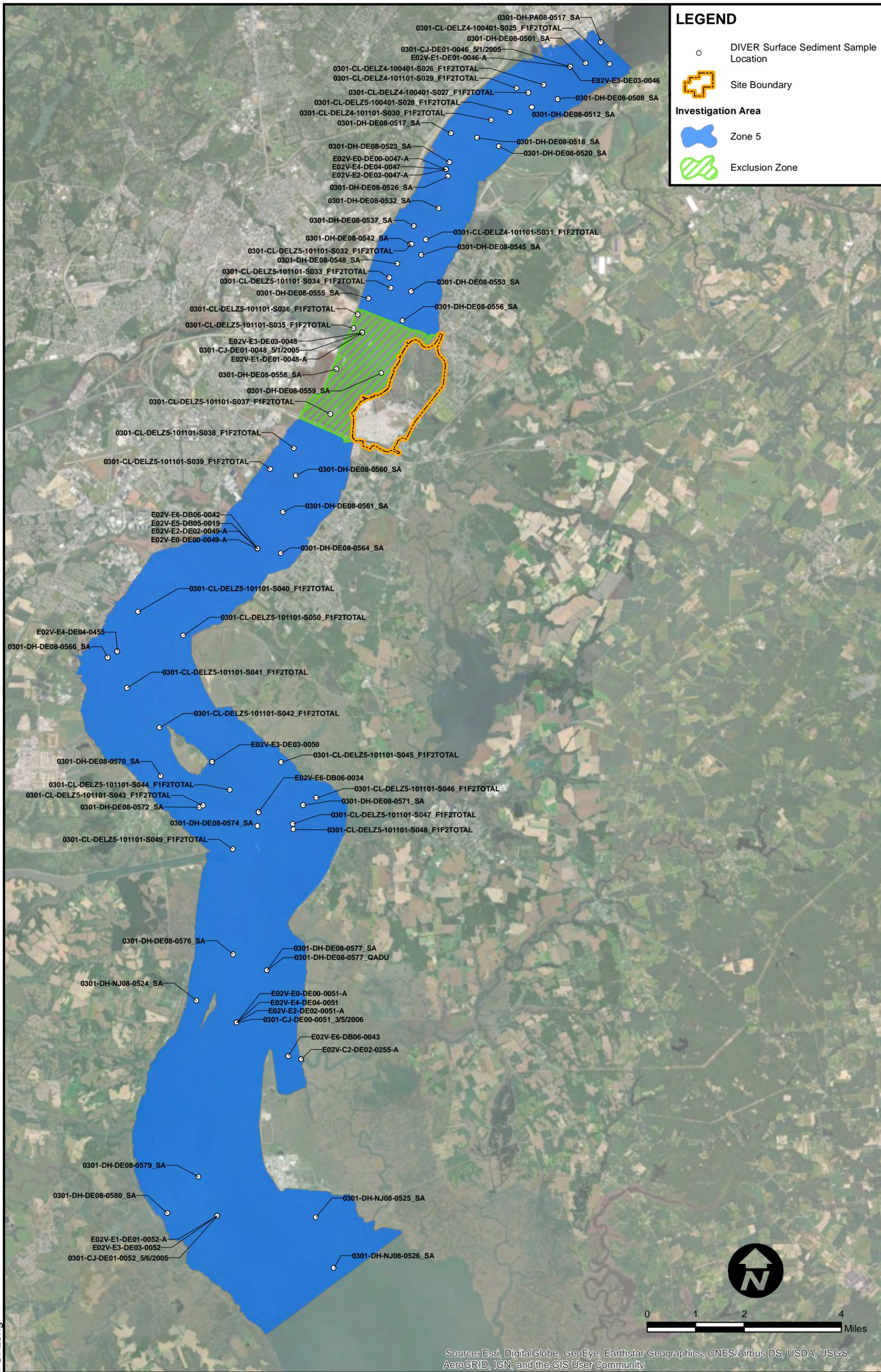
600 300 0 600

Scale In Feet

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES



**FIGURE 20**



Reviewed By: G. Long

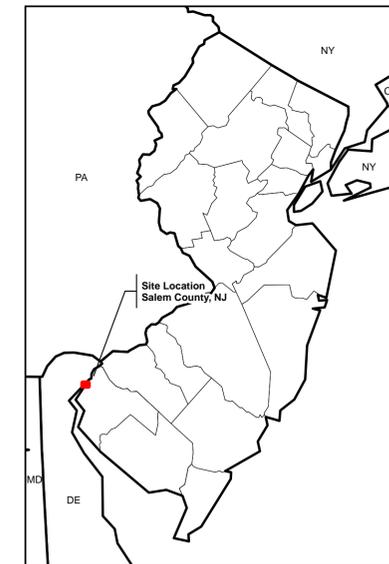


**Chemours Chambers Works  
Deepwater, New Jersey**

**Representative Background Sampling  
Stations - DIVER Database DRBC Zone 5  
Delaware River  
SLERA Report**

**FIGURE 21**

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



### Legend

**Sediment Sampling Location**

- Exceedance
- No Exceedance

**Substrate Type**

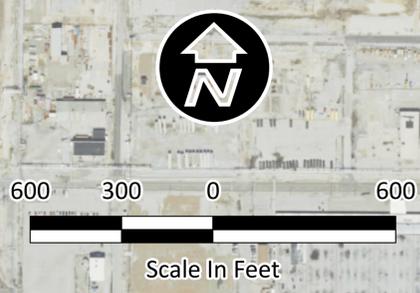
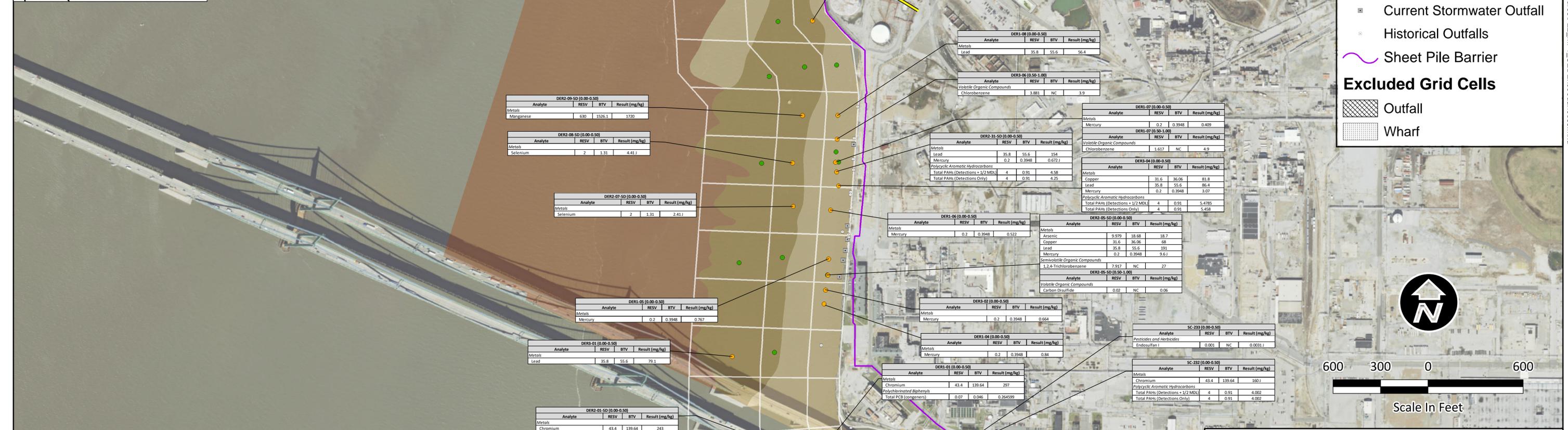
- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

**Outfall Type**

- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls
- ~ Sheet Pile Barrier

**Excluded Grid Cells**

- Outfall
- Wharf



## Manufacturing Zone Jackson Labs/TEL Area Refined Sediment Screening Exceedances Delaware River SLERA Report

### Chemours Chambers Works Deepwater, New Jersey


**FIGURE 22**

DER1-11 (0.00-0.50)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Selenium	2	1.31	2.48	

DER1-10 (0.00-0.50)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Manganese	630	1526.1	1550	
Polycyclic Aromatic Hydrocarbons				
Total PAHs (Detections + 1/2 MDL)	4	0.91	4.55	
Total PAHs (Detections Only)	4	0.91	4.31	

DER1-08 (0.00-0.50)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Lead	35.8	55.6	56.4	

DER3-06 (0.50-1.00)				
Analyte	RESV	BTV	Result (mg/kg)	
Volatile Organic Compounds				
Chlorobenzene	3.881	NC	3.9	

DER1-07 (0.00-0.50)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Mercury	0.2	0.3948	0.409	

DER1-07 (0.50-1.00)				
Analyte	RESV	BTV	Result (mg/kg)	
Volatile Organic Compounds				
Chlorobenzene	1.617	NC	4.9	

DER3-04 (0.00-0.50)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Copper	31.6	36.06	81.8	
Lead	35.8	55.6	86.4	
Mercury	0.2	0.3948	3.07	
Polycyclic Aromatic Hydrocarbons				
Total PAHs (Detections + 1/2 MDL)	4	0.91	5.4785	
Total PAHs (Detections Only)	4	0.91	5.458	

DER2-09-SD (0.00-0.50)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Manganese	630	1526.1	1720	

DER2-08-SD (0.00-0.50)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Selenium	2	1.31	4.41	

DER2-07-SD (0.00-0.50)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Selenium	2	1.31	2.41	

DER1-06 (0.00-0.50)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Mercury	0.2	0.3948	0.522	

DER2-05 (0.00-0.50)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Mercury	0.2	0.3948	0.767	

DER1-05 (0.00-0.50)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Lead	35.8	55.6	79.1	

DER1-04 (0.00-0.50)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Mercury	0.2	0.3948	0.84	

DER1-01 (0.00-0.50)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Chromium	43.4	139.64	297	
Polychlorinated Biphenyls	0.07	0.046	0.264599	

DER2-01-SD (0.00-0.50)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Chromium	43.4	139.64	243	

SC-233 (0.00-0.50)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Mercury	0.2	0.3948	0.664	

SC-232 (0.00-0.50)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Chromium	43.4	139.64	160	
Polycyclic Aromatic Hydrocarbons				
Total PAHs (Detections + 1/2 MDL)	4	0.91	4.002	
Total PAHs (Detections Only)	4	0.91	4.009	

SC-231 (0.00-0.50)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Antimony	2	1.683	6.55	
Arsenic	9.979	18.68	66.1	
Chromium	43.4	139.64	159.1	
Copper	31.6	36.06	87.8	
Iron	20000	48800	112000	
Lead	35.8	55.6	1210	
Mercury	0.2	0.3948	0.298	
Selenium	2	1.31	2.21	
Silver	1	1.0248	1.08	

SC-231 (0.50-1.00)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Antimony	2	1.683	2.94	
Arsenic	9.979	18.68	42.8	
Chromium	43.4	139.64	49.1	
Copper	31.6	36.06	38.7	
Iron	20000	48800	118000	
Lead	35.8	55.6	119	
Mercury	0.2	0.3948	0.486	

SC-230 (0.00-0.50)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Chromium	43.4	139.64	452	

SC-229 (0.50-1.00)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Chromium	43.4	139.64	730	

SC-228 (0.00-0.50)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Chromium	43.4	139.64	150	

SC-228 (0.50-1.00)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Chromium	43.4	139.64	108	

SC-236 (0.00-0.50)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Lead	35.8	55.6	57.8	
Pesticides and Herbicides				
Endosulfan I	0.004	NC	0.0092	
Polycyclic Aromatic Hydrocarbons				
Total PAHs (Detections + 1/2 MDL)	4	0.91	25.2	
Total PAHs (Detections Only)	4	0.91	25.2	

SC-236 (0.50-1.00)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Arsenic	9.979	18.68	18.8	
Copper	31.6	36.06	46.8	
Lead	35.8	55.6	125.1	
Pesticides and Herbicides				
4,4'-DDE	0.005	NC	0.0062	
Polychlorinated Biphenyls				
Total PCB (congeners)	0.07	0.046	0.118	
Polycyclic Aromatic Hydrocarbons				
Total PAHs (Detections + 1/2 MDL)	4	0.91	14.906	
Total PAHs (Detections Only)	4	0.91	14.89	

SC-237 (0.00-0.50)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Chromium	43.4	139.64	862	
Copper	31.6	36.06	69.1	
Iron	20000	48800	50500	
Nickel	22.7	49.6	76	
Polycyclic Aromatic Hydrocarbons				
Total PAHs (Detections + 1/2 MDL)	4	0.91	4.787	
Total PAHs (Detections Only)	4	0.91	4.787	

SC-237 (0.50-1.00)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Chromium	43.4	139.64	573	
Copper	31.6	36.06	61.9	
Nickel	22.7	49.6	53.5	

SC-234 (0.00-0.50)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Chromium	43.4	139.64	465	

SC-234 (0.50-1.00)				
Analyte	RESV	BTV	Result (mg/kg)	
Metals				
Chromium	43.4	139.64	452	



**Legend**

**PAH  $\Sigma$ ESBTU**

- < 1
- 1 - 10
- 10 - 100
- 100 - 1000
- > 1000

**PAH  $\Sigma$ IWTU<sub>TOT</sub>**

- < 1
- 1 - 10
- 10 - 100
- 100 - 1000
- > 1000
- Not Calculated

Sheet Pile Barrier

Zone Division Lines

**Outfall Type**

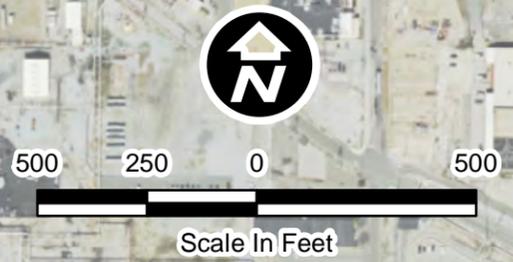
- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls

**Substrate Type**

- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

**Excluded Grid Cells**

- Outfall
- SWMU 52
- Wharf



**Manufacturing Zone  
Jackson Labs/TEL Area  
Sediment PAH  $\Sigma$ ESBTU Summary  
(0.0 - 0.5 foot)  
Delaware River  
SLERA Report**

**Chemours Chambers Works  
Deepwater, New Jersey**

Reviewed By: G. Long

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES

J:\EHSS\_GIS\02\2329\_ChemoursChambersWorks\01\_ANALYSIS\2018\1015\_ESBTU\figures\PAH\_TU\_Sum.mxd Printed 10/29/2018 9:56:36 AM by Justine Decker



**Legend**

**Non-PAH Narcotic  $\Sigma$ ESBTU**

- < 1
- 1 - 10
- 10 - 100
- 100 - 1000
- > 1000

**Zone Division Lines** (Yellow line)

**Sheet Pile Barrier** (Purple line)

**Outfall Type**

- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls

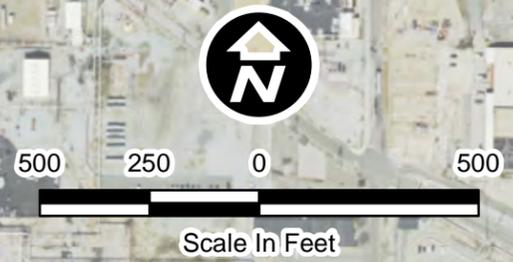
**Substrate Type**

- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

**Excluded Grid Cells**

- Outfall
- SWMU 52
- Wharf

**DER2-05-SD**  
 ESBTU Sum = 4.73  
 1,2,4-Trichlorobenzene = 3.41  
 1,2-Dichlorobenzene = 0.9  
 1,4-Dichlorobenzene = 0.41  
 Hexachlorobenzene < 0.01



**Manufacturing Zone  
 Jackson Labs/TEL Area  
 Sediment Non-PAH Narcotic  
 $\Sigma$ ESBTU Summary (0.0 - 0.5 foot)  
 Delaware River  
 SLERA Report**

**Chemours Chambers Works  
 Deepwater, New Jersey**

Reviewed By: G. Long

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES

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### Legend

#### Sediment Sampling Location

- Exceedance
- No Exceedance

#### Substrate Type

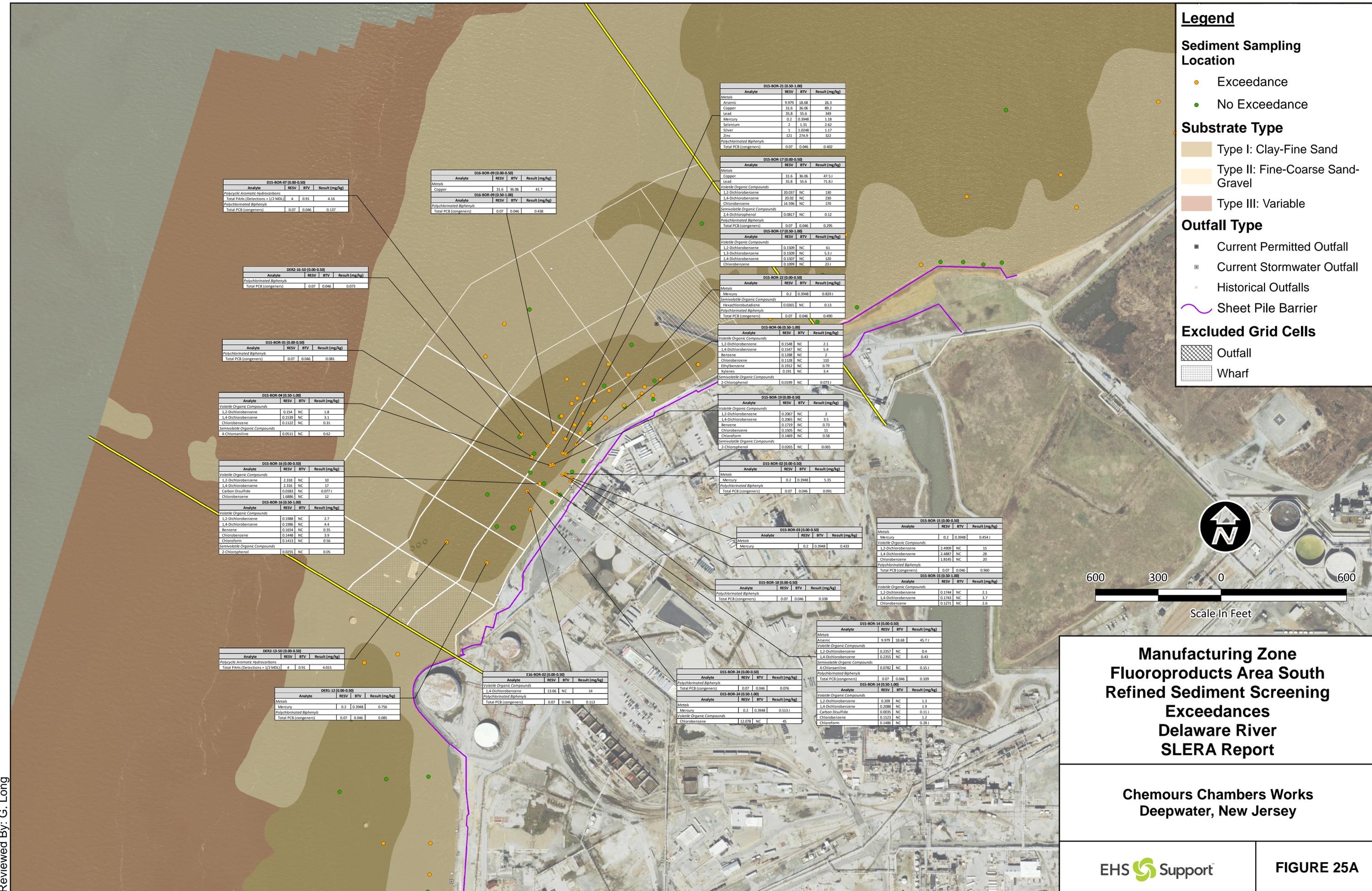
- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

#### Outfall Type

- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls
- ~ Sheet Pile Barrier

#### Excluded Grid Cells

- Outfall
- Wharf



D15-BOR-07 (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<b>Polycyclic Aromatic Hydrocarbons</b>			
Total PAHs (Detections + 1/2 MDL)	4	0.91	4.16
<b>Polychlorinated Biphenyls</b>			
Total PCB (congeners)	0.07	0.046	0.137

D16-BOR-09 (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<b>Metals</b>			
Copper	31.6	36.06	41.7
<b>Polychlorinated Biphenyls</b>			
Total PCB (congeners)	0.07	0.046	0.438

D15-BOR-21 (0.50-1.00)			
Analyte	RESV	BTV	Result (mg/kg)
<b>Metals</b>			
Arsenic	9.979	18.68	26.3
Copper	31.6	36.06	89.2
Lead	35.8	55.6	349
Mercury	0.2	0.3948	1.18
Selenium	2	1.31	2.62
Silver	1	1.0248	1.17
Zinc	121	274.9	322
<b>Polychlorinated Biphenyls</b>			
Total PCB (congeners)	0.07	0.046	0.402

D15-BOR-17 (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<b>Metals</b>			
Copper	31.6	36.06	47.51
Lead	35.8	55.6	71.81
<b>Volatile Organic Compounds</b>			
1,2-Dichlorobenzene	20.007	NC	130
1,4-Dichlorobenzene	20.02	NC	220
Chlorobenzene	14.596	NC	170
<b>Semivolatile Organic Compounds</b>			
2,4-Dichloropheno	0.0817	NC	0.12
<b>Polychlorinated Biphenyls</b>			
Total PCB (congeners)	0.07	0.046	0.295

D15-BOR-17 (0.50-1.00)			
Analyte	RESV	BTV	Result (mg/kg)
<b>Volatile Organic Compounds</b>			
1,2-Dichlorobenzene	0.1509	NC	61
1,3-Dichlorobenzene	0.1509	NC	5.31
1,4-Dichlorobenzene	0.1507	NC	120
Chlorobenzene	0.1099	NC	23.1

D15-BOR-22 (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<b>Metals</b>			
Mercury	0.2	0.3948	0.8291
<b>Semivolatile Organic Compounds</b>			
Hexachlorobutadiene	0.0265	NC	0.13
<b>Polychlorinated Biphenyls</b>			
Total PCB (congeners)	0.07	0.046	0.490

D15-BOR-06 (0.50-1.00)			
Analyte	RESV	BTV	Result (mg/kg)
<b>Volatile Organic Compounds</b>			
1,2-Dichlorobenzene	0.1548	NC	2.1
1,4-Dichlorobenzene	0.1547	NC	5.4
Benzene	0.1288	NC	2
Chlorobenzene	0.1228	NC	110
Ethylbenzene	0.1912	NC	0.79
Xylenes	0.191	NC	3.4
<b>Semivolatile Organic Compounds</b>			
2-Chlorophenol	0.0199	NC	0.0731

D15-BOR-19 (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<b>Volatile Organic Compounds</b>			
1,2-Dichlorobenzene	0.2067	NC	2
1,4-Dichlorobenzene	0.2063	NC	3.5
Benzene	0.1743	NC	0.73
Chlorobenzene	0.1505	NC	11
Chloroform	0.1469	NC	0.58
<b>Semivolatile Organic Compounds</b>			
2-Chlorophenol	0.0265	NC	0.065

D15-BOR-02 (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<b>Metals</b>			
Mercury	0.2	0.3948	5.35
<b>Polychlorinated Biphenyls</b>			
Total PCB (congeners)	0.07	0.046	0.091

D15-BOR-03 (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<b>Metals</b>			
Mercury	0.2	0.3948	0.433

D15-BOR-18 (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<b>Polychlorinated Biphenyls</b>			
Total PCB (congeners)	0.07	0.046	0.338

D15-BOR-15 (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<b>Metals</b>			
Mercury	0.2	0.3948	0.4541
<b>Volatile Organic Compounds</b>			
1,2-Dichlorobenzene	2.4009	NC	15
1,4-Dichlorobenzene	2.4887	NC	28
Chlorobenzene	1.8145	NC	20
<b>Polychlorinated Biphenyls</b>			
Total PCB (congeners)	0.07	0.046	0.960

D15-BOR-15 (0.50-1.00)			
Analyte	RESV	BTV	Result (mg/kg)
<b>Volatile Organic Compounds</b>			
1,2-Dichlorobenzene	0.1344	NC	2.1
1,4-Dichlorobenzene	0.1343	NC	3.7
Chlorobenzene	0.1271	NC	2.6

D15-BOR-01 (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<b>Polychlorinated Biphenyls</b>			
Total PCB (congeners)	0.07	0.046	0.081

D15-BOR-04 (0.50-1.00)			
Analyte	RESV	BTV	Result (mg/kg)
<b>Volatile Organic Compounds</b>			
1,2-Dichlorobenzene	0.154	NC	8.8
1,4-Dichlorobenzene	0.1539	NC	3.1
Chlorobenzene	0.1122	NC	0.31
<b>Semivolatile Organic Compounds</b>			
4-Chloroaniline	0.0511	NC	0.62

D15-BOR-10 (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<b>Volatile Organic Compounds</b>			
1,2-Dichlorobenzene	2.318	NC	10
1,4-Dichlorobenzene	2.318	NC	17
Carbon Disulfide	0.0383	NC	0.0771
Chlorobenzene	1.6886	NC	12

D15-BOR-16 (0.50-1.00)			
Analyte	RESV	BTV	Result (mg/kg)
<b>Volatile Organic Compounds</b>			
1,2-Dichlorobenzene	0.1988	NC	2.7
1,4-Dichlorobenzene	0.1986	NC	4.4
Benzene	0.1654	NC	0.35
Chlorobenzene	0.1446	NC	3.9
Chloroform	0.1413	NC	0.56
<b>Semivolatile Organic Compounds</b>			
2-Chlorophenol	0.0755	NC	0.05

DER2-13-SD (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<b>Polycyclic Aromatic Hydrocarbons</b>			
Total PAHs (Detections + 1/2 MDL)	4	0.91	4.015

DER1-12 (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<b>Metals</b>			
Mercury	0.2	0.3948	0.756
<b>Polychlorinated Biphenyls</b>			
Total PCB (congeners)	0.07	0.046	0.085

E16-BOR-02 (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<b>Volatile Organic Compounds</b>			
1,2-Dichlorobenzene	13.66	NC	14
<b>Polychlorinated Biphenyls</b>			
Total PCB (congeners)	0.07	0.046	0.113

D15-BOR-24 (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<b>Polychlorinated Biphenyls</b>			
Total PCB (congeners)	0.07	0.046	0.076

D15-BOR-24 (0.50-1.00)			
Analyte	RESV	BTV	Result (mg/kg)
<b>Metals</b>			
Mercury	0.2	0.3948	0.5131
<b>Volatile Organic Compounds</b>			
Chlorobenzene	12.078	NC	45

D15-BOR-14 (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<b>Metals</b>			
Arsenic	9.979	18.68	45.71
<b>Volatile Organic Compounds</b>			
1,2-Dichlorobenzene	0.2357	NC	0.4
1,4-Dichlorobenzene	0.2355	NC	0.43
<b>Semivolatile Organic Compounds</b>			
4-Chloroaniline	0.0762	NC	0.351
<b>Polychlorinated Biphenyls</b>			
Total PCB (congeners)	0.07	0.046	0.109

D15-BOR-34 (0.50-1.00)			
Analyte	RESV	BTV	Result (mg/kg)
<b>Volatile Organic Compounds</b>			
1,2-Dichlorobenzene	0.209	NC	1.3
1,4-Dichlorobenzene	0.2088	NC	1.9
Carbon Disulfide	0.0035	NC	0.111
Chlorobenzene	0.1523	NC	1.2
Chloroform	0.1486	NC	0.881



## Manufacturing Zone Fluoroproducts Area South Refined Sediment Screening Exceedances Delaware River SLERA Report

Chemours Chambers Works  
Deepwater, New Jersey



FIGURE 25A

Legend

Sediment Sampling Location

- Exceedance
- No Exceedance

Substrate Type

- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

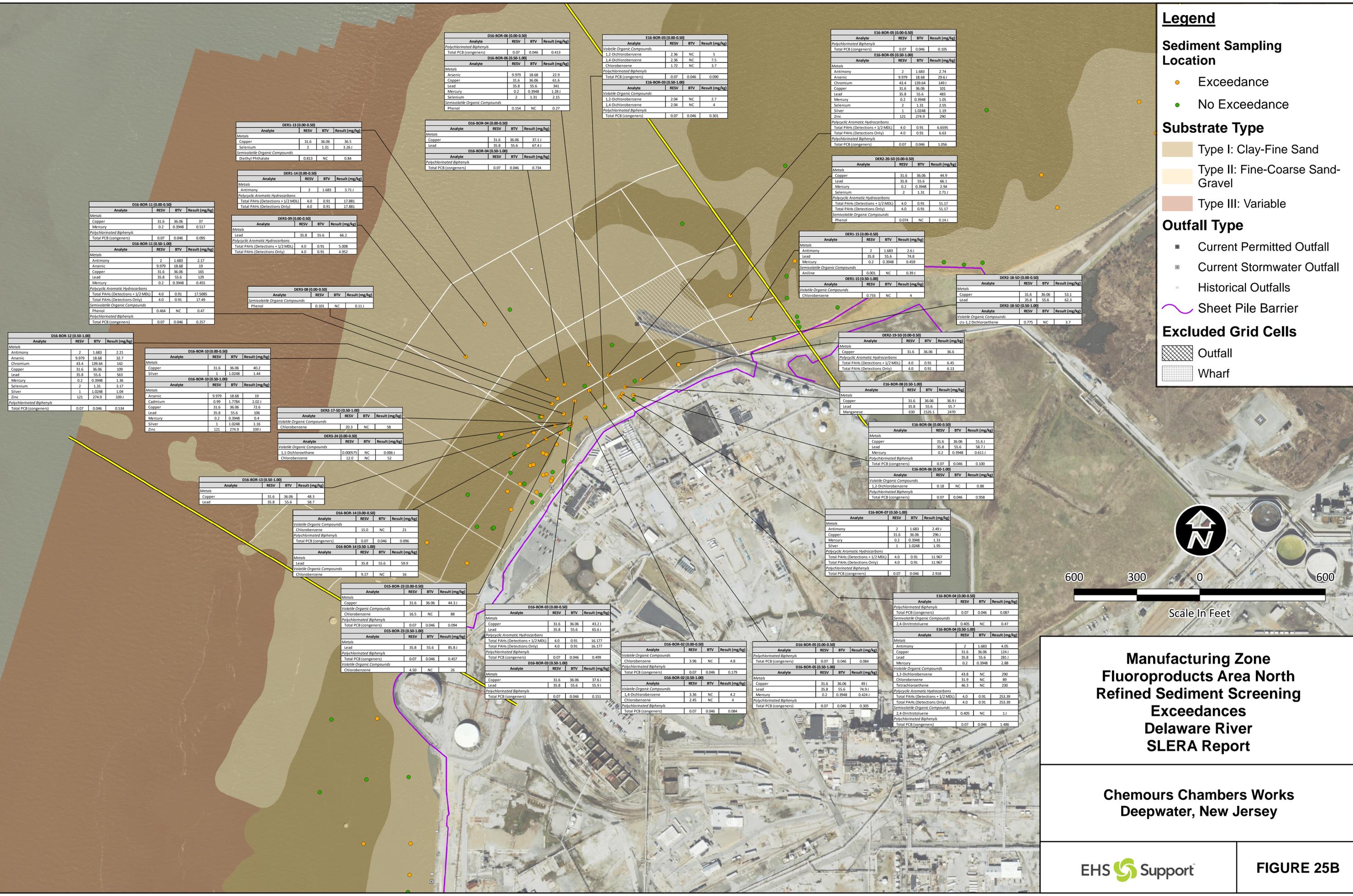
Outfall Type

- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls

Sheet Pile Barrier

Excluded Grid Cells

- Outfall
- Wharf



**Manufacturing Zone  
Fluoroproducts Area North  
Refined Sediment Screening  
Exceedances  
Delaware River  
SLERA Report**

**Chemours Chambers Works  
Deepwater, New Jersey**



**Legend**

**PAH  $\Sigma$ ESBTU**

- < 1
- 1 - 10
- 10 - 100
- 100 - 1000
- > 1000

**PAH  $\Sigma$ IWTU<sub>TOT</sub>**

- < 1
- 1 - 10
- 10 - 100
- 100 - 1000
- > 1000
- Not Calculated

**Sheet Pile Barrier**

**Zone Division Lines**

**Outfall Type**

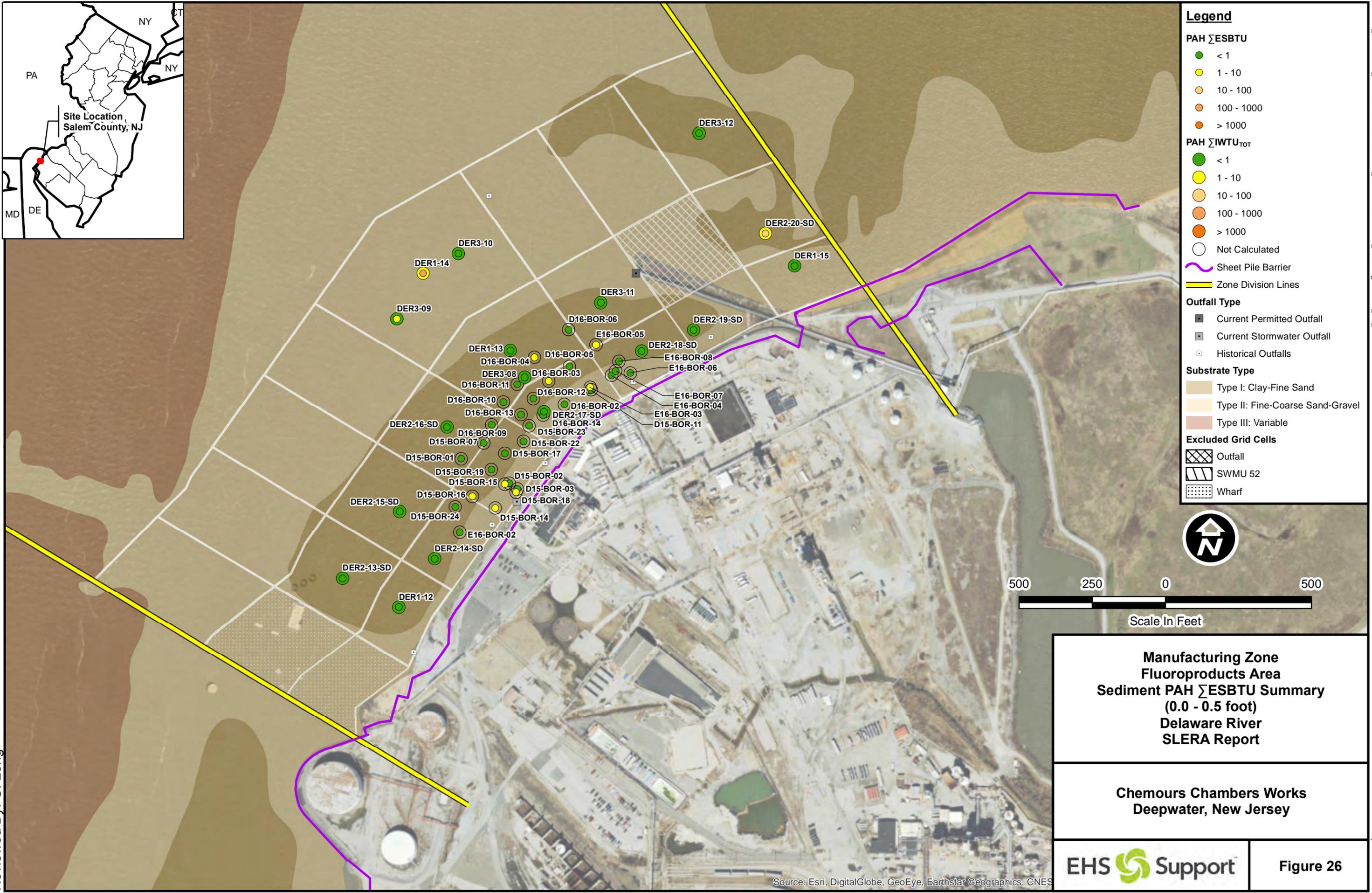
- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls

**Substrate Type**

- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

**Excluded Grid Cells**

- Outfall
- SWMU 52
- Wharf



**Manufacturing Zone  
Fluoroproducts Area  
Sediment PAH  $\Sigma$ ESBTU Summary  
(0.0 - 0.5 foot)  
Delaware River  
SLERA Report**

**Chemours Chambers Works  
Deepwater, New Jersey**

**EHS Support** **Figure 26**

Reviewed By: G. Long

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES

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### Legend

**Non-PAH Narcotic  $\Sigma$ ESBTU**

- < 1
- 1 - 10
- 10 - 100
- 100 - 1000
- > 1000

**Zone Division Lines**

**Sheet Pile Barrier**

**Outfall Type**

- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls

**Substrate Type**

- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

**Excluded Grid Cells**

- Outfall
- SWMU 52
- Wharf

**D16-BOR-02**  
ESBTU Sum = 3.08  
Chlorobenzene = 1.21  
1,4-Dichlorobenzene = 0.96  
1,2-Dichlorobenzene = 0.33  
Methyl Ethyl Ketone = 0.16  
Tetrachloroethene = 0.07

**E16-BOR-04**  
ESBTU Sum = 2.45  
1,2-Dichlorobenzene = 0.73  
Chlorobenzene = 0.51  
Tetrachloroethene = 0.4  
1,4-Dichlorobenzene = 0.24  
Methyl Ethyl Ketone = 0.19

**E16-BOR-07**  
ESBTU Sum = 1.52  
1,2-Dichlorobenzene = 0.54  
1,4-Dichlorobenzene = 0.3  
Chlorobenzene = 0.26  
Tetrachloroethene = 0.18  
Methyl Ethyl Ketone = 0.07

**E16-BOR-06**  
ESBTU Sum = 1.43  
1,2-Dichlorobenzene = 0.9  
Methyl Ethyl Ketone = 0.14  
Methylene Chloride = 0.06  
Chlorobenzene = 0.05  
Trichloroethene = 0.04

**D15-BOR-17**  
ESBTU Sum = 33.47  
Chlorobenzene = 11.65  
1,4-Dichlorobenzene = 11.49  
1,2-Dichlorobenzene = 6.49  
Tetrachloroethene = 0.8  
Methyl Ethyl Ketone = 0.71

**D15-BOR-19**  
ESBTU Sum = 122.05  
Chlorobenzene = 73.07  
1,4-Dichlorobenzene = 16.95  
1,2-Dichlorobenzene = 9.68  
Benzene = 4.25  
Chloroform = 3.95

**D15-BOR-16**  
ESBTU Sum = 21.37  
1,4-Dichlorobenzene = 7.34  
Chlorobenzene = 7.11  
1,2-Dichlorobenzene = 4.31  
Benzene = 0.57  
Chloroform = 0.46

**E16-BOR-03**  
ESBTU Sum = 8.94  
1,4-Dichlorobenzene = 3.18  
Chlorobenzene = 2.15  
1,2-Dichlorobenzene = 2.12  
Tetrachloroethene = 0.34  
Methyl Ethyl Ketone = 0.3

**DER3-24**  
ESBTU Sum = 4.65  
Chlorobenzene = 4.35  
Benzene = 0.29  
Chloroform < 0.01  
Toluene < 0.01  
1,1-Dichloroethene < 0.01

**D16-BOR-14**  
ESBTU Sum = 1.99  
Chlorobenzene = 1.4  
1,4-Dichlorobenzene = 0.18  
1,2-Dichlorobenzene = 0.12  
Methyl Ethyl Ketone = 0.08  
Tetrachloroethene = 0.05

**E16-BOR-02**  
ESBTU Sum = 1.26  
1,4-Dichlorobenzene = 1.02  
1,2-Dichlorobenzene = 0.16  
1,3-Dichlorobenzene = 0.07  
Hexachlorobenzene < 0.01

**D15-BOR-23**  
ESBTU Sum = 6.81  
Chlorobenzene = 5.32  
1,4-Dichlorobenzene = 0.57  
1,2-Dichlorobenzene = 0.34  
Tetrachloroethene = 0.25  
Benzene = 0.12

**D15-BOR-22**  
ESBTU Sum = 2.32  
Chlorobenzene = 0.82  
1,4-Dichlorobenzene = 0.69  
Tetrachloroethene = 0.39  
1,2-Dichlorobenzene = 0.27  
2-Methylnaphthalene = 0.02

**D15-BOR-03**  
ESBTU Sum = 1.49  
1,4-Dichlorobenzene = 0.64  
1,2-Dichlorobenzene = 0.42  
1,3-Dichlorobenzene = 0.35  
Hexachlorobenzene = 0.08

**D15-BOR-14**  
ESBTU Sum = 5.53  
1,4-Dichlorobenzene = 1.83  
1,2-Dichlorobenzene = 1.7  
Chlorobenzene = 0.64  
2-Methylnaphthalene = 0.37  
Dibenzofuran = 0.18

**D15-BOR-15**  
ESBTU Sum = 32.01  
1,4-Dichlorobenzene = 11.25  
Chlorobenzene = 11.02  
1,2-Dichlorobenzene = 6.02  
Tetrachloroethene = 0.76  
1,3-Dichlorobenzene = 0.52



**Manufacturing Zone  
Fluoroproducts Area  
Sediment Non-PAH Narcotic  
 $\Sigma$ ESBTU Summary (0.0 - 0.5 foot)  
Delaware River  
SLERA Report**

**Chemours Chambers Works  
Deepwater, New Jersey**

**EHS Support**

**Figure 27**

Reviewed By: G. Long

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES

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**Legend**

**Sediment Sampling Location**

- Exceedance
- No Exceedance

**Substrate Type**

- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

**Outfall Type**

- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls
- Sheet Pile Barrier

**Excluded Grid Cells**

- Outfall
- Wharf

DER3-13 (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<i>Semivolatile Organic Compounds</i>			
Nitrobenzene	1.78	NC	3
<i>Polycyclic Aromatic Hydrocarbons</i>			
Total PAHs (Detections + 1/2 MDL)	4.0	0.91	4.615

5B-P3-17 (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<i>Semivolatile Organic Compounds</i>			
4-Chloroaniline	0.179	NC	0.21

DER1-16 (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<i>Metals</i>			
Antimony	2	1.683	2.07 J
Mercury	0.2	0.395	0.474

DER2-21-SD (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<i>Polycyclic Aromatic Hydrocarbons</i>			
Total PAHs (Detections + 1/2 MDL)	4.0	0.91	4.517
Total PAHs (Detections Only)	4.0	0.91	4.495
<i>Metals</i>			
Mercury	0.2	0.395	2.67

SS-18 (0.50-1.00)			
Analyte	RESV	BTV	Result (mg/kg)
<i>Metals</i>			
Lead	35.8	55.6	141
<i>Volatile Organic Compounds</i>			
1,2-Dichlorobenzene	0.762	NC	1.9
<i>Semivolatile Organic Compounds</i>			
Nitrobenzene	0.15	NC	0.36

DER2-25-SD (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<i>Metals</i>			
Antimony	2	1.683	2.75 J
Copper	31.6	36.06	71.4
Lead	35.8	55.6	79.1
Mercury	0.2	0.395	2.28

DER1-19 (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<i>Metals</i>			
Lead	35.8	55.6	92.6
Mercury	0.2	0.395	0.694
<i>Semivolatile Organic Compounds</i>			
2,4-Dinitrotoluene	0.036	NC	0.22

DER2-24-SD (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<i>Metals</i>			
Lead	35.8	55.6	59.5
Mercury	0.2	0.395	0.641 J

DER1-18 (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<i>Metals</i>			
Lead	35.8	55.6	68.3
Mercury	0.2	0.395	0.405
<i>Semivolatile Organic Compounds</i>			
2,4-Dinitrotoluene	0.041	NC	0.45
2,6-Dinitrotoluene	0.041	NC	0.042 J

DER2-23-SD (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<i>Polycyclic Aromatic Hydrocarbons</i>			
Total PAHs (Detections + 1/2 MDL)	4.0	0.91	45.88
Total PAHs (Detections Only)	4.0	0.91	45.7

DER1-17 (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<i>Metals</i>			
Antimony	2	1.683	2.44 J
Lead	35.8	55.6	81.3 J
Mercury	0.2	0.395	0.91

DER2-22-SD (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<i>Metals</i>			
Mercury	0.2	0.395	0.479



600 300 0 600



Scale In Feet

**Manufacturing Zone  
SWMU 5/Henby Creek Area  
Refined Sediment Screening  
Exceedances  
Delaware River  
SLERA Report**

**Chemours Chambers Works  
Deepwater, New Jersey**



**Legend**

**PAH  $\Sigma$ ESBTU**

- < 1
- 1 - 10
- 10 - 100
- 100 - 1000
- > 1000

**PAH  $\Sigma$ IWTU<sub>TOT</sub>**

- < 1
- 1 - 10
- 10 - 100
- 100 - 1000
- > 1000
- Not Calculated

Sheet Pile Barrier

Zone Division Lines

**Outfall Type**

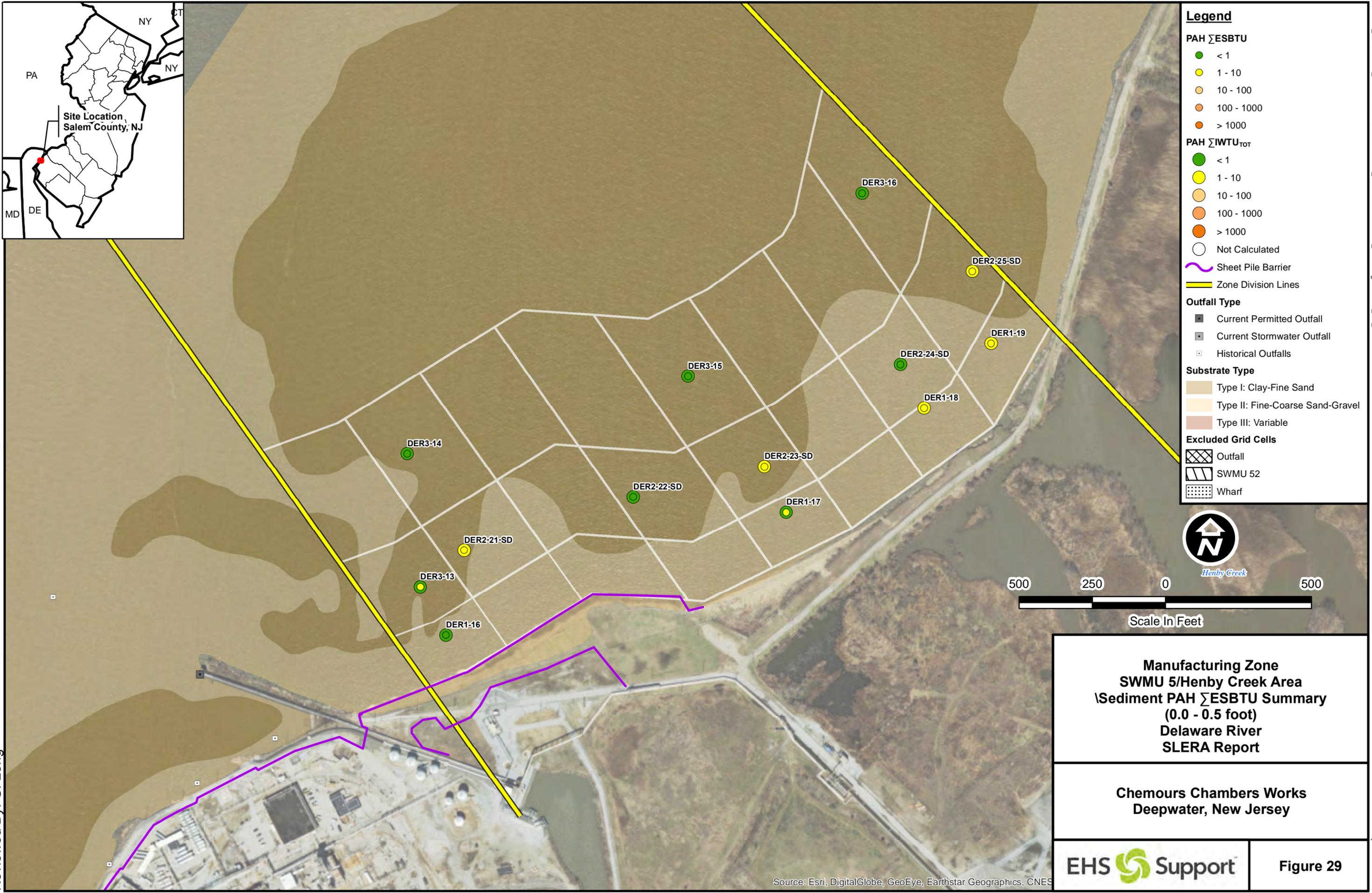
- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls

**Substrate Type**

- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

**Excluded Grid Cells**

- Outfall
- SWMU 52
- Wharf



**Manufacturing Zone  
SWMU 5/Henby Creek Area  
Sediment PAH  $\Sigma$ ESBTU Summary  
(0.0 - 0.5 foot)  
Delaware River  
SLERA Report**

**Chemours Chambers Works  
Deepwater, New Jersey**

Reviewed By: G. Long

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES

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**Legend**

**Non-PAH Narcotic  $\Sigma$ ESBTU**

- < 1
- 1 - 10
- 10 - 100
- 100 - 1000
- > 1000

**Zone Division Lines**

— Zone Division Lines

— Sheet Pile Barrier

**Outfall Type**

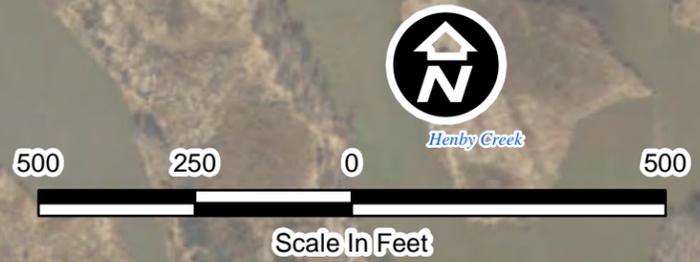
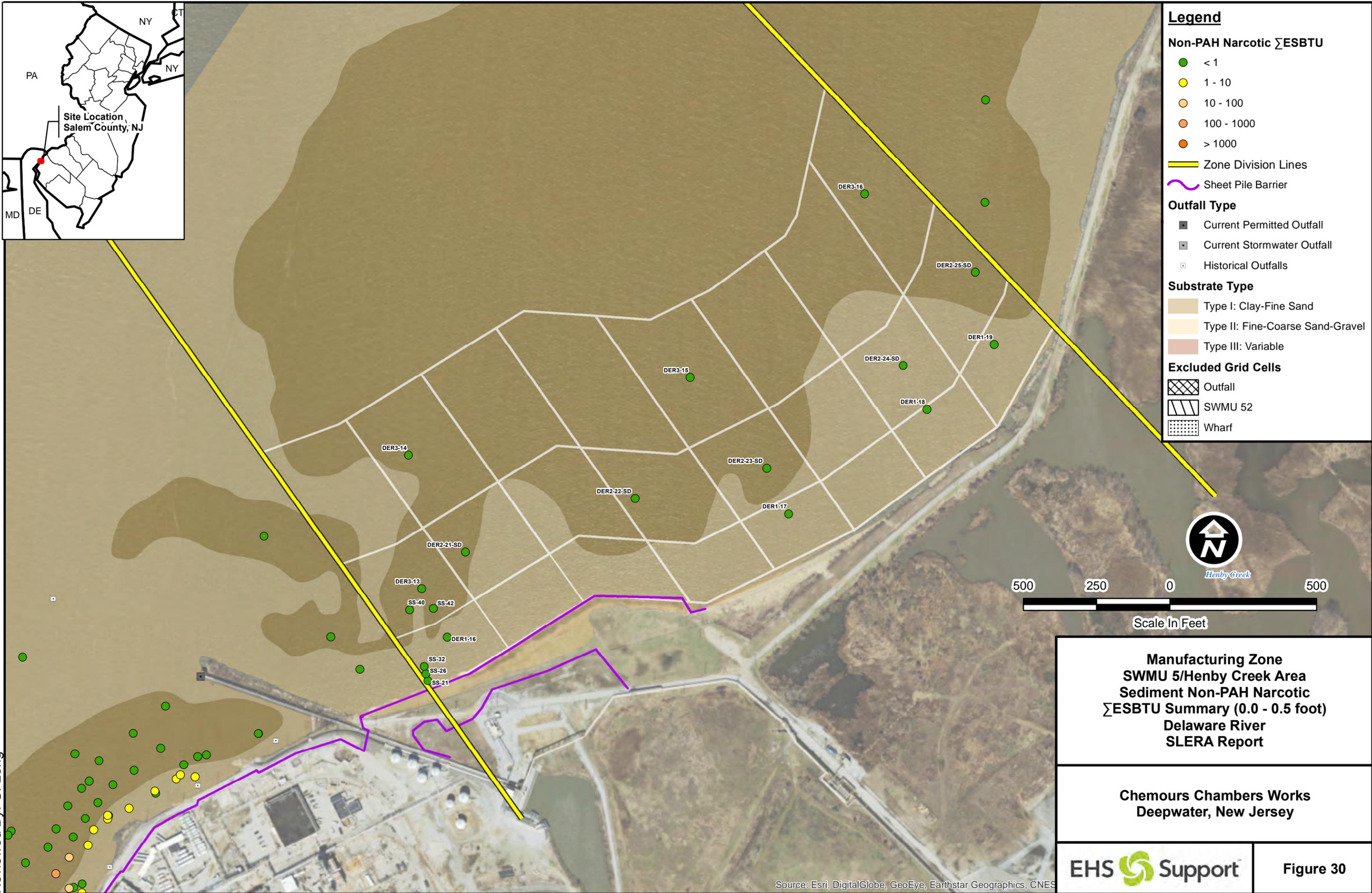
- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls

**Substrate Type**

- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

**Excluded Grid Cells**

- Outfall
- SWMU 52
- Wharf



**Manufacturing Zone  
SWMU 5/Henby Creek Area  
Sediment Non-PAH Narcotic  
 $\Sigma$ ESBTU Summary (0.0 - 0.5 foot)  
Delaware River  
SLERA Report**

**Chemours Chambers Works  
Deepwater, New Jersey**

**EHS Support** **Figure 30**

Reviewed By: G. Long

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES

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**Legend**

**Sediment Sampling Location**

- Exceedance
- No Exceedance

**Substrate Type**

- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

**Outfall Type**

- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls

**Excluded Grid Cells**

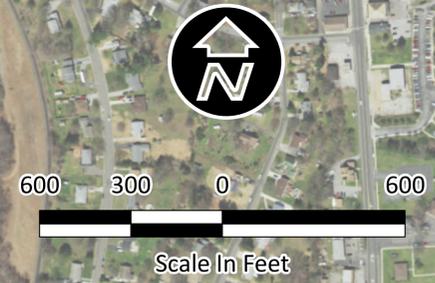
- Outfall
- SWMU 52
- Wharf

DER1-27 (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<i>Polychlorinated Biphenyls</i>			
Total PCB (congeners)	0.07	0.046	0.072

DER2-27-SD (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<i>Metals</i>			
Selenium	2	1.31	2.07 J

DER3-17 (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<i>Metals</i>			
Copper	31.6	36.06	57.4
Lead	35.8	55.6	57.6
Mercury	0.2	0.395	1.12

DER2-26-SD (0.00-0.50)			
Analyte	RESV	BTV	Result (mg/kg)
<i>Metals</i>			
Mercury	0.2	0.395	0.756



**Carneys Point Zone  
Refined Sediment Screening  
Exceedances  
Delaware River  
SLERA Report**

**Chemours Chambers Works  
Deepwater, New Jersey**



**FIGURE 31**

Reviewed By: G. Long

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**Legend**

**PAH  $\Sigma$ ESBTU**

- < 1
- 1 - 10
- 10 - 100
- 100 - 1000
- > 1000

**PAH  $\Sigma$ IWTU<sub>TOT</sub>**

- < 1
- 1 - 10
- 10 - 100
- 100 - 1000
- > 1000
- Not Calculated

- Sheet Pile Barrier
- Zone Division Lines

**Outfall Type**

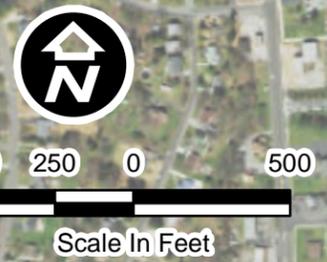
- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls

**Substrate Type**

- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

**Excluded Grid Cells**

- Outfall
- SWMU 52
- Wharf



**Carneys Point Zone  
Sediment PAH  $\Sigma$ ESBTU Summary  
(0.0 - 0.5 foot)  
Delaware River  
SLERA Report**

**Chemours Chambers Works  
Deepwater, New Jersey**

**EHS Support**

**Figure 32**

Reviewed By: G. Long

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES

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**Legend**

**Non-PAH Narcotic  $\Sigma$ ESBTU**

- < 1
- 1 - 10
- 10 - 100
- 100 - 1000
- > 1000

**Zone Division Lines**

**Sheet Pile Barrier**

**Outfall Type**

- Current Permitted Outfall
- Current Stormwater Outfall
- Historical Outfalls

**Substrate Type**

- Type I: Clay-Fine Sand
- Type II: Fine-Coarse Sand-Gravel
- Type III: Variable

**Excluded Grid Cells**

- ▣ Outfall
- ▣ SWMU 52
- ▣ Wharf



**Carneys Point Zone  
Preliminary Sediment Screening  
Sediment Non-PAH Narcotic  
 $\Sigma$ ESBTU Summary (0.0 - 0.5 foot))  
Delaware River  
SLERA Report**

**Chemours Chambers Works  
Deepwater, New Jersey**

Reviewed By: G. Long

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES

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# Appendices

# Appendix A

## Summary of Analytical Data

**Table A1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	MZ-JL/TEL												
Field Sample ID	22406818	22406819	22406821	22406822	22406824	22406825	22406827	22406828	22406831	22406832	22465054	22465055	
Location ID	DER1-01	DER1-01	DER1-05	DER1-05	DER1-07	DER1-07	DER1-09	DER1-09	DER1-11	DER1-11	DER1-04	DER1-04	
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	
Sample Purpose	FS												
Date	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/24/2009	9/24/2009	
Chemical Class	Units												
<b>General Chemistry</b>													
Black Carbon	mg/kg	720	400	600	3255	2080	1215	440	8705	1630	4100	270	1175
Percent Moisture	%	13.9	12	14.7	16.7	25.6	18.5	27.1	51.9	53.5	37.1	16.3	24.4
Percent Solids	%												
Total Organic Carbon	mg/kg	2090	510	1845	2230	2510	2825	4165	24550	18650	5410	1205	1890
<b>Metals</b>													
Aluminum	mg/kg	19100		6480		5710		4950		17700		4250	
Antimony	mg/kg	1.16 U		1.16 U		1.29 U		1.37 U		2.11 U		1.17 U	
Arsenic	mg/kg	2.32		2.56		2.16		2.31		7.37		3.02	
Barium	mg/kg	162		37.5		29.4		24.1		71.3		31.4	
Beryllium	mg/kg	2.36		0.566		0.412		0.331		1.05		0.0925	
Cadmium	mg/kg	0.531		0.465		0.509		0.331		1.1		0.164 U	
Calcium	mg/kg	8960		1260		1000		763		2940		1080	
Chromium	mg/kg	297		47		28.9		17.9		45.4		34.2	
Cobalt	mg/kg	8.35		4.19		3.91		3.65		11.1		3.62	
Copper	mg/kg	23.4		23.2		15.9		9.52		27.3		8.04	
Iron	mg/kg	20100		16000		15500		10600		26000		12700	
Lead	mg/kg	16.8		38.6		42.1		19.7		39		38.9	
Magnesium	mg/kg	1830		1400		1500		1310		5410		984	
Manganese	mg/kg	142		129		166		193		823		238	
Mercury	mg/kg	0.013 U		0.767		0.409		0.2		0.184		0.84	
Nickel	mg/kg	21.1		13.3		11.1		9.96		25.8		10.3	
Potassium	mg/kg	1920		992		917		858		3150		672	
Selenium	mg/kg	1.14 U		1.14 U		1.39		1.34 U		2.48		1.15 U	
Silver	mg/kg	0.209 U		0.209 U		0.233 U		0.247 U		0.38 U		0.211 U	
Sodium	mg/kg	919		274		246		204		736		217	
Thallium	mg/kg	1.66 U		1.66 U		1.87 U		1.99 U		3.06 U		1.7 U	
Tin	mg/kg	2.6		5.04		4.55		3.16		6.26		1.91	
Titanium	mg/kg												
Vanadium	mg/kg	35.9		21.8		20.2		15.6		46.2		17	
Zinc	mg/kg	39.7		57.8		69.6		54.9		168		55.3	
<b>Metals - AVS/SEM</b>													
Acid Volatile Sulfide	umol/g												
Arsenic	umol/g												
Cadmium	umol/g												
Copper	umol/g												
Lead	umol/g												
Zinc	umol/g												
<b>Metals - Leachate</b>													
Lead	ug/L												
<b>Per and Polyfluorinated Organic Substances</b>													
Perfluorobutane Sulfonic Acid	mg/kg												
Perfluorobutanoic Acid	mg/kg												
Perfluorodecane Sulfonic Acid	mg/kg												
Perfluorodecanoic Acid	mg/kg												
Perfluorododecanoic Acid	mg/kg												
Perfluoroheptanoic Acid	mg/kg												
Perfluorohexane Sulfonic Acid	mg/kg												
Perfluorohexanoic Acid	mg/kg												
Perfluorononanoic Acid	mg/kg												
Perfluorooctane Sulfonamide	mg/kg												
Perfluoropentanoic Acid	mg/kg												
Perfluorotetradecanoic Acid	mg/kg												
Perfluorotridecanoic Acid	mg/kg												
Perfluoroundecanoic Acid	mg/kg												
PFOA	mg/kg												
PFOA(trial)	mg/kg												
PFOS	mg/kg												
PFOS (trial)	mg/kg												
<b>Pesticides and Herbicides</b>													
4,4'-DDD	mg/kg												
4,4'-DDE	mg/kg												
4,4'-DDT	mg/kg												
Aldrin	mg/kg												
Alpha Chlordane	mg/kg												
Alpha-BHC	mg/kg												
beta-BHC	mg/kg												
delta-BHC	mg/kg												
Dieldrin	mg/kg												
Endosulfan I	mg/kg												
Endosulfan II	mg/kg												
Endosulfan Sulfate	mg/kg												
Endrin	mg/kg												
Endrin Aldehyde	mg/kg												
Endrin Ketone	mg/kg												
Gamma Chlordane	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-JL/TEL												
Field Sample ID	22406818	22406819	22406821	22406822	22406824	22406825	22406827	22406828	22406831	22406832	22465054	22465055	
Location ID	DER1-01	DER1-01	DER1-05	DER1-05	DER1-07	DER1-07	DER1-09	DER1-09	DER1-11	DER1-11	DER1-04	DER1-04	
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	
Sample Purpose	FS												
Date	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/24/2009	9/24/2009	
Chemical Class	Units												
Heptachlor	mg/kg												
Heptachlor Epoxide	mg/kg												
Lindane	mg/kg												
Methoxychlor	mg/kg												
Toxaphene	mg/kg												
<b>Physical Properties</b>													
0.001 MM	% PASSING	1		1		0.5	U	1		8.5		0.5	U
0.002 MM	% PASSING	1		1		2		1		15.5		0.5	U
0.005 MM	% PASSING	1		1		5.5		2		23		0.5	U
0.02 MM	% PASSING	1		2.5		8		4		42		0.5	U
0.05 MM	% PASSING	1.5		3		14		5		56		2.5	
0.064 MM	% PASSING	2		3		17		6.5		61.5		2.5	
0.075 MM	% PASSING	2.4		3.7		19.4		7.6		64.8		2.5	
0.15 MM	% PASSING	2.7		9		28.4		15.5		74.1		4.3	
0.3 MM	% PASSING	6.8		40.5		60.2		76.9		84.8		59.3	
0.6 MM	% PASSING	44.1		56.2		87.6		93.9		91.2		83.3	
1.18 MM	% PASSING	68.7		66.3		94.2		96.9		93.6		86	
19 MM	% PASSING	100		100		100		100		100		100	
2.36 MM	% PASSING	81.2		74		95.6		98.1		95.1		89.1	
3.35 MM	% PASSING	87.2		81.2		96.7		98.7		97.2		91.7	
37.5 MM	% PASSING	100		100		100		100		100		100	
4.75 MM	% PASSING	90.7		88.7		97.6		99.3		98.6		94.6	
75 MM	% PASSING	100		100		100		100		100		100	
Density	PCF												
<b>Polychlorinated Biphenyls - TICs</b>													
1,1'-Biphenyl, 2,3-dichloro-	mg/kg												
Unknown Biphenyl	mg/kg												
<b>Polychlorinated Biphenyls</b>													
Heptachlorobiphenyl	mg/kg												
Hexachlorobiphenyl	mg/kg												
Octachlorobiphenyl	mg/kg												
PCB 1	mg/kg												
PCB 10	mg/kg												
PCB 100	mg/kg												
PCB 101	mg/kg												
PCB 102	mg/kg												
PCB 103	mg/kg												
PCB 104	mg/kg												
PCB 105	mg/kg												
PCB 106	mg/kg												
PCB 107	mg/kg												
PCB 107/123	mg/kg												
PCB 108	mg/kg												
PCB 109	mg/kg												
PCB 11	mg/kg												
PCB 110	mg/kg												
PCB 111	mg/kg												
PCB 112	mg/kg												
PCB 113	mg/kg												
PCB 114	mg/kg												
PCB 115	mg/kg												
PCB 116	mg/kg												
PCB 117	mg/kg												
PCB 118	mg/kg												
PCB 119	mg/kg												
PCB 12	mg/kg												
PCB 120	mg/kg												
PCB 121	mg/kg												
PCB 121/95/88	mg/kg												
PCB 122	mg/kg												
PCB 123	mg/kg												
PCB 124	mg/kg												
PCB 125	mg/kg												
PCB 126	mg/kg												
PCB 127	mg/kg												
PCB 128	mg/kg												
PCB 129	mg/kg												
PCB 129/158	mg/kg												
PCB 13	mg/kg												
PCB 130	mg/kg												
PCB 130/164	mg/kg												
PCB 131	mg/kg												
PCB 132	mg/kg												
PCB 133	mg/kg												
PCB 134	mg/kg												
PCB 135	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-JL/TEL												
Field Sample ID	22406818	22406819	22406821	22406822	22406824	22406825	22406827	22406828	22406831	22406832	22465054	22465055	
Location ID	DER1-01	DER1-01	DER1-05	DER1-05	DER1-07	DER1-07	DER1-09	DER1-09	DER1-11	DER1-11	DER1-04	DER1-04	
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	
Sample Purpose	FS												
Date	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/24/2009	9/24/2009	
Chemical Class													
Chemical	Units												
PCB 136	mg/kg												
PCB 137	mg/kg												
PCB 138	mg/kg												
PCB 139	mg/kg												
PCB 14	mg/kg												
PCB 140	mg/kg												
PCB 141	mg/kg												
PCB 142	mg/kg												
PCB 143	mg/kg												
PCB 143/139	mg/kg												
PCB 144	mg/kg												
PCB 145	mg/kg												
PCB 146	mg/kg												
PCB 147	mg/kg												
PCB 148	mg/kg												
PCB 149	mg/kg												
PCB 15	mg/kg												
PCB 150	mg/kg												
PCB 151	mg/kg												
PCB 152	mg/kg												
PCB 153	mg/kg												
PCB 154	mg/kg												
PCB 155	mg/kg												
PCB 156	mg/kg												
PCB 157	mg/kg												
PCB 158	mg/kg												
PCB 159	mg/kg												
PCB 16	mg/kg												
PCB 160	mg/kg												
PCB 161	mg/kg												
PCB 162	mg/kg												
PCB 163	mg/kg												
PCB 163/160	mg/kg												
PCB 164	mg/kg												
PCB 165	mg/kg												
PCB 166	mg/kg												
PCB 167	mg/kg												
PCB 168	mg/kg												
PCB 169	mg/kg												
PCB 17	mg/kg												
PCB 170	mg/kg												
PCB 171	mg/kg												
PCB 172	mg/kg												
PCB 173	mg/kg												
PCB 174	mg/kg												
PCB 175	mg/kg												
PCB 176	mg/kg												
PCB 177	mg/kg												
PCB 178	mg/kg												
PCB 179	mg/kg												
PCB 18	mg/kg												
PCB 180	mg/kg												
PCB 181	mg/kg												
PCB 182	mg/kg												
PCB 182/175	mg/kg												
PCB 183	mg/kg												
PCB 184	mg/kg												
PCB 185	mg/kg												
PCB 186	mg/kg												
PCB 187	mg/kg												
PCB 188	mg/kg												
PCB 189	mg/kg												
PCB 19	mg/kg												
PCB 190	mg/kg												
PCB 191	mg/kg												
PCB 192	mg/kg												
PCB 193	mg/kg												
PCB 194	mg/kg												
PCB 195	mg/kg												
PCB 196	mg/kg												
PCB 197	mg/kg												
PCB 198	mg/kg												
PCB 199	mg/kg												
PCB 2	mg/kg												
PCB 20	mg/kg												
PCB 200	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-JL/TEL											
Field Sample ID	22406818	22406819	22406821	22406822	22406824	22406825	22406827	22406828	22406831	22406832	22465054	22465055
Location ID	DER1-01	DER1-01	DER1-05	DER1-05	DER1-07	DER1-07	DER1-09	DER1-09	DER1-11	DER1-11	DER1-04	DER1-04
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00
Sample Purpose	FS											
Date	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/24/2009	9/24/2009
Chemical Class	Units											
PCB 201	mg/kg											
PCB 202	mg/kg											
PCB 203	mg/kg											
PCB 204	mg/kg											
PCB 204/200	mg/kg											
PCB 205	mg/kg											
PCB 206	mg/kg											
PCB 207	mg/kg											
PCB 208	mg/kg											
PCB 209	mg/kg											
PCB 21	mg/kg											
PCB 21/20	mg/kg											
PCB 22	mg/kg											
PCB 23	mg/kg											
PCB 24	mg/kg											
PCB 25	mg/kg											
PCB 26	mg/kg											
PCB 27	mg/kg											
PCB 28	mg/kg											
PCB 29	mg/kg											
PCB 3	mg/kg											
PCB 30	mg/kg											
PCB 31	mg/kg											
PCB 32	mg/kg											
PCB 33	mg/kg											
PCB 34	mg/kg											
PCB 35	mg/kg											
PCB 36	mg/kg											
PCB 37	mg/kg											
PCB 38	mg/kg											
PCB 39	mg/kg											
PCB 4	mg/kg											
PCB 4/10	mg/kg											
PCB 40	mg/kg											
PCB 41	mg/kg											
PCB 42	mg/kg											
PCB 43	mg/kg											
PCB 44	mg/kg											
PCB 45	mg/kg											
PCB 46	mg/kg											
PCB 47	mg/kg											
PCB 48	mg/kg											
PCB 49	mg/kg											
PCB 5	mg/kg											
PCB 50	mg/kg											
PCB 51	mg/kg											
PCB 52	mg/kg											
PCB 53	mg/kg											
PCB 54	mg/kg											
PCB 55	mg/kg											
PCB 56	mg/kg											
PCB 57	mg/kg											
PCB 58	mg/kg											
PCB 59	mg/kg											
PCB 6	mg/kg											
PCB 60	mg/kg											
PCB 61	mg/kg											
PCB 62	mg/kg											
PCB 63	mg/kg											
PCB 64	mg/kg											
PCB 65	mg/kg											
PCB 65/75/62	mg/kg											
PCB 66	mg/kg											
PCB 67	mg/kg											
PCB 67/58	mg/kg											
PCB 68	mg/kg											
PCB 68/64	mg/kg											
PCB 69	mg/kg											
PCB 7	mg/kg											
PCB 70	mg/kg											
PCB 71	mg/kg											
PCB 72	mg/kg											
PCB 73	mg/kg											
PCB 73/46	mg/kg											
PCB 74	mg/kg											
PCB 75	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-JL/TEL												
Field Sample ID	22406818	22406819	22406821	22406822	22406824	22406825	22406827	22406828	22406831	22406832	22465054	22465055	
Location ID	DER1-01	DER1-01	DER1-05	DER1-05	DER1-07	DER1-07	DER1-09	DER1-09	DER1-11	DER1-11	DER1-04	DER1-04	
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	
Sample Purpose	FS												
Date	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/24/2009	9/24/2009	
Chemical Class	Units												
PCB 76	mg/kg												
PCB 77	mg/kg												
PCB 78	mg/kg												
PCB 79	mg/kg												
PCB 8	mg/kg												
PCB 80	mg/kg												
PCB 81	mg/kg												
PCB 82	mg/kg												
PCB 83	mg/kg												
PCB 83/125/112	mg/kg												
PCB 84	mg/kg												
PCB 85	mg/kg												
PCB 86	mg/kg												
PCB 86/109	mg/kg												
PCB 87	mg/kg												
PCB 87/111	mg/kg												
PCB 88	mg/kg												
PCB 89	mg/kg												
PCB 89/84	mg/kg												
PCB 9	mg/kg												
PCB 90	mg/kg												
PCB 91	mg/kg												
PCB 92	mg/kg												
PCB 93	mg/kg												
PCB 94	mg/kg												
PCB 95	mg/kg												
PCB 96	mg/kg												
PCB 97	mg/kg												
PCB 98	mg/kg												
PCB 99	mg/kg												
PCB-100/93	mg/kg												
PCB-107/124	mg/kg												
PCB-108/119/86/97/125/87	mg/kg												
PCB-113/90/101	mg/kg												
PCB-116/85	mg/kg												
PCB-128/166	mg/kg												
PCB-13/12	mg/kg												
PCB-139/140	mg/kg												
PCB-147/149	mg/kg												
PCB-151/135	mg/kg												
PCB-153/168	mg/kg												
PCB-156/157	mg/kg												
PCB-163/138/129	mg/kg												
PCB-171/173	mg/kg												
PCB-180/193	mg/kg												
PCB-198/199	mg/kg												
PCB-21/33	mg/kg												
PCB-26/29	mg/kg												
PCB-28/20	mg/kg												
PCB-30/18	mg/kg												
PCB-44/47/65	mg/kg												
PCB-50/53	mg/kg												
PCB-59/62/75	mg/kg												
PCB-61/70/74/76	mg/kg												
PCB-69/49	mg/kg												
PCB-71/40	mg/kg												
PCB-90/101	mg/kg												
Pentachlorobiphenyl	mg/kg												
Tetrachlorobiphenyl	mg/kg												
Total Decachlorobiphenyls (congeners)	mg/kg												
Total Dichlorobiphenyls (congeners)	mg/kg												
Total Heptachlorobiphenyls (congeners)	mg/kg												
Total Hexachlorobiphenyls (congeners)	mg/kg												
Total Monochlorobiphenyls (congeners)	mg/kg												
Total Nonachlorobiphenyls (congeners)	mg/kg												
Total Octachlorobiphenyls (congeners)	mg/kg												
Total PCB (congeners)	mg/kg												
Total Pentachlorobiphenyls (congeners)	mg/kg												
Total Tetrachlorobiphenyls (congeners)	mg/kg												
Total Trichlorobiphenyls (congeners)	mg/kg												
Trichlorobiphenyl (total)	mg/kg												
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>													
Benzo[e]pyrene	mg/kg												
Chrysene, 1-methyl-	mg/kg												
Naphthalene, 1-methyl-	mg/kg												
Pyrene, 1-methyl-	mg/kg												

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL							
Field Sample ID	22406818	22406819	22406821	22406822	22406824	22406825	22406827	22406828	22406831	22406832	22465054	22465055	
Location ID	DER1-01	DER1-01	DER1-05	DER1-05	DER1-07	DER1-07	DER1-09	DER1-09	DER1-11	DER1-11	DER1-04	DER1-04	
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS								
Date	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/24/2009	9/24/2009	
Chemical Class	Chemical	Units	Units	Units	Units	Units							
<b>Polycyclic Aromatic Hydrocarbons</b>													
Acenaphthene	mg/kg	0.039	U	0.039	U	0.045	U	0.047	U	0.072	U	0.04	U
Acenaphthylene	mg/kg	0.039	U	0.039	U	0.045	U	0.046	U	0.072	U	0.04	U
Anthracene	mg/kg	0.039	U	0.039	U	0.045	U	0.062	U	0.072	U	0.04	U
Benzo(A)Anthracene	mg/kg	0.039	U	0.1	U	0.045	U	0.12	U	0.072	U	0.04	U
Benzo(B)Fluoranthene	mg/kg	0.047	U	0.084	U	0.045	U	0.2	U	0.072	U	0.04	U
Benzo(G,H,I)Perylene	mg/kg	0.039	U	0.044	U	0.045	U	0.076	U	0.072	U	0.04	U
Benzo(K)Fluoranthene	mg/kg	0.039	U	0.039	U	0.045	U	0.088	U	0.072	U	0.04	U
Benzo(A)Pyrene	mg/kg	0.039	U	0.071	U	0.045	U	0.096	U	0.072	U	0.04	U
Chrysene	mg/kg	0.044	U	0.13	U	0.045	U	0.22	U	0.072	U	0.04	U
Dibenz(A,H)Anthracene	mg/kg	0.039	U	0.039	U	0.045	U	0.046	U	0.072	U	0.04	U
Fluoranthene	mg/kg	0.064	U	0.14	U	0.045	U	0.7	U	0.072	U	0.04	U
Fluorene	mg/kg	0.039	U	0.039	U	0.045	U	0.062	U	0.072	U	0.04	U
Indeno (1,2,3-CD) Pyrene	mg/kg	0.039	U	0.04	U	0.045	U	0.061	U	0.072	U	0.04	U
Naphthalene	mg/kg	0.039	U	0.039	U	0.045	U	0.046	U	0.072	U	0.04	U
Phenanthrene	mg/kg	0.039	U	0.11	U	0.045	U	0.6	U	0.072	U	0.04	U
Pyrene	mg/kg	0.059	U	0.22	U	0.045	U	0.58	U	0.072	U	0.04	U
Total PAHs (Detections + 1/2 MDL)	mg/kg	0.448		1.0755		0.36		2.981		0.576		0.32	
Total PAHs (Detections Only)	mg/kg	0.214		0.939		0.36		2.912		0.576		0.32	
<b>Semivolatile Organic Compounds - TICs</b>													
1,2,4-Trithiolane	mg/kg												
1,4-Benzenediol, 2-chloro-	mg/kg												
11H-Benzo[b]fluorene	mg/kg												
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg												
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg	19		19		25		15		38		18	
3-PENTEN-2-ONE, 4-METHYL-	mg/kg			0.28		0.36				0.76			
7H-Benz[de]anthracen-7-one	mg/kg												
9,10-Anthracenedione	mg/kg												
9-Octadecenamido, (Z)-	mg/kg												
Acetamide, 2-chloro-N-(ethox	mg/kg												
Alachlor	mg/kg												
Benzenamine, 3-methyl-	mg/kg												
Benzenamine, 4,4',4"-methy	mg/kg												
Benzenamine, 4,4'-methyleneb	mg/kg												
Benzene, 1,2,3,4-tetrachloro	mg/kg												
Benzene, 1,2,3,5-tetrachloro	mg/kg												
Benzene, 1,2,3-trichloro-	mg/kg												
Benzene, 1,3,5-trichloro-	mg/kg												
Benzene, 1,3-bis(1-methyleth	mg/kg												
Benzene, 1,4-bis(1-methyleth	mg/kg												
Benzofuran, 2,3-dihydro-	mg/kg												
CYCLIC OCTAATOMIC SULFUR	mg/kg							6.4					
Diphenyl Ether	mg/kg												
Docosane	mg/kg												
Heneicosane	mg/kg												
Hexacosane	mg/kg												
Hexadecane	mg/kg												
Hexatriacontane	mg/kg												
m-Chloroaniline	mg/kg												
N,N-Diethylaniline	mg/kg												
n-Hexadecanoic acid	mg/kg												
Nonadecane	mg/kg												
o-Chloroaniline	mg/kg												
Octacosane	mg/kg												
Octadecane	mg/kg												
Octadecane, 1-chloro-	mg/kg												
Octadecanoic acid	mg/kg												
Parachlorophenol	mg/kg												
Pentadecane	mg/kg												
Perylene	mg/kg												
Phenol, 2,5-dichloro-	mg/kg												
Phenol, 3-chloro-	mg/kg												
Phenol, 4,4'-(1-methylethyl)	mg/kg												
Tetracosane	mg/kg												
Tetradecane	mg/kg												
Tetraethylene glycol	mg/kg												
Total SVOC TICs	mg/kg												
Triacotane	mg/kg												
Tributyl phosphate	mg/kg												
Tridecanoic acid	mg/kg												
Triphenyl phosphate	mg/kg												
UNKNOWN	mg/kg	0.375		0.42		0.366		0.439473684		0.424545455		4.971	
Unknown acid	mg/kg												
Unknown Alcohol	mg/kg												
Unknown Aldol Condensate	mg/kg												
UNKNOWN ALKANE	mg/kg	0.205		0.38				0.395		1.33		2.043333333	

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	MZ-JL/TEL														
Field Sample ID	22406818	22406819	22406821	22406822	22406824	22406825	22406827	22406828	22406831	22406832	22465054	22465055			
Location ID	DER1-01	DER1-01	DER1-05	DER1-05	DER1-07	DER1-07	DER1-09	DER1-09	DER1-11	DER1-11	DER1-04	DER1-04			
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00			
Sample Purpose	FS														
Date	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/24/2009	9/24/2009			
Chemical Class	Units														
Unknown Alkene	mg/kg														
Unknown Amide	mg/kg														
Unknown Amine	mg/kg														
UNKNOWN AROMATIC	mg/kg														
Unknown Carboxylic Acid	mg/kg														
Unknown Cycloalkane	mg/kg														
Unknown Hydrocarbon	mg/kg														
Unknown Ketone	mg/kg														
Unknown PAH	mg/kg														
UNKNOWN SILOXANE	mg/kg														
<b>Semivolatile Organic Compounds</b>															
1,2,4-Trichlorobenzene	mg/kg	0.039	U		0.039	U		0.045	U		0.072	U		0.04	U
1,2-Diphenylhydrazine	mg/kg	0.039	U		0.039	U		0.045	U		0.046	U		0.04	U
1,4-Dioxane	mg/kg														
1-Naphthylamine	mg/kg	0.19	U		0.2	U		0.22	U		0.23	U		0.2	U
2,3,4,6-Tetrachlorophenol	mg/kg														
2,4,5-Trichlorophenol	mg/kg														
2,4,6-Trichlorophenol	mg/kg	0.039	U		0.039	U		0.045	U		0.046	U		0.04	U
2,4-Dichlorophenol	mg/kg	0.039	U		0.039	U		0.045	U		0.046	U		0.04	U
2,4-Dimethylphenol	mg/kg	0.077	U		0.078	U		0.09	U		0.091	U		0.08	U
2,4-Dinitrophenol	mg/kg	0.77	U		0.78	U		0.9	U		0.91	U		0.8	U
2,4-Dinitrotoluene	mg/kg	0.077	U		0.078	U		0.09	U		0.091	U		0.08	U
2,6-Dinitrotoluene	mg/kg	0.039	U		0.039	U		0.045	U		0.046	U		0.04	U
2-Chloronaphthalene	mg/kg	0.039	U		0.039	U		0.045	U		0.046	U		0.04	U
2-Chlorophenol	mg/kg	0.039	U		0.039	U		0.045	U		0.046	U		0.04	U
2-Methylnaphthalene	mg/kg														
2-Methylphenol (O-Cresol)	mg/kg														
2-Naphthylamine	mg/kg	0.19	U		0.2	U		0.22	U		0.23	U		0.2	U
2-Nitroaniline	mg/kg														
2-Nitrophenol	mg/kg	0.039	U		0.039	U		0.045	U		0.046	U		0.04	U
3,3'-Dichlorobenzidine	mg/kg	0.12	U		0.12	U		0.13	U		0.14	U		0.12	U
3,3'-Dimethylbenzidine	mg/kg														
3-Nitroaniline	mg/kg														
4,6-Dinitro-2-Methylphenol	mg/kg	0.19	U		0.2	U		0.22	U		0.23	U		0.2	U
4-Aminobiphenyl	mg/kg	0.19	U		0.2	U		0.22	U		0.23	U		0.2	U
4-Bromophenyl Phenyl Ether	mg/kg	0.039	U		0.039	U		0.045	U		0.046	U		0.04	U
4-Chloro-3-Methylphenol	mg/kg	0.077	U		0.078	U		0.09	U		0.091	U		0.08	U
4-Chloroaniline	mg/kg	0.077	U		0.078	U		0.09	U		0.091	U		0.08	U
4-Chlorophenyl Phenyl Ether	mg/kg	0.039	U		0.039	U		0.045	U		0.046	U		0.04	U
4-Methylphenol (P-Cresol)	mg/kg														
4-Nitroaniline	mg/kg														
4-Nitrophenol	mg/kg	0.19	U		0.2	U		0.22	U		0.23	U		0.2	U
Acetophenone	mg/kg														
Aniline	mg/kg	0.19	U		0.2	U		0.22	U		0.23	U		0.2	U
Benzidine	mg/kg	1.4	U		1.4	U		1.6	U		1.6	U		1.4	U
Biphenyl	mg/kg														
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg														
Bis(2-Chloroethoxy)Methane	mg/kg	0.039	U		0.039	U		0.045	U		0.046	U		0.04	U
Bis(2-Chloroethyl)Ether	mg/kg	0.039	U		0.039	U		0.045	U		0.046	U		0.04	U
Bis(2-Chloroisopropyl)Ether	mg/kg	0.039	U		0.039	U		0.045	U		0.046	U		0.04	U
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.077	U		0.078	U		0.09	U		0.091	U		0.08	U
Butyl Benzyl Phthalate	mg/kg	0.077	U		0.078	U		0.09	U		0.091	U		0.08	U
Carbazole	mg/kg	0.039	U		0.039	U		0.045	U		0.046	U		0.04	U
Dibenzofuran	mg/kg														
Diethyl Phthalate	mg/kg	0.077	U		0.078	U		0.09	U		0.091	U		0.08	U
Dimethyl Phthalate	mg/kg	0.077	U		0.078	U		0.09	U		0.091	U		0.08	U
Di-N-Butyl Phthalate	mg/kg	0.077	U		0.078	U		0.09	U		0.091	U		0.08	U
Diphenyl Ether	mg/kg														
Hexachlorobenzene	mg/kg	0.039	U		0.039	U		0.045	U		0.046	U		0.04	U
Hexachlorobutadiene	mg/kg	0.077	U		0.078	U		0.09	U		0.091	U		0.08	U
Hexachlorocyclopentadiene	mg/kg	0.19	U		0.2	U		0.22	U		0.23	U		0.2	U
Hexachloroethane	mg/kg	0.039	U		0.039	U		0.045	U		0.046	U		0.04	U
Hexachloropropylene	mg/kg														
Isophorone	mg/kg	0.039	U		0.039	U		0.045	U		0.046	U		0.04	U
N-Dioctyl Phthalate	mg/kg	0.077	U		0.078	U		0.09	U		0.091	U		0.08	U
Nitrobenzene	mg/kg	0.039	U		0.039	U		0.045	U		0.046	U		0.04	U
N-Nitrosodimethylamine	mg/kg	0.077	U		0.078	U		0.09	U		0.091	U		0.08	U
N-Nitrosodi-N-Propylamine	mg/kg	0.039	U		0.039	U		0.045	U		0.046	U		0.04	U
N-Nitrosodiphenylamine	mg/kg	0.039	U		0.039	U		0.045	U		0.046	U		0.04	U
O-Toluidine	mg/kg	0.23	U		0.23	U		0.27	U		0.27	U		0.24	U
Parathion	mg/kg														
Pentachlorobenzene	mg/kg														
Pentachlorophenol	mg/kg	0.19	U		0.2	U		0.22	U		0.23	U		0.2	U
Phenol	mg/kg	0.039	U		0.039	U		0.045	U		0.046	U		0.04	U
<b>Volatile Organic Compounds - TICs</b>															
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg														

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-JL/TEL												
Field Sample ID	22406818	22406819	22406821	22406822	22406824	22406825	22406827	22406828	22406831	22406832	22465054	22465055	
Location ID	DER1-01	DER1-01	DER1-05	DER1-05	DER1-07	DER1-07	DER1-09	DER1-09	DER1-11	DER1-11	DER1-04	DER1-04	
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	
Sample Purpose	FS												
Date	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/24/2009	9/24/2009	
Chemical Class	Units												
1-Butene	mg/kg												
1-Heptene	mg/kg												
1-Propene, 2-methyl-	mg/kg												
Azulene	mg/kg												
BENZENE, 1,2,4-TRICHLORO-	mg/kg												
BENZENE, 1,2-DICHLORO-	mg/kg												
BENZENE, 1,4-DICHLORO-	mg/kg												
Camphene	mg/kg												
CYCLOHEXANE	mg/kg					0.12							
Cyclohexane, methyl-	mg/kg												
Cyclotrisiloxane, hexamethyl	mg/kg												
Diphenyl Ether	mg/kg					0.06							
Ethane, 1,1,2,2-tetrachloro-	mg/kg												
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg												
Ethane, 1,2-dichloro-1,1-dif	mg/kg												
Ethene, 1,1-dichloro-2,2-dif	mg/kg												
Hexane, 2-methyl-	mg/kg												
Hexane, 3-methyl-	mg/kg												
METHANE, CHLOROFLUORO-	mg/kg												
Naphthalene	mg/kg					0.11							
NAPHTHALENE, 2-METHYL-	mg/kg												
Nonanal	mg/kg												
Norflurane	mg/kg												
Pentane, 2,3-dimethyl-	mg/kg												
Phenol, 4-(1,1,3,3-tetrameth	mg/kg												
Propene	mg/kg												
Sulfur dioxide	mg/kg												
Tridecane	mg/kg												
UNKNOWN	mg/kg					0.211		0.179		0.56			
UNKNOWN ALICYCLIC	mg/kg							0.18					
UNKNOWN ALIPHATIC	mg/kg												
UNKNOWN ALKANE	mg/kg							0.2025					
UNKNOWN AROMATIC	mg/kg					0.17							
UNKNOWN SILOXANE	mg/kg				0.007							0.009	
<b>Volatile Organic Compounds</b>													
1,1,1,2-Tetrachloroethane	mg/kg												
1,1,1-Trichloroethane	mg/kg		0.001 U			0.001 U		0.001 U		0.002 U		0.001 U	
1,1,1-Trichlorotrifluoroethane	mg/kg												
1,1,2,2-Tetrachloroethane	mg/kg		0.001 U			0.001 U		0.001 U		0.002 U		0.001 U	
1,1,2-Trichloroethane	mg/kg		0.001 U			0.001 U		0.001 U		0.002 U		0.001 U	
1,1,2-Trichlorotrifluoroethane	mg/kg		0.002 U			0.029		0.002 U		0.005 U		0.003 U	
1,1,2-Trifluoroethane	mg/kg												
1,1-Dichloro-1-Fluoroethane	mg/kg												
1,1-Dichloroethane	mg/kg		0.001 U			0.001 U		0.001 U		0.002 U		0.001 U	
1,1-Dichloroethene	mg/kg		0.001 U			0.001 U		0.001 U		0.002 U		0.001 U	
1,1-Dichloropropene	mg/kg												
1,2,4-Trimethylbenzene	mg/kg												
1,2-Dibromoethane (EDB)	mg/kg												
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg												
1,2-Dichloro-1-Fluoroethane	mg/kg												
1,2-Dichlorobenzene	mg/kg	0.039 U		0.048		0.045 U		0.078		0.072 U		0.04 U	
1,2-Dichloroethane	mg/kg		0.001 U			0.001 U		0.001 U		0.002 U		0.001 U	
1,2-Dichloroethene	mg/kg												
1,2-Dichloropropane	mg/kg		0.001 U			0.001 U		0.001 U		0.002 U		0.001 U	
1,2-Dichlorotetrafluoroethane	mg/kg												
1,3,5-Trimethylbenzene	mg/kg												
1,3-Dichlorobenzene	mg/kg	0.039 U		0.039 U		0.045 U		0.046 U		0.072 U		0.04 U	
1,4-Dichlorobenzene	mg/kg	0.039 U		0.039 U		0.045 U		0.082		0.072 U		0.04 U	
1-Chloro-1,1-Difluoroethane	mg/kg												
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg												
2-Chloro-1,1,1-Trifluoroethane	mg/kg												
2-Chloroethyl Vinyl Ether	mg/kg												
2-Chlorotoluene	mg/kg												
2-Hexanone	mg/kg												
4-Chlorotoluene	mg/kg												
4-Isopropyltoluene	mg/kg												
Acetone	mg/kg		0.01			0.013		0.032		0.11		0.027	
Acrolein	mg/kg		0.021 U			0.02 U		0.022 U		0.049 U		0.026 U	
Acrylonitrile	mg/kg		0.004 U			0.004 U		0.004 U		0.01 U		0.005 U	
Benzene	mg/kg		0.0005 U			0.0005 U		0.44		0.001		0.0006 U	
Bromodichloromethane	mg/kg		0.001 U			0.001 U		0.001 U		0.002 U		0.001 U	
Bromoform	mg/kg		0.001 U			0.001 U		0.001 U		0.002 U		0.001 U	
Carbon Disulfide	mg/kg		0.001 U			0.001 U		0.002		0.003		0.002	
Carbon Tetrachloride	mg/kg		0.001 U			0.001 U		0.001 U		0.002 U		0.001 U	
CFC-1113	mg/kg												
Chlorobenzene	mg/kg		0.001 U			0.001		4.9		0.054		0.001 U	

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	MZ-JL/TEL		MZ-JL/TEL		MZ-JL/TEL		MZ-JL/TEL		MZ-JL/TEL		MZ-JL/TEL		MZ-JL/TEL	
		Field Sample ID	22406818	22406819	22406821	22406822	22406824	22406825	22406827	22406828	22406831	22406832	22465054	22465055	
Chemical	Location ID	DER1-01	DER1-01	DER1-05	DER1-05	DER1-07	DER1-07	DER1-09	DER1-09	DER1-11	DER1-11	DER1-04	DER1-04		
Units	Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00		
	Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS		
	Date	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	9/24/2009	9/24/2009		
Chlorodibromomethane	mg/kg		0.001 U			0.001 U		0.001 U		0.002 U		0.002 U		0.001 U	
Chlorodifluoromethane	mg/kg														
Chlorofluoromethane	mg/kg														
Chloroform	mg/kg		0.001 U			0.001 U		0.001 U		0.002 U		0.002 U		0.001 U	
Chloropentafluoroethane	mg/kg														
cis-1,2-Dichloroethene	mg/kg		0.001 U			0.001 U		0.001 U		0.002 U		0.002 U		0.001 U	
cis-1,3-Dichloropropene	mg/kg		0.001 U			0.001 U		0.001 U		0.002 U		0.002 U		0.001 U	
Cumene	mg/kg														
Dichlorodifluoromethane	mg/kg		0.002 U			0.002 U		0.002 U		0.005 U		0.005 U		0.003 U	
Dichlorofluoromethane	mg/kg		0.002 U			0.002 U		0.002 U		0.005 U		0.005 U		0.003 U	
Ethane	ug/L														
Ethyl Chloride	mg/kg		0.002 U			0.002 U		0.002 U		0.005 U		0.005 U		0.003 U	
Ethylbenzene	mg/kg		0.001 U			0.001 U		0.005 U		0.002 U		0.002 U		0.001 U	
Fluoromethane	mg/kg														
Hexane	mg/kg														
Isobutyl Alcohol	mg/kg														
Meta- And Para-Xylene	mg/kg														
Methacrylonitrile	mg/kg														
Methane	ug/L														
Methyl Bromide	mg/kg		0.002 U			0.002 U		0.002 U		0.005 U		0.005 U		0.003 U	
Methyl Chloride	mg/kg		0.002 U			0.002 U		0.002 U		0.005 U		0.005 U		0.003 U	
Methyl Ethyl Ketone	mg/kg														
Methyl Isobutyl Ketone	mg/kg														
Methyl Methacrylate	mg/kg														
Methyl Tertiary Butyl Ether	mg/kg														
Methylene Chloride	mg/kg		0.002 U			0.002 U		0.002 U		0.005 U		0.005 U		0.003	
N-Butylbenzene	mg/kg														
N-Propylbenzene	mg/kg														
Ortho-Xylene	mg/kg														
Propionitrile	mg/kg														
sec-Butylbenzene	mg/kg														
Styrene	mg/kg														
tert-Butylbenzene	mg/kg														
Tetrachloroethene	mg/kg		0.001 U			0.001 U		0.001 U		0.002 U		0.002 U		0.001 U	
Tetrahydrofuran	mg/kg														
Toluene	mg/kg		0.002			0.001		0.004		0.004		0.009		0.001	
trans-1,2-Dichloroethene	mg/kg		0.001 U			0.001 U		0.001 U		0.002 U		0.002 U		0.001 U	
trans-1,3-Dichloropropene	mg/kg		0.001 U			0.001 U		0.001 U		0.002 U		0.002 U		0.001 U	
Trichloroethene	mg/kg		0.001 U			0.001 U		0.001 U		0.002 U		0.002 U		0.001 U	
Trichlorofluoromethane	mg/kg		0.002 U			0.002 U		0.002 U		0.005 U		0.005 U		0.003 U	
Vinyl Chloride	mg/kg		0.001 U			0.001 U		0.001 U		0.002 U		0.002 U		0.001 U	
Vinyl Fluoride	mg/kg														
Xylenes	mg/kg		0.001 U			0.001 U		0.019		0.002 U		0.002 U		0.001 U	

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-JL/TEL												
Field Sample ID	22465057	22465058	22465060	22465061	22465063	22465064	22465065	22465066	22499337	22499338	22499339	22522848	
Location ID	DER1-06	DER1-06	DER1-08	DER1-08	DER1-10	DER1-10	DER1-10	DER1-10	DER1-01	DER1-05	DER1-09	DER1-06	
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	
Sample Purpose	FS	FS	FS	FS	FS	DUP	FS	DUP	FS	FS	FS	FS	
Date	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	
Chemical Class	Units												
<b>General Chemistry</b>													
Black Carbon	mg/kg		500	2240	3455	1590		635					920
Percent Moisture	%	14.3	19.1	30.5	21.5	65.2	65	67.1	65.5				
Percent Solids	%												
Total Organic Carbon	mg/kg		7070	4650	5775	23100		17750					3005
<b>Metals</b>													
Aluminum	mg/kg	3730		6490		24700		26200					
Antimony	mg/kg	1.16 U		1.4 U		2.79 U		2.8 U					
Arsenic	mg/kg	2.4		2.81		13.2		13.1					
Barium	mg/kg	24.5		31.8		95.4		99					
Beryllium	mg/kg	0.0878		0.095 U		0.418		0.434					
Cadmium	mg/kg	0.162 U		0.319		0.656		0.675					
Calcium	mg/kg	790		1180		4390		4490					
Chromium	mg/kg	36		31.2		62.5		65.3					
Cobalt	mg/kg	2.47		5.06		14.8		15.1					
Copper	mg/kg	17.5		16.9		30.2		31.6					
Iron	mg/kg	10300		17100		37500		38500					
Lead	mg/kg	37.7		56.4		44.6		46					
Magnesium	mg/kg	801		1800		8350		8650					
Manganese	mg/kg	89.4		173		1550		1570					
Mercury	mg/kg	0.522		0.379		0.149		0.243					
Nickel	mg/kg	6.14		12.5		31.6		32.8					
Potassium	mg/kg	560		1070		4370		4680					
Selenium	mg/kg	1.13 U		1.37 U		2.73 U		2.75 U					
Silver	mg/kg	0.209 U		0.4 U		0.502 U		0.504 U					
Sodium	mg/kg	166		319		1380		1480					
Thallium	mg/kg	1.68 U		2.03 U		4.05 U		4.06 U					
Tin	mg/kg	2.11		2.54		6.05		6.13					
Titanium	mg/kg												
Vanadium	mg/kg	11.5		22.9		62.9		66.3					
Zinc	mg/kg	48.6		80.9		200		204					
<b>Metals - AVS/SEM</b>													
Acid Volatile Sulfide	umol/g												
Arsenic	umol/g												
Cadmium	umol/g												
Copper	umol/g												
Lead	umol/g												
Zinc	umol/g												
<b>Metals - Leachate</b>													
Lead	ug/L												
<b>Per and Polyfluorinated Organic Substances</b>													
Perfluorobutane Sulfonic Acid	mg/kg												
Perfluorobutanoic Acid	mg/kg												
Perfluorodecane Sulfonic Acid	mg/kg												
Perfluorodecanoic Acid	mg/kg												
Perfluorododecanoic Acid	mg/kg												
Perfluoroheptanoic Acid	mg/kg												
Perfluorohexane Sulfonic Acid	mg/kg												
Perfluorohexanoic Acid	mg/kg												
Perfluorononanoic Acid	mg/kg												
Perfluorooctane Sulfonamide	mg/kg												
Perfluoropentanoic Acid	mg/kg												
Perfluorotetradecanoic Acid	mg/kg												
Perfluorotridecanoic Acid	mg/kg												
Perfluoroundecanoic Acid	mg/kg												
PFOA	mg/kg												
PFOA(trial)	mg/kg												
PFOS	mg/kg												
PFOS (trial)	mg/kg												
<b>Pesticides and Herbicides</b>													
4,4'-DDD	mg/kg												
4,4'-DDE	mg/kg												
4,4'-DDT	mg/kg												
Aldrin	mg/kg												
Alpha Chlordane	mg/kg												
Alpha-BHC	mg/kg												
beta-BHC	mg/kg												
delta-BHC	mg/kg												
Dieldrin	mg/kg												
Endosulfan I	mg/kg												
Endosulfan II	mg/kg												
Endosulfan Sulfate	mg/kg												
Endrin	mg/kg												
Endrin Aldehyde	mg/kg												
Endrin Ketone	mg/kg												
Gamma Chlordane	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL								
Field Sample ID	22465057	22465058	22465060	22465061	22465063	22465064	22465065	22465066	22499337	22499338	22499339	22522848
Location ID	DER1-06	DER1-06	DER1-08	DER1-08	DER1-10	DER1-10	DER1-10	DER1-10	DER1-01	DER1-05	DER1-09	DER1-06
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50
Sample Purpose	FS	FS	FS	FS	FS	DUP	FS	DUP	FS	FS	FS	FS
Date	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009
Chemical Class	Units											
Heptachlor	mg/kg											
Heptachlor Epoxide	mg/kg											
Lindane	mg/kg											
Methoxychlor	mg/kg											
Toxaphene	mg/kg											
<b>Physical Properties</b>												
0.001 MM	% PASSING	0.5	U	1	27	17						
0.002 MM	% PASSING	0.5	U	1	30	26						
0.005 MM	% PASSING	0.5	U	2	43.5	36.5						
0.02 MM	% PASSING	0.5	U	6	71	65.5						
0.05 MM	% PASSING	1.5		12	89.5	76						
0.064 MM	% PASSING	1.5		15.5	96	74.5						
0.075 MM	% PASSING	1.6		17.8	98	73.1						
0.15 MM	% PASSING	2.4		27.9	98.2	74.9						
0.3 MM	% PASSING	11		78.9	98.7	90						
0.6 MM	% PASSING	35.9		94.6	98.8	90.6						
1.18 MM	% PASSING	52.9		98	98.9	99.2						
19 MM	% PASSING	100		100	100	100						
2.36 MM	% PASSING	68.7		98.9	98.9	99.3						
3.35 MM	% PASSING	74.5		99.5	99.5	99.7						
37.5 MM	% PASSING	100		100	100	100						
4.75 MM	% PASSING	81.9		99.7	99.7	99.8						
75 MM	% PASSING	100		100	100	100						
Density	PCF											
<b>Polychlorinated Biphenyls - TICs</b>												
1,1'-Biphenyl, 2,3-dichloro-	mg/kg											
Unknown Biphenyl	mg/kg											
<b>Polychlorinated Biphenyls</b>												
Heptachlorobiphenyl	mg/kg											
Hexachlorobiphenyl	mg/kg											
Octachlorobiphenyl	mg/kg											
PCB 1	mg/kg								0.00261	0.000316	0.000314	
PCB 10	mg/kg								0.000362	0.0000124	0.0000804	
PCB 100	mg/kg											
PCB 101	mg/kg											
PCB 102	mg/kg								0.000245	0.0000171	0.000019	
PCB 103	mg/kg								0.0000633	0.0000665	0.0000135	
PCB 104	mg/kg								0.00000855	0.00000579	0.00000119	
PCB 105	mg/kg								0.000221	0.00016	0.000155	
PCB 106	mg/kg								0.00000169	U	0.00000205	0.00000349
PCB 107	mg/kg											
PCB 107/123	mg/kg											
PCB 108	mg/kg											
PCB 109	mg/kg								0.000289	0.0000354	0.0000518	
PCB 11	mg/kg								0.000146	0.000179	0.000127	
PCB 110	mg/kg								0.000423	0.000369	0.000474	
PCB 111	mg/kg								0.00000143	U	0.00000168	0.00000171
PCB 112	mg/kg								0.0000018	U	0.00000292	U
PCB 113	mg/kg											
PCB 114	mg/kg								0.0000135	0.0000111	0.00000834	
PCB 115	mg/kg								0.0000609	0.0000049	0.00000763	
PCB 116	mg/kg											
PCB 117	mg/kg								0.0000134	0.0000132	0.0000141	
PCB 118	mg/kg								0.000369	0.000371	0.000426	
PCB 119	mg/kg											
PCB 12	mg/kg											
PCB 120	mg/kg								0.0000206	0.00000434	0.00000545	
PCB 121	mg/kg								0.00000145	U	0.00000606	0.00000429
PCB 121/95/88	mg/kg											
PCB 122	mg/kg								0.0000092	0.00000829	0.00000842	
PCB 123	mg/kg								0.00000878	0.00000979	0.00000871	
PCB 124	mg/kg											
PCB 125	mg/kg											
PCB 126	mg/kg								0.0000233	0.00000365	0.00000561	
PCB 127	mg/kg								0.00000198	U	0.00000168	0.00000344
PCB 128	mg/kg											
PCB 129	mg/kg											
PCB 129/158	mg/kg											
PCB 13	mg/kg											
PCB 130	mg/kg								0.0000331	0.000057	0.0000532	
PCB 130/164	mg/kg											
PCB 131	mg/kg								0.00000413	0.00000631	0.00000559	
PCB 132	mg/kg								0.000112	0.00019	0.000178	
PCB 133	mg/kg								0.00000975	0.0000206	0.0000187	
PCB 134	mg/kg								0.0000202	0.0000315	0.0000359	
PCB 135	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	Chemical	Units	Field Sample ID	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL								
			22465057	22465058	22465060	22465061	22465063	22465064	22465065	22465066	22499337	22499338	22499339	22522848
Location ID	Depth Interval (ft)	Sample Purpose	Date	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50
Location ID	Depth Interval (ft)	Sample Purpose	Date	FS	FS	FS	FS	FS	DUP	FS	DUP	FS	FS	FS
Location ID	Depth Interval (ft)	Sample Purpose	Date	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/21/2009	9/21/2009	9/21/2009
PCB 136	mg/kg											0.0000461	0.000101	0.000101
PCB 137	mg/kg											0.0000119	0.0000197	0.0000173
PCB 138	mg/kg													
PCB 139	mg/kg													
PCB 14	mg/kg											0.0000246	0.000119	0.0000283
PCB 140	mg/kg													
PCB 141	mg/kg											0.00006	0.000127	0.0000836
PCB 142	mg/kg											0.000000137	0.00000207	0.00000101
PCB 143	mg/kg											0.000000654	0.00000163	0.000000232
PCB 143/139	mg/kg													
PCB 144	mg/kg											0.0000155	0.000032	0.0000232
PCB 145	mg/kg											0.000000118	0.000000215	0.000000275
PCB 146	mg/kg											0.0000607	0.000113	0.000117
PCB 147	mg/kg													
PCB 148	mg/kg											0.00000153	0.00000276	0.00000406
PCB 149	mg/kg													
PCB 15	mg/kg											0.0192	0.000851	0.000347
PCB 150	mg/kg											0.00000166	0.00000297	0.00000476
PCB 151	mg/kg													
PCB 152	mg/kg											0.000000455	0.000000621	0.000000785
PCB 153	mg/kg													
PCB 154	mg/kg											0.0000128	0.0000204	0.000033
PCB 155	mg/kg											0.00000133	0.00000247	0.00000363
PCB 156	mg/kg													
PCB 157	mg/kg													
PCB 158	mg/kg											0.0000365	0.0000589	0.0000421
PCB 159	mg/kg											0.00000522	0.0000122	0.0000101
PCB 16	mg/kg											0.00761	0.000351	0.000218
PCB 160	mg/kg											0.000000101	0.000000568	0.000000194
PCB 161	mg/kg											0.000000114	0.000000187	0.00000022
PCB 162	mg/kg											0.00000297	0.00000819	0.00000519
PCB 163	mg/kg													
PCB 163/160	mg/kg													
PCB 164	mg/kg											0.0000323	0.0000557	0.0000462
PCB 165	mg/kg											0.000000149	0.000000912	0.00000118
PCB 166	mg/kg													
PCB 167	mg/kg											0.0000203	0.0000358	0.0000274
PCB 168	mg/kg													
PCB 169	mg/kg											0.000000452	0.000000719	0.000000895
PCB 17	mg/kg											0.00914	0.000388	0.00016
PCB 170	mg/kg											0.0000755	0.000162	0.000129
PCB 171	mg/kg													
PCB 172	mg/kg											0.0000183	0.0000385	0.0000333
PCB 173	mg/kg													
PCB 174	mg/kg											0.0000783	0.000167	0.000143
PCB 175	mg/kg											0.00000596	0.0000135	0.0000116
PCB 176	mg/kg											0.0000118	0.00003	0.0000241
PCB 177	mg/kg											0.0000514	0.000105	0.0000998
PCB 178	mg/kg											0.0000275	0.0000644	0.0000549
PCB 179	mg/kg											0.0000435	0.000102	0.0000889
PCB 18	mg/kg													
PCB 180	mg/kg													
PCB 181	mg/kg											0.00000849	0.00000225	0.00000192
PCB 182	mg/kg											0.00000246	0.00000236	0.00000363
PCB 182/175	mg/kg													
PCB 183	mg/kg											0.0000592	0.000114	0.000102
PCB 184	mg/kg											0.000000981	0.00000191	0.00000265
PCB 185	mg/kg											0.00000807	0.0000198	0.0000144
PCB 186	mg/kg											0.00000011	0.00000035	0.0000002
PCB 187	mg/kg											0.000134	0.000259	0.000247
PCB 188	mg/kg											0.00000256	0.00000509	0.0000067
PCB 189	mg/kg											0.0000046	0.00000986	0.00000849
PCB 19	mg/kg											0.000967	0.0000987	0.0000443
PCB 190	mg/kg											0.0000213	0.0000487	0.0000356
PCB 191	mg/kg											0.00000387	0.00000879	0.0000061
PCB 192	mg/kg											0.00000024	0.00000028	0.00000171
PCB 193	mg/kg													
PCB 194	mg/kg											0.0000594	0.000124	0.000111
PCB 195	mg/kg											0.0000194	0.0000417	0.0000358
PCB 196	mg/kg											0.0000499	0.000102	0.000101
PCB 197	mg/kg											0.00000445	0.0000104	0.0000112
PCB 198	mg/kg													
PCB 199	mg/kg													
PCB 2	mg/kg											0.000245	0.000318	0.000136
PCB 20	mg/kg													
PCB 200	mg/kg											0.000014	0.0000263	0.0000232

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	MZ-JL/TEL													
		Field Sample ID	22465057	22465058	22465060	22465061	22465063	22465064	22465065	22465066	22499337	22499338	22499339	22522848	
Chemical	Location ID	DER1-06	DER1-06	DER1-08	DER1-08	DER1-10	DER1-10	DER1-10	DER1-10	DER1-10	DER1-01	DER1-05	DER1-09	DER1-06	
Units	Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	
	Sample Purpose	FS	FS	FS	FS	FS	DUP	FS	FS	DUP	FS	FS	FS	FS	
	Date	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	
PCB 201	mg/kg										0.0000246	0.0000479	0.0000482		
PCB 202	mg/kg										0.0000556	0.00012	0.000103		
PCB 203	mg/kg										0.0000685	0.000149	0.000119		
PCB 204	mg/kg										0.00000641	0.00000216	0.00000197		
PCB 204/200	mg/kg														
PCB 205	mg/kg										0.0000402	0.0000104	0.00000806		
PCB 206	mg/kg										0.000475	0.00122	0.00105		
PCB 207	mg/kg										0.0000431	0.000102	0.000106		
PCB 208	mg/kg										0.000243	0.000623	0.000538		
PCB 209	mg/kg										0.000669	0.00173	0.00181		
PCB 21	mg/kg														
PCB 21/20	mg/kg														
PCB 22	mg/kg										0.011	0.000263	0.000127		
PCB 23	mg/kg										0.0000292	0.00000893	0.00000522		
PCB 24	mg/kg										0.000373	0.000041	0.00003		
PCB 25	mg/kg										0.00199	0.0000883	0.0000434		
PCB 26	mg/kg														
PCB 27	mg/kg										0.00131	0.0000962	0.000041		
PCB 28	mg/kg														
PCB 29	mg/kg														
PCB 3	mg/kg										0.00143	0.000447	0.000222		
PCB 30	mg/kg														
PCB 31	mg/kg										0.0267	0.000684	0.000327		
PCB 32	mg/kg										0.00644	0.00031	0.000131		
PCB 33	mg/kg														
PCB 34	mg/kg										0.0000731	0.0000207	0.0000103		
PCB 35	mg/kg										0.000594	0.000104	0.000135		
PCB 36	mg/kg										0.0000298	0.0000194	0.00001		
PCB 37	mg/kg										0.0141	0.000628	0.000412		
PCB 38	mg/kg										0.0000102	0.00000234	0.00000184		
PCB 39	mg/kg										0.0000388	0.0000371	0.0000233		
PCB 4	mg/kg										0.00748	0.000258	0.000225		
PCB 4/10	mg/kg														
PCB 40	mg/kg														
PCB 41	mg/kg										0.000991	0.0000389	0.0000221		
PCB 42	mg/kg										0.00165	0.000113	0.000116		
PCB 43	mg/kg										0.000219	0.0000159	0.0000187		
PCB 44	mg/kg														
PCB 45	mg/kg										0.000693	0.0000621	0.0000512		
PCB 46	mg/kg										0.00026	0.0000294	0.000023		
PCB 47	mg/kg														
PCB 48	mg/kg										0.00138	0.0000741	0.0000594		
PCB 49	mg/kg														
PCB 5	mg/kg										0.000604	0.0000588	0.0000536		
PCB 50	mg/kg														
PCB 51	mg/kg										0.000204	0.0000312	0.0000298		
PCB 52	mg/kg										0.00308	0.000292	0.000342		
PCB 53	mg/kg														
PCB 54	mg/kg										0.0000071	0.00000356	0.00000392		
PCB 55	mg/kg										0.000154	0.00000839	0.00000777		
PCB 56	mg/kg										0.00245	0.000201	0.00027		
PCB 57	mg/kg										0.0000301	0.00000418	0.0000113		
PCB 58	mg/kg										0.00000825	0.00000241	0.00000354		
PCB 59	mg/kg														
PCB 6	mg/kg										0.00502	0.000202	0.000141		
PCB 60	mg/kg										0.00175	0.000101	0.0000572		
PCB 61	mg/kg														
PCB 62	mg/kg														
PCB 63	mg/kg										0.000139	0.0000155	0.000015		
PCB 64	mg/kg										0.00214	0.000139	0.000136		
PCB 65	mg/kg														
PCB 65/75/62	mg/kg														
PCB 66	mg/kg										0.00392	0.000337	0.000326		
PCB 67	mg/kg										0.000187	0.0000148	0.0000192		
PCB 67/58	mg/kg														
PCB 68	mg/kg										0.00000717	0.00000392	0.00000588		
PCB 68/64	mg/kg														
PCB 69	mg/kg														
PCB 7	mg/kg										0.00103	0.0000371	0.0000123		
PCB 70	mg/kg														
PCB 71	mg/kg														
PCB 72	mg/kg										0.0000153	0.00000677	0.0000106		
PCB 73	mg/kg										0.000000148	U	0.000000241	U	0.00000191
PCB 73/46	mg/kg														
PCB 74	mg/kg														
PCB 75	mg/kg														



**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
Field Sample ID	22465057	22465058	22465060	22465061	22465063	22465064	22465065	22465066	22499337	22499338	22499339	22522848	
Location ID	DER1-06	DER1-06	DER1-08	DER1-08	DER1-10	DER1-10	DER1-10	DER1-10	DER1-01	DER1-05	DER1-09	DER1-06	
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	
Sample Purpose	FS	FS	FS	FS	FS	DUP	FS	DUP	FS	FS	FS	FS	
Date	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	
Chemical Class	Units												
<b>Polycyclic Aromatic Hydrocarbons</b>													
Acenaphthene	mg/kg	0.039	U		0.048	U		0.096	U	0.095	U		
Acenaphthylene	mg/kg	0.039	U		0.048	U		0.096	U	0.095	U		
Anthracene	mg/kg	0.039	U		0.048	U		0.12	U	0.095	U		
Benzo(A)Anthracene	mg/kg	0.039	U		0.048	U		0.38	U	0.095	U		
Benzo(B)Fluoranthene	mg/kg	0.039	U		0.048	U		0.38	U	0.11	U		
Benzo(G,H,I)Perylene	mg/kg	0.039	U		0.048	U		0.16	U	0.095	U		
Benzo(K)Fluoranthene	mg/kg	0.039	U		0.048	U		0.17	U	0.095	U		
Benzo(A)Pyrene	mg/kg	0.039	U		0.048	U		0.26	U	0.095	U		
Chrysene	mg/kg	0.039	U		0.048	U		0.81	U	0.095	U		
Dibenz(A,H)Anthracene	mg/kg	0.039	U		0.048	U		0.096	U	0.095	U		
Fluoranthene	mg/kg	0.039	U		0.048	U		0.73	U	0.12	U		
Fluorene	mg/kg	0.039	U		0.048	U		0.096	U	0.095	U		
Indeno (1,2,3-CD) Pyrene	mg/kg	0.039	U		0.048	U		0.14	U	0.095	U		
Naphthalene	mg/kg	0.039	U		0.048	U		0.096	U	0.095	U		
Phenanthrene	mg/kg	0.039	U		0.048	U		0.36	U	0.095	U		
Pyrene	mg/kg	0.05			0.048	U		0.8	U	0.16	U		
Total PAHs (Detections + 1/2 MDL)	mg/kg	0.3425			0.384	U		4.55	U	1.0075	U		
Total PAHs (Detections Only)	mg/kg	0.05			0.384	U		4.31	U	0.39	U		
<b>Semivolatile Organic Compounds - TICs</b>													
1,2,4-Trithiolane	mg/kg												
1,4-Benzenediol, 2-chloro-	mg/kg												
11H-Benzo[b]fluorene	mg/kg												
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg												
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg	10			16			38		41			
3-PENTEN-2-ONE, 4-METHYL-	mg/kg				0.23								
7H-Benz[de]anthracen-7-one	mg/kg												
9,10-Anthracenedione	mg/kg												
9-Octadecanamide, (Z)-	mg/kg												
Acetamide, 2-chloro-N-(ethox	mg/kg												
Alachlor	mg/kg												
Benzenamine, 3-methyl-	mg/kg												
Benzenamine, 4,4',4"-methy	mg/kg												
Benzenamine, 4,4"-methyleneb	mg/kg												
Benzene, 1,2,3,4-tetrachloro	mg/kg												
Benzene, 1,2,3,5-tetrachloro	mg/kg												
Benzene, 1,2,3-trichloro-	mg/kg												
Benzene, 1,3,5-trichloro-	mg/kg												
Benzene, 1,3-bis(1-methyleth	mg/kg												
Benzene, 1,4-bis(1-methyleth	mg/kg												
Benzofuran, 2,3-dihydro-	mg/kg												
CYCLIC OCTAATOMIC SULFUR	mg/kg				1.2								
Diphenyl Ether	mg/kg												
Docosane	mg/kg												
Heneicosane	mg/kg												
Hexacosane	mg/kg												
Hexadecane	mg/kg												
Hexatriacontane	mg/kg												
m-Chloroaniline	mg/kg												
N,N-Diethylaniline	mg/kg												
n-Hexadecanoic acid	mg/kg												
Nonadecane	mg/kg												
o-Chloroaniline	mg/kg												
Octacosane	mg/kg												
Octadecane	mg/kg												
Octadecane, 1-chloro-	mg/kg												
Octadecanoic acid	mg/kg												
Parachlorophenol	mg/kg												
Pentadecane	mg/kg												
Perylene	mg/kg												
Phenol, 2,5-dichloro-	mg/kg												
Phenol, 3-chloro-	mg/kg												
Phenol, 4,4'-(1-methylethyl)	mg/kg												
Tetracosane	mg/kg												
Tetradecane	mg/kg												
Tetraethylene glycol	mg/kg												
Total SVOC TICs	mg/kg												
Triacotane	mg/kg												
Tributyl phosphate	mg/kg												
Tridecanoic acid	mg/kg												
Triphenyl phosphate	mg/kg												
UNKNOWN	mg/kg	0.31			0.596666667			1.00047619		1.381578947			
Unknown acid	mg/kg												
Unknown Alcohol	mg/kg												
Unknown Aldol Condensate	mg/kg												
UNKNOWN ALKANE	mg/kg	0.66						0.45		1.294			

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-JL/TEL												
Field Sample ID	22465057	22465058	22465060	22465061	22465063	22465064	22465065	22465066	22499337	22499338	22499339	22522848	
Location ID	DER1-06	DER1-06	DER1-08	DER1-08	DER1-10	DER1-10	DER1-10	DER1-10	DER1-01	DER1-05	DER1-09	DER1-06	
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	
Sample Purpose	FS	FS	FS	FS	FS	DUP	FS	DUP	FS	FS	FS	FS	
Date	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/21/2009	9/21/2009	9/21/2009	9/24/2009	
Chemical Class	Units												
Unknown Alkene	mg/kg												
Unknown Amide	mg/kg												
Unknown Amine	mg/kg												
UNKNOWN AROMATIC	mg/kg												
Unknown Carboxylic Acid	mg/kg												
Unknown Cycloalkane	mg/kg												
Unknown Hydrocarbon	mg/kg												
Unknown Ketone	mg/kg												
Unknown PAH	mg/kg												
UNKNOWN SILOXANE	mg/kg												
<b>Semivolatile Organic Compounds</b>													
1,2,4-Trichlorobenzene	mg/kg	0.039	U		0.048	U		0.1	0.095	U			
1,2-Diphenylhydrazine	mg/kg	0.039	U		0.048	U		0.096	U	0.095	U		
1,4-Dioxane	mg/kg												
1-Naphthylamine	mg/kg	0.19	U		0.24	U		0.48	U	0.48	U		
2,3,4,6-Tetrachlorophenol	mg/kg												
2,4,5-Trichlorophenol	mg/kg												
2,4,6-Trichlorophenol	mg/kg	0.039	U		0.048	U		0.096	U	0.095	U		
2,4-Dichlorophenol	mg/kg	0.039	U		0.048	U		0.096	U	0.095	U		
2,4-Dimethylphenol	mg/kg	0.078	U		0.096	U		0.19	U	0.19	U		
2,4-Dinitrophenol	mg/kg	0.78	U		0.96	U		1.9	U	1.9	U		
2,4-Dinitrotoluene	mg/kg	0.078	U		0.096	U		0.24	U	0.19	U		
2,6-Dinitrotoluene	mg/kg	0.039	U		0.048	U		0.096	U	0.095	U		
2-Chloronaphthalene	mg/kg	0.039	U		0.048	U		0.096	U	0.095	U		
2-Chlorophenol	mg/kg	0.039	U		0.048	U		0.096	U	0.095	U		
2-Methylnaphthalene	mg/kg												
2-Methylphenol (O-Cresol)	mg/kg												
2-Naphthylamine	mg/kg	0.19	U		0.24	U		0.48	U	0.48	U		
2-Nitroaniline	mg/kg												
2-Nitrophenol	mg/kg	0.039	U		0.048	U		0.096	U	0.095	U		
3,3'-Dichlorobenzidine	mg/kg	0.12	U		0.14	U		0.29	U	0.29	U		
3,3'-Dimethylbenzidine	mg/kg												
3-Nitroaniline	mg/kg												
4,6-Dinitro-2-Methylphenol	mg/kg	0.19	U		0.24	U		0.48	U	0.48	U		
4-Aminobiphenyl	mg/kg	0.19	U		0.24	U		0.48	U	0.48	U		
4-Bromophenyl Phenyl Ether	mg/kg	0.039	U		0.048	U		0.096	U	0.095	U		
4-Chloro-3-Methylphenol	mg/kg	0.078	U		0.096	U		0.19	U	0.19	U		
4-Chloroaniline	mg/kg	0.078	U		0.096	U		0.19	U	0.19	U		
4-Chlorophenyl Phenyl Ether	mg/kg	0.039	U		0.048	U		0.096	U	0.095	U		
4-Methylphenol (P-Cresol)	mg/kg												
4-Nitroaniline	mg/kg												
4-Nitrophenol	mg/kg	0.19	U		0.24	U		0.48	U	0.48	U		
Acetophenone	mg/kg												
Aniline	mg/kg	0.19	U		0.24	U		0.48	U	0.48	U		
Benzidine	mg/kg	1.4	U		1.7	U		3.4	U	3.3	U		
Biphenyl	mg/kg												
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg												
Bis(2-Chloroethoxy)Methane	mg/kg	0.039	U		0.048	U		0.096	U	0.095	U		
Bis(2-Chloroethyl)Ether	mg/kg	0.039	U		0.048	U		0.096	U	0.095	U		
Bis(2-Chloroisopropyl)Ether	mg/kg	0.039	U		0.048	U		0.096	U	0.095	U		
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.078	U		0.096	U		0.21	U	0.19	U		
Butyl Benzyl Phthalate	mg/kg	0.078	U		0.096	U		0.19	U	0.19	U		
Carbazole	mg/kg	0.039	U		0.048	U		0.096	U	0.095	U		
Dibenzofuran	mg/kg												
Diethyl Phthalate	mg/kg	0.078	U		0.096	U		0.19	U	0.19	U		
Dimethyl Phthalate	mg/kg	0.078	U		0.096	U		0.19	U	0.19	U		
Di-N-Butyl Phthalate	mg/kg	0.078	U		0.096	U		0.41	U	0.19	U		
Diphenyl Ether	mg/kg												
Hexachlorobenzene	mg/kg	0.049	U		0.048	U		0.096	U	0.095	U		
Hexachlorobutadiene	mg/kg	0.078	U		0.096	U		0.19	U	0.19	U		
Hexachlorocyclopentadiene	mg/kg	0.19	U		0.24	U		0.48	U	0.48	U		
Hexachloroethane	mg/kg	0.039	U		0.048	U		0.096	U	0.095	U		
Hexachloropropylene	mg/kg												
Isophorone	mg/kg	0.039	U		0.048	U		0.096	U	0.095	U		
N-Dioctyl Phthalate	mg/kg	0.078	U		0.096	U		0.19	U	0.19	U		
Nitrobenzene	mg/kg	0.039	U		0.048	U		0.096	U	0.095	U		
N-Nitrosodimethylamine	mg/kg	0.078	U		0.096	U		0.19	U	0.19	U		
N-Nitrosodi-N-Propylamine	mg/kg	0.039	U		0.048	U		0.096	U	0.095	U		
N-Nitrosodiphenylamine	mg/kg	0.039	U		0.048	U		0.2	U	0.095	U		
O-Toluidine	mg/kg	0.23	U		0.29	U		0.57	U	0.57	U		
Parathion	mg/kg												
Pentachlorobenzene	mg/kg												
Pentachlorophenol	mg/kg	0.19	U		0.24	U		0.48	U	0.48	U		
Phenol	mg/kg	0.039	U		0.048	U		0.096	U	0.095	U		
<b>Volatile Organic Compounds - TICs</b>													
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg												

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
Field Sample ID	22465057	22465058	22465060	22465061	22465063	22465064	22465065	22465066	22499337	22499338	22499339	22522848	
Location ID	DER1-06	DER1-06	DER1-08	DER1-08	DER1-10	DER1-10	DER1-10	DER1-10	DER1-01	DER1-05	DER1-09	DER1-06	
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	
Sample Purpose	FS	FS	FS	FS	FS	DUP	FS	DUP	FS	FS	FS	FS	
Date	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/21/2009	9/21/2009	9/21/2009	9/21/2009	
Chemical Class	Units												
1-Butene	mg/kg												
1-Heptene	mg/kg												
1-Propene, 2-methyl-	mg/kg												
Azulene	mg/kg												
BENZENE, 1,2,4-TRICHLORO-	mg/kg												
BENZENE, 1,2-DICHLORO-	mg/kg												
BENZENE, 1,4-DICHLORO-	mg/kg												
Camphene	mg/kg												
CYCLOHEXANE	mg/kg												
Cyclohexane, methyl-	mg/kg												
Cyclotrisiloxane, hexamethyl	mg/kg												
Diphenyl Ether	mg/kg												
Ethane, 1,1,2,2-tetrachloro-	mg/kg												
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg												
Ethane, 1,2-dichloro-1,1-dif	mg/kg												
Ethene, 1,1-dichloro-2,2-dif	mg/kg												
Hexane, 2-methyl-	mg/kg												
Hexane, 3-methyl-	mg/kg												
METHANE, CHLOROFLUORO-	mg/kg												
Naphthalene	mg/kg												
NAPHTHALENE, 2-METHYL-	mg/kg												
Nonanal	mg/kg												
Norflurane	mg/kg												
Pentane, 2,3-dimethyl-	mg/kg												
Phenol, 4-(1,1,3,3-tetrameth	mg/kg												
Propene	mg/kg												
Sulfur dioxide	mg/kg												
Tridecane	mg/kg												
UNKNOWN	mg/kg				0.056928571								
UNKNOWN ALICYCLIC	mg/kg												
UNKNOWN ALIPHATIC	mg/kg												
UNKNOWN ALKANE	mg/kg												
UNKNOWN AROMATIC	mg/kg		0.02										
UNKNOWN SILOXANE	mg/kg		0.013		0.012		0.043	0.069					
<b>Volatile Organic Compounds</b>													
1,1,1,2-Tetrachloroethane	mg/kg												
1,1,1-Trichloroethane	mg/kg		0.001 U		0.001 U		0.005 U	0.004 U					
1,1,1-Trichlorotrifluoroethane	mg/kg												
1,1,2,2-Tetrachloroethane	mg/kg		0.001 U		0.001 U		0.005 U	0.004 U					
1,1,2-Trichloroethane	mg/kg		0.001 U		0.001 U		0.005 U	0.004 U					
1,1,2-Trichlorotrifluoroethane	mg/kg		0.002 U		0.002 U		0.01 U	0.007 U					
1,1,2-Trifluoroethane	mg/kg												
1,1-Dichloro-1-Fluoroethane	mg/kg												
1,1-Dichloroethane	mg/kg		0.001 U		0.001 U		0.005 U	0.004 U					
1,1-Dichloroethene	mg/kg		0.001 U		0.001 U		0.005 U	0.004 U					
1,1-Dichloropropene	mg/kg												
1,2,4-Trimethylbenzene	mg/kg												
1,2-Dibromoethane (EDB)	mg/kg												
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg												
1,2-Dichloro-1-Fluoroethane	mg/kg												
1,2-Dichlorobenzene	mg/kg	0.039 U		0.048 U		0.34	0.11						
1,2-Dichloroethane	mg/kg		0.001 U		0.001 U		0.005 U	0.004 U					
1,2-Dichloroethene	mg/kg												
1,2-Dichloropropane	mg/kg		0.001 U		0.001 U		0.005 U	0.004 U					
1,2-Dichlorotetrafluoroethane	mg/kg												
1,3,5-Trimethylbenzene	mg/kg												
1,3-Dichlorobenzene	mg/kg	0.039 U		0.048 U		0.096 U	0.095 U						
1,4-Dichlorobenzene	mg/kg	0.039 U		0.048 U		0.43	0.095 U						
1-Chloro-1,1-Difluoroethane	mg/kg												
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg												
2-Chloro-1,1,1-Trifluoroethane	mg/kg												
2-Chloroethyl Vinyl Ether	mg/kg												
2-Chlorotoluene	mg/kg												
2-Hexanone	mg/kg												
4-Chlorotoluene	mg/kg												
4-Isopropyltoluene	mg/kg												
Acetone	mg/kg		0.075		0.019		0.19	0.11					
Acrolein	mg/kg		0.024 U		0.023 U		0.097 U	0.071 U					
Acrylonitrile	mg/kg		0.005 U		0.005 U		0.019 U	0.014 U					
Benzene	mg/kg		0.0008		0.0006 U		0.002 U	0.002 U					
Bromodichloromethane	mg/kg		0.001 U		0.001 U		0.005 U	0.004 U					
Bromoform	mg/kg		0.001 U		0.001 U		0.005 U	0.004 U					
Carbon Disulfide	mg/kg		0.004		0.002		0.029	0.054					
Carbon Tetrachloride	mg/kg		0.001 U		0.001 U		0.005 U	0.004 U					
CFC-1113	mg/kg												
Chlorobenzene	mg/kg		0.072		0.006		0.006	0.007					

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone		MZ-JL/TEL											
	Field Sample ID	Location ID	22465057	22465058	22465060	22465061	22465063	22465064	22465065	22465066	22499337	22499338	22499339	22522848
Chemical	Depth Interval (ft)	Sample Purpose	DER1-06	DER1-06	DER1-08	DER1-08	DER1-10	DER1-10	DER1-10	DER1-10	DER1-01	DER1-05	DER1-09	DER1-06
Units	Date		0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50
			FS	FS	FS	FS	FS	DUP	FS	DUP	FS	FS	FS	FS
			9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/24/2009	9/21/2009	9/21/2009	9/21/2009	9/24/2009
Chlorodibromomethane	mg/kg			0.001 U		0.001 U			0.005 U	0.004 U				
Chlorodifluoromethane	mg/kg													
Chlorofluoromethane	mg/kg													
Chloroform	mg/kg			0.001 U		0.001 U			0.005 U	0.004 U				
Chloropentafluoroethane	mg/kg													
cis-1,2-Dichloroethene	mg/kg			0.001 U		0.001 U			0.005 U	0.004 U				
cis-1,3-Dichloropropene	mg/kg			0.001 U		0.001 U			0.005 U	0.004 U				
Cumene	mg/kg													
Dichlorodifluoromethane	mg/kg			0.002 U		0.002 U			0.01 U	0.007 U				
Dichlorofluoromethane	mg/kg			0.002 U		0.002 U			0.01 U	0.007 U				
Ethane	ug/L													
Ethyl Chloride	mg/kg			0.002 U		0.002 U			0.01 U	0.007 U				
Ethylbenzene	mg/kg			0.001 U		0.001 U			0.005 U	0.004 U				
Fluoromethane	mg/kg													
Hexane	mg/kg													
Isobutyl Alcohol	mg/kg													
Meta- And Para-Xylene	mg/kg													
Methacrylonitrile	mg/kg													
Methane	ug/L													
Methyl Bromide	mg/kg			0.002 U		0.002 U			0.01 U	0.007 U				
Methyl Chloride	mg/kg			0.002 U		0.002 U			0.01 U	0.007 U				
Methyl Ethyl Ketone	mg/kg													
Methyl Isobutyl Ketone	mg/kg													
Methyl Methacrylate	mg/kg													
Methyl Tertiary Butyl Ether	mg/kg													
Methylene Chloride	mg/kg			0.003		0.002 U			0.01 U	0.008				
N-Butylbenzene	mg/kg													
N-Propylbenzene	mg/kg													
Ortho-Xylene	mg/kg													
Propionitrile	mg/kg													
sec-Butylbenzene	mg/kg													
Styrene	mg/kg													
tert-Butylbenzene	mg/kg													
Tetrachloroethene	mg/kg			0.001 U		0.001 U			0.005 U	0.004 U				
Tetrahydrofuran	mg/kg													
Toluene	mg/kg			0.001 U		0.001 U			0.005 U	0.006				
trans-1,2-Dichloroethene	mg/kg			0.001 U		0.001 U			0.005 U	0.004 U				
trans-1,3-Dichloropropene	mg/kg			0.001 U		0.001 U			0.005 U	0.004 U				
Trichloroethene	mg/kg			0.001 U		0.001 U			0.005 U	0.004 U				
Trichlorofluoromethane	mg/kg			0.002 U		0.002 U			0.01 U	0.007 U				
Vinyl Chloride	mg/kg			0.001 U		0.001 U			0.005 U	0.004 U				
Vinyl Fluoride	mg/kg													
Xylenes	mg/kg			0.001 U		0.001 U			0.005 U	0.004 U				

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	MZ-JL/TEL	MZ-JL/TEL											
Field Sample ID	23615969	23615971	23615974	23615975	23624152	23624154	23633165	23633167	23659380	23659382	23659384	23681946	
Location ID	DER2-01-SD	DER2-09-SD	DER2-01-SD	DER2-09-SD	DER2-03-SD	DER2-07-SD	DER2-06-SD	DER2-08-SD	DER2-05-SD	DER2-31-SD	DER2-30-SD	DER2-03-SD	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	
Sample Purpose	FS												
Date	4/21/2010	4/21/2010	4/21/2010	4/21/2010	4/22/2010	4/22/2010	4/23/2010	4/23/2010	4/27/2010	4/27/2010	4/27/2010	4/27/2010	
Chemical Class	Units												
<b>General Chemistry</b>													
Black Carbon	mg/kg	155	1950			565	665	505	1030	6870	2585		
Percent Moisture	%	19.5	69.5	15.5	59.3	63.1	47.6	44.7	66.2	25.6	36.9	11.2	48.9
Percent Solids	%												
Total Organic Carbon	mg/kg	1600	22750	1465	20250	15200	13700	9280	18950	7765	7920	470	11200
<b>Metals</b>													
Aluminum	mg/kg	20100	26000			17100	24800	21900	24800	9730	6850		
Antimony	mg/kg	6.21 U	3.28 U			2.66 U	1.83 U	1.77 U	2.96 U	1.79 U	1.57 U		
Arsenic	mg/kg	5.58	13.2			9.71	11.2	9.11	14.8	18.7	3.92		
Barium	mg/kg	169	128			95.7	83.1	66.4	110	51.5	34.6		
Beryllium	mg/kg	2.12	1.33			1.18	1.39	1.2	1.59	0.591	0.486		
Cadmium	mg/kg	0.174 U	0.921			0.728	0.461	1.06	1.67	1.03	0.355		
Calcium	mg/kg	10100	5130			3130	2340	3250	4340	1450	1400		
Chromium	mg/kg	243	65.7			43.2	61.3	49	60.1	60.4	40.3		
Cobalt	mg/kg	8.78	16.2			10.5	12.4	10.9	14.8	9.84	5.1		
Copper	mg/kg	19.4	35.6			22	25.2	15.1	29.7	68	23.1		
Iron	mg/kg	26900	41100			25500	30300	28500	36200	20900	19600		
Lead	mg/kg	16.9	54.4			35.4	40.3	24.1	45.1	191	154		
Magnesium	mg/kg	2070	8120			4980	6680	5840	7480	2510	2160		
Manganese	mg/kg	141	1720			935	564	495	1440	219	255		
Mercury	mg/kg	0.0261	0.222			0.142	0.22	0.0561	0.144	9.6	0.672		
Nickel	mg/kg	29.5	36.7			23	27.4	23.9	31.1	20.5	12.7		
Potassium	mg/kg	1830	4360			3110	3800	3310	4220	1540	1100		
Selenium	mg/kg	1.22 U	3.21 U			2.6 U	2.41 U	1.74 U	4.41 U	1.32 U	1.54 U		
Silver	mg/kg	0.224 U	0.59 U			0.547 U	0.33 U	0.438 U	0.891 U	0.242 U	0.282 U		
Sodium	mg/kg	807	991			710	637	431	940	338	373		
Thallium	mg/kg	2.05	4.75 U			3.85 U	2.56 U	2.57 U	4.29 U	1.95 U	2.28 U		
Tin	mg/kg	2.94	8.44			6.36	6.77	4.38	7.11	6.41	5.12		
Titanium	mg/kg												
Vanadium	mg/kg	44.7	65.6			41.2	51.5	46.7	60.2	26.6	25.7		
Zinc	mg/kg	36.8	235			150	105	80	201	270	88.6		
<b>Metals - AVS/SEM</b>													
Acid Volatile Sulfide	umol/g												
Arsenic	umol/g												
Cadmium	umol/g												
Copper	umol/g												
Lead	umol/g												
Zinc	umol/g												
<b>Metals - Leachate</b>													
Lead	ug/L												
<b>Per and Polyfluorinated Organic Substances</b>													
Perfluorobutane Sulfonic Acid	mg/kg												
Perfluorobutanoic Acid	mg/kg												
Perfluorodecane Sulfonic Acid	mg/kg												
Perfluorodecanoic Acid	mg/kg												
Perfluorododecanoic Acid	mg/kg												
Perfluoroheptanoic Acid	mg/kg												
Perfluorohexane Sulfonic Acid	mg/kg												
Perfluorohexanoic Acid	mg/kg												
Perfluorononanoic Acid	mg/kg												
Perfluorooctane Sulfonamide	mg/kg												
Perfluoropentanoic Acid	mg/kg												
Perfluorotetradecanoic Acid	mg/kg												
Perfluorotridecanoic Acid	mg/kg												
Perfluoroundecanoic Acid	mg/kg												
PFOA	mg/kg												
PFOA(trial)	mg/kg												
PFOS	mg/kg												
PFOS (trial)	mg/kg												
<b>Pesticides and Herbicides</b>													
4,4'-DDD	mg/kg												
4,4'-DDE	mg/kg												
4,4'-DDT	mg/kg												
Aldrin	mg/kg												
Alpha Chlordane	mg/kg												
Alpha-BHC	mg/kg												
beta-BHC	mg/kg												
delta-BHC	mg/kg												
Dieldrin	mg/kg												
Endosulfan I	mg/kg												
Endosulfan II	mg/kg												
Endosulfan Sulfate	mg/kg												
Endrin	mg/kg												
Endrin Aldehyde	mg/kg												
Endrin Ketone	mg/kg												
Gamma Chlordane	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL		
Field Sample ID	23615969	23615971	23615974	23615975	23624152	23624154	23633165	23633167	23659380	23659382	23659384	23681946			
Location ID	DER2-01-SD	DER2-09-SD	DER2-01-SD	DER2-09-SD	DER2-03-SD	DER2-07-SD	DER2-06-SD	DER2-08-SD	DER2-05-SD	DER2-31-SD	DER2-30-SD	DER2-03-SD			
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00			
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS			
Date	4/21/2010	4/21/2010	4/21/2010	4/21/2010	4/22/2010	4/22/2010	4/23/2010	4/23/2010	4/27/2010	4/27/2010	4/27/2010	4/22/2010			
Chemical Class	Units														
Heptachlor	mg/kg														
Heptachlor Epoxide	mg/kg														
Lindane	mg/kg														
Methoxychlor	mg/kg														
Toxaphene	mg/kg														
<b>Physical Properties</b>															
0.001 MM	% PASSING	0.5	U	18			2.5	14.5	3	25	0.5	U	0.5	U	
0.002 MM	% PASSING	0.5	U	24			3	21	7	32	1.5		1.5		
0.005 MM	% PASSING	0.5	U	34			5	33	11	41	4.5		2	2.5	
0.02 MM	% PASSING	0.5		61			10.5	61	17.5	66	7.5		3.5	4.5	
0.05 MM	% PASSING	0.5		82			13	73	34	82.5	12		7	8	
0.064 MM	% PASSING	0.5		90			13.5	75	43.5	89.5	14		9.5	9.5	
0.075 MM	% PASSING	0.85		94.1			13.8	76.9	48.9	93.2	14.7		10.6	11	
0.15 MM	% PASSING	1.3		97.5			14.7	88.6	57.5	96.8	20.4		15.4	15.1	
0.3 MM	% PASSING	7		97.9			22.4	96.1	62.4	98.1	52		40.2	37.9	
0.6 MM	% PASSING	43.5		98.3			28.9	97.4	64.4	98.5	62.1		68.7	64.4	
1.18 MM	% PASSING	70.5		98.6			32.9	97.7	65.3	98.9	68		79.7	73.8	
19 MM	% PASSING	100		100			64.4	100	84.1	100	93.8		100	100	
2.36 MM	% PASSING	84.1		99			36.2	98.1	67.2	99.2	76		85.9	78.5	
3.35 MM	% PASSING	90.2		99.5			38.6	98.9	72.1	99.6	80.2		89	80.3	
37.5 MM	% PASSING	100		100			80.2	100	100	100	100		100	100	
4.75 MM	% PASSING	93.9		99.7			41.9	99.4	77.3	99.8	85.6		92.3	82.9	
75 MM	% PASSING	100		100			100	100	100	100	100		100	100	
Density	PCF														
<b>Polychlorinated Biphenyls - TICs</b>															
1,1'-Biphenyl, 2,3-dichloro-	mg/kg														
Unknown Biphenyl	mg/kg														
<b>Polychlorinated Biphenyls</b>															
Heptachlorobiphenyl	mg/kg														
Hexachlorobiphenyl	mg/kg														
Octachlorobiphenyl	mg/kg														
PCB 1	mg/kg	0.0000335					0.00063	0.000013							
PCB 10	mg/kg	0.00000537					0.0000103	0.00000842							
PCB 100	mg/kg														
PCB 101	mg/kg														
PCB 102	mg/kg	0.00000444					0.0000952	0.00000814							
PCB 103	mg/kg	0.0000017					0.0000354	0.00000469							
PCB 104	mg/kg	0.00000159	U				0.00000248	0.00000238	U						
PCB 105	mg/kg	0.0000222					0.000398	0.0000455							
PCB 106	mg/kg	0.00000184	U				0.000000318	0.000000315	U						
PCB 107	mg/kg														
PCB 107/123	mg/kg														
PCB 108	mg/kg														
PCB 109	mg/kg	0.00000541					0.0000845	0.0000134							
PCB 11	mg/kg	0.0000164					0.000335	0.0000569							
PCB 110	mg/kg	0.0000865					0.00151	0.000166							
PCB 111	mg/kg	0.00000205	U				0.00000377	0.000000352	U						
PCB 112	mg/kg	0.00000018	U				0.000000314	0.000000308	U						
PCB 113	mg/kg														
PCB 114	mg/kg	0.000000997					0.0000217	0.00000189							
PCB 115	mg/kg	0.000000181	U				0.000000267	0.000000031	U						
PCB 116	mg/kg														
PCB 117	mg/kg	0.00000216					0.0000245	0.00000377							
PCB 118	mg/kg	0.0000605					0.0011	0.000136							
PCB 119	mg/kg														
PCB 12	mg/kg														
PCB 120	mg/kg	0.000000176	U				0.0000114	0.00000235							
PCB 121	mg/kg	0.000000209	U				0.000000353	0.000000358	U						
PCB 121/95/88	mg/kg														
PCB 122	mg/kg	0.000000984					0.000014	0.00000175							
PCB 123	mg/kg	0.00000151					0.0000199	0.00000227							
PCB 124	mg/kg														
PCB 125	mg/kg														
PCB 126	mg/kg	0.000000247	U				0.00000073	0.00000113							
PCB 127	mg/kg	0.000000198	U				0.000000384	0.000000367	U						
PCB 128	mg/kg														
PCB 129	mg/kg														
PCB 129/158	mg/kg														
PCB 13	mg/kg														
PCB 130	mg/kg	0.0000101					0.000118	0.0000173							
PCB 130/164	mg/kg														
PCB 131	mg/kg	0.00000121					0.0000157	0.00000175							
PCB 132	mg/kg	0.0000359					0.000484	0.0000534							
PCB 133	mg/kg	0.00000418					0.0000515	0.00000837							
PCB 134	mg/kg	0.00000717					0.000104	0.0000113							
PCB 135	mg/kg														

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
Chemical	Field Sample ID	23615969	23615971	23615974	23615975	23624152	23624154	23633165	23633167	23659380	23659382	23659384	23681946
Units	Location ID	DER2-01-SD	DER2-09-SD	DER2-01-SD	DER2-09-SD	DER2-03-SD	DER2-07-SD	DER2-06-SD	DER2-08-SD	DER2-05-SD	DER2-31-SD	DER2-30-SD	DER2-03-SD
	Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00
	Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
	Date	4/21/2010	4/21/2010	4/21/2010	4/21/2010	4/22/2010	4/22/2010	4/23/2010	4/23/2010	4/27/2010	4/27/2010	4/27/2010	4/22/2010
PCB 136	mg/kg	0.0000186				0.000258	0.0000335						
PCB 137	mg/kg	0.0000045				0.0000612	0.0000658						
PCB 138	mg/kg												
PCB 139	mg/kg												
PCB 14	mg/kg	0.00000247				0.000142	0.00000158						
PCB 140	mg/kg												
PCB 141	mg/kg	0.0000185				0.000231	0.0000241						
PCB 142	mg/kg	0.000000212 U				0.00000037 U	0.000000304 U						
PCB 143	mg/kg	0.000000182 U				0.000000335 U	0.000000262 U						
PCB 143/139	mg/kg												
PCB 144	mg/kg	0.00000535				0.0000672	0.0000672						
PCB 145	mg/kg	0.00000149 U				0.00000021 U	0.000000222 U						
PCB 146	mg/kg	0.0000266				0.000235	0.0000348						
PCB 147	mg/kg												
PCB 148	mg/kg	0.00000105				0.000016	0.00000274						
PCB 149	mg/kg												
PCB 15	mg/kg	0.0000257				0.000699	0.0000846						
PCB 150	mg/kg	0.00000107				0.0000177	0.00000364						
PCB 151	mg/kg												
PCB 152	mg/kg	0.000000125 U				0.00000249	0.000000187 U						
PCB 153	mg/kg												
PCB 154	mg/kg	0.00000507				0.0000847	0.0000152						
PCB 155	mg/kg	0.000000599				0.00000775	0.00000214						
PCB 156	mg/kg												
PCB 157	mg/kg												
PCB 158	mg/kg	0.0000112				0.000133	0.0000141						
PCB 159	mg/kg	0.00000192				0.000000524 U	0.000000613 U						
PCB 16	mg/kg	0.00000634				0.000104	0.00000971						
PCB 160	mg/kg	0.00000016 U				0.000000285 U	0.00000023 U						
PCB 161	mg/kg	0.000000146 U				0.000000242 U	0.00000021 U						
PCB 162	mg/kg	0.000000327 U				0.0000117	0.00000253						
PCB 163	mg/kg												
PCB 163/160	mg/kg												
PCB 164	mg/kg	0.0000101				0.000103	0.0000151						
PCB 165	mg/kg	0.000000148 U				0.00000257	0.000000212 U						
PCB 166	mg/kg												
PCB 167	mg/kg	0.00000702				0.0000681	0.0000099						
PCB 168	mg/kg												
PCB 169	mg/kg	0.000000351 U				0.000000731 U	0.00000067 U						
PCB 17	mg/kg	0.00000637				0.000111	0.0000142						
PCB 170	mg/kg	0.0000354				0.000328	0.0000463						
PCB 171	mg/kg												
PCB 172	mg/kg	0.00000805				0.000067	0.0000103						
PCB 173	mg/kg												
PCB 174	mg/kg	0.0000396				0.00037	0.0000515						
PCB 175	mg/kg	0.0000024				0.0000216	0.00000307						
PCB 176	mg/kg	0.00000641				0.000058	0.00000942						
PCB 177	mg/kg	0.000026				0.000213	0.0000398						
PCB 178	mg/kg	0.0000119				0.000112	0.0000205						
PCB 179	mg/kg	0.0000204				0.000203	0.0000322						
PCB 18	mg/kg												
PCB 180	mg/kg												
PCB 181	mg/kg	0.000000238 U				0.0000033	0.000000464 U						
PCB 182	mg/kg	0.000000661				0.00000655	0.00000146						
PCB 182/175	mg/kg												
PCB 183	mg/kg	0.0000236				0.000197	0.0000356						
PCB 184	mg/kg	0.00000043				0.00000543	0.00000126						
PCB 185	mg/kg	0.00000478				0.000041	0.000000511 U						
PCB 186	mg/kg	0.00000012 U				0.000000219 U	0.000000241 U						
PCB 187	mg/kg	0.0000613				0.000586	0.0000857						
PCB 188	mg/kg	0.00000119				0.0000175	0.00000475						
PCB 189	mg/kg	0.00000189				0.0000162	0.00000258						
PCB 19	mg/kg	0.00000353				0.0000373	0.00000644						
PCB 190	mg/kg	0.0000084				0.0000714	0.00000969						
PCB 191	mg/kg	0.00000158				0.0000142	0.00000181						
PCB 192	mg/kg	0.000000191 U				0.000000529 U	0.000000372 U						
PCB 193	mg/kg												
PCB 194	mg/kg	0.0000299				0.000235	0.0000388						
PCB 195	mg/kg	0.00000965				0.0000814	0.0000121						
PCB 196	mg/kg	0.0000215				0.000229	0.0000409						
PCB 197	mg/kg	0.00000212				0.0000311	0.00000524						
PCB 198	mg/kg												
PCB 199	mg/kg												
PCB 2	mg/kg	0.0000202				0.000501	0.0000339						
PCB 20	mg/kg												
PCB 200	mg/kg	0.00000466				0.0000226	0.00000386						

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	Field Sample ID	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
			23615969	23615971	23615974	23615975	23624152	23624154	23633165	23633167	23659380	23659382	23659384
Chemical	Location ID	Depth Interval (ft)	Sample Purpose	Date	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50
Units					FS	FS	FS	FS	FS	FS	FS	FS	FS
					4/21/2010	4/21/2010	4/21/2010	4/21/2010	4/22/2010	4/22/2010	4/23/2010	4/23/2010	4/27/2010
PCB 201					0.00001				0.000121	0.0000219			
PCB 202					0.0000315				0.000268	0.0000514			
PCB 203					0.0000374				0.000311	0.0000516			
PCB 204					0.000000417				0.00000385	0.00000292	U		
PCB 204/200													
PCB 205					0.00000193				0.0000151	0.00000258			
PCB 206					0.000324				0.00264	0.000597			
PCB 207					0.0000236				0.000206	0.0000514			
PCB 208					0.000157				0.00132	0.000291			
PCB 209					0.000493				0.0051	0.00112			
PCB 21													
PCB 21/20													
PCB 22					0.0000656				0.000153	0.0000137			
PCB 23					0.00000242				0.0000198	0.00000267	U		
PCB 24					0.00000922				0.0000371	0.0000019	U		
PCB 25					0.00000303				0.0000936	0.0000119			
PCB 26													
PCB 27					0.00000376				0.0000391	0.00000653			
PCB 28													
PCB 29													
PCB 3					0.0000379				0.000538	0.0000236			
PCB 30													
PCB 31					0.0000173				0.000447	0.00005			
PCB 32					0.00000741				0.0000937	0.0000142			
PCB 33													
PCB 34					0.000000518				0.0000341	0.000000727			
PCB 35					0.00000424				0.000122	0.00000778			
PCB 36					0.00000689				0.0000283	0.00000123			
PCB 37					0.0000201				0.000543	0.0000451			
PCB 38					0.00000158	U			0.00000365	0.00000256	U		
PCB 39					0.00000174				0.00006	0.00000152			
PCB 4					0.0000106				0.000355	0.0000134			
PCB 4/10													
PCB 40													
PCB 41					0.0000011				0.0000182	0.0000018			
PCB 42					0.0000107				0.000203	0.0000025			
PCB 43					0.00000845				0.0000174	0.0000019			
PCB 44													
PCB 45					0.00000372				0.0000595	0.00000753			
PCB 46					0.00000239				0.0000337	0.00000472			
PCB 47													
PCB 48					0.00000336				0.0000641	0.00000711			
PCB 49													
PCB 5					0.00000181				0.0000835	0.00000944			
PCB 50													
PCB 51					0.0000049				0.0000774	0.0000091			
PCB 52					0.0000394				0.000874	0.0000932			
PCB 53													
PCB 54					0.00000632				0.00000811	0.00000136			
PCB 55					0.00000395				0.00000597	0.00000378	U		
PCB 56					0.000014				0.00024	0.0000351			
PCB 57					0.00000196	U			0.0000177	0.00000668			
PCB 58					0.00000017	U			0.00000683	0.000001			
PCB 59													
PCB 6					0.00000576				0.000299	0.00000814			
PCB 60					0.00000415				0.0000755	0.00000948			
PCB 61													
PCB 62													
PCB 63					0.00000135				0.0000287	0.00000343			
PCB 64					0.0000152				0.000269	0.0000357			
PCB 65													
PCB 65/75/62													
PCB 66					0.0000291				0.000554	0.0000896			
PCB 67					0.00000105				0.0000422	0.00000326			
PCB 67/58													
PCB 68					0.000000919				0.0000211	0.00000279			
PCB 68/64													
PCB 69													
PCB 7					0.00000101				0.0000438	0.00000143			
PCB 70													
PCB 71													
PCB 72					0.000000784				0.0000263	0.00000314			
PCB 73					0.000000359				0.00000848	0.00000199	U		
PCB 73/46													
PCB 74													
PCB 75													

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
Chemical	Field Sample ID	23615969	23615971	23615974	23615975	23624152	23624154	23633165	23633167	23659380	23659382	23659384	23681946
Units	Location ID	DER2-01-SD	DER2-09-SD	DER2-01-SD	DER2-09-SD	DER2-03-SD	DER2-07-SD	DER2-06-SD	DER2-08-SD	DER2-05-SD	DER2-31-SD	DER2-30-SD	DER2-03-SD
	Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00
	Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
	Date	4/21/2010	4/21/2010	4/21/2010	4/21/2010	4/22/2010	4/22/2010	4/23/2010	4/23/2010	4/27/2010	4/27/2010	4/27/2010	4/22/2010
PCB 76	mg/kg												
PCB 77	mg/kg	0.0000861				0.000151	0.000251						
PCB 78	mg/kg	0.00000189 U				0.00000776 U	0.00000387 U						
PCB 79	mg/kg	0.00000887				0.000145	0.000023						
PCB 8	mg/kg	0.0000143				0.000553	0.0000202						
PCB 80	mg/kg	0.00000189 U				0.00000772 U	0.00000387 U						
PCB 81	mg/kg	0.00000213 U				0.00000409	0.00000436 U						
PCB 82	mg/kg	0.0000814				0.000122	0.000139						
PCB 83	mg/kg	0.0000445				0.0000735	0.0000803						
PCB 83/125/112	mg/kg												
PCB 84	mg/kg	0.0000193				0.000332	0.0000381						
PCB 85	mg/kg												
PCB 86	mg/kg												
PCB 86/109	mg/kg												
PCB 87	mg/kg												
PCB 87/111	mg/kg												
PCB 88	mg/kg	0.00000293 U				0.00000481 U	0.00000502 U						
PCB 89	mg/kg	0.0000101				0.0000136	0.0000149						
PCB 89/84	mg/kg												
PCB 9	mg/kg	0.0000364				0.000192	0.0000222						
PCB 90	mg/kg												
PCB 91	mg/kg	0.0000165				0.000293	0.0000376						
PCB 92	mg/kg	0.0000179				0.000324	0.0000345						
PCB 93	mg/kg												
PCB 94	mg/kg	0.0000118				0.000019	0.0000215						
PCB 95	mg/kg	0.0000637				0.000976	0.000111						
PCB 96	mg/kg	0.0000106				0.0000133	0.0000187						
PCB 97	mg/kg												
PCB 98	mg/kg	0.0000024 U				0.00000446 U	0.00000412 U						
PCB 99	mg/kg	0.0000422				0.000651	0.000994						
PCB-100/93	mg/kg	0.0000257				0.0000431	0.0000566						
PCB-107/124	mg/kg	0.0000265				0.0000378	0.0000466						
PCB-108/119/86/97/125/87	mg/kg	0.0000498				0.000836	0.000926						
PCB-113/90/101	mg/kg	0.0000831				0.00137	0.00017						
PCB-116/85	mg/kg	0.0000134				0.000227	0.000231						
PCB-128/166	mg/kg	0.0000172				0.000215	0.000302						
PCB-13/12	mg/kg	0.000018				0.000792	0.000183						
PCB-139/140	mg/kg	0.0000256				0.0000325	0.0000426						
PCB-147/149	mg/kg	0.000105				0.00136	0.000176						
PCB-151/135	mg/kg	0.0000476				0.000658	0.0000738						
PCB-153/168	mg/kg	0.000148				0.00151	0.000216						
PCB-156/157	mg/kg	0.0000119				0.000161	0.0000197						
PCB-163/138/129	mg/kg	0.000142				0.00166	0.000213						
PCB-171/173	mg/kg	0.0000113				0.000107	0.0000148						
PCB-180/193	mg/kg	0.0000902				0.000758	0.000109						
PCB-198/199	mg/kg	0.0000841				0.000772	0.000144						
PCB-21/33	mg/kg	0.0000112				0.000298	0.0000206						
PCB-26/29	mg/kg	0.0000483				0.000174	0.0000165						
PCB-28/20	mg/kg	0.0000246				0.000569	0.0000838						
PCB-30/18	mg/kg	0.0000151				0.000248	0.0000268						
PCB-44/47/65	mg/kg	0.0000374				0.000841	0.0000905						
PCB-50/53	mg/kg	0.0000864				0.000109	0.0000159						
PCB-59/62/75	mg/kg	0.0000426				0.0000716	0.0000925						
PCB-61/70/74/76	mg/kg	0.000042				0.000891	0.000122						
PCB-69/49	mg/kg	0.0000238				0.000668	0.0000698						
PCB-71/40	mg/kg	0.000016				0.000461	0.0000399						
PCB-90/101	mg/kg												
Pentachlorobiphenyl	mg/kg												
Tetrachlorobiphenyl	mg/kg												
Total Decachlorobiphenyls (congeners)	mg/kg												
Total Dichlorobiphenyls (congeners)	mg/kg	0.0001				0.0035	0.000209						
Total Heptachlorobiphenyls (congeners)	mg/kg	0.000356				0.0032	0.000479						
Total Hexachlorobiphenyls (congeners)	mg/kg	0.000645				0.00767	0.000996						
Total Monochlorobiphenyls (congeners)	mg/kg	0.0000916				0.00167	0.0000705						
Total Nonachlorobiphenyls (congeners)	mg/kg	0.000504				0.00417	0.00094						
Total Octachlorobiphenyls (congeners)	mg/kg	0.000233				0.00209	0.000373						
Total PCB (congeners)	mg/kg	0.0033496				0.04514	0.0062595						
Total Pentachlorobiphenyls (congeners)	mg/kg	0.000513				0.00866	0.00103						
Total Tetrachlorobiphenyls (congeners)	mg/kg	0.000276				0.00586	0.000711						
Total Trichlorobiphenyls (congeners)	mg/kg	0.000138				0.00322	0.000331						
Trichlorobiphenyl (total)	mg/kg												
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>													
Benzo[e]pyrene	mg/kg												
Chrysene, 1-methyl-	mg/kg												
Naphthalene, 1-methyl-	mg/kg												
Pyrene, 1-methyl-	mg/kg												

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL					
Field Sample ID	23615969	23615971	23615974	23615975	23624152	23624154	23633165	23633167	23659380	23659382	23659384	23681946						
Location ID	DER2-01-SD	DER2-09-SD	DER2-01-SD	DER2-09-SD	DER2-03-SD	DER2-07-SD	DER2-06-SD	DER2-08-SD	DER2-05-SD	DER2-31-SD	DER2-30-SD	DER2-03-SD						
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00						
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS						
Date	4/21/2010	4/21/2010	4/21/2010	4/21/2010	4/22/2010	4/22/2010	4/23/2010	4/23/2010	4/27/2010	4/27/2010	4/27/2010	4/27/2010						
Chemical Class	Units																	
<b>Polycyclic Aromatic Hydrocarbons</b>																		
Acenaphthene	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.09	U	0.63	
Acenaphthylene	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.09	U	0.11	U
Anthracene	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.09	U	0.24	
Benzo(A)Anthracene	mg/kg	0.041	U	0.16			0.09	U	0.3		0.18	U	0.3	U	0.35		0.11	
Benzo(B)Fluoranthene	mg/kg	0.041	U	0.23			0.12		0.28		0.18	U	0.3	U	0.26		0.11	U
Benzo(G,H,I)Perylene	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.14		0.11	U
Benzo(K)Fluoranthene	mg/kg	0.041	U	0.11			0.09	U	0.19	U	0.18	U	0.3	U	0.09	U	0.11	U
Benzo(A)Pyrene	mg/kg	0.041	U	0.17			0.09	U	0.24		0.18	U	0.3	U	0.25		0.13	
Chrysene	mg/kg	0.041	U	0.24			0.096		0.24		0.18	U	0.3	U	0.52		0.13	
Dibenz(A,H)Anthracene	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.09	U	0.11	U
Fluoranthene	mg/kg	0.041	U	0.27			0.14		0.33		0.18	U	0.3	U	0.44		0.39	
Fluorene	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.09	U	0.4	
Indeno (1,2,3-CD) Pyrene	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.093		0.11	U
Naphthalene	mg/kg	0.041	U	0.12			0.09	U	0.19	U	0.18	U	0.3	U	0.1		0.63	
Phenanthrene	mg/kg	0.041	U	0.17			0.09	U	0.24		0.18	U	0.3	U	0.12		1.2	
Pyrene	mg/kg	0.041	U	0.32			0.17		0.39		0.18	U	0.3	U	0.78		0.39	
Total PAHs (Detections + 1/2 MDL)	mg/kg	0.328	U	2.175			1.066		2.875		1.44	U	2.4	U	3.323		4.58	
Total PAHs (Detections Only)	mg/kg	0.328	U	1.79			0.526		2.02		1.44	U	2.4	U	3.053		4.25	
<b>Semivolatile Organic Compounds - TICs</b>																		
1,2,4-Trithiolane	mg/kg																	
1,4-Benzenediol, 2-chloro-	mg/kg																	
11H-Benzo[b]fluorene	mg/kg																	
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg																	
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg	1.4							6.2		5.1		9.8					
3-PENTEN-2-ONE, 4-METHYL-	mg/kg																	
7H-Benz[de]anthracen-7-one	mg/kg																	
9,10-Anthracenedione	mg/kg																	
9-Octadecenamido, (Z)-	mg/kg																	
Acetamide, 2-chloro-N-(ethox	mg/kg																	
Alachlor	mg/kg																	
Benzenamine, 3-methyl-	mg/kg																	
Benzenamine, 4,4',4"-methy	mg/kg																	
Benzenamine, 4,4"-methyleneb	mg/kg																	
Benzene, 1,2,3,4-tetrachloro	mg/kg																	
Benzene, 1,2,3,5-tetrachloro	mg/kg																	
Benzene, 1,2,3-trichloro-	mg/kg																	
Benzene, 1,3,5-trichloro-	mg/kg																	
Benzene, 1,3-bis(1-methyleth	mg/kg																	
Benzene, 1,4-bis(1-methyleth	mg/kg																	
Benzofuran, 2,3-dihydro-	mg/kg																	
CYCLIC OCTAATOMIC SULFUR	mg/kg																	
Diphenyl Ether	mg/kg													0.57				
Docosane	mg/kg																	
Heneicosane	mg/kg																	
Hexacosane	mg/kg																	
Hexadecane	mg/kg																	
Hexatriacontane	mg/kg																	
m-Chloroaniline	mg/kg																	
N,N-Diethylaniline	mg/kg																	
n-Hexadecanoic acid	mg/kg																	
Nonadecane	mg/kg																	
o-Chloroaniline	mg/kg																	
Octacosane	mg/kg																	
Octadecane	mg/kg																	
Octadecane, 1-chloro-	mg/kg																	
Octadecanoic acid	mg/kg																	
Parachlorophenol	mg/kg																	
Pentadecane	mg/kg																	
Perylene	mg/kg																	
Phenol, 2,5-dichloro-	mg/kg																	
Phenol, 3-chloro-	mg/kg																	
Phenol, 4,4'-(1-methylethyl)	mg/kg																	
Tetracosane	mg/kg																	
Tetradecane	mg/kg																	
Tetraethylene glycol	mg/kg																	
Total SVOC TICs	mg/kg																	
Triacontane	mg/kg																	
Tributyl phosphate	mg/kg																	
Tridecanoic acid	mg/kg																	
Triphenyl phosphate	mg/kg																	
UNKNOWN	mg/kg	0.698333333		2.54			4.8084		2.371875		2.0375		3.630434783		1.835909091		1.168181818	
Unknown acid	mg/kg																	
Unknown Alcohol	mg/kg																	
Unknown Aldol Condensate	mg/kg																	
UNKNOWN ALKANE	mg/kg								2.85				7.8		0.59			

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-JL/TEL	MZ-JL/TEL																
Field Sample ID	23615969	23615971	23615974	23615975	23624152	23624154	23633165	23633167	23659380	23659382	23659384	23681946						
Location ID	DER2-01-SD	DER2-09-SD	DER2-01-SD	DER2-09-SD	DER2-03-SD	DER2-07-SD	DER2-06-SD	DER2-08-SD	DER2-05-SD	DER2-31-SD	DER2-30-SD	DER2-03-SD						
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00						
Sample Purpose	FS																	
Date	4/21/2010	4/21/2010	4/21/2010	4/21/2010	4/22/2010	4/22/2010	4/23/2010	4/23/2010	4/27/2010	4/27/2010	4/27/2010	4/22/2010						
Chemical Class	Units																	
Unknown Alkene	mg/kg																	
Unknown Amide	mg/kg																	
Unknown Amine	mg/kg																	
UNKNOWN AROMATIC	mg/kg																	
Unknown Carboxylic Acid	mg/kg																	
Unknown Cycloalkane	mg/kg																	
Unknown Hydrocarbon	mg/kg																	
Unknown Ketone	mg/kg																	
Unknown PAH	mg/kg																	
UNKNOWN SILOXANE	mg/kg																	
<b>Semivolatile Organic Compounds</b>																		
1,2,4-Trichlorobenzene	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	27	0.11	U	
1,2-Diphenylhydrazine	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.09	U	0.11	U
1,4-Dioxane	mg/kg																	
1-Naphthylamine	mg/kg	0.21	U	0.55	U		0.45	U	0.95	U	0.9	U	1.5	U	0.45	U	0.53	U
2,3,4,6-Tetrachlorophenol	mg/kg																	
2,4,5-Trichlorophenol	mg/kg																	
2,4,6-Trichlorophenol	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.09	U	0.11	U
2,4-Dichlorophenol	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.09	U	0.11	U
2,4-Dimethylphenol	mg/kg	0.083	U	0.22	U		0.18	U	0.38	U	0.36	U	0.59	U	0.18	U	0.21	U
2,4-Dinitrophenol	mg/kg	0.83	U	2.2	U		1.8	U	3.8	U	3.6	U	5.9	U	1.8	U	2.1	U
2,4-Dinitrotoluene	mg/kg	0.083	U	0.22	U		0.18	U	0.38	U	0.36	U	0.59	U	0.18	U	0.21	U
2,6-Dinitrotoluene	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.09	U	0.11	U
2-Chloronaphthalene	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.09	U	0.11	U
2-Chlorophenol	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.09	U	0.11	U
2-Methylnaphthalene	mg/kg																	
2-Methylphenol (O-Cresol)	mg/kg																	
2-Naphthylamine	mg/kg	0.21	U	0.55	U		0.45	U	0.95	U	0.9	U	1.5	U	0.45	U	0.53	U
2-Nitroaniline	mg/kg																	
2-Nitrophenol	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.09	U	0.11	U
3,3'-Dichlorobenzidine	mg/kg	0.12	U	0.33	U		0.27	U	0.57	U	0.54	U	0.89	U	0.27	U	0.32	U
3,3'-Dimethylbenzidine	mg/kg																	
3-Nitroaniline	mg/kg																	
4,6-Dinitro-2-Methylphenol	mg/kg	0.21	U	0.55	U		0.45	U	0.95	U	0.9	U	1.5	U	0.45	U	0.53	U
4-Aminobiphenyl	mg/kg	0.21	U	0.55	U		0.45	U	0.95	U	0.9	U	1.5	U	0.45	U	0.53	U
4-Bromophenyl Phenyl Ether	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.09	U	0.11	U
4-Chloro-3-Methylphenol	mg/kg	0.083	U	0.22	U		0.18	U	0.38	U	0.36	U	0.59	U	0.18	U	0.21	U
4-Chloroaniline	mg/kg	0.083	U	0.22	U		0.18	U	0.38	U	0.36	U	0.59	U	0.18	U	1.1	U
4-Chlorophenyl Phenyl Ether	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.09	U	0.11	U
4-Methylphenol (P-Cresol)	mg/kg																	
4-Nitroaniline	mg/kg																	
4-Nitrophenol	mg/kg	0.21	U	0.55	U		0.45	U	0.95	U	0.9	U	1.5	U	0.45	U	0.53	U
Acetophenone	mg/kg																	
Aniline	mg/kg	0.21	U	0.55	U		0.45	U	0.95	U	0.9	U	1.5	U	0.45	U	0.53	U
Benzidine	mg/kg	1.4	U	3.6	U		3.2	U	6.7	U	6.3	U	10	U	3.1	U	3.7	U
Biphenyl	mg/kg																	
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg																	
Bis(2-Chloroethoxy)Methane	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.09	U	0.11	U
Bis(2-Chloroethyl)Ether	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.09	U	0.11	U
Bis(2-Chloroisopropyl)Ether	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.09	U	0.11	U
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.083	U	0.41	U		0.25	U	0.38	U	0.36	U	0.59	U	0.18	U	0.33	U
Butyl Benzyl Phthalate	mg/kg	0.083	U	0.22	U		0.18	U	0.38	U	0.36	U	0.59	U	0.18	U	0.21	U
Carbazole	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.09	U	0.11	U
Dibenzofuran	mg/kg																	
Diethyl Phthalate	mg/kg	0.083	U	0.22	U		0.18	U	0.38	U	0.36	U	0.59	U	0.18	U	0.21	U
Dimethyl Phthalate	mg/kg	0.083	U	0.22	U		0.18	U	0.38	U	0.36	U	0.59	U	0.18	U	0.21	U
Di-N-Butyl Phthalate	mg/kg	0.083	U	0.22	U		0.18	U	0.38	U	0.36	U	0.59	U	0.18	U	0.21	U
Diphenyl Ether	mg/kg																	
Hexachlorobenzene	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.09	U	0.11	U
Hexachlorobutadiene	mg/kg	0.083	U	0.22	U		0.18	U	0.38	U	0.36	U	0.59	U	0.18	U	0.21	U
Hexachlorocyclopentadiene	mg/kg	0.21	U	0.55	U		0.45	U	0.95	U	0.9	U	1.5	U	0.45	U	0.53	U
Hexachloroethane	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.09	U	0.11	U
Hexachloropropylene	mg/kg																	
Isophorone	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.09	U	0.11	U
N-Dioctyl Phthalate	mg/kg	0.083	U	0.22	U		0.18	U	0.66	U	0.36	U	0.59	U	0.18	U	0.21	U
Nitrobenzene	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.09	U	0.11	U
N-Nitrosodimethylamine	mg/kg	0.083	U	0.22	U		0.18	U	0.38	U	0.36	U	0.59	U	0.18	U	0.21	U
N-Nitrosodi-N-Propylamine	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.09	U	0.11	U
N-Nitrosodiphenylamine	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.09	U	0.11	U
O-Toluidine	mg/kg	0.25	U	0.66	U		0.54	U	1.1	U	1.1	U	1.8	U	0.54	U	0.63	U
Parathion	mg/kg																	
Pentachlorobenzene	mg/kg																	
Pentachlorophenol	mg/kg	0.21	U	0.55	U		0.45	U	0.95	U	0.9	U	1.5	U	0.45	U	0.53	U
Phenol	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.09	U	0.11	U
<b>Volatile Organic Compounds - TICs</b>																		
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg																	

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-JL/TEL	MZ-JL/TEL															
Field Sample ID	23615969	23615971	23615974	23615975	23624152	23624154	23633165	23633167	23659380	23659382	23659384	23681946					
Location ID	DER2-01-SD	DER2-09-SD	DER2-01-SD	DER2-09-SD	DER2-03-SD	DER2-07-SD	DER2-06-SD	DER2-08-SD	DER2-05-SD	DER2-31-SD	DER2-30-SD	DER2-03-SD					
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00					
Sample Purpose	FS																
Date	4/21/2010	4/21/2010	4/21/2010	4/21/2010	4/22/2010	4/22/2010	4/23/2010	4/23/2010	4/27/2010	4/27/2010	4/27/2010	4/27/2010					
Chemical Class	Units																
1-Butene	mg/kg																
1-Heptene	mg/kg																
1-Propene, 2-methyl-	mg/kg																
Azulene	mg/kg																
BENZENE, 1,2,4-TRICHLORO-	mg/kg																
BENZENE, 1,2-DICHLORO-	mg/kg																
BENZENE, 1,4-DICHLORO-	mg/kg																
Camphene	mg/kg																
CYCLOHEXANE	mg/kg																
Cyclohexane, methyl-	mg/kg																
Cyclotrisiloxane, hexamethyl	mg/kg																
Diphenyl Ether	mg/kg																
Ethane, 1,1,2,2-tetrachloro-	mg/kg																
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg																
Ethane, 1,2-dichloro-1,1-dif	mg/kg																
Ethene, 1,1-dichloro-2,2-dif	mg/kg																
Hexane, 2-methyl-	mg/kg																
Hexane, 3-methyl-	mg/kg																
METHANE, CHLOROFLUORO-	mg/kg																
Naphthalene	mg/kg																
NAPHTHALENE, 2-METHYL-	mg/kg																
Nonanal	mg/kg																
Norflurane	mg/kg																
Pentane, 2,3-dimethyl-	mg/kg																
Phenol, 4-(1,1,3,3-tetrameth	mg/kg																
Propene	mg/kg																
Sulfur dioxide	mg/kg																
Tridecane	mg/kg																
UNKNOWN	mg/kg										0.0115						
UNKNOWN ALICYCLIC	mg/kg																
UNKNOWN ALIPHATIC	mg/kg																
UNKNOWN ALKANE	mg/kg																
UNKNOWN AROMATIC	mg/kg																
UNKNOWN SILOXANE	mg/kg			0.01	0.0195						0.0055	0.1165					
<b>Volatile Organic Compounds</b>																	
1,1,1,2-Tetrachloroethane	mg/kg																
1,1,1-Trichloroethane	mg/kg			0.001	U	0.004	U					0.0008	U	0.004	U		
1,1,1-Trichlorotrifluoroethane	mg/kg																
1,1,2,2-Tetrachloroethane	mg/kg			0.001	U	0.004	U					0.0008	U	0.004	U		
1,1,2-Trichloroethane	mg/kg			0.001	U	0.004	U					0.0008	U	0.004	U		
1,1,2-Trichlorotrifluoroethane	mg/kg			0.002	U	0.007	U					0.002	U	0.008	U		
1,1,2-Trifluoroethane	mg/kg																
1,1-Dichloro-1-Fluoroethane	mg/kg																
1,1-Dichloroethane	mg/kg			0.001	U	0.004	U					0.0008	U	0.004	U		
1,1-Dichloroethene	mg/kg			0.001	U	0.004	U					0.0008	U	0.004	U		
1,1-Dichloropropene	mg/kg																
1,2,4-Trimethylbenzene	mg/kg																
1,2-Dibromoethane (EDB)	mg/kg																
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg																
1,2-Dichloro-1-Fluoroethane	mg/kg																
1,2-Dichlorobenzene	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	5.5	0.2	
1,2-Dichloroethane	mg/kg			0.001	U	0.004	U							0.0008	U	0.004	U
1,2-Dichloroethene	mg/kg																
1,2-Dichloropropane	mg/kg			0.001	U	0.004	U							0.0008	U	0.004	U
1,2-Dichlorotetrafluoroethane	mg/kg																
1,3,5-Trimethylbenzene	mg/kg																
1,3-Dichlorobenzene	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	0.24	0.11	U
1,4-Dichlorobenzene	mg/kg	0.041	U	0.11	U		0.09	U	0.19	U	0.18	U	0.3	U	2.5	0.11	U
1-Chloro-1,1-Difluoroethane	mg/kg																
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg																
2-Chloro-1,1,1-Trifluoroethane	mg/kg																
2-Chloroethyl Vinyl Ether	mg/kg																
2-Chlorotoluene	mg/kg																
2-Hexanone	mg/kg																
4-Chlorotoluene	mg/kg																
4-Isopropyltoluene	mg/kg																
Acetone	mg/kg			0.007	U	0.055								0.006	U	0.064	
Acrolein	mg/kg			0.019	U	0.074	U							0.017	U	0.084	U
Acrylonitrile	mg/kg			0.004	U	0.015	U							0.003	U	0.017	U
Benzene	mg/kg			0.0005	U	0.002	U							0.14		0.002	U
Bromodichloromethane	mg/kg			0.001	U	0.004	U							0.0008	U	0.004	U
Bromoform	mg/kg			0.001	U	0.004	U							0.0008	U	0.004	U
Carbon Disulfide	mg/kg			0.001	U	0.007								0.0009		0.011	
Carbon Tetrachloride	mg/kg			0.001	U	0.004	U							0.0008	U	0.004	U
CFC-1113	mg/kg																
Chlorobenzene	mg/kg			0.001	U	0.004	U							0.17		0.004	U

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-JL/TEL	MZ-JL/TEL													
Field Sample ID	23615969	23615971	23615974	23615975	23624152	23624154	23633165	23633167	23659380	23659382	23659384	23681946			
Location ID	DER2-01-SD	DER2-09-SD	DER2-01-SD	DER2-09-SD	DER2-03-SD	DER2-07-SD	DER2-06-SD	DER2-08-SD	DER2-05-SD	DER2-31-SD	DER2-30-SD	DER2-03-SD			
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00			
Sample Purpose	FS														
Date	4/21/2010	4/21/2010	4/21/2010	4/21/2010	4/22/2010	4/22/2010	4/23/2010	4/23/2010	4/27/2010	4/27/2010	4/27/2010	4/22/2010			
Chemical Class	Units														
Chlorodibromomethane	mg/kg			0.001	U	0.004	U					0.0008	U	0.004	U
Chlorodifluoromethane	mg/kg														
Chlorofluoromethane	mg/kg														
Chloroform	mg/kg			0.001	U	0.004	U					0.0008	U	0.004	U
Chloropentafluoroethane	mg/kg														
cis-1,2-Dichloroethene	mg/kg			0.001	U	0.004	U					0.0008	U	0.004	U
cis-1,3-Dichloropropene	mg/kg			0.001	U	0.004	U					0.0008	U	0.004	U
Cumene	mg/kg														
Dichlorodifluoromethane	mg/kg			0.002	U	0.007	U					0.002	U	0.008	U
Dichlorofluoromethane	mg/kg			0.002	U	0.007	U					0.002	U	0.008	U
Ethane	ug/L														
Ethyl Chloride	mg/kg			0.002	U	0.007	U					0.002	U	0.008	U
Ethylbenzene	mg/kg			0.001	U	0.004	U					0.0008	U	0.004	U
Fluoromethane	mg/kg														
Hexane	mg/kg														
Isobutyl Alcohol	mg/kg														
Meta- And Para-Xylene	mg/kg														
Methacrylonitrile	mg/kg														
Methane	ug/L														
Methyl Bromide	mg/kg			0.002	U	0.007	U					0.002	U	0.008	U
Methyl Chloride	mg/kg			0.002	U	0.007	U					0.002	U	0.008	U
Methyl Ethyl Ketone	mg/kg														
Methyl Isobutyl Ketone	mg/kg														
Methyl Methacrylate	mg/kg														
Methyl Tertiary Butyl Ether	mg/kg														
Methylene Chloride	mg/kg			0.002	U	0.007	U					0.002	U	0.008	U
N-Butylbenzene	mg/kg														
N-Propylbenzene	mg/kg														
Ortho-Xylene	mg/kg														
Propionitrile	mg/kg														
sec-Butylbenzene	mg/kg														
Styrene	mg/kg														
tert-Butylbenzene	mg/kg														
Tetrachloroethene	mg/kg			0.001	U	0.004	U					0.0008	U	0.004	U
Tetrahydrofuran	mg/kg														
Toluene	mg/kg			0.001	U	0.004	U					0.0008	U	0.004	U
trans-1,2-Dichloroethene	mg/kg			0.001	U	0.004	U					0.0008	U	0.004	U
trans-1,3-Dichloropropene	mg/kg			0.001	U	0.004	U					0.0008	U	0.004	U
Trichloroethene	mg/kg			0.001	U	0.004	U					0.0008	U	0.004	U
Trichlorofluoromethane	mg/kg			0.002	U	0.007	U					0.002	U	0.008	U
Vinyl Chloride	mg/kg			0.001	U	0.004	U					0.0008	U	0.004	U
Vinyl Fluoride	mg/kg														
Xylenes	mg/kg			0.001	U	0.004	U					0.0008	U	0.004	U

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-JL/TEL	MZ-JL/TEL											
Field Sample ID	23681947	23683235	23683256	23683302	23687884	23687885	23687886	23687887	23687889	23687890	23687895	23687896	
Location ID	DER2-07-SD	DER2-05-SD	DER2-31-SD	DER2-30-SD	DER2-10-SD	DER2-10-SD	DER2-10-SD	DER2-10-SD	DER2-11-SD	DER2-11-SD	DER2-12-SD	DER2-12-SD	
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	DUP	FS	FS	FS	FS	
Date	4/22/2010	4/27/2010	4/27/2010	4/27/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	
Chemical Class	Units												
<b>General Chemistry</b>													
Black Carbon	mg/kg				470	4025	3710			2215		3855	
Percent Moisture	%	39	18.1	16.9	26.2	61	60.7	49	59.7	66.9	60.2	64.9	57.9
Percent Solids	%												
Total Organic Carbon	mg/kg	12300	1555	1025	4270	19500	19300	19750	17000	21000	20350	19850	20000
<b>Metals</b>													
Aluminum	mg/kg				4840	22000	24200			24100		27300	
Antimony	mg/kg				1.36 U	2.56 U	2.49 U			2.99 U		2.85 U	
Arsenic	mg/kg				3.17	10.5	11.2			11.8		12.7	
Barium	mg/kg				28.7	92.6	90.6			107		125	
Beryllium	mg/kg				0.321	1.21	1.14			1.18		1.43	
Cadmium	mg/kg				0.271	0.682	0.654			0.769		1.13	
Calcium	mg/kg				972	4030	4200			4530		5400	
Chromium	mg/kg				24.4	53.8	58			58.2		66.9	
Cobalt	mg/kg				3.71	12.5	13.4			14.2		17.9	
Copper	mg/kg				14	27.1	28.4			30.3		45.1	
Iron	mg/kg				12100	32700	35200			35600		42100	
Lead	mg/kg				33	39.2	41.2			46.6		62.5	
Magnesium	mg/kg				1250	7020	7850			7620		7870	
Manganese	mg/kg				152	1270	1360			1410		1500	
Mercury	mg/kg				0.367	0.123	0.135			0.163		0.208	
Nickel	mg/kg				8.31	29.3	31.5			32.2		41.3	
Potassium	mg/kg				790	3880	4170			4120		4270	
Selenium	mg/kg				1.33 U	2.51 U	2.44 U			2.93 U		2.79 U	
Silver	mg/kg				0.244 U	0.462 U	0.449 U			0.538 U		0.513 U	
Sodium	mg/kg				120	1120	1160			1000		649	
Thallium	mg/kg				1.96 U	3.75	4.03			4.34 U		4.21	
Tin	mg/kg				3.93	6.43	7.24			7.16		9.87	
Titanium	mg/kg												
Vanadium	mg/kg				15.8	54.5	60.1			59.8		69.7	
Zinc	mg/kg				58	175	187			201		284	
<b>Metals - AVS/SEM</b>													
Acid Volatile Sulfide	umol/g												
Arsenic	umol/g												
Cadmium	umol/g												
Copper	umol/g												
Lead	umol/g												
Zinc	umol/g												
<b>Metals - Leachate</b>													
Lead	ug/L												
<b>Per and Polyfluorinated Organic Substances</b>													
Perfluorobutane Sulfonic Acid	mg/kg												
Perfluorobutanoic Acid	mg/kg												
Perfluorodecane Sulfonic Acid	mg/kg												
Perfluorodecanoic Acid	mg/kg												
Perfluorododecanoic Acid	mg/kg												
Perfluoroheptanoic Acid	mg/kg												
Perfluorohexane Sulfonic Acid	mg/kg												
Perfluorohexanoic Acid	mg/kg												
Perfluorononanoic Acid	mg/kg												
Perfluorooctane Sulfonamide	mg/kg												
Perfluoropentanoic Acid	mg/kg												
Perfluorotetradecanoic Acid	mg/kg												
Perfluorotridecanoic Acid	mg/kg												
Perfluoroundecanoic Acid	mg/kg												
PFOA	mg/kg												
PFOA(trial)	mg/kg												
PFOS	mg/kg												
PFOS (trial)	mg/kg												
<b>Pesticides and Herbicides</b>													
4,4'-DDD	mg/kg												
4,4'-DDE	mg/kg												
4,4'-DDT	mg/kg												
Aldrin	mg/kg												
Alpha Chlordane	mg/kg												
Alpha-BHC	mg/kg												
beta-BHC	mg/kg												
delta-BHC	mg/kg												
Dieldrin	mg/kg												
Endosulfan I	mg/kg												
Endosulfan II	mg/kg												
Endosulfan Sulfate	mg/kg												
Endrin	mg/kg												
Endrin Aldehyde	mg/kg												
Endrin Ketone	mg/kg												
Gamma Chlordane	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL								
Field Sample ID	23681947	23683235	23683256	23683302	23687884	23687885	23687886	23687887	23687889	23687890	23687895	23687896
Location ID	DER2-07-SD	DER2-05-SD	DER2-31-SD	DER2-30-SD	DER2-10-SD	DER2-10-SD	DER2-10-SD	DER2-10-SD	DER2-11-SD	DER2-11-SD	DER2-12-SD	DER2-12-SD
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00
Sample Purpose	FS	FS	FS	FS	FS	DUP	FS	DUP	FS	FS	FS	FS
Date	4/22/2010	4/27/2010	4/27/2010	4/27/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010
Chemical Class	Units											
Heptachlor	mg/kg											
Heptachlor Epoxide	mg/kg											
Lindane	mg/kg											
Methoxychlor	mg/kg											
Toxaphene	mg/kg											
<b>Physical Properties</b>												
0.001 MM	% PASSING					27	25		16			15.5
0.002 MM	% PASSING					34	30.5		23			23
0.005 MM	% PASSING					43	39.5		35			35
0.02 MM	% PASSING					57	62.5		64			65
0.05 MM	% PASSING					79.5	81		83			82.5
0.064 MM	% PASSING					88.5	87.5		91			89
0.075 MM	% PASSING					93.5	91.2		94.7			92.6
0.15 MM	% PASSING					96.9	96.1		97.8			96.6
0.3 MM	% PASSING					97.7	97.1		98.2			97.4
0.6 MM	% PASSING					98.2	97.7		98.4			97.9
1.18 MM	% PASSING					98.8	98.5		98.7			98.5
19 MM	% PASSING					100	100		100			100
2.36 MM	% PASSING					99.4	99.3		98.9			99.3
3.35 MM	% PASSING					99.7	99.6		99.2			99.7
37.5 MM	% PASSING					100	100		100			100
4.75 MM	% PASSING					99.8	99.8		99.4			99.8
75 MM	% PASSING					100	100		100			100
Density	PCF											
<b>Polychlorinated Biphenyls - TICs</b>												
1,1'-Biphenyl, 2,3-dichloro-	mg/kg											
Unknown Biphenyl	mg/kg											
<b>Polychlorinated Biphenyls</b>												
Heptachlorobiphenyl	mg/kg											
Hexachlorobiphenyl	mg/kg											
Octachlorobiphenyl	mg/kg											
PCB 1	mg/kg								0.000261			
PCB 10	mg/kg								0.0000129			
PCB 100	mg/kg											
PCB 101	mg/kg											
PCB 102	mg/kg								0.0000929			
PCB 103	mg/kg								0.0000462			
PCB 104	mg/kg								0.00000476			
PCB 105	mg/kg								0.000526			
PCB 106	mg/kg								0.000000359	U		
PCB 107	mg/kg											
PCB 107/123	mg/kg											
PCB 108	mg/kg											
PCB 109	mg/kg								0.000137			
PCB 11	mg/kg								0.000504			
PCB 110	mg/kg								0.00193			
PCB 111	mg/kg								0.00000616			
PCB 112	mg/kg								0.000000352	U		
PCB 113	mg/kg											
PCB 114	mg/kg								0.0000276			
PCB 115	mg/kg								0.000000353	U		
PCB 116	mg/kg											
PCB 117	mg/kg								0.0000484			
PCB 118	mg/kg								0.00152			
PCB 119	mg/kg											
PCB 12	mg/kg											
PCB 120	mg/kg								0.0000191			
PCB 121	mg/kg								0.000000408	U		
PCB 121/95/88	mg/kg											
PCB 122	mg/kg								0.0000205			
PCB 123	mg/kg								0.0000297			
PCB 124	mg/kg											
PCB 125	mg/kg											
PCB 126	mg/kg								0.00000933			
PCB 127	mg/kg								0.000000401	U		
PCB 128	mg/kg											
PCB 129	mg/kg											
PCB 129/158	mg/kg											
PCB 13	mg/kg											
PCB 130	mg/kg								0.00018			
PCB 130/164	mg/kg											
PCB 131	mg/kg								0.0000224			
PCB 132	mg/kg								0.000685			
PCB 133	mg/kg								0.0000795			
PCB 134	mg/kg								0.000142			
PCB 135	mg/kg											

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Sediment Analytical Results Summary  
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Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-JL/TEL											
Field Sample ID	23681947	23683235	23683256	23683302	23687884	23687885	23687886	23687887	23687889	23687890	23687895	23687896
Location ID	DER2-07-SD	DER2-05-SD	DER2-31-SD	DER2-30-SD	DER2-10-SD	DER2-10-SD	DER2-10-SD	DER2-10-SD	DER2-11-SD	DER2-11-SD	DER2-12-SD	DER2-12-SD
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00
Sample Purpose	FS	FS	FS	FS	FS	DUP	FS	DUP	FS	FS	FS	FS
Date	4/22/2010	4/27/2010	4/27/2010	4/27/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010
Chemical Class	Units											
PCB 136	mg/kg								0.000423			
PCB 137	mg/kg								0.0000726			
PCB 138	mg/kg											
PCB 139	mg/kg											
PCB 14	mg/kg								0.0000165			
PCB 140	mg/kg											
PCB 141	mg/kg								0.000306			
PCB 142	mg/kg								0.00000454	U		
PCB 143	mg/kg								0.00000039	U		
PCB 143/139	mg/kg											
PCB 144	mg/kg								0.0000906			
PCB 145	mg/kg								0.0000111			
PCB 146	mg/kg								0.000341			
PCB 147	mg/kg											
PCB 148	mg/kg								0.0000232			
PCB 149	mg/kg											
PCB 15	mg/kg								0.000848			
PCB 150	mg/kg								0.0000332			
PCB 151	mg/kg											
PCB 152	mg/kg								0.00000332			
PCB 153	mg/kg											
PCB 154	mg/kg								0.000132			
PCB 155	mg/kg								0.0000162			
PCB 156	mg/kg											
PCB 157	mg/kg											
PCB 158	mg/kg								0.000179			
PCB 159	mg/kg								0.00000871	U		
PCB 16	mg/kg								0.000159			
PCB 160	mg/kg								0.00000343	U		
PCB 161	mg/kg								0.00000313	U		
PCB 162	mg/kg								0.0000197			
PCB 163	mg/kg											
PCB 163/160	mg/kg											
PCB 164	mg/kg								0.000171			
PCB 165	mg/kg								0.0000272			
PCB 166	mg/kg											
PCB 167	mg/kg								0.000106			
PCB 168	mg/kg											
PCB 169	mg/kg								0.00000112	U		
PCB 17	mg/kg								0.000217			
PCB 170	mg/kg								0.000507			
PCB 171	mg/kg											
PCB 172	mg/kg								0.000104			
PCB 173	mg/kg											
PCB 174	mg/kg								0.000567			
PCB 175	mg/kg								0.0000372			
PCB 176	mg/kg								0.000112			
PCB 177	mg/kg								0.000352			
PCB 178	mg/kg								0.000206			
PCB 179	mg/kg								0.000382			
PCB 18	mg/kg											
PCB 180	mg/kg											
PCB 181	mg/kg								0.00000517			
PCB 182	mg/kg								0.000012			
PCB 182/175	mg/kg											
PCB 183	mg/kg								0.000352			
PCB 184	mg/kg								0.0000114			
PCB 185	mg/kg								0.00000872	U		
PCB 186	mg/kg								0.00000323	U		
PCB 187	mg/kg								0.000874			
PCB 188	mg/kg								0.0000371			
PCB 189	mg/kg								0.0000254			
PCB 19	mg/kg								0.0000838			
PCB 190	mg/kg								0.000103			
PCB 191	mg/kg								0.0000212			
PCB 192	mg/kg								0.00000634	U		
PCB 193	mg/kg											
PCB 194	mg/kg								0.000388			
PCB 195	mg/kg								0.000136			
PCB 196	mg/kg								0.00041			
PCB 197	mg/kg								0.00005			
PCB 198	mg/kg											
PCB 199	mg/kg											
PCB 2	mg/kg								0.000194			
PCB 20	mg/kg											
PCB 200	mg/kg								0.0000406			

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-JL/TEL											
Field Sample ID	23681947	23683235	23683256	23683302	23687884	23687885	23687886	23687887	23687889	23687890	23687895	23687896
Location ID	DER2-07-SD	DER2-05-SD	DER2-31-SD	DER2-30-SD	DER2-10-SD	DER2-10-SD	DER2-10-SD	DER2-10-SD	DER2-11-SD	DER2-11-SD	DER2-12-SD	DER2-12-SD
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00
Sample Purpose	FS	FS	FS	FS	FS	DUP	FS	DUP	FS	FS	FS	FS
Date	4/22/2010	4/27/2010	4/27/2010	4/27/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010
Chemical Class	Units											
PCB 201	mg/kg								0.000216			
PCB 202	mg/kg								0.000446			
PCB 203	mg/kg								0.000575			
PCB 204	mg/kg								0.0000666			
PCB 204/200	mg/kg											
PCB 205	mg/kg								0.0000231			
PCB 206	mg/kg								0.00453			
PCB 207	mg/kg								0.000378			
PCB 208	mg/kg								0.0023			
PCB 209	mg/kg								0.00925			
PCB 21	mg/kg											
PCB 21/20	mg/kg											
PCB 22	mg/kg								0.000145			
PCB 23	mg/kg								0.0000214			
PCB 24	mg/kg								0.0000131			
PCB 25	mg/kg								0.000119			
PCB 26	mg/kg											
PCB 27	mg/kg								0.000096			
PCB 28	mg/kg											
PCB 29	mg/kg											
PCB 3	mg/kg								0.000241			
PCB 30	mg/kg											
PCB 31	mg/kg								0.000505			
PCB 32	mg/kg								0.000215			
PCB 33	mg/kg											
PCB 34	mg/kg								0.0000824			
PCB 35	mg/kg								0.000114			
PCB 36	mg/kg								0.0000109			
PCB 37	mg/kg								0.000423			
PCB 38	mg/kg								0.0000146			
PCB 39	mg/kg								0.0000141			
PCB 4	mg/kg								0.000217			
PCB 4/10	mg/kg											
PCB 40	mg/kg											
PCB 41	mg/kg								0.0000288			
PCB 42	mg/kg								0.000261			
PCB 43	mg/kg								0.0000232			
PCB 44	mg/kg											
PCB 45	mg/kg								0.0000831			
PCB 46	mg/kg								0.0000491			
PCB 47	mg/kg											
PCB 48	mg/kg								0.0000834			
PCB 49	mg/kg											
PCB 5	mg/kg								0.0000148			
PCB 50	mg/kg											
PCB 51	mg/kg								0.000108			
PCB 52	mg/kg								0.000932			
PCB 53	mg/kg											
PCB 54	mg/kg								0.0000189			
PCB 55	mg/kg								0.0000781			
PCB 56	mg/kg								0.00038			
PCB 57	mg/kg								0.0000839			
PCB 58	mg/kg								0.000077			
PCB 59	mg/kg											
PCB 6	mg/kg								0.0000911			
PCB 60	mg/kg								0.000108			
PCB 61	mg/kg											
PCB 62	mg/kg											
PCB 63	mg/kg								0.0000388			
PCB 64	mg/kg								0.000389			
PCB 65	mg/kg											
PCB 65/75/62	mg/kg											
PCB 66	mg/kg								0.00089			
PCB 67	mg/kg								0.0000336			
PCB 67/58	mg/kg											
PCB 68	mg/kg								0.0000264			
PCB 68/64	mg/kg											
PCB 69	mg/kg											
PCB 7	mg/kg								0.0000133			
PCB 70	mg/kg											
PCB 71	mg/kg											
PCB 72	mg/kg								0.0000273			
PCB 73	mg/kg								0.0000623			
PCB 73/46	mg/kg											
PCB 74	mg/kg											
PCB 75	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-JL/TEL	MZ-JL/TEL											
Field Sample ID	23681947	23683235	23683256	23683302	23687884	23687885	23687886	23687887	23687889	23687890	23687895	23687896	
Location ID	DER2-07-SD	DER2-05-SD	DER2-31-SD	DER2-30-SD	DER2-10-SD	DER2-10-SD	DER2-10-SD	DER2-10-SD	DER2-11-SD	DER2-11-SD	DER2-12-SD	DER2-12-SD	
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.50-1.00
Sample Purpose	FS	FS	FS	FS	FS	DUP	FS	DUP	FS	FS	FS	FS	FS
Date	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010
Chemical Class	Units												
PCB 76	mg/kg												
PCB 77	mg/kg												
PCB 78	mg/kg								0.000273				
PCB 79	mg/kg								0.0000102	U			
PCB 8	mg/kg								0.0000187				
PCB 8	mg/kg								0.000214				
PCB 80	mg/kg								0.0000102	U			
PCB 81	mg/kg								0.0000365				
PCB 82	mg/kg								0.000185				
PCB 83	mg/kg								0.000108				
PCB 83/125/112	mg/kg												
PCB 84	mg/kg								0.000467				
PCB 85	mg/kg												
PCB 86	mg/kg												
PCB 86/109	mg/kg												
PCB 87	mg/kg												
PCB 87/111	mg/kg												
PCB 88	mg/kg								0.00000572	U			
PCB 89	mg/kg								0.0000193				
PCB 89/84	mg/kg												
PCB 9	mg/kg								0.0000244				
PCB 90	mg/kg												
PCB 91	mg/kg								0.000395				
PCB 92	mg/kg								0.0004				
PCB 93	mg/kg												
PCB 94	mg/kg								0.0000258				
PCB 95	mg/kg								0.00131				
PCB 96	mg/kg								0.000023				
PCB 97	mg/kg												
PCB 98	mg/kg								0.00000469	U			
PCB 99	mg/kg								0.00104				
PCB-100/93	mg/kg								0.0000589				
PCB-107/124	mg/kg								0.0000567				
PCB-108/119/86/97/125/87	mg/kg								0.00116				
PCB-113/90/101	mg/kg								0.00194				
PCB-116/85	mg/kg								0.000278				
PCB-128/166	mg/kg								0.000365				
PCB-13/12	mg/kg								0.000189				
PCB-139/140	mg/kg								0.0000472				
PCB-147/149	mg/kg								0.00196				
PCB-151/135	mg/kg								0.000876				
PCB-153/168	mg/kg								0.00225				
PCB-156/157	mg/kg								0.000231				
PCB-163/138/129	mg/kg								0.00241				
PCB-171/173	mg/kg								0.000151				
PCB-180/193	mg/kg								0.00116				
PCB-198/199	mg/kg								0.00144				
PCB-21/33	mg/kg								0.000208				
PCB-26/29	mg/kg								0.00017				
PCB-28/20	mg/kg								0.000827				
PCB-30/18	mg/kg								0.000395				
PCB-44/47/65	mg/kg								0.000962				
PCB-50/53	mg/kg								0.00016				
PCB-59/62/75	mg/kg								0.000941				
PCB-61/70/74/76	mg/kg								0.00129				
PCB-69/49	mg/kg								0.000706				
PCB-71/40	mg/kg								0.000417				
PCB-90/101	mg/kg												
Pentachlorobiphenyl	mg/kg												
Tetrachlorobiphenyl	mg/kg												
Total Decachlorobiphenyls (congeners)	mg/kg												
Total Dichlorobiphenyls (congeners)	mg/kg								0.00214				
Total Heptachlorobiphenyls (congeners)	mg/kg								0.00502				
Total Hexachlorobiphenyls (congeners)	mg/kg								0.0112				
Total Monochlorobiphenyls (congeners)	mg/kg								0.000696				
Total Nonachlorobiphenyls (congeners)	mg/kg								0.00721				
Total Octachlorobiphenyls (congeners)	mg/kg								0.00373				
Total PCB (congeners)	mg/kg								0.062316				
Total Pentachlorobiphenyls (congeners)	mg/kg								0.0119				
Total Tetrachlorobiphenyls (congeners)	mg/kg								0.00744				
Total Trichlorobiphenyls (congeners)	mg/kg								0.00373				
Trichlorobiphenyl (total)	mg/kg												
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>													
Benzo[e]pyrene	mg/kg												
Chrysene, 1-methyl-	mg/kg												
Naphthalene, 1-methyl-	mg/kg												
Pyrene, 1-methyl-	mg/kg												

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	
Field Sample ID	23681947	23683235	23683256	23683302	23687884	23687885	23687886	23687887	23687889	23687890	23687895	23687896		
Location ID	DER2-07-SD	DER2-05-SD	DER2-31-SD	DER2-30-SD	DER2-10-SD	DER2-10-SD	DER2-10-SD	DER2-10-SD	DER2-11-SD	DER2-11-SD	DER2-12-SD	DER2-12-SD		
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	DUP	FS	DUP	FS	FS	FS	FS	FS	
Date	4/22/2010	4/27/2010	4/27/2010	4/27/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	
Chemical Class	Chemical	Units												
<b>Polycyclic Aromatic Hydrocarbons</b>														
Acenaphthene	mg/kg			0.045	U	0.085	U	0.085	U		0.1	U	0.095	U
Acenaphthylene	mg/kg			0.045	U	0.085	U	0.085	U		0.1	U	0.095	U
Anthracene	mg/kg			0.045	U	0.085	U	0.085	U		0.1	U	0.095	U
Benzo(A)Anthracene	mg/kg			0.045	U	0.085	U	0.085	U		0.1	U	0.095	U
Benzo(B)Fluoranthene	mg/kg			0.045	U	0.11		0.11			0.12		0.12	
Benzo(G,H,I)Perylene	mg/kg			0.045	U	0.085	U	0.085	U		0.1	U	0.095	U
Benzo(K)Fluoranthene	mg/kg			0.045	U	0.085	U	0.085	U		0.1	U	0.095	U
Benzo(A)Pyrene	mg/kg			0.045	U	0.085	U	0.085	U		0.1	U	0.097	
Chrysene	mg/kg			0.045	U	0.085	U	0.1			0.1	U	0.12	
Dibenz(A,H)Anthracene	mg/kg			0.045	U	0.085	U	0.085	U		0.1	U	0.095	U
Fluoranthene	mg/kg			0.045	U	0.13		0.14			0.14		0.15	
Fluorene	mg/kg			0.045	U	0.085	U	0.085	U		0.1	U	0.095	U
Indeno (1,2,3-CD) Pyrene	mg/kg			0.045	U	0.085	U	0.085	U		0.1	U	0.095	U
Naphthalene	mg/kg			0.097		0.1		0.12			0.1	U	0.14	
Phenanthrene	mg/kg			0.045	U	0.12		0.11			0.1		0.16	
Pyrene	mg/kg			0.045	U	0.15		0.16			0.16		0.19	
Total PAHs (Detections + 1/2 MDL)	mg/kg			0.4345		1.0775		1.165			1.12		1.4045	
Total PAHs (Detections Only)	mg/kg			0.097		0.61		0.74			0.52		0.977	
<b>Semivolatile Organic Compounds - TICs</b>														
1,2,4-Trithiolane	mg/kg													
1,4-Benzenediol, 2-chloro-	mg/kg													
11H-Benzo[b]fluorene	mg/kg													
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg													
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg						8.5	12			6.5		6.9	
3-PENTEN-2-ONE, 4-METHYL-	mg/kg						0.88							
7H-Benz[de]anthracen-7-one	mg/kg													
9,10-Anthracenedione	mg/kg													
9-Octadecanamide, (Z)-	mg/kg													
Acetamide, 2-chloro-N-(ethox	mg/kg													
Alachlor	mg/kg													
Benzenamine, 3-methyl-	mg/kg													
Benzenamine, 4,4',4"-methy	mg/kg													
Benzenamine, 4,4'-methyleneb	mg/kg													
Benzene, 1,2,3,4-tetrachloro	mg/kg													
Benzene, 1,2,3,5-tetrachloro	mg/kg													
Benzene, 1,2,3-trichloro-	mg/kg													
Benzene, 1,3,5-trichloro-	mg/kg													
Benzene, 1,3-bis(1-methyleth	mg/kg													
Benzene, 1,4-bis(1-methyleth	mg/kg													
Benzofuran, 2,3-dihydro-	mg/kg													
CYCLIC OCTAATOMIC SULFUR	mg/kg													
Diphenyl Ether	mg/kg													
Docosane	mg/kg													
Heneicosane	mg/kg													
Hexacosane	mg/kg													
Hexadecane	mg/kg													
Hexatriacontane	mg/kg													
m-Chloroaniline	mg/kg													
N,N-Diethylaniline	mg/kg													
n-Hexadecanoic acid	mg/kg													
Nonadecane	mg/kg													
o-Chloroaniline	mg/kg													
Octacosane	mg/kg													
Octadecane	mg/kg													
Octadecane, 1-chloro-	mg/kg													
Octadecanoic acid	mg/kg													
Parachlorophenol	mg/kg													
Pentadecane	mg/kg													
Perylene	mg/kg													
Phenol, 2,5-dichloro-	mg/kg													
Phenol, 3-chloro-	mg/kg													
Phenol, 4,4'-(1-methylethyl)	mg/kg													
Tetracosane	mg/kg													
Tetradecane	mg/kg													
Tetraethylene glycol	mg/kg													
Total SVOC TICs	mg/kg													
Triacontane	mg/kg													
Tributyl phosphate	mg/kg													
Tridecanoic acid	mg/kg													
Triphenyl phosphate	mg/kg													
UNKNOWN	mg/kg				0.539230769	1.721578947	3.127777778		1.616		2.387619048			
Unknown acid	mg/kg													
Unknown Alcohol	mg/kg													
Unknown Aldol Condensate	mg/kg													
UNKNOWN ALKANE	mg/kg					1.475	2.2		1.825		2.133333333			

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Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-JL/TEL											
Field Sample ID	23681947	23683235	23683256	23683302	23687884	23687885	23687886	23687887	23687889	23687890	23687895	23687896
Location ID	DER2-07-SD	DER2-05-SD	DER2-31-SD	DER2-30-SD	DER2-10-SD	DER2-10-SD	DER2-10-SD	DER2-10-SD	DER2-11-SD	DER2-11-SD	DER2-12-SD	DER2-12-SD
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00
Sample Purpose	FS	DUP	FS	FS	FS	FS						
Date	4/22/2010	4/27/2010	4/27/2010	4/27/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010
Chemical Class	Units											
Unknown Alkene	mg/kg											
Unknown Amide	mg/kg											
Unknown Amine	mg/kg											
UNKNOWN AROMATIC	mg/kg											
Unknown Carboxylic Acid	mg/kg											
Unknown Cycloalkane	mg/kg											
Unknown Hydrocarbon	mg/kg											
Unknown Ketone	mg/kg											
Unknown PAH	mg/kg											
UNKNOWN SILOXANE	mg/kg											
<b>Semivolatile Organic Compounds</b>												
1,2,4-Trichlorobenzene	mg/kg				0.045 U	0.085 U	0.085 U		0.1 U		0.095 U	
1,2-Diphenylhydrazine	mg/kg				0.045 U	0.085 U	0.085 U		0.1 U		0.095 U	
1,4-Dioxane	mg/kg											
1-Naphthylamine	mg/kg				0.23 U	0.43 U	0.42 U		0.5 U		0.47 U	
2,3,4,6-Tetrachlorophenol	mg/kg											
2,4,5-Trichlorophenol	mg/kg											
2,4,6-Trichlorophenol	mg/kg				0.045 U	0.085 U	0.085 U		0.1 U		0.095 U	
2,4-Dichlorophenol	mg/kg				0.045 U	0.085 U	0.085 U		0.1 U		0.095 U	
2,4-Dimethylphenol	mg/kg				0.09 U	0.17 U	0.17 U		0.2 U		0.19 U	
2,4-Dinitrophenol	mg/kg				0.9 U	1.7 U	1.7 U		2 U		1.9 U	
2,4-Dinitrotoluene	mg/kg				0.09 U	0.17 U	0.17 U		0.2 U		0.19 U	
2,6-Dinitrotoluene	mg/kg				0.045 U	0.085 U	0.085 U		0.1 U		0.095 U	
2-Chloronaphthalene	mg/kg				0.045 U	0.085 U	0.085 U		0.1 U		0.095 U	
2-Chlorophenol	mg/kg				0.045 U	0.085 U	0.085 U		0.1 U		0.095 U	
2-Methylnaphthalene	mg/kg											
2-Methylphenol (O-Cresol)	mg/kg											
2-Naphthylamine	mg/kg				0.23 U	0.43 U	0.42 U		0.5 U		0.47 U	
2-Nitroaniline	mg/kg											
2-Nitrophenol	mg/kg				0.045 U	0.085 U	0.085 U		0.1 U		0.095 U	
3,3'-Dichlorobenzidine	mg/kg				0.14 U	0.26 U	0.25 U		0.3 U		0.28 U	
3,3'-Dimethylbenzidine	mg/kg											
3-Nitroaniline	mg/kg											
4,6-Dinitro-2-Methylphenol	mg/kg				0.23 U	0.43 U	0.42 U		0.5 U		0.47 U	
4-Aminobiphenyl	mg/kg				0.23 U	0.43 U	0.42 U		0.5 U		0.47 U	
4-Bromophenyl Phenyl Ether	mg/kg				0.045 U	0.085 U	0.085 U		0.1 U		0.095 U	
4-Chloro-3-Methylphenol	mg/kg				0.09 U	0.17 U	0.17 U		0.2 U		0.19 U	
4-Chloroaniline	mg/kg				0.41 U	0.17 U	0.17 U		0.2 U		0.19 U	
4-Chlorophenyl Phenyl Ether	mg/kg				0.045 U	0.085 U	0.085 U		0.1 U		0.095 U	
4-Methylphenol (P-Cresol)	mg/kg											
4-Nitroaniline	mg/kg											
4-Nitrophenol	mg/kg				0.23 U	0.43 U	0.42 U		0.5 U		0.47 U	
Acetophenone	mg/kg											
Aniline	mg/kg				0.23 U	0.43 U	0.42 U		0.5 U		0.47 U	
Benzidine	mg/kg				1.6 U	3 U	3 U		3.5 U		3.3 U	
Biphenyl	mg/kg											
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg											
Bis(2-Chloroethoxy)Methane	mg/kg				0.045 U	0.085 U	0.085 U		0.1 U		0.095 U	
Bis(2-Chloroethyl)Ether	mg/kg				0.045 U	0.085 U	0.085 U		0.1 U		0.095 U	
Bis(2-Chloroisopropyl)Ether	mg/kg				0.045 U	0.085 U	0.085 U		0.1 U		0.095 U	
Bis(2-Ethylhexyl)Phthalate	mg/kg				0.09 U	0.17 U	0.17 U		0.2 U		0.19 U	
Butyl Benzyl Phthalate	mg/kg				0.09 U	0.17 U	0.17 U		0.2 U		0.19 U	
Carbazole	mg/kg				0.045 U	0.085 U	0.085 U		0.1 U		0.095 U	
Dibenzofuran	mg/kg											
Diethyl Phthalate	mg/kg				0.09 U	0.17 U	0.17 U		0.2 U		0.19 U	
Dimethyl Phthalate	mg/kg				0.09 U	0.17 U	0.17 U		0.2 U		0.19 U	
Di-N-Butyl Phthalate	mg/kg				0.09 U	0.17 U	0.17 U		0.2 U		0.19 U	
Diphenyl Ether	mg/kg											
Hexachlorobenzene	mg/kg				0.045 U	0.085 U	0.085 U		0.1 U		0.095 U	
Hexachlorobutadiene	mg/kg				0.09 U	0.17 U	0.17 U		0.2 U		0.19 U	
Hexachlorocyclopentadiene	mg/kg				0.23 U	0.43 U	0.42 U		0.5 U		0.47 U	
Hexachloroethane	mg/kg				0.045 U	0.085 U	0.085 U		0.1 U		0.095 U	
Hexachloropropylene	mg/kg											
Isophorone	mg/kg				0.045 U	0.085 U	0.085 U		0.1 U		0.095 U	
N-Dioctyl Phthalate	mg/kg				0.09 U	0.17 U	0.17 U		0.2 U		0.19 U	
Nitrobenzene	mg/kg				0.045 U	0.085 U	0.085 U		0.1 U		0.095 U	
N-Nitrosodimethylamine	mg/kg				0.09 U	0.17 U	0.17 U		0.2 U		0.19 U	
N-Nitrosodi-N-Propylamine	mg/kg				0.045 U	0.085 U	0.085 U		0.1 U		0.095 U	
N-Nitrosodiphenylamine	mg/kg				0.045 U	0.085 U	0.085 U		0.1 U		0.095 U	
O-Toluidine	mg/kg				0.27 U	0.51 U	0.51 U		0.6 U		0.57 U	
Parathion	mg/kg											
Pentachlorobenzene	mg/kg											
Pentachlorophenol	mg/kg				0.23 U	0.43 U	0.42 U		0.5 U		0.47 U	
Phenol	mg/kg				0.045 U	0.085 U	0.085 U		0.1 U		0.095 U	
<b>Volatile Organic Compounds - TICs</b>												
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-JL/TEL	MZ-JL/TEL															
Field Sample ID	23681947	23683235	23683256	23683302	23687884	23687885	23687886	23687887	23687889	23687890	23687895	23687896					
Location ID	DER2-07-SD	DER2-05-SD	DER2-31-SD	DER2-30-SD	DER2-10-SD	DER2-10-SD	DER2-10-SD	DER2-10-SD	DER2-11-SD	DER2-11-SD	DER2-12-SD	DER2-12-SD					
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00					
Sample Purpose	FS	FS	FS	FS	FS	DUP	FS	DUP	FS	FS	FS	FS					
Date	4/22/2010	4/27/2010	4/27/2010	4/27/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010					
Chemical Class	Units																
1-Butene	mg/kg																
1-Heptene	mg/kg																
1-Propene, 2-methyl-	mg/kg																
Azulene	mg/kg																
BENZENE, 1,2,4-TRICHLORO-	mg/kg																
BENZENE, 1,2-DICHLORO-	mg/kg																
BENZENE, 1,4-DICHLORO-	mg/kg																
Camphene	mg/kg																
CYCLOHEXANE	mg/kg																
Cyclohexane, methyl-	mg/kg																
Cyclotrisiloxane, hexamethyl	mg/kg																
Diphenyl Ether	mg/kg																
Ethane, 1,1,2,2-tetrachloro-	mg/kg																
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg																
Ethane, 1,2-dichloro-1,1-dif	mg/kg																
Ethene, 1,1-dichloro-2,2-dif	mg/kg																
Hexane, 2-methyl-	mg/kg																
Hexane, 3-methyl-	mg/kg																
METHANE, CHLOROFLUORO-	mg/kg																
Naphthalene	mg/kg																
NAPHTHALENE, 2-METHYL-	mg/kg																
Nonanal	mg/kg																
Norflurane	mg/kg																
Pentane, 2,3-dimethyl-	mg/kg																
Phenol, 4-(1,1,3,3-tetrameth	mg/kg																
Propene	mg/kg																
Sulfur dioxide	mg/kg																
Tridecane	mg/kg																
UNKNOWN	mg/kg		0.22966667	0.012													
UNKNOWN ALICYCLIC	mg/kg																
UNKNOWN ALIPHATIC	mg/kg																
UNKNOWN ALKANE	mg/kg							0.019					0.017				
UNKNOWN AROMATIC	mg/kg																
UNKNOWN SILOXANE	mg/kg	0.029		0.0085				0.05	0.047				0.0325				
<b>Volatile Organic Compounds</b>																	
1,1,1,2-Tetrachloroethane	mg/kg																
1,1,1-Trichloroethane	mg/kg	0.003	U	0.003	0.0009	U		0.004	U	0.003	U		0.003	U			
1,1,1-Trichlorotrifluoroethane	mg/kg																
1,1,2,2-Tetrachloroethane	mg/kg	0.003	U	0.001	0.0009	U		0.004	U	0.003	U		0.003	U			
1,1,2-Trichloroethane	mg/kg	0.003	U	0.001	0.0009	U		0.004	U	0.003	U		0.003	U			
1,1,2-Trichlorotrifluoroethane	mg/kg	0.006	U	0.84	0.002	U		0.007	U	0.006	U		0.007	U			
1,1,2-Trifluoroethane	mg/kg																
1,1-Dichloro-1-Fluoroethane	mg/kg																
1,1-Dichloroethane	mg/kg	0.003	U	0.001	0.0009	U		0.004	U	0.003	U		0.003	U			
1,1-Dichloroethene	mg/kg	0.003	U	0.005	0.0009	U		0.004	U	0.003	U		0.003	U			
1,1-Dichloropropene	mg/kg																
1,2,4-Trimethylbenzene	mg/kg																
1,2-Dibromoethane (EDB)	mg/kg																
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg																
1,2-Dichloro-1-Fluoroethane	mg/kg																
1,2-Dichlorobenzene	mg/kg				0.045	U	0.085	U	0.085	U							
1,2-Dichloroethane	mg/kg	0.003	U	0.005	0.0009	U		0.004	U	0.003	U	0.1	U	0.095	U		
1,2-Dichloroethene	mg/kg																
1,2-Dichloropropane	mg/kg	0.003	U	0.001	0.0009	U		0.004	U	0.003	U		0.004	U	0.003	U	
1,2-Dichlorotetrafluoroethane	mg/kg																
1,3,5-Trimethylbenzene	mg/kg																
1,3-Dichlorobenzene	mg/kg				0.045	U	0.085	U	0.085	U		0.1	U	0.095	U		
1,4-Dichlorobenzene	mg/kg				0.066		0.085	U	0.085	U		0.1	U	0.095	U		
1-Chloro-1,1-Difluoroethane	mg/kg																
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg																
2-Chloro-1,1,1-Trifluoroethane	mg/kg																
2-Chloroethyl Vinyl Ether	mg/kg																
2-Chlorotoluene	mg/kg																
2-Hexanone	mg/kg																
4-Chlorotoluene	mg/kg																
4-Isopropyltoluene	mg/kg																
Acetone	mg/kg	0.087		0.072	0.007	U			0.076		0.079			0.071		0.11	
Acrolein	mg/kg	0.055	U	0.02	0.019	U			0.074	U	0.064	U		0.081	U	0.066	U
Acrylonitrile	mg/kg	0.011	U	0.004	0.004	U			0.015	U	0.013	U		0.016	U	0.013	U
Benzene	mg/kg	0.001	U	0.028	0.001				0.002	U	0.002	U		0.002	U	0.002	U
Bromodichloromethane	mg/kg	0.003	U	0.001	0.0009	U			0.004	U	0.003	U		0.004	U	0.003	U
Bromoform	mg/kg	0.003	U	0.001	0.0009	U			0.004	U	0.003	U		0.004	U	0.003	U
Carbon Disulfide	mg/kg	0.003		0.06	0.001				0.007		0.007			0.004	U	0.004	U
Carbon Tetrachloride	mg/kg	0.003	U	0.26	0.0009	U			0.004	U	0.003	U		0.004	U	0.003	U
CFC-1113	mg/kg																
Chlorobenzene	mg/kg	0.003	U	0.51	0.005				0.004	U	0.003	U		0.004	U	0.003	U

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-JL/TEL												
Field Sample ID	23681947	23683235	23683256	23683302	23687884	23687885	23687886	23687887	23687889	23687890	23687895	23687896	
Location ID	DER2-07-SD	DER2-05-SD	DER2-31-SD	DER2-30-SD	DER2-10-SD	DER2-10-SD	DER2-10-SD	DER2-10-SD	DER2-11-SD	DER2-11-SD	DER2-12-SD	DER2-12-SD	
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	DUP	FS	DUP	FS	FS	FS	FS	
Date	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	4/20/2010	
Chemical Class	Units												
Chlorodibromomethane	mg/kg	0.003	U	0.001	U	0.0009	U			0.004	U	0.003	U
Chlorodifluoromethane	mg/kg												
Chlorofluoromethane	mg/kg												
Chloroform	mg/kg	0.003	U	1.2		0.0009	U			0.004	U	0.003	U
Chloropentafluoroethane	mg/kg									0.003	U		
cis-1,2-Dichloroethene	mg/kg	0.003	U	0.01		0.0009	U			0.004	U	0.003	U
cis-1,3-Dichloropropene	mg/kg	0.003	U	0.001	U	0.0009	U			0.004	U	0.003	U
Cumene	mg/kg												
Dichlorodifluoromethane	mg/kg	0.006	U	0.036		0.002	U			0.007	U	0.006	U
Dichlorofluoromethane	mg/kg	0.006	U	0.002		0.002	U			0.007	U	0.006	U
Ethane	ug/L												
Ethyl Chloride	mg/kg	0.006	U	0.002	U	0.002	U			0.007	U	0.006	U
Ethylbenzene	mg/kg	0.003	U	0.006		0.0009	U			0.004	U	0.003	U
Fluoromethane	mg/kg												
Hexane	mg/kg												
Isobutyl Alcohol	mg/kg												
Meta- And Para-Xylene	mg/kg												
Methacrylonitrile	mg/kg												
Methane	ug/L												
Methyl Bromide	mg/kg	0.006	U	0.002	U	0.002	U			0.007	U	0.006	U
Methyl Chloride	mg/kg	0.006	U	0.002	U	0.002	U			0.007	U	0.006	U
Methyl Ethyl Ketone	mg/kg												
Methyl Isobutyl Ketone	mg/kg												
Methyl Methacrylate	mg/kg												
Methyl Tertiary Butyl Ether	mg/kg												
Methylene Chloride	mg/kg	0.006	U	0.009		0.002	U			0.007	U	0.006	U
N-Butylbenzene	mg/kg												
N-Propylbenzene	mg/kg												
Ortho-Xylene	mg/kg												
Propionitrile	mg/kg												
sec-Butylbenzene	mg/kg												
Styrene	mg/kg												
tert-Butylbenzene	mg/kg												
Tetrachloroethene	mg/kg	0.003	U	0.2		0.0009	U			0.004	U	0.003	U
Tetrahydrofuran	mg/kg												
Toluene	mg/kg	0.003	U	0.063		0.0009	U			0.004	U	0.003	U
trans-1,2-Dichloroethene	mg/kg	0.003	U	0.007		0.0009	U			0.004	U	0.003	U
trans-1,3-Dichloropropene	mg/kg	0.003	U	0.001	U	0.0009	U			0.004	U	0.003	U
Trichloroethene	mg/kg	0.003	U	0.016		0.0009	U			0.004	U	0.003	U
Trichlorofluoromethane	mg/kg	0.006	U	0.04		0.002	U			0.007	U	0.006	U
Vinyl Chloride	mg/kg	0.003	U	0.002		0.0009	U			0.004	U	0.003	U
Vinyl Fluoride	mg/kg												
Xylenes	mg/kg	0.003	U	0.028		0.0009	U			0.004	U	0.003	U

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
Field Sample ID	23708847	23708848	23929792	23929793	23948607	23948627	23948629	23948633	24831762	24831763	24831765	24831766	
Location ID	DER2-06-SD	DER2-08-SD	DER2-08-SD	DER2-08-SD	DER1-01	DER1-07	DER1-04	DER1-09	DER3-04	DER3-04	DER3-06	DER3-06	
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	
Sample Purpose	FS	FS	DUP	DUP	FS	FS	FS	FS	FS	FS	FS	FS	
Date	4/23/2010	4/23/2010	4/23/2010	4/23/2010	4/22/2010	4/22/2010	4/22/2010	4/22/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010	
Chemical Class	Units												
<b>General Chemistry</b>													
Black Carbon	mg/kg									3190		1430	
Percent Moisture	%	40.7	39.1			20	54	25	30	18.9	18.8	42.9	26.4
Percent Solids	%												
Total Organic Carbon	mg/kg	9190	15700	19450	16100					17050		6780	
<b>Metals</b>													
Aluminum	mg/kg									5440		10600	
Antimony	mg/kg									1.89		1.68	U
Arsenic	mg/kg									6.25		4.83	
Barium	mg/kg									24.9		46.5	
Beryllium	mg/kg									0.328		0.541	
Cadmium	mg/kg									0.473		0.451	
Calcium	mg/kg									808		1830	
Chromium	mg/kg									32.7		33.3	
Cobalt	mg/kg									4.71		6.93	
Copper	mg/kg									81.8		19.2	
Iron	mg/kg									13700		19100	
Lead	mg/kg									86.4		35.3	
Magnesium	mg/kg									1460		3330	
Manganese	mg/kg									129		461	
Mercury	mg/kg									3.07		0.285	
Nickel	mg/kg									11.4		16.1	
Potassium	mg/kg									844		1790	
Selenium	mg/kg									1.17	U	1.65	U
Silver	mg/kg									0.215	U	0.303	U
Sodium	mg/kg									239		623	
Thallium	mg/kg									1.74	U	2.44	U
Tin	mg/kg									3.91		3.65	
Titanium	mg/kg												
Vanadium	mg/kg									18.2		28.5	
Zinc	mg/kg									95.5		88.8	
<b>Metals - AVS/SEM</b>													
Acid Volatile Sulfide	umol/g												
Arsenic	umol/g												
Cadmium	umol/g												
Copper	umol/g												
Lead	umol/g												
Zinc	umol/g												
<b>Metals - Leachate</b>													
Lead	ug/L												
<b>Per and Polyfluorinated Organic Substances</b>													
Perfluorobutane Sulfonic Acid	mg/kg												
Perfluorobutanoic Acid	mg/kg												
Perfluorodecane Sulfonic Acid	mg/kg												
Perfluorodecanoic Acid	mg/kg												
Perfluorododecanoic Acid	mg/kg												
Perfluoroheptanoic Acid	mg/kg												
Perfluorohexane Sulfonic Acid	mg/kg												
Perfluorohexanoic Acid	mg/kg												
Perfluorononanoic Acid	mg/kg												
Perfluorooctane Sulfonamide	mg/kg												
Perfluoropentanoic Acid	mg/kg												
Perfluorotetradecanoic Acid	mg/kg												
Perfluorotridecanoic Acid	mg/kg												
Perfluoroundecanoic Acid	mg/kg												
PFOA	mg/kg					0.00059	U	0.001	U	0.00072	U		
PFOA(trial)	mg/kg					0.00059	U	0.001	U	0.00072	U		
PFOS	mg/kg					0.00014	U	0.00025	U	0.00015	U	0.00017	U
PFOS (trial)	mg/kg					0.00014	U	0.00025	U	0.00015	U	0.00017	U
<b>Pesticides and Herbicides</b>													
4,4'-DDD	mg/kg												
4,4'-DDE	mg/kg												
4,4'-DDT	mg/kg												
Aldrin	mg/kg												
Alpha Chlordane	mg/kg												
Alpha-BHC	mg/kg												
beta-BHC	mg/kg												
delta-BHC	mg/kg												
Dieldrin	mg/kg												
Endosulfan I	mg/kg												
Endosulfan II	mg/kg												
Endosulfan Sulfate	mg/kg												
Endrin	mg/kg												
Endrin Aldehyde	mg/kg												
Endrin Ketone	mg/kg												
Gamma Chlordane	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
Field Sample ID	23708847	23708848	23929792	23929793	23948607	23948627	23948629	23948633	24831762	24831763	24831765	24831766	
Location ID	DER2-06-SD	DER2-08-SD	DER2-08-SD	DER2-08-SD	DER1-01	DER1-07	DER1-04	DER1-09	DER3-04	DER3-04	DER3-06	DER3-06	
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	
Sample Purpose	FS	FS	DUP	DUP	FS	FS	FS	FS	FS	FS	FS	FS	
Date	4/23/2010	4/23/2010	4/23/2010	4/23/2010	4/22/2010	4/22/2010	4/22/2010	4/22/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010	
Chemical Class	Units												
Heptachlor	mg/kg												
Heptachlor Epoxide	mg/kg												
Lindane	mg/kg												
Methoxychlor	mg/kg												
Toxaphene	mg/kg												
<b>Physical Properties</b>													
0.001 MM	% PASSING								3			1	
0.002 MM	% PASSING								3			3	
0.005 MM	% PASSING								3			8	
0.02 MM	% PASSING								6			17	
0.05 MM	% PASSING								9			21	
0.064 MM	% PASSING								11			25	
0.075 MM	% PASSING								11.7			26.5	
0.15 MM	% PASSING								14.6			30.8	
0.3 MM	% PASSING								32.2			50.7	
0.6 MM	% PASSING								48.7			80.3	
1.18 MM	% PASSING								55.8			92.3	
19 MM	% PASSING								90.4			100	
2.36 MM	% PASSING								62.2			96	
3.35 MM	% PASSING								67.4			96.6	
37.5 MM	% PASSING								100			100	
4.75 MM	% PASSING								73.5			96.8	
75 MM	% PASSING								100			100	
Density	PCF												
<b>Polychlorinated Biphenyls - TICs</b>													
1,1'-Biphenyl, 2,3-dichloro-	mg/kg												
Unknown Biphenyl	mg/kg												
<b>Polychlorinated Biphenyls</b>													
Heptachlorobiphenyl	mg/kg												
Hexachlorobiphenyl	mg/kg												
Octachlorobiphenyl	mg/kg												
PCB 1	mg/kg												
PCB 10	mg/kg												
PCB 100	mg/kg												
PCB 101	mg/kg												
PCB 102	mg/kg												
PCB 103	mg/kg												
PCB 104	mg/kg												
PCB 105	mg/kg												
PCB 106	mg/kg												
PCB 107	mg/kg												
PCB 107/123	mg/kg												
PCB 108	mg/kg												
PCB 109	mg/kg												
PCB 11	mg/kg												
PCB 110	mg/kg												
PCB 111	mg/kg												
PCB 112	mg/kg												
PCB 113	mg/kg												
PCB 114	mg/kg												
PCB 115	mg/kg												
PCB 116	mg/kg												
PCB 117	mg/kg												
PCB 118	mg/kg												
PCB 119	mg/kg												
PCB 12	mg/kg												
PCB 120	mg/kg												
PCB 121	mg/kg												
PCB 121/95/88	mg/kg												
PCB 122	mg/kg												
PCB 123	mg/kg												
PCB 124	mg/kg												
PCB 125	mg/kg												
PCB 126	mg/kg												
PCB 127	mg/kg												
PCB 128	mg/kg												
PCB 129	mg/kg												
PCB 129/158	mg/kg												
PCB 13	mg/kg												
PCB 130	mg/kg												
PCB 130/164	mg/kg												
PCB 131	mg/kg												
PCB 132	mg/kg												
PCB 133	mg/kg												
PCB 134	mg/kg												
PCB 135	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
Field Sample ID	23708847	23708848	23929792	23929793	23948607	23948627	23948629	23948633	24831762	24831763	24831765	24831766	
Location ID	DER2-06-SD	DER2-08-SD	DER2-08-SD	DER2-08-SD	DER1-01	DER1-07	DER1-04	DER1-09	DER3-04	DER3-04	DER3-06	DER3-06	
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	
Sample Purpose	FS	FS	DUP	DUP	FS	FS	FS	FS	FS	FS	FS	FS	
Date	4/23/2010	4/23/2010	4/23/2010	4/23/2010	4/22/2010	4/22/2010	4/22/2010	4/22/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010	
Chemical Class	Units												
PCB 136	mg/kg												
PCB 137	mg/kg												
PCB 138	mg/kg												
PCB 139	mg/kg												
PCB 14	mg/kg												
PCB 140	mg/kg												
PCB 141	mg/kg												
PCB 142	mg/kg												
PCB 143	mg/kg												
PCB 143/139	mg/kg												
PCB 144	mg/kg												
PCB 145	mg/kg												
PCB 146	mg/kg												
PCB 147	mg/kg												
PCB 148	mg/kg												
PCB 149	mg/kg												
PCB 15	mg/kg												
PCB 150	mg/kg												
PCB 151	mg/kg												
PCB 152	mg/kg												
PCB 153	mg/kg												
PCB 154	mg/kg												
PCB 155	mg/kg												
PCB 156	mg/kg												
PCB 157	mg/kg												
PCB 158	mg/kg												
PCB 159	mg/kg												
PCB 16	mg/kg												
PCB 160	mg/kg												
PCB 161	mg/kg												
PCB 162	mg/kg												
PCB 163	mg/kg												
PCB 163/160	mg/kg												
PCB 164	mg/kg												
PCB 165	mg/kg												
PCB 166	mg/kg												
PCB 167	mg/kg												
PCB 168	mg/kg												
PCB 169	mg/kg												
PCB 17	mg/kg												
PCB 170	mg/kg												
PCB 171	mg/kg												
PCB 172	mg/kg												
PCB 173	mg/kg												
PCB 174	mg/kg												
PCB 175	mg/kg												
PCB 176	mg/kg												
PCB 177	mg/kg												
PCB 178	mg/kg												
PCB 179	mg/kg												
PCB 18	mg/kg												
PCB 180	mg/kg												
PCB 181	mg/kg												
PCB 182	mg/kg												
PCB 182/175	mg/kg												
PCB 183	mg/kg												
PCB 184	mg/kg												
PCB 185	mg/kg												
PCB 186	mg/kg												
PCB 187	mg/kg												
PCB 188	mg/kg												
PCB 189	mg/kg												
PCB 19	mg/kg												
PCB 190	mg/kg												
PCB 191	mg/kg												
PCB 192	mg/kg												
PCB 193	mg/kg												
PCB 194	mg/kg												
PCB 195	mg/kg												
PCB 196	mg/kg												
PCB 197	mg/kg												
PCB 198	mg/kg												
PCB 199	mg/kg												
PCB 2	mg/kg												
PCB 20	mg/kg												
PCB 200	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
Field Sample ID	23708847	23708848	23929792	23929793	23948607	23948627	23948629	23948633	24831762	24831763	24831765	24831766	
Location ID	DER2-06-SD	DER2-08-SD	DER2-08-SD	DER2-08-SD	DER1-01	DER1-07	DER1-04	DER1-09	DER3-04	DER3-04	DER3-06	DER3-06	
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	
Sample Purpose	FS	FS	DUP	DUP	FS	FS	FS	FS	FS	FS	FS	FS	
Date	4/23/2010	4/23/2010	4/23/2010	4/23/2010	4/22/2010	4/22/2010	4/22/2010	4/22/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010	
Chemical Class	Chemical	Units											
PCB 201	mg/kg												
PCB 202	mg/kg												
PCB 203	mg/kg												
PCB 204	mg/kg												
PCB 204/200	mg/kg												
PCB 205	mg/kg												
PCB 206	mg/kg												
PCB 207	mg/kg												
PCB 208	mg/kg												
PCB 209	mg/kg												
PCB 21	mg/kg												
PCB 21/20	mg/kg												
PCB 22	mg/kg												
PCB 23	mg/kg												
PCB 24	mg/kg												
PCB 25	mg/kg												
PCB 26	mg/kg												
PCB 27	mg/kg												
PCB 28	mg/kg												
PCB 29	mg/kg												
PCB 3	mg/kg												
PCB 30	mg/kg												
PCB 31	mg/kg												
PCB 32	mg/kg												
PCB 33	mg/kg												
PCB 34	mg/kg												
PCB 35	mg/kg												
PCB 36	mg/kg												
PCB 37	mg/kg												
PCB 38	mg/kg												
PCB 39	mg/kg												
PCB 4	mg/kg												
PCB 4/10	mg/kg												
PCB 40	mg/kg												
PCB 41	mg/kg												
PCB 42	mg/kg												
PCB 43	mg/kg												
PCB 44	mg/kg												
PCB 45	mg/kg												
PCB 46	mg/kg												
PCB 47	mg/kg												
PCB 48	mg/kg												
PCB 49	mg/kg												
PCB 5	mg/kg												
PCB 50	mg/kg												
PCB 51	mg/kg												
PCB 52	mg/kg												
PCB 53	mg/kg												
PCB 54	mg/kg												
PCB 55	mg/kg												
PCB 56	mg/kg												
PCB 57	mg/kg												
PCB 58	mg/kg												
PCB 59	mg/kg												
PCB 6	mg/kg												
PCB 60	mg/kg												
PCB 61	mg/kg												
PCB 62	mg/kg												
PCB 63	mg/kg												
PCB 64	mg/kg												
PCB 65	mg/kg												
PCB 65/75/62	mg/kg												
PCB 66	mg/kg												
PCB 67	mg/kg												
PCB 67/58	mg/kg												
PCB 68	mg/kg												
PCB 68/64	mg/kg												
PCB 69	mg/kg												
PCB 7	mg/kg												
PCB 70	mg/kg												
PCB 71	mg/kg												
PCB 72	mg/kg												
PCB 73	mg/kg												
PCB 73/46	mg/kg												
PCB 74	mg/kg												
PCB 75	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
Field Sample ID	23708847	23708848	23929792	23929793	23948607	23948627	23948629	23948633	24831762	24831763	24831765	24831766	
Location ID	DER2-06-SD	DER2-08-SD	DER2-08-SD	DER2-08-SD	DER1-01	DER1-07	DER1-04	DER1-09	DER3-04	DER3-04	DER3-06	DER3-06	
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	
Sample Purpose	FS	FS	DUP	DUP	FS	FS	FS	FS	FS	FS	FS	FS	
Date	4/23/2010	4/23/2010	4/23/2010	4/23/2010	4/22/2010	4/22/2010	4/22/2010	4/22/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010	
Chemical Class	Units												
PCB 76	mg/kg												
PCB 77	mg/kg												
PCB 78	mg/kg												
PCB 79	mg/kg												
PCB 8	mg/kg												
PCB 80	mg/kg												
PCB 81	mg/kg												
PCB 82	mg/kg												
PCB 83	mg/kg												
PCB 83/125/112	mg/kg												
PCB 84	mg/kg												
PCB 85	mg/kg												
PCB 86	mg/kg												
PCB 86/109	mg/kg												
PCB 87	mg/kg												
PCB 87/111	mg/kg												
PCB 88	mg/kg												
PCB 89	mg/kg												
PCB 89/84	mg/kg												
PCB 9	mg/kg												
PCB 90	mg/kg												
PCB 91	mg/kg												
PCB 92	mg/kg												
PCB 93	mg/kg												
PCB 94	mg/kg												
PCB 95	mg/kg												
PCB 96	mg/kg												
PCB 97	mg/kg												
PCB 98	mg/kg												
PCB 99	mg/kg												
PCB-100/93	mg/kg												
PCB-107/124	mg/kg												
PCB-108/119/86/97/125/87	mg/kg												
PCB-113/90/101	mg/kg												
PCB-116/85	mg/kg												
PCB-128/166	mg/kg												
PCB-13/12	mg/kg												
PCB-139/140	mg/kg												
PCB-147/149	mg/kg												
PCB-151/135	mg/kg												
PCB-153/168	mg/kg												
PCB-156/157	mg/kg												
PCB-163/138/129	mg/kg												
PCB-171/173	mg/kg												
PCB-180/193	mg/kg												
PCB-198/199	mg/kg												
PCB-21/33	mg/kg												
PCB-26/29	mg/kg												
PCB-28/20	mg/kg												
PCB-30/18	mg/kg												
PCB-44/47/65	mg/kg												
PCB-50/53	mg/kg												
PCB-59/62/75	mg/kg												
PCB-61/70/74/76	mg/kg												
PCB-69/49	mg/kg												
PCB-71/40	mg/kg												
PCB-90/101	mg/kg												
Pentachlorobiphenyl	mg/kg												
Tetrachlorobiphenyl	mg/kg												
Total Decachlorobiphenyls (congeners)	mg/kg												
Total Dichlorobiphenyls (congeners)	mg/kg												
Total Heptachlorobiphenyls (congeners)	mg/kg												
Total Hexachlorobiphenyls (congeners)	mg/kg												
Total Monochlorobiphenyls (congeners)	mg/kg												
Total Nonachlorobiphenyls (congeners)	mg/kg												
Total Octachlorobiphenyls (congeners)	mg/kg												
Total PCB (congeners)	mg/kg												
Total Pentachlorobiphenyls (congeners)	mg/kg												
Total Tetrachlorobiphenyls (congeners)	mg/kg												
Total Trichlorobiphenyls (congeners)	mg/kg												
Trichlorobiphenyl (total)	mg/kg												
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>													
Benzo[e]pyrene	mg/kg												
Chrysene, 1-methyl-	mg/kg												
Naphthalene, 1-methyl-	mg/kg												
Pyrene, 1-methyl-	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	
Field Sample ID	23708847	23708848	23929792	23929793	23948607	23948627	23948629	23948633	24831762	24831763	24831765	24831766		
Location ID	DER2-06-SD	DER2-08-SD	DER2-08-SD	DER2-08-SD	DER1-01	DER1-07	DER1-04	DER1-09	DER3-04	DER3-04	DER3-06	DER3-06		
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00		
Sample Purpose	FS	FS	DUP	DUP	FS	FS	FS	FS	FS	FS	FS	FS		
Date	4/23/2010	4/23/2010	4/23/2010	4/23/2010	4/22/2010	4/22/2010	4/22/2010	4/22/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010		
Chemical Class	Units													
<b>Polycyclic Aromatic Hydrocarbons</b>														
Acenaphthene	mg/kg									0.041	U		0.058	U
Acenaphthylene	mg/kg									0.049			0.058	U
Anthracene	mg/kg									0.42			0.058	U
Benzo(A)Anthracene	mg/kg									0.41			0.058	U
Benzo(B)Fluoranthene	mg/kg									0.31			0.058	U
Benzo(G,H,I)Perylene	mg/kg									0.18			0.058	U
Benzo(K)Fluoranthene	mg/kg									0.15			0.058	U
Benzo(A)Pyrene	mg/kg									0.31			0.058	U
Chrysene	mg/kg									1			0.058	U
Dibenz(A,H)Anthracene	mg/kg									0.059			0.058	U
Fluoranthene	mg/kg									0.4			0.058	U
Fluorene	mg/kg									0.11			0.058	U
Indeno (1,2,3-CD) Pyrene	mg/kg									0.15			0.058	U
Naphthalene	mg/kg									1.1			0.058	U
Phenanthrene	mg/kg									0.24			0.058	U
Pyrene	mg/kg									0.57			0.058	U
Total PAHs (Detections + 1/2 MDL)	mg/kg									5.4785			0.464	U
Total PAHs (Detections Only)	mg/kg									5.458			0.464	U
<b>Semivolatile Organic Compounds - TICs</b>														
1,2,4-Trithiolane	mg/kg													
1,4-Benzenediol, 2-chloro-	mg/kg													
11H-Benzo[blfluorene	mg/kg													
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg													
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg													
3-PENTEN-2-ONE, 4-METHYL-	mg/kg													
7H-Benz[de]anthracen-7-one	mg/kg													
9,10-Anthracenedione	mg/kg													
9-Octadecenamamide, (Z)-	mg/kg													
Acetamide, 2-chloro-N-(ethox	mg/kg													
Alachlor	mg/kg													
Benzenamine, 3-methyl-	mg/kg													
Benzenamine, 4,4',4"-methy	mg/kg													
Benzenamine, 4,4'-methyleneb	mg/kg													
Benzene, 1,2,3,4-tetrachloro	mg/kg													
Benzene, 1,2,3,5-tetrachloro	mg/kg													
Benzene, 1,2,3-trichloro-	mg/kg													
Benzene, 1,3,5-trichloro-	mg/kg													
Benzene, 1,3-bis(1-methyleth	mg/kg													
Benzene, 1,4-bis(1-methyleth	mg/kg													
Benzofuran, 2,3-dihydro-	mg/kg													
CYCLIC OCTAATOMIC SULFUR	mg/kg													
Diphenyl Ether	mg/kg													
Docosane	mg/kg													
Heneicosane	mg/kg													
Hexacosane	mg/kg													
Hexadecane	mg/kg													
Hexatriacontane	mg/kg													
m-Chloroaniline	mg/kg													
N,N-Diethylaniline	mg/kg													
n-Hexadecanoic acid	mg/kg													
Nonadecane	mg/kg													
o-Chloroaniline	mg/kg													
Octacosane	mg/kg													
Octadecane	mg/kg													
Octadecane, 1-chloro-	mg/kg													
Octadecanoic acid	mg/kg													
Parachlorophenol	mg/kg													
Pentadecane	mg/kg													
Perylene	mg/kg													
Phenol, 2,5-dichloro-	mg/kg													
Phenol, 3-chloro-	mg/kg													
Phenol, 4,4'-(1-methylethyl)	mg/kg													
Tetracosane	mg/kg													
Tetradecane	mg/kg													
Tetraethylene glycol	mg/kg													
Total SVOC TICs	mg/kg													
Triacontane	mg/kg													
Tributyl phosphate	mg/kg													
Tridecanoic acid	mg/kg													
Triphenyl phosphate	mg/kg													
UNKNOWN	mg/kg									2.0396			0.583913043	
Unknown acid	mg/kg													
Unknown Alcohol	mg/kg													
Unknown Aldol Condensate	mg/kg													
UNKNOWN ALKANE	mg/kg													

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
Field Sample ID	23708847	23708848	23929792	23929793	23948607	23948627	23948629	23948633	24831762	24831763	24831765	24831766	
Location ID	DER2-06-SD	DER2-08-SD	DER2-08-SD	DER2-08-SD	DER1-01	DER1-07	DER1-04	DER1-09	DER3-04	DER3-04	DER3-06	DER3-06	
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	
Sample Purpose	FS	FS	DUP	DUP	FS	FS	FS	FS	FS	FS	FS	FS	
Date	4/23/2010	4/23/2010	4/23/2010	4/23/2010	4/22/2010	4/22/2010	4/22/2010	4/22/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010	
Chemical Class	Units												
Unknown Alkene	mg/kg												
Unknown Amide	mg/kg												
Unknown Amine	mg/kg												
UNKNOWN AROMATIC	mg/kg												
Unknown Carboxylic Acid	mg/kg												
Unknown Cycloalkane	mg/kg												
Unknown Hydrocarbon	mg/kg												
Unknown Ketone	mg/kg												
Unknown PAH	mg/kg												
UNKNOWN SILOXANE	mg/kg												
<b>Semivolatile Organic Compounds</b>													
1,2,4-Trichlorobenzene	mg/kg								0.44			0.058	U
1,2-Diphenylhydrazine	mg/kg								0.041	U		0.058	U
1,4-Dioxane	mg/kg												
1-Naphthylamine	mg/kg								0.21	U		0.29	U
2,3,4,6-Tetrachlorophenol	mg/kg												
2,4,5-Trichlorophenol	mg/kg												
2,4,6-Trichlorophenol	mg/kg								0.041	U		0.058	U
2,4-Dichlorophenol	mg/kg								0.041	U		0.058	U
2,4-Dimethylphenol	mg/kg								0.082	U		0.12	U
2,4-Dinitrophenol	mg/kg								0.82	U		1.2	U
2,4-Dinitrotoluene	mg/kg								0.082	U		0.12	U
2,6-Dinitrotoluene	mg/kg								0.041	U		0.058	U
2-Chloronaphthalene	mg/kg								0.041	U		0.058	U
2-Chlorophenol	mg/kg								0.041	U		0.058	U
2-Methylnaphthalene	mg/kg												
2-Methylphenol (O-Cresol)	mg/kg												
2-Naphthylamine	mg/kg								0.21	U		0.29	U
2-Nitroaniline	mg/kg												
2-Nitrophenol	mg/kg								0.041	U		0.058	U
3,3'-Dichlorobenzidine	mg/kg								0.12	U		0.18	U
3,3'-Dimethylbenzidine	mg/kg												
3-Nitroaniline	mg/kg												
4,6-Dinitro-2-Methylphenol	mg/kg								0.21	U		0.29	U
4-Aminobiphenyl	mg/kg								0.21	U		0.29	U
4-Bromophenyl Phenyl Ether	mg/kg								0.041	U		0.058	U
4-Chloro-3-Methylphenol	mg/kg								0.082	U		0.12	U
4-Chloroaniline	mg/kg								0.9	U		0.12	U
4-Chlorophenyl Phenyl Ether	mg/kg								0.041	U		0.058	U
4-Methylphenol (P-Cresol)	mg/kg												
4-Nitroaniline	mg/kg												
4-Nitrophenol	mg/kg								0.21	U		0.29	U
Acetophenone	mg/kg												
Aniline	mg/kg								0.21	U		0.29	U
Benzidine	mg/kg								1.4	U		2	U
Biphenyl	mg/kg												
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg												
Bis(2-Chloroethoxy)Methane	mg/kg								0.041	U		0.058	U
Bis(2-Chloroethyl)Ether	mg/kg								0.041	U		0.058	U
Bis(2-Chloroisopropyl)Ether	mg/kg								0.041	U		0.058	U
Bis(2-Ethylhexyl)Phthalate	mg/kg								0.082	U		0.12	U
Butyl Benzyl Phthalate	mg/kg								0.082	U		0.12	U
Carbazole	mg/kg								0.041	U		0.058	U
Dibenzofuran	mg/kg												
Diethyl Phthalate	mg/kg								0.082	U		0.12	U
Dimethyl Phthalate	mg/kg								0.082	U		0.12	U
Di-N-Butyl Phthalate	mg/kg								0.11	U		0.12	U
Diphenyl Ether	mg/kg												
Hexachlorobenzene	mg/kg								0.041	U		0.058	U
Hexachlorobutadiene	mg/kg								0.082	U		0.12	U
Hexachlorocyclopentadiene	mg/kg								0.21	U		0.29	U
Hexachloroethane	mg/kg								0.041	U		0.058	U
Hexachloropropylene	mg/kg												
Isophorone	mg/kg								0.041	U		0.058	U
N-Dioctyl Phthalate	mg/kg								0.082	U		0.12	U
Nitrobenzene	mg/kg								0.26	U		0.25	U
N-Nitrosodimethylamine	mg/kg								0.082	U		0.12	U
N-Nitrosodi-N-Propylamine	mg/kg								0.041	U		0.058	U
N-Nitrosodiphenylamine	mg/kg								0.4	U		0.26	U
O-Toluidine	mg/kg								0.25	U		0.35	U
Parathion	mg/kg												
Pentachlorobenzene	mg/kg												
Pentachlorophenol	mg/kg								0.21	U		0.29	U
Phenol	mg/kg								0.041	U		0.058	U
<b>Volatile Organic Compounds - TICs</b>													
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
Field Sample ID	23708847	23708848	23929792	23929793	23948607	23948627	23948629	23948633	24831762	24831763	24831765	24831766	
Location ID	DER2-06-SD	DER2-08-SD	DER2-08-SD	DER2-08-SD	DER1-01	DER1-07	DER1-04	DER1-09	DER3-04	DER3-04	DER3-06	DER3-06	
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	
Sample Purpose	FS	FS	DUP	DUP	FS	FS	FS	FS	FS	FS	FS	FS	
Date	4/23/2010	4/23/2010	4/23/2010	4/23/2010	4/22/2010	4/22/2010	4/22/2010	4/22/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010	
Chemical Class	Units												
1-Butene	mg/kg												
1-Heptene	mg/kg												
1-Propene, 2-methyl-	mg/kg												
Azulene	mg/kg												
BENZENE, 1,2,4-TRICHLORO-	mg/kg												
BENZENE, 1,2-DICHLORO-	mg/kg												
BENZENE, 1,4-DICHLORO-	mg/kg												
Camphene	mg/kg												
CYCLOHEXANE	mg/kg												
Cyclohexane, methyl-	mg/kg												
Cyclotrisiloxane, hexamethyl	mg/kg												
Diphenyl Ether	mg/kg												
Ethane, 1,1,2,2-tetrachloro-	mg/kg												
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg												
Ethane, 1,2-dichloro-1,1-dif	mg/kg												
Ethene, 1,1-dichloro-2,2-dif	mg/kg												
Hexane, 2-methyl-	mg/kg												
Hexane, 3-methyl-	mg/kg												
METHANE, CHLOROFLUORO-	mg/kg												
Naphthalene	mg/kg												
NAPHTHALENE, 2-METHYL-	mg/kg												
Nonanal	mg/kg												
Norflurane	mg/kg												
Pentane, 2,3-dimethyl-	mg/kg												
Phenol, 4-(1,1,3,3-tetrameth	mg/kg												
Propene	mg/kg												
Sulfur dioxide	mg/kg												
Tridecane	mg/kg												
UNKNOWN	mg/kg									0.0095	0.024	1.5647	
UNKNOWN ALICYCLIC	mg/kg												
UNKNOWN ALIPHATIC	mg/kg												
UNKNOWN ALKANE	mg/kg	0.011											
UNKNOWN AROMATIC	mg/kg												
UNKNOWN SILOXANE	mg/kg	0.02	0.037						0.0255				
<b>Volatile Organic Compounds</b>													
1,1,1,2-Tetrachloroethane	mg/kg												
1,1,1-Trichloroethane	mg/kg	0.002	U	0.002	U					0.001	U	0.001	U
1,1,1-Trichlorotrifluoroethane	mg/kg												
1,1,2,2-Tetrachloroethane	mg/kg	0.002	U	0.002	U					0.001	U	0.001	U
1,1,2-Trichloroethane	mg/kg	0.002	U	0.002	U					0.001	U	0.001	U
1,1,2-Trichlorotrifluoroethane	mg/kg	0.003	U	0.004	U					0.003	U	0.003	U
1,1,2-Trifluoroethane	mg/kg												
1,1-Dichloro-1-Fluoroethane	mg/kg												
1,1-Dichloroethane	mg/kg	0.002	U	0.002	U					0.001	U	0.001	U
1,1-Dichloroethene	mg/kg	0.002	U	0.002	U					0.001	U	0.001	U
1,1-Dichloropropene	mg/kg												
1,2,4-Trimethylbenzene	mg/kg												
1,2-Dibromoethane (EDB)	mg/kg												
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg												
1,2-Dichloro-1-Fluoroethane	mg/kg												
1,2-Dichlorobenzene	mg/kg									2.5		0.1	
1,2-Dichloroethane	mg/kg	0.002	U	0.002	U					0.001	U	0.001	U
1,2-Dichloroethene	mg/kg												
1,2-Dichloropropane	mg/kg	0.002	U	0.002	U					0.001	U	0.001	U
1,2-Dichlorotetrafluoroethane	mg/kg												
1,3,5-Trimethylbenzene	mg/kg												
1,3-Dichlorobenzene	mg/kg									0.45		0.058	U
1,4-Dichlorobenzene	mg/kg									4.2		0.058	U
1-Chloro-1,1-Difluoroethane	mg/kg												
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg												
2-Chloro-1,1,1-Trifluoroethane	mg/kg												
2-Chloroethyl Vinyl Ether	mg/kg												
2-Chlorotoluene	mg/kg												
2-Hexanone	mg/kg												
4-Chlorotoluene	mg/kg												
4-Isopropyltoluene	mg/kg												
Acetone	mg/kg	0.025		0.068						0.015		0.011	0.021
Acrolein	mg/kg	0.034	U	0.042	U					0.028	U	0.022	U
Acrylonitrile	mg/kg	0.007	U	0.008	U					0.006	U	0.004	U
Benzene	mg/kg	0.0009	U	0.001	U					0.0007	U	0.0005	U
Bromodichloromethane	mg/kg	0.002	U	0.002	U					0.001	U	0.001	U
Bromoform	mg/kg	0.002	U	0.002	U					0.001	U	0.001	U
Carbon Disulfide	mg/kg	0.002	U	0.005						0.003		0.001	U
Carbon Tetrachloride	mg/kg	0.002	U	0.002	U					0.001	U	0.001	U
CFC-1113	mg/kg												
Chlorobenzene	mg/kg	0.002	U	0.003						0.001	U	0.01	0.002
													3.9

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	MZ-JL/TEL		MZ-JL/TEL		MZ-JL/TEL		MZ-JL/TEL		MZ-JL/TEL		MZ-JL/TEL		MZ-JL/TEL		MZ-JL/TEL	
		Field Sample ID	23708847	23708848	23929792	23929793	23948607	23948627	23948629	23948633	24831762	24831763	24831765	24831766			
Chemical	Location ID	DER2-06-SD	DER2-08-SD	DER2-08-SD	DER2-08-SD	DER1-01	DER1-07	DER1-04	DER1-09	DER3-04	DER3-04	DER3-06	DER3-06				
Units	Depth Interval (ft)	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00				
	Sample Purpose	FS	FS	DUP	DUP	FS	FS	FS	FS	FS	FS	FS	FS				
	Date	4/23/2010	4/23/2010	4/23/2010	4/23/2010	4/22/2010	4/22/2010	4/22/2010	4/22/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010				
Chlorodibromomethane	mg/kg	0.002	U	0.002	U					0.001	U	0.001	U	0.002	U	0.001	U
Chlorodifluoromethane	mg/kg																
Chlorofluoromethane	mg/kg																
Chloroform	mg/kg	0.002	U	0.002	U					0.001	U	0.001	U	0.002	U	0.001	U
Chloropentafluoroethane	mg/kg																
cis-1,2-Dichloroethene	mg/kg	0.002	U	0.002	U					0.001	U	0.001	U	0.002	U	0.001	U
cis-1,3-Dichloropropene	mg/kg	0.002	U	0.002	U					0.001	U	0.001	U	0.002	U	0.001	U
Cumene	mg/kg																
Dichlorodifluoromethane	mg/kg	0.003	U	0.004	U					0.003	U	0.002	U	0.003	U	0.003	U
Dichlorofluoromethane	mg/kg	0.003	U	0.004	U					0.003	U	0.002	U	0.003	U	0.003	U
Ethane	ug/L																
Ethyl Chloride	mg/kg	0.003	U	0.004	U					0.003	U	0.002	U	0.003	U	0.003	U
Ethylbenzene	mg/kg	0.002	U	0.002	U					0.001	U	0.001	U	0.002	U	0.004	U
Fluoromethane	mg/kg																
Hexane	mg/kg																
Isobutyl Alcohol	mg/kg																
Meta- And Para-Xylene	mg/kg																
Methacrylonitrile	mg/kg																
Methane	ug/L																
Methyl Bromide	mg/kg	0.003	U	0.004	U					0.003	U	0.002	U	0.003	U	0.003	U
Methyl Chloride	mg/kg	0.003	U	0.004	U					0.003	U	0.002	U	0.003	U	0.003	U
Methyl Ethyl Ketone	mg/kg																
Methyl Isobutyl Ketone	mg/kg																
Methyl Methacrylate	mg/kg																
Methyl Tertiary Butyl Ether	mg/kg																
Methylene Chloride	mg/kg	0.003	U	0.004	U					0.003	U	0.002	U	0.003	U	0.003	U
N-Butylbenzene	mg/kg																
N-Propylbenzene	mg/kg																
Ortho-Xylene	mg/kg																
Propionitrile	mg/kg																
sec-Butylbenzene	mg/kg																
Styrene	mg/kg																
tert-Butylbenzene	mg/kg																
Tetrachloroethene	mg/kg	0.002	U	0.002	U					0.001	U	0.001	U	0.002	U	0.001	U
Tetrahydrofuran	mg/kg																
Toluene	mg/kg	0.002	U	0.002	U					0.001	U	0.001	U	0.002	U	0.007	U
trans-1,2-Dichloroethene	mg/kg	0.002	U	0.002	U					0.001	U	0.001	U	0.002	U	0.001	U
trans-1,3-Dichloropropene	mg/kg	0.002	U	0.002	U					0.001	U	0.001	U	0.002	U	0.001	U
Trichloroethene	mg/kg	0.002	U	0.002	U					0.001	U	0.001	U	0.002	U	0.001	U
Trichlorofluoromethane	mg/kg	0.003	U	0.004	U					0.003	U	0.002	U	0.003	U	0.003	U
Vinyl Chloride	mg/kg	0.002	U	0.002	U					0.001	U	0.001	U	0.002	U	0.001	U
Vinyl Fluoride	mg/kg																
Xylenes	mg/kg	0.002	U	0.002	U					0.001	U	0.001	U	0.002	U	0.018	U

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-JL/TEL	MZ-JL/TEL											
Field Sample ID	24848003	24848005	24895111	24895112	24895114	24895116	24895118	24895122	24911666	24911667	24911668	24911669	
Location ID	DER3-19	DER3-20	DER3-01	DER3-01	DER3-02	DER3-03	DER3-05	DER3-07	DER3-01	DER3-01	DER3-02	DER3-03	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	
Sample Purpose	FS	FS	FS	DUP	FS	FS	FS	FS	FS	DUP	FS	FS	
Date	11/18/2010	11/18/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	
Chemical Class	Units												
<b>General Chemistry</b>													
Black Carbon	mg/kg			7360	2400	330	3650	2280	3600				
Percent Moisture	%	34	27.2	64.7	64.9	22.5	63	65.3	62.5	61.4	58.1	26.8	59
Percent Solids	%												
Total Organic Carbon	mg/kg	10100	5080	7200	18750	1120	17650	15100	17000				
<b>Metals</b>													
Aluminum	mg/kg			22900	22600	4180	23800	23100	19400				
Antimony	mg/kg			2.83 U	2.77 U	1.27 U	2.65 U	2.88 U	2.64 U				
Arsenic	mg/kg			13.2	14.1	3.98	12.2	12.2	10.1				
Barium	mg/kg			82.2	331	26.4	81.1	87	75.8				
Beryllium	mg/kg			1.12	1.1	0.354	1.16	1.13	0.958				
Cadmium	mg/kg			0.878	0.929	0.188	0.925	1.03	0.858				
Calcium	mg/kg			3700	3920	845	3760	3620	3360				
Chromium	mg/kg			57.3	63	31	59.9	57.6	48.5				
Cobalt	mg/kg			13.6	14	3.5	14.7	14.4	12.3				
Copper	mg/kg			28.3	27.5	8.71	28.5	28.9	23.4				
Iron	mg/kg			33800	33800	10000	35200	34000	29400				
Lead	mg/kg			79.1	64.5	39	44.7	45.5	38.6				
Magnesium	mg/kg			7730	7730	992	8180	7660	6560				
Manganese	mg/kg			1350	1340	179	1350	1210	998				
Mercury	mg/kg			0.123	0.115	0.664	0.138	0.168	0.146				
Nickel	mg/kg			29.6	30.2	9.36	31.1	30.3	25.7				
Potassium	mg/kg			3870	3890	624	4070	3810	3280				
Selenium	mg/kg			2.78 U	2.71 U	1.24 U	2.6 U	2.82 U	2.59 U				
Silver	mg/kg			0.51 U	0.498 U	0.228 U	0.477 U	0.519 U	0.475 U				
Sodium	mg/kg			1720	1690	252	2010	2000	1700				
Thallium	mg/kg			4.11 U	4.01 U	1.83 U	3.84 U	4.18 U	3.63 U				
Tin	mg/kg			5.72	5.42	1.96	5.64	5.78	5.04				
Titanium	mg/kg												
Vanadium	mg/kg			55.6	55	14	58.1	55.7	47.3				
Zinc	mg/kg			176	175	51.3	182	183	154				
<b>Metals - AVS/SEM</b>													
Acid Volatile Sulfide	umol/g												
Arsenic	umol/g												
Cadmium	umol/g												
Copper	umol/g												
Lead	umol/g												
Zinc	umol/g												
<b>Metals - Leachate</b>													
Lead	ug/L												
<b>Per and Polyfluorinated Organic Substances</b>													
Perfluorobutane Sulfonic Acid	mg/kg												
Perfluorobutanoic Acid	mg/kg												
Perfluorodecane Sulfonic Acid	mg/kg												
Perfluorodecanoic Acid	mg/kg												
Perfluorododecanoic Acid	mg/kg												
Perfluoroheptanoic Acid	mg/kg												
Perfluorohexane Sulfonic Acid	mg/kg												
Perfluorohexanoic Acid	mg/kg												
Perfluorononanoic Acid	mg/kg												
Perfluorooctane Sulfonamide	mg/kg												
Perfluoropentanoic Acid	mg/kg												
Perfluorotetradecanoic Acid	mg/kg												
Perfluorotridecanoic Acid	mg/kg												
Perfluoroundecanoic Acid	mg/kg												
PFOA	mg/kg												
PFOA(trial)	mg/kg												
PFOS	mg/kg												
PFOS (trial)	mg/kg												
<b>Pesticides and Herbicides</b>													
4,4'-DDD	mg/kg												
4,4'-DDE	mg/kg												
4,4'-DDT	mg/kg												
Aldrin	mg/kg												
Alpha Chlordane	mg/kg												
Alpha-BHC	mg/kg												
beta-BHC	mg/kg												
delta-BHC	mg/kg												
Dieldrin	mg/kg												
Endosulfan I	mg/kg												
Endosulfan II	mg/kg												
Endosulfan Sulfate	mg/kg												
Endrin	mg/kg												
Endrin Aldehyde	mg/kg												
Endrin Ketone	mg/kg												
Gamma Chlordane	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-JL/TEL	MZ-JL/TEL											
Field Sample ID	24848003	24848005	24895111	24895112	24895114	24895116	24895118	24895122	24911666	24911667	24911668	24911669	
Location ID	DER3-19	DER3-20	DER3-01	DER3-01	DER3-02	DER3-03	DER3-05	DER3-07	DER3-01	DER3-01	DER3-02	DER3-03	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	
Sample Purpose	FS	FS	FS	DUP	FS	FS	FS	FS	FS	DUP	FS	FS	
Date	11/18/2010	11/18/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	
Chemical Class	Units												
Heptachlor	mg/kg												
Heptachlor Epoxide	mg/kg												
Lindane	mg/kg												
Methoxychlor	mg/kg												
Toxaphene	mg/kg												
<b>Physical Properties</b>													
0.001 MM	% PASSING			16	13	0.5	U	11	12	12			
0.002 MM	% PASSING			21.5	22	0.5	U	22	21	18			
0.005 MM	% PASSING			34	36	0.5	U	33.5	33	27			
0.02 MM	% PASSING			53	65	1		67	62.5	45			
0.05 MM	% PASSING			78	82	1		87	82.5	72			
0.064 MM	% PASSING			89	90	1		92.5	90	86			
0.075 MM	% PASSING			94.6	93.2	1.7		95.2	93.6	92.5			
0.15 MM	% PASSING			96.5	95.1	6.2		97.7	96.9	97.6			
0.3 MM	% PASSING			97.4	96.9	65.6		98.5	98.3	98.6			
0.6 MM	% PASSING			98.4	97.9	80.4		98.9	98.9	99			
1.18 MM	% PASSING			99.1	98.5	84.7		99.3	99.5	99.3			
19 MM	% PASSING			100	100	100		100	100	100			
2.36 MM	% PASSING			99.7	99.3	91.5		99.8	99.8	99.7			
3.35 MM	% PASSING			99.9	99.5	93.8		99.9	99.9	99.9			
37.5 MM	% PASSING			100	100	100		100	100	100			
4.75 MM	% PASSING			100	99.7	95.7		100	100	100			
75 MM	% PASSING			100	100	100		100	100	100			
Density	PCF												
<b>Polychlorinated Biphenyls - TICs</b>													
1,1'-Biphenyl, 2,3-dichloro-	mg/kg												
Unknown Biphenyl	mg/kg												
<b>Polychlorinated Biphenyls</b>													
Heptachlorobiphenyl	mg/kg												
Hexachlorobiphenyl	mg/kg												
Octachlorobiphenyl	mg/kg												
PCB 1	mg/kg												
PCB 10	mg/kg												
PCB 100	mg/kg												
PCB 101	mg/kg												
PCB 102	mg/kg												
PCB 103	mg/kg												
PCB 104	mg/kg												
PCB 105	mg/kg												
PCB 106	mg/kg												
PCB 107	mg/kg												
PCB 107/123	mg/kg												
PCB 108	mg/kg												
PCB 109	mg/kg												
PCB 11	mg/kg												
PCB 110	mg/kg												
PCB 111	mg/kg												
PCB 112	mg/kg												
PCB 113	mg/kg												
PCB 114	mg/kg												
PCB 115	mg/kg												
PCB 116	mg/kg												
PCB 117	mg/kg												
PCB 118	mg/kg												
PCB 119	mg/kg												
PCB 12	mg/kg												
PCB 120	mg/kg												
PCB 121	mg/kg												
PCB 121/95/88	mg/kg												
PCB 122	mg/kg												
PCB 123	mg/kg												
PCB 124	mg/kg												
PCB 125	mg/kg												
PCB 126	mg/kg												
PCB 127	mg/kg												
PCB 128	mg/kg												
PCB 129	mg/kg												
PCB 129/158	mg/kg												
PCB 13	mg/kg												
PCB 130	mg/kg												
PCB 130/164	mg/kg												
PCB 131	mg/kg												
PCB 132	mg/kg												
PCB 133	mg/kg												
PCB 134	mg/kg												
PCB 135	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-JL/TEL	MZ-JL/TEL											
Field Sample ID	24848003	24848005	24895111	24895112	24895114	24895116	24895118	24895122	24911666	24911667	24911668	24911669	
Location ID	DER3-19	DER3-20	DER3-01	DER3-01	DER3-02	DER3-03	DER3-05	DER3-07	DER3-01	DER3-01	DER3-02	DER3-03	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	
Sample Purpose	FS	FS	FS	DUP	FS	FS	FS	FS	FS	DUP	FS	FS	
Date	11/18/2010	11/18/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	
Chemical Class	Units												
PCB 136	mg/kg												
PCB 137	mg/kg												
PCB 138	mg/kg												
PCB 139	mg/kg												
PCB 14	mg/kg												
PCB 140	mg/kg												
PCB 141	mg/kg												
PCB 142	mg/kg												
PCB 143	mg/kg												
PCB 143/139	mg/kg												
PCB 144	mg/kg												
PCB 145	mg/kg												
PCB 146	mg/kg												
PCB 147	mg/kg												
PCB 148	mg/kg												
PCB 149	mg/kg												
PCB 15	mg/kg												
PCB 150	mg/kg												
PCB 151	mg/kg												
PCB 152	mg/kg												
PCB 153	mg/kg												
PCB 154	mg/kg												
PCB 155	mg/kg												
PCB 156	mg/kg												
PCB 157	mg/kg												
PCB 158	mg/kg												
PCB 159	mg/kg												
PCB 16	mg/kg												
PCB 160	mg/kg												
PCB 161	mg/kg												
PCB 162	mg/kg												
PCB 163	mg/kg												
PCB 163/160	mg/kg												
PCB 164	mg/kg												
PCB 165	mg/kg												
PCB 166	mg/kg												
PCB 167	mg/kg												
PCB 168	mg/kg												
PCB 169	mg/kg												
PCB 17	mg/kg												
PCB 170	mg/kg												
PCB 171	mg/kg												
PCB 172	mg/kg												
PCB 173	mg/kg												
PCB 174	mg/kg												
PCB 175	mg/kg												
PCB 176	mg/kg												
PCB 177	mg/kg												
PCB 178	mg/kg												
PCB 179	mg/kg												
PCB 18	mg/kg												
PCB 180	mg/kg												
PCB 181	mg/kg												
PCB 182	mg/kg												
PCB 182/175	mg/kg												
PCB 183	mg/kg												
PCB 184	mg/kg												
PCB 185	mg/kg												
PCB 186	mg/kg												
PCB 187	mg/kg												
PCB 188	mg/kg												
PCB 189	mg/kg												
PCB 19	mg/kg												
PCB 190	mg/kg												
PCB 191	mg/kg												
PCB 192	mg/kg												
PCB 193	mg/kg												
PCB 194	mg/kg												
PCB 195	mg/kg												
PCB 196	mg/kg												
PCB 197	mg/kg												
PCB 198	mg/kg												
PCB 199	mg/kg												
PCB 2	mg/kg												
PCB 20	mg/kg												
PCB 200	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-JL/TEL	MZ-JL/TEL											
Field Sample ID	24848003	24848005	24895111	24895112	24895114	24895116	24895118	24895122	24911666	24911667	24911668	24911669	
Location ID	DER3-19	DER3-20	DER3-01	DER3-01	DER3-02	DER3-03	DER3-05	DER3-07	DER3-01	DER3-01	DER3-02	DER3-03	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	
Sample Purpose	FS	FS	FS	DUP	FS	FS	FS	FS	FS	DUP	FS	FS	
Date	11/18/2010	11/18/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	
Chemical Class	Units												
PCB 201	mg/kg												
PCB 202	mg/kg												
PCB 203	mg/kg												
PCB 204	mg/kg												
PCB 204/200	mg/kg												
PCB 205	mg/kg												
PCB 206	mg/kg												
PCB 207	mg/kg												
PCB 208	mg/kg												
PCB 209	mg/kg												
PCB 21	mg/kg												
PCB 21/20	mg/kg												
PCB 22	mg/kg												
PCB 23	mg/kg												
PCB 24	mg/kg												
PCB 25	mg/kg												
PCB 26	mg/kg												
PCB 27	mg/kg												
PCB 28	mg/kg												
PCB 29	mg/kg												
PCB 3	mg/kg												
PCB 30	mg/kg												
PCB 31	mg/kg												
PCB 32	mg/kg												
PCB 33	mg/kg												
PCB 34	mg/kg												
PCB 35	mg/kg												
PCB 36	mg/kg												
PCB 37	mg/kg												
PCB 38	mg/kg												
PCB 39	mg/kg												
PCB 4	mg/kg												
PCB 4/10	mg/kg												
PCB 40	mg/kg												
PCB 41	mg/kg												
PCB 42	mg/kg												
PCB 43	mg/kg												
PCB 44	mg/kg												
PCB 45	mg/kg												
PCB 46	mg/kg												
PCB 47	mg/kg												
PCB 48	mg/kg												
PCB 49	mg/kg												
PCB 5	mg/kg												
PCB 50	mg/kg												
PCB 51	mg/kg												
PCB 52	mg/kg												
PCB 53	mg/kg												
PCB 54	mg/kg												
PCB 55	mg/kg												
PCB 56	mg/kg												
PCB 57	mg/kg												
PCB 58	mg/kg												
PCB 59	mg/kg												
PCB 6	mg/kg												
PCB 60	mg/kg												
PCB 61	mg/kg												
PCB 62	mg/kg												
PCB 63	mg/kg												
PCB 64	mg/kg												
PCB 65	mg/kg												
PCB 65/75/62	mg/kg												
PCB 66	mg/kg												
PCB 67	mg/kg												
PCB 67/58	mg/kg												
PCB 68	mg/kg												
PCB 68/64	mg/kg												
PCB 69	mg/kg												
PCB 7	mg/kg												
PCB 70	mg/kg												
PCB 71	mg/kg												
PCB 72	mg/kg												
PCB 73	mg/kg												
PCB 73/46	mg/kg												
PCB 74	mg/kg												
PCB 75	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-JL/TEL	MZ-JL/TEL											
Field Sample ID	24848003	24848005	24895111	24895112	24895114	24895116	24895118	24895122	24911666	24911667	24911668	24911669	
Location ID	DER3-19	DER3-20	DER3-01	DER3-01	DER3-02	DER3-03	DER3-05	DER3-07	DER3-01	DER3-01	DER3-02	DER3-03	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	
Sample Purpose	FS	FS	FS	DUP	FS	FS	FS	FS	FS	DUP	FS	FS	
Date	11/18/2010	11/18/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	
Chemical Class	Units												
PCB 76	mg/kg												
PCB 77	mg/kg												
PCB 78	mg/kg												
PCB 79	mg/kg												
PCB 8	mg/kg												
PCB 80	mg/kg												
PCB 81	mg/kg												
PCB 82	mg/kg												
PCB 83	mg/kg												
PCB 83/125/112	mg/kg												
PCB 84	mg/kg												
PCB 85	mg/kg												
PCB 86	mg/kg												
PCB 86/109	mg/kg												
PCB 87	mg/kg												
PCB 87/111	mg/kg												
PCB 88	mg/kg												
PCB 89	mg/kg												
PCB 89/84	mg/kg												
PCB 9	mg/kg												
PCB 90	mg/kg												
PCB 91	mg/kg												
PCB 92	mg/kg												
PCB 93	mg/kg												
PCB 94	mg/kg												
PCB 95	mg/kg												
PCB 96	mg/kg												
PCB 97	mg/kg												
PCB 98	mg/kg												
PCB 99	mg/kg												
PCB-100/93	mg/kg												
PCB-107/124	mg/kg												
PCB-108/119/86/97/125/87	mg/kg												
PCB-113/90/101	mg/kg												
PCB-116/85	mg/kg												
PCB-128/166	mg/kg												
PCB-13/12	mg/kg												
PCB-139/140	mg/kg												
PCB-147/149	mg/kg												
PCB-151/135	mg/kg												
PCB-153/168	mg/kg												
PCB-156/157	mg/kg												
PCB-163/138/129	mg/kg												
PCB-171/173	mg/kg												
PCB-180/193	mg/kg												
PCB-198/199	mg/kg												
PCB-21/33	mg/kg												
PCB-26/29	mg/kg												
PCB-28/20	mg/kg												
PCB-30/18	mg/kg												
PCB-44/47/65	mg/kg												
PCB-50/53	mg/kg												
PCB-59/62/75	mg/kg												
PCB-61/70/74/76	mg/kg												
PCB-69/49	mg/kg												
PCB-71/40	mg/kg												
PCB-90/101	mg/kg												
Pentachlorobiphenyl	mg/kg												
Tetrachlorobiphenyl	mg/kg												
Total Decachlorobiphenyls (congeners)	mg/kg												
Total Dichlorobiphenyls (congeners)	mg/kg												
Total Heptachlorobiphenyls (congeners)	mg/kg												
Total Hexachlorobiphenyls (congeners)	mg/kg												
Total Monochlorobiphenyls (congeners)	mg/kg												
Total Nonachlorobiphenyls (congeners)	mg/kg												
Total Octachlorobiphenyls (congeners)	mg/kg												
Total PCB (congeners)	mg/kg												
Total Pentachlorobiphenyls (congeners)	mg/kg												
Total Tetrachlorobiphenyls (congeners)	mg/kg												
Total Trichlorobiphenyls (congeners)	mg/kg												
Trichlorobiphenyl (total)	mg/kg												
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>													
Benzo[e]pyrene	mg/kg												
Chrysene, 1-methyl-	mg/kg												
Naphthalene, 1-methyl-	mg/kg												
Pyrene, 1-methyl-	mg/kg												

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-JL/TEL	MZ-JL/TEL															
Field Sample ID	24848003	24848005	24895111	24895112	24895114	24895116	24895118	24895122	24911666	24911667	24911668	24911669					
Location ID	DER3-19	DER3-20	DER3-01	DER3-01	DER3-02	DER3-03	DER3-05	DER3-07	DER3-01	DER3-01	DER3-02	DER3-03					
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00					
Sample Purpose	FS	FS	FS	DUP	FS	FS	FS	FS	FS	DUP	FS	FS					
Date	11/18/2010	11/18/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010					
Chemical Class	Units																
<b>Polycyclic Aromatic Hydrocarbons</b>																	
Acenaphthene	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U		
Acenaphthylene	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U		
Anthracene	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U		
Benzo(A)Anthracene	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U		
Benzo(B)Fluoranthene	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U		
Benzo(G,H,I)Perylene	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U		
Benzo(K)Fluoranthene	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U		
Benzo(A)Pyrene	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U		
Chrysene	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U		
Dibenz(A,H)Anthracene	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U		
Fluoranthene	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U		
Fluorene	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U		
Indeno (1,2,3-CD) Pyrene	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U		
Naphthalene	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U		
Phenanthrene	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U		
Pyrene	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U		
Total PAHs (Detections + 1/2 MDL)	mg/kg			0.752	U	0.76	U	0.344	U	0.72	U	0.768	U	0.7775			
Total PAHs (Detections Only)	mg/kg			0.752	U	0.76	U	0.344	U	0.72	U	0.768	U	0.11			
<b>Semivolatile Organic Compounds - TICs</b>																	
1,2,4-Trithiolane	mg/kg																
1,4-Benzenediol, 2-chloro-	mg/kg																
11H-Benzo[b]fluorene	mg/kg																
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg																
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg																
3-PENTEN-2-ONE, 4-METHYL-	mg/kg																
7H-Benz[de]anthracen-7-one	mg/kg																
9,10-Anthracenedione	mg/kg																
9-Octadecenamamide, (Z)-	mg/kg																
Acetamide, 2-chloro-N-(ethox	mg/kg																
Alachlor	mg/kg																
Benzenamine, 3-methyl-	mg/kg																
Benzenamine, 4,4',4"-methy	mg/kg																
Benzenamine, 4,4"-methyleneb	mg/kg																
Benzene, 1,2,3,4-tetrachloro	mg/kg																
Benzene, 1,2,3,5-tetrachloro	mg/kg																
Benzene, 1,2,3-trichloro-	mg/kg																
Benzene, 1,3,5-trichloro-	mg/kg																
Benzene, 1,3-bis(1-methyleth	mg/kg																
Benzene, 1,4-bis(1-methyleth	mg/kg																
Benzofuran, 2,3-dihydro-	mg/kg																
CYCLIC OCTAATOMIC SULFUR	mg/kg																
Diphenyl Ether	mg/kg																
Docosane	mg/kg																
Heneicosane	mg/kg																
Hexacosane	mg/kg																
Hexadecane	mg/kg																
Hexatriacontane	mg/kg																
m-Chloroaniline	mg/kg																
N,N-Diethylaniline	mg/kg																
n-Hexadecanoic acid	mg/kg																
Nonadecane	mg/kg																
o-Chloroaniline	mg/kg																
Octacosane	mg/kg																
Octadecane	mg/kg																
Octadecane, 1-chloro-	mg/kg																
Octadecanoic acid	mg/kg																
Parachlorophenol	mg/kg																
Pentadecane	mg/kg																
Perylene	mg/kg																
Phenol, 2,5-dichloro-	mg/kg																
Phenol, 3-chloro-	mg/kg																
Phenol, 4,4'-(1-methylethyl)	mg/kg																
Tetracosane	mg/kg																
Tetradecane	mg/kg																
Tetraethylene glycol	mg/kg																
Total SVOC TICs	mg/kg																
Triacotane	mg/kg																
Tributyl phosphate	mg/kg																
Tridecanoic acid	mg/kg																
Triphenyl phosphate	mg/kg																
UNKNOWN	mg/kg			1.3652		1.626		0.4725		2		2.192		1.43533333			
Unknown acid	mg/kg																
Unknown Alcohol	mg/kg																
Unknown Aldol Condensate	mg/kg																
UNKNOWN ALKANE	mg/kg											1.654					

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	MZ-JL/TEL	MZ-JL/TEL													
Field Sample ID	24848003	24848005	24895111	24895112	24895114	24895116	24895118	24895122	24911666	24911667	24911668	24911669			
Location ID	DER3-19	DER3-20	DER3-01	DER3-01	DER3-02	DER3-03	DER3-05	DER3-07	DER3-01	DER3-01	DER3-02	DER3-03			
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00			
Sample Purpose	FS	FS	FS	DUP	FS	FS	FS	FS	FS	DUP	FS	FS			
Date	11/18/2010	11/18/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010			
Chemical Class	Units														
Unknown Alkene	mg/kg														
Unknown Amide	mg/kg														
Unknown Amine	mg/kg														
UNKNOWN AROMATIC	mg/kg														
Unknown Carboxylic Acid	mg/kg							0.6							
Unknown Cycloalkane	mg/kg							0.42							
Unknown Hydrocarbon	mg/kg														
Unknown Ketone	mg/kg														
Unknown PAH	mg/kg														
UNKNOWN SILOXANE	mg/kg														
<b>Semivolatile Organic Compounds</b>															
1,2,4-Trichlorobenzene	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U
1,2-Diphenylhydrazine	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U
1,4-Dioxane	mg/kg														
1-Naphthylamine	mg/kg			0.47	U	0.47	U	0.22	U	0.45	U	0.48	U	0.44	U
2,3,4,6-Tetrachlorophenol	mg/kg														
2,4,5-Trichlorophenol	mg/kg														
2,4,6-Trichlorophenol	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U
2,4-Dichlorophenol	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U
2,4-Dimethylphenol	mg/kg			0.19	U	0.19	U	0.086	U	0.18	U	0.19	U	0.18	U
2,4-Dinitrophenol	mg/kg			1.9	U	1.9	U	0.86	U	1.8	U	1.9	U	1.8	U
2,4-Dinitrotoluene	mg/kg			0.19	U	0.19	U	0.086	U	0.18	U	0.19	U	0.18	U
2,6-Dinitrotoluene	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U
2-Chloronaphthalene	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U
2-Chlorophenol	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U
2-Methylnaphthalene	mg/kg														
2-Methylphenol (O-Cresol)	mg/kg														
2-Naphthylamine	mg/kg			0.47	U	0.47	U	0.22	U	0.45	U	0.48	U	0.44	U
2-Nitroaniline	mg/kg														
2-Nitrophenol	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U
3,3'-Dichlorobenzidine	mg/kg			0.26	U	0.26	U	0.13	U	0.27	U	0.29	U	0.27	U
3,3'-Dimethylbenzidine	mg/kg														
3-Nitroaniline	mg/kg														
4,6-Dinitro-2-Methylphenol	mg/kg			0.47	U	0.47	U	0.22	U	0.45	U	0.48	U	0.44	U
4-Aminobiphenyl	mg/kg			0.47	U	0.47	U	0.22	U	0.45	U	0.48	U	0.44	U
4-Bromophenyl Phenyl Ether	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U
4-Chloro-3-Methylphenol	mg/kg			0.19	U	0.19	U	0.086	U	0.18	U	0.19	U	0.18	U
4-Chloroaniline	mg/kg			0.19	U	0.19	U	0.086	U	0.18	U	0.19	U	0.18	U
4-Chlorophenyl Phenyl Ether	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U
4-Methylphenol (P-Cresol)	mg/kg														
4-Nitroaniline	mg/kg														
4-Nitrophenol	mg/kg			0.47	U	0.47	U	0.22	U	0.45	U	0.48	U	0.44	U
Acetophenone	mg/kg														
Aniline	mg/kg			0.47	U	0.47	U	0.22	U	0.45	U	0.48	U	0.44	U
Benzidine	mg/kg			3.3	U	3.3	U	1.5	U	3.2	U	3.4	U	3.1	U
Biphenyl	mg/kg														
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg														
Bis(2-Chloroethoxy)Methane	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U
Bis(2-Chloroethyl)Ether	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U
Bis(2-Chloroisopropyl)Ether	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U
Bis(2-Ethylhexyl)Phthalate	mg/kg			0.19	U	0.19	U	0.086	U	0.18	U	0.19	U	0.18	U
Butyl Benzyl Phthalate	mg/kg			0.19	U	0.19	U	0.086	U	0.18	U	0.19	U	0.18	U
Carbazole	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U
Dibenzofuran	mg/kg														
Diethyl Phthalate	mg/kg			0.19	U	0.19	U	0.086	U	0.18	U	0.19	U	0.18	U
Dimethyl Phthalate	mg/kg			0.19	U	0.19	U	0.086	U	0.18	U	0.19	U	0.18	U
Di-N-Butyl Phthalate	mg/kg			0.19	U	0.19	U	0.086	U	0.18	U	0.19	U	0.18	U
Diphenyl Ether	mg/kg														
Hexachlorobenzene	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U
Hexachlorobutadiene	mg/kg			0.19	U	0.19	U	0.086	U	0.18	U	0.19	U	0.18	U
Hexachlorocyclopentadiene	mg/kg			0.47	U	0.47	U	0.22	U	0.45	U	0.48	U	0.44	U
Hexachloroethane	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U
Hexachloropropylene	mg/kg														
Isophorone	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U
N-Dioctyl Phthalate	mg/kg			0.19	U	0.19	U	0.086	U	0.18	U	0.19	U	0.18	U
Nitrobenzene	mg/kg			0.84	U	0.23	U	0.043	U	0.24	U	0.2	U	0.089	U
N-Nitrosodimethylamine	mg/kg			0.19	U	0.19	U	0.086	U	0.18	U	0.19	U	0.18	U
N-Nitrosodi-N-Propylamine	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U
N-Nitrosodiphenylamine	mg/kg			0.25	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U
O-Toluidine	mg/kg			0.57	U	0.57	U	0.26	U	0.54	U	0.58	U	0.53	U
Parathion	mg/kg														
Pentachlorobenzene	mg/kg														
Pentachlorophenol	mg/kg			0.47	U	0.47	U	0.22	U	0.45	U	0.48	U	0.44	U
Phenol	mg/kg			0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U
<b>Volatile Organic Compounds - TICs</b>															
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg														

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL															
Field Sample ID	24848003	24848005	24895111	24895112	24895114	24895116	24895118	24895122	24911666	24911667	24911668	24911669																
Location ID	DER3-19	DER3-20	DER3-01	DER3-01	DER3-02	DER3-03	DER3-05	DER3-07	DER3-01	DER3-01	DER3-02	DER3-03																
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00																
Sample Purpose	FS	FS	FS	DUP	FS	FS	FS	FS	FS	DUP	FS	FS																
Date	11/18/2010	11/18/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010																
Chemical Class	Units																											
1-Butene	mg/kg																											
1-Heptene	mg/kg																											
1-Propene, 2-methyl-	mg/kg																											
Azulene	mg/kg																											
BENZENE, 1,2,4-TRICHLORO-	mg/kg																											
BENZENE, 1,2-DICHLORO-	mg/kg										0.4																	
BENZENE, 1,4-DICHLORO-	mg/kg																											
Camphene	mg/kg																											
CYCLOHEXANE	mg/kg																											
Cyclohexane, methyl-	mg/kg										0.015																	
Cyclotrisiloxane, hexamethyl	mg/kg																											
Diphenyl Ether	mg/kg																											
Ethane, 1,1,2,2-tetrachloro-	mg/kg																											
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg																											
Ethane, 1,2-dichloro-1,1-dif	mg/kg																											
Ethene, 1,1-dichloro-2,2-dif	mg/kg																											
Hexane, 2-methyl-	mg/kg																											
Hexane, 3-methyl-	mg/kg																											
METHANE, CHLOROFLUORO-	mg/kg																											
Naphthalene	mg/kg																											
NAPHTHALENE, 2-METHYL-	mg/kg																											
Nonanal	mg/kg																											
Norflurane	mg/kg																											
Pentane, 2,3-dimethyl-	mg/kg																											
Phenol, 4-(1,1,3,3-tetrameth	mg/kg																											
Propene	mg/kg																											
Sulfur dioxide	mg/kg				0.12																							
Tridecane	mg/kg																											
UNKNOWN	mg/kg		0.035		0.33		0.56	1.7	0.16		0.51	0.58	0.217666667															
UNKNOWN ALICYCLIC	mg/kg																											
UNKNOWN ALIPHATIC	mg/kg																											
UNKNOWN ALKANE	mg/kg																											
UNKNOWN AROMATIC	mg/kg	22.63333333																										
UNKNOWN SILOXANE	mg/kg		0.011	0.027	0.029	0.009	0.057		0.028	0.073			0.042															
<b>Volatile Organic Compounds</b>																												
1,1,1,2-Tetrachloroethane	mg/kg																											
1,1,1-Trichloroethane	mg/kg	0.13	U	0.001	U	0.004	U	0.001	U	0.004	U	0.007	U	0.003	U													
1,1,1-Trichlorotrifluoroethane	mg/kg																											
1,1,2,2-Tetrachloroethane	mg/kg	0.13	U	0.001	U	0.004	U	0.001	U	0.004	U	0.005	U	0.003	U													
1,1,2-Trichloroethane	mg/kg	0.13	U	0.001	U	0.004	U	0.001	U	0.004	U	0.005	U	0.003	U													
1,1,2-Trichlorotrifluoroethane	mg/kg	2.4	U	0.003	U	0.008	U	0.007	U	0.003	U	0.008	U	0.015	U	0.007	U											
1,1,2-Trifluoroethane	mg/kg																											
1,1-Dichloro-1-Fluoroethane	mg/kg																											
1,1-Dichloroethane	mg/kg	0.13	U	0.001	U	0.004	U	0.001	U	0.004	U	0.005	U	0.004	U	0.007	U	0.003	U									
1,1-Dichloroethene	mg/kg	0.13	U	0.001	U	0.004	U	0.001	U	0.004	U	0.005	U	0.004	U	0.007	U	0.003	U									
1,1-Dichloropropene	mg/kg																											
1,2,4-Trimethylbenzene	mg/kg																											
1,2-Dibromoethane (EDB)	mg/kg																											
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg																											
1,2-Dichloro-1-Fluoroethane	mg/kg																											
1,2-Dichlorobenzene	mg/kg				0.094	U	0.095	U	0.51	0.09	U	0.096	U	0.089	U													
1,2-Dichloroethane	mg/kg	0.13	U	0.001	U	0.004	U	0.001	U	0.004	U	0.005	U	0.004	U	0.007	U	0.003	U									
1,2-Dichloroethene	mg/kg																											
1,2-Dichloropropane	mg/kg	0.13	U	0.001	U	0.004	U	0.001	U	0.004	U	0.005	U	0.004	U	0.007	U	0.003	U									
1,2-Dichlorotetrafluoroethane	mg/kg																											
1,3,5-Trimethylbenzene	mg/kg																											
1,3-Dichlorobenzene	mg/kg				0.094	U	0.095	U	0.043	U	0.09	U	0.096	U	0.089	U												
1,4-Dichlorobenzene	mg/kg				0.094	U	0.095	U	0.063	0.09	U	0.096	U	0.089	U													
1-Chloro-1,1-Difluoroethane	mg/kg																											
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg																											
2-Chloro-1,1,1-Trifluoroethane	mg/kg																											
2-Chloroethyl Vinyl Ether	mg/kg	0.26	U																									
2-Chlorotoluene	mg/kg																											
2-Hexanone	mg/kg																											
4-Chlorotoluene	mg/kg																											
4-Isopropyltoluene	mg/kg																											
Acetone	mg/kg	0.92	U	0.01	U	0.11	0.037	0.013	0.074	0.14	0.25	0.14	0.053	0.019	0.054													
Acrolein	mg/kg	2.6	U	0.028	U	0.076	U	0.073	U	0.027	U	0.077	U	0.098	U	0.15	U	0.069	U	0.029	U	0.07	U					
Acrylonitrile	mg/kg	0.53	U	0.006	U	0.015	U	0.015	U	0.005	U	0.015	U	0.02	U	0.016	U	0.008	U	0.014	U	0.008	U	0.014	U			
Benzene	mg/kg	0.068	U	0.0007	U	0.002	U	0.002	U	0.0007	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.027	U	0.002	U	
Bromodichloromethane	mg/kg	0.13	U	0.001	U	0.004	U	0.001	U	0.004	U	0.005	U	0.004	U	0.007	U	0.003	U	0.001	U	0.003	U	0.003	U	0.003	U	
Bromoform	mg/kg	0.13	U	0.001	U	0.004	U	0.001	U	0.004	U	0.005	U	0.004	U	0.007	U	0.003	U	0.001	U	0.003	U	0.003	U	0.003	U	
Carbon Disulfide	mg/kg	0.13	U	0.003	U	0.025	U	0.01	0.014	0.014	0.024	0.068	0.023	0.007	0.01	0.007	0.003	U										
Carbon Tetrachloride	mg/kg	0.13	U	0.001	U	0.004	U	0.001	U	0.004	U	0.005	U	0.004	U	0.007	U	0.003	U									
CFC-1113	mg/kg																											
Chlorobenzene	mg/kg	2.7		0.001	U	0.004	U	0.004	U	0.001	U	0.004	U	0.005	U	0.004	U	0.007	U	0.003	U	0.003	U	0.22	0.003	U	0.003	U

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	MZ-JL/TEL		MZ-JL/TEL		MZ-JL/TEL		MZ-JL/TEL		MZ-JL/TEL		MZ-JL/TEL		MZ-JL/TEL		MZ-JL/TEL	
		Field Sample ID	24848003	24848005	24895111	24895112	24895114	24895116	24895118	24895122	24911666	24911667	24911668	24911669			
Chemical	Location ID	DER3-19	DER3-20	DER3-01	DER3-01	DER3-02	DER3-03	DER3-05	DER3-07	DER3-01	DER3-01	DER3-02	DER3-03				
Units	Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00				
	Sample Purpose	FS	FS	FS	DUP	FS	FS	FS	FS	DUP	DUP	FS	FS				
	Date	11/18/2010	11/18/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010				
Chlorodibromomethane	mg/kg	0.13	U	0.001	U	0.004	U	0.004	U	0.007	U	0.003	U	0.001	U	0.003	U
Chlorodifluoromethane	mg/kg																
Chlorofluoromethane	mg/kg																
Chloroform	mg/kg	1.5		0.001	U	0.004	U	0.004	U	0.005	U	0.004	U	0.007	U	0.003	U
Chloropentafluoroethane	mg/kg																
cis-1,2-Dichloroethene	mg/kg	0.13	U	0.001	U	0.004	U	0.004	U	0.005	U	0.004	U	0.007	U	0.003	U
cis-1,3-Dichloropropene	mg/kg	0.13	U	0.001	U	0.004	U	0.004	U	0.005	U	0.004	U	0.007	U	0.003	U
Cumene	mg/kg																
Dichlorodifluoromethane	mg/kg	0.26	U	0.003	U	0.008	U	0.007	U	0.01	U	0.008	U	0.015	U	0.007	U
Dichlorofluoromethane	mg/kg	0.26	U	0.003	U	0.008	U	0.007	U	0.01	U	0.008	U	0.015	U	0.007	U
Ethane	ug/L																
Ethyl Chloride	mg/kg	0.26	U	0.003	U	0.008	U	0.007	U	0.01	U	0.008	U	0.015	U	0.007	U
Ethylbenzene	mg/kg	0.00013	U	0.001	U	0.004	U	0.004	U	0.005	U	0.004	U	0.007	U	0.003	U
Fluoromethane	mg/kg																
Hexane	mg/kg																
Isobutyl Alcohol	mg/kg																
Meta- And Para-Xylene	mg/kg																
Methacrylonitrile	mg/kg																
Methane	ug/L																
Methyl Bromide	mg/kg	0.26	U	0.003	U	0.008	U	0.007	U	0.01	U	0.008	U	0.015	U	0.007	U
Methyl Chloride	mg/kg	0.26	U	0.003	U	0.008	U	0.007	U	0.01	U	0.008	U	0.015	U	0.007	U
Methyl Ethyl Ketone	mg/kg																
Methyl Isobutyl Ketone	mg/kg																
Methyl Methacrylate	mg/kg																
Methyl Tertiary Butyl Ether	mg/kg																
Methylene Chloride	mg/kg	0.26	U	0.003	U	0.008	U	0.007	U	0.01	U	0.008	U	0.015	U	0.007	U
N-Butylbenzene	mg/kg																
N-Propylbenzene	mg/kg																
Ortho-Xylene	mg/kg																
Propionitrile	mg/kg																
sec-Butylbenzene	mg/kg																
Styrene	mg/kg																
tert-Butylbenzene	mg/kg																
Tetrachloroethene	mg/kg	0.41		0.001	U	0.004	U	0.004	U	0.005	U	0.004	U	0.007	U	0.003	U
Tetrahydrofuran	mg/kg																
Toluene	mg/kg	0.15		0.001	U	0.004	U	0.004	U	0.005	U	0.004	U	0.007	U	0.003	U
trans-1,2-Dichloroethene	mg/kg	0.13	U	0.001	U	0.004	U	0.004	U	0.005	U	0.004	U	0.007	U	0.003	U
trans-1,3-Dichloropropene	mg/kg	0.13	U	0.001	U	0.004	U	0.004	U	0.005	U	0.004	U	0.007	U	0.003	U
Trichloroethene	mg/kg	0.82		0.001	U	0.004	U	0.004	U	0.005	U	0.004	U	0.007	U	0.003	U
Trichlorofluoromethane	mg/kg	0.26	U	0.003	U	0.008	U	0.007	U	0.01	U	0.008	U	0.015	U	0.007	U
Vinyl Chloride	mg/kg	0.13	U	0.001	U	0.004	U	0.004	U	0.005	U	0.004	U	0.007	U	0.003	U
Vinyl Fluoride	mg/kg																
Xylenes	mg/kg	0.13	U	0.001	U	0.004	U	0.004	U	0.005	U	0.004	U	0.007	U	0.003	U

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
Field Sample ID	24911670	24911671	SC-229-TRT4S(0.5-0.8)	SC-229-TRT4S(0-0.5)	SC-230-OutT3-(0.5-1.0)	SC-230-OutT3-(0-0.5)	SC-231-Out013-(0.5-1.0)	SC-231-Out013-(0-0.5)	SC-232-OutT3W(0.5-1.0)	SC-232-OutT3W(0-0.5)	SC-232-OutT3W(1.0-1.5)	SC-232-OutT3W(1.5-2.0)	
Location ID	DER3-05	DER3-07	SC-229	SC-229	SC-230	SC-230	SC-231	SC-231	SC-232	SC-232	SC-232	SC-232	
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.50-0.80	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	1.00-1.50	1.50-2.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Date	11/16/2010	11/16/2010	8/24/2016	8/24/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	
Chemical Class	Units												
<b>General Chemistry</b>													
Black Carbon	mg/kg												
Percent Moisture	%	61.9	65	33.6	21.2	17.3	16	37.7	49.5	18.8	28.9	16	26.6
Percent Solids	%												
Total Organic Carbon	mg/kg			8590	10200	361	195 U	30800	25600	4210	10100	3160	9710
<b>Metals</b>													
Aluminum	mg/kg			11000	10100	4140	3380	14500	16800	8390	11300	6220	11900
Antimony	mg/kg			0.602	0.466	0.252	0.159	2.94	6.55	0.126	0.679	0.113 U	0.271
Arsenic	mg/kg			18.1	10.6	1.66	1.29	45.8	65	10.8	13.5	3.62	11.5
Barium	mg/kg			132	149	15.2	16	142	256	48.8	141	20.3	75.5
Beryllium	mg/kg			1.31	1.82	0.291	0.198	1.62	2.35	0.567	1.67	0.228	0.837
Cadmium	mg/kg			0.313	0.152	0.336	0.0449	0.304	0.485	0.0584	0.256	0.0448 U	0.213
Calcium	mg/kg			7630	7770	386	2760	4280	5200	735	3500	372	1610
Chromium	mg/kg			150	353	10.9	8.66	92.1	195	20.6	160	10.2	40.5
Cobalt	mg/kg			12.8	9.26	3.96	2.05	11.2	15.6	6.4	10.2	3.16	10
Copper	mg/kg			37.1	24.2	5.42	7.21	38.7	87.8	7.44	24.8	3.39	17.4
Iron	mg/kg			37700	21700	4000	5940	118000	112000	10900	17600	7160	13900
Lead	mg/kg			108	93.1	13	10.3	119	1210	10.7	54.3	4.77	29.3
Magnesium	mg/kg			1640	1660	1260	2010	1840	2790	1240	1400	944	2770
Manganese	mg/kg			373	253	506	71.2	43.4	673	96.9	124	39.6	173
Mercury	mg/kg			0.252	0.114	0.0152	0.0117 U	0.486	0.886	0.0114 U	0.198	0.0115 U	0.0708
Nickel	mg/kg			24.7	20	9.24	5.21	22.2	32.3	11.9	35.2	5.5	21.8
Potassium	mg/kg			1160	1240	484	571	1810	2150	883	1270	605	1600
Selenium	mg/kg			0.818	0.32	0.0867	0.0694 U	1.11	2.21	0.27	0.415	0.153	0.416
Silver	mg/kg			0.183	0.0678	0.0201 U	0.0187 U	0.592	1.08	0.0286	0.0779	0.0273 U	0.0679
Sodium	mg/kg			503	515	166	157	793	976	181	547	88.5	201
Thallium	mg/kg			0.196	0.0678	0.0948	0.0393	0.198	0.251	0.144	0.169	0.0939	0.229
Tin	mg/kg												
Titanium	mg/kg			631	486	280	218	1370	4440	321	670	228	478
Vanadium	mg/kg			50.6	35.6	33	18.5	62.8	95.1	24.7	76	13.1	37.2
Zinc	mg/kg			95.9	45.7	49.9	33.9	124	160	27	71.3	17.7	95.6
<b>Metals - AVS/SEM</b>													
Acid Volatile Sulfide	umol/g												
Arsenic	umol/g												
Cadmium	umol/g												
Copper	umol/g												
Lead	umol/g												
Zinc	umol/g												
<b>Metals - Leachate</b>													
Lead	ug/L												
<b>Per and Polyfluorinated Organic Substances</b>													
Perfluorobutane Sulfonic Acid	mg/kg												
Perfluorobutanoic Acid	mg/kg												
Perfluorodecane Sulfonic Acid	mg/kg												
Perfluorodecanoic Acid	mg/kg												
Perfluorododecanoic Acid	mg/kg												
Perfluoroheptanoic Acid	mg/kg												
Perfluorohexane Sulfonic Acid	mg/kg												
Perfluorohexanoic Acid	mg/kg												
Perfluorononanoic Acid	mg/kg												
Perfluorooctane Sulfonamide	mg/kg												
Perfluoropentanoic Acid	mg/kg												
Perfluorotetradecanoic Acid	mg/kg												
Perfluorotridecanoic Acid	mg/kg												
Perfluoroundecanoic Acid	mg/kg												
PFOA	mg/kg												
PFOA(trial)	mg/kg												
PFOS	mg/kg												
PFOS (trial)	mg/kg												
<b>Pesticides and Herbicides</b>													
4,4'-DDD	mg/kg												
4,4'-DDE	mg/kg												
4,4'-DDT	mg/kg												
Aldrin	mg/kg												
Alpha-Chlordane	mg/kg												
Alpha-BHC	mg/kg												
beta-BHC	mg/kg												
delta-BHC	mg/kg												
Dieldrin	mg/kg												
Endosulfan I	mg/kg												
Endosulfan II	mg/kg												
Endosulfan Sulfate	mg/kg												
Endrin	mg/kg												
Endrin Aldehyde	mg/kg												
Endrin Ketone	mg/kg												
Gamma-Chlordane	mg/kg												

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
Field Sample ID	24911670	24911671	SC-229-TRT4S(0.5-0.8)	SC-229-TRT4S(0-0.5)	SC-230-OutT3-(0.5-1.0)	SC-230-OutT3-(0-0.5)	SC-231-Out013-(0.5-1.0)	SC-231-Out013-(0-0.5)	SC-232-OutT3W(0.5-1.0)	SC-232-OutT3W(0-0.5)	SC-232-OutT3W(1.0-1.5)	SC-232-OutT3W(1.5-2.0)	
Location ID	DER3-05	DER3-07	SC-229	SC-229	SC-230	SC-230	SC-231	SC-231	SC-232	SC-232	SC-232	SC-232	
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.50-0.80	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	1.00-1.50	1.50-2.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Date	11/16/2010	11/16/2010	8/24/2016	8/24/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	
Chemical Class	Units												
Heptachlor	mg/kg												
Heptachlor Epoxide	mg/kg												
Lindane	mg/kg												
Methoxychlor	mg/kg												
Toxaphene	mg/kg												
<b>Physical Properties</b>													
0.001 MM	% PASSING		0.5	0.5	0.5	0.5	0.5	0.5	0.5	5	2	2	3
0.002 MM	% PASSING		1	0.5	0.5	0.5	1	2	3	5	2	3	6
0.005 MM	% PASSING		3	1	0.5	3	5	8	8	2.5	6	10	
0.02 MM	% PASSING		7	2	2.5	4	8	13	19	8	11	20.5	
0.05 MM	% PASSING		9	3	5	4	12	17	27	11	16	28	
0.064 MM	% PASSING		12	2.5	8	4	15	22.5	28	13	20	32	
0.075 MM	% PASSING		12.4	3	9.6	4	16.1	24.2	29.4	12.9	21.5	34	
0.15 MM	% PASSING		13.3	3.2	13.5	4.6	17	26.1	34.4	15.5	25.7	45.6	
0.3 MM	% PASSING		17.5	6	34.3	16.5	19.7	31.4	52	30	41.6	69.5	
0.6 MM	% PASSING		37.9	19.9	77	44.5	27.4	48.4	87.4	65.2	82.9	91.5	
1.18 MM	% PASSING		51.7	38	88.7	56.4	36.6	67.1	96.2	80.9	97.7	97.9	
19 MM	% PASSING		95.5	100	100	100	85.4	100	100	100	100	100	
2.36 MM	% PASSING		58.9	60.6	92	64.2	45.5	79.9	97.5	87.1	99.7	98.7	
3.35 MM	% PASSING		62.4	68.8	95.2	70.4	52.3	88	98.3	91.3	99.8	99.4	
37.5 MM	% PASSING		100	100	100	100	100	100	100	100	100	100	
4.75 MM	% PASSING		66.5	76.9	97.7	78.4	58.5	92	99.1	94.3	99.9	99.6	
75 MM	% PASSING		100	100	100	100	100	100	100	100	100	100	
Density	PCF												
<b>Polychlorinated Biphenyls - TICs</b>													
1,1'-Biphenyl, 2,3-dichloro-	mg/kg												
Unknown Biphenyl	mg/kg												
<b>Polychlorinated Biphenyls</b>													
Heptachlorobiphenyl	mg/kg												
Hexachlorobiphenyl	mg/kg												
Octachlorobiphenyl	mg/kg												
PCB 1	mg/kg												
PCB 10	mg/kg												
PCB 100	mg/kg												
PCB 101	mg/kg												
PCB 102	mg/kg												
PCB 103	mg/kg												
PCB 104	mg/kg												
PCB 105	mg/kg												
PCB 106	mg/kg												
PCB 107	mg/kg												
PCB 107/123	mg/kg												
PCB 108	mg/kg												
PCB 109	mg/kg												
PCB 11	mg/kg												
PCB 110	mg/kg												
PCB 111	mg/kg												
PCB 112	mg/kg												
PCB 113	mg/kg												
PCB 114	mg/kg												
PCB 115	mg/kg												
PCB 116	mg/kg												
PCB 117	mg/kg												
PCB 118	mg/kg												
PCB 119	mg/kg												
PCB 12	mg/kg												
PCB 120	mg/kg												
PCB 121	mg/kg												
PCB 121/95/88	mg/kg												
PCB 122	mg/kg												
PCB 123	mg/kg												
PCB 124	mg/kg												
PCB 125	mg/kg												
PCB 126	mg/kg												
PCB 127	mg/kg												
PCB 128	mg/kg												
PCB 129	mg/kg												
PCB 129/158	mg/kg												
PCB 13	mg/kg												
PCB 130	mg/kg												
PCB 130/164	mg/kg												
PCB 131	mg/kg												
PCB 132	mg/kg												
PCB 133	mg/kg												
PCB 134	mg/kg												
PCB 135	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
		Field Sample ID	24911670	24911671	SC-229-TRT4S(0.5-0.8)	SC-229-TRT4S(0-0.5)	SC-230-OutT3-(0.5-1.0)	SC-230-OutT3-(0-0.5)	SC-231-Out013-(0.5-1.0)	SC-231-Out013-(0-0.5)	SC-232-OutT3W(0.5-1.0)	SC-232-OutT3W(0-0.5)	SC-232-OutT3W(1.0-1.5)
Chemical	Location ID	DER3-05	DER3-07	SC-229	SC-229	SC-230	SC-230	SC-231	SC-231	SC-232	SC-232	SC-232	SC-232
Units	Depth Interval (ft)	0.50-1.00	0.50-1.00	0.50-0.80	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	1.00-1.50	1.50-2.00
	Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
	Date	11/16/2010	11/16/2010	8/24/2016	8/24/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016
PCB 136	mg/kg												
PCB 137	mg/kg												
PCB 138	mg/kg												
PCB 139	mg/kg												
PCB 14	mg/kg												
PCB 140	mg/kg												
PCB 141	mg/kg												
PCB 142	mg/kg												
PCB 143	mg/kg												
PCB 143/139	mg/kg												
PCB 144	mg/kg												
PCB 145	mg/kg												
PCB 146	mg/kg												
PCB 147	mg/kg												
PCB 148	mg/kg												
PCB 149	mg/kg												
PCB 15	mg/kg												
PCB 150	mg/kg												
PCB 151	mg/kg												
PCB 152	mg/kg												
PCB 153	mg/kg												
PCB 154	mg/kg												
PCB 155	mg/kg												
PCB 156	mg/kg												
PCB 157	mg/kg												
PCB 158	mg/kg												
PCB 159	mg/kg												
PCB 16	mg/kg												
PCB 160	mg/kg												
PCB 161	mg/kg												
PCB 162	mg/kg												
PCB 163	mg/kg												
PCB 163/160	mg/kg												
PCB 164	mg/kg												
PCB 165	mg/kg												
PCB 166	mg/kg												
PCB 167	mg/kg												
PCB 168	mg/kg												
PCB 169	mg/kg												
PCB 17	mg/kg												
PCB 170	mg/kg												
PCB 171	mg/kg												
PCB 172	mg/kg												
PCB 173	mg/kg												
PCB 174	mg/kg												
PCB 175	mg/kg												
PCB 176	mg/kg												
PCB 177	mg/kg												
PCB 178	mg/kg												
PCB 179	mg/kg												
PCB 18	mg/kg												
PCB 180	mg/kg												
PCB 181	mg/kg												
PCB 182	mg/kg												
PCB 182/175	mg/kg												
PCB 183	mg/kg												
PCB 184	mg/kg												
PCB 185	mg/kg												
PCB 186	mg/kg												
PCB 187	mg/kg												
PCB 188	mg/kg												
PCB 189	mg/kg												
PCB 19	mg/kg												
PCB 190	mg/kg												
PCB 191	mg/kg												
PCB 192	mg/kg												
PCB 193	mg/kg												
PCB 194	mg/kg												
PCB 195	mg/kg												
PCB 196	mg/kg												
PCB 197	mg/kg												
PCB 198	mg/kg												
PCB 199	mg/kg												
PCB 2	mg/kg												
PCB 20	mg/kg												
PCB 200	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
		Field Sample ID	24911670	24911671	SC-229-TRT4S(0.5-0.8)	SC-229-TRT4S(0-0.5)	SC-230-OutT3-(0.5-1.0)	SC-230-OutT3-(0-0.5)	SC-231-Out013-(0.5-1.0)	SC-231-Out013-(0-0.5)	SC-232-OutT3W(0.5-1.0)	SC-232-OutT3W(0-0.5)	SC-232-OutT3W(1.0-1.5)
Chemical	Location ID	DER3-05	DER3-07	SC-229	SC-229	SC-230	SC-230	SC-231	SC-231	SC-232	SC-232	SC-232	SC-232
Units	Depth Interval (ft)	0.50-1.00	0.50-1.00	0.50-0.80	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	1.00-1.50	1.50-2.00
	Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
	Date	11/16/2010	11/16/2010	8/24/2016	8/24/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016
PCB 201	mg/kg												
PCB 202	mg/kg												
PCB 203	mg/kg												
PCB 204	mg/kg												
PCB 204/200	mg/kg												
PCB 205	mg/kg												
PCB 206	mg/kg												
PCB 207	mg/kg												
PCB 208	mg/kg												
PCB 209	mg/kg												
PCB 21	mg/kg												
PCB 21/20	mg/kg												
PCB 22	mg/kg												
PCB 23	mg/kg												
PCB 24	mg/kg												
PCB 25	mg/kg												
PCB 26	mg/kg												
PCB 27	mg/kg												
PCB 28	mg/kg												
PCB 29	mg/kg												
PCB 3	mg/kg												
PCB 30	mg/kg												
PCB 31	mg/kg												
PCB 32	mg/kg												
PCB 33	mg/kg												
PCB 34	mg/kg												
PCB 35	mg/kg												
PCB 36	mg/kg												
PCB 37	mg/kg												
PCB 38	mg/kg												
PCB 39	mg/kg												
PCB 4	mg/kg												
PCB 4/10	mg/kg												
PCB 40	mg/kg												
PCB 41	mg/kg												
PCB 42	mg/kg												
PCB 43	mg/kg												
PCB 44	mg/kg												
PCB 45	mg/kg												
PCB 46	mg/kg												
PCB 47	mg/kg												
PCB 48	mg/kg												
PCB 49	mg/kg												
PCB 5	mg/kg												
PCB 50	mg/kg												
PCB 51	mg/kg												
PCB 52	mg/kg												
PCB 53	mg/kg												
PCB 54	mg/kg												
PCB 55	mg/kg												
PCB 56	mg/kg												
PCB 57	mg/kg												
PCB 58	mg/kg												
PCB 59	mg/kg												
PCB 6	mg/kg												
PCB 60	mg/kg												
PCB 61	mg/kg												
PCB 62	mg/kg												
PCB 63	mg/kg												
PCB 64	mg/kg												
PCB 65	mg/kg												
PCB 65/75/62	mg/kg												
PCB 66	mg/kg												
PCB 67	mg/kg												
PCB 67/58	mg/kg												
PCB 68	mg/kg												
PCB 68/64	mg/kg												
PCB 69	mg/kg												
PCB 7	mg/kg												
PCB 70	mg/kg												
PCB 71	mg/kg												
PCB 72	mg/kg												
PCB 73	mg/kg												
PCB 73/46	mg/kg												
PCB 74	mg/kg												
PCB 75	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
		Field Sample ID	24911670	24911671	SC-229-TRT4S(0.5-0.8)	SC-229-TRT4S(0-0.5)	SC-230-OutT3-(0.5-1.0)	SC-230-OutT3-(0-0.5)	SC-231-Out013-(0.5-1.0)	SC-231-Out013-(0-0.5)	SC-232-OutT3W(0.5-1.0)	SC-232-OutT3W(0-0.5)	SC-232-OutT3W(1.0-1.5)
Chemical	Location ID	DER3-05	DER3-07	SC-229	SC-229	SC-230	SC-230	SC-231	SC-231	SC-232	SC-232	SC-232	SC-232
Units	Depth Interval (ft)	0.50-1.00	0.50-1.00	0.50-0.80	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	1.00-1.50	1.50-2.00
	Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
	Date	11/16/2010	11/16/2010	8/24/2016	8/24/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016
PCB 76	mg/kg												
PCB 77	mg/kg												
PCB 78	mg/kg												
PCB 79	mg/kg												
PCB 8	mg/kg												
PCB 80	mg/kg												
PCB 81	mg/kg												
PCB 82	mg/kg												
PCB 83	mg/kg												
PCB 83/125/112	mg/kg												
PCB 84	mg/kg												
PCB 85	mg/kg												
PCB 86	mg/kg												
PCB 86/109	mg/kg												
PCB 87	mg/kg												
PCB 87/111	mg/kg												
PCB 88	mg/kg												
PCB 89	mg/kg												
PCB 89/84	mg/kg												
PCB 9	mg/kg												
PCB 90	mg/kg												
PCB 91	mg/kg												
PCB 92	mg/kg												
PCB 93	mg/kg												
PCB 94	mg/kg												
PCB 95	mg/kg												
PCB 96	mg/kg												
PCB 97	mg/kg												
PCB 98	mg/kg												
PCB 99	mg/kg												
PCB-100/93	mg/kg												
PCB-107/124	mg/kg												
PCB-108/119/86/97/125/87	mg/kg												
PCB-113/90/101	mg/kg												
PCB-116/85	mg/kg												
PCB-128/166	mg/kg												
PCB-13/12	mg/kg												
PCB-139/140	mg/kg												
PCB-147/149	mg/kg												
PCB-151/135	mg/kg												
PCB-153/168	mg/kg												
PCB-156/157	mg/kg												
PCB-163/138/129	mg/kg												
PCB-171/173	mg/kg												
PCB-180/193	mg/kg												
PCB-198/199	mg/kg												
PCB-21/33	mg/kg												
PCB-26/29	mg/kg												
PCB-28/20	mg/kg												
PCB-30/18	mg/kg												
PCB-44/47/65	mg/kg												
PCB-50/53	mg/kg												
PCB-59/62/75	mg/kg												
PCB-61/70/74/76	mg/kg												
PCB-69/49	mg/kg												
PCB-71/40	mg/kg												
PCB-90/101	mg/kg												
Pentachlorobiphenyl	mg/kg												
Tetrachlorobiphenyl	mg/kg												
Total Decachlorobiphenyls (congeners)	mg/kg												
Total Dichlorobiphenyls (congeners)	mg/kg												
Total Heptachlorobiphenyls (congeners)	mg/kg												
Total Hexachlorobiphenyls (congeners)	mg/kg												
Total Monochlorobiphenyls (congeners)	mg/kg												
Total Nonachlorobiphenyls (congeners)	mg/kg												
Total Octachlorobiphenyls (congeners)	mg/kg												
Total PCB (congeners)	mg/kg												
Total Pentachlorobiphenyls (congeners)	mg/kg												
Total Tetrachlorobiphenyls (congeners)	mg/kg												
Total Trichlorobiphenyls (congeners)	mg/kg												
Trichlorobiphenyl (total)	mg/kg												
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>													
Benzo[e]pyrene	mg/kg												
Chrysene, 1-methyl-	mg/kg												
Naphthalene, 1-methyl-	mg/kg												
Pyrene, 1-methyl-	mg/kg												

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL				
Field Sample ID	24911670	24911671	SC-229-TRT4S(0.5-0.8)	SC-229-TRT4S(0-0.5)	SC-230-OutT3-(0.5-1.0)	SC-230-OutT3-(0-0.5)	SC-231-Out013-(0.5-1.0)	SC-231-Out013-(0-0.5)	SC-232-OutT3W(0.5-1.0)	SC-232-OutT3W(0-0.5)	SC-232-OutT3W(1.0-1.5)	SC-232-OutT3W(1.5-2.0)					
Location ID	DER3-05	DER3-07	SC-229	SC-229	SC-230	SC-230	SC-231	SC-231	SC-232	SC-232	SC-232	SC-232					
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.50-0.80	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	1.00-1.50	1.50-2.00					
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS					
Date	11/16/2010	11/16/2010	8/24/2016	8/24/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016					
Chemical Class	Chemical	Units															
<b>Polycyclic Aromatic Hydrocarbons</b>																	
Acenaphthene	mg/kg		0.079	0.017	0.004	U	0.004	U	0.068	0.091	0.004	U	0.035	0.004	U	0.022	U
Acenaphthylene	mg/kg		0.012	0.006	0.004	U	0.005	0.027	0.034	0.032	0.004	U	0.032	0.004	U	0.027	
Anthracene	mg/kg		0.068	0.027	0.004	U	0.007	0.073	0.11	0.008	0.14	0.005	0.056	0.005	0.056		
Benzo(A)Anthracene	mg/kg		0.14	0.083	0.007		0.019	0.08	0.093	0.012	0.36	0.008	0.077	0.008	0.077		
Benzo(B)Fluoranthene	mg/kg		0.21	0.085	0.008		0.052	0.1	0.12	0.012	0.21	0.008	0.088	0.008	0.088		
Benzo(G,H,I)Perylene	mg/kg		0.088	0.035	0.004	U	0.019	0.056	0.077	0.009	0.33	0.005	0.05	0.005	0.05		
Benzo(K)Fluoranthene	mg/kg		0.076	0.035	0.004		0.021	0.039	0.054	0.004	0.055	0.005	0.03	0.005	0.03		
Benzo(A)Pyrene	mg/kg		0.15	0.056	0.005		0.043	0.065	0.085	0.011	0.29	0.009	0.081	0.009	0.081		
Chrysene	mg/kg		0.15	0.094	0.007		0.04	0.11	0.18	0.012	0.53	0.007	0.07	0.007	0.07		
Dibenz(A,H)Anthracene	mg/kg		0.021	0.009	0.004	U	0.005	0.027	0.033	0.004	0.064	0.004	0.022	0.004	0.022	U	
Fluoranthene	mg/kg		0.34	0.11	0.005		0.008	0.19	0.23	0.01	0.15	0.009	0.069	0.009	0.069		
Fluorene	mg/kg		0.035	0.012	0.004	U	0.004	0.047	0.064	0.005	0.079	0.004	0.036	0.004	0.036		
Indeno (1,2,3-CD) Pyrene	mg/kg		0.078	0.028	0.004	U	0.017	0.049	0.057	0.006	0.097	0.005	0.042	0.005	0.042		
Naphthalene	mg/kg		0.077	0.024	0.004	U	0.004	0.12	1.5	0.021	0.16	0.01	0.14	0.01	0.14		
Phenanthrene	mg/kg		0.15	0.039	0.004	U	0.006	0.12	0.19	0.013	0.27	0.009	0.093	0.009	0.093		
Pyrene	mg/kg		0.31	0.12	0.011		0.012	0.27	0.35	0.024	1.2	0.015	0.14	0.015	0.14		
Total PAHs (Detections + 1/2 MDL)	mg/kg		1.984	0.78	0.065		0.26	1.414	3.2515	0.153	4.002	0.103	1.021	0.103	1.021		
Total PAHs (Detections Only)	mg/kg		1.984	0.78	0.047		0.254	1.387	3.235	0.147	4.002	0.095	0.999	0.095	0.999		
<b>Semivolatile Organic Compounds - TICs</b>																	
1,2,4-Trithiolane	mg/kg								8.8								
1,4-Benzenediol, 2-chloro-	mg/kg																
11H-Benzo[b]fluorene	mg/kg																
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg																
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg																
3-PENTEN-2-ONE, 4-METHYL-	mg/kg																
7H-Benz[de]anthracen-7-one	mg/kg																
9,10-Anthracenedione	mg/kg																
9-Octadecenamamide, (Z)-	mg/kg					0.24					0.32						
Acetamide, 2-chloro-N-(ethox	mg/kg																
Alachlor	mg/kg																
Benzenamine, 3-methyl-	mg/kg																
Benzenamine, 4,4',4"-methy	mg/kg																
Benzenamine, 4,4'-methyleneb	mg/kg																
Benzene, 1,2,3,4-tetrachloro	mg/kg																
Benzene, 1,2,3,5-tetrachloro	mg/kg																
Benzene, 1,2,3-trichloro-	mg/kg																
Benzene, 1,3,5-trichloro-	mg/kg																
Benzene, 1,3-bis(1-methyleth	mg/kg																
Benzene, 1,4-bis(1-methyleth	mg/kg																
Benzofuran, 2,3-dihydro-	mg/kg																
CYCLIC OCTAATOMIC SULFUR	mg/kg								9.8								
Diphenyl Ether	mg/kg																
Docosane	mg/kg																
Heneicosane	mg/kg					0.17											
Hexacosane	mg/kg												0.95				
Hexadecane	mg/kg																
Hexatriacontane	mg/kg																
m-Chloroaniline	mg/kg																
N,N-Diethylaniline	mg/kg																
n-Hexadecanoic acid	mg/kg				1.2												
Nonadecane	mg/kg																
o-Chloroaniline	mg/kg																
Octacosane	mg/kg										0.24		0.19				
Octadecane	mg/kg																
Octadecane, 1-chloro-	mg/kg																
Octadecanoic acid	mg/kg																
Parachlorophenol	mg/kg																
Pentadecane	mg/kg																
Perylene	mg/kg																
Phenol, 2,5-dichloro-	mg/kg																
Phenol, 3-chloro-	mg/kg																
Phenol, 4,4'-(1-methylethyl)	mg/kg																
Tetracosane	mg/kg																
Tetradecane	mg/kg																
Tetraethylene glycol	mg/kg					1.3											
Total SVOC TICs	mg/kg		39	31	2.2		3.4	100	180	7.4	57	6.1	26				
Triacotane	mg/kg																
Tributyl phosphate	mg/kg																
Tridecanoic acid	mg/kg			0.3													
Triphenyl phosphate	mg/kg																
UNKNOWN	mg/kg		1.068	2.24	0.305		0.7	6.681818182	6.84	0.9625	3.5625	0.439	2.468571429				
Unknown acid	mg/kg																
Unknown Alcohol	mg/kg																
Unknown Aldol Condensate	mg/kg		8.5														
UNKNOWN ALKANE	mg/kg								1.4		4.4						

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
Field Sample ID	24911670	24911671	SC-229-TRT4S(0.5-0.8)	SC-229-TRT4S(0-0.5)	SC-230-OutT3-(0.5-1.0)	SC-230-OutT3-(0-0.5)	SC-231-Out013-(0.5-1.0)	SC-231-Out013-(0-0.5)	SC-232-OutT3W(0.5-1.0)	SC-232-OutT3W(0-0.5)	SC-232-OutT3W(1.0-1.5)	SC-232-OutT3W(1.5-2.0)	
Location ID	DER3-05	DER3-07	SC-229	SC-229	SC-230	SC-230	SC-231	SC-231	SC-232	SC-232	SC-232	SC-232	
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.50-0.80	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	1.00-1.50	1.50-2.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Date	11/16/2010	11/16/2010	8/24/2016	8/24/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	
Chemical Class	Units												
Unknown Alkene	mg/kg												
Unknown Amide	mg/kg												
Unknown Amine	mg/kg												
UNKNOWN AROMATIC	mg/kg												
Unknown Carboxylic Acid	mg/kg												
Unknown Cycloalkane	mg/kg												
Unknown Hydrocarbon	mg/kg												
Unknown Ketone	mg/kg												
Unknown PAH	mg/kg										4.15		
UNKNOWN SILOXANE	mg/kg												
<b>Semivolatile Organic Compounds</b>													
1,2,4-Trichlorobenzene	mg/kg		0.028	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
1,2-Diphenylhydrazine	mg/kg		0.025	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
1,4-Dioxane	mg/kg		0.15	0.13	0.12	0.12	0.8	0.98	0.12	0.7	0.12	0.67	0.67
1-Naphthylamine	mg/kg		0.25	0.21	0.2	0.2	1.3	1.6	0.2	1.2	0.2	1.1	1.1
2,3,4,6-Tetrachlorophenol	mg/kg		0.099	0.084	0.08	0.079	0.53	0.65	0.082	0.47	0.079	0.45	0.45
2,4,5-Trichlorophenol	mg/kg		0.025	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
2,4,6-Trichlorophenol	mg/kg		0.025	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
2,4-Dichlorophenol	mg/kg		0.025	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
2,4-Dimethylphenol	mg/kg		0.025	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
2,4-Dinitrophenol	mg/kg		0.45	0.38	0.36	0.36	2.4	2.9	0.37	2.1	0.36	2	2
2,4-Dinitrotoluene	mg/kg		0.099	0.084	0.08	0.079	0.53	0.65	0.082	0.47	0.079	0.45	0.45
2,6-Dinitrotoluene	mg/kg		0.025	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
2-Chloronaphthalene	mg/kg		0.01	0.008	0.008	0.008	0.054	0.065	0.008	0.047	0.008	0.045	0.045
2-Chlorophenol	mg/kg		0.025	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
2-Methylnaphthalene	mg/kg		0.033	0.011	0.004	0.004	0.071	0.18	0.009	0.15	0.005	0.069	0.069
2-Methylphenol (O-Cresol)	mg/kg		0.025	0.067	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
2-Naphthylamine	mg/kg		0.25	0.21	0.2	0.2	1.3	1.6	0.2	1.2	0.2	1.1	1.1
2-Nitroaniline	mg/kg		0.025	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
2-Nitrophenol	mg/kg		0.025	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
3,3'-Dichlorobenzidine	mg/kg		0.15	0.13	0.12	0.12	0.8	0.98	0.12	0.7	0.12	0.67	0.67
3,3'-Dimethylbenzidine	mg/kg												
3-Nitroaniline	mg/kg		0.099	0.084	0.08	0.079	0.53	0.65	0.082	0.47	0.079	0.45	0.45
4,6-Dinitro-2-Methylphenol	mg/kg		0.25	0.21	0.2	0.2	1.3	1.6	0.2	1.2	0.2	1.1	1.1
4-Aminobiphenyl	mg/kg		0.25	0.21	0.2	0.2	1.3	1.6	0.2	1.2	0.2	1.1	1.1
4-Bromophenyl Phenyl Ether	mg/kg		0.025	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
4-Chloro-3-Methylphenol	mg/kg		0.025	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
4-Chloroaniline	mg/kg		0.05	0.042	0.04	0.039	0.27	0.33	0.041	0.23	0.04	0.22	0.22
4-Chlorophenyl Phenyl Ether	mg/kg		0.025	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
4-Methylphenol (P-Cresol)	mg/kg		0.24	0.021	0.02	0.02	0.27	1.3	0.02	0.12	0.02	0.11	0.11
4-Nitroaniline	mg/kg		0.099	0.084	0.08	0.079	0.53	0.65	0.082	0.47	0.079	0.45	0.45
4-Nitrophenol	mg/kg		0.25	0.21	0.2	0.2	1.3	1.6	0.2	1.2	0.2	1.1	1.1
Acetophenone	mg/kg		0.025	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
Aniline	mg/kg		0.25	0.21	0.2	0.2	1.3	1.6	0.2	1.2	0.2	1.1	1.1
Benzidine	mg/kg		0.37	0.32	0.3	0.3	2	2.4	0.31	1.7	0.3	1.7	1.7
Biphenyl	mg/kg		0.025	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg		0.025	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
Bis(2-Chloroethoxy)Methane	mg/kg		0.025	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
Bis(2-Chloroethyl)Ether	mg/kg		0.025	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
Bis(2-Chloroisopropyl)Ether	mg/kg												
Bis(2-Ethylhexyl)Phthalate	mg/kg		0.099	0.084	0.08	0.079	0.53	0.65	0.082	0.47	0.079	0.45	0.45
Butyl Benzyl Phthalate	mg/kg		0.099	0.084	0.08	0.079	0.53	0.65	0.082	0.47	0.079	0.45	0.45
Carbazole	mg/kg		0.025	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
Dibenzofuran	mg/kg		0.025	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
Diethyl Phthalate	mg/kg		0.099	0.084	0.08	0.079	0.53	0.65	0.082	0.47	0.079	0.45	0.45
Dimethyl Phthalate	mg/kg		0.099	0.084	0.08	0.079	0.53	0.65	0.082	0.47	0.079	0.45	0.45
Di-N-Butyl Phthalate	mg/kg		0.099	0.084	0.08	0.079	0.53	0.65	0.082	0.47	0.079	0.45	0.45
Diphenyl Ether	mg/kg		0.025	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
Hexachlorobenzene	mg/kg		0.005	0.004	0.004	0.004	0.027	0.033	0.004	0.023	0.004	0.022	0.022
Hexachlorobutadiene	mg/kg		0.025	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
Hexachlorocyclopentadiene	mg/kg		0.25	0.21	0.2	0.2	1.3	1.6	0.2	1.2	0.2	1.1	1.1
Hexachloroethane	mg/kg		0.05	0.042	0.04	0.039	0.27	0.33	0.041	0.23	0.04	0.22	0.22
Hexachloropropylene	mg/kg												
Isophorone	mg/kg		0.025	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
N-Dioctyl Phthalate	mg/kg		0.099	0.084	0.08	0.079	0.53	0.65	0.082	0.47	0.079	0.45	0.45
Nitrobenzene	mg/kg		0.025	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
N-Nitrosodimethylamine	mg/kg		0.099	0.084	0.08	0.079	0.53	0.65	0.082	0.47	0.079	0.45	0.45
N-Nitrosodi-N-Propylamine	mg/kg		0.025	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
N-Nitrosodiphenylamine	mg/kg		0.025	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
O-Toluidine	mg/kg		0.3	0.25	0.24	0.24	1.6	2	0.25	1.4	0.24	1.3	1.3
Parathion	mg/kg		0.25	0.21	0.2	0.2	1.3	1.6	0.2	1.2	0.2	1.1	1.1
Pentachlorobenzene	mg/kg		0.025	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
Pentachlorophenol	mg/kg		0.05	0.042	0.04	0.039	0.27	0.33	0.041	0.23	0.04	0.22	0.22
Phenol	mg/kg		0.025	0.021	0.02	0.02	0.13	0.16	0.02	0.12	0.02	0.11	0.11
<b>Volatile Organic Compounds - TICs</b>													
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg												

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	
Field Sample ID	24911670	24911671	SC-229-TRT4S(0.5-0.8)	SC-229-TRT4S(0-0.5)	SC-230-OutT3-(0.5-1.0)	SC-230-OutT3-(0-0.5)	SC-231-Out013-(0.5-1.0)	SC-231-Out013-(0-0.5)	SC-232-OutT3W(0.5-1.0)	SC-232-OutT3W(0-0.5)	SC-232-OutT3W(1.0-1.5)	SC-232-OutT3W(1.5-2.0)		
Location ID	DER3-05	DER3-07	SC-229	SC-229	SC-230	SC-230	SC-231	SC-231	SC-232	SC-232	SC-232	SC-232		
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.50-0.80	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	1.00-1.50	1.50-2.00		
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS		
Date	11/16/2010	11/16/2010	8/24/2016	8/24/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016		
Chemical Class	Units													
1-Butene	mg/kg													
1-Heptene	mg/kg													
1-Propene, 2-methyl-	mg/kg													
Azulene	mg/kg													
BENZENE, 1,2,4-TRICHLORO-	mg/kg													
BENZENE, 1,2-DICHLORO-	mg/kg													
BENZENE, 1,4-DICHLORO-	mg/kg													
Camphene	mg/kg													
CYCLOHEXANE	mg/kg													
Cyclohexane, methyl-	mg/kg													
Cyclotrisiloxane, hexamethyl	mg/kg													
Diphenyl Ether	mg/kg													
Ethane, 1,1,2,2-tetrachloro-	mg/kg													
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg													
Ethane, 1,2-dichloro-1,1-dif	mg/kg													
Ethene, 1,1-dichloro-2,2-dif	mg/kg													
Hexane, 2-methyl-	mg/kg													
Hexane, 3-methyl-	mg/kg													
METHANE, CHLOROFLUORO-	mg/kg													
Naphthalene	mg/kg													
NAPHTHALENE, 2-METHYL-	mg/kg													
Nonanal	mg/kg													
Norflurane	mg/kg													
Pentane, 2,3-dimethyl-	mg/kg													
Phenol, 4-(1,1,3,3-tetrameth	mg/kg				2.3									
Propene	mg/kg													
Sulfur dioxide	mg/kg													
Tridecane	mg/kg													
UNKNOWN	mg/kg	2.1	0.34			0.014				0.0235			0.083	
UNKNOWN ALICYCLIC	mg/kg			0.011										
UNKNOWN ALIPHATIC	mg/kg													
UNKNOWN ALKANE	mg/kg			0.012				0.015						
UNKNOWN AROMATIC	mg/kg													
UNKNOWN SILOXANE	mg/kg	0.03	0.067											
<b>Volatile Organic Compounds</b>														
1,1,1,2-Tetrachloroethane	mg/kg			0.002	U		0.001	U		0.002	U		0.001	U
1,1,1-Trichloroethane	mg/kg	0.006	U	0.004	U		0.001	U		0.002	U		0.001	U
1,1,1-Trichlorotrifluoroethane	mg/kg													
1,1,2,2-Tetrachloroethane	mg/kg	0.006	U	0.004	U		0.001	U		0.002	U		0.001	U
1,1,2-Trichloroethane	mg/kg	0.006	U	0.004	U		0.001	U		0.002	U		0.001	U
1,1,2-Trichlorotrifluoroethane	mg/kg	0.012	U	0.009	U		0.002	U		0.004	U		0.002	U
1,1,2-Trifluoroethane	mg/kg													
1,1-Dichloro-1-Fluoroethane	mg/kg													
1,1-Dichloroethane	mg/kg	0.006	U	0.004	U		0.001	U		0.002	U		0.001	U
1,1-Dichloroethene	mg/kg	0.006	U	0.004	U		0.001	U		0.002	U		0.001	U
1,1-Dichloropropene	mg/kg						0.001	U		0.002	U		0.001	U
1,2,4-Trimethylbenzene	mg/kg						0.001	U		0.002	U		0.001	U
1,2-Dibromoethane (EDB)	mg/kg						0.001	U		0.002	U		0.001	U
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg													
1,2-Dichloro-1-Fluoroethane	mg/kg													
1,2-Dichlorobenzene	mg/kg						0.001	U		0.003	U		0.001	U
1,2-Dichloroethane	mg/kg	0.006	U	0.004	U		0.001	U		0.002	U		0.001	U
1,2-Dichloroethene	mg/kg						0.001	U		0.002	U		0.001	U
1,2-Dichloropropane	mg/kg	0.006	U	0.004	U		0.001	U		0.002	U		0.001	U
1,2-Dichlorotetrafluoroethane	mg/kg													
1,3,5-Trimethylbenzene	mg/kg						0.001	U		0.002	U		0.001	U
1,3-Dichlorobenzene	mg/kg						0.001	U		0.002	U		0.001	U
1,4-Dichlorobenzene	mg/kg						0.001	U		0.002	U		0.001	U
1-Chloro-1,1-Difluoroethane	mg/kg													
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg													
2-Chloro-1,1,1-Trifluoroethane	mg/kg													
2-Chloroethyl Vinyl Ether	mg/kg													
2-Chlorotoluene	mg/kg						0.001	U		0.002	U		0.001	U
2-Hexanone	mg/kg						0.004	U		0.006	U		0.004	U
4-Chlorotoluene	mg/kg						0.001	U		0.002	U		0.001	U
4-Isopropyltoluene	mg/kg						0.001	U		0.002	U		0.001	U
Acetone	mg/kg	0.11		0.088			0.009			0.088			0.028	
Acrolein	mg/kg	0.12	U	0.086	U									
Acrylonitrile	mg/kg	0.025	U	0.017	U									
Benzene	mg/kg	0.003	U	0.002	U		0.0006	U		0.001	U		0.0006	U
Bromodichloromethane	mg/kg	0.006	U	0.004	U		0.001	U		0.002	U		0.001	U
Bromoform	mg/kg	0.006	U	0.004	U									
Carbon Disulfide	mg/kg	0.018		0.008			0.001	U		0.017			0.002	
Carbon Tetrachloride	mg/kg	0.006	U	0.004	U		0.001	U		0.002	U		0.001	U
CFC-1113	mg/kg													
Chlorobenzene	mg/kg	0.006	U	0.004	U		0.001	U		0.002	U		0.001	U

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
		24911670 DER3-05 0.50-1.00 FS 11/16/2010	24911671 DER3-07 0.50-1.00 FS 11/16/2010	SC-229-TRT4S(0.5-0.8) SC-229 0.50-0.80 FS 8/24/2016	SC-229-TRT4S(0-0.5) SC-229 0.00-0.50 FS 8/24/2016	SC-230-OutT3-(0.5-1.0) SC-230 0.50-1.00 FS 8/25/2016	SC-230-OutT3-(0-0.5) SC-230 0.00-0.50 FS 8/25/2016	SC-231-Out013-(0.5-1.0) SC-231 0.50-1.00 FS 8/25/2016	SC-231-Out013-(0-0.5) SC-231 0.00-0.50 FS 8/25/2016	SC-232-OutT3W(0.5-1.0) SC-232 0.50-1.00 FS 8/25/2016	SC-232-OutT3W(0-0.5) SC-232 0.00-0.50 FS 8/25/2016	SC-232-OutT3W(1.0-1.5) SC-232 1.00-1.50 FS 8/25/2016	SC-232-OutT3W(1.5-2.0) SC-232 1.50-2.00 FS 8/25/2016
Chlorodibromomethane	mg/kg	0.006 U	0.004 U	0.002 U		0.001 U		0.002 U		0.001 U		0.001 U	0.001 U
Chlorodifluoromethane	mg/kg												
Chlorofluoromethane	mg/kg												
Chloroform	mg/kg	0.006 U	0.004 U	0.002 U		0.001 U		0.002 U		0.001 U		0.001 U	0.001 U
Chloropentafluoroethane	mg/kg												
cis-1,2-Dichloroethene	mg/kg	0.006 U	0.004 U	0.002 U		0.001 U		0.002 U		0.001 U		0.001 U	0.001 U
cis-1,3-Dichloropropene	mg/kg	0.006 U	0.004 U	0.002 U		0.001 U		0.002 U		0.001 U		0.001 U	0.001 U
Cumene	mg/kg			0.002 U		0.001 U		0.002 U		0.001 U		0.001 U	0.001 U
Dichlorodifluoromethane	mg/kg	0.012 U	0.009 U	0.003 U		0.002 U		0.004 U		0.002 U		0.002 U	0.003 U
Dichlorofluoromethane	mg/kg	0.012 U	0.009 U	0.003 U		0.002 U		0.004 U		0.002 U		0.002 U	0.003 U
Ethane	ug/L												
Ethyl Chloride	mg/kg	0.012 U	0.009 U	0.003 U		0.002 U		0.004 U		0.002 U		0.002 U	0.003 U
Ethylbenzene	mg/kg	0.006 U	0.004 U	0.002 U		0.001 U		0.002 U		0.001 U		0.001 U	0.001 U
Fluoromethane	mg/kg												
Hexane	mg/kg			0.002 U		0.001 U		0.002 U		0.001 U		0.001 U	0.001 U
Isobutyl Alcohol	mg/kg			0.16 U		0.12 U		0.21 U		0.12 U		0.12 U	0.14 U
Meta- And Para-Xylene	mg/kg			0.002 U		0.001 U		0.002 U		0.001 U		0.001 U	0.001 U
Methacrylonitrile	mg/kg			0.008 U		0.006 U		0.011 U		0.006 U		0.006 U	0.007 U
Methane	ug/L												
Methyl Bromide	mg/kg	0.012 U	0.009 U										
Methyl Chloride	mg/kg	0.012 U	0.009 U	0.003 U		0.002 U		0.004 U		0.002 U		0.002 U	0.003 U
Methyl Ethyl Ketone	mg/kg			0.023 U		0.005 U		0.015 U		0.006 U		0.005 U	0.006 U
Methyl Isobutyl Ketone	mg/kg			0.005 U		0.004 U		0.006 U		0.004 U		0.004 U	0.004 U
Methyl Methacrylate	mg/kg			0.002 U		0.001 U		0.002 U		0.001 U		0.001 U	0.001 U
Methyl Tertiary Butyl Ether	mg/kg			0.0008 U		0.0006 U		0.001 U		0.0006 U		0.0006 U	0.0007 U
Methylene Chloride	mg/kg	0.012 U	0.009 U	0.012 U		0.002 U		0.004 U		0.002 U		0.002 U	0.003 U
N-Butylbenzene	mg/kg			0.002 U		0.001 U		0.002 U		0.001 U		0.001 U	0.001 U
N-Propylbenzene	mg/kg			0.002 U		0.001 U		0.002 U		0.001 U		0.001 U	0.001 U
Ortho-Xylene	mg/kg			0.002 U		0.001 U		0.002 U		0.001 U		0.001 U	0.001 U
Propionitrile	mg/kg			0.046 U		0.036 U		0.064 U		0.037 U		0.036 U	0.042 U
sec-Butylbenzene	mg/kg			0.002 U		0.001 U		0.002 U		0.001 U		0.001 U	0.001 U
Styrene	mg/kg			0.002 U		0.001 U		0.002 U		0.001 U		0.001 U	0.001 U
tert-Butylbenzene	mg/kg			0.002 U		0.001 U		0.002 U		0.001 U		0.001 U	0.001 U
Tetrachloroethene	mg/kg	0.006 U	0.004 U	0.002 U		0.001 U		0.002 U		0.001 U		0.001 U	0.001 U
Tetrahydrofuran	mg/kg			0.006 U		0.005 U		0.009 U		0.005 U		0.005 U	0.006 U
Toluene	mg/kg	0.006 U	0.004 U	0.002 U		0.001 U		0.002 U		0.001 U		0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/kg	0.006 U	0.004 U	0.002 U		0.001 U		0.002 U		0.001 U		0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/kg	0.006 U	0.004 U										
Trichloroethene	mg/kg	0.006 U	0.004 U	0.002 U		0.001 U		0.002 U		0.001 U		0.001 U	0.001 U
Trichlorofluoromethane	mg/kg	0.012 U	0.009 U	0.003 U		0.002 U		0.004 U		0.002 U		0.002 U	0.003 U
Vinyl Chloride	mg/kg	0.006 U	0.004 U	0.002 U		0.001 U		0.002 U		0.001 U		0.001 U	0.001 U
Vinyl Fluoride	mg/kg												
Xylenes	mg/kg	0.006 U	0.004 U	0.002 U		0.001 U		0.002 U		0.001 U		0.001 U	0.001 U

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone	MZ-JL/TEL											
		Field Sample ID	SC-232-OutT3W(1.5-2.0)-D	SC-232-OutT3W(2.0-2.25)	SC-233-OUTDR013C(0.5-1.0)	SC-233-OUTDR013C(0-0.5)	SC-233-OutDR013C(0.5-1.0)	SC-233-OutDR013C(0-0.5)	SC-234-TRT3WM(0.5-1.0)	SC-234-TRT3WM(0-0.5)	SC-235-TRT3WS(0.5-1.0)	SC-235-TRT3WS(0-0.5)	SC-235-TRT3WS(1.0-1.5)
Chemical	Location ID	SC-232	SC-232	SC-233	SC-233	SC-233	SC-233	SC-234	SC-234	SC-235	SC-235	SC-235	SC-235
Units	Depth Interval (ft)	1.50-2.00	2.00-2.25	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	1.00-1.50	1.50-2.00
	Sample Purpose	DUP	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
	Date	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/24/2016	8/24/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016
<b>General Chemistry</b>													
Black Carbon	mg/kg												
Percent Moisture	%	26.7	24.8	18.6	23.7	16.5	21.6	11.25	14.8	24.6	24.9	29.7	27.4
Percent Solids	%			83.9	76.8								
Total Organic Carbon	mg/kg		9050			164 U	4140	1520	3140	5060	1870		
<b>Metals</b>													
Aluminum	mg/kg		10800			6870	7100	21800	43600	12100	16600	12000	12400
Antimony	mg/kg		0.202			0.129	0.167	0.748	0.552	0.381	0.524	0.928	1.08
Arsenic	mg/kg		11.5			1.9	4.05	4.44	6.41	8.59	9.94	15.7	23.5
Barium	mg/kg		67.7			37.5	63	311	519	132	259	108	114
Beryllium	mg/kg		0.835			0.435	0.602	4.09	6.69	1.62	2.88	1.4	1.21
Cadmium	mg/kg		0.234			0.0395	0.109	0.0657	0.0548	0.0936	0.0929	0.414	0.647
Calcium	mg/kg		1280			373	21300	3470	21300	4730	7210	3820	3060
Chromium	mg/kg		38.1			17	35.1	465	1170	230	412	173	189
Cobalt	mg/kg		9.88			4	4.2	17.5	31.4	8.53	14.9	11.7	8.47
Copper	mg/kg		16.7			11.6	11.3	25	43.9	17.4	26.7	43	50.7
Iron	mg/kg		13500			6080	10900	22800	44900	16000	19400	23300	20800
Lead	mg/kg		29.3			8.59	51.5	26	23.9	42	51.4	82.9	135
Magnesium	mg/kg		2370			1330	2240	1870	3760	1410	1740	2060	2450
Manganese	mg/kg		147			63.8	104	194	257	95.4	148	271	178
Mercury	mg/kg		0.0503			0.0118 U	0.0475	0.0147	0.0236	0.0867	0.106	0.31	0.22
Nickel	mg/kg		20.9			12.4	14.2	32.1	59.7	21.2	40.9	23.9	20.7
Potassium	mg/kg		1490			1100	978	2060	4600	1220	1610	1470	1550
Selenium	mg/kg		0.466			0.0824 U	0.0858 U	0.0839	0.133	0.24	0.291	0.527	0.667
Silver	mg/kg		0.0815			0.0223 U	0.0257 U	0.022 U	0.0255	0.039	0.0438	0.205	0.196
Sodium	mg/kg		207			130	254	956	2080	591	794	629	546
Thallium	mg/kg		0.234			0.0905	0.0923	0.0576	0.0839	0.0603	0.0738	0.13	0.187
Tin	mg/kg												
Titanium	mg/kg		514			322	336	1280	2620	627	1080	753	737
Vanadium	mg/kg		36.7			16.8	29.9	46	84.2	43.6	70.1	43.5	44.8
Zinc	mg/kg		89			19.3	43	19.3	27.7	46.4	41	143	187
<b>Metals - AVS/SEM</b>													
Acid Volatile Sulfide	umol/g												
Arsenic	umol/g												
Cadmium	umol/g												
Copper	umol/g												
Lead	umol/g												
Zinc	umol/g												
<b>Metals - Leachate</b>													
Lead	ug/L												
<b>Per and Polyfluorinated Organic Substances</b>													
Perfluorobutane Sulfonic Acid	mg/kg			0.00017 U	0.00018 U			0.00016 U	0.00018 U				
Perfluorobutanoic Acid	mg/kg			0.00015 U	0.00016 U			0.00026 U	0.00015 U				
Perfluorodecane Sulfonic Acid	mg/kg			0.00037 U	0.00039 U			0.00034 U	0.00038 U				
Perfluorodecanoic Acid	mg/kg			0.00033 U	0.0021			0.00031 U	0.00034 U				
Perfluorododecanoic Acid	mg/kg			0.0007 U	0.0012			0.00065 U	0.00072 U				
Perfluoroheptanoic Acid	mg/kg			0.00015 U	0.00016			0.00014 U	0.00015 U				
Perfluorohexane Sulfonic Acid	mg/kg			0.00034 U	0.00037 U			0.00032 U	0.00035 U				
Perfluorohexanoic Acid	mg/kg			0.00047 U	0.00029			0.00017 U	0.00019 U				
Perfluorononanoic Acid	mg/kg			0.00027 U	0.00029 U			0.00025 U	0.00028 U				
Perfluorooctane Sulfonamide	mg/kg			0.00012 U	0.00013 U			0.00011 U	0.00012 U				
Perfluoropentanoic Acid	mg/kg			0.00029 U	0.00031 U			0.00027 U	0.0003 U				
Perfluorotetradecanoic Acid	mg/kg			0.00085 U	0.0009 U			0.00078 U	0.00087 U				
Perfluorotridecanoic Acid	mg/kg			0.00039 U	0.00042 U			0.00036 U	0.0004 U				
Perfluoroundecanoic Acid	mg/kg			0.00039 U	0.00063			0.00036 U	0.0004 U				
PFOA	mg/kg			0.00032	0.00073			0.00026 U	0.00029 U				
PFOA(trial)	mg/kg												
PFOS	mg/kg			0.00017 U	0.00018 U			0.00016 U	0.00018 U				
PFOS (trial)	mg/kg												
<b>Pesticides and Herbicides</b>													
4,4'-DDD	mg/kg					0.00039 U	0.00042 U						
4,4'-DDE	mg/kg					0.00039 U	0.0011						
4,4'-DDT	mg/kg					0.00042 U	0.0012						
Aldrin	mg/kg					0.0002 U	0.00022 U						
Alpha Chlordane	mg/kg					0.0002 U	0.00022 U						
Alpha-BHC	mg/kg					0.0002 U	0.0029						
beta-BHC	mg/kg					0.00036 U	0.019 U						
delta-BHC	mg/kg					0.00054 U	0.0016						
Dieldrin	mg/kg					0.00039 U	0.00042 U						
Endosulfan I	mg/kg					0.00026 U	0.0031						
Endosulfan II	mg/kg					0.00039 U	0.00042 U						
Endosulfan Sulfate	mg/kg					0.00039 U	0.0018						
Endrin	mg/kg					0.00039 U	0.00042 U						
Endrin Aldehyde	mg/kg					0.00039 U	0.00042 U						
Endrin Ketone	mg/kg					0.00072 U	0.00076 U						
Gamma Chlordane	mg/kg					0.0002 U	0.011 U						

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	Field Sample ID	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
		SC-232-OutT3W(1.5-2.0)-D	SC-232-OutT3W(2.0-2.25)	SC-233-OUTDR013C(0.5-1.0)	SC-233-OUTDR013C(0-0.5)	SC-233-OutDR013C(0.5-1.0)	SC-233-OutDR013C(0-0.5)	SC-234-TRT3WM(0.5-1.0)	SC-234-TRT3WM(0-0.5)	SC-235-TRT3WS(0.5-1.0)	SC-235-TRT3WS(0-0.5)	SC-235-TRT3WS(1.0-1.5)	SC-235-TRT3WS(1.5-2.0)
Location ID	Depth Interval (ft)	SC-232	SC-232	SC-233	SC-233	SC-233	SC-234	SC-234	SC-235	SC-235	SC-235	SC-235	
Sample Purpose	Date	1.50-2.00 DUP	2.00-2.25 FS	0.50-1.00 FS	0.00-0.50 FS	0.50-1.00 FS	0.50-1.00 FS	0.00-0.50 FS	0.50-1.00 FS	0.00-0.50 FS	1.00-1.50 FS	1.50-2.00 FS	
Chemical Class	Units	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/24/2016	8/24/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	
Chemical													
Heptachlor	mg/kg					0.0002 U	0.0049						
Heptachlor Epoxide	mg/kg					0.0002 U	0.00022 U						
Lindane	mg/kg					0.0002 U	0.00022 U						
Methoxychlor	mg/kg					0.002 U	0.0022 U						
Toxaphene	mg/kg					0.017 U	0.018 U						
<b>Physical Properties</b>													
0.001 MM	% PASSING		5			0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	
0.002 MM	% PASSING		7			0.5	1	0.5	0.5 U	0.5 U	0.5 U	0.5 U	
0.005 MM	% PASSING		13			2	3	1.5	0.5 U	0.5 U	0.5 U	0.5 U	
0.02 MM	% PASSING		20			6	4	1.5	1	1	1	1	
0.05 MM	% PASSING		27			11	7	1.5	1	2	3	3	
0.064 MM	% PASSING		29			16	10	1	1.5	3	4	4	
0.075 MM	% PASSING		31.1			19.1	11.1	1.2	1.5	3.1	5	5	
0.15 MM	% PASSING		49			30.6	15.1	1.4	1.8	4.2	7.2	7.2	
0.3 MM	% PASSING		82.1			52.9	28.9	5.9	6.5	22.8	27.1	27.1	
0.6 MM	% PASSING		93.3			82.1	57.4	31.8	27.4	78.4	79.3	79.3	
1.18 MM	% PASSING		96.9			87.4	72.2	52.1	43.8	93.7	96.1	96.1	
19 MM	% PASSING		100			100	100	100	89.9	100	100	100	
2.36 MM	% PASSING		97.5			88	82.2	62.8	63.2	97.2	98.2	98.2	
3.35 MM	% PASSING		98.8			90.2	87.4	69.2	69.4	98	99.2	99.2	
37.5 MM	% PASSING		100			100	100	100	100	100	100	100	
4.75 MM	% PASSING		99.3			92.6	91.4	74.5	74	98.6	99.6	99.6	
75 MM	% PASSING		100			100	100	100	100	100	100	100	
Density	PCF												
<b>Polychlorinated Biphenyls - TICs</b>													
1,1'-Biphenyl, 2,3-dichloro-	mg/kg												
Unknown Biphenyl	mg/kg												
<b>Polychlorinated Biphenyls</b>													
Heptachlorobiphenyl	mg/kg			0.000208 U	0.00667								
Hexachlorobiphenyl	mg/kg			0.000208 U	0.0105								
Octachlorobiphenyl	mg/kg			0.000208 U	0.00206								
PCB 1	mg/kg			0.000208 U	0.000254 U								
PCB 10	mg/kg												
PCB 100	mg/kg			0.000208 U	0.000254 U								
PCB 101	mg/kg												
PCB 102	mg/kg			0.000208 U	0.000254 U								
PCB 103	mg/kg			0.000208 U	0.000254 U								
PCB 104	mg/kg			0.000208 U	0.000254 U								
PCB 105	mg/kg			0.000208 U	0.0006								
PCB 106	mg/kg			0.000208 U	0.000254 U								
PCB 107	mg/kg												
PCB 107/123	mg/kg			0.000417 U	0.000508 U								
PCB 108	mg/kg			0.000208 U	0.000254 U								
PCB 109	mg/kg												
PCB 11	mg/kg			0.000208 U	0.000254 U								
PCB 110	mg/kg			0.000208 U	0.00181								
PCB 111	mg/kg												
PCB 112	mg/kg												
PCB 113	mg/kg			0.000208 U	0.000254 U								
PCB 114	mg/kg			0.000208 U	0.000254 U								
PCB 115	mg/kg			0.000208 U	0.000254 U								
PCB 116	mg/kg			0.000208 U	0.000254 U								
PCB 117	mg/kg			0.000208 U	0.000254 U								
PCB 118	mg/kg			0.000208 U	0.00136								
PCB 119	mg/kg			0.000208 U	0.000254 U								
PCB 12	mg/kg			0.000208 U	0.000254 U								
PCB 120	mg/kg			0.000208 U	0.000254 U								
PCB 121	mg/kg												
PCB 121/95/88	mg/kg			0.000625 U	0.000917								
PCB 122	mg/kg			0.000208 U	0.000254 U								
PCB 123	mg/kg												
PCB 124	mg/kg			0.000208 U	0.000254 U								
PCB 125	mg/kg												
PCB 126	mg/kg			0.000208 U	0.000254 U								
PCB 127	mg/kg			0.000208 U	0.000254 U								
PCB 128	mg/kg			0.000208 U	0.000426								
PCB 129	mg/kg												
PCB 129/158	mg/kg			0.000417 U	0.000508 U								
PCB 13	mg/kg			0.000417 U	0.000508 U								
PCB 130	mg/kg												
PCB 130/164	mg/kg			0.000417 U	0.000508 U								
PCB 131	mg/kg			0.000208 U	0.000254 U								
PCB 132	mg/kg			0.000208 U	0.000678								
PCB 133	mg/kg			0.000208 U	0.000254 U								
PCB 134	mg/kg			0.000208 U	0.000254 U								
PCB 135	mg/kg			0.000208 U	0.000345								

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	Field Sample ID	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
			SC-232-OutT3W(1.5-2.0)-D	SC-232-OutT3W(2.0-2.25)	SC-233-OUTDR013C(0.5-1.0)	SC-233-OUTDR013C(0-0.5)	SC-233-OutDRO13C(0.5-1.0)	SC-233-OutDRO13C(0-0.5)	SC-234-TRT3WM(0.5-1.0)	SC-234-TRT3WM(0-0.5)	SC-235-TRT3WS(0.5-1.0)	SC-235-TRT3WS(0-0.5)	SC-235-TRT3WS(1.0-1.5)
Chemical	Location ID	Depth Interval (ft)	SC-232	SC-232	SC-233	SC-233	SC-233	SC-233	SC-233	SC-234	SC-234	SC-235	SC-235
Units	Sample Purpose	Date	1.50-2.00	2.00-2.25	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	1.00-1.50
			DUP	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
			8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/24/2016	8/24/2016	8/25/2016	8/25/2016
PCB 136	mg/kg				0.000208	U	0.000306						
PCB 137	mg/kg				0.000208	U	0.000254	U					
PCB 138	mg/kg				0.000208	U	0.00178						
PCB 139	mg/kg												
PCB 14	mg/kg				0.000208	U	0.000254	U					
PCB 140	mg/kg				0.000208	U	0.000254	U					
PCB 141	mg/kg				0.000208	U	0.000754						
PCB 142	mg/kg				0.000208	U	0.000254	U					
PCB 143	mg/kg												
PCB 143/139	mg/kg				0.000417	U	0.000508	U					
PCB 144	mg/kg				0.000208	U	0.000254	U					
PCB 145	mg/kg				0.000208	U	0.000254	U					
PCB 146	mg/kg				0.000208	U	0.000376						
PCB 147	mg/kg												
PCB 148	mg/kg				0.000208	U	0.000254	U					
PCB 149	mg/kg												
PCB 15	mg/kg				0.000208	U	0.000254	U					
PCB 150	mg/kg				0.000208	U	0.000254	U					
PCB 151	mg/kg				0.000208	U	0.00053						
PCB 152	mg/kg				0.000208	U	0.000254	U					
PCB 153	mg/kg				0.000208	U	0.00271						
PCB 154	mg/kg				0.000208	U	0.000254	U					
PCB 155	mg/kg				0.000208	U	0.000254	U					
PCB 156	mg/kg				0.000208	U	0.000254	U					
PCB 157	mg/kg				0.000208	U	0.000254	U					
PCB 158	mg/kg												
PCB 159	mg/kg				0.000208	U	0.000254	U					
PCB 16	mg/kg				0.000208	U	0.000254	U					
PCB 160	mg/kg												
PCB 161	mg/kg				0.000208	U	0.000254	U					
PCB 162	mg/kg				0.000208	U	0.000254	U					
PCB 163	mg/kg												
PCB 163/160	mg/kg				0.000417	U	0.000597						
PCB 164	mg/kg												
PCB 165	mg/kg				0.000208	U	0.000254	U					
PCB 166	mg/kg				0.000208	U	0.000254	U					
PCB 167	mg/kg				0.000208	U	0.000254	U					
PCB 168	mg/kg				0.000208	U	0.000254	U					
PCB 169	mg/kg				0.000208	U	0.000254	U					
PCB 17	mg/kg				0.000208	U	0.000254	U					
PCB 170	mg/kg				0.000208	U	0.000786						
PCB 171	mg/kg				0.000208	U	0.000362						
PCB 172	mg/kg				0.000208	U	0.000254	U					
PCB 173	mg/kg				0.000208	U	0.000254	U					
PCB 174	mg/kg				0.000208	U	0.000886						
PCB 175	mg/kg												
PCB 176	mg/kg				0.000208	U	0.000254	U					
PCB 177	mg/kg				0.000208	U	0.000461						
PCB 178	mg/kg				0.000208	U	0.000254	U					
PCB 179	mg/kg				0.000208	U	0.000361						
PCB 18	mg/kg				0.000208	U	0.000254	U					
PCB 180	mg/kg				0.000208	U	0.00185						
PCB 181	mg/kg				0.000208	U	0.000254	U					
PCB 182	mg/kg												
PCB 182/175	mg/kg				0.000417	U	0.000508	U					
PCB 183	mg/kg				0.000208	U	0.000734						
PCB 184	mg/kg				0.000208	U	0.000254	U					
PCB 185	mg/kg				0.000208	U	0.000254	U					
PCB 186	mg/kg				0.000208	U	0.000254	U					
PCB 187	mg/kg				0.000208	U	0.00123						
PCB 188	mg/kg				0.000208	U	0.000254	U					
PCB 189	mg/kg				0.000208	U	0.000254	U					
PCB 19	mg/kg				0.000208	U	0.000254	U					
PCB 190	mg/kg				0.000208	U	0.000254	U					
PCB 191	mg/kg				0.000208	U	0.000254	U					
PCB 192	mg/kg				0.000208	U	0.000254	U					
PCB 193	mg/kg				0.000208	U	0.000254	U					
PCB 194	mg/kg				0.000208	U	0.000254	U					
PCB 195	mg/kg				0.000208	U	0.000254	U					
PCB 196	mg/kg				0.000208	U	0.000399						
PCB 197	mg/kg				0.000208	U	0.000254	U					
PCB 198	mg/kg				0.000208	U	0.000254	U					
PCB 199	mg/kg				0.000208	U	0.000254	U					
PCB 2	mg/kg				0.000208	U	0.000254	U					
PCB 20	mg/kg												
PCB 200	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	Chemical	Units	River Zone		MZ-JL/TEL		MZ-JL/TEL		MZ-JL/TEL		MZ-JL/TEL		MZ-JL/TEL		MZ-JL/TEL		MZ-JL/TEL		MZ-JL/TEL	
			Field Sample ID	Location ID	Depth Interval (ft)	Sample Purpose	Date	SC-232-OutT3W(1.5-2.0)-D	SC-232-OutT3W(2.0-2.25)	SC-233-OUTDR013C(0.5-1.0)	SC-233-OUTDR013C(0-0.5)	SC-233-OutDRO13C(0.5-1.0)	SC-233-OutDRO13C(0-0.5)	SC-234-TRT3WM(0.5-1.0)	SC-234-TRT3WM(0-0.5)	SC-235-TRT3WS(0.5-1.0)	SC-235-TRT3WS(0-0.5)	SC-235-TRT3WS(1.0-1.5)	SC-235-TRT3WS(1.5-2.0)	
	PCB 201	mg/kg		SC-232	1.50-2.00	DUP	8/25/2016			0.000208	U	0.00106								
	PCB 202	mg/kg								0.000208	U	0.000254	U							
	PCB 203	mg/kg								0.000208	U	0.000598								
	PCB 204	mg/kg																		
	PCB 204/200	mg/kg								0.000417	U	0.000508	U							
	PCB 205	mg/kg								0.000208	U	0.000254	U							
	PCB 206	mg/kg								0.000208	U	0.00155								
	PCB 207	mg/kg								0.000208	U	0.000254	U							
	PCB 208	mg/kg								0.000208	U	0.000754								
	PCB 209	mg/kg								0.000208	U	0.00159								
	PCB 21	mg/kg																		
	PCB 21/20	mg/kg								0.000417	U	0.000508	U							
	PCB 22	mg/kg								0.000208	U	0.000254	U							
	PCB 23	mg/kg								0.000208	U	0.000254	U							
	PCB 24	mg/kg								0.000208	U	0.000254	U							
	PCB 25	mg/kg								0.000208	U	0.000254	U							
	PCB 26	mg/kg								0.000208	U	0.000254	U							
	PCB 27	mg/kg								0.000208	U	0.000254	U							
	PCB 28	mg/kg								0.000208	U	0.000254	U							
	PCB 29	mg/kg								0.000208	U	0.000254	U							
	PCB 3	mg/kg								0.000208	U	0.000254	U							
	PCB 30	mg/kg								0.000208	U	0.000254	U							
	PCB 31	mg/kg								0.000208	U	0.000254	U							
	PCB 32	mg/kg								0.000208	U	0.000254	U							
	PCB 33	mg/kg								0.000208	U	0.000254	U							
	PCB 34	mg/kg								0.000208	U	0.000254	U							
	PCB 35	mg/kg								0.000208	U	0.000254	U							
	PCB 36	mg/kg								0.000208	U	0.000254	U							
	PCB 37	mg/kg								0.000208	U	0.000254	U							
	PCB 38	mg/kg								0.000208	U	0.000254	U							
	PCB 39	mg/kg								0.000208	U	0.000254	U							
	PCB 4	mg/kg																		
	PCB 4/10	mg/kg								0.000417	U	0.000508	U							
	PCB 40	mg/kg								0.000208	U	0.000254	U							
	PCB 41	mg/kg								0.000208	U	0.000254	U							
	PCB 42	mg/kg								0.000208	U	0.000374								
	PCB 43	mg/kg								0.000208	U	0.000254	U							
	PCB 44	mg/kg								0.000208	U	0.000579								
	PCB 45	mg/kg								0.000208	U	0.000254	U							
	PCB 46	mg/kg																		
	PCB 47	mg/kg								0.000208	U	0.000254	U							
	PCB 48	mg/kg								0.000208	U	0.000254	U							
	PCB 49	mg/kg								0.000208	U	0.000404								
	PCB 5	mg/kg								0.000208	U	0.000254	U							
	PCB 50	mg/kg								0.000208	U	0.000254	U							
	PCB 51	mg/kg								0.000208	U	0.000254	U							
	PCB 52	mg/kg								0.000208	U	0.000815								
	PCB 53	mg/kg								0.000208	U	0.000254	U							
	PCB 54	mg/kg								0.000208	U	0.000254	U							
	PCB 55	mg/kg								0.000208	U	0.000254	U							
	PCB 56	mg/kg								0.000208	U	0.00031								
	PCB 57	mg/kg								0.000208	U	0.000254	U							
	PCB 58	mg/kg																		
	PCB 59	mg/kg								0.000208	U	0.000254	U							
	PCB 6	mg/kg								0.000208	U	0.000254	U							
	PCB 60	mg/kg								0.000208	U	0.000254	U							
	PCB 61	mg/kg								0.000208	U	0.000254	U							
	PCB 62	mg/kg																		
	PCB 63	mg/kg								0.000208	U	0.000254	U							
	PCB 64	mg/kg																		
	PCB 65	mg/kg																		
	PCB 65/75/62	mg/kg								0.000625	U	0.000761	U							
	PCB 66	mg/kg								0.000208	U	0.000535								
	PCB 67	mg/kg																		
	PCB 67/58	mg/kg								0.000417	U	0.000508	U							
	PCB 68	mg/kg																		
	PCB 68/64	mg/kg								0.000417	U	0.000675								
	PCB 69	mg/kg								0.000208	U	0.000254	U							
	PCB 7	mg/kg								0.000208	U	0.000254	U							
	PCB 70	mg/kg								0.000208	U	0.000385								
	PCB 71	mg/kg								0.000208	U	0.000308								
	PCB 72	mg/kg								0.000208	U	0.000254	U							
	PCB 73	mg/kg																		
	PCB 73/46	mg/kg								0.000417	U	0.000508	U							
	PCB 74	mg/kg								0.000208	U	0.000262								
	PCB 75	mg/kg																		

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	Field Sample ID	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
			SC-232-OutT3W(1.5-2.0)-D	SC-232-OutT3W(2.0-2.25)	SC-233-OUTDR013C(0.5-1.0)	SC-233-OUTDR013C(0-0.5)	SC-233-OutDRO13C(0.5-1.0)	SC-233-OutDRO13C(0-0.5)	SC-234-TRT3WM(0.5-1.0)	SC-234-TRT3WM(0-0.5)	SC-235-TRT3WS(0.5-1.0)	SC-235-TRT3WS(0-0.5)	SC-235-TRT3WS(1.0-1.5)
Chemical	Location ID	Depth Interval (ft)	SC-232	SC-232	SC-233	SC-233	SC-233	SC-233	SC-233	SC-234	SC-234	SC-235	SC-235
Units	Sample Purpose	Date	1.50-2.00	2.00-2.25	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	1.00-1.50
			DUP	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
			8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/24/2016	8/24/2016	8/25/2016	8/25/2016
PCB 76	mg/kg				0.000208	U	0.000254	U					
PCB 77	mg/kg				0.000208	U	0.0005						
PCB 78	mg/kg				0.000208	U	0.000254	U					
PCB 79	mg/kg				0.000208	U	0.000254	U					
PCB 8	mg/kg				0.000208	U	0.000254	U					
PCB 80	mg/kg				0.000208	U	0.000254	U					
PCB 81	mg/kg				0.000208	U	0.000254	U					
PCB 82	mg/kg				0.000208	U	0.000254	U					
PCB 83	mg/kg												
PCB 83/125/112	mg/kg				0.000625	U	0.000761	U					
PCB 84	mg/kg												
PCB 85	mg/kg				0.000208	U	0.000641						
PCB 86	mg/kg												
PCB 86/109	mg/kg				0.000417	U	0.000508	U					
PCB 87	mg/kg												
PCB 87/111	mg/kg				0.000417	U	0.000683						
PCB 88	mg/kg												
PCB 89	mg/kg												
PCB 89/84	mg/kg				0.000208	U	0.000427						
PCB 9	mg/kg				0.000208	U	0.000254	U					
PCB 90	mg/kg												
PCB 91	mg/kg				0.000208	U	0.000254	U					
PCB 92	mg/kg				0.000208	U	0.000254	U					
PCB 93	mg/kg				0.000208	U	0.000254	U					
PCB 94	mg/kg				0.000208	U	0.000254	U					
PCB 95	mg/kg												
PCB 96	mg/kg				0.000208	U	0.000254	U					
PCB 97	mg/kg				0.000208	U	0.000576						
PCB 98	mg/kg				0.000208	U	0.000254	U					
PCB 99	mg/kg				0.000208	U	0.000542						
PCB-100/93	mg/kg												
PCB-107/124	mg/kg												
PCB-108/119/86/97/125/87	mg/kg												
PCB-113/90/101	mg/kg												
PCB-116/85	mg/kg												
PCB-128/166	mg/kg												
PCB-13/12	mg/kg												
PCB-139/140	mg/kg												
PCB-147/149	mg/kg				0.000417	U	0.00204						
PCB-151/135	mg/kg												
PCB-153/168	mg/kg												
PCB-156/157	mg/kg												
PCB-163/138/129	mg/kg												
PCB-171/173	mg/kg												
PCB-180/193	mg/kg												
PCB-198/199	mg/kg												
PCB-21/33	mg/kg												
PCB-26/29	mg/kg												
PCB-28/20	mg/kg												
PCB-30/18	mg/kg												
PCB-44/47/65	mg/kg												
PCB-50/53	mg/kg												
PCB-59/62/75	mg/kg												
PCB-61/70/74/76	mg/kg												
PCB-69/49	mg/kg												
PCB-71/40	mg/kg												
PCB-90/101	mg/kg				0.000417	U	0.0016						
Pentachlorobiphenyl	mg/kg				0.000208	U	0.00916						
Tetrachlorobiphenyl	mg/kg				0.000208	U	0.00515						
Total Decachlorobiphenyls (congeners)	mg/kg				0.000208	U	0.00159						
Total Dichlorobiphenyls (congeners)	mg/kg				0.000208	U	0.000254	U					
Total Heptachlorobiphenyls (congeners)	mg/kg												
Total Hexachlorobiphenyls (congeners)	mg/kg												
Total Monochlorobiphenyls (congeners)	mg/kg				0.000208	U	0.000254	U					
Total Nonachlorobiphenyls (congeners)	mg/kg				0.000208	U	0.0023						
Total Octachlorobiphenyls (congeners)	mg/kg												
Total PCB (congeners)	mg/kg				0.000208	U	0.0375						
Total Pentachlorobiphenyls (congeners)	mg/kg												
Total Tetrachlorobiphenyls (congeners)	mg/kg												
Total Trichlorobiphenyls (congeners)	mg/kg												
Trichlorobiphenyl (total)	mg/kg				0.000208	U	0.000254	U					
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>													
Benzo[e]pyrene	mg/kg												
Chrysene, 1-methyl-	mg/kg												
Naphthalene, 1-methyl-	mg/kg												
Pyrene, 1-methyl-	mg/kg												

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
Field Sample ID	SC-232-OutT3W(1.5-2.0)-D	SC-232-OutT3W(2.0-2.25)	SC-233-OUTDR013C(0.5-1.0)	SC-233-OUTDR013C(0-0.5)	SC-233-OutDRO13C(0.5-1.0)	SC-233-OutDRO13C(0-0.5)	SC-234-TRT3WM(0.5-1.0)	SC-234-TRT3WM(0-0.5)	SC-235-TRT3WS(0.5-1.0)	SC-235-TRT3WS(0-0.5)	SC-235-TRT3WS(1.0-1.5)	SC-235-TRT3WS(1.5-2.0)	
Location ID	SC-232	SC-232	SC-233	SC-233	SC-233	SC-233	SC-234	SC-234	SC-235	SC-235	SC-235	SC-235	
Depth Interval (ft)	1.50-2.00	2.00-2.25	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	1.00-1.50	1.50-2.00	
Sample Purpose	DUP	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Date	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/24/2016	8/24/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	
Chemical Class													
Chemical	Units												
<b>Polycyclic Aromatic Hydrocarbons</b>													
Acenaphthene	mg/kg		0.013			0.004 U	0.021 U	0.004 U	0.004 U	0.004 U	0.017		
Acenaphthylene	mg/kg		0.018			0.004 U	0.021 U	0.004 U	0.004 U	0.004 U	0.004 U		
Anthracene	mg/kg		0.036			0.004 U	0.021 U	0.004 U	0.009	0.007	0.023		
Benzo(A)Anthracene	mg/kg		0.061			0.004 U	0.054	0.005	0.028	0.034	0.051		
Benzo(B)Fluoranthene	mg/kg		0.079			0.005	0.077	0.004	0.033	0.05	0.058		
Benzo(G,H,I)Perylene	mg/kg		0.041			0.004 U	0.047	0.004 U	0.016	0.018	0.031		
Benzo(K)Fluoranthene	mg/kg		0.032			0.004 U	0.039	0.004 U	0.014	0.019	0.032		
Benzo(A)Pyrene	mg/kg		0.068			0.004 U	0.051	0.004	0.021	0.028	0.037		
Chrysene	mg/kg		0.068			0.004 U	0.071	0.004 U	0.034	0.045	0.058		
Dibenz(A,H)Anthracene	mg/kg		0.012			0.004 U	0.021 U	0.004 U	0.004	0.005	0.006		
Fluoranthene	mg/kg		0.063			0.004 U	0.1	0.005	0.048	0.034	0.12		
Fluorene	mg/kg		0.025			0.004 U	0.021 U	0.004 U	0.004	0.004 U	0.016		
Indeno (1,2,3-CD) Pyrene	mg/kg		0.036			0.004 U	0.038	0.004 U	0.012	0.017	0.021		
Naphthalene	mg/kg		0.36			0.004 U	0.021 U	0.006	0.017	0.01	0.016		
Phenanthrene	mg/kg		0.066			0.004 U	0.046	0.004	0.018	0.013	0.079		
Pyrene	mg/kg		0.1			0.007	0.13	0.009	0.06	0.034	0.098		
Total PAHs (Detections + 1/2 MDL)	mg/kg		1.078			0.04	0.716	0.055	0.324	0.32	0.665		
Total PAHs (Detections Only)	mg/kg		1.078			0.012	0.653	0.037	0.322	0.314	0.663		
<b>Semivolatile Organic Compounds - TICs</b>													
1,2,4-Trithiolane	mg/kg												
1,4-Benzenediol, 2-chloro-	mg/kg												
11H-Benzo[b]fluorene	mg/kg												
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg												
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg												
3-PENTEN-2-ONE, 4-METHYL-	mg/kg												
7H-Benz[de]anthracen-7-one	mg/kg												
9,10-Anthracenedione	mg/kg												
9-Octadecanamide, (Z)-	mg/kg					0.3							
Acetamide, 2-chloro-N-(ethox	mg/kg												
Alachlor	mg/kg												
Benzenamine, 3-methyl-	mg/kg												
Benzenamine, 4,4',4"-methy	mg/kg												
Benzenamine, 4,4'-methyleneb	mg/kg												
Benzene, 1,2,3,4-tetrachloro	mg/kg												
Benzene, 1,2,3,5-tetrachloro	mg/kg												
Benzene, 1,2,3-trichloro-	mg/kg												
Benzene, 1,3,5-trichloro-	mg/kg												
Benzene, 1,3-bis(1-methyleth	mg/kg												
Benzene, 1,4-bis(1-methyleth	mg/kg												
Benzofuran, 2,3-dihydro-	mg/kg												
CYCLIC OCTAATOMIC SULFUR	mg/kg								1.2	0.28			
Diphenyl Ether	mg/kg												
Docosane	mg/kg												
Heneicosane	mg/kg										0.18		
Hexacosane	mg/kg												
Hexadecane	mg/kg												
Hexatriacontane	mg/kg												
m-Chloroaniline	mg/kg												
N,N-Diethylaniline	mg/kg												
n-Hexadecanoic acid	mg/kg												
Nonadecane	mg/kg										0.26		
o-Chloroaniline	mg/kg												
Octacosane	mg/kg										0.3		
Octadecane	mg/kg												
Octadecane, 1-chloro-	mg/kg												
Octadecanoic acid	mg/kg												
Parachlorophenol	mg/kg												
Pentadecane	mg/kg												
Perylene	mg/kg												
Phenol, 2,5-dichloro-	mg/kg												
Phenol, 3-chloro-	mg/kg												
Phenol, 4,4'-(1-methylethyl)	mg/kg							0.61	0.86				
Tetracosane	mg/kg									0.19			
Tetradecane	mg/kg												
Tetraethylene glycol	mg/kg												
Total SVOC TICs	mg/kg		20			2.3	2.8	16	15	2.4	3.6		
Triacotane	mg/kg										0.24		
Tributyl phosphate	mg/kg												
Tridecanoic acid	mg/kg												
Triphenyl phosphate	mg/kg												
UNKNOWN	mg/kg		2.633333333			0.64	0.98	1.087857143	1.006153846	0.585	0.25		
Unknown acid	mg/kg												
Unknown Alcohol	mg/kg		1.2										
Unknown Aldol Condensate	mg/kg					0.74	0.93			0.78	0.88		
UNKNOWN ALKANE	mg/kg						0.93						

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	Field Sample ID	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
		SC-232-OutT3W(1.5-2.0)-D	SC-232-OutT3W(2.0-2.25)	SC-233-OUTDR013C(0.5-1.0)	SC-233-OUTDR013C(0-0.5)	SC-233-OutDRO13C(0.5-1.0)	SC-233-OutDRO13C(0-0.5)	SC-234-TRT3WM(0.5-1.0)	SC-234-TRT3WM(0-0.5)	SC-235-TRT3WS(0.5-1.0)	SC-235-TRT3WS(0-0.5)	SC-235-TRT3WS(1.0-1.5)	SC-235-TRT3WS(1.5-2.0)
Location ID	Location ID	Location ID	Location ID	Location ID	Location ID	Location ID	Location ID	Location ID	Location ID	Location ID	Location ID	Location ID	Location ID
Depth Interval (ft)	Depth Interval (ft)	Depth Interval (ft)	Depth Interval (ft)	Depth Interval (ft)	Depth Interval (ft)	Depth Interval (ft)	Depth Interval (ft)	Depth Interval (ft)	Depth Interval (ft)	Depth Interval (ft)	Depth Interval (ft)	Depth Interval (ft)	Depth Interval (ft)
Sample Purpose	Sample Purpose	Sample Purpose	Sample Purpose	Sample Purpose	Sample Purpose	Sample Purpose	Sample Purpose	Sample Purpose	Sample Purpose	Sample Purpose	Sample Purpose	Sample Purpose	Sample Purpose
Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date
Chemical Class	Chemical Class	Chemical Class	Chemical Class	Chemical Class	Chemical Class	Chemical Class	Chemical Class	Chemical Class	Chemical Class	Chemical Class	Chemical Class	Chemical Class	Chemical Class
Chemical	Chemical	Chemical	Chemical	Chemical	Chemical	Chemical	Chemical	Chemical	Chemical	Chemical	Chemical	Chemical	Chemical
Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units
Unknown Alkene													
Unknown Amide													
Unknown Amine													
UNKNOWN AROMATIC													
Unknown Carboxylic Acid		0.79											
Unknown Cycloalkane													
Unknown Hydrocarbon													
Unknown Ketone		0.745											
Unknown PAH													
UNKNOWN SILOXANE													
<b>Semivolatile Organic Compounds</b>													
1,2,4-Trichlorobenzene	mg/kg		0.022 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
1,2-Diphenylhydrazine	mg/kg		0.022 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
1,4-Dioxane	mg/kg		0.13 U			0.12 U	0.63 U	0.11 U	0.11 U	0.13 U	0.13 U		
1-Naphthylamine	mg/kg		0.22 U			0.2 U	1.1 U	0.18 U	0.18 U	0.22 U	0.22 U		
2,3,4,6-Tetrachlorophenol	mg/kg		0.088 U			0.079 U	0.42 U	0.071 U	0.073 U	0.087 U	0.089 U		
2,4,5-Trichlorophenol	mg/kg		0.022 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
2,4,6-Trichlorophenol	mg/kg		0.022 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
2,4-Dichlorophenol	mg/kg		0.022 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
2,4-Dimethylphenol	mg/kg		0.022 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
2,4-Dinitrophenol	mg/kg		0.4 U			0.36 U	1.9 U	0.32 U	0.33 U	0.39 U	0.4 U		
2,4-Dinitrotoluene	mg/kg		0.088 U			0.079 U	0.42 U	0.071 U	0.073 U	0.087 U	0.089 U		
2,6-Dinitrotoluene	mg/kg		0.022 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
2-Chloronaphthalene	mg/kg		0.009 U			0.008 U	0.042 U	0.007 U	0.007 U	0.009 U	0.009 U		
2-Chlorophenol	mg/kg		0.022 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
2-Methylnaphthalene	mg/kg		0.13 U			0.004 U	0.021 U	0.004 U	0.009 U	0.005 U	0.02 U		
2-Methylphenol (O-Cresol)	mg/kg		0.022 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
2-Naphthylamine	mg/kg		0.22 U			0.2 U	1.1 U	0.18 U	0.18 U	0.22 U	0.22 U		
2-Nitroaniline	mg/kg		0.022 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
2-Nitrophenol	mg/kg		0.022 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
3,3'-Dichlorobenzidine	mg/kg		0.13 U			0.12 U	0.63 U	0.11 U	0.11 U	0.13 U	0.13 U		
3,3'-Dimethylbenzidine	mg/kg												
3-Nitroaniline	mg/kg		0.088 U			0.079 U	0.42 U	0.071 U	0.073 U	0.087 U	0.089 U		
4,6-Dinitro-2-Methylphenol	mg/kg		0.22 U			0.2 U	1.1 U	0.18 U	0.18 U	0.22 U	0.22 U		
4-Aminobiphenyl	mg/kg		0.22 U			0.2 U	1.1 U	0.18 U	0.18 U	0.22 U	0.22 U		
4-Bromophenyl Phenyl Ether	mg/kg		0.022 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
4-Chloro-3-Methylphenol	mg/kg		0.022 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
4-Chloroaniline	mg/kg		0.044 U			0.04 U	0.21 U	0.036 U	0.036 U	0.044 U	0.044 U		
4-Chlorophenyl Phenyl Ether	mg/kg		0.022 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
4-Methylphenol (P-Cresol)	mg/kg		0.04 U			0.02 U	0.11 U	0.018 U	0.034 U	0.022 U	0.031 U		
4-Nitroaniline	mg/kg		0.088 U			0.079 U	0.42 U	0.071 U	0.073 U	0.087 U	0.089 U		
4-Nitrophenol	mg/kg		0.22 U			0.2 U	1.1 U	0.18 U	0.18 U	0.22 U	0.22 U		
Acetophenone	mg/kg		0.022 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
Aniline	mg/kg		0.22 U			0.2 U	1.1 U	0.18 U	0.18 U	0.22 U	0.22 U		
Benzidine	mg/kg		0.33 U			0.3 U	1.6 U	0.27 U	0.27 U	0.33 U	0.33 U		
Biphenyl	mg/kg		0.049 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg		0.022 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
Bis(2-Chloroethoxy)Methane	mg/kg		0.022 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
Bis(2-Chloroethyl)Ether	mg/kg		0.022 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
Bis(2-Chloroisopropyl)Ether	mg/kg												
Bis(2-Ethylhexyl)Phthalate	mg/kg		0.088 U			0.079 U	0.42 U	0.071 U	0.073 U	0.087 U	0.089 U		
Butyl Benzyl Phthalate	mg/kg		0.088 U			0.079 U	0.42 U	0.071 U	0.073 U	0.087 U	0.089 U		
Carbazole	mg/kg		0.022 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
Dibenzofuran	mg/kg		0.027 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
Diethyl Phthalate	mg/kg		0.088 U			0.079 U	0.42 U	0.071 U	0.073 U	0.087 U	0.089 U		
Dimethyl Phthalate	mg/kg		0.088 U			0.079 U	0.42 U	0.071 U	0.073 U	0.087 U	0.089 U		
Di-N-Butyl Phthalate	mg/kg		0.088 U			0.079 U	0.42 U	0.071 U	0.073 U	0.087 U	0.089 U		
Diphenyl Ether	mg/kg		0.064 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
Hexachlorobenzene	mg/kg		0.004 U			0.004 U	0.021 U	0.004 U	0.004 U	0.004 U	0.004 U		
Hexachlorobutadiene	mg/kg		0.022 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
Hexachlorocyclopentadiene	mg/kg		0.22 U			0.2 U	1.1 U	0.18 U	0.18 U	0.22 U	0.22 U		
Hexachloroethane	mg/kg		0.044 U			0.04 U	0.21 U	0.036 U	0.036 U	0.044 U	0.044 U		
Hexachloropropylene	mg/kg												
Isophorone	mg/kg		0.022 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
N-Dioctyl Phthalate	mg/kg		0.088 U			0.079 U	0.42 U	0.071 U	0.073 U	0.087 U	0.089 U		
Nitrobenzene	mg/kg		0.022 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
N-Nitrosodimethylamine	mg/kg		0.088 U			0.079 U	0.42 U	0.071 U	0.073 U	0.087 U	0.089 U		
N-Nitrosodi-N-Propylamine	mg/kg		0.022 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
N-Nitrosodiphenylamine	mg/kg		0.022 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
O-Toluidine	mg/kg		0.26 U			0.24 U	1.3 U	0.21 U	0.22 U	0.26 U	0.27 U		
Parathion	mg/kg		0.22 U			0.2 U	1.1 U	0.18 U	0.18 U	0.22 U	0.22 U		
Pentachlorobenzene	mg/kg		0.022 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
Pentachlorophenol	mg/kg		0.044 U			0.04 U	0.21 U	0.036 U	0.036 U	0.044 U	0.044 U		
Phenol	mg/kg		0.022 U			0.02 U	0.11 U	0.018 U	0.018 U	0.022 U	0.022 U		
<b>Volatile Organic Compounds - TICs</b>													
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg												

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	Field Sample ID	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
		SC-232-OutT3W(1.5-2.0)-D	SC-232-OutT3W(2.0-2.25)	SC-233-OUTDR013C(0.5-1.0)	SC-233-OUTDR013C(0-0.5)	SC-233-OUTDR013C(0.5-1.0)	SC-233-OUTDR013C(0-0.5)	SC-234-TRT3WM(0.5-1.0)	SC-234-TRT3WM(0-0.5)	SC-235-TRT3WS(0.5-1.0)	SC-235-TRT3WS(0-0.5)	SC-235-TRT3WS(1.0-1.5)	SC-235-TRT3WS(1.5-2.0)
Location ID	Location ID	SC-232	SC-232	SC-233	SC-233	SC-233	SC-234	SC-234	SC-235	SC-235	SC-235	SC-235	
Depth Interval (ft)	Depth Interval (ft)	1.50-2.00	2.00-2.25	0.50-1.00	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	1.00-1.50	1.50-2.00
Sample Purpose	Sample Purpose	DUP	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Date	Date	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/24/2016	8/24/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	
Chemical Class	Units												
1-Butene	mg/kg												
1-Heptene	mg/kg												
1-Propene, 2-methyl-	mg/kg												
Azulene	mg/kg												
BENZENE, 1,2,4-TRICHLORO-	mg/kg												
BENZENE, 1,2-DICHLORO-	mg/kg												
BENZENE, 1,4-DICHLORO-	mg/kg												
Camphene	mg/kg												
CYCLOHEXANE	mg/kg												
Cyclohexane, methyl-	mg/kg												
Cyclotrisiloxane, hexamethyl	mg/kg												
Diphenyl Ether	mg/kg												
Ethane, 1,1,2,2-tetrachloro-	mg/kg												
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg												
Ethane, 1,2-dichloro-1,1-dif	mg/kg												
Ethene, 1,1-dichloro-2,2-dif	mg/kg												
Hexane, 2-methyl-	mg/kg												
Hexane, 3-methyl-	mg/kg												
METHANE, CHLOROFLUORO-	mg/kg												
Naphthalene	mg/kg												
NAPHTHALENE, 2-METHYL-	mg/kg												
Nonanal	mg/kg												
Norflurane	mg/kg												
Pentane, 2,3-dimethyl-	mg/kg												
Phenol, 4-(1,1,3,3-tetrameth	mg/kg												
Propene	mg/kg												
Sulfur dioxide	mg/kg												
Tridecane	mg/kg												
UNKNOWN	mg/kg	0.085	0.022333333										
UNKNOWN ALICYCLIC	mg/kg												
UNKNOWN ALIPHATIC	mg/kg												
UNKNOWN ALKANE	mg/kg										0.007		
UNKNOWN AROMATIC	mg/kg												
UNKNOWN SILOXANE	mg/kg												
<b>Volatile Organic Compounds</b>													
1,1,1,2-Tetrachloroethane	mg/kg	0.001	U	0.001	U			0.001	U			0.001	U
1,1,1-Trichloroethane	mg/kg	0.001	U	0.001	U			0.001	U			0.001	U
1,1,1-Trichlorotrifluoroethane	mg/kg												
1,1,2,2-Tetrachloroethane	mg/kg	0.001	U	0.001	U			0.001	U			0.001	U
1,1,2-Trichloroethane	mg/kg	0.001	U	0.001	U			0.001	U			0.001	U
1,1,2-Trichlorotrifluoroethane	mg/kg	0.003	U	0.003	U			0.002	U			0.003	U
1,1,2-Trifluoroethane	mg/kg												
1,1-Dichloro-1-Fluoroethane	mg/kg												
1,1-Dichloroethane	mg/kg	0.001	U	0.001	U			0.001	U			0.001	U
1,1-Dichloroethene	mg/kg	0.001	U	0.001	U			0.001	U			0.001	U
1,1-Dichloropropene	mg/kg	0.001	U	0.001	U			0.001	U			0.001	U
1,2,4-Trimethylbenzene	mg/kg	0.001	U	0.001	U			0.001	U			0.001	U
1,2-Dibromoethane (EDB)	mg/kg	0.001	U	0.001	U			0.001	U			0.001	U
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg												
1,2-Dichloro-1-Fluoroethane	mg/kg												
1,2-Dichlorobenzene	mg/kg	0.001	U	0.001	U			0.001	U			0.001	U
1,2-Dichloroethane	mg/kg	0.001	U	0.001	U			0.001	U			0.001	U
1,2-Dichloroethene	mg/kg	0.001	U	0.001	U			0.001	U			0.001	U
1,2-Dichloropropane	mg/kg	0.001	U	0.001	U			0.001	U			0.001	U
1,2-Dichlorotetrafluoroethane	mg/kg												
1,3,5-Trimethylbenzene	mg/kg	0.001	U	0.001	U			0.001	U			0.001	U
1,3-Dichlorobenzene	mg/kg	0.001	U	0.001	U			0.001	U			0.001	U
1,4-Dichlorobenzene	mg/kg	0.001	U	0.001	U			0.001	U			0.001	U
1-Chloro-1,1-Difluoroethane	mg/kg												
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg												
2-Chloro-1,1,1-Trifluoroethane	mg/kg												
2-Chloroethyl Vinyl Ether	mg/kg												
2-Chlorotoluene	mg/kg	0.001	U	0.001	U			0.001	U			0.001	U
2-Hexanone	mg/kg	0.004	U	0.004	U			0.003	U			0.004	U
4-Chlorotoluene	mg/kg	0.001	U	0.001	U			0.001	U			0.001	U
4-Isopropyltoluene	mg/kg	0.001	U	0.001	U			0.001	U			0.001	U
Acetone	mg/kg	0.02		0.029				0.014				0.015	
Acrolein	mg/kg												
Acrylonitrile	mg/kg												
Benzene	mg/kg	0.0007	U	0.0007	U			0.0005	U			0.0007	U
Bromodichloromethane	mg/kg	0.001	U	0.001	U			0.001	U			0.001	U
Bromoform	mg/kg												
Carbon Disulfide	mg/kg	0.001		0.002				0.001				0.002	
Carbon Tetrachloride	mg/kg	0.001	U	0.001	U			0.001	U			0.001	U
CFC-1113	mg/kg												
Chlorobenzene	mg/kg	0.001	U	0.001	U			0.001	U			0.001	U

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
		SC-232-OutT3W(1.5-2.0)-D SC-232 1.50-2.00 DUP 8/25/2016	SC-232-OutT3W(2.0-2.25) SC-232 2.00-2.25 FS 8/25/2016	SC-233-OUTDR013C(0.5-1.0) SC-233 0.50-1.00 FS 8/25/2016	SC-233-OUTDR013C(0-0.5) SC-233 0.00-0.50 FS 8/25/2016	SC-233-OutDR013C(0.5-1.0) SC-233 0.50-1.00 FS 8/25/2016	SC-233-OutDR013C(0-0.5) SC-233 0.00-0.50 FS 8/25/2016	SC-234-TRT3WM(0.5-1.0) SC-234 0.50-1.00 FS 8/24/2016	SC-234-TRT3WM(0-0.5) SC-234 0.00-0.50 FS 8/24/2016	SC-235-TRT3WS(0.5-1.0) SC-235 0.50-1.00 FS 8/25/2016	SC-235-TRT3WS(0-0.5) SC-235 0.00-0.50 FS 8/25/2016	SC-235-TRT3WS(1.0-1.5) SC-235 1.00-1.50 FS 8/25/2016	SC-235-TRT3WS(1.5-2.0) SC-235 1.50-2.00 FS 8/25/2016
Chlorodibromomethane	mg/kg	0.001 U	0.001 U			0.001 U		0.001 U		0.001 U		0.001 U	
Chlorodifluoromethane	mg/kg												
Chlorofluoromethane	mg/kg												
Chloroform	mg/kg	0.001 U	0.001 U			0.001 U		0.001 U		0.001 U		0.001 U	
Chloropentafluoroethane	mg/kg												
cis-1,2-Dichloroethene	mg/kg	0.001 U	0.001 U			0.001 U		0.001 U		0.001 U		0.001 U	
cis-1,3-Dichloropropene	mg/kg	0.001 U	0.001 U			0.001 U		0.001 U		0.001 U		0.001 U	
Cumene	mg/kg	0.001 U	0.001 U			0.001 U		0.001 U		0.001 U		0.001 U	
Dichlorodifluoromethane	mg/kg	0.003 U	0.003 U			0.002 U		0.002 U		0.003 U		0.003 U	
Dichlorofluoromethane	mg/kg	0.003 U	0.003 U			0.002 U		0.002 U		0.003 U		0.003 U	
Ethane	ug/L												
Ethyl Chloride	mg/kg	0.003 U	0.003 U			0.002 U		0.002 U		0.003 U		0.003 U	
Ethylbenzene	mg/kg	0.001 U	0.001 U			0.001 U		0.001 U		0.001 U		0.001 U	
Fluoromethane	mg/kg												
Hexane	mg/kg	0.001 U	0.001 U			0.001 U		0.001 U		0.001 U		0.001 U	
Isobutyl Alcohol	mg/kg	0.14 U	0.13 U			0.1 U		0.11 U		0.13 U		0.14 U	
Meta- And Para-Xylene	mg/kg	0.001 U	0.001 U			0.001 U		0.001 U		0.001 U		0.001 U	
Methacrylonitrile	mg/kg	0.007 U	0.007 U			0.005 U		0.006 U		0.006 U		0.007 U	
Methane	ug/L												
Methyl Bromide	mg/kg												
Methyl Chloride	mg/kg	0.003 U	0.003 U			0.002 U		0.002 U		0.003 U		0.003 U	
Methyl Ethyl Ketone	mg/kg	0.006 U	0.005 U			0.004 U		0.005 U		0.005 U		0.006 U	
Methyl Isobutyl Ketone	mg/kg	0.004 U	0.004 U			0.003 U		0.003 U		0.004 U		0.004 U	
Methyl Methacrylate	mg/kg	0.001 U	0.001 U			0.001 U		0.001 U		0.001 U		0.001 U	
Methyl Tertiary Butyl Ether	mg/kg	0.0007 U	0.0007 U			0.0005 U		0.0006 U		0.0006 U		0.0007 U	
Methylene Chloride	mg/kg	0.003 U	0.003 U			0.002 U		0.002 U		0.003 U		0.003 U	
N-Butylbenzene	mg/kg	0.001 U	0.001 U			0.001 U		0.001 U		0.001 U		0.001 U	
N-Propylbenzene	mg/kg	0.001 U	0.001 U			0.001 U		0.001 U		0.001 U		0.001 U	
Ortho-Xylene	mg/kg	0.001 U	0.001 U			0.001 U		0.001 U		0.001 U		0.001 U	
Propionitrile	mg/kg	0.042 U	0.039 U			0.031 U		0.034 U		0.039 U		0.041 U	
sec-Butylbenzene	mg/kg	0.001 U	0.001 U			0.001 U		0.001 U		0.001 U		0.001 U	
Styrene	mg/kg	0.001 U	0.001 U			0.001 U		0.001 U		0.001 U		0.001 U	
tert-Butylbenzene	mg/kg	0.001 U	0.001 U			0.001 U		0.001 U		0.001 U		0.001 U	
Tetrachloroethene	mg/kg	0.001 U	0.001 U			0.001 U		0.001 U		0.001 U		0.001 U	
Tetrahydrofuran	mg/kg	0.006 U	0.005 U			0.004 U		0.005 U		0.005 U		0.006 U	
Toluene	mg/kg	0.001 U	0.001 U			0.001 U		0.001 U		0.001 U		0.001 U	
trans-1,2-Dichloroethene	mg/kg	0.001 U	0.001 U			0.001 U		0.001 U		0.001 U		0.001 U	
trans-1,3-Dichloropropene	mg/kg												
Trichloroethene	mg/kg	0.001 U	0.001 U			0.001 U		0.001 U		0.001 U		0.001 U	
Trichlorofluoromethane	mg/kg	0.003 U	0.003 U			0.002 U		0.002 U		0.003 U		0.003 U	
Vinyl Chloride	mg/kg	0.001 U	0.001 U			0.001 U		0.001 U		0.001 U		0.001 U	
Vinyl Fluoride	mg/kg												
Xylenes	mg/kg	0.001 U	0.001 U			0.001 U		0.001 U		0.001 U		0.001 U	

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
Field Sample ID	SC-235-TRT3WS(2.0-2.5)	SC-235-TRT3WS(2.5-3.0)	SC-235-TRT3WS(2.5-3.0)-D	SC-236-OutT2(0.5-1.0)	SC-236-OutT2(0-0.5)	SC-237-TRT2M(0.5-1.0)	SC-237-TRT2M(0-0.5)	SC-237-TRT2M(1.0-1.5)	SC-237-TRT2M(1.0-1.5)REP	SC-237-TRT2M(1.5-2.0)	SC-237-TRT2M(1.5-2.0)-D	SC-237-TRT2M(2.0-2.5)	
Location ID	SC-235	SC-235	SC-235	SC-236	SC-236	SC-237	SC-237	SC-237	SC-237	SC-237	SC-237	SC-237	
Depth Interval (ft)	2.00-2.50	2.50-3.00	2.50-3.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	1.00-1.50	1.00-1.50	1.50-2.00	1.50-2.00	2.00-2.50	
Sample Purpose	FS	FS	DUP	FS	FS	FS	FS	FS	REP	FS	DUP	FS	
Date	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/24/2016	8/24/2016	8/24/2016	8/24/2016	8/24/2016	8/24/2016	8/24/2016	
Chemical Class	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	
<b>General Chemistry</b>													
Black Carbon	mg/kg												
Percent Moisture	%	47.4	50.1	50	48.55	39.8	14	14.9	20.5		52.1	40	
Percent Solids	%				52.1	61.5					50.7		
Total Organic Carbon	mg/kg		39400	42500	26500	13000	186 U	202 U				35900	
<b>Metals</b>													
Aluminum	mg/kg	20300	27800	25800	18400	12400	31600	56900	33500	31500	30200	22600	
Antimony	mg/kg	2.87	2.54	2.54	0.581	0.347	0.827	0.638	0.967	0.93	2.1	1.74	
Arsenic	mg/kg	80.6	92.9	80.1	18.8	8.91	6.23	8.15	9	7.18	72.9	67.1	
Barium	mg/kg	199	368	294	157	113	361	541	293	315	232	271	
Beryllium	mg/kg	2.03	3.27	2.8	1.51	1.16	5.71	7.26	3.57	5.52	2.7	3.08	
Cadmium	mg/kg	3.02	3.8	3.3	0.901	0.402	0.0454	0.0477	0.23	0.163	2.21	2.94	
Calcium	mg/kg	3610	6010	5590	3950	4880	14800	21200	14800	14800	5210	6100	
Chromium	mg/kg	220	402	356	111	103	573	862	585	444	264	435	
Cobalt	mg/kg	16.5	31	25	17	10.8	27.2	40.2	18.6	20.3	26.4	25.8	
Copper	mg/kg	131	173	148	46.8	26	61.9	69.1	48.3	43.2	168	143	
Iron	mg/kg	40500	49400	45100	26500	18300	35100	50500	33700	26400	48900	30300	
Lead	mg/kg	271	344	317	125	57.8	24.1	19.4	36.1	25.2	240	196	
Magnesium	mg/kg	4830	5680	5450	4260	2630	2700	3810	3040	2780	8100	4390	
Manganese	mg/kg	474	588	522	282	193	247	165	205		884	446	
Mercury	mg/kg	1.17	0.868	0.905	0.36	0.15	0.0569	0.0286	0.184		1.12	0.979	
Nickel	mg/kg	36.6	64.1	51	49.6	25.3	53.5	76	32	37.6	55.3	47.1	
Potassium	mg/kg	2530	3320	3070	2630	1640	3240	4530	3610	3250	5220	3250	
Selenium	mg/kg	1.87	2.27	1.85	0.859	0.435	0.207	0.158	0.577	0.291	1.6	1.74	
Silver	mg/kg	0.612	0.693	0.558	0.425	0.145	0.0403	0.04	0.197	0.145	0.629	0.651	
Sodium	mg/kg	723	1010	982	919	713	1530	2130	1680	1580	1510	1010	
Thallium	mg/kg	0.631	0.881	0.785	0.213	0.125	0.0932	0.103	0.152	0.0994	0.611	0.512	
Tin	mg/kg												
Titanium	mg/kg	1110	1330	1160	811	606	1980	2530	1890	1600	1540	1130	
Vanadium	mg/kg	69	93.9	75.8	99.1	52.6	78.3	108	47	64.2	102	78.5	
Zinc	mg/kg	733	753	787	215	110	23.4	23.5	72.4	40.5	629	579	
<b>Metals - AVS/SEM</b>													
Acid Volatile Sulfide	umol/g												
Arsenic	umol/g												
Cadmium	umol/g												
Copper	umol/g												
Lead	umol/g												
Zinc	umol/g												
<b>Metals - Leachate</b>													
Lead	ug/L												
<b>Per and Polyfluorinated Organic Substances</b>													
Perfluorobutane Sulfonic Acid	mg/kg				0.00027 U	0.00022 U							
Perfluorobutanoic Acid	mg/kg				0.0014	0.00066							
Perfluorodecane Sulfonic Acid	mg/kg				0.00058 U	0.00048 U							
Perfluorodecanoic Acid	mg/kg				0.0095	0.0049							
Perfluorododecanoic Acid	mg/kg				0.0073	0.002							
Perfluoroheptanoic Acid	mg/kg				0.0017	0.00024							
Perfluorohexane Sulfonic Acid	mg/kg				0.00054 U	0.00045 U							
Perfluorohexanoic Acid	mg/kg				0.0059	0.0018							
Perfluorononanoic Acid	mg/kg				0.0017	0.00056							
Perfluorooctane Sulfonamide	mg/kg				0.00025	0.00016 U							
Perfluoropentanoic Acid	mg/kg				0.00088	0.00038 U							
Perfluorotetradecanoic Acid	mg/kg				0.0013 U	0.0011 U							
Perfluorotridecanoic Acid	mg/kg				0.0014	0.00072							
Perfluoroundecanoic Acid	mg/kg				0.0045	0.0033							
PFOA	mg/kg				0.0052	0.0018							
PFOA(trial)	mg/kg												
PFOS	mg/kg				0.00027 U	0.00022 U							
PFOS (trial)	mg/kg												
<b>Pesticides and Herbicides</b>													
4,4'-DDD	mg/kg				0.0036	0.0027 U							
4,4'-DDE	mg/kg				0.0062	0.0027 U							
4,4'-DDT	mg/kg				0.0015	0.0029 U							
Aldrin	mg/kg				0.00033 U	0.0014 U							
Alpha Chlordane	mg/kg				0.00033 U	0.0014 U							
Alpha-BHC	mg/kg				0.0023	0.0028 U							
beta-BHC	mg/kg				0.0017	0.0025							
delta-BHC	mg/kg				0.00088 U	0.0037 U							
Dieldrin	mg/kg				0.00064 U	0.0027 U							
Endosulfan I	mg/kg				0.0015	0.0092							
Endosulfan II	mg/kg				0.00064 U	0.0027 U							
Endosulfan Sulfate	mg/kg				0.0061	0.0027 U							
Endrin	mg/kg				0.016 U	0.0027 U							
Endrin Aldehyde	mg/kg				0.00064 U	0.0027 U							
Endrin Ketone	mg/kg				0.0012 U	0.0049 U							
Gamma Chlordane	mg/kg				0.0083 U	0.0028 U							

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	Field Sample ID	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
			SC-235-TRT3WS(2.0-2.5)	SC-235-TRT3WS(2.5-3.0)	SC-235-TRT3WS(2.5-3.0)-D	SC-236-OutT2(0.5-1.0)	SC-236-OutT2(0-0.5)	SC-237-TRT2M(0.5-1.0)	SC-237-TRT2M(0-0.5)	SC-237-TRT2M(1.0-1.5)	SC-237-TRT2M(1.0-1.5)REP	SC-237-TRT2M(1.5-2.0)	SC-237-TRT2M(1.5-2.0)-D
Chemical	Location ID	Depth Interval (ft)	SC-235	SC-235	SC-235	SC-236	SC-236	SC-237	SC-237	SC-237	SC-237	SC-237	SC-237
Units	Sample Purpose	Date	FS	FS	DUP	FS	FS	FS	FS	FS	REP	FS	DUP
			8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/24/2016	8/24/2016	8/24/2016	8/24/2016	8/24/2016	8/24/2016
Heptachlor						0.0012	0.055						
Heptachlor Epoxide						0.00033 U	0.028 U						
Lindane						0.0083 U	0.0014 U						
Methoxychlor						0.0033 U	0.014 U						
Toxaphene						0.027 U	0.11 U						
<b>Physical Properties</b>													
0.001 MM	% PASSING		2			3	2	0.5	0.5 U				5
0.002 MM	% PASSING		6			5	3	0.5	0.5 U				11
0.005 MM	% PASSING		13			10	6	1	0.5 U				21
0.02 MM	% PASSING		40			29	14	1.5	1				39
0.05 MM	% PASSING		56			40	23	1.5	1				42
0.064 MM	% PASSING		62			45	25	1.5	1.5				40
0.075 MM	% PASSING		64.7			46.6	26.2	1.3	1.7				39.5
0.15 MM	% PASSING		68.3			52.5	30.5	1.4	1.7				41
0.3 MM	% PASSING		77.9			69	50.6	5.9	2.4				48.3
0.6 MM	% PASSING		90			87.7	76.7	34.3	12.1				74.6
1.18 MM	% PASSING		94.9			95.1	88	53.1	33.3				90.8
19 MM	% PASSING		100			100	99.9	100	100				100
2.36 MM	% PASSING		97.7			96.8	93.3	65.4	60.2				96.9
3.35 MM	% PASSING		99			98.2	96.2	73.1	69.7				99
37.5 MM	% PASSING		100			100	100	100	100				100
4.75 MM	% PASSING		100			99.5	97.5	79.8	76.5				99.6
75 MM	% PASSING		100			100	100	100	100				100
Density	PCF												
<b>Polychlorinated Biphenyls - TICs</b>													
1,1'-Biphenyl, 2,3-dichloro-	mg/kg												
Unknown Biphenyl	mg/kg												
<b>Polychlorinated Biphenyls</b>													
Heptachlorobiphenyl	mg/kg					0.0114	0.00304						
Hexachlorobiphenyl	mg/kg					0.0198	0.00532						
Octachlorobiphenyl	mg/kg					0.00666	0.000801						
PCB 1	mg/kg					0.0024	0.000162 U						
PCB 10	mg/kg												
PCB 100	mg/kg					0.000186 U	0.000162 U						
PCB 101	mg/kg												
PCB 102	mg/kg					0.000186 U	0.000162 U						
PCB 103	mg/kg					0.000186 U	0.000162 U						
PCB 104	mg/kg					0.000186 U	0.000162 U						
PCB 105	mg/kg					0.000584	0.000162 U						
PCB 106	mg/kg					0.000186 U	0.000162 U						
PCB 107	mg/kg												
PCB 107/123	mg/kg					0.000372 U	0.000323 U						
PCB 108	mg/kg					0.000186 U	0.000162 U						
PCB 109	mg/kg												
PCB 11	mg/kg					0.000186 U	0.000321						
PCB 110	mg/kg					0.00367	0.00102						
PCB 111	mg/kg												
PCB 112	mg/kg												
PCB 113	mg/kg					0.000186 U	0.000162 U						
PCB 114	mg/kg					0.000186 U	0.000162 U						
PCB 115	mg/kg					0.000186 U	0.000162 U						
PCB 116	mg/kg					0.000186 U	0.000162 U						
PCB 117	mg/kg					0.000186 U	0.000162 U						
PCB 118	mg/kg					0.00238	0.000688						
PCB 119	mg/kg					0.000186 U	0.000162 U						
PCB 12	mg/kg					0.000186 U	0.000162 U						
PCB 120	mg/kg					0.000186 U	0.000162 U						
PCB 121	mg/kg												
PCB 121/95/88	mg/kg					0.00226	0.000643						
PCB 122	mg/kg					0.000186 U	0.000162 U						
PCB 123	mg/kg												
PCB 124	mg/kg					0.000186 U	0.000162 U						
PCB 125	mg/kg												
PCB 126	mg/kg					0.000186 U	0.000162 U						
PCB 127	mg/kg					0.000186 U	0.000162 U						
PCB 128	mg/kg					0.000593	0.000286						
PCB 129	mg/kg												
PCB 129/158	mg/kg					0.000628	0.000323 U						
PCB 13	mg/kg					0.000372 U	0.000323 U						
PCB 130	mg/kg												
PCB 130/164	mg/kg					0.000815	0.000328						
PCB 131	mg/kg					0.000186 U	0.000162 U						
PCB 132	mg/kg					0.00137	0.000372						
PCB 133	mg/kg					0.000186 U	0.000162 U						
PCB 134	mg/kg					0.000248	0.000162 U						
PCB 135	mg/kg					0.000712	0.000174						

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	Chemical	Units	Field Sample ID	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
			Location ID	SC-235-TRT3WS(2.0-2.5)	SC-235-TRT3WS(2.5-3.0)	SC-235-TRT3WS(2.5-3.0)-D	SC-236-OutT2(0.5-1.0)	SC-236-OutT2(0-0.5)	SC-237-TRT2M(0.5-1.0)	SC-237-TRT2M(0-0.5)	SC-237-TRT2M(1.0-1.5)	SC-237-TRT2M(1.0-1.5)REP	SC-237-TRT2M(1.5-2.0)	SC-237-TRT2M(1.5-2.0)-D
Depth Interval (ft)	Sample Purpose	Date	SC-235	SC-235	SC-235	SC-236	SC-236	SC-237	SC-237	SC-237	SC-237	SC-237	SC-237	SC-237
2.00-2.50	FS	8/25/2016	2.00-2.50	2.50-3.00	2.50-3.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	1.00-1.50	1.00-1.50	1.50-2.00	1.50-2.00	2.00-2.50
			FS	FS	DUP	FS	FS	FS	FS	FS	FS	FS	FS	FS
			8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/24/2016	8/24/2016	8/24/2016	8/24/2016	8/24/2016	8/24/2016	8/24/2016
	PCB 136	mg/kg				0.000491	0.000162	U						
	PCB 137	mg/kg				0.000186	0.000162	U						
	PCB 138	mg/kg				0.00283	0.00091							
	PCB 139	mg/kg												
	PCB 14	mg/kg				0.000186	0.000162	U						
	PCB 140	mg/kg				0.000186	0.000162	U						
	PCB 141	mg/kg				0.000899	0.000162	U						
	PCB 142	mg/kg				0.000186	0.000162	U						
	PCB 143	mg/kg												
	PCB 143/139	mg/kg				0.000372	0.000323	U						
	PCB 144	mg/kg				0.000186	0.000162	U						
	PCB 145	mg/kg				0.000186	0.000162	U						
	PCB 146	mg/kg				0.000186	0.000162	U						
	PCB 147	mg/kg				0.000908	0.000382							
	PCB 148	mg/kg				0.000186	0.000162	U						
	PCB 149	mg/kg												
	PCB 15	mg/kg				0.00116	0.000162	U						
	PCB 150	mg/kg				0.000186	0.000162	U						
	PCB 151	mg/kg				0.001	0.000292							
	PCB 152	mg/kg				0.000186	0.000162	U						
	PCB 153	mg/kg				0.00412	0.00148							
	PCB 154	mg/kg				0.000225	0.000162	U						
	PCB 155	mg/kg				0.000186	0.000162	U						
	PCB 156	mg/kg				0.000393	0.000162	U						
	PCB 157	mg/kg				0.000186	0.000162	U						
	PCB 158	mg/kg												
	PCB 159	mg/kg				0.000186	0.000162	U						
	PCB 16	mg/kg				0.00161	0.000162	U						
	PCB 160	mg/kg												
	PCB 161	mg/kg				0.000186	0.000162	U						
	PCB 162	mg/kg				0.000186	0.000162	U						
	PCB 163	mg/kg												
	PCB 163/160	mg/kg				0.000754	0.000323	U						
	PCB 164	mg/kg												
	PCB 165	mg/kg				0.000186	0.000162	U						
	PCB 166	mg/kg				0.000186	0.000162	U						
	PCB 167	mg/kg				0.000379	0.000162	U						
	PCB 168	mg/kg				0.000186	0.000162	U						
	PCB 169	mg/kg				0.000186	0.000162	U						
	PCB 17	mg/kg				0.00186	0.000162	U						
	PCB 170	mg/kg				0.00126	0.000486							
	PCB 171	mg/kg				0.000495	0.000162	U						
	PCB 172	mg/kg				0.000186	0.000162	U						
	PCB 173	mg/kg				0.000186	0.000162	U						
	PCB 174	mg/kg				0.00132	0.000517							
	PCB 175	mg/kg												
	PCB 176	mg/kg				0.000257	0.000162	U						
	PCB 177	mg/kg				0.000989	0.000162	U						
	PCB 178	mg/kg				0.000506	0.000216							
	PCB 179	mg/kg				0.000758	0.000188							
	PCB 18	mg/kg				0.00229	0.000162	U						
	PCB 180	mg/kg				0.00262	0.000753							
	PCB 181	mg/kg				0.000186	0.000162	U						
	PCB 182	mg/kg												
	PCB 182/175	mg/kg				0.000372	0.000323	U						
	PCB 183	mg/kg				0.000894	0.000277							
	PCB 184	mg/kg				0.000186	0.000162	U						
	PCB 185	mg/kg				0.000186	0.000162	U						
	PCB 186	mg/kg				0.000186	0.000162	U						
	PCB 187	mg/kg				0.00204	0.000599							
	PCB 188	mg/kg				0.000186	0.000162	U						
	PCB 189	mg/kg				0.000186	0.000162	U						
	PCB 19	mg/kg				0.000566	0.000162	U						
	PCB 190	mg/kg				0.000265	0.000162	U						
	PCB 191	mg/kg				0.000186	0.000162	U						
	PCB 192	mg/kg				0.000186	0.000162	U						
	PCB 193	mg/kg				0.000186	0.000162	U						
	PCB 194	mg/kg				0.00124	0.000162	U						
	PCB 195	mg/kg				0.000186	0.000162	U						
	PCB 196	mg/kg				0.000972	0.000162	U						
	PCB 197	mg/kg				0.000186	0.000162	U						
	PCB 198	mg/kg				0.000186	0.000162	U						
	PCB 199	mg/kg				0.000186	0.000162	U						
	PCB 2	mg/kg				0.000186	0.000162	U						
	PCB 20	mg/kg												
	PCB 200	mg/kg												

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone	Field Sample ID	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
			SC-235-TRT3WS(2.0-2.5)	SC-235-TRT3WS(2.5-3.0)	SC-235-TRT3WS(2.5-3.0)-D	SC-236-OutT2(0.5-1.0)	SC-236-OutT2(0-0.5)	SC-237-TRT2M(0.5-1.0)	SC-237-TRT2M(0-0.5)	SC-237-TRT2M(1.0-1.5)	SC-237-TRT2M(1.0-1.5)REP	SC-237-TRT2M(1.5-2.0)	SC-237-TRT2M(1.5-2.0)-D
Chemical	Location ID	Depth Interval (ft)	SC-235	SC-235	SC-235	SC-236	SC-236	SC-237	SC-237	SC-237	SC-237	SC-237	SC-237
Units	Sample Purpose	Date	2.00-2.50	2.50-3.00	2.50-3.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	1.00-1.50	1.00-1.50	1.50-2.00	1.50-2.00
			FS	FS	DUP	FS	FS	FS	FS	FS	REP	FS	DUP
			8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/24/2016	8/24/2016	8/24/2016	8/24/2016	8/24/2016	8/24/2016
PCB 201	mg/kg					0.00231	0.000584						
PCB 202	mg/kg					0.000726	0.000217						
PCB 203	mg/kg					0.00102	0.000162	U					
PCB 204	mg/kg												
PCB 204/200	mg/kg					0.000392	0.000323	U					
PCB 205	mg/kg					0.000186	0.000162	U					
PCB 206	mg/kg					0.00549	0.00211						
PCB 207	mg/kg					0.000473	0.000162	U					
PCB 208	mg/kg					0.00296	0.001						
PCB 209	mg/kg					0.00691	0.00289						
PCB 21	mg/kg												
PCB 21/20	mg/kg					0.000372	0.000323	U					
PCB 22	mg/kg					0.000974	0.000162	U					
PCB 23	mg/kg					0.000186	0.000162	U					
PCB 24	mg/kg					0.000186	0.000162	U					
PCB 25	mg/kg					0.000186	0.000162	U					
PCB 26	mg/kg					0.000186	0.000162	U					
PCB 27	mg/kg					0.000186	0.000162	U					
PCB 28	mg/kg					0.00251	0.000162	U					
PCB 29	mg/kg					0.000186	0.000162	U					
PCB 3	mg/kg					0.000186	0.000162	U					
PCB 30	mg/kg					0.000186	0.000162	U					
PCB 31	mg/kg					0.00271	0.000162	U					
PCB 32	mg/kg					0.0011	0.000162	U					
PCB 33	mg/kg					0.00158	0.000162	U					
PCB 34	mg/kg					0.000186	0.000162	U					
PCB 35	mg/kg					0.000186	0.000162	U					
PCB 36	mg/kg					0.000186	0.000162	U					
PCB 37	mg/kg					0.000974	0.000289						
PCB 38	mg/kg					0.000186	0.000162	U					
PCB 39	mg/kg					0.000186	0.000162	U					
PCB 4	mg/kg												
PCB 4/10	mg/kg					0.00587	0.000957						
PCB 40	mg/kg					0.000186	0.000162	U					
PCB 41	mg/kg					0.000186	0.000162	U					
PCB 42	mg/kg					0.000765	0.000162	U					
PCB 43	mg/kg					0.000186	0.000162	U					
PCB 44	mg/kg					0.00254	0.000428						
PCB 45	mg/kg					0.000186	0.000162	U					
PCB 46	mg/kg												
PCB 47	mg/kg					0.000636	0.000162	U					
PCB 48	mg/kg					0.000186	0.000162	U					
PCB 49	mg/kg					0.00243	0.000162	U					
PCB 5	mg/kg					0.000186	0.000162	U					
PCB 50	mg/kg					0.000186	0.000162	U					
PCB 51	mg/kg					0.000186	0.000162	U					
PCB 52	mg/kg					0.00306	0.00054						
PCB 53	mg/kg					0.000186	0.000162	U					
PCB 54	mg/kg					0.000186	0.000162	U					
PCB 55	mg/kg					0.000186	0.000162	U					
PCB 56	mg/kg					0.00172	0.000162	U					
PCB 57	mg/kg					0.000186	0.000162	U					
PCB 58	mg/kg												
PCB 59	mg/kg					0.000445	0.000162	U					
PCB 6	mg/kg					0.0014	0.000162	U					
PCB 60	mg/kg					0.000186	0.000162	U					
PCB 61	mg/kg					0.000186	0.000162	U					
PCB 62	mg/kg												
PCB 63	mg/kg					0.000186	0.000162	U					
PCB 64	mg/kg												
PCB 65	mg/kg												
PCB 65/75/62	mg/kg					0.000558	0.000485	U					
PCB 66	mg/kg					0.00197	0.000502						
PCB 67	mg/kg												
PCB 67/58	mg/kg					0.000372	0.000323	U					
PCB 68	mg/kg												
PCB 68/64	mg/kg					0.000372	0.000323	U					
PCB 69	mg/kg					0.000186	0.000162	U					
PCB 7	mg/kg					0.000186	0.000162	U					
PCB 70	mg/kg					0.00189	0.00029						
PCB 71	mg/kg					0.000699	0.000162	U					
PCB 72	mg/kg					0.000186	0.000162	U					
PCB 73	mg/kg												
PCB 73/46	mg/kg					0.000372	0.000323	U					
PCB 74	mg/kg					0.000987	0.000162	U					
PCB 75	mg/kg												

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
		SC-235-TRT3WS(2.0-2.5)	SC-235-TRT3WS(2.5-3.0)	SC-235-TRT3WS(2.5-3.0)-D	SC-236-OutT2(0.5-1.0)	SC-236-OutT2(0-0.5)	SC-237-TRT2M(0.5-1.0)	SC-237-TRT2M(0-0.5)	SC-237-TRT2M(1.0-1.5)	SC-237-TRT2M(1.0-1.5)REP	SC-237-TRT2M(1.5-2.0)	SC-237-TRT2M(1.5-2.0)-D	SC-237-TRT2M(2.0-2.5)
Chemical	Units	SC-235 2.00-2.50 FS 8/25/2016	SC-235 2.50-3.00 FS 8/25/2016	SC-235 2.50-3.00 DUP 8/25/2016	SC-236 0.50-1.00 FS 8/25/2016	SC-236 0.00-0.50 FS 8/25/2016	SC-237 0.50-1.00 FS 8/24/2016	SC-237 0.00-0.50 FS 8/24/2016	SC-237 1.00-1.50 FS 8/24/2016	SC-237 1.00-1.50 REP 8/24/2016	SC-237 1.50-2.00 FS 8/24/2016	SC-237 1.50-2.00 DUP 8/24/2016	SC-237 2.00-2.50 FS 8/24/2016
PCB 76	mg/kg				0.000186	U	0.000162	U					
PCB 77	mg/kg				0.000186	U	0.000162	U					
PCB 78	mg/kg				0.000186	U	0.000162	U					
PCB 79	mg/kg				0.000186	U	0.000162	U					
PCB 8	mg/kg				0.00289		0.000447						
PCB 80	mg/kg				0.000186	U	0.000162	U					
PCB 81	mg/kg				0.000186	U	0.000162	U					
PCB 82	mg/kg				0.000186	U	0.000162	U					
PCB 83	mg/kg												
PCB 83/125/112	mg/kg				0.000558	U	0.000485	U					
PCB 84	mg/kg												
PCB 85	mg/kg				0.000186	U	0.000162	U					
PCB 86	mg/kg												
PCB 86/109	mg/kg				0.000372	U	0.000323	U					
PCB 87	mg/kg												
PCB 87/111	mg/kg				0.000899		0.000323	U					
PCB 88	mg/kg												
PCB 89	mg/kg												
PCB 89/84	mg/kg				0.0011		0.000162	U					
PCB 9	mg/kg				0.000186	U	0.000162	U					
PCB 90	mg/kg												
PCB 91	mg/kg				0.000678		0.000162	U					
PCB 92	mg/kg				0.000617		0.000162	U					
PCB 93	mg/kg				0.000186	U	0.000162	U					
PCB 94	mg/kg				0.000186	U	0.000162	U					
PCB 95	mg/kg												
PCB 96	mg/kg				0.000186	U	0.000162	U					
PCB 97	mg/kg				0.00118		0.000162	U					
PCB 98	mg/kg				0.000186	U	0.000162	U					
PCB 99	mg/kg				0.00135		0.000442						
PCB-100/93	mg/kg												
PCB-107/124	mg/kg												
PCB-108/119/86/97/125/87	mg/kg												
PCB-113/90/101	mg/kg												
PCB-116/85	mg/kg												
PCB-128/166	mg/kg												
PCB-13/12	mg/kg												
PCB-139/140	mg/kg												
PCB-147/149	mg/kg				0.00346		0.0011						
PCB-151/135	mg/kg												
PCB-153/168	mg/kg												
PCB-156/157	mg/kg												
PCB-163/138/129	mg/kg												
PCB-171/173	mg/kg												
PCB-180/193	mg/kg												
PCB-198/199	mg/kg												
PCB-21/33	mg/kg												
PCB-26/29	mg/kg												
PCB-28/20	mg/kg												
PCB-30/18	mg/kg												
PCB-44/47/65	mg/kg												
PCB-50/53	mg/kg												
PCB-59/62/75	mg/kg												
PCB-61/70/74/76	mg/kg												
PCB-69/49	mg/kg												
PCB-71/40	mg/kg												
PCB-90/101	mg/kg				0.00294		0.000796						
Pentachlorobiphenyl	mg/kg				0.0177		0.00359						
Tetrachlorobiphenyl	mg/kg				0.0171		0.00176						
Total Decachlorobiphenyls (congeners)	mg/kg				0.00691		0.00289						
Total Dichlorobiphenyls (congeners)	mg/kg				0.0113		0.00173						
Total Heptachlorobiphenyls (congeners)	mg/kg												
Total Hexachlorobiphenyls (congeners)	mg/kg												
Total Monochlorobiphenyls (congeners)	mg/kg				0.0024		0.000162	U					
Total Nonachlorobiphenyls (congeners)	mg/kg				0.00892		0.00311						
Total Octachlorobiphenyls (congeners)	mg/kg												
Total PCB (congeners)	mg/kg				0.118		0.0225						
Total Pentachlorobiphenyls (congeners)	mg/kg												
Total Tetrachlorobiphenyls (congeners)	mg/kg												
Total Trichlorobiphenyls (congeners)	mg/kg												
Trichlorobiphenyl (total)	mg/kg				0.0162		0.000289						
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>													
Benzo[e]pyrene	mg/kg						1.2		0.31				
Chrysene, 1-methyl-	mg/kg												
Naphthalene, 1-methyl-	mg/kg												
Pyrene, 1-methyl-	mg/kg												

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class Chemical	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date Units	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
		SC-235-TRT3WS(2.0-2.5)	SC-235-TRT3WS(2.5-3.0)	SC-235-TRT3WS(2.5-3.0)-D	SC-236-OutT2(0.5-1.0)	SC-236-OutT2(0-0.5)	SC-237-TRT2M(0.5-1.0)	SC-237-TRT2M(0-0.5)	SC-237-TRT2M(1.0-1.5)	SC-237-TRT2M(1.0-1.5)REP	SC-237-TRT2M(1.5-2.0)	SC-237-TRT2M(1.5-2.0)-D	SC-237-TRT2M(2.0-2.5)
<b>Polycyclic Aromatic Hydrocarbons</b>													
Acenaphthene	mg/kg		0.033 U	0.033 U	0.15	0.12	0.004 U	0.019					0.087
Acenaphthylene	mg/kg		0.033	0.042	0.032 U	0.028 U	0.004 U	0.27					0.079
Anthracene	mg/kg		0.13	0.1	0.51	0.98	0.011	0.17					0.2
Benzo(A)Anthracene	mg/kg		0.13	0.13	1.3	2.3	0.017	0.59					0.17
Benzo(B)Fluoranthene	mg/kg		0.16	0.18	1.2	2.3	0.023	0.55					0.21
Benzo(G,H,I)Perylene	mg/kg		0.16	0.2	0.56	1.1	0.015	0.25					0.25
Benzo(K)Fluoranthene	mg/kg		0.069	0.066	0.6	1.3	0.01	0.27					0.11
Benzo(A)Pyrene	mg/kg		0.13	0.15	0.9	2	0.015	0.54					0.22
Chrysene	mg/kg		0.2	0.23	1.1	2	0.026	0.55					0.3
Dibenz(A,H)Anthracene	mg/kg		0.033 U	0.033 U	0.11	0.21	0.005	0.086					0.055 U
Fluoranthene	mg/kg		0.19	0.22	3.3	5.5	0.013	0.45					0.3
Fluorene	mg/kg		0.088	0.072	0.22	0.23	0.004 U	0.038					0.085
Indeno (1,2,3-CD) Pyrene	mg/kg		0.1	0.098	0.45	1	0.008	0.23					0.13
Naphthalene	mg/kg		0.39	0.45	0.19	0.039	0.019	0.006					0.6
Phenanthrene	mg/kg		0.34	0.35	1.8	2.1	0.011	0.078					0.28
Pyrene	mg/kg		0.38	0.43	2.5	4	0.077	0.69					0.49
Total PAHs (Detections + 1/2 MDL)	mg/kg		2.533	2.751	14.906	25.193	0.256	4.787					3.5385
Total PAHs (Detections Only)	mg/kg		2.5	2.718	14.89	25.179	0.25	4.787					3.511
<b>Semivolatile Organic Compounds - TICs</b>													
1,2,4-Trithiolane	mg/kg												
1,4-Benzenediol, 2-chloro-	mg/kg												
11H-Benzo[b]fluorene	mg/kg												
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg												
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg												
3-PENTEN-2-ONE, 4-METHYL-	mg/kg												
7H-Benz[de]anthracen-7-one	mg/kg												
9,10-Anthracenedione	mg/kg												
9-Octadecanamide, (Z)-	mg/kg												
Acetamide, 2-chloro-N-(ethox	mg/kg												
Alachlor	mg/kg												
Benzenamine, 3-methyl-	mg/kg												
Benzenamine, 4,4',4"-methy	mg/kg												
Benzenamine, 4,4'-methyleneb	mg/kg		2.9										
Benzene, 1,2,3,4-tetrachloro	mg/kg												
Benzene, 1,2,3,5-tetrachloro	mg/kg												
Benzene, 1,2,3-trichloro-	mg/kg												
Benzene, 1,3,5-trichloro-	mg/kg												
Benzene, 1,3-bis(1-methyleth	mg/kg												
Benzene, 1,4-bis(1-methyleth	mg/kg												
Benzofuran, 2,3-dihydro-	mg/kg												
CYCLIC OCTAATOMIC SULFUR	mg/kg												
Diphenyl Ether	mg/kg												
Docosane	mg/kg												
Heneicosane	mg/kg												
Hexacosane	mg/kg												
Hexadecane	mg/kg			2			1.3						
Hexatriacontane	mg/kg												
m-Chloroaniline	mg/kg												
N,N-Diethylaniline	mg/kg												
n-Hexadecanoic acid	mg/kg												
Nonadecane	mg/kg												
o-Chloroaniline	mg/kg												
Octacosane	mg/kg												
Octadecane	mg/kg												
Octadecane, 1-chloro-	mg/kg			1.5									3.1
Octadecanoic acid	mg/kg												
Parachlorophenol	mg/kg												
Pentadecane	mg/kg							1.3					
Perylene	mg/kg												
Phenol, 2,5-dichloro-	mg/kg												
Phenol, 3-chloro-	mg/kg												
Phenol, 4,4'-(1-methylethyl)	mg/kg							0.74					4.3
Tetracosane	mg/kg			2.6									
Tetradecane	mg/kg						0.5						
Tetraethylene glycol	mg/kg												
Total SVOC TICs	mg/kg		40	34	3.4	3.8	9.7	4.5					68
Triacotane	mg/kg												
Tributyl phosphate	mg/kg												
Tridecanoic acid	mg/kg												
Triphenyl phosphate	mg/kg												
UNKNOWN	mg/kg		2.3	2.04444444	1.4	1.4	0.535	0.332					5.063636364
Unknown acid	mg/kg												
Unknown Alcohol	mg/kg												
Unknown Aldol Condensate	mg/kg			4.9	2	1.1							
UNKNOWN ALKANE	mg/kg		3.4	1.4			0.428571429	0.32					2.6

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	Field Sample ID	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
		SC-235-TRT3WS(2.0-2.5)	SC-235-TRT3WS(2.5-3.0)	SC-235-TRT3WS(2.5-3.0)-D	SC-236-OutT2(0.5-1.0)	SC-236-OutT2(0-0.5)	SC-237-TRT2M(0.5-1.0)	SC-237-TRT2M(0-0.5)	SC-237-TRT2M(1.0-1.5)	SC-237-TRT2M(1.0-1.5)REP	SC-237-TRT2M(1.5-2.0)	SC-237-TRT2M(1.5-2.0)-D	SC-237-TRT2M(2.0-2.5)
Location ID	Location ID	Location ID	Location ID	Location ID	Location ID	Location ID	Location ID	Location ID	Location ID	Location ID	Location ID	Location ID	Location ID
Depth Interval (ft)	Depth Interval (ft)	Depth Interval (ft)	Depth Interval (ft)	Depth Interval (ft)	Depth Interval (ft)	Depth Interval (ft)	Depth Interval (ft)	Depth Interval (ft)	Depth Interval (ft)	Depth Interval (ft)	Depth Interval (ft)	Depth Interval (ft)	Depth Interval (ft)
Sample Purpose	Sample Purpose	Sample Purpose	Sample Purpose	Sample Purpose	Sample Purpose	Sample Purpose	Sample Purpose	Sample Purpose	Sample Purpose	Sample Purpose	Sample Purpose	Sample Purpose	Sample Purpose
Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date
Chemical Class	Chemical Class	Chemical Class	Chemical Class	Chemical Class	Chemical Class	Chemical Class	Chemical Class	Chemical Class	Chemical Class	Chemical Class	Chemical Class	Chemical Class	Chemical Class
Chemical	Chemical	Chemical	Chemical	Chemical	Chemical	Chemical	Chemical	Chemical	Chemical	Chemical	Chemical	Chemical	Chemical
Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units
Unknown Alkene													
Unknown Amide													2.6
Unknown Amine													
UNKNOWN AROMATIC													
Unknown Carboxylic Acid													
Unknown Cycloalkane								0.54					
Unknown Hydrocarbon													
Unknown Ketone													
Unknown PAH													
UNKNOWN SILOXANE													
<b>Semivolatile Organic Compounds</b>													
1,2,4-Trichlorobenzene	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.097 U	0.019 U					0.87 U
1,2-Diphenylhydrazine	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
1,4-Dioxane	mg/kg		0.99 U	0.98 U	0.97 U	0.83 U	0.12 U	0.12 U					1.6 U
1-Naphthylamine	mg/kg		1.6 U	1.6 U	1.6 U	1.4 U	0.19 U	0.19 U					2.7 U
2,3,4,6-Tetrachlorophenol	mg/kg		0.66 U	0.66 U	0.65 U	0.55 U	0.077 U	0.078 U					1.1 U
2,4,5-Trichlorophenol	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
2,4,6-Trichlorophenol	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
2,4-Dichlorophenol	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
2,4-Dimethylphenol	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
2,4-Dinitrophenol	mg/kg		3 U	3 U	2.9 U	2.5 U	0.35 U	0.35 U					4.9 U
2,4-Dinitrotoluene	mg/kg		0.66 U	0.66 U	0.65 U	0.55 U	0.077 U	0.078 U					1.1 U
2,6-Dinitrotoluene	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
2-Chloronaphthalene	mg/kg		0.066 U	0.066 U	0.065 U	0.055 U	0.008 U	0.008 U					0.11 U
2-Chlorophenol	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
2-Methylnaphthalene	mg/kg		0.26 U	0.28 U	0.086 U	0.028 U	0.006 U	0.019 U					0.27 U
2-Methylphenol (O-Cresol)	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
2-Naphthylamine	mg/kg		1.6 U	1.6 U	1.6 U	1.4 U	0.19 U	0.19 U					2.7 U
2-Nitroaniline	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
2-Nitrophenol	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
3,3'-Dichlorobenzidine	mg/kg		0.99 U	0.98 U	0.97 U	0.83 U	0.12 U	0.12 U					1.6 U
3,3'-Dimethylbenzidine	mg/kg												
3-Nitroaniline	mg/kg		0.66 U	0.66 U	0.65 U	0.55 U	0.077 U	0.078 U					1.1 U
4,6-Dinitro-2-Methylphenol	mg/kg		1.6 U	1.6 U	1.6 U	1.4 U	0.19 U	0.19 U					2.7 U
4-Aminobiphenyl	mg/kg		1.6 U	1.6 U	1.6 U	1.4 U	0.19 U	0.19 U					2.7 U
4-Bromophenyl Phenyl Ether	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
4-Chloro-3-Methylphenol	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
4-Chloroaniline	mg/kg		0.33 U	0.33 U	0.32 U	0.28 U	0.038 U	0.039 U					0.55 U
4-Chlorophenyl Phenyl Ether	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
4-Methylphenol (P-Cresol)	mg/kg		0.36 U	0.46 U	0.16 U	0.14 U	0.019 U	0.019 U					0.4 U
4-Nitroaniline	mg/kg		0.66 U	0.66 U	0.65 U	0.55 U	0.077 U	0.078 U					1.1 U
4-Nitrophenol	mg/kg		1.6 U	1.6 U	1.6 U	1.4 U	0.19 U	0.19 U					2.7 U
Acetophenone	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
Aniline	mg/kg		1.6 U	1.6 U	1.6 U	1.4 U	0.19 U	0.19 U					2.7 U
Benzidine	mg/kg		2.5 U	2.5 U	2.4 U	2.1 U	0.29 U	0.29 U					4.1 U
Biphenyl	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
Bis(2-Chloroethoxy)Methane	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
Bis(2-Chloroethyl)Ether	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
Bis(2-Chloroisopropyl)Ether	mg/kg												
Bis(2-Ethylhexyl)Phthalate	mg/kg		0.66 U	0.66 U	0.65 U	0.55 U	0.077 U	0.078 U					1.1 U
Butyl Benzyl Phthalate	mg/kg		0.66 U	0.66 U	0.65 U	0.55 U	0.077 U	0.078 U					1.1 U
Carbazole	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
Dibenzofuran	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
Diethyl Phthalate	mg/kg		0.66 U	0.66 U	0.65 U	0.55 U	0.077 U	0.078 U					1.1 U
Dimethyl Phthalate	mg/kg		0.66 U	0.66 U	0.65 U	0.55 U	0.077 U	0.078 U					1.1 U
Di-N-Butyl Phthalate	mg/kg		0.66 U	0.66 U	0.65 U	0.55 U	0.077 U	0.078 U					1.1 U
Diphenyl Ether	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
Hexachlorobenzene	mg/kg		0.033 U	0.033 U	0.032 U	0.029 U	0.004 U	0.004 U					0.055 U
Hexachlorobutadiene	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
Hexachlorocyclopentadiene	mg/kg		1.6 U	1.6 U	1.6 U	1.4 U	0.19 U	0.19 U					2.7 U
Hexachloroethane	mg/kg		0.33 U	0.33 U	0.32 U	0.28 U	0.038 U	0.039 U					0.55 U
Hexachloropropylene	mg/kg												
Isophorone	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
N-Dioctyl Phthalate	mg/kg		0.66 U	0.66 U	0.65 U	0.55 U	0.077 U	0.078 U					1.1 U
Nitrobenzene	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
N-Nitrosodimethylamine	mg/kg		0.66 U	0.66 U	0.65 U	0.55 U	0.077 U	0.078 U					1.1 U
N-Nitrosodi-N-Propylamine	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
N-Nitrosodiphenylamine	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
O-Toluidine	mg/kg		2 U	2 U	1.9 U	1.7 U	0.23 U	0.23 U					3.3 U
Parathion	mg/kg		1.6 U	1.6 U	1.6 U	1.4 U	0.19 U	0.19 U					2.7 U
Pentachlorobenzene	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
Pentachlorophenol	mg/kg		0.33 U	0.33 U	0.32 U	0.28 U	0.038 U	0.039 U					0.55 U
Phenol	mg/kg		0.16 U	0.16 U	0.16 U	0.14 U	0.019 U	0.019 U					0.27 U
<b>Volatile Organic Compounds - TICs</b>													
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg												

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
Field Sample ID	SC-235-TRT3WS(2.0-2.5)	SC-235-TRT3WS(2.5-3.0)	SC-235-TRT3WS(2.5-3.0)-D	SC-236-OutT2(0.5-1.0)	SC-236-OutT2(0-0.5)	SC-237-TRT2M(0.5-1.0)	SC-237-TRT2M(0-0.5)	SC-237-TRT2M(1.0-1.5)	SC-237-TRT2M(1.0-1.5)REP	SC-237-TRT2M(1.5-2.0)	SC-237-TRT2M(1.5-2.0)-D	SC-237-TRT2M(2.0-2.5)	
Location ID	SC-235	SC-235	SC-235	SC-236	SC-236	SC-237	SC-237	SC-237	SC-237	SC-237	SC-237	SC-237	
Depth Interval (ft)	2.00-2.50	2.50-3.00	2.50-3.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	1.00-1.50	1.00-1.50	1.50-2.00	1.50-2.00	2.00-2.50	
Sample Purpose	FS	FS	DUP	FS	FS	FS	FS	FS	REP	FS	DUP	FS	
Date	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/25/2016	8/24/2016	8/24/2016	8/24/2016	8/24/2016	8/24/2016	8/24/2016	8/24/2016	
Chemical Class													
Chemical	Units												
1-Butene	mg/kg												
1-Heptene	mg/kg												
1-Propene, 2-methyl-	mg/kg												
Azulene	mg/kg												
BENZENE, 1,2,4-TRICHLORO-	mg/kg												
BENZENE, 1,2-DICHLORO-	mg/kg												
BENZENE, 1,4-DICHLORO-	mg/kg												
Camphene	mg/kg		0.21										
CYCLOHEXANE	mg/kg							0.008		0.12	0.056		
Cyclohexane, methyl-	mg/kg									0.04	0.02		
Cyclotrisiloxane, hexamethyl	mg/kg												
Diphenyl Ether	mg/kg												
Ethane, 1,1,2,2-tetrachloro-	mg/kg												
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg												
Ethane, 1,2-dichloro-1,1-dif	mg/kg												
Ethene, 1,1-dichloro-2,2-dif	mg/kg												
Hexane, 2-methyl-	mg/kg												
Hexane, 3-methyl-	mg/kg												
METHANE, CHLOROFLUORO-	mg/kg												
Naphthalene	mg/kg												
NAPHTHALENE, 2-METHYL-	mg/kg												
Nonanal	mg/kg												
Norflurane	mg/kg												
Pentane, 2,3-dimethyl-	mg/kg												
Phenol, 4-(1,1,3,3-tetrameth	mg/kg												
Propene	mg/kg												
Sulfur dioxide	mg/kg												
Tridecane	mg/kg												
UNKNOWN	mg/kg	0.1296	0.1475			0.037		0.084					
UNKNOWN ALICYCLIC	mg/kg	0.1185				0.0498		0.008		0.019	0.0065		
UNKNOWN ALIPHATIC	mg/kg							0.0115		0.0295	0.011		
UNKNOWN ALKANE	mg/kg	0.11	0.17	0.015		0.041333333		0.029		0.02	0.0085		
UNKNOWN AROMATIC	mg/kg												
UNKNOWN SILOXANE	mg/kg												
<b>Volatile Organic Compounds</b>													
1,1,1,2-Tetrachloroethane	mg/kg	0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U	
1,1,1-Trichloroethane	mg/kg	0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U	
1,1,1-Trichlorotrifluoroethane	mg/kg												
1,1,2,2-Tetrachloroethane	mg/kg	0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U	
1,1,2-Trichloroethane	mg/kg	0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U	
1,1,2-Trichlorotrifluoroethane	mg/kg	0.005 U	0.005 U	0.005 U		0.002 U		0.003 U		0.005 U	0.005 U	0.2 U	
1,1,2-Trifluoroethane	mg/kg												
1,1-Dichloro-1-Fluoroethane	mg/kg												
1,1-Dichloroethane	mg/kg	0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U	
1,1-Dichloroethene	mg/kg	0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U	
1,1-Dichloropropene	mg/kg	0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U	
1,2,4-Trimethylbenzene	mg/kg	0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U	
1,2-Dibromoethane (EDB)	mg/kg	0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U	
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg												
1,2-Dichloro-1-Fluoroethane	mg/kg												
1,2-Dichlorobenzene	mg/kg	0.003 U	0.003 U	0.032 U		0.011 U		0.023 U		0.066 U	0.073 U	4 U	
1,2-Dichloroethane	mg/kg	0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U	
1,2-Dichloroethene	mg/kg	0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.72 U	
1,2-Dichloropropane	mg/kg	0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U	
1,2-Dichlorotetrafluoroethane	mg/kg												
1,3,5-Trimethylbenzene	mg/kg	0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U	
1,3-Dichlorobenzene	mg/kg	0.003 U	0.003 U	0.005 U		0.002 U		0.002 U		0.003 U	0.002 U	1.3 U	
1,4-Dichlorobenzene	mg/kg	0.003 U	0.003 U	0.004 U		0.006 U		0.004 U		0.003 U	0.002 U	0.97 U	
1-Chloro-1,1-Difluoroethane	mg/kg												
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg												
2-Chloro-1,1,1-Trifluoroethane	mg/kg												
2-Chloroethyl Vinyl Ether	mg/kg												
2-Chlorotoluene	mg/kg	0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U	
2-Hexanone	mg/kg	0.008 U	0.008 U	0.008 U		0.004 U		0.004 U		0.008 U	0.007 U	0.3 U	
4-Chlorotoluene	mg/kg	0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U	
4-Isopropyltoluene	mg/kg	0.003 U	0.055 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U	
Acetone	mg/kg	0.11	0.13	0.077		0.062		0.072		0.15	0.1	0.7 U	
Acrolein	mg/kg												
Acrylonitrile	mg/kg												
Benzene	mg/kg	0.001 U	0.001 U	0.001 U		0.0006 U		0.0006 U		0.005 U	0.004 U	0.2 U	
Bromodichloromethane	mg/kg	0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U	
Bromoform	mg/kg												
Carbon Disulfide	mg/kg	0.004	0.004	0.004		0.002		0.003		0.005	0.002 U	0.1 U	
Carbon Tetrachloride	mg/kg	0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U	
CFC-1113	mg/kg												
Chlorobenzene	mg/kg	0.003 U	0.003 U	0.072 U		0.004 U		0.006 U		0.043 U	0.042 U	9.6 U	

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	
		SC-235-TRT3WS(2.0-2.5) SC-235 2.00-2.50 FS 8/25/2016	SC-235-TRT3WS(2.5-3.0) SC-235 2.50-3.00 FS 8/25/2016	SC-235-TRT3WS(2.5-3.0)-D SC-235 2.50-3.00 DUP 8/25/2016	SC-236-OutT2(0.5-1.0) SC-236 0.50-1.00 FS 8/25/2016	SC-236-OutT2(0-0.5) SC-236 0.00-0.50 FS 8/25/2016	SC-237-TRT2M(0.5-1.0) SC-237 0.50-1.00 FS 8/24/2016	SC-237-TRT2M(0-0.5) SC-237 0.00-0.50 FS 8/24/2016	SC-237-TRT2M(1.0-1.5) SC-237 1.00-1.50 FS 8/24/2016	SC-237-TRT2M(1.0-1.5)REP SC-237 1.00-1.50 REP 8/24/2016	SC-237-TRT2M(1.5-2.0) SC-237 1.50-2.00 FS 8/24/2016	SC-237-TRT2M(1.5-2.0)-D SC-237 1.50-2.00 DUP 8/24/2016	SC-237-TRT2M(2.0-2.5) SC-237 2.00-2.50 FS 8/24/2016
Chemical	Units												
Chlorodibromomethane	mg/kg		0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U
Chlorodifluoromethane	mg/kg												
Chlorofluoromethane	mg/kg												
Chloroform	mg/kg		0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U
Chloropentafluoroethane	mg/kg												
cis-1,2-Dichloroethene	mg/kg		0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.72
cis-1,3-Dichloropropene	mg/kg		0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U
Cumene	mg/kg		0.003 U	0.015	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U
Dichlorodifluoromethane	mg/kg		0.005 U	0.005 U	0.005 U		0.002 U		0.003 U		0.005 U	0.005 U	0.2 U
Dichlorofluoromethane	mg/kg		0.005 U	0.005 U	0.005 U		0.002 U		0.003 U		0.005 U	0.005 U	0.2 U
Ethane	ug/L												
Ethyl Chloride	mg/kg		0.005 U	0.005 U	0.005 U		0.002 U		0.003 U		0.005 U	0.005 U	0.2 U
Ethylbenzene	mg/kg		0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U
Fluoromethane	mg/kg												
Hexane	mg/kg		0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U
Isobutyl Alcohol	mg/kg		0.26 U	0.26 U	0.25 U		0.12 U		0.13 U		0.26 U	0.25 U	10 U
Meta- And Para-Xylene	mg/kg		0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U
Methacrylonitrile	mg/kg		0.013 U	0.013 U	0.013 U		0.006 U		0.006 U		0.013 U	0.012 U	0.5 U
Methane	ug/L												
Methyl Bromide	mg/kg												
Methyl Chloride	mg/kg		0.005 U	0.005 U	0.005 U		0.002 U		0.003 U		0.005 U	0.005 U	0.2 U
Methyl Ethyl Ketone	mg/kg		0.021	0.026	0.013		0.01		0.009		0.024	0.018	0.4 U
Methyl Isobutyl Ketone	mg/kg		0.008 U	0.008 U	0.008 U		0.004 U		0.004 U		0.008 U	0.007 U	0.3 U
Methyl Methacrylate	mg/kg		0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U
Methyl Tertiary Butyl Ether	mg/kg		0.001 U	0.001 U	0.001 U		0.0006 U		0.0006 U		0.001 U	0.001 U	0.05 U
Methylene Chloride	mg/kg		0.005 U	0.005 U	0.005 U		0.016		0.009		0.005 U	0.005 U	0.2 U
N-Butylbenzene	mg/kg		0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U
N-Propylbenzene	mg/kg		0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U
Ortho-Xylene	mg/kg		0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U
Propionitrile	mg/kg		0.077 U	0.076 U	0.076 U		0.037 U		0.039 U		0.078 U	0.074 U	3 U
sec-Butylbenzene	mg/kg		0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U
Styrene	mg/kg		0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U
tert-Butylbenzene	mg/kg		0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U
Tetrachloroethene	mg/kg		0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U
Tetrahydrofuran	mg/kg		0.01 U	0.01 U	0.01 U		0.005 U		0.005 U		0.01 U	0.01 U	0.4 U
Toluene	mg/kg		0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.003 U	0.16
trans-1,2-Dichloroethene	mg/kg		0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U
trans-1,3-Dichloropropene	mg/kg												
Trichloroethene	mg/kg		0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U
Trichlorofluoromethane	mg/kg		0.005 U	0.005 U	0.005 U		0.002 U		0.003 U		0.005 U	0.005 U	0.2 U
Vinyl Chloride	mg/kg		0.003 U	0.003 U	0.003 U		0.002		0.001 U		0.003 U	0.002 U	0.19
Vinyl Fluoride	mg/kg												
Xylenes	mg/kg		0.003 U	0.003 U	0.003 U		0.001 U		0.001 U		0.003 U	0.002 U	0.1 U

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	21556127	21556129	21556130	21556131	21556133	21556134	21556135	21556137	21556138	21563385	21563386	
Location ID	D15-BOR-01	D15-BOR-02	D15-BOR-02	D15-BOR-02	D15-BOR-03	D15-BOR-03	D15-BOR-03	D15-BOR-04	D15-BOR-04	D15-BOR-05	D15-BOR-05	
Depth Interval (ft)	7.00-7.50	1.50-2.00	11.00-11.50	13.00-13.50	2.00-2.50	11.00-11.50	14.00-14.50	0.50-1.00	14.00-14.50	7.00-7.50	10.50-11.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Date	3/24/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	
Chemical Class	Units											
<b>General Chemistry</b>												
Black Carbon	mg/kg											
Percent Moisture	%	18.1	12.1	19.5	21.2	11.7	15.2	14.9	49.5	20	10.5	21.9
Percent Solids	%											
Total Organic Carbon	mg/kg											
<b>Metals</b>												
Aluminum	mg/kg											
Antimony	mg/kg											
Arsenic	mg/kg											
Barium	mg/kg											
Beryllium	mg/kg											
Cadmium	mg/kg											
Calcium	mg/kg											
Chromium	mg/kg											
Cobalt	mg/kg											
Copper	mg/kg											
Iron	mg/kg											
Lead	mg/kg											
Magnesium	mg/kg											
Manganese	mg/kg											
Mercury	mg/kg											
Nickel	mg/kg											
Potassium	mg/kg											
Selenium	mg/kg											
Silver	mg/kg											
Sodium	mg/kg											
Thallium	mg/kg											
Tin	mg/kg											
Titanium	mg/kg											
Vanadium	mg/kg											
Zinc	mg/kg											
<b>Metals - AVS/SEM</b>												
Acid Volatile Sulfide	umol/g											
Arsenic	umol/g											
Cadmium	umol/g											
Copper	umol/g											
Lead	umol/g											
Zinc	umol/g											
<b>Metals - Leachate</b>												
Lead	ug/L											
<b>Per and Polyfluorinated Organic Substances</b>												
Perfluorobutane Sulfonic Acid	mg/kg											
Perfluorobutanoic Acid	mg/kg											
Perfluorodecane Sulfonic Acid	mg/kg											
Perfluorodecanoic Acid	mg/kg											
Perfluorododecanoic Acid	mg/kg											
Perfluoroheptanoic Acid	mg/kg											
Perfluorohexane Sulfonic Acid	mg/kg											
Perfluorohexanoic Acid	mg/kg											
Perfluorononanoic Acid	mg/kg											
Perfluorooctane Sulfonamide	mg/kg											
Perfluoropentanoic Acid	mg/kg											
Perfluorotetradecanoic Acid	mg/kg											
Perfluorotridecanoic Acid	mg/kg											
Perfluoroundecanoic Acid	mg/kg											
PFOA	mg/kg											
PFOA(trial)	mg/kg											
PFOS	mg/kg											
PFOS (trial)	mg/kg											
<b>Pesticides and Herbicides</b>												
4,4'-DDD	mg/kg											
4,4'-DDE	mg/kg											
4,4'-DDT	mg/kg											
Aldrin	mg/kg											
Alpha Chlordane	mg/kg											
Alpha-BHC	mg/kg											
beta-BHC	mg/kg											
delta-BHC	mg/kg											
Dieldrin	mg/kg											
Endosulfan I	mg/kg											
Endosulfan II	mg/kg											
Endosulfan Sulfate	mg/kg											
Endrin	mg/kg											
Endrin Aldehyde	mg/kg											
Endrin Ketone	mg/kg											
Gamma Chlordane	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	21556127	21556129	21556130	21556131	21556133	21556134	21556135	21556137	21556138	21563385	21563386	
Location ID	D15-BOR-01	D15-BOR-02	D15-BOR-02	D15-BOR-02	D15-BOR-03	D15-BOR-03	D15-BOR-03	D15-BOR-04	D15-BOR-04	D15-BOR-05	D15-BOR-05	
Depth Interval (ft)	7.00-7.50	1.50-2.00	11.00-11.50	13.00-13.50	2.00-2.50	11.00-11.50	14.00-14.50	0.50-1.00	14.00-14.50	7.00-7.50	10.50-11.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Date	3/24/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	
Chemical Class												
Chemical	Units											
Heptachlor	mg/kg											
Heptachlor Epoxide	mg/kg											
Lindane	mg/kg											
Methoxychlor	mg/kg											
Toxaphene	mg/kg											
<b>Physical Properties</b>												
0.001 MM	% PASSING											
0.002 MM	% PASSING											
0.005 MM	% PASSING											
0.02 MM	% PASSING											
0.05 MM	% PASSING											
0.064 MM	% PASSING											
0.075 MM	% PASSING											
0.15 MM	% PASSING											
0.3 MM	% PASSING											
0.6 MM	% PASSING											
1.18 MM	% PASSING											
19 MM	% PASSING											
2.36 MM	% PASSING											
3.35 MM	% PASSING											
37.5 MM	% PASSING											
4.75 MM	% PASSING											
75 MM	% PASSING											
Density	PCF											
<b>Polychlorinated Biphenyls - TICs</b>												
1,1'-Biphenyl, 2,3-dichloro-	mg/kg											
Unknown Biphenyl	mg/kg											
<b>Polychlorinated Biphenyls</b>												
Heptachlorobiphenyl	mg/kg											
Hexachlorobiphenyl	mg/kg											
Octachlorobiphenyl	mg/kg											
PCB 1	mg/kg											
PCB 10	mg/kg											
PCB 100	mg/kg											
PCB 101	mg/kg											
PCB 102	mg/kg											
PCB 103	mg/kg											
PCB 104	mg/kg											
PCB 105	mg/kg											
PCB 106	mg/kg											
PCB 107	mg/kg											
PCB 107/123	mg/kg											
PCB 108	mg/kg											
PCB 109	mg/kg											
PCB 11	mg/kg											
PCB 110	mg/kg											
PCB 111	mg/kg											
PCB 112	mg/kg											
PCB 113	mg/kg											
PCB 114	mg/kg											
PCB 115	mg/kg											
PCB 116	mg/kg											
PCB 117	mg/kg											
PCB 118	mg/kg											
PCB 119	mg/kg											
PCB 12	mg/kg											
PCB 120	mg/kg											
PCB 121	mg/kg											
PCB 121/95/88	mg/kg											
PCB 122	mg/kg											
PCB 123	mg/kg											
PCB 124	mg/kg											
PCB 125	mg/kg											
PCB 126	mg/kg											
PCB 127	mg/kg											
PCB 128	mg/kg											
PCB 129	mg/kg											
PCB 129/158	mg/kg											
PCB 13	mg/kg											
PCB 130	mg/kg											
PCB 130/164	mg/kg											
PCB 131	mg/kg											
PCB 132	mg/kg											
PCB 133	mg/kg											
PCB 134	mg/kg											
PCB 135	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	21556127	21556129	21556130	21556131	21556133	21556134	21556135	21556137	21556138	21563385	21563386
Location ID	D15-BOR-01	D15-BOR-02	D15-BOR-02	D15-BOR-02	D15-BOR-03	D15-BOR-03	D15-BOR-03	D15-BOR-04	D15-BOR-04	D15-BOR-05	D15-BOR-05
Depth Interval (ft)	7.00-7.50	1.50-2.00	11.00-11.50	13.00-13.50	2.00-2.50	11.00-11.50	14.00-14.50	0.50-1.00	14.00-14.50	7.00-7.50	10.50-11.00
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Date	3/24/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009
Chemical Class											
Chemical	Units										
PCB 136	mg/kg										
PCB 137	mg/kg										
PCB 138	mg/kg										
PCB 139	mg/kg										
PCB 14	mg/kg										
PCB 140	mg/kg										
PCB 141	mg/kg										
PCB 142	mg/kg										
PCB 143	mg/kg										
PCB 143/139	mg/kg										
PCB 144	mg/kg										
PCB 145	mg/kg										
PCB 146	mg/kg										
PCB 147	mg/kg										
PCB 148	mg/kg										
PCB 149	mg/kg										
PCB 15	mg/kg										
PCB 150	mg/kg										
PCB 151	mg/kg										
PCB 152	mg/kg										
PCB 153	mg/kg										
PCB 154	mg/kg										
PCB 155	mg/kg										
PCB 156	mg/kg										
PCB 157	mg/kg										
PCB 158	mg/kg										
PCB 159	mg/kg										
PCB 16	mg/kg										
PCB 160	mg/kg										
PCB 161	mg/kg										
PCB 162	mg/kg										
PCB 163	mg/kg										
PCB 163/160	mg/kg										
PCB 164	mg/kg										
PCB 165	mg/kg										
PCB 166	mg/kg										
PCB 167	mg/kg										
PCB 168	mg/kg										
PCB 169	mg/kg										
PCB 17	mg/kg										
PCB 170	mg/kg										
PCB 171	mg/kg										
PCB 172	mg/kg										
PCB 173	mg/kg										
PCB 174	mg/kg										
PCB 175	mg/kg										
PCB 176	mg/kg										
PCB 177	mg/kg										
PCB 178	mg/kg										
PCB 179	mg/kg										
PCB 18	mg/kg										
PCB 180	mg/kg										
PCB 181	mg/kg										
PCB 182	mg/kg										
PCB 182/175	mg/kg										
PCB 183	mg/kg										
PCB 184	mg/kg										
PCB 185	mg/kg										
PCB 186	mg/kg										
PCB 187	mg/kg										
PCB 188	mg/kg										
PCB 189	mg/kg										
PCB 19	mg/kg										
PCB 190	mg/kg										
PCB 191	mg/kg										
PCB 192	mg/kg										
PCB 193	mg/kg										
PCB 194	mg/kg										
PCB 195	mg/kg										
PCB 196	mg/kg										
PCB 197	mg/kg										
PCB 198	mg/kg										
PCB 199	mg/kg										
PCB 2	mg/kg										
PCB 20	mg/kg										
PCB 200	mg/kg										

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	21556127	21556129	21556130	21556131	21556133	21556134	21556135	21556137	21556138	21563385	21563386
Location ID	D15-BOR-01	D15-BOR-02	D15-BOR-02	D15-BOR-02	D15-BOR-03	D15-BOR-03	D15-BOR-03	D15-BOR-04	D15-BOR-04	D15-BOR-05	D15-BOR-05
Depth Interval (ft)	7.00-7.50	1.50-2.00	11.00-11.50	13.00-13.50	2.00-2.50	11.00-11.50	14.00-14.50	0.50-1.00	14.00-14.50	7.00-7.50	10.50-11.00
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Date	3/24/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009
Chemical Class											
Chemical	Units										
PCB 201	mg/kg										
PCB 202	mg/kg										
PCB 203	mg/kg										
PCB 204	mg/kg										
PCB 204/200	mg/kg										
PCB 205	mg/kg										
PCB 206	mg/kg										
PCB 207	mg/kg										
PCB 208	mg/kg										
PCB 209	mg/kg										
PCB 21	mg/kg										
PCB 21/20	mg/kg										
PCB 22	mg/kg										
PCB 23	mg/kg										
PCB 24	mg/kg										
PCB 25	mg/kg										
PCB 26	mg/kg										
PCB 27	mg/kg										
PCB 28	mg/kg										
PCB 29	mg/kg										
PCB 3	mg/kg										
PCB 30	mg/kg										
PCB 31	mg/kg										
PCB 32	mg/kg										
PCB 33	mg/kg										
PCB 34	mg/kg										
PCB 35	mg/kg										
PCB 36	mg/kg										
PCB 37	mg/kg										
PCB 38	mg/kg										
PCB 39	mg/kg										
PCB 4	mg/kg										
PCB 4/10	mg/kg										
PCB 40	mg/kg										
PCB 41	mg/kg										
PCB 42	mg/kg										
PCB 43	mg/kg										
PCB 44	mg/kg										
PCB 45	mg/kg										
PCB 46	mg/kg										
PCB 47	mg/kg										
PCB 48	mg/kg										
PCB 49	mg/kg										
PCB 5	mg/kg										
PCB 50	mg/kg										
PCB 51	mg/kg										
PCB 52	mg/kg										
PCB 53	mg/kg										
PCB 54	mg/kg										
PCB 55	mg/kg										
PCB 56	mg/kg										
PCB 57	mg/kg										
PCB 58	mg/kg										
PCB 59	mg/kg										
PCB 6	mg/kg										
PCB 60	mg/kg										
PCB 61	mg/kg										
PCB 62	mg/kg										
PCB 63	mg/kg										
PCB 64	mg/kg										
PCB 65	mg/kg										
PCB 65/75/62	mg/kg										
PCB 66	mg/kg										
PCB 67	mg/kg										
PCB 67/58	mg/kg										
PCB 68	mg/kg										
PCB 68/64	mg/kg										
PCB 69	mg/kg										
PCB 7	mg/kg										
PCB 70	mg/kg										
PCB 71	mg/kg										
PCB 72	mg/kg										
PCB 73	mg/kg										
PCB 73/46	mg/kg										
PCB 74	mg/kg										
PCB 75	mg/kg										

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	21556127	21556129	21556130	21556131	21556133	21556134	21556135	21556137	21556138	21563385	21563386	
Location ID	D15-BOR-01	D15-BOR-02	D15-BOR-02	D15-BOR-02	D15-BOR-03	D15-BOR-03	D15-BOR-03	D15-BOR-04	D15-BOR-04	D15-BOR-05	D15-BOR-05	
Depth Interval (ft)	7.00-7.50	1.50-2.00	11.00-11.50	13.00-13.50	2.00-2.50	11.00-11.50	14.00-14.50	0.50-1.00	14.00-14.50	7.00-7.50	10.50-11.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Date	3/24/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	
Chemical Class	Units											
PCB 76	mg/kg											
PCB 77	mg/kg											
PCB 78	mg/kg											
PCB 79	mg/kg											
PCB 8	mg/kg											
PCB 80	mg/kg											
PCB 81	mg/kg											
PCB 82	mg/kg											
PCB 83	mg/kg											
PCB 83/125/112	mg/kg											
PCB 84	mg/kg											
PCB 85	mg/kg											
PCB 86	mg/kg											
PCB 86/109	mg/kg											
PCB 87	mg/kg											
PCB 87/111	mg/kg											
PCB 88	mg/kg											
PCB 89	mg/kg											
PCB 89/84	mg/kg											
PCB 9	mg/kg											
PCB 90	mg/kg											
PCB 91	mg/kg											
PCB 92	mg/kg											
PCB 93	mg/kg											
PCB 94	mg/kg											
PCB 95	mg/kg											
PCB 96	mg/kg											
PCB 97	mg/kg											
PCB 98	mg/kg											
PCB 99	mg/kg											
PCB-100/93	mg/kg											
PCB-107/124	mg/kg											
PCB-108/119/86/97/125/87	mg/kg											
PCB-113/90/101	mg/kg											
PCB-116/85	mg/kg											
PCB-128/166	mg/kg											
PCB-13/12	mg/kg											
PCB-139/140	mg/kg											
PCB-147/149	mg/kg											
PCB-151/135	mg/kg											
PCB-153/168	mg/kg											
PCB-156/157	mg/kg											
PCB-163/138/129	mg/kg											
PCB-171/173	mg/kg											
PCB-180/193	mg/kg											
PCB-198/199	mg/kg											
PCB-21/33	mg/kg											
PCB-26/29	mg/kg											
PCB-28/20	mg/kg											
PCB-30/18	mg/kg											
PCB-44/47/65	mg/kg											
PCB-50/53	mg/kg											
PCB-59/62/75	mg/kg											
PCB-61/70/74/76	mg/kg											
PCB-69/49	mg/kg											
PCB-71/40	mg/kg											
PCB-90/101	mg/kg											
Pentachlorobiphenyl	mg/kg											
Tetrachlorobiphenyl	mg/kg											
Total Decachlorobiphenyls (congeners)	mg/kg											
Total Dichlorobiphenyls (congeners)	mg/kg											
Total Heptachlorobiphenyls (congeners)	mg/kg											
Total Hexachlorobiphenyls (congeners)	mg/kg											
Total Monochlorobiphenyls (congeners)	mg/kg											
Total Nonachlorobiphenyls (congeners)	mg/kg											
Total Octachlorobiphenyls (congeners)	mg/kg											
Total PCB (congeners)	mg/kg											
Total Pentachlorobiphenyls (congeners)	mg/kg											
Total Tetrachlorobiphenyls (congeners)	mg/kg											
Total Trichlorobiphenyls (congeners)	mg/kg											
Trichlorobiphenyl (total)	mg/kg											
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>												
Benzo[e]pyrene	mg/kg											
Chrysene, 1-methyl-	mg/kg											
Naphthalene, 1-methyl-	mg/kg											
Pyrene, 1-methyl-	mg/kg											



**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	21556127	21556129	21556130	21556131	21556133	21556134	21556135	21556137	21556138	21563385	21563386	
Location ID	D15-BOR-01	D15-BOR-02	D15-BOR-02	D15-BOR-02	D15-BOR-03	D15-BOR-03	D15-BOR-03	D15-BOR-04	D15-BOR-04	D15-BOR-05	D15-BOR-05	
Depth Interval (ft)	7.00-7.50	1.50-2.00	11.00-11.50	13.00-13.50	2.00-2.50	11.00-11.50	14.00-14.50	0.50-1.00	14.00-14.50	7.00-7.50	10.50-11.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Date	3/24/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	
Chemical Class												
Chemical	Units											
Unknown Alkene	mg/kg											
Unknown Amide	mg/kg											
Unknown Amine	mg/kg											
UNKNOWN AROMATIC	mg/kg											
Unknown Carboxylic Acid	mg/kg											
Unknown Cycloalkane	mg/kg											
Unknown Hydrocarbon	mg/kg											
Unknown Ketone	mg/kg											
Unknown PAH	mg/kg											
UNKNOWN SILOXANE	mg/kg											
<b>Semivolatile Organic Compounds</b>												
1,2,4-Trichlorobenzene	mg/kg	0.041 U	0.038 U	1.4	0.14	0.038 U	15	0.039 U	0.17	0.042 U	0.037 U	0.36
1,2-Diphenylhydrazine	mg/kg	0.041 U	0.038 U	0.071	0.042 U	0.038 U	1	0.039 U	0.066 U	0.042 U	0.037 U	0.043 U
1,4-Dioxane	mg/kg											
1-Naphthylamine	mg/kg	0.2 U	0.19 U	0.21 U	0.21 U	0.19 U	0.2 U	0.2 U	0.33 U	0.21 U	0.19 U	0.21 U
2,3,4,6-Tetrachlorophenol	mg/kg											
2,4,5-Trichlorophenol	mg/kg											
2,4,6-Trichlorophenol	mg/kg	0.041 U	0.038 U	0.041 U	0.042 U	0.038 U	0.039 U	0.039 U	0.066 U	0.042 U	0.037 U	0.043 U
2,4-Dichlorophenol	mg/kg	0.041 U	0.038 U	0.041 U	0.042 U	0.038 U	0.039 U	0.039 U	0.066 U	0.042 U	0.037 U	0.043 U
2,4-Dimethylphenol	mg/kg	0.081 U	0.076 U	0.083 U	0.085 U	0.076 U	0.079 U	0.078 U	0.13 U	0.083 U	0.074 U	0.085 U
2,4-Dinitrophenol	mg/kg	0.81 U	0.76 U	0.83 U	0.85 U	0.76 U	0.79 U	0.78 U	1.3 U	0.83 U	0.74 U	0.85 U
2,4-Dinitrotoluene	mg/kg	0.081 U	0.076 U	0.083 U	0.085 U	0.076 U	0.079 U	0.078 U	0.13 U	0.083 U	0.074 U	0.085 U
2,6-Dinitrotoluene	mg/kg	0.041 U	0.038 U	0.041 U	0.042 U	0.038 U	0.039 U	0.039 U	0.066 U	0.042 U	0.037 U	0.043 U
2-Chloronaphthalene	mg/kg	0.041 U	0.038 U	0.041 U	0.042 U	0.038 U	0.039 U	0.039 U	0.066 U	0.042 U	0.037 U	0.043 U
2-Chlorophenol	mg/kg	0.041 U	0.038 U	0.055	0.24	0.038 U	0.039 U	0.039 U	0.066 U	0.12	0.037 U	0.043 U
2-Methylnaphthalene	mg/kg											
2-Methylphenol (O-Cresol)	mg/kg											
2-Naphthylamine	mg/kg	0.2 U	0.19 U	0.21 U	0.21 U	0.19 U	0.2 U	0.2 U	0.33 U	0.21 U	0.19 U	0.21 U
2-Nitroaniline	mg/kg											
2-Nitrophenol	mg/kg	0.041 U	0.038 U	0.041 U	0.042 U	0.038 U	0.039 U	0.039 U	0.066 U	0.042 U	0.037 U	0.043 U
3,3'-Dichlorobenzidine	mg/kg	0.12 U	0.11 U	0.12 U	0.13 U	0.11 U	0.12 U	0.12 U	0.2 U	0.13 U	0.11 U	0.13 U
3,3'-Dimethylbenzidine	mg/kg											
3-Nitroaniline	mg/kg											
4,6-Dinitro-2-Methylphenol	mg/kg	0.2 U	0.19 U	0.21 U	0.21 U	0.19 U	0.2 U	0.2 U	0.33 U	0.21 U	0.19 U	0.21 U
4-Aminobiphenyl	mg/kg	0.2 U	0.19 U	0.21 U	0.21 U	0.19 U	0.2 U	0.2 U	0.33 U	0.21 U	0.19 U	0.21 U
4-Bromophenyl Phenyl Ether	mg/kg	0.041 U	0.038 U	0.041 U	0.042 U	0.038 U	0.039 U	0.039 U	0.066 U	0.042 U	0.037 U	0.043 U
4-Chloro-3-Methylphenol	mg/kg	0.081 U	0.076 U	0.083 U	0.085 U	0.076 U	0.079 U	0.078 U	0.13 U	0.083 U	0.074 U	0.085 U
4-Chloroaniline	mg/kg	0.081 U	0.076 U	0.083 U	0.085 U	0.076 U	0.079 U	0.078 U	0.62	0.083 U	0.074 U	0.085 U
4-Chlorophenyl Phenyl Ether	mg/kg	0.041 U	0.038 U	0.041 U	0.042 U	0.038 U	0.039 U	0.039 U	0.066 U	0.042 U	0.037 U	0.043 U
4-Methylphenol (P-Cresol)	mg/kg											
4-Nitroaniline	mg/kg											
4-Nitrophenol	mg/kg	0.2 U	0.19 U	0.21 U	0.21 U	0.19 U	0.2 U	0.2 U	0.33 U	0.21 U	0.19 U	0.21 U
Acetophenone	mg/kg											
Aniline	mg/kg	0.2 U	0.19 U	0.21 U	0.21 U	0.19 U	0.2 U	0.2 U	0.99	0.21 U	0.19 U	0.21 U
Benzidine	mg/kg	1.4 U	1.3 U	1.4 U	1.5 U	1.3 U	1.4 U	1.4 U	2.3 U	1.5 U	1.3 U	1.5 U
Biphenyl	mg/kg											
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg											
Bis(2-Chloroethoxy)Methane	mg/kg	0.041 U	0.038 U	0.041 U	0.042 U	0.038 U	0.039 U	0.039 U	0.066 U	0.042 U	0.037 U	0.043 U
Bis(2-Chloroethyl)Ether	mg/kg	0.041 U	0.038 U	0.041 U	0.042 U	0.038 U	0.039 U	0.039 U	0.066 U	0.042 U	0.037 U	0.043 U
Bis(2-Chloroisopropyl)Ether	mg/kg	0.041 U	0.038 U	0.041 U	0.042 U	0.038 U	0.039 U	0.039 U	0.066 U	0.042 U	0.037 U	0.043 U
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.081 U	0.13	0.083 U	0.085 U	0.076 U	0.079 U	0.078 U	0.5	0.083 U	0.074 U	0.085 U
Butyl Benzyl Phthalate	mg/kg	0.081 U	0.076 U	0.083 U	0.085 U	0.076 U	0.079 U	0.078 U	0.14	0.083 U	0.074 U	0.085 U
Carbazole	mg/kg	0.041 U	0.038 U	0.041 U	0.042 U	0.038 U	0.039 U	0.039 U	0.066 U	0.042 U	0.037 U	0.043 U
Dibenzofuran	mg/kg											
Diethyl Phthalate	mg/kg	0.081 U	0.076 U	0.083 U	0.085 U	0.076 U	0.079 U	0.078 U	0.13 U	0.083 U	0.074 U	0.085 U
Dimethyl Phthalate	mg/kg	0.081 U	0.076 U	0.083 U	0.085 U	0.076 U	0.079 U	0.078 U	0.13 U	0.083 U	0.074 U	0.085 U
Di-N-Butyl Phthalate	mg/kg	0.081 U	0.076 U	0.083 U	0.085 U	0.076 U	0.079 U	0.078 U	0.13 U	0.083 U	0.074 U	0.085 U
Diphenyl Ether	mg/kg											
Hexachlorobenzene	mg/kg	0.041 U	0.038 U	0.041 U	0.042 U	0.038 U	0.039 U	0.039 U	0.066 U	0.042 U	0.037 U	0.043 U
Hexachlorobutadiene	mg/kg	0.081 U	0.076 U	0.083 U	0.085 U	0.076 U	0.079 U	0.078 U	0.13 U	0.083 U	0.074 U	0.085 U
Hexachlorocyclopentadiene	mg/kg	0.2 U	0.19 U	0.21 U	0.21 U	0.19 U	0.2 U	0.2 U	0.33 U	0.21 U	0.19 U	0.21 U
Hexachloroethane	mg/kg	0.041 U	0.038 U	0.041 U	0.042 U	0.038 U	0.039 U	0.039 U	0.066 U	0.042 U	0.037 U	0.043 U
Hexachloropropylene	mg/kg											
Isophorone	mg/kg	0.041 U	0.038 U	0.041 U	0.042 U	0.038 U	0.039 U	0.039 U	0.066 U	0.042 U	0.037 U	0.043 U
N-Dioctyl Phthalate	mg/kg	0.081 U	0.076 U	0.083 U	0.085 U	0.076 U	0.079 U	0.078 U	0.13 U	0.083 U	0.074 U	0.085 U
Nitrobenzene	mg/kg	0.041 U	0.038 U	0.089	0.042 U	0.038 U	0.039 U	0.039 U	0.066 U	0.042 U	0.037 U	0.043 U
N-Nitrosodimethylamine	mg/kg	0.081 U	0.076 U	0.083 U	0.085 U	0.076 U	0.079 U	0.078 U	0.13 U	0.083 U	0.074 U	0.085 U
N-Nitrosodi-N-Propylamine	mg/kg	0.041 U	0.038 U	0.041 U	0.042 U	0.038 U	0.039 U	0.039 U	0.066 U	0.042 U	0.037 U	0.043 U
N-Nitrosodiphenylamine	mg/kg	0.041 U	0.038 U	0.041 U	0.042 U	0.038 U	0.039 U	0.039 U	0.066 U	0.042 U	0.037 U	0.043 U
O-Toluidine	mg/kg	0.24 U	0.23 U	0.25 U	0.25 U	0.23 U	1.1	0.78	0.4	0.25 U	0.22 U	0.26 U
Parathion	mg/kg											
Pentachlorobenzene	mg/kg											
Pentachlorophenol	mg/kg	0.2 U	0.19 U	0.21 U	0.21 U	0.19 U	0.2 U	0.2 U	0.33 U	0.21 U	0.19 U	0.21 U
Phenol	mg/kg	0.041 U	0.038 U	0.041 U	0.042 U	0.038 U	0.039 U	0.039 U	0.066 U	0.042 U	0.037 U	0.043 U
<b>Volatile Organic Compounds - TICs</b>												
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg											

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA										
Field Sample ID	21556127	21556129	21556130	21556131	21556133	21556134	21556135	21556137	21556138	21563385	21563386											
Location ID	D15-BOR-01	D15-BOR-02	D15-BOR-02	D15-BOR-02	D15-BOR-03	D15-BOR-03	D15-BOR-03	D15-BOR-04	D15-BOR-04	D15-BOR-05	D15-BOR-05											
Depth Interval (ft)	7.00-7.50	1.50-2.00	11.00-11.50	13.00-13.50	2.00-2.50	11.00-11.50	14.00-14.50	0.50-1.00	14.00-14.50	7.00-7.50	10.50-11.00											
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS											
Date	3/24/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009											
Chemical Class	Units																					
1-Butene	mg/kg																					
1-Heptene	mg/kg																					
1-Propene, 2-methyl-	mg/kg																					
Azulene	mg/kg																					
BENZENE, 1,2,4-TRICHLORO-	mg/kg																					
BENZENE, 1,2-DICHLORO-	mg/kg																					
BENZENE, 1,4-DICHLORO-	mg/kg																					
Camphene	mg/kg																					
CYCLOHEXANE	mg/kg																					
Cyclohexane, methyl-	mg/kg																					
Cyclotrisiloxane, hexamethyl	mg/kg																					
Diphenyl Ether	mg/kg																					
Ethane, 1,1,2,2-tetrachloro-	mg/kg																					
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg																					
Ethane, 1,2-dichloro-1,1-dif	mg/kg																					
Ethene, 1,1-dichloro-2,2-dif	mg/kg																					
Hexane, 2-methyl-	mg/kg																					
Hexane, 3-methyl-	mg/kg																					
METHANE, CHLOROFLUORO-	mg/kg																					
Naphthalene	mg/kg																					
NAPHTHALENE, 2-METHYL-	mg/kg																					
Nonanal	mg/kg																					
Norflurane	mg/kg																					
Pentane, 2,3-dimethyl-	mg/kg																					
Phenol, 4-(1,1,3,3-tetrameth	mg/kg																					
Propene	mg/kg																					
Sulfur dioxide	mg/kg																					
Tridecane	mg/kg																					
UNKNOWN	mg/kg																					
UNKNOWN ALICYCLIC	mg/kg																					
UNKNOWN ALIPHATIC	mg/kg																					
UNKNOWN ALKANE	mg/kg																					
UNKNOWN AROMATIC	mg/kg																					
UNKNOWN SILOXANE	mg/kg																					
<b>Volatile Organic Compounds</b>																						
1,1,1,2-Tetrachloroethane	mg/kg																					
1,1,1-Trichloroethane	mg/kg	0.001	U	0.001	0.062	U	0.066	U	0.001	U	0.12	U	0.058	U	0.003	U	0.062	U	0.001	U	0.07	U
1,1,1-Trichlorotrifluoroethane	mg/kg																					
1,1,2,2-Tetrachloroethane	mg/kg	0.001	U	0.001	0.062	U	0.066	U	0.001	U	0.12	U	0.058	U	0.003	U	0.062	U	0.002	U	0.07	U
1,1,2-Trichloroethane	mg/kg	0.001	U	0.001	0.062	U	0.066	U	0.001	U	0.12	U	0.058	U	0.003	U	0.062	U	0.001	U	0.07	U
1,1,2-Trichlorotrifluoroethane	mg/kg	0.002	U	0.75	44		2.8		0.027		33		0.45		0.04		0.2		0.003		1.8	
1,1,2-Trifluoroethane	mg/kg																					
1,1-Dichloro-1-Fluoroethane	mg/kg																					
1,1-Dichloroethane	mg/kg	0.001	U	0.001	0.062	U	0.066	U	0.001	U	0.12	U	0.058	U	0.003	U	0.062	U	0.001	U	0.07	U
1,1-Dichloroethene	mg/kg	0.001	U	0.003	0.062	U	0.066	U	0.001	U	0.12	U	0.058	U	0.003	U	0.062	U	0.001	U	0.07	U
1,1-Dichloropropene	mg/kg																					
1,2,4-Trimethylbenzene	mg/kg																					
1,2-Dibromoethane (EDB)	mg/kg																					
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg																					
1,2-Dichloro-1-Fluoroethane	mg/kg																					
1,2-Dichlorobenzene	mg/kg	0.041	U	0.045	17		8.6		0.038	U	150		0.14		1.8		1.6		0.037	U	2.3	
1,2-Dichloroethane	mg/kg	0.001	U	0.008	0.062	U	0.066	U	0.001	U	0.12	U	0.058	U	0.003	U	0.062	U	0.001	U	0.07	U
1,2-Dichloroethene	mg/kg																					
1,2-Dichloropropane	mg/kg	0.001	U	0.001	0.062	U	0.066	U	0.001	U	0.12	U	0.058	U	0.003	U	0.062	U	0.001	U	0.07	U
1,2-Dichlorotetrafluoroethane	mg/kg																					
1,3,5-Trimethylbenzene	mg/kg																					
1,3-Dichlorobenzene	mg/kg	0.041	U	0.038	1.5		0.66		0.038	U	12		0.039	U	0.23		0.11		0.037	U	0.17	
1,4-Dichlorobenzene	mg/kg	0.043		0.044	30		15		0.038	U	260		0.19		3.1		2.9		0.037	U	3.8	
1-Chloro-1,1-Difluoroethane	mg/kg																					
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg																					
2-Chloro-1,1,1-Trifluoroethane	mg/kg																					
2-Chloroethyl Vinyl Ether	mg/kg				0.12	U	0.13	U			0.24	U	0.12	U			0.12	U			0.14	U
2-Chlorotoluene	mg/kg																					
2-Hexanone	mg/kg																					
4-Chlorotoluene	mg/kg																					
4-Isopropyltoluene	mg/kg																					
Acetone	mg/kg	0.01		0.047	0.43	U	0.46	U	0.02		0.84	U	0.41	U	0.14		0.44	U	0.027		0.49	U
Acrolein	mg/kg	0.021	U	0.021	1.2	U	1.3	U	0.023	U	2.4	U	1.2	U	0.056	U	1.2	U	0.022	U	1.4	U
Acrylonitrile	mg/kg	0.004	U	0.004	0.25	U	0.26	U	0.005	U	0.48	U	0.23	U	0.011	U	0.25	U	0.004	U	0.28	U
Benzene	mg/kg	0.005		0.2	3.8		5.2		0.002		1.4		0.78		0.003		10		0.005		0.23	
Bromodichloromethane	mg/kg	0.001	U	0.001	0.062	U	0.066	U	0.001	U	0.12	U	0.058	U	0.003	U	0.062	U	0.001	U	0.07	U
Bromoform	mg/kg	0.001	U	0.001	0.062	U	0.066	U	0.001	U	0.12	U	0.058	U	0.003	U	0.062	U	0.001	U	0.07	U
Carbon Disulfide	mg/kg	0.001	U	0.017	0.32		0.2		0.006		0.15		0.058	U	0.006		0.062	U	0.001	U	0.07	U
Carbon Tetrachloride	mg/kg	0.001	U	0.045	5.3		0.066	U	0.001	U	4		0.058	U	0.003	U	0.062	U	0.001	U	0.07	U
CFC-1113	mg/kg																					
Chlorobenzene	mg/kg	1.1		1.8	240		160		0.022		150		6.6		0.31		130		0.017		10	

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA 21556127 D15-BOR-01 7.00-7.50 FS 3/24/2009		MZ-FPA 21556129 D15-BOR-02 1.50-2.00 FS 3/25/2009		MZ-FPA 21556130 D15-BOR-02 11.00-11.50 FS 3/25/2009		MZ-FPA 21556131 D15-BOR-02 13.00-13.50 FS 3/25/2009		MZ-FPA 21556133 D15-BOR-03 2.00-2.50 FS 3/25/2009		MZ-FPA 21556134 D15-BOR-03 11.00-11.50 FS 3/25/2009		MZ-FPA 21556135 D15-BOR-03 14.00-14.50 FS 3/25/2009		MZ-FPA 21556137 D15-BOR-04 0.50-1.00 FS 3/25/2009		MZ-FPA 21556138 D15-BOR-04 14.00-14.50 FS 3/25/2009		MZ-FPA 21563385 D15-BOR-05 7.00-7.50 FS 3/25/2009		MZ-FPA 21563386 D15-BOR-05 10.50-11.00 FS 3/25/2009	
		Units																					
Chlorodibromomethane	mg/kg	0.001	U	0.001	U	0.062	U	0.066	U	0.001	U	0.12	U	0.058	U	0.003	U	0.062	U	0.001	U	0.07	U
Chlorodifluoromethane	mg/kg																						
Chlorofluoromethane	mg/kg																						
Chloroform	mg/kg	0.001	U	0.3		2		0.62		0.001	U	1.1		0.63		0.003	U	0.62		0.001	U	0.47	
Chloropentafluoroethane	mg/kg																						
cis-1,2-Dichloroethene	mg/kg	0.001	U	0.005		0.062	U	0.066	U	0.001	U	0.12	U	0.058	U	0.003	U	0.062	U	0.001	U	0.07	U
cis-1,3-Dichloropropene	mg/kg	0.001	U	0.001	U	0.062	U	0.066	U	0.001	U	0.12	U	0.058	U	0.003	U	0.062	U	0.001	U	0.07	U
Cumene	mg/kg																						
Dichlorodifluoromethane	mg/kg	0.002	U	0.002	U	0.12	U	0.13	U	0.002	U	0.24	U	0.12	U	0.006	U	0.12	U	0.002	U	0.14	U
Dichlorofluoromethane	mg/kg	0.002	U	0.037		0.12	U	0.13	U	0.002	U	0.24	U	0.12	U	0.006	U	0.12	U	0.002	U	0.14	U
Ethane	ug/L																						
Ethyl Chloride	mg/kg	0.002	U	0.002	U	0.12	U	0.13	U	0.002	U	0.24	U	0.12	U	0.006	U	0.12	U	0.002	U	0.14	U
Ethylbenzene	mg/kg	0.001	U	0.02		4.3		1		0.001	U	2.9		0.058	U	0.006		0.67		0.001	U	0.1	
Fluoromethane	mg/kg																						
Hexane	mg/kg																						
Isobutyl Alcohol	mg/kg																						
Meta- And Para-Xylene	mg/kg																						
Methacrylonitrile	mg/kg																						
Methane	ug/L																						
Methyl Bromide	mg/kg	0.002	U	0.002	U	0.12	U	0.13	U	0.002	U	0.24	U	0.12	U	0.006	U	0.12	U	0.002	U	0.14	U
Methyl Chloride	mg/kg	0.002	U	0.002	U	0.12	U	0.13	U	0.002	U	0.24	U	0.12	U	0.006	U	0.12	U	0.002	U	0.14	U
Methyl Ethyl Ketone	mg/kg																						
Methyl Isobutyl Ketone	mg/kg																						
Methyl Methacrylate	mg/kg																						
Methyl Tertiary Butyl Ether	mg/kg																						
Methylene Chloride	mg/kg	0.002	U	0.056		0.12	U	0.13	U	0.015		0.24	U	0.12	U	0.006	U	0.12	U	0.009		0.23	
N-Butylbenzene	mg/kg																						
N-Propylbenzene	mg/kg																						
Ortho-Xylene	mg/kg																						
Propionitrile	mg/kg																						
sec-Butylbenzene	mg/kg																						
Styrene	mg/kg																						
tert-Butylbenzene	mg/kg																						
Tetrachloroethene	mg/kg	0.001	U	0.057		12		0.74		0.001		8.7		0.078		0.017		0.18		0.003		4.2	
Tetrahydrofuran	mg/kg																						
Toluene	mg/kg	0.001	U	0.25		13		3.3		0.001	U	7.4		0.38		0.014		7.8		0.001	U	0.25	
trans-1,2-Dichloroethene	mg/kg	0.001	U	0.001	U	0.062	U	0.066	U	0.001	U	0.12	U	0.058	U	0.003	U	0.062	U	0.001	U	0.07	U
trans-1,3-Dichloropropene	mg/kg	0.001	U	0.001	U	0.062	U	0.066	U	0.001	U	0.12	U	0.058	U	0.003	U	0.062	U	0.001	U	0.07	U
Trichloroethene	mg/kg	0.001	U	0.012		0.21		0.066	U	0.001	U	0.14		0.058	U	0.003	U	0.062	U	0.001	U	0.19	
Trichlorofluoromethane	mg/kg	0.002	U	0.11		4		0.15		0.002	U	2.1		0.16		0.006	U	0.12	U	0.002	U	0.15	
Vinyl Chloride	mg/kg	0.001	U	0.001	U	0.062	U	0.066	U	0.001	U	0.12	U	0.058	U	0.003	U	0.062	U	0.001	U	0.07	U
Vinyl Fluoride	mg/kg																						
Xylenes	mg/kg	0.001	U	0.14		34		6.7		0.001	U	24		0.17		0.051		5.8		0.001	U	0.78	

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	21563387	21563389	21563390	21563391	21563393	21563394	21563395	21563397	21563398	21563400
Location ID	D15-BOR-05	D15-BOR-06	D15-BOR-06	D15-BOR-06	D15-BOR-07	D15-BOR-07	D15-BOR-07	D15-BOR-08	D15-BOR-08	D15-BOR-09
Depth Interval (ft)	14.50-15.00	0.50-1.00	12.00-12.50	14.00-14.50	13.00-13.50	8.00-8.50	0.50-1.00	6.50-7.00	10.50-11.00	0.50-1.00
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Date	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/26/2009	3/26/2009	3/26/2009
Chemical Class	Units									
<b>General Chemistry</b>										
Black Carbon	mg/kg									
Percent Moisture	%	16.7	48.7	23.3	14	16.4	21.1	24.2	9.6	20.1
Percent Solids	%									
Total Organic Carbon	mg/kg									
<b>Metals</b>										
Aluminum	mg/kg									
Antimony	mg/kg									
Arsenic	mg/kg									
Barium	mg/kg									
Beryllium	mg/kg									
Cadmium	mg/kg									
Calcium	mg/kg									
Chromium	mg/kg									
Cobalt	mg/kg									
Copper	mg/kg									
Iron	mg/kg									
Lead	mg/kg									
Magnesium	mg/kg									
Manganese	mg/kg									
Mercury	mg/kg									
Nickel	mg/kg									
Potassium	mg/kg									
Selenium	mg/kg									
Silver	mg/kg									
Sodium	mg/kg									
Thallium	mg/kg									
Tin	mg/kg									
Titanium	mg/kg									
Vanadium	mg/kg									
Zinc	mg/kg									
<b>Metals - AVS/SEM</b>										
Acid Volatile Sulfide	umol/g									
Arsenic	umol/g									
Cadmium	umol/g									
Copper	umol/g									
Lead	umol/g									
Zinc	umol/g									
<b>Metals - Leachate</b>										
Lead	ug/L									
<b>Per and Polyfluorinated Organic Substances</b>										
Perfluorobutane Sulfonic Acid	mg/kg									
Perfluorobutanoic Acid	mg/kg									
Perfluorodecane Sulfonic Acid	mg/kg									
Perfluorodecanoic Acid	mg/kg									
Perfluorododecanoic Acid	mg/kg									
Perfluoroheptanoic Acid	mg/kg									
Perfluorohexane Sulfonic Acid	mg/kg									
Perfluorohexanoic Acid	mg/kg									
Perfluorononanoic Acid	mg/kg									
Perfluorooctane Sulfonamide	mg/kg									
Perfluoropentanoic Acid	mg/kg									
Perfluorotetradecanoic Acid	mg/kg									
Perfluorotridecanoic Acid	mg/kg									
Perfluoroundecanoic Acid	mg/kg									
PFOA	mg/kg									
PFOA(trial)	mg/kg									
PFOS	mg/kg									
PFOS (trial)	mg/kg									
<b>Pesticides and Herbicides</b>										
4,4'-DDD	mg/kg									
4,4'-DDE	mg/kg									
4,4'-DDT	mg/kg									
Aldrin	mg/kg									
Alpha Chlordane	mg/kg									
Alpha-BHC	mg/kg									
beta-BHC	mg/kg									
delta-BHC	mg/kg									
Dieldrin	mg/kg									
Endosulfan I	mg/kg									
Endosulfan II	mg/kg									
Endosulfan Sulfate	mg/kg									
Endrin	mg/kg									
Endrin Aldehyde	mg/kg									
Endrin Ketone	mg/kg									
Gammax Chlordane	mg/kg									

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	21563387	21563389	21563390	21563391	21563393	21563394	21563395	21563397	21563398	21563400
Location ID	D15-BOR-05	D15-BOR-06	D15-BOR-06	D15-BOR-06	D15-BOR-07	D15-BOR-07	D15-BOR-07	D15-BOR-08	D15-BOR-08	D15-BOR-09
Depth Interval (ft)	14.50-15.00	0.50-1.00	12.00-12.50	14.00-14.50	13.00-13.50	8.00-8.50	0.50-1.00	6.50-7.00	10.50-11.00	0.50-1.00
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Date	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/26/2009	3/26/2009	3/26/2009
Chemical Class	Units									
Heptachlor	mg/kg									
Heptachlor Epoxide	mg/kg									
Lindane	mg/kg									
Methoxychlor	mg/kg									
Toxaphene	mg/kg									
<b>Physical Properties</b>										
0.001 MM	% PASSING									
0.002 MM	% PASSING									
0.005 MM	% PASSING									
0.02 MM	% PASSING									
0.05 MM	% PASSING									
0.064 MM	% PASSING									
0.075 MM	% PASSING									
0.15 MM	% PASSING									
0.3 MM	% PASSING									
0.6 MM	% PASSING									
1.18 MM	% PASSING									
19 MM	% PASSING									
2.36 MM	% PASSING									
3.35 MM	% PASSING									
37.5 MM	% PASSING									
4.75 MM	% PASSING									
75 MM	% PASSING									
Density	PCF									
<b>Polychlorinated Biphenyls - TICs</b>										
1,1'-Biphenyl, 2,3-dichloro-	mg/kg									
Unknown Biphenyl	mg/kg									
<b>Polychlorinated Biphenyls</b>										
Heptachlorobiphenyl	mg/kg									
Hexachlorobiphenyl	mg/kg									
Octachlorobiphenyl	mg/kg									
PCB 1	mg/kg									
PCB 10	mg/kg									
PCB 100	mg/kg									
PCB 101	mg/kg									
PCB 102	mg/kg									
PCB 103	mg/kg									
PCB 104	mg/kg									
PCB 105	mg/kg									
PCB 106	mg/kg									
PCB 107	mg/kg									
PCB 107/123	mg/kg									
PCB 108	mg/kg									
PCB 109	mg/kg									
PCB 11	mg/kg									
PCB 110	mg/kg									
PCB 111	mg/kg									
PCB 112	mg/kg									
PCB 113	mg/kg									
PCB 114	mg/kg									
PCB 115	mg/kg									
PCB 116	mg/kg									
PCB 117	mg/kg									
PCB 118	mg/kg									
PCB 119	mg/kg									
PCB 12	mg/kg									
PCB 120	mg/kg									
PCB 121	mg/kg									
PCB 121/95/88	mg/kg									
PCB 122	mg/kg									
PCB 123	mg/kg									
PCB 124	mg/kg									
PCB 125	mg/kg									
PCB 126	mg/kg									
PCB 127	mg/kg									
PCB 128	mg/kg									
PCB 129	mg/kg									
PCB 129/158	mg/kg									
PCB 13	mg/kg									
PCB 130	mg/kg									
PCB 130/164	mg/kg									
PCB 131	mg/kg									
PCB 132	mg/kg									
PCB 133	mg/kg									
PCB 134	mg/kg									
PCB 135	mg/kg									

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
	Field Sample ID	21563387	21563389	21563390	21563391	21563393	21563394	21563395	21563397	21563398	21563400
Chemical	Location ID	D15-BOR-05	D15-BOR-06	D15-BOR-06	D15-BOR-06	D15-BOR-07	D15-BOR-07	D15-BOR-07	D15-BOR-08	D15-BOR-08	D15-BOR-09
Units	Depth Interval (ft)	14.50-15.00	0.50-1.00	12.00-12.50	14.00-14.50	13.00-13.50	8.00-8.50	0.50-1.00	6.50-7.00	10.50-11.00	0.50-1.00
	Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
	Date	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/26/2009	3/26/2009	3/26/2009
PCB 136	mg/kg										
PCB 137	mg/kg										
PCB 138	mg/kg										
PCB 139	mg/kg										
PCB 14	mg/kg										
PCB 140	mg/kg										
PCB 141	mg/kg										
PCB 142	mg/kg										
PCB 143	mg/kg										
PCB 143/139	mg/kg										
PCB 144	mg/kg										
PCB 145	mg/kg										
PCB 146	mg/kg										
PCB 147	mg/kg										
PCB 148	mg/kg										
PCB 149	mg/kg										
PCB 15	mg/kg										
PCB 150	mg/kg										
PCB 151	mg/kg										
PCB 152	mg/kg										
PCB 153	mg/kg										
PCB 154	mg/kg										
PCB 155	mg/kg										
PCB 156	mg/kg										
PCB 157	mg/kg										
PCB 158	mg/kg										
PCB 159	mg/kg										
PCB 16	mg/kg										
PCB 160	mg/kg										
PCB 161	mg/kg										
PCB 162	mg/kg										
PCB 163	mg/kg										
PCB 163/160	mg/kg										
PCB 164	mg/kg										
PCB 165	mg/kg										
PCB 166	mg/kg										
PCB 167	mg/kg										
PCB 168	mg/kg										
PCB 169	mg/kg										
PCB 17	mg/kg										
PCB 170	mg/kg										
PCB 171	mg/kg										
PCB 172	mg/kg										
PCB 173	mg/kg										
PCB 174	mg/kg										
PCB 175	mg/kg										
PCB 176	mg/kg										
PCB 177	mg/kg										
PCB 178	mg/kg										
PCB 179	mg/kg										
PCB 18	mg/kg										
PCB 180	mg/kg										
PCB 181	mg/kg										
PCB 182	mg/kg										
PCB 182/175	mg/kg										
PCB 183	mg/kg										
PCB 184	mg/kg										
PCB 185	mg/kg										
PCB 186	mg/kg										
PCB 187	mg/kg										
PCB 188	mg/kg										
PCB 189	mg/kg										
PCB 19	mg/kg										
PCB 190	mg/kg										
PCB 191	mg/kg										
PCB 192	mg/kg										
PCB 193	mg/kg										
PCB 194	mg/kg										
PCB 195	mg/kg										
PCB 196	mg/kg										
PCB 197	mg/kg										
PCB 198	mg/kg										
PCB 199	mg/kg										
PCB 2	mg/kg										
PCB 20	mg/kg										
PCB 200	mg/kg										

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	21563387	21563389	21563390	21563391	21563393	21563394	21563395	21563397	21563398	21563400
Location ID	D15-BOR-05	D15-BOR-06	D15-BOR-06	D15-BOR-06	D15-BOR-07	D15-BOR-07	D15-BOR-07	D15-BOR-08	D15-BOR-08	D15-BOR-09
Depth Interval (ft)	14.50-15.00	0.50-1.00	12.00-12.50	14.00-14.50	13.00-13.50	8.00-8.50	0.50-1.00	6.50-7.00	10.50-11.00	0.50-1.00
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Date	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/26/2009	3/26/2009	3/26/2009
Chemical Class	Units									
PCB 201	mg/kg									
PCB 202	mg/kg									
PCB 203	mg/kg									
PCB 204	mg/kg									
PCB 204/200	mg/kg									
PCB 205	mg/kg									
PCB 206	mg/kg									
PCB 207	mg/kg									
PCB 208	mg/kg									
PCB 209	mg/kg									
PCB 21	mg/kg									
PCB 21/20	mg/kg									
PCB 22	mg/kg									
PCB 23	mg/kg									
PCB 24	mg/kg									
PCB 25	mg/kg									
PCB 26	mg/kg									
PCB 27	mg/kg									
PCB 28	mg/kg									
PCB 29	mg/kg									
PCB 3	mg/kg									
PCB 30	mg/kg									
PCB 31	mg/kg									
PCB 32	mg/kg									
PCB 33	mg/kg									
PCB 34	mg/kg									
PCB 35	mg/kg									
PCB 36	mg/kg									
PCB 37	mg/kg									
PCB 38	mg/kg									
PCB 39	mg/kg									
PCB 4	mg/kg									
PCB 4/10	mg/kg									
PCB 40	mg/kg									
PCB 41	mg/kg									
PCB 42	mg/kg									
PCB 43	mg/kg									
PCB 44	mg/kg									
PCB 45	mg/kg									
PCB 46	mg/kg									
PCB 47	mg/kg									
PCB 48	mg/kg									
PCB 49	mg/kg									
PCB 5	mg/kg									
PCB 50	mg/kg									
PCB 51	mg/kg									
PCB 52	mg/kg									
PCB 53	mg/kg									
PCB 54	mg/kg									
PCB 55	mg/kg									
PCB 56	mg/kg									
PCB 57	mg/kg									
PCB 58	mg/kg									
PCB 59	mg/kg									
PCB 6	mg/kg									
PCB 60	mg/kg									
PCB 61	mg/kg									
PCB 62	mg/kg									
PCB 63	mg/kg									
PCB 64	mg/kg									
PCB 65	mg/kg									
PCB 65/75/62	mg/kg									
PCB 66	mg/kg									
PCB 67	mg/kg									
PCB 67/58	mg/kg									
PCB 68	mg/kg									
PCB 68/64	mg/kg									
PCB 69	mg/kg									
PCB 7	mg/kg									
PCB 70	mg/kg									
PCB 71	mg/kg									
PCB 72	mg/kg									
PCB 73	mg/kg									
PCB 73/46	mg/kg									
PCB 74	mg/kg									
PCB 75	mg/kg									

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	21563387	21563389	21563390	21563391	21563393	21563394	21563395	21563397	21563398	21563400
Location ID	D15-BOR-05	D15-BOR-06	D15-BOR-06	D15-BOR-06	D15-BOR-07	D15-BOR-07	D15-BOR-07	D15-BOR-08	D15-BOR-08	D15-BOR-09
Depth Interval (ft)	14.50-15.00	0.50-1.00	12.00-12.50	14.00-14.50	13.00-13.50	8.00-8.50	0.50-1.00	6.50-7.00	10.50-11.00	0.50-1.00
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Date	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/26/2009	3/26/2009	3/26/2009
Chemical Class	Units									
PCB 76	mg/kg									
PCB 77	mg/kg									
PCB 78	mg/kg									
PCB 79	mg/kg									
PCB 8	mg/kg									
PCB 80	mg/kg									
PCB 81	mg/kg									
PCB 82	mg/kg									
PCB 83	mg/kg									
PCB 83/125/112	mg/kg									
PCB 84	mg/kg									
PCB 85	mg/kg									
PCB 86	mg/kg									
PCB 86/109	mg/kg									
PCB 87	mg/kg									
PCB 87/111	mg/kg									
PCB 88	mg/kg									
PCB 89	mg/kg									
PCB 89/84	mg/kg									
PCB 9	mg/kg									
PCB 90	mg/kg									
PCB 91	mg/kg									
PCB 92	mg/kg									
PCB 93	mg/kg									
PCB 94	mg/kg									
PCB 95	mg/kg									
PCB 96	mg/kg									
PCB 97	mg/kg									
PCB 98	mg/kg									
PCB 99	mg/kg									
PCB-100/93	mg/kg									
PCB-107/124	mg/kg									
PCB-108/119/86/97/125/87	mg/kg									
PCB-113/90/101	mg/kg									
PCB-116/85	mg/kg									
PCB-128/166	mg/kg									
PCB-13/12	mg/kg									
PCB-139/140	mg/kg									
PCB-147/149	mg/kg									
PCB-151/135	mg/kg									
PCB-153/168	mg/kg									
PCB-156/157	mg/kg									
PCB-163/138/129	mg/kg									
PCB-171/173	mg/kg									
PCB-180/193	mg/kg									
PCB-198/199	mg/kg									
PCB-21/33	mg/kg									
PCB-26/29	mg/kg									
PCB-28/20	mg/kg									
PCB-30/18	mg/kg									
PCB-44/47/65	mg/kg									
PCB-50/53	mg/kg									
PCB-59/62/75	mg/kg									
PCB-61/70/74/76	mg/kg									
PCB-69/49	mg/kg									
PCB-71/40	mg/kg									
PCB-90/101	mg/kg									
Pentachlorobiphenyl	mg/kg									
Tetrachlorobiphenyl	mg/kg									
Total Decachlorobiphenyls (congeners)	mg/kg									
Total Dichlorobiphenyls (congeners)	mg/kg									
Total Heptachlorobiphenyls (congeners)	mg/kg									
Total Hexachlorobiphenyls (congeners)	mg/kg									
Total Monochlorobiphenyls (congeners)	mg/kg									
Total Nonachlorobiphenyls (congeners)	mg/kg									
Total Octachlorobiphenyls (congeners)	mg/kg									
Total PCB (congeners)	mg/kg									
Total Pentachlorobiphenyls (congeners)	mg/kg									
Total Tetrachlorobiphenyls (congeners)	mg/kg									
Total Trichlorobiphenyls (congeners)	mg/kg									
Trichlorobiphenyl (total)	mg/kg									
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>										
Benzo[e]pyrene	mg/kg									
Chrysene, 1-methyl-	mg/kg									
Naphthalene, 1-methyl-	mg/kg									
Pyrene, 1-methyl-	mg/kg									

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA										
Field Sample ID	21563387	21563389	21563390	21563391	21563393	21563394	21563395	21563397	21563398	21563400											
Location ID	D15-BOR-05	D15-BOR-06	D15-BOR-06	D15-BOR-06	D15-BOR-07	D15-BOR-07	D15-BOR-07	D15-BOR-08	D15-BOR-08	D15-BOR-09											
Depth Interval (ft)	14.50-15.00	0.50-1.00	12.00-12.50	14.00-14.50	13.00-13.50	8.00-8.50	0.50-1.00	6.50-7.00	10.50-11.00	0.50-1.00											
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS											
Date	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/26/2009	3/26/2009	3/26/2009											
Chemical Class	Units																				
<b>Polycyclic Aromatic Hydrocarbons</b>																					
Acenaphthene	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.044	U	0.037	U	0.31	U	0.042	U
Acenaphthylene	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.044	U	0.037	U	0.043	U	0.042	U
Anthracene	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.052	U	0.037	U	0.24	U	0.042	U
Benzo(A)Anthracene	mg/kg	0.04	U	0.1	U	0.043	U	0.039	U	0.04	U	0.042	U	0.097	U	0.037	U	0.063	U	0.042	U
Benzo(B)Fluoranthene	mg/kg	0.04	U	0.098	U	0.043	U	0.039	U	0.04	U	0.042	U	0.062	U	0.037	U	0.043	U	0.042	U
Benzo(G,H,I)Perylene	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.044	U	0.037	U	0.043	U	0.042	U
Benzo(K)Fluoranthene	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.044	U	0.037	U	0.043	U	0.042	U
Benzo(A)Pyrene	mg/kg	0.04	U	0.076	U	0.043	U	0.039	U	0.04	U	0.042	U	0.059	U	0.037	U	0.043	U	0.042	U
Chrysene	mg/kg	0.04	U	0.11	U	0.043	U	0.039	U	0.04	U	0.042	U	0.15	U	0.037	U	0.14	U	0.042	U
Dibenz(A,H)Anthracene	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.044	U	0.037	U	0.043	U	0.042	U
Fluoranthene	mg/kg	0.04	U	0.14	U	0.043	U	0.039	U	0.04	U	0.042	U	0.14	U	0.037	U	0.25	U	0.042	U
Fluorene	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.044	U	0.037	U	0.45	U	0.042	U
Indeno (1,2,3-CD) Pyrene	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.044	U	0.037	U	0.043	U	0.042	U
Naphthalene	mg/kg	0.04	U	0.12	U	0.073	U	0.039	U	0.04	U	0.059	U	0.075	U	0.11	U	8.8	U	0.042	U
Phenanthrene	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.12	U	0.037	U	2.1	U	0.042	U
Pyrene	mg/kg	0.04	U	0.15	U	0.043	U	0.039	U	0.04	U	0.042	U	0.19	U	0.037	U	0.17	U	0.042	U
Total PAHs (Detections + 1/2 MDL)	mg/kg	0.32	U	1.0865	U	0.3955	U	0.312	U	0.32	U	0.374	U	1.099	U	0.3875	U	12.6735	U	0.336	U
Total PAHs (Detections Only)	mg/kg	0.32	U	0.794	U	0.073	U	0.312	U	0.32	U	0.059	U	0.945	U	0.11	U	12.523	U	0.336	U
<b>Semivolatile Organic Compounds - TICs</b>																					
1,2,4-Trithiolane	mg/kg																				
1,4-Benzenediol, 2-chloro-	mg/kg																				
11H-Benzo[b]fluorene	mg/kg																				
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg																				
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg																				
3-PENTEN-2-ONE, 4-METHYL-	mg/kg																				
7H-Benz[de]anthracen-7-one	mg/kg																				
9,10-Anthracenedione	mg/kg																				
9-Octadecenamamide, (Z)-	mg/kg																				
Acetamide, 2-chloro-N-(ethox	mg/kg																				
Alachlor	mg/kg																				
Benzenamine, 3-methyl-	mg/kg																				
Benzenamine, 4,4',4"-methy	mg/kg																				
Benzenamine, 4,4'-methyleneb	mg/kg																				
Benzene, 1,2,3,4-tetrachloro	mg/kg																				
Benzene, 1,2,3,5-tetrachloro	mg/kg																				
Benzene, 1,2,3-trichloro-	mg/kg																				
Benzene, 1,3,5-trichloro-	mg/kg																				
Benzene, 1,3-bis(1-methyleth	mg/kg																				
Benzene, 1,4-bis(1-methyleth	mg/kg																				
Benzofuran, 2,3-dihydro-	mg/kg																				
CYCLIC OCTAATOMIC SULFUR	mg/kg																				
Diphenyl Ether	mg/kg																				
Docosane	mg/kg																				
Heneicosane	mg/kg																				
Hexacosane	mg/kg																				
Hexadecane	mg/kg																				
Hexatriacontane	mg/kg																				
m-Chloroaniline	mg/kg																				
N,N-Diethylaniline	mg/kg																				
n-Hexadecanoic acid	mg/kg																				
Nonadecane	mg/kg																				
o-Chloroaniline	mg/kg																				
Octacosane	mg/kg																				
Octadecane	mg/kg																				
Octadecane, 1-chloro-	mg/kg																				
Octadecanoic acid	mg/kg																				
Parachlorophenol	mg/kg																				
Pentadecane	mg/kg																				
Perylene	mg/kg																				
Phenol, 2,5-dichloro-	mg/kg																				
Phenol, 3-chloro-	mg/kg																				
Phenol, 4,4'-(1-methylethyl)	mg/kg																				
Tetracosane	mg/kg																				
Tetradecane	mg/kg																				
Tetraethylene glycol	mg/kg																				
Total SVOC TICs	mg/kg																				
Triacotane	mg/kg																				
Tributyl phosphate	mg/kg																				
Tridecanoic acid	mg/kg																				
Triphenyl phosphate	mg/kg																				
UNKNOWN	mg/kg																				
Unknown acid	mg/kg																				
Unknown Alcohol	mg/kg																				
Unknown Aldol Condensate	mg/kg																				
UNKNOWN ALKANE	mg/kg																				

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA										
Field Sample ID	21563387	21563389	21563390	21563391	21563393	21563394	21563395	21563397	21563398	21563400											
Location ID	D15-BOR-05	D15-BOR-06	D15-BOR-06	D15-BOR-06	D15-BOR-07	D15-BOR-07	D15-BOR-07	D15-BOR-08	D15-BOR-08	D15-BOR-09											
Depth Interval (ft)	14.50-15.00	0.50-1.00	12.00-12.50	14.00-14.50	13.00-13.50	8.00-8.50	0.50-1.00	6.50-7.00	10.50-11.00	0.50-1.00											
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS											
Date	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/26/2009	3/26/2009	3/26/2009											
Chemical Class																					
Chemical	Units																				
Unknown Alkene	mg/kg																				
Unknown Amide	mg/kg																				
Unknown Amine	mg/kg																				
UNKNOWN AROMATIC	mg/kg																				
Unknown Carboxylic Acid	mg/kg																				
Unknown Cycloalkane	mg/kg																				
Unknown Hydrocarbon	mg/kg																				
Unknown Ketone	mg/kg																				
Unknown PAH	mg/kg																				
UNKNOWN SILOXANE	mg/kg																				
<b>Semivolatile Organic Compounds</b>																					
1,2,4-Trichlorobenzene	mg/kg	0.04	U	0.068	U	0.043	U	0.039	U	0.04	U	0.044	U	0.044	U	1.1	U	19	U	0.042	U
1,2-Diphenylhydrazine	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.044	U	0.037	U	0.87	U	0.042	U
1,4-Dioxane	mg/kg																				
1-Naphthylamine	mg/kg	0.2	U	0.32	U	0.22	U	0.19	U	0.2	U	0.21	U	0.22	U	0.18	U	0.22	U	0.21	U
2,3,4,6-Tetrachlorophenol	mg/kg																				
2,4,5-Trichlorophenol	mg/kg																				
2,4,6-Trichlorophenol	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.044	U	0.037	U	0.043	U	0.042	U
2,4-Dichlorophenol	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.044	U	0.037	U	0.13	U	0.042	U
2,4-Dimethylphenol	mg/kg	0.08	U	0.13	U	0.087	U	0.087	U	0.08	U	0.084	U	0.088	U	0.074	U	0.087	U	0.083	U
2,4-Dinitrophenol	mg/kg	0.8	U	1.3	U	0.87	U	0.78	U	0.8	U	0.84	U	0.88	U	0.74	U	0.87	U	0.83	U
2,4-Dinitrotoluene	mg/kg	0.08	U	0.13	U	0.087	U	0.078	U	0.08	U	0.084	U	0.088	U	0.074	U	0.087	U	0.083	U
2,6-Dinitrotoluene	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.044	U	0.037	U	0.043	U	0.042	U
2-Chloronaphthalene	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.044	U	0.037	U	0.043	U	0.042	U
2-Chlorophenol	mg/kg	0.04	U	0.073	U	0.11	U	0.039	U	0.04	U	0.051	U	0.044	U	0.037	U	0.14	U	0.042	U
2-Methylnaphthalene	mg/kg																				
2-Methylphenol (O-Cresol)	mg/kg																				
2-Naphthylamine	mg/kg	0.2	U	0.32	U	0.22	U	0.19	U	0.2	U	0.21	U	0.22	U	0.18	U	0.22	U	0.21	U
2-Nitroaniline	mg/kg																				
2-Nitrophenol	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.044	U	0.037	U	0.043	U	0.042	U
3,3'-Dichlorobenzidine	mg/kg	0.12	U	0.19	U	0.13	U	0.12	U	0.12	U	0.13	U	0.13	U	0.11	U	0.13	U	0.13	U
3,3'-Dimethylbenzidine	mg/kg																				
3-Nitroaniline	mg/kg																				
4,6-Dinitro-2-Methylphenol	mg/kg	0.2	U	0.32	U	0.22	U	0.19	U	0.2	U	0.21	U	0.22	U	0.18	U	0.22	U	0.21	U
4-Aminobiphenyl	mg/kg	0.2	U	0.32	U	0.22	U	0.19	U	0.2	U	0.21	U	0.22	U	0.18	U	0.22	U	0.21	U
4-Bromophenyl Phenyl Ether	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.044	U	0.037	U	0.043	U	0.042	U
4-Chloro-3-Methylphenol	mg/kg	0.08	U	0.13	U	0.087	U	0.078	U	0.08	U	0.084	U	0.088	U	0.074	U	0.087	U	0.083	U
4-Chloroaniline	mg/kg	0.08	U	0.13	U	0.087	U	0.078	U	0.08	U	0.084	U	0.088	U	0.35	U	0.081	U	0.091	U
4-Chlorophenyl Phenyl Ether	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.044	U	0.037	U	0.043	U	0.042	U
4-Methylphenol (P-Cresol)	mg/kg																				
4-Nitroaniline	mg/kg																				
4-Nitrophenol	mg/kg	0.2	U	0.32	U	0.22	U	0.19	U	0.2	U	0.21	U	0.22	U	0.18	U	0.22	U	0.21	U
Acetophenone	mg/kg																				
Aniline	mg/kg	0.2	U	0.32	U	0.22	U	0.19	U	0.2	U	0.21	U	0.22	U	0.18	U	0.25	U	0.21	U
Benzidine	mg/kg	1.4	U	2.3	U	1.5	U	1.4	U	1.4	U	1.5	U	1.5	U	1.3	U	1.5	U	1.5	U
Biphenyl	mg/kg																				
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg																				
Bis(2-Chloroethoxy)Methane	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.044	U	0.037	U	0.043	U	0.042	U
Bis(2-Chloroethyl)Ether	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.044	U	0.037	U	0.043	U	0.042	U
Bis(2-Chloroisopropyl)Ether	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.044	U	0.037	U	0.043	U	0.042	U
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.19	U	0.14	U	0.087	U	0.08	U	0.08	U	0.088	U	0.088	U	0.27	U	0.4	U	0.19	U
Butyl Benzyl Phthalate	mg/kg	0.08	U	0.13	U	0.087	U	0.078	U	0.08	U	0.084	U	0.088	U	0.074	U	0.087	U	0.083	U
Carbazole	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.044	U	0.037	U	0.14	U	0.042	U
Dibenzofuran	mg/kg																				
Diethyl Phthalate	mg/kg	0.08	U	0.13	U	0.087	U	0.078	U	0.08	U	0.084	U	0.088	U	0.074	U	0.087	U	0.083	U
Dimethyl Phthalate	mg/kg	0.08	U	0.13	U	0.087	U	0.078	U	0.08	U	0.084	U	0.088	U	0.074	U	0.087	U	0.083	U
Di-N-Butyl Phthalate	mg/kg	0.08	U	0.13	U	0.087	U	0.078	U	0.08	U	0.084	U	0.088	U	0.074	U	0.087	U	0.083	U
Diphenyl Ether	mg/kg																				
Hexachlorobenzene	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.044	U	0.037	U	0.19	U	0.042	U
Hexachlorobutadiene	mg/kg	0.08	U	0.13	U	0.087	U	0.078	U	0.08	U	0.084	U	0.088	U	0.074	U	0.087	U	0.083	U
Hexachlorocyclopentadiene	mg/kg	0.2	U	0.32	U	0.22	U	0.19	U	0.2	U	0.21	U	0.22	U	0.18	U	0.22	U	0.21	U
Hexachloroethane	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.044	U	0.037	U	0.043	U	0.042	U
Hexachloropropylene	mg/kg																				
Isophorone	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.044	U	0.037	U	0.043	U	0.042	U
N-Dioctyl Phthalate	mg/kg	0.08	U	0.13	U	0.087	U	0.078	U	0.08	U	0.084	U	0.088	U	0.074	U	0.087	U	0.083	U
Nitrobenzene	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.044	U	0.037	U	0.091	U	0.042	U
N-Nitrosodimethylamine	mg/kg	0.08	U	0.13	U	0.087	U	0.078	U	0.08	U	0.084	U	0.088	U	0.074	U	0.087	U	0.083	U
N-Nitrosodi-N-Propylamine	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.044	U	0.037	U	0.043	U	0.042	U
N-Nitrosodiphenylamine	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.044	U	0.037	U	0.13	U	0.042	U
O-Toluidine	mg/kg	0.24	U	0.39	U	0.26	U	0.23	U	0.24	U	0.25	U	0.25	U	0.22	U	0.26	U	0.25	U
Parathion	mg/kg																				
Pentachlorobenzene	mg/kg																				
Pentachlorophenol	mg/kg	0.2	U	0.32	U	0.22	U	0.19	U	0.2	U	0.21	U	0.22	U	0.18	U	0.22	U	0.21	U
Phenol	mg/kg	0.04	U	0.065	U	0.043	U	0.039	U	0.04	U	0.042	U	0.044	U	0.037	U	0.043	U	0.042	U
<b>Volatile Organic Compounds - TICs</b>																					
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg																				

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	21563387	21563389	21563390	21563391	21563393	21563394	21563395	21563397	21563398	21563400	
Location ID	D15-BOR-05	D15-BOR-06	D15-BOR-06	D15-BOR-06	D15-BOR-07	D15-BOR-07	D15-BOR-07	D15-BOR-08	D15-BOR-08	D15-BOR-09	
Depth Interval (ft)	14.50-15.00	0.50-1.00	12.00-12.50	14.00-14.50	13.00-13.50	8.00-8.50	0.50-1.00	6.50-7.00	10.50-11.00	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Date	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/26/2009	3/26/2009	3/26/2009	
Chemical Class											
Chemical	Units										
1-Butene	mg/kg										
1-Heptene	mg/kg										
1-Propene, 2-methyl-	mg/kg										
Azulene	mg/kg										
BENZENE, 1,2,4-TRICHLORO-	mg/kg										
BENZENE, 1,2-DICHLORO-	mg/kg										
BENZENE, 1,4-DICHLORO-	mg/kg										
Camphene	mg/kg										
CYCLOHEXANE	mg/kg										
Cyclohexane, methyl-	mg/kg										
Cyclotrisiloxane, hexamethyl	mg/kg										
Diphenyl Ether	mg/kg										
Ethane, 1,1,2,2-tetrachloro-	mg/kg										
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg										
Ethane, 1,2-dichloro-1,1-dif	mg/kg										
Ethene, 1,1-dichloro-2,2-dif	mg/kg										
Hexane, 2-methyl-	mg/kg										
Hexane, 3-methyl-	mg/kg										
METHANE, CHLOROFLUORO-	mg/kg										
Naphthalene	mg/kg										
NAPHTHALENE, 2-METHYL-	mg/kg										
Nonanal	mg/kg										
Norflurane	mg/kg										
Pentane, 2,3-dimethyl-	mg/kg										
Phenol, 4-(1,1,3,3-tetrameth	mg/kg										
Propene	mg/kg										
Sulfur dioxide	mg/kg										
Tridecane	mg/kg										
UNKNOWN	mg/kg										
UNKNOWN ALICYCLIC	mg/kg										
UNKNOWN ALIPHATIC	mg/kg										
UNKNOWN ALKANE	mg/kg										
UNKNOWN AROMATIC	mg/kg										
UNKNOWN SILOXANE	mg/kg										
<b>Volatile Organic Compounds</b>											
1,1,1,2-Tetrachloroethane	mg/kg										
1,1,1-Trichloroethane	mg/kg	0.001 U	0.14 U	0.062 U	0.001 U	0.001 U	0.059 U	0.002 U	0.057 U	0.62 U	0.001 U
1,1,1-Trichlorotrifluoroethane	mg/kg										
1,1,2,2-Tetrachloroethane	mg/kg	0.001 U	0.14 U	0.062 U	0.001 U	0.001 U	0.059 U	0.002 U	0.057 U	0.62 U	0.001 U
1,1,2-Trichloroethane	mg/kg	0.001 U	0.14 U	0.062 U	0.001 U	0.001 U	0.059 U	0.002 U	0.057 U	0.62 U	0.001 U
1,1,2-Trichlorotrifluoroethane	mg/kg	0.002 U	0.29 U	0.12 U	0.002 U	0.002 U	0.12 U	0.003 U	0.11 U	100 U	0.002 U
1,1,2-Trifluoroethane	mg/kg										
1,1-Dichloro-1-Fluoroethane	mg/kg										
1,1-Dichloroethane	mg/kg	0.001 U	0.14 U	0.062 U	0.001 U	0.001 U	0.059 U	0.002 U	0.057 U	0.62 U	0.001 U
1,1-Dichloroethene	mg/kg	0.001 U	0.14 U	0.062 U	0.001 U	0.001 U	0.059 U	0.002 U	0.057 U	0.62 U	0.001 U
1,1-Dichloropropene	mg/kg										
1,2,4-Trimethylbenzene	mg/kg										
1,2-Dibromoethane (EDB)	mg/kg										
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg										
1,2-Dichloro-1-Fluoroethane	mg/kg										
1,2-Dichlorobenzene	mg/kg	0.04 U	2.1 U	2.3 U	0.039 U	0.04 U	1.1 U	0.12 U	0.64 U	160 U	0.042 U
1,2-Dichloroethane	mg/kg	0.001 U	0.14 U	0.062 U	0.001 U	0.001 U	0.059 U	0.002 U	0.057 U	0.62 U	0.001 U
1,2-Dichloroethene	mg/kg										
1,2-Dichloropropane	mg/kg	0.001 U	0.14 U	0.062 U	0.001 U	0.001 U	0.059 U	0.002 U	0.057 U	0.62 U	0.001 U
1,2-Dichlorotetrafluoroethane	mg/kg										
1,3,5-Trimethylbenzene	mg/kg										
1,3-Dichlorobenzene	mg/kg	0.04 U	0.32 U	0.18 U	0.039 U	0.04 U	0.088 U	0.044 U	0.037 U	13 U	0.042 U
1,4-Dichlorobenzene	mg/kg	0.04 U	5.4 U	4.1 U	0.039 U	0.04 U	2 U	0.18 U	0.95 U	290 U	0.042 U
1-Chloro-1,1-Difluoroethane	mg/kg										
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg										
2-Chloro-1,1,1-Trifluoroethane	mg/kg										
2-Chloroethyl Vinyl Ether	mg/kg		0.29 U	0.12 U			0.12 U		0.11 U	1.2 U	
2-Chlorotoluene	mg/kg										
2-Hexanone	mg/kg										
4-Chlorotoluene	mg/kg										
4-Isopropyltoluene	mg/kg										
Acetone	mg/kg	0.027 U	1 U	0.43 U	0.009 U	0.039 U	0.41 U	0.093 U	0.4 U	4.4 U	0.021 U
Acrolein	mg/kg	0.024 U	2.9 U	1.2 U	0.022 U	0.024 U	1.2 U	0.033 U	1.1 U	12 U	0.024 U
Acrylonitrile	mg/kg	0.005 U	0.57 U	0.25 U	0.005 U	0.005 U	0.23 U	0.007 U	0.23 U	2.5 U	0.005 U
Benzene	mg/kg	0.082 U	2 U	2.4 U	0.0005 U	0.0007 U	0.17 U	0.001 U	0.028 U	1.9 U	0.005 U
Bromodichloromethane	mg/kg	0.001 U	0.14 U	0.062 U	0.001 U	0.001 U	0.059 U	0.002 U	0.057 U	0.62 U	0.001 U
Bromoform	mg/kg	0.001 U	0.14 U	0.062 U	0.001 U	0.001 U	0.059 U	0.002 U	0.057 U	0.62 U	0.001 U
Carbon Disulfide	mg/kg	0.004 U	0.14 U	0.062 U	0.001 U	0.001 U	0.059 U	0.004 U	0.071 U	0.62 U	0.018 U
Carbon Tetrachloride	mg/kg	0.001 U	0.14 U	0.062 U	0.001 U	0.001 U	0.059 U	0.002 U	0.057 U	0.62 U	0.001 U
CFC-1113	mg/kg										
Chlorobenzene	mg/kg	0.11 U	110 U	29 U	0.056 U	0.016 U	3.2 U	0.078 U	0.66 U	370 U	0.008 U

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA											
Field Sample ID	21563387	21563389	21563390	21563391	21563393	21563394	21563395	21563397	21563398	21563400											
Location ID	D15-BOR-05	D15-BOR-06	D15-BOR-06	D15-BOR-06	D15-BOR-07	D15-BOR-07	D15-BOR-07	D15-BOR-08	D15-BOR-08	D15-BOR-09											
Depth Interval (ft)	14.50-15.00	0.50-1.00	12.00-12.50	14.00-14.50	13.00-13.50	8.00-8.50	0.50-1.00	6.50-7.00	10.50-11.00	0.50-1.00											
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS											
Date	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/25/2009	3/26/2009	3/26/2009	3/26/2009											
Chemical Class																					
Chemical	Units																				
Chlorodibromomethane	mg/kg	0.001	U	0.14	U	0.062	U	0.001	U	0.001	U	0.059	U	0.002	U	0.057	U	0.62	U	0.001	U
Chlorodifluoromethane	mg/kg																				
Chlorofluoromethane	mg/kg																				
Chloroform	mg/kg	0.001	U	0.14	U	1.2		0.001	U	0.001	U	0.059	U	0.002	U	0.057	U	0.62	U	0.001	U
Chloropentafluoroethane	mg/kg																				
cis-1,2-Dichloroethene	mg/kg	0.001	U	0.14	U	0.062	U	0.001	U	0.001	U	0.059	U	0.002	U	0.057	U	0.62	U	0.001	U
cis-1,3-Dichloropropene	mg/kg	0.001	U	0.14	U	0.062	U	0.001	U	0.001	U	0.059	U	0.002	U	0.057	U	0.62	U	0.001	U
Cumene	mg/kg																				
Dichlorodifluoromethane	mg/kg	0.005		0.29	U	0.12	U	0.002	U	0.002	U	0.12	U	0.003	U	0.11	U	1.2	U	0.002	U
Dichlorofluoromethane	mg/kg	0.046		0.29	U	0.12	U	0.002	U	0.002	U	0.12	U	0.003	U	0.11	U	1.2	U	0.002	U
Ethane	ug/L																				
Ethyl Chloride	mg/kg	0.002	U	0.29	U	0.12	U	0.002	U	0.002	U	0.12	U	0.003	U	0.11	U	1.2	U	0.002	U
Ethylbenzene	mg/kg	0.001	U	0.79		0.11		0.001	U	0.001	U	0.059	U	0.002	U	0.057	U	8.4		0.001	U
Fluoromethane	mg/kg																				
Hexane	mg/kg																				
Isobutyl Alcohol	mg/kg																				
Meta- And Para-Xylene	mg/kg																				
Methacrylonitrile	mg/kg																				
Methane	ug/L																				
Methyl Bromide	mg/kg	0.002	U	0.29	U	0.12	U	0.002	U	0.002	U	0.12	U	0.003	U	0.11	U	1.2	U	0.002	U
Methyl Chloride	mg/kg	0.002	U	0.29	U	0.12	U	0.002	U	0.002	U	0.12	U	0.003	U	0.11	U	1.2	U	0.002	U
Methyl Ethyl Ketone	mg/kg																				
Methyl Isobutyl Ketone	mg/kg																				
Methyl Methacrylate	mg/kg																				
Methyl Tertiary Butyl Ether	mg/kg																				
Methylene Chloride	mg/kg	0.034		0.29	U	0.12	U	0.002	U	0.005		0.12	U	0.006		0.11	U	1.2	U	0.009	
N-Butylbenzene	mg/kg																				
N-Propylbenzene	mg/kg																				
Ortho-Xylene	mg/kg																				
Propionitrile	mg/kg																				
sec-Butylbenzene	mg/kg																				
Styrene	mg/kg																				
tert-Butylbenzene	mg/kg																				
Tetrachloroethene	mg/kg	0.001	U	0.14	U	0.062	U	0.001	U	0.001	U	0.059	U	0.002	U	0.057	U	21		0.001	U
Tetrahydrofuran	mg/kg																				
Toluene	mg/kg	0.012		0.29		1.6		0.001	U	0.001	U	0.059	U	0.002	U	0.057	U	15		0.001	U
trans-1,2-Dichloroethene	mg/kg	0.001	U	0.14	U	0.062	U	0.001	U	0.001	U	0.059	U	0.002	U	0.057	U	0.62	U	0.001	U
trans-1,3-Dichloropropene	mg/kg	0.001	U	0.14	U	0.062	U	0.001	U	0.001	U	0.059	U	0.002	U	0.057	U	0.62	U	0.001	U
Trichloroethene	mg/kg	0.001		0.14	U	0.062	U	0.001	U	0.001	U	0.059	U	0.002	U	0.057	U	0.62	U	0.001	U
Trichlorofluoromethane	mg/kg	0.002	U	0.29	U	0.2		0.002	U	0.002	U	0.12	U	0.003	U	0.11	U	2.7		0.002	U
Vinyl Chloride	mg/kg	0.001	U	0.14	U	0.062	U	0.001	U	0.001	U	0.059	U	0.002	U	0.057	U	0.62	U	0.001	U
Vinyl Fluoride	mg/kg																				
Xylenes	mg/kg	0.001	U	3.4		0.97		0.001	U	0.001	U	0.059	U	0.002	U	0.094		68		0.001	U

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	21563401	21563402	21563403	21563405	21563406	21563407	21583283	21583284	21583286
Location ID	D15-BOR-09	D15-BOR-09	D15-BOR-09	D15-BOR-10	D15-BOR-10	D15-BOR-10	D15-BOR-01	D15-BOR-01	D15-BOR-02
Depth Interval (ft)	10.50-11.00	13.00-13.50	10.50-11.00	0.50-1.00	7.00-7.50	11.50-14.00	0.00-0.50	0.00-0.50	0.00-0.50
Sample Purpose	FS	FS	DUP	FS	FS	FS	FS	DUP	FS
Date	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/28/2009	3/28/2009	3/28/2009
Chemical Class	Units								
<b>General Chemistry</b>									
Black Carbon	mg/kg								
Percent Moisture	%	20.6	19.7	20.8	14	17.4	21.6	63.25	62.75
Percent Solids	%								
Total Organic Carbon	mg/kg							23400	27500
<b>Metals</b>									
Aluminum	mg/kg							20000	19700
Antimony	mg/kg							2.79 U	2.7 U
Arsenic	mg/kg							12.1	12.2
Barium	mg/kg							85	86.9
Beryllium	mg/kg							1.05	1.02
Cadmium	mg/kg							0.432	0.397
Calcium	mg/kg							4460	3720
Chromium	mg/kg							48.6	48.2
Cobalt	mg/kg							11.7	11.3
Copper	mg/kg							26.8	27.2
Iron	mg/kg							29200	29400
Lead	mg/kg							37.1	37.7
Magnesium	mg/kg							6090	5980
Manganese	mg/kg							1060	1060
Mercury	mg/kg							0.145	0.134
Nickel	mg/kg							27	26.8
Potassium	mg/kg							3520	3380
Selenium	mg/kg							2.73 U	2.65 U
Silver	mg/kg							0.474 U	0.459 U
Sodium	mg/kg							1000	968
Thallium	mg/kg							3.54 U	3.43 U
Tin	mg/kg							9.79	9.84
Titanium	mg/kg								
Vanadium	mg/kg							47.7	47.2
Zinc	mg/kg							177	177
<b>Metals - AVS/SEM</b>									
Acid Volatile Sulfide	umol/g								
Arsenic	umol/g								
Cadmium	umol/g								
Copper	umol/g								
Lead	umol/g								
Zinc	umol/g								
<b>Metals - Leachate</b>									
Lead	ug/L								
<b>Per and Polyfluorinated Organic Substances</b>									
Perfluorobutane Sulfonic Acid	mg/kg								
Perfluorobutanoic Acid	mg/kg								
Perfluorodecane Sulfonic Acid	mg/kg								
Perfluorodecanoic Acid	mg/kg								
Perfluorododecanoic Acid	mg/kg								
Perfluoroheptanoic Acid	mg/kg								
Perfluorohexane Sulfonic Acid	mg/kg								
Perfluorohexanoic Acid	mg/kg								
Perfluorononanoic Acid	mg/kg								
Perfluorooctane Sulfonamide	mg/kg								
Perfluoropentanoic Acid	mg/kg								
Perfluorotetradecanoic Acid	mg/kg								
Perfluorotridecanoic Acid	mg/kg								
Perfluoroundecanoic Acid	mg/kg								
PFOA	mg/kg								
PFOA(trial)	mg/kg								
PFOS	mg/kg								
PFOS (trial)	mg/kg								
<b>Pesticides and Herbicides</b>									
4,4'-DDD	mg/kg								
4,4'-DDE	mg/kg								
4,4'-DDT	mg/kg								
Aldrin	mg/kg								
Alpha Chlordane	mg/kg								
Alpha-BHC	mg/kg								
beta-BHC	mg/kg								
delta-BHC	mg/kg								
Dieldrin	mg/kg								
Endosulfan I	mg/kg								
Endosulfan II	mg/kg								
Endosulfan Sulfate	mg/kg								
Endrin	mg/kg								
Endrin Aldehyde	mg/kg								
Endrin Ketone	mg/kg								
Gamma Chlordane	mg/kg								

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	21563401	21563402	21563403	21563405	21563406	21563407	21583283	21583284	21583286
Location ID	D15-BOR-09	D15-BOR-09	D15-BOR-09	D15-BOR-10	D15-BOR-10	D15-BOR-10	D15-BOR-01	D15-BOR-01	D15-BOR-02
Depth Interval (ft)	10.50-11.00	13.00-13.50	10.50-11.00	0.50-1.00	7.00-7.50	11.50-14.00	0.00-0.50	0.00-0.50	0.00-0.50
Sample Purpose	FS	FS	DUP	FS	FS	FS	FS	DUP	FS
Date	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/28/2009	3/28/2009	3/28/2009
Chemical Class									
Chemical									
Units									
Heptachlor	mg/kg								
Heptachlor Epoxide	mg/kg								
Lindane	mg/kg								
Methoxychlor	mg/kg								
Toxaphene	mg/kg								
<b>Physical Properties</b>									
0.001 MM	% PASSING						9	15	2
0.002 MM	% PASSING						18	21	2
0.005 MM	% PASSING						31	33	2
0.02 MM	% PASSING						66	65	2
0.05 MM	% PASSING						85	82	32
0.064 MM	% PASSING						92	89	63
0.075 MM	% PASSING						95.7	91.6	81.5
0.15 MM	% PASSING						96.1	93.5	84.6
0.3 MM	% PASSING						97.2	94.2	96.8
0.6 MM	% PASSING						98	98.2	98.3
1.18 MM	% PASSING						98.6	98.6	98.8
19 MM	% PASSING						100	100	100
2.36 MM	% PASSING						99.2	98.7	99
3.35 MM	% PASSING						99.6	99.3	99.5
37.5 MM	% PASSING						100	100	100
4.75 MM	% PASSING						99.8	99.7	99.8
75 MM	% PASSING						100	100	100
Density	PCF								
<b>Polychlorinated Biphenyls - TICs</b>									
1,1'-Biphenyl, 2,3-dichloro-	mg/kg								
Unknown Biphenyl	mg/kg								
<b>Polychlorinated Biphenyls</b>									
Heptachlorobiphenyl	mg/kg								
Hexachlorobiphenyl	mg/kg								
Octachlorobiphenyl	mg/kg								
PCB 1	mg/kg						0.000195	0.000259	0.00806
PCB 10	mg/kg						0.0000102	0.0000927	0.000066
PCB 100	mg/kg						0.0000411	0.0000416	0.0000193
PCB 101	mg/kg						0.0013	0.00136	0.000841
PCB 102	mg/kg						0.00007	0.0000607	0.0000381
PCB 103	mg/kg						0.0000344	0.0000345	0.0000193
PCB 104	mg/kg						0.0000133	0.0000133	0.0000013
PCB 105	mg/kg						0.000405	0.00044	0.000287
PCB 106	mg/kg						0.0000133	0.0000133	0.00000314
PCB 107	mg/kg						0.000122	0.000122	0.0000682
PCB 107/123	mg/kg								
PCB 108	mg/kg						0.0000419	0.0000387	0.0000306
PCB 109	mg/kg						0.000748	0.000765	0.000536
PCB 11	mg/kg						0.000371	0.000385	0.000657
PCB 110	mg/kg						0.00159	0.0017	0.00101
PCB 111	mg/kg						0.0000058	0.00000496	0.00000331
PCB 112	mg/kg						0.0000133	0.0000133	0.00000997
PCB 113	mg/kg						0.0013	0.00136	0.000841
PCB 114	mg/kg						0.0000206	0.0000215	0.0000162
PCB 115	mg/kg						0.00159	0.0017	0.00101
PCB 116	mg/kg						0.000214	0.00021	0.000197
PCB 117	mg/kg						0.000214	0.00021	0.000197
PCB 118	mg/kg						0.0012	0.00129	0.000758
PCB 119	mg/kg						0.000748	0.000765	0.000536
PCB 12	mg/kg						0.00024	0.000256	0.00319
PCB 120	mg/kg						0.0000164	0.0000151	0.00000842
PCB 121	mg/kg						0.0000133	0.0000133	0.00000997
PCB 121/95/88	mg/kg								
PCB 122	mg/kg						0.000018	0.0000161	0.0000142
PCB 123	mg/kg						0.000018	0.0000221	0.0000142
PCB 124	mg/kg						0.0000419	0.0000387	0.0000306
PCB 125	mg/kg						0.000748	0.000765	0.000536
PCB 126	mg/kg						0.0000224	0.0000366	0.0000114
PCB 127	mg/kg						0.00000161	0.00000255	0.00000278
PCB 128	mg/kg						0.000256	0.000269	0.000157
PCB 129	mg/kg						0.00184	0.00191	0.00106
PCB 129/158	mg/kg								
PCB 13	mg/kg						0.00024	0.000256	0.00319
PCB 130	mg/kg						0.000133	0.000129	0.0000767
PCB 130/164	mg/kg								
PCB 131	mg/kg						0.0000155	0.0000184	0.0000131
PCB 132	mg/kg						0.000514	0.000523	0.000311
PCB 133	mg/kg						0.0000597	0.0000631	0.0000324
PCB 134	mg/kg						0.0000835	0.0000882	0.0000535
PCB 135	mg/kg						0.000617	0.00065	0.000344

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	
Chemical	Field Sample ID	21563401	21563402	21563403	21563405	21563406	21563407	21583283	21583284	21583286
Units	Location ID	D15-BOR-09	D15-BOR-09	D15-BOR-09	D15-BOR-10	D15-BOR-10	D15-BOR-10	D15-BOR-01	D15-BOR-01	D15-BOR-02
	Depth Interval (ft)	10.50-11.00	13.00-13.50	10.50-11.00	0.50-1.00	7.00-7.50	11.50-14.00	0.00-0.50	0.00-0.50	0.00-0.50
	Sample Purpose	FS	FS	DUP	FS	FS	FS	FS	DUP	FS
	Date	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/28/2009	3/28/2009	3/28/2009
PCB 136	mg/kg							0.000218	0.000226	0.000124
PCB 137	mg/kg							0.0000541	0.0000547	0.0000408
PCB 138	mg/kg							0.00184	0.00191	0.00106
PCB 139	mg/kg							0.000032	0.0000334	0.0000197
PCB 14	mg/kg							0.0000458	0.0000407	0.000887
PCB 140	mg/kg							0.000032	0.0000334	0.0000197
PCB 141	mg/kg							0.000242	0.00024	0.000153
PCB 142	mg/kg							0.0000133 U	0.0000133 U	0.0000622
PCB 143	mg/kg							0.0000835	0.0000882	0.0000535
PCB 143/139	mg/kg									
PCB 144	mg/kg							0.0000552	0.000062	0.0000345
PCB 145	mg/kg							0.0000133 U	0.0000133 U	0.0000997 U
PCB 146	mg/kg							0.000413	0.000421	0.000213
PCB 147	mg/kg							0.00159	0.00159	0.000844
PCB 148	mg/kg							0.0000126	0.0000157	0.0000607
PCB 149	mg/kg							0.00159	0.00159	0.000844
PCB 15	mg/kg							0.000393	0.000427	0.000961
PCB 150	mg/kg							0.0000163	0.0000175	0.0000717
PCB 151	mg/kg							0.000617	0.00065	0.000344
PCB 152	mg/kg							0.0000133 U	0.0000204	0.0000997 U
PCB 153	mg/kg							0.00176	0.00177	0.000918
PCB 154	mg/kg							0.0000968	0.0000974	0.0000318
PCB 155	mg/kg							0.00000992	0.0000101	0.00000492
PCB 156	mg/kg							0.000153	0.000165	0.000105
PCB 157	mg/kg							0.000153	0.000165	0.000105
PCB 158	mg/kg							0.000128	0.000134	0.0000866
PCB 159	mg/kg							0.0000171	0.0000105	0.0000117
PCB 16	mg/kg							0.000126	0.000115	0.000279
PCB 160	mg/kg							0.00184	0.00191	0.00106
PCB 161	mg/kg							0.0000133 U	0.0000133 U	0.0000997 U
PCB 162	mg/kg							0.0000151	0.0000158	0.0000136
PCB 163	mg/kg							0.00184	0.00191	0.00106
PCB 163/160	mg/kg									
PCB 164	mg/kg							0.000137	0.000138	0.0000815
PCB 165	mg/kg							0.0000133 U	0.0000037	0.0000223
PCB 166	mg/kg							0.000256	0.000269	0.000157
PCB 167	mg/kg							0.0000711	0.0000754	0.0000426
PCB 168	mg/kg							0.00176	0.00177	0.000918
PCB 169	mg/kg							0.000014	0.0000195	0.0000774
PCB 17	mg/kg							0.000144	0.000138	0.000164
PCB 170	mg/kg							0.000428	0.000454	0.000228
PCB 171	mg/kg							0.000139	0.000146	0.0000706
PCB 172	mg/kg							0.0000933	0.000102	0.0000481
PCB 173	mg/kg							0.000139	0.000146	0.0000706
PCB 174	mg/kg							0.00046	0.000482	0.000243
PCB 175	mg/kg							0.000024	0.000031	0.0000145
PCB 176	mg/kg							0.0000642	0.0000634	0.0000315
PCB 177	mg/kg							0.000325	0.000342	0.000152
PCB 178	mg/kg							0.000157	0.000165	0.0000723
PCB 179	mg/kg							0.000254	0.000265	0.000122
PCB 18	mg/kg							0.000283	0.000265	0.000545
PCB 180	mg/kg							0.00101	0.00111	0.000513
PCB 181	mg/kg							0.00000356	0.00000513	0.00000426
PCB 182	mg/kg							0.0000115	0.000012	0.00000646
PCB 182/175	mg/kg									
PCB 183	mg/kg							0.000353	0.000367	0.000173
PCB 184	mg/kg							0.00000862	0.00001	0.00000392
PCB 185	mg/kg							0.000353	0.000367	0.000173
PCB 186	mg/kg							0.0000133 U	0.0000133 U	0.0000997 U
PCB 187	mg/kg							0.000847	0.000889	0.000393
PCB 188	mg/kg							0.000285	0.000264	0.0000901
PCB 189	mg/kg							0.0000193	0.0000182	0.0000114
PCB 19	mg/kg							0.0000506	0.0000513	0.0000968
PCB 190	mg/kg							0.0000737	0.0000892	0.0000475
PCB 191	mg/kg							0.0000178	0.0000195	0.0000104
PCB 192	mg/kg							0.0000133 U	0.0000133 U	0.00000566
PCB 193	mg/kg							0.00101	0.00111	0.000513
PCB 194	mg/kg							0.000344	0.000368	0.000179
PCB 195	mg/kg							0.000107	0.000108	0.000053
PCB 196	mg/kg							0.000298	0.000328	0.00013
PCB 197	mg/kg							0.0000449	0.0000456	0.0000165
PCB 198	mg/kg							0.00109	0.00121	0.000465
PCB 199	mg/kg							0.00109	0.00121	0.000465
PCB 2	mg/kg							0.000191	0.000258	0.000571
PCB 20	mg/kg							0.000784	0.000839	0.000594
PCB 200	mg/kg							0.0000415	0.000047	0.0000235

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	
Chemical	Field Sample ID	21563401	21563402	21563403	21563405	21563406	21563407	21583283	21583284	21583286
Units	Location ID	D15-BOR-09	D15-BOR-09	D15-BOR-09	D15-BOR-10	D15-BOR-10	D15-BOR-10	D15-BOR-01	D15-BOR-01	D15-BOR-02
	Depth Interval (ft)	10.50-11.00	13.00-13.50	10.50-11.00	0.50-1.00	7.00-7.50	11.50-14.00	0.00-0.50	0.00-0.50	0.00-0.50
	Sample Purpose	FS	FS	DUP	FS	FS	FS	FS	DUP	FS
	Date	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/28/2009	3/28/2009	3/28/2009
PCB 201	mg/kg							0.000145	0.000146	0.000058
PCB 202	mg/kg							0.000381	0.000395	0.000149
PCB 203	mg/kg							0.000395	0.000451	0.000188
PCB 204	mg/kg							0.0000487	0.0000529	0.0000349
PCB 204/200	mg/kg									
PCB 205	mg/kg							0.0000206	0.0000226	0.000013
PCB 206	mg/kg							0.0041	0.00478	0.00144
PCB 207	mg/kg							0.000356	0.000391	0.00013
PCB 208	mg/kg							0.00196	0.0022	0.000653
PCB 209	mg/kg							0.00692	0.00783	0.00218
PCB 21	mg/kg							0.000241	0.000248	0.000551
PCB 21/20	mg/kg									
PCB 22	mg/kg							0.000165	0.000177	0.000267
PCB 23	mg/kg							0.0000601	0.0000048	0.0000388
PCB 24	mg/kg							0.0000204	0.000022	0.000189
PCB 25	mg/kg							0.000106	0.000112	0.000105
PCB 26	mg/kg							0.000155	0.000162	0.00024
PCB 27	mg/kg							0.0000464	0.0000475	0.0000505
PCB 28	mg/kg							0.000784	0.000839	0.000594
PCB 29	mg/kg							0.000155	0.000162	0.00024
PCB 3	mg/kg							0.000191	0.000268	0.00374
PCB 30	mg/kg							0.000283	0.000265	0.000545
PCB 31	mg/kg							0.00054	0.000574	0.000685
PCB 32	mg/kg							0.000129	0.00013	0.000106
PCB 33	mg/kg							0.000241	0.000248	0.000551
PCB 34	mg/kg							0.0000149	0.0000151	0.0000934
PCB 35	mg/kg							0.000081	0.000158	0.000225
PCB 36	mg/kg							0.0000188	0.000017	0.0000875
PCB 37	mg/kg							0.000353	0.000407	0.000964
PCB 38	mg/kg							0.00000196	0.00000187	0.00000582
PCB 39	mg/kg							0.0000244	0.0000257	0.00015
PCB 4	mg/kg							0.000149	0.000164	0.00343
PCB 4/10	mg/kg									
PCB 40	mg/kg							0.000431	0.00043	0.000261
PCB 41	mg/kg							0.000431	0.00043	0.000261
PCB 42	mg/kg							0.000205	0.000208	0.000123
PCB 43	mg/kg							0.000017	0.0000179	0.0000155
PCB 44	mg/kg							0.000797	0.000807	0.000512
PCB 45	mg/kg							0.000134	0.000145	0.0000971
PCB 46	mg/kg							0.0000406	0.0000425	0.0000261
PCB 47	mg/kg							0.000797	0.000807	0.000512
PCB 48	mg/kg							0.0000876	0.0000873	0.000065
PCB 49	mg/kg							0.000566	0.000571	0.000324
PCB 5	mg/kg							0.0000539	0.0000531	0.00117
PCB 50	mg/kg							0.000107	0.000114	0.0000713
PCB 51	mg/kg							0.000134	0.000145	0.0000971
PCB 52	mg/kg							0.000914	0.00091	0.000618
PCB 53	mg/kg							0.000107	0.000114	0.0000713
PCB 54	mg/kg							0.000065	0.0000823	0.0000765
PCB 55	mg/kg							0.0000135	0.0000133	0.0000639
PCB 56	mg/kg							0.000385	0.000387	0.000261
PCB 57	mg/kg							0.00000489	0.0000047	0.00000605
PCB 58	mg/kg							0.00000738	0.00000701	0.0000054
PCB 59	mg/kg							0.0000725	0.0000686	0.0000509
PCB 6	mg/kg							0.000129	0.000137	0.00292
PCB 60	mg/kg							0.000117	0.000109	0.0000788
PCB 61	mg/kg							0.00123	0.00123	0.000805
PCB 62	mg/kg							0.0000725	0.0000686	0.0000509
PCB 63	mg/kg							0.0000308	0.0000296	0.0000227
PCB 64	mg/kg							0.000291	0.000298	0.000187
PCB 65	mg/kg							0.000797	0.000807	0.000512
PCB 65/75/62	mg/kg									
PCB 66	mg/kg							0.000877	0.000893	0.000486
PCB 67	mg/kg							0.0000291	0.0000279	0.0000173
PCB 67/58	mg/kg									
PCB 68	mg/kg							0.0000198	0.0000207	0.00000881
PCB 68/64	mg/kg									
PCB 69	mg/kg							0.000566	0.000571	0.000324
PCB 7	mg/kg							0.0000223	0.0000223	0.000427
PCB 70	mg/kg							0.00123	0.00123	0.000805
PCB 71	mg/kg							0.000431	0.00043	0.000261
PCB 72	mg/kg							0.0000225	0.0000246	0.0000175
PCB 73	mg/kg							0.000017	0.0000179	0.0000155
PCB 73/46	mg/kg									
PCB 74	mg/kg							0.00123	0.00123	0.000805
PCB 75	mg/kg							0.0000725	0.0000686	0.0000509

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Chemical	Field Sample ID	21563401	21563402	21563403	21563405	21563406	21563407	21583283	21583284	21583286
Units	Location ID	D15-BOR-09	D15-BOR-09	D15-BOR-09	D15-BOR-10	D15-BOR-10	D15-BOR-10	D15-BOR-01	D15-BOR-01	D15-BOR-02
	Depth Interval (ft)	10.50-11.00	13.00-13.50	10.50-11.00	0.50-1.00	7.00-7.50	11.50-14.00	0.00-0.50	0.00-0.50	0.00-0.50
	Sample Purpose	FS	FS	DUP	FS	FS	FS	FS	DUP	FS
	Date	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/28/2009	3/28/2009	3/28/2009
PCB 76	mg/kg							0.00123	0.00123	0.000805
PCB 77	mg/kg							0.000175	0.00087	0.000118
PCB 78	mg/kg							0.0000133	0.0000131	0.0000195
PCB 79	mg/kg							0.00000819	0.0000382	0.0000245
PCB 8	mg/kg							0.000278	0.000296	0.0063
PCB 80	mg/kg							0.0000253	0.00000978	0.0000209
PCB 81	mg/kg							0.0000369	0.0000505	0.0000499
PCB 82	mg/kg							0.000134	0.000142	0.000095
PCB 83	mg/kg							0.000954	0.001	0.000548
PCB 83/125/112	mg/kg									
PCB 84	mg/kg							0.000301	0.00032	0.000207
PCB 85	mg/kg							0.000214	0.00021	0.000197
PCB 86	mg/kg							0.000748	0.000765	0.000536
PCB 86/109	mg/kg									
PCB 87	mg/kg							0.000748	0.000765	0.000536
PCB 87/111	mg/kg									
PCB 88	mg/kg							0.000246	0.000258	0.000143
PCB 89	mg/kg							0.0000131	0.0000138	0.0000107
PCB 89/84	mg/kg									
PCB 9	mg/kg							0.0000706	0.0000651	0.00238
PCB 90	mg/kg							0.0013	0.00136	0.000841
PCB 91	mg/kg							0.000246	0.000258	0.000143
PCB 92	mg/kg							0.000249	0.000263	0.000155
PCB 93	mg/kg							0.0000411	0.0000416	0.0000193
PCB 94	mg/kg							0.0000133	0.0000152	0.0000103
PCB 95	mg/kg							0.000957	0.001	0.000629
PCB 96	mg/kg							0.0000123	0.0000129	0.00000817
PCB 97	mg/kg							0.000748	0.000765	0.000536
PCB 98	mg/kg							0.00007	0.0000607	0.0000381
PCB 99	mg/kg							0.000954	0.001	0.000548
PCB-100/93	mg/kg									
PCB-107/124	mg/kg									
PCB-108/119/86/97/125/87	mg/kg									
PCB-113/90/101	mg/kg									
PCB-116/85	mg/kg									
PCB-128/166	mg/kg									
PCB-13/12	mg/kg									
PCB-139/140	mg/kg									
PCB-147/149	mg/kg									
PCB-151/135	mg/kg									
PCB-153/168	mg/kg									
PCB-156/157	mg/kg									
PCB-163/138/129	mg/kg									
PCB-171/173	mg/kg									
PCB-180/193	mg/kg									
PCB-198/199	mg/kg									
PCB-21/33	mg/kg									
PCB-26/29	mg/kg									
PCB-28/20	mg/kg									
PCB-30/18	mg/kg									
PCB-44/47/65	mg/kg									
PCB-50/53	mg/kg									
PCB-59/62/75	mg/kg									
PCB-61/70/74/76	mg/kg									
PCB-69/49	mg/kg									
PCB-71/40	mg/kg									
PCB-90/101	mg/kg									
Pentachlorobiphenyl	mg/kg									
Tetrachlorobiphenyl	mg/kg									
Total Decachlorobiphenyls (congeners)	mg/kg									
Total Dichlorobiphenyls (congeners)	mg/kg									
Total Heptachlorobiphenyls (congeners)	mg/kg									
Total Hexachlorobiphenyls (congeners)	mg/kg									
Total Monochlorobiphenyls (congeners)	mg/kg									
Total Nonachlorobiphenyls (congeners)	mg/kg									
Total Octachlorobiphenyls (congeners)	mg/kg									
Total PCB (congeners)	mg/kg							0.08118653	0.086467708	0.09096692
Total Pentachlorobiphenyls (congeners)	mg/kg									
Total Tetrachlorobiphenyls (congeners)	mg/kg									
Total Trichlorobiphenyls (congeners)	mg/kg									
Trichlorobiphenyl (total)	mg/kg									
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>										
Benzo[e]pyrene	mg/kg									
Chrysene, 1-methyl-	mg/kg									
Naphthalene, 1-methyl-	mg/kg									
Pyrene, 1-methyl-	mg/kg									

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	21563401	21563402	21563403	21563405	21563406	21563407	21563283	21563284	21563286
Location ID	D15-BOR-09	D15-BOR-09	D15-BOR-09	D15-BOR-10	D15-BOR-10	D15-BOR-10	D15-BOR-01	D15-BOR-01	D15-BOR-02
Depth Interval (ft)	10.50-11.00	13.00-13.50	10.50-11.00	0.50-1.00	7.00-7.50	11.50-14.00	0.00-0.50	0.00-0.50	0.00-0.50
Sample Purpose	FS	FS	DUP	FS	FS	FS	FS	DUP	FS
Date	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/28/2009	3/28/2009	3/28/2009
Chemical Class									
Chemical									
Units									
<b>Polycyclic Aromatic Hydrocarbons</b>									
Acenaphthene	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.32 U
Acenaphthylene	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.32 U
Anthracene	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.32 U
Benzo(A)Anthracene	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.32 U
Benzo(B)Fluoranthene	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.32 U
Benzo(G,H,I)Perylene	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.32 U
Benzo(K)Fluoranthene	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.32 U
Benzo(A)Pyrene	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.32 U
Chrysene	mg/kg	0.042 U	0.042 U	0.042 U	0.047 U	0.04 U	0.043 U	0.46 U	0.32 U
Dibenz(A,H)Anthracene	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.32 U
Fluoranthene	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.32 U
Fluorene	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.32 U
Indeno (1,2,3-CD) Pyrene	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.32 U
Naphthalene	mg/kg	0.042 U	0.042 U	0.08 U	0.039 U	0.04 U	0.043 U	0.46 U	0.32 U
Phenanthrene	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.32 U
Pyrene	mg/kg	0.042 U	0.042 U	0.042 U	0.078 U	0.04 U	0.043 U	0.46 U	0.32 U
Total PAHs (Detections + 1/2 MDL)	mg/kg	0.336 U	0.336 U	0.395 U	0.398 U	0.32 U	0.344 U	3.68 U	2.56 U
Total PAHs (Detections Only)	mg/kg	0.336 U	0.336 U	0.08 U	0.125 U	0.32 U	0.344 U	3.68 U	2.56 U
<b>Semivolatile Organic Compounds - TICs</b>									
1,2,4-Trithiolane	mg/kg								
1,4-Benzenediol, 2-chloro-	mg/kg								
11H-Benzo[b]fluorene	mg/kg								
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg								
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg						32	26	12
3-PENTEN-2-ONE, 4-METHYL-	mg/kg								
7H-Benz[de]anthracen-7-one	mg/kg								
9,10-Anthracenedione	mg/kg								
9-Octadecenamamide, (Z)-	mg/kg								
Acetamide, 2-chloro-N-(ethox	mg/kg								
Alachlor	mg/kg								
Benzenamine, 3-methyl-	mg/kg								
Benzenamine, 4,4',4"-methy	mg/kg								
Benzenamine, 4,4'-methyleneb	mg/kg								
Benzene, 1,2,3,4-tetrachloro	mg/kg								
Benzene, 1,2,3,5-tetrachloro	mg/kg								
Benzene, 1,2,3-trichloro-	mg/kg								
Benzene, 1,3,5-trichloro-	mg/kg								
Benzene, 1,3-bis(1-methyleth	mg/kg								
Benzene, 1,4-bis(1-methyleth	mg/kg								
Benzofuran, 2,3-dihydro-	mg/kg								
CYCLIC OCTAATOMIC SULFUR	mg/kg								
Diphenyl Ether	mg/kg								
Docosane	mg/kg								
Heneicosane	mg/kg								
Hexacosane	mg/kg								
Hexadecane	mg/kg								
Hexatriacontane	mg/kg								
m-Chloroaniline	mg/kg								
N,N-Diethylaniline	mg/kg								
n-Hexadecanoic acid	mg/kg								
Nonadecane	mg/kg								
o-Chloroaniline	mg/kg								
Octacosane	mg/kg								
Octadecane	mg/kg								
Octadecane, 1-chloro-	mg/kg								
Octadecanoic acid	mg/kg								
Parachlorophenol	mg/kg								
Pentadecane	mg/kg								
Perylene	mg/kg								
Phenol, 2,5-dichloro-	mg/kg								
Phenol, 3-chloro-	mg/kg								
Phenol, 4,4'-(1-methylethyl)	mg/kg								
Tetracosane	mg/kg								
Tetradecane	mg/kg								
Tetraethylene glycol	mg/kg								
Total SVOIC TICs	mg/kg								
Triacotane	mg/kg								
Tributyl phosphate	mg/kg								
Tridecanoic acid	mg/kg								
Triphenyl phosphate	mg/kg								
UNKNOWN	mg/kg						20.5	8.28	2.55
Unknown acid	mg/kg								
Unknown Alcohol	mg/kg								
Unknown Aldol Condensate	mg/kg								
UNKNOWN ALKANE	mg/kg								

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	
Field Sample ID	21563401	21563402	21563403	21563405	21563406	21563407	21583283	21583284	21583286	
Location ID	D15-BOR-09	D15-BOR-09	D15-BOR-09	D15-BOR-10	D15-BOR-10	D15-BOR-10	D15-BOR-01	D15-BOR-01	D15-BOR-02	
Depth Interval (ft)	10.50-11.00	13.00-13.50	10.50-11.00	0.50-1.00	7.00-7.50	11.50-14.00	0.00-0.50	0.00-0.50	0.00-0.50	
Sample Purpose	FS	FS	DUP	FS	FS	FS	FS	DUP	FS	
Date	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/28/2009	3/28/2009	3/28/2009	
Chemical Class										
Chemical	Units									
Unknown Alkene	mg/kg									
Unknown Amide	mg/kg									
Unknown Amine	mg/kg									
UNKNOWN AROMATIC	mg/kg									
Unknown Carboxylic Acid	mg/kg									
Unknown Cycloalkane	mg/kg									
Unknown Hydrocarbon	mg/kg									
Unknown Ketone	mg/kg									
Unknown PAH	mg/kg									
UNKNOWN SILOXANE	mg/kg									
<b>Semivolatile Organic Compounds</b>										
1,2,4-Trichlorobenzene	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.45 U	
1,2-Diphenylhydrazine	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.45 U	
1,4-Dioxane	mg/kg									
1-Naphthylamine	mg/kg	0.21 U	0.21 U	0.21 U	0.19 U	0.2 U	0.21 U	2.3 U	1.6 U	
2,3,4,6-Tetrachlorophenol	mg/kg									
2,4,5-Trichlorophenol	mg/kg									
2,4,6-Trichlorophenol	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.45 U	
2,4-Dichlorophenol	mg/kg	0.042 U	0.042 U	0.073 U	0.039 U	0.04 U	0.043 U	0.46 U	0.45 U	
2,4-Dimethylphenol	mg/kg	0.084 U	0.083 U	0.084 U	0.078 U	0.081 U	0.085 U	0.93 U	0.64 U	
2,4-Dinitrophenol	mg/kg	0.84 U	0.83 U	0.84 U	0.78 U	0.81 U	0.85 U	9.3 U	6.4 U	
2,4-Dinitrotoluene	mg/kg	0.084 U	0.083 U	0.084 U	0.078 U	0.081 U	0.085 U	0.93 U	0.64 U	
2,6-Dinitrotoluene	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.45 U	
2-Chloronaphthalene	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.45 U	
2-Chlorophenol	mg/kg	0.08 U	0.057 U	0.071 U	0.039 U	0.04 U	0.043 U	0.46 U	0.45 U	
2-Methylnaphthalene	mg/kg									
2-Methylphenol (O-Cresol)	mg/kg									
2-Naphthylamine	mg/kg	0.21 U	0.21 U	0.21 U	0.19 U	0.2 U	0.21 U	2.3 U	1.6 U	
2-Nitroaniline	mg/kg									
2-Nitrophenol	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.45 U	
3,3'-Dichlorobenzidine	mg/kg	0.13 U	0.12 U	0.13 U	0.12 U	0.12 U	0.13 U	1.4 U	0.95 U	
3,3'-Dimethylbenzidine	mg/kg									
3-Nitroaniline	mg/kg									
4,6-Dinitro-2-Methylphenol	mg/kg	0.21 U	0.21 U	0.21 U	0.19 U	0.2 U	0.21 U	2.3 U	1.6 U	
4-Aminobiphenyl	mg/kg	0.21 U	0.21 U	0.21 U	0.19 U	0.2 U	0.21 U	2.3 U	1.6 U	
4-Bromophenyl Phenyl Ether	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.45 U	
4-Chloro-3-Methylphenol	mg/kg	0.084 U	0.083 U	0.084 U	0.078 U	0.081 U	0.085 U	0.93 U	0.64 U	
4-Chloroaniline	mg/kg	0.084 U	0.083 U	0.084 U	0.078 U	0.081 U	0.085 U	0.93 U	0.64 U	
4-Chlorophenyl Phenyl Ether	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.45 U	
4-Methylphenol (P-Cresol)	mg/kg									
4-Nitroaniline	mg/kg									
4-Nitrophenol	mg/kg	0.21 U	0.21 U	0.21 U	0.19 U	0.2 U	0.21 U	2.3 U	1.6 U	
Acetophenone	mg/kg									
Aniline	mg/kg	0.21 U	0.21 U	0.21 U	0.19 U	0.2 U	0.21 U	2.3 U	1.6 U	
Benzidine	mg/kg	1.5 U	1.5 U	1.5 U	1.4 U	1.4 U	1.5 U	16 U	11 U	
Biphenyl	mg/kg									
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg									
Bis(2-Chloroethoxy)Methane	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.45 U	
Bis(2-Chloroethyl)Ether	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.45 U	
Bis(2-Chloroisopropyl)Ether	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.45 U	
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.084 U	0.083 U	0.084 U	0.078 U	0.081 U	0.085 U	0.93 U	0.64 U	
Butyl Benzyl Phthalate	mg/kg	0.084 U	0.083 U	0.084 U	0.078 U	0.081 U	0.085 U	0.93 U	0.64 U	
Carbazole	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.45 U	
Dibenzofuran	mg/kg									
Diethyl Phthalate	mg/kg	0.084 U	0.083 U	0.084 U	0.078 U	0.081 U	0.085 U	0.93 U	0.64 U	
Dimethyl Phthalate	mg/kg	0.084 U	0.083 U	0.084 U	0.078 U	0.081 U	0.085 U	0.93 U	0.64 U	
Di-N-Butyl Phthalate	mg/kg	0.084 U	0.083 U	0.084 U	0.078 U	0.081 U	0.085 U	0.93 U	0.64 U	
Diphenyl Ether	mg/kg									
Hexachlorobenzene	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.45 U	
Hexachlorobutadiene	mg/kg	0.084 U	0.083 U	0.084 U	0.078 U	0.081 U	0.085 U	0.93 U	0.64 U	
Hexachlorocyclopentadiene	mg/kg	0.21 U	0.21 U	0.21 U	0.19 U	0.2 U	0.21 U	2.3 U	1.6 U	
Hexachloroethane	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.45 U	
Hexachloropropylene	mg/kg									
Isophorone	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.45 U	
N-Dioctyl Phthalate	mg/kg	0.084 U	0.083 U	0.084 U	0.078 U	0.081 U	0.085 U	0.93 U	0.64 U	
Nitrobenzene	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.45 U	
N-Nitrosodimethylamine	mg/kg	0.084 U	0.083 U	0.084 U	0.078 U	0.081 U	0.085 U	0.93 U	0.64 U	
N-Nitrosodi-N-Propylamine	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.45 U	
N-Nitrosodiphenylamine	mg/kg	0.042 U	0.042 U	0.042 U	0.039 U	0.04 U	0.043 U	0.46 U	0.45 U	
O-Toluidine	mg/kg	0.25 U	0.25 U	0.25 U	0.23 U	0.24 U	0.26 U	2.8 U	1.9 U	
Parathion	mg/kg									
Pentachlorobenzene	mg/kg									
Pentachlorophenol	mg/kg	0.21 U	0.21 U	0.21 U	0.19 U	0.2 U	0.21 U	2.3 U	1.6 U	
Phenol	mg/kg	0.042 U	0.042 U	0.044 U	0.039 U	0.04 U	0.043 U	0.46 U	0.45 U	
<b>Volatile Organic Compounds - TICs</b>										
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg									

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	
Field Sample ID	21563401	21563402	21563403	21563405	21563406	21563407	21583283	21583284	21583286	
Location ID	D15-BOR-09	D15-BOR-09	D15-BOR-09	D15-BOR-10	D15-BOR-10	D15-BOR-10	D15-BOR-01	D15-BOR-01	D15-BOR-02	
Depth Interval (ft)	10.50-11.00	13.00-13.50	10.50-11.00	0.50-1.00	7.00-7.50	11.50-14.00	0.00-0.50	0.00-0.50	0.00-0.50	
Sample Purpose	FS	FS	DUP	FS	FS	FS	FS	DUP	FS	
Date	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/28/2009	3/28/2009	3/28/2009	
Chemical Class										
Chemical	Units									
1-Butene	mg/kg									
1-Heptene	mg/kg									
1-Propene, 2-methyl-	mg/kg									
Azulene	mg/kg									
BENZENE, 1,2,4-TRICHLORO-	mg/kg									
BENZENE, 1,2-DICHLORO-	mg/kg									
BENZENE, 1,4-DICHLORO-	mg/kg									
Camphene	mg/kg									
CYCLOHEXANE	mg/kg									
Cyclohexane, methyl-	mg/kg									
Cyclotrisiloxane, hexamethyl	mg/kg									
Diphenyl Ether	mg/kg									
Ethane, 1,1,2,2-tetrachloro-	mg/kg									
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg									
Ethane, 1,2-dichloro-1,1-dif	mg/kg									
Ethene, 1,1-dichloro-2,2-dif	mg/kg									
Hexane, 2-methyl-	mg/kg									
Hexane, 3-methyl-	mg/kg									
METHANE, CHLOROFLUORO-	mg/kg									
Naphthalene	mg/kg									
NAPHTHALENE, 2-METHYL-	mg/kg									
Nonanal	mg/kg									
Norflurane	mg/kg									
Pentane, 2,3-dimethyl-	mg/kg									
Phenol, 4-(1,1,3,3-tetrameth	mg/kg									
Propene	mg/kg									
Sulfur dioxide	mg/kg									
Tridecane	mg/kg									
UNKNOWN	mg/kg									
UNKNOWN ALICYCLIC	mg/kg									
UNKNOWN ALIPHATIC	mg/kg									
UNKNOWN ALKANE	mg/kg									
UNKNOWN AROMATIC	mg/kg									
UNKNOWN SILOXANE	mg/kg									
<b>Volatile Organic Compounds</b>										
1,1,1,2-Tetrachloroethane	mg/kg									
1,1,1-Trichloroethane	mg/kg	0.067	U	0.062	U	0.063	U	0.001	U	
1,1,1-Trichlorotrifluoroethane	mg/kg									
1,1,2,2-Tetrachloroethane	mg/kg	0.067	U	0.062	U	0.063	U	0.001	U	
1,1,2-Trichloroethane	mg/kg	0.067	U	0.062	U	0.063	U	0.001	U	
1,1,2-Trichlorotrifluoroethane	mg/kg	0.13	U	0.12	U	0.23	U	0.002	U	
1,1,2-Trifluoroethane	mg/kg									
1,1-Dichloro-1-Fluoroethane	mg/kg									
1,1-Dichloroethane	mg/kg	0.067	U	0.062	U	0.063	U	0.001	U	
1,1-Dichloroethene	mg/kg	0.067	U	0.062	U	0.063	U	0.001	U	
1,1-Dichloropropene	mg/kg									
1,2,4-Trimethylbenzene	mg/kg									
1,2-Dibromoethane (EDB)	mg/kg									
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg									
1,2-Dichloro-1-Fluoroethane	mg/kg									
1,2-Dichlorobenzene	mg/kg	0.28		0.67		0.12		0.039	U	
1,2-Dichloroethane	mg/kg	0.067	U	0.062	U	0.063	U	0.001	U	
1,2-Dichloroethene	mg/kg									
1,2-Dichloropropane	mg/kg	0.067	U	0.062	U	0.063	U	0.001	U	
1,2-Dichlorotetrafluoroethane	mg/kg									
1,3,5-Trimethylbenzene	mg/kg									
1,3-Dichlorobenzene	mg/kg	0.042	U	0.042	U	0.042	U	0.039	U	
1,4-Dichlorobenzene	mg/kg	0.44		1.1		0.19		0.04	U	
1-Chloro-1,1-Difluoroethane	mg/kg									
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg									
2-Chloro-1,1,1-Trifluoroethane	mg/kg									
2-Chloroethyl Vinyl Ether	mg/kg	0.13	U	0.12	U	0.13	U	0.13	U	
2-Chlorotoluene	mg/kg									
2-Hexanone	mg/kg									
4-Chlorotoluene	mg/kg									
4-Isopropyltoluene	mg/kg									
Acetone	mg/kg	0.47	U	0.43	U	0.44	U	0.015	U	
Acrolein	mg/kg	1.3	U	1.2	U	1.3	U	0.022	U	
Acrylonitrile	mg/kg	0.27	U	0.25	U	0.25	U	0.004	U	
Benzene	mg/kg	0.96		0.098		2.8		0.002	U	
Bromodichloromethane	mg/kg	0.067	U	0.062	U	0.063	U	0.001	U	
Bromoform	mg/kg	0.067	U	0.062	U	0.063	U	0.001	U	
Carbon Disulfide	mg/kg	0.067	U	0.062	U	0.13		0.002	U	
Carbon Tetrachloride	mg/kg	0.067	U	0.062	U	0.063	U	0.001	U	
CFC-1113	mg/kg									
Chlorobenzene	mg/kg	7.9		5.1		20		0.002	U	

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	21563401	21563402	21563403	21563405	21563406	21563407	21583283	21583284	21583286
Location ID	D15-BOR-09	D15-BOR-09	D15-BOR-09	D15-BOR-10	D15-BOR-10	D15-BOR-10	D15-BOR-01	D15-BOR-01	D15-BOR-02
Depth Interval (ft)	10.50-11.00	13.00-13.50	10.50-11.00	0.50-1.00	7.00-7.50	11.50-14.00	0.00-0.50	0.00-0.50	0.00-0.50
Sample Purpose	FS	FS	DUP	FS	FS	FS	DUP	DUP	FS
Date	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/28/2009	3/28/2009	3/28/2009
Chemical Class									
Chemical	Units								
Chlorodibromomethane	mg/kg	0.067 U	0.062 U	0.063 U	0.001 U	0.001 U	0.063 U		
Chlorodifluoromethane	mg/kg								
Chlorofluoromethane	mg/kg								
Chloroform	mg/kg	0.76	0.052 U	2.4	0.001 U	0.001 U	0.063 U		
Chloropentafluoroethane	mg/kg								
cis-1,2-Dichloroethene	mg/kg	0.067 U	0.062 U	0.063 U	0.001 U	0.001 U	0.063 U		
cis-1,3-Dichloropropene	mg/kg	0.067 U	0.062 U	0.063 U	0.001 U	0.001 U	0.063 U		
Cumene	mg/kg								
Dichlorodifluoromethane	mg/kg	0.13 U	0.12 U	0.13 U	0.002 U	0.002 U	0.13 U		
Dichlorofluoromethane	mg/kg	0.13 U	0.12 U	0.13 U	0.002 U	0.002 U	0.13 U		
Ethane	ug/L							1 U	1 U
Ethyl Chloride	mg/kg	0.13 U	0.12 U	0.13 U	0.002 U	0.002 U	0.13 U		
Ethylbenzene	mg/kg	0.067 U	0.062 U	0.13	0.001 U	0.001 U	0.65		
Fluoromethane	mg/kg								
Hexane	mg/kg								
Isobutyl Alcohol	mg/kg								
Meta- And Para-Xylene	mg/kg								
Methacrylonitrile	mg/kg								
Methane	ug/L						420	390	10 U
Methyl Bromide	mg/kg	0.13 U	0.12 U	0.13 U	0.002 U	0.002 U	0.13 U		
Methyl Chloride	mg/kg	0.13 U	0.12 U	0.13 U	0.002 U	0.002 U	0.13 U		
Methyl Ethyl Ketone	mg/kg								
Methyl Isobutyl Ketone	mg/kg								
Methyl Methacrylate	mg/kg								
Methyl Tertiary Butyl Ether	mg/kg								
Methylene Chloride	mg/kg	0.13 U	0.12 U	0.13 U	0.002 U	0.006	0.13 U		
N-Butylbenzene	mg/kg								
N-Propylbenzene	mg/kg								
Ortho-Xylene	mg/kg								
Propionitrile	mg/kg								
sec-Butylbenzene	mg/kg								
Styrene	mg/kg								
tert-Butylbenzene	mg/kg								
Tetrachloroethene	mg/kg	0.067 U	0.062 U	0.078	0.001 U	0.001 U	0.063 U		
Tetrahydrofuran	mg/kg								
Toluene	mg/kg	0.69	0.062 U	1.8	0.001	0.001 U	0.063 U		
trans-1,2-Dichloroethene	mg/kg	0.067 U	0.062 U	0.063 U	0.001 U	0.001 U	0.063 U		
trans-1,3-Dichloropropene	mg/kg	0.067 U	0.062 U	0.063 U	0.001 U	0.001 U	0.063 U		
Trichloroethene	mg/kg	0.067 U	0.062 U	0.063 U	0.001 U	0.001 U	0.063 U		
Trichlorofluoromethane	mg/kg	0.27	0.12 U	0.53	0.002 U	0.002 U	0.13 U		
Vinyl Chloride	mg/kg	0.067 U	0.062 U	0.063 U	0.001 U	0.001 U	0.063 U		
Vinyl Fluoride	mg/kg								
Xylenes	mg/kg	0.41	0.062 U	0.98	0.001 U	0.001 U	0.94		

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA								
Field Sample ID	21583288	21583290	21583292	21583294	21585997	21585999	21586000	21586002	21586004	21586006	
Location ID	D15-BOR-03	D15-BOR-07	D15-BOR-11	E16-BOR-02	D15-BOR-01	D15-BOR-02	D15-BOR-02	D15-BOR-03	D15-BOR-08	D15-BOR-11	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	13.00-13.50	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	FS	FS	
Date	3/28/2009	3/28/2009	3/28/2009	3/28/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	
Chemical Class	Units										
<b>General Chemistry</b>											
Black Carbon	mg/kg										
Percent Moisture	%	29.6	67.25	45.75	47.45				18.6		
Percent Solids	%										
Total Organic Carbon	mg/kg	879	27900	9400	17400						
<b>Metals</b>											
Aluminum	mg/kg	6680	19300	9090	12200						
Antimony	mg/kg	1.35 U	3.07 U	1.89 U	1.82 U						
Arsenic	mg/kg	3.96	11.7	6	6.45						
Barium	mg/kg	43.9	84.6	48.6	55.3						
Beryllium	mg/kg	0.289	1.01	0.431	0.615						
Cadmium	mg/kg	0.189 U	0.43 U	0.265 U	0.258 U						
Calcium	mg/kg	4610	3190	3580	3350						
Chromium	mg/kg	22.6	46.7	22.9	31						
Cobalt	mg/kg	3.56	11.4	5.26	6.97						
Copper	mg/kg	11.8	26.1	12.8	17.2						
Iron	mg/kg	13700	28300	15200	18700						
Lead	mg/kg	24.2	37.1	21.4	28.8						
Magnesium	mg/kg	1420	5740	2630	3500						
Manganese	mg/kg	142	998	461	482						
Mercury	mg/kg	0.433	0.0697	0.169	0.247						
Nickel	mg/kg	9.89	25.3	12.7	16.4						
Potassium	mg/kg	1390	3370	1670	2230						
Selenium	mg/kg	1.32 U	3.01 U	1.85 U	1.78 U						
Silver	mg/kg	0.23 U	0.522 U	0.321 U	0.309 U						
Sodium	mg/kg	278	1040	519	500						
Thallium	mg/kg	1.72 U	3.9 U	2.4 U	2.31 U						
Tin	mg/kg	6.05	9.48	8.91	6.81						
Titanium	mg/kg										
Vanadium	mg/kg	20.7	46	24.2	29.5						
Zinc	mg/kg	56	172	81.2	110						
<b>Metals - AVS/SEM</b>											
Acid Volatile Sulfide	umol/g										
Arsenic	umol/g										
Cadmium	umol/g										
Copper	umol/g										
Lead	umol/g										
Zinc	umol/g										
<b>Metals - Leachate</b>											
Lead	ug/L										
<b>Per and Polyfluorinated Organic Substances</b>											
Perfluorobutane Sulfonic Acid	mg/kg										
Perfluorobutanoic Acid	mg/kg										
Perfluorodecane Sulfonic Acid	mg/kg										
Perfluorodecanoic Acid	mg/kg										
Perfluorododecanoic Acid	mg/kg										
Perfluoroheptanoic Acid	mg/kg										
Perfluorohexane Sulfonic Acid	mg/kg										
Perfluorohexanoic Acid	mg/kg										
Perfluorononanoic Acid	mg/kg										
Perfluorooctane Sulfonamide	mg/kg										
Perfluoropentanoic Acid	mg/kg										
Perfluorotetradecanoic Acid	mg/kg										
Perfluorotridecanoic Acid	mg/kg										
Perfluoroundecanoic Acid	mg/kg										
PFOA	mg/kg										
PFOA(trial)	mg/kg										
PFOS	mg/kg										
PFOS (trial)	mg/kg										
<b>Pesticides and Herbicides</b>											
4,4'-DDD	mg/kg										
4,4'-DDE	mg/kg										
4,4'-DDT	mg/kg										
Aldrin	mg/kg										
Alpha Chlordane	mg/kg										
Alpha-BHC	mg/kg										
beta-BHC	mg/kg										
delta-BHC	mg/kg										
Dieldrin	mg/kg										
Endosulfan I	mg/kg										
Endosulfan II	mg/kg										
Endosulfan Sulfate	mg/kg										
Endrin	mg/kg										
Endrin Aldehyde	mg/kg										
Endrin Ketone	mg/kg										
Gamma Chlordane	mg/kg										

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA								
Field Sample ID	21583288	21583290	21583292	21583294	21585997	21585999	21586000	21586002	21586004	21586006
Location ID	D15-BOR-03	D15-BOR-07	D15-BOR-11	E16-BOR-02	D15-BOR-01	D15-BOR-02	D15-BOR-02	D15-BOR-03	D15-BOR-08	D15-BOR-11
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	13.00-13.50	0.50-1.00
Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	FS	FS
Date	3/28/2009	3/28/2009	3/28/2009	3/28/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009
Chemical Class										
Chemical	Units									
Heptachlor	mg/kg									
Heptachlor Epoxide	mg/kg									
Lindane	mg/kg									
Methoxychlor	mg/kg									
Toxaphene	mg/kg									
<b>Physical Properties</b>										
0.001 MM	% PASSING	0.5	U	18.5	1	3				
0.002 MM	% PASSING	1.5		27	7	8				
0.005 MM	% PASSING	6		38	12	13				
0.02 MM	% PASSING	31		64	29	33				
0.05 MM	% PASSING	21		84	45	51				
0.064 MM	% PASSING	10		91	53	58				
0.075 MM	% PASSING	5.3		95.9	59	62.5				
0.15 MM	% PASSING	42.6		97.4	71.2	74.3				
0.3 MM	% PASSING	87.4		97.8	92.5	95.8				
0.6 MM	% PASSING	94		98	98.5	97.3				
1.18 MM	% PASSING	96.6		98.6	98.9	98.7				
19 MM	% PASSING	100		100	100	100				
2.36 MM	% PASSING	99.9		99.3	98.9	99.5				
3.35 MM	% PASSING	100		99.6	99.4	99.8				
37.5 MM	% PASSING	100		100	100	100				
4.75 MM	% PASSING	100		99.8	99.6	99.9				
75 MM	% PASSING	100		100	100	100				
Density	PCF									
<b>Polychlorinated Biphenyls - TICs</b>										
1,1'-Biphenyl, 2,3-dichloro-	mg/kg									
Unknown Biphenyl	mg/kg									
<b>Polychlorinated Biphenyls</b>										
Heptachlorobiphenyl	mg/kg									
Hexachlorobiphenyl	mg/kg									
Octachlorobiphenyl	mg/kg									
PCB 1	mg/kg	0.00243		0.000193	0.00121	0.00997				
PCB 10	mg/kg	0.0000387		0.00000767	0.0000799	0.0000401				
PCB 100	mg/kg	0.0000082		0.0000403	0.0000146	0.0000371				
PCB 101	mg/kg	0.000383		0.00134	0.000756	0.00129				
PCB 102	mg/kg	0.0000268		0.0000546	0.0000436	0.0000706				
PCB 103	mg/kg	0.000008		0.0000338	0.0000163	0.000033				
PCB 104	mg/kg	0.00001	U	0.0000298	0.00001	0.00000273				
PCB 105	mg/kg	0.000152		0.000441	0.000296	0.000456				
PCB 106	mg/kg	0.0000078		0.000027	0.00001	0.00001	U			
PCB 107	mg/kg	0.0000353		0.000124	0.0000632	0.000119				
PCB 107/123	mg/kg									
PCB 108	mg/kg	0.0000226		0.0000458	0.00003	0.0000453				
PCB 109	mg/kg	0.000307		0.000757	0.000487	0.000815				
PCB 11	mg/kg	0.000505		0.000367	0.000201	0.000658				
PCB 110	mg/kg	0.000478		0.00167	0.000905	0.00157				
PCB 111	mg/kg	0.00000388		0.00000586	0.00000157	0.00000663				
PCB 112	mg/kg	0.00001	U	0.0000298	0.00001	0.00001	U			
PCB 113	mg/kg	0.000383		0.00134	0.000756	0.00129				
PCB 114	mg/kg	0.0000117		0.0000228	0.0000171	0.0000257				
PCB 115	mg/kg	0.000478		0.00167	0.000905	0.00157				
PCB 116	mg/kg	0.000194		0.00022	0.000141	0.000313				
PCB 117	mg/kg	0.000194		0.00022	0.000141	0.000313				
PCB 118	mg/kg	0.000364		0.00131	0.000794	0.00121				
PCB 119	mg/kg	0.000307		0.000757	0.000487	0.000815				
PCB 12	mg/kg	0.00247		0.000215	0.000422	0.00215				
PCB 120	mg/kg	0.0000677		0.0000172	0.00000566	0.0000154				
PCB 121	mg/kg	0.00000184		0.0000298	0.00001	0.0000037				
PCB 121/95/88	mg/kg									
PCB 122	mg/kg	0.0000887		0.0000205	0.0000146	0.0000199				
PCB 123	mg/kg	0.00000778		0.0000298	0.0000158	0.0000311				
PCB 124	mg/kg	0.0000226		0.0000458	0.00003	0.0000453				
PCB 125	mg/kg	0.000307		0.000757	0.000487	0.000815				
PCB 126	mg/kg	0.00000928		0.0000253	0.0000105	0.0000214				
PCB 127	mg/kg	0.00000373		0.00000253	0.00000171	0.0000039				
PCB 128	mg/kg	0.0000924		0.000287	0.000181	0.000256				
PCB 129	mg/kg	0.000543		0.00196	0.00119	0.00176				
PCB 129/158	mg/kg									
PCB 13	mg/kg	0.00247		0.000215	0.000422	0.00215				
PCB 130	mg/kg	0.0000403		0.000145	0.000079	0.000131				
PCB 130/164	mg/kg									
PCB 131	mg/kg	0.00000602		0.0000201	0.000014	0.0000165				
PCB 132	mg/kg	0.000148		0.000544	0.000324	0.000502				
PCB 133	mg/kg	0.0000203		0.000066	0.0000283	0.0000677				
PCB 134	mg/kg	0.0000289		0.0000963	0.0000543	0.0000787				
PCB 135	mg/kg	0.000173		0.000668	0.000323	0.0006				

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	MZ-FPA									
		Field Sample ID	21583288	21583290	21583292	21583294	21585997	21585999	21586000	21586002	21586004
Chemical	Location ID	D15-BOR-03	D15-BOR-07	D15-BOR-11	E16-BOR-02	D15-BOR-01	D15-BOR-02	D15-BOR-02	D15-BOR-03	D15-BOR-08	D15-BOR-11
Units	Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	13.00-13.50	0.50-1.00
	Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	FS	FS
	Date	3/28/2009	3/28/2009	3/28/2009	3/28/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009
PCB 136	mg/kg	0.0000597	0.000234	0.000113	0.000205						
PCB 137	mg/kg	0.0000252	0.0000597	0.0000524	0.000057						
PCB 138	mg/kg	0.000543	0.00196	0.00119	0.00176						
PCB 139	mg/kg	0.0000105	0.0000349	0.0000203	0.0000289						
PCB 14	mg/kg	0.000544	0.0000285	0.0000951	0.000473						
PCB 140	mg/kg	0.0000105	0.0000349	0.0000203	0.0000289						
PCB 141	mg/kg	0.0000955	0.000246	0.000172	0.000235						
PCB 142	mg/kg	0.0000149	0.0000298 U	0.00001 U	0.0000104						
PCB 143	mg/kg	0.0000289	0.0000963	0.0000543	0.0000787						
PCB 143/139	mg/kg										
PCB 144	mg/kg	0.0000192	0.0000673	0.0000374	0.0000583						
PCB 145	mg/kg	0.00001 U	0.0000298 U	0.00001 U	0.00001 U						
PCB 146	mg/kg	0.000112	0.000427	0.000198	0.000387						
PCB 147	mg/kg	0.000392	0.00166	0.000811	0.00139						
PCB 148	mg/kg	0.00000372	0.0000179	0.00000552	0.000013						
PCB 149	mg/kg	0.000392	0.00166	0.000811	0.00139						
PCB 15	mg/kg	0.000995	0.000396	0.000282	0.00114						
PCB 150	mg/kg	0.0000027	0.0000213	0.0000066	0.0000131						
PCB 151	mg/kg	0.000173	0.000668	0.000323	0.0006						
PCB 152	mg/kg	0.00001 U	0.0000298 U	0.00001 U	0.00000164						
PCB 153	mg/kg	0.000435	0.00185	0.000944	0.00152						
PCB 154	mg/kg	0.0000129	0.0000923	0.0000333	0.0000652						
PCB 155	mg/kg	0.00001 U	0.000012	0.00000397	0.0000077						
PCB 156	mg/kg	0.0000608	0.000174	0.000138	0.000177						
PCB 157	mg/kg	0.0000608	0.000174	0.000138	0.000177						
PCB 158	mg/kg	0.0000436	0.000135	0.000103	0.000131						
PCB 159	mg/kg	0.0000111	0.0000153	0.00000975	0.0000202						
PCB 16	mg/kg	0.000339	0.000113	0.000275	0.000351						
PCB 160	mg/kg	0.000543	0.00196	0.00119	0.00176						
PCB 161	mg/kg	0.00001 U	0.0000298 U	0.00001 U	0.00001 U						
PCB 162	mg/kg	0.0000143	0.0000189	0.0000115	0.0000299						
PCB 163	mg/kg	0.000543	0.00196	0.00119	0.00176						
PCB 163/160	mg/kg										
PCB 164	mg/kg	0.0000497	0.000141	0.0000811	0.000149						
PCB 165	mg/kg	0.00000327	0.00000336	0.0000015	0.00000367						
PCB 166	mg/kg	0.0000924	0.000287	0.000181	0.000256						
PCB 167	mg/kg	0.0000278	0.0000782	0.0000501	0.0000801						
PCB 168	mg/kg	0.000435	0.00185	0.000944	0.00152						
PCB 169	mg/kg	0.00000469	0.0000249	0.00000557	0.0000194						
PCB 17	mg/kg	0.000181	0.000139	0.000174	0.000243						
PCB 170	mg/kg	0.000127	0.000481	0.000248	0.000394						
PCB 171	mg/kg	0.0000411	0.000154	0.0000788	0.000126						
PCB 172	mg/kg	0.0000388	0.000105	0.0000491	0.0000944						
PCB 173	mg/kg	0.0000411	0.000154	0.0000788	0.000126						
PCB 174	mg/kg	0.000144	0.000497	0.000244	0.000439						
PCB 175	mg/kg	0.00000988	0.0000339	0.0000147	0.0000287						
PCB 176	mg/kg	0.0000194	0.0000682	0.0000322	0.0000548						
PCB 177	mg/kg	0.0000819	0.00036	0.000153	0.000279						
PCB 178	mg/kg	0.000042	0.000182	0.0000681	0.000135						
PCB 179	mg/kg	0.000065	0.000271	0.000116	0.000222						
PCB 18	mg/kg	0.000694	0.000261	0.000642	0.00069						
PCB 180	mg/kg	0.000336	0.00112	0.000555	0.000999						
PCB 181	mg/kg	0.00000646	0.00000542	0.00000319	0.0000098						
PCB 182	mg/kg	0.00000504	0.0000137	0.00000457	0.0000123						
PCB 182/175	mg/kg										
PCB 183	mg/kg	0.000114	0.000404	0.000179	0.000325						
PCB 184	mg/kg	0.00000418	0.00000954	0.00000405	0.00000798						
PCB 185	mg/kg	0.000114	0.000404	0.000179	0.000325						
PCB 186	mg/kg	0.00000134	0.00000298 U	0.00001 U	0.00001 U						
PCB 187	mg/kg	0.000222	0.00091	0.000372	0.000753						
PCB 188	mg/kg	0.00000327	0.0000314	0.00000816	0.000017						
PCB 189	mg/kg	0.0000112	0.0000248	0.0000137	0.0000241						
PCB 19	mg/kg	0.000064	0.000046	0.000178	0.0000642						
PCB 190	mg/kg	0.0000362	0.0000946	0.0000472	0.0000886						
PCB 191	mg/kg	0.000008	0.0000196	0.0000107	0.000019						
PCB 192	mg/kg	0.0000164	0.0000298 U	0.00000226	0.0000134						
PCB 193	mg/kg	0.000336	0.00112	0.000555	0.000999						
PCB 194	mg/kg	0.000164	0.000416	0.000168	0.000382						
PCB 195	mg/kg	0.0000319	0.000124	0.0000509	0.0000939						
PCB 196	mg/kg	0.0000749	0.000448	0.000123	0.000248						
PCB 197	mg/kg	0.0000133	0.0000505	0.0000174	0.0000337						
PCB 198	mg/kg	0.000332	0.00239	0.000425	0.000955						
PCB 199	mg/kg	0.000332	0.00239	0.000425	0.000955						
PCB 2	mg/kg	0.00205	0.000181	0.000546	0.0043						
PCB 20	mg/kg	0.000649	0.000815	0.000367	0.00113						
PCB 200	mg/kg	0.0000184	0.0000561	0.0000206	0.0000421						

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	Field Sample ID	MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA	
			21583288	21583290	21583292	21583294	21585997	21585999	21586000	21586002	21586004	21586006	21586008	21586010	21586012	21586014	21586016	21586018
Chemical	Location ID	Depth Interval (ft)	D15-BOR-03	D15-BOR-07	D15-BOR-11	E16-BOR-02	D15-BOR-01	D15-BOR-02	D15-BOR-02	D15-BOR-03	D15-BOR-08	D15-BOR-11						
Units	Sample Purpose	Date	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	13.00-13.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00
			FS	FS	FS	FS	FS	FS	FS	FS								
			3/28/2009	3/28/2009	3/28/2009	3/28/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009
PCB 201	mg/kg		0.0000285	0.00018	0.0000514	0.000104												
PCB 202	mg/kg		0.0000729	0.000686	0.000129	0.000278												
PCB 203	mg/kg		0.000131	0.000679	0.000186	0.000386												
PCB 204	mg/kg		0.0000624	0.0000709	0.0000284	0.0000733												
PCB 204/200	mg/kg																	
PCB 205	mg/kg		0.000153	0.0000335	0.0000117	0.0000244												
PCB 206	mg/kg		0.000715	0.0207	0.00129	0.0029												
PCB 207	mg/kg		0.0000752	0.000847	0.000117	0.000245												
PCB 208	mg/kg		0.000257	0.00872	0.000577	0.00128												
PCB 209	mg/kg		0.00108	0.0332	0.00188	0.00431												
PCB 21	mg/kg		0.000749	0.000226	0.000185	0.000807												
PCB 21/20	mg/kg																	
PCB 22	mg/kg		0.000372	0.000165	0.000114	0.000453												
PCB 23	mg/kg		0.0000518	0.00000433	0.00000805	0.0000499												
PCB 24	mg/kg		0.000218	0.0000188	0.0000326	0.000189												
PCB 25	mg/kg		0.000116	0.000108	0.0000527	0.000209												
PCB 26	mg/kg		0.000353	0.000155	0.0000916	0.000378												
PCB 27	mg/kg		0.0000505	0.0000479	0.0000465	0.0000852												
PCB 28	mg/kg		0.000649	0.000815	0.000367	0.00113												
PCB 29	mg/kg		0.000353	0.000155	0.0000916	0.000378												
PCB 3	mg/kg		0.00177	0.000185	0.000609	0.00348												
PCB 30	mg/kg		0.000694	0.000261	0.000642	0.00069												
PCB 31	mg/kg		0.000936	0.000532	0.000334	0.00116												
PCB 32	mg/kg		0.000105	0.000128	0.000132	0.000189												
PCB 33	mg/kg		0.000749	0.000226	0.000185	0.000807												
PCB 34	mg/kg		0.000159	0.0000146	0.0000174	0.000139												
PCB 35	mg/kg		0.000391	0.0000934	0.0000555	0.000388												
PCB 36	mg/kg		0.000162	0.000015	0.0000168	0.000166												
PCB 37	mg/kg		0.00176	0.000363	0.000255	0.00184												
PCB 38	mg/kg		0.0000101	0.0000298	0.00001	0.000012												
PCB 39	mg/kg		0.000298	0.0000217	0.0000307	0.000319												
PCB 4	mg/kg		0.00172	0.000146	0.00215	0.00169												
PCB 4/10	mg/kg																	
PCB 40	mg/kg		0.00021	0.000446	0.000251	0.000515												
PCB 41	mg/kg		0.00021	0.000446	0.000251	0.000515												
PCB 42	mg/kg		0.0000947	0.000216	0.000116	0.00024												
PCB 43	mg/kg		0.0000233	0.000013	0.000012	0.0000312												
PCB 44	mg/kg		0.000392	0.000795	0.000455	0.000968												
PCB 45	mg/kg		0.0000749	0.000145	0.0000941	0.000187												
PCB 46	mg/kg		0.0000247	0.0000469	0.0000295	0.0000534												
PCB 47	mg/kg		0.000392	0.000795	0.000455	0.000968												
PCB 48	mg/kg		0.000067	0.0000864	0.0000618	0.000132												
PCB 49	mg/kg		0.000209	0.000558	0.000281	0.000621												
PCB 5	mg/kg		0.000365	0.0000475	0.000109	0.000376												
PCB 50	mg/kg		0.0000576	0.000111	0.0000771	0.000135												
PCB 51	mg/kg		0.0000749	0.000145	0.0000941	0.000187												
PCB 52	mg/kg		0.000438	0.000914	0.000536	0.0011												
PCB 53	mg/kg		0.0000576	0.000111	0.0000771	0.000135												
PCB 54	mg/kg		0.0000282	0.0000652	0.000061	0.0000722												
PCB 55	mg/kg		0.0000101	0.0000109	0.00000576	0.0000168												
PCB 56	mg/kg		0.000236	0.000387	0.000219	0.000523												
PCB 57	mg/kg		0.00000873	0.00000412	0.00000372	0.0000123												
PCB 58	mg/kg		0.00000534	0.00000925	0.00000321	0.0000108												
PCB 59	mg/kg		0.0000544	0.000076	0.0000391	0.000107												
PCB 6	mg/kg		0.00134	0.000123	0.000394	0.00115												
PCB 60	mg/kg		0.0000755	0.000118	0.0000603	0.000144												
PCB 61	mg/kg		0.000643	0.00122	0.000659	0.00151												
PCB 62	mg/kg		0.0000544	0.000076	0.0000391	0.000107												
PCB 63	mg/kg		0.0000257	0.0000296	0.0000159	0.0000461												
PCB 64	mg/kg		0.000157	0.000302	0.000149	0.000375												
PCB 65	mg/kg		0.000392	0.000795	0.000455	0.000968												
PCB 65/75/62	mg/kg																	
PCB 66	mg/kg		0.000324	0.000868	0.000432	0.000911												
PCB 67	mg/kg		0.0000167	0.0000277	0.0000138	0.0000359												
PCB 67/58	mg/kg																	
PCB 68	mg/kg		0.00000732	0.0000212	0.00000816	0.0000209												
PCB 68/64	mg/kg																	
PCB 69	mg/kg		0.000209	0.000558	0.000281	0.000621												
PCB 7	mg/kg		0.000165	0.0000212	0.0000558	0.000158												
PCB 70	mg/kg		0.000643	0.00122	0.000659	0.00151												
PCB 71	mg/kg		0.00021	0.000446	0.000251	0.000515												
PCB 72	mg/kg		0.0000197	0.0000231	0.0000102	0.0000355												
PCB 73	mg/kg		0.0000233	0.000013	0.000012	0.0000312												
PCB 73/46	mg/kg																	
PCB 74	mg/kg		0.000643	0.00122	0.000659	0.00151												
PCB 75	mg/kg		0.0000544	0.000076	0.0000391	0.000107												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Chemical	Field Sample ID	21583288	21583290	21583292	21583294	21585997	21585999	21586000	21586002	21586004	21586006
Units	Location ID	D15-BOR-03	D15-BOR-07	D15-BOR-11	E16-BOR-02	D15-BOR-01	D15-BOR-02	D15-BOR-02	D15-BOR-03	D15-BOR-08	D15-BOR-11
	Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	13.00-13.50	0.50-1.00
	Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	FS	FS
	Date	3/28/2009	3/28/2009	3/28/2009	3/28/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009
PCB 76	mg/kg	0.000643	0.00122	0.000659	0.00151						
PCB 77	mg/kg	0.000127	0.000241	0.0000809	0.000295						
PCB 78	mg/kg	0.0000313	0.0000298 U	0.00001 U	0.0000372						
PCB 79	mg/kg	0.0000273	0.0000119	0.00000451	0.0000402						
PCB 8	mg/kg	0.00229	0.000258	0.00105	0.00194						
PCB 80	mg/kg	0.0000264	0.0000275	0.00000892	0.00001 U						
PCB 81	mg/kg	0.0000588	0.0000401	0.000002	0.00000719						
PCB 82	mg/kg	0.000059	0.000152	0.0000927	0.000147						
PCB 83	mg/kg	0.000252	0.00099	0.000497	0.000885						
PCB 83/125/112	mg/kg										
PCB 84	mg/kg	0.000104	0.000323	0.000185	0.000323						
PCB 85	mg/kg	0.000194	0.00022	0.000141	0.000313						
PCB 86	mg/kg	0.000307	0.000757	0.000487	0.000815						
PCB 86/109	mg/kg										
PCB 87	mg/kg	0.000307	0.000757	0.000487	0.000815						
PCB 87/111	mg/kg										
PCB 88	mg/kg	0.0000673	0.000258	0.000121	0.000237						
PCB 89	mg/kg	0.0000096	0.0000154	0.00000807	0.0000216						
PCB 89/84	mg/kg										
PCB 9	mg/kg	0.000935	0.0000549	0.000226	0.000843						
PCB 90	mg/kg	0.000383	0.00134	0.000756	0.00129						
PCB 91	mg/kg	0.0000673	0.000258	0.000121	0.000237						
PCB 92	mg/kg	0.0000777	0.000272	0.000142	0.000257						
PCB 93	mg/kg	0.0000082	0.0000403	0.0000146	0.0000371						
PCB 94	mg/kg	0.00000684	0.0000142	0.0000112	0.0000167						
PCB 95	mg/kg	0.000293	0.00101	0.00055	0.00102						
PCB 96	mg/kg	0.00000509	0.000013	0.0000115	0.0000147						
PCB 97	mg/kg	0.000307	0.000757	0.000487	0.000815						
PCB 98	mg/kg	0.0000268	0.0000546	0.0000436	0.0000706						
PCB 99	mg/kg	0.000252	0.00099	0.000497	0.000885						
PCB-100/93	mg/kg										
PCB-107/124	mg/kg										
PCB-108/119/86/97/125/87	mg/kg										
PCB-113/90/101	mg/kg										
PCB-116/85	mg/kg										
PCB-128/166	mg/kg										
PCB-13/12	mg/kg										
PCB-139/140	mg/kg										
PCB-147/149	mg/kg										
PCB-151/135	mg/kg										
PCB-153/168	mg/kg										
PCB-156/157	mg/kg										
PCB-163/138/129	mg/kg										
PCB-171/173	mg/kg										
PCB-180/193	mg/kg										
PCB-198/199	mg/kg										
PCB-21/33	mg/kg										
PCB-26/29	mg/kg										
PCB-28/20	mg/kg										
PCB-30/18	mg/kg										
PCB-44/47/65	mg/kg										
PCB-50/53	mg/kg										
PCB-59/62/75	mg/kg										
PCB-61/70/74/76	mg/kg										
PCB-69/49	mg/kg										
PCB-71/40	mg/kg										
PCB-90/101	mg/kg										
Pentachlorobiphenyl	mg/kg										
Tetrachlorobiphenyl	mg/kg										
Total Decachlorobiphenyls (congeners)	mg/kg										
Total Dichlorobiphenyls (congeners)	mg/kg										
Total Heptachlorobiphenyls (congeners)	mg/kg										
Total Hexachlorobiphenyls (congeners)	mg/kg										
Total Monochlorobiphenyls (congeners)	mg/kg										
Total Nonachlorobiphenyls (congeners)	mg/kg										
Total Octachlorobiphenyls (congeners)	mg/kg										
Total PCB (congeners)	mg/kg	0.05404415	0.13728685	0.050300592	0.11337281						
Total Pentachlorobiphenyls (congeners)	mg/kg										
Total Tetrachlorobiphenyls (congeners)	mg/kg										
Total Trichlorobiphenyls (congeners)	mg/kg										
Trichlorobiphenyl (total)	mg/kg										
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>											
Benzo[e]pyrene	mg/kg										
Chrysene, 1-methyl-	mg/kg										
Naphthalene, 1-methyl-	mg/kg										
Pyrene, 1-methyl-	mg/kg										

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA										
Field Sample ID	21583288	21583290	21583292	21583294	21585997	21585999	21586000	21586002	21586004	21586006		
Location ID	D15-BOR-03	D15-BOR-07	D15-BOR-11	E16-BOR-02	D15-BOR-01	D15-BOR-02	D15-BOR-02	D15-BOR-03	D15-BOR-08	D15-BOR-11		
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	13.00-13.50	0.50-1.00		
Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	FS	FS		
Date	3/28/2009	3/28/2009	3/28/2009	3/28/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009		
Chemical Class												
Chemical	Units											
<b>Polycyclic Aromatic Hydrocarbons</b>												
Acenaphthene	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U		0.041	U
Acenaphthylene	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U		0.041	U
Anthracene	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U		0.041	U
Benzo(A)Anthracene	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U		0.041	U
Benzo(B)Fluoranthene	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U		0.041	U
Benzo(G,H,I)Perylene	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U		0.041	U
Benzo(K)Fluoranthene	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U		0.041	U
Benzo(A)Pyrene	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U		0.043	U
Chrysene	mg/kg	0.24	U	0.52	U	0.32	U	0.36	U		0.041	U
Dibenz(A,H)Anthracene	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U		0.041	U
Fluoranthene	mg/kg	0.24	U	0.52	U	0.32	U	0.49	U		0.041	U
Fluorene	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U		0.041	U
Indeno (1,2,3-CD) Pyrene	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U		0.041	U
Naphthalene	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U		0.23	U
Phenanthrene	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U		0.041	U
Pyrene	mg/kg	0.24	U	0.52	U	0.32	U	0.44	U		0.041	U
Total PAHs (Detections + 1/2 MDL)	mg/kg	1.92	U	4.16	U	2.56	U	3.24	U		0.56	U
Total PAHs (Detections Only)	mg/kg	1.92	U	4.16	U	2.56	U	1.29	U		0.273	U
<b>Semivolatile Organic Compounds - TICs</b>												
1,2,4-Trithiolane	mg/kg											
1,4-Benzenediol, 2-chloro-	mg/kg											
11H-Benzo[b]fluorene	mg/kg											
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg											
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg	14		34		17		11				
3-PENTEN-2-ONE, 4-METHYL-	mg/kg											
7H-Benz[de]anthracen-7-one	mg/kg											
9,10-Anthracenedione	mg/kg											
9-Octadecenamide, (Z)-	mg/kg											
Acetamide, 2-chloro-N-(ethox	mg/kg											
Alachlor	mg/kg											
Benzenamine, 3-methyl-	mg/kg											
Benzenamine, 4,4',4"-methy	mg/kg											
Benzenamine, 4,4'-methyleneb	mg/kg											
Benzene, 1,2,3,4-tetrachloro	mg/kg											
Benzene, 1,2,3,5-tetrachloro	mg/kg											
Benzene, 1,2,3-trichloro-	mg/kg											
Benzene, 1,3,5-trichloro-	mg/kg											
Benzene, 1,3-bis(1-methyleth	mg/kg											
Benzene, 1,4-bis(1-methyleth	mg/kg											
Benzofuran, 2,3-dihydro-	mg/kg											
CYCLIC OCTAATOMIC SULFUR	mg/kg			2.9								
Diphenyl Ether	mg/kg											
Docosane	mg/kg											
Heneicosane	mg/kg											
Hexacosane	mg/kg											
Hexadecane	mg/kg											
Hexatriacontane	mg/kg											
m-Chloroaniline	mg/kg											
N,N-Diethylaniline	mg/kg											
n-Hexadecanoic acid	mg/kg											
Nonadecane	mg/kg											
o-Chloroaniline	mg/kg											
Octacosane	mg/kg											
Octadecane	mg/kg											
Octadecane, 1-chloro-	mg/kg											
Octadecanoic acid	mg/kg											
Parachlorophenol	mg/kg											
Pentadecane	mg/kg											
Perylene	mg/kg											
Phenol, 2,5-dichloro-	mg/kg											
Phenol, 3-chloro-	mg/kg											
Phenol, 4,4'-(1-methylethyl)	mg/kg											
Tetracosane	mg/kg											
Tetradecane	mg/kg											
Tetraethylene glycol	mg/kg											
Total SVOC TICs	mg/kg											
Triacotane	mg/kg											
Tributyl phosphate	mg/kg											
Tridecanoic acid	mg/kg											
Triphenyl phosphate	mg/kg											
UNKNOWN	mg/kg	7.3		2.65		5.6		7.9				
Unknown acid	mg/kg											
Unknown Alcohol	mg/kg											
Unknown Aldol Condensate	mg/kg											
UNKNOWN ALKANE	mg/kg						1.8					

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA								
Field Sample ID	21583288	21583290	21583292	21583294	21585997	21585999	21586000	21586002	21586004	21586006
Location ID	D15-BOR-03	D15-BOR-07	D15-BOR-11	E16-BOR-02	D15-BOR-01	D15-BOR-02	D15-BOR-02	D15-BOR-03	D15-BOR-08	D15-BOR-11
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	13.00-13.50	0.50-1.00
Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	FS	FS
Date	3/28/2009	3/28/2009	3/28/2009	3/28/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009
Chemical Class										
Chemical	Units									
Unknown Alkene	mg/kg									
Unknown Amide	mg/kg									
Unknown Amine	mg/kg									
UNKNOWN AROMATIC	mg/kg									
Unknown Carboxylic Acid	mg/kg									
Unknown Cycloalkane	mg/kg									
Unknown Hydrocarbon	mg/kg									
Unknown Ketone	mg/kg									
Unknown PAH	mg/kg									
UNKNOWN SILOXANE	mg/kg									
<b>Semivolatile Organic Compounds</b>										
1,2,4-Trichlorobenzene	mg/kg	0.24	U	0.52	U	0.32	U	0.43		
1,2-Diphenylhydrazine	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U	0.041
1,4-Dioxane	mg/kg									
1-Naphthylamine	mg/kg	1.2	U	2.6	U	1.6	U	1.5	U	0.2
2,3,4,6-Tetrachlorophenol	mg/kg									
2,4,5-Trichlorophenol	mg/kg									
2,4,6-Trichlorophenol	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U	0.041
2,4-Dichlorophenol	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U	0.041
2,4-Dimethylphenol	mg/kg	0.47	U	1	U	0.64	U	0.61	U	0.082
2,4-Dinitrophenol	mg/kg	4.7	U	10	U	8.4	U	8.1	U	0.82
2,4-Dinitrotoluene	mg/kg	0.47	U	1	U	0.64	U	0.61	U	0.082
2,6-Dinitrotoluene	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U	0.041
2-Chloronaphthalene	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U	0.041
2-Chlorophenol	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U	0.19
2-Methylnaphthalene	mg/kg									
2-Methylphenol (O-Cresol)	mg/kg									
2-Naphthylamine	mg/kg	1.2	U	2.6	U	1.6	U	1.5	U	0.2
2-Nitroaniline	mg/kg									
2-Nitrophenol	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U	0.041
3,3'-Dichlorobenzidine	mg/kg	0.71	U	1.6	U	0.95	U	0.91	U	0.12
3,3'-Dimethylbenzidine	mg/kg									
3-Nitroaniline	mg/kg									
4,6-Dinitro-2-Methylphenol	mg/kg	1.2	U	2.6	U	1.6	U	1.5	U	0.2
4-Aminobiphenyl	mg/kg	1.2	U	2.6	U	1.6	U	1.5	U	0.2
4-Bromophenyl Phenyl Ether	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U	0.041
4-Chloro-3-Methylphenol	mg/kg	0.47	U	1	U	0.64	U	0.61	U	0.082
4-Chloroaniline	mg/kg	0.47	U	1	U	0.64	U	0.61	U	0.082
4-Chlorophenyl Phenyl Ether	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U	0.041
4-Methylphenol (P-Cresol)	mg/kg									
4-Nitroaniline	mg/kg									
4-Nitrophenol	mg/kg	1.2	U	2.6	U	1.6	U	1.5	U	0.2
Acetophenone	mg/kg									
Aniline	mg/kg	1.2	U	2.6	U	1.6	U	1.5	U	0.2
Benzidine	mg/kg	8.3	U	18	U	11	U	11	U	1.4
Biphenyl	mg/kg									
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg									
Bis(2-Chloroethoxy)Methane	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U	0.041
Bis(2-Chloroethyl)Ether	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U	0.041
Bis(2-Chloroisopropyl)Ether	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U	0.041
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.47	U	1	U	0.64	U	0.61	U	0.082
Butyl Benzyl Phthalate	mg/kg	0.47	U	1	U	0.64	U	0.61	U	0.082
Carbazole	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U	0.041
Dibenzofuran	mg/kg									
Diethyl Phthalate	mg/kg	0.47	U	1	U	0.64	U	0.61	U	0.082
Dimethyl Phthalate	mg/kg	0.47	U	1	U	0.64	U	0.61	U	0.082
Di-N-Butyl Phthalate	mg/kg	0.47	U	1	U	0.64	U	0.61	U	0.082
Diphenyl Ether	mg/kg									
Hexachlorobenzene	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U	0.041
Hexachlorobutadiene	mg/kg	0.47	U	1	U	0.64	U	0.61	U	0.082
Hexachlorocyclopentadiene	mg/kg	1.2	U	2.6	U	1.6	U	1.5	U	0.2
Hexachloroethane	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U	0.041
Hexachloropropylene	mg/kg									
Isophorone	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U	0.041
N-Dioctyl Phthalate	mg/kg	0.47	U	1	U	0.64	U	0.61	U	0.082
Nitrobenzene	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U	0.041
N-Nitrosodimethylamine	mg/kg	0.47	U	1	U	0.64	U	0.61	U	0.082
N-Nitrosodi-N-Propylamine	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U	0.041
N-Nitrosodiphenylamine	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U	0.041
O-Toluidine	mg/kg	1.4	U	3.1	U	1.9	U	1.8	U	0.25
Parathion	mg/kg									
Pentachlorobenzene	mg/kg									
Pentachlorophenol	mg/kg	1.2	U	2.6	U	1.6	U	1.5	U	0.2
Phenol	mg/kg	0.24	U	0.52	U	0.32	U	0.3	U	0.052
<b>Volatile Organic Compounds - TICs</b>										
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg									

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA															
Field Sample ID	21583288	21583290	21583292	21583294	21585997	21585999	21586000	21586002	21586004	21586006							
Location ID	D15-BOR-03	D15-BOR-07	D15-BOR-11	E16-BOR-02	D15-BOR-01	D15-BOR-02	D15-BOR-02	D15-BOR-03	D15-BOR-08	D15-BOR-11							
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	13.00-13.50	0.50-1.00							
Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	FS	FS							
Date	3/28/2009	3/28/2009	3/28/2009	3/28/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009							
Chemical Class	Units																
1-Butene	mg/kg																
1-Heptene	mg/kg																
1-Propene, 2-methyl-	mg/kg																
Azulene	mg/kg																
BENZENE, 1,2,4-TRICHLORO-	mg/kg																
BENZENE, 1,2-DICHLORO-	mg/kg																
BENZENE, 1,4-DICHLORO-	mg/kg																
Camphene	mg/kg																
CYCLOHEXANE	mg/kg																
Cyclohexane, methyl-	mg/kg																
Cyclotrisiloxane, hexamethyl	mg/kg																
Diphenyl Ether	mg/kg																
Ethane, 1,1,2,2-tetrachloro-	mg/kg																
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg																
Ethane, 1,2-dichloro-1,1-dif	mg/kg																
Ethene, 1,1-dichloro-2,2-dif	mg/kg																
Hexane, 2-methyl-	mg/kg																
Hexane, 3-methyl-	mg/kg																
METHANE, CHLOROFLUORO-	mg/kg																
Naphthalene	mg/kg																
NAPHTHALENE, 2-METHYL-	mg/kg																
Nonanal	mg/kg																
Norflurane	mg/kg																
Pentane, 2,3-dimethyl-	mg/kg																
Phenol, 4-(1,1,3,3-tetrameth	mg/kg																
Propene	mg/kg																
Sulfur dioxide	mg/kg																
Tridecane	mg/kg																
UNKNOWN	mg/kg																
UNKNOWN ALICYCLIC	mg/kg																
UNKNOWN ALIPHATIC	mg/kg																
UNKNOWN ALKANE	mg/kg																
UNKNOWN AROMATIC	mg/kg																
UNKNOWN SILOXANE	mg/kg																
<b>Volatile Organic Compounds</b>																	
1,1,1,2-Tetrachloroethane	mg/kg																
1,1,1-Trichloroethane	mg/kg					0.001	U	0.001	U	0.062	U	0.055	U				
1,1,1-Trichlorotrifluoroethane	mg/kg																
1,1,2,2-Tetrachloroethane	mg/kg					0.001	U	0.001	U	0.001	U	0.062	U	0.055	U		
1,1,2-Trichloroethane	mg/kg					0.001	U	0.001	U	0.001	U	0.062	U	0.055	U		
1,1,2-Trichlorotrifluoroethane	mg/kg					0.002	U	0.02		0.018		3.4		1.7			
1,1,2-Trifluoroethane	mg/kg																
1,1-Dichloro-1-Fluoroethane	mg/kg																
1,1-Dichloroethane	mg/kg					0.001	U	0.001	U	0.001	U	0.062	U	0.055	U		
1,1-Dichloroethene	mg/kg					0.001	U	0.001	U	0.001	U	0.062	U	0.055	U		
1,1-Dichloropropene	mg/kg																
1,2,4-Trimethylbenzene	mg/kg																
1,2-Dibromoethane (EDB)	mg/kg																
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg																
1,2-Dichloro-1-Fluoroethane	mg/kg																
1,2-Dichlorobenzene	mg/kg	0.29		0.52	U	0.99		2.2				4.6					
1,2-Dichloroethane	mg/kg					0.001	U	0.001	U	0.001	U	0.001	U	0.062	U	0.055	U
1,2-Dichloroethene	mg/kg																
1,2-Dichloropropane	mg/kg					0.001	U	0.001	U	0.001	U	0.001	U	0.062	U	0.055	U
1,2-Dichlorotetrafluoroethane	mg/kg																
1,3,5-Trimethylbenzene	mg/kg																
1,3-Dichlorobenzene	mg/kg	0.24	U	0.52	U	0.32	U	1				0.29					
1,4-Dichlorobenzene	mg/kg	0.44		0.52	U	0.98		14				6.7					
1-Chloro-1,1-Difluoroethane	mg/kg																
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg																
2-Chloro-1,1,1-Trifluoroethane	mg/kg																
2-Chloroethyl Vinyl Ether	mg/kg											0.12	U	0.11	U		
2-Chlorotoluene	mg/kg																
2-Hexanone	mg/kg																
4-Chlorotoluene	mg/kg																
4-Isopropyltoluene	mg/kg																
Acetone	mg/kg					0.034		0.038		0.04		0.019		0.43	U	0.38	U
Acrolein	mg/kg					0.019	U	0.021	U	0.019	U	0.021	U	1.2	U	1.1	U
Acrylonitrile	mg/kg					0.004	U	0.004	U	0.004	U	0.004	U	0.25	U	0.22	U
Benzene	mg/kg					0.0005	U	0.004		0.003		0.0005	U	1.5		0.027	U
Bromodichloromethane	mg/kg					0.001	U	0.001	U	0.001	U	0.001	U	0.062	U	0.055	U
Bromoform	mg/kg					0.001	U	0.001	U	0.001	U	0.001	U	0.062	U	0.055	U
Carbon Disulfide	mg/kg					0.001	U	0.005		0.004		0.001	U	0.062	U	0.055	U
Carbon Tetrachloride	mg/kg					0.001	U	0.001	U	0.001	U	0.001	U	0.062	U	0.055	U
CFC-1113	mg/kg																
Chlorobenzene	mg/kg					0.001	U	0.044		0.068		0.001		61		0.77	

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA					
	Field Sample ID	Location ID	21583288	21583290	21583292	21583294	21585997	21585999	21586000	21586002	21586004	21586006	21586008	21586010	21586012	21586014	21586016	21586018				
Chemical	Depth Interval (ft)	Sample Purpose	D15-BOR-03		D15-BOR-07		D15-BOR-11		E16-BOR-02		D15-BOR-01		D15-BOR-02		D15-BOR-02		D15-BOR-03		D15-BOR-08		D15-BOR-11	
Units		Date	0.00-0.50		0.00-0.50		0.00-0.50		0.00-0.50		0.50-1.00		0.50-1.00		0.50-1.00		0.50-1.00		13.00-13.50		0.50-1.00	
			FS		FS		FS		FS		FS		DUP		DUP		FS		FS		FS	
			3/28/2009		3/28/2009		3/28/2009		3/28/2009		3/27/2009		3/27/2009		3/27/2009		3/27/2009		3/27/2009		3/27/2009	
Chlorodibromomethane	mg/kg									0.001	U	0.001	U	0.001	U	0.001	U	0.062	U	0.055	U	
Chlorodifluoromethane	mg/kg																					
Chlorofluoromethane	mg/kg																					
Chloroform	mg/kg									0.001	U	0.005		0.006		0.001	U	0.43		0.055	U	
Chloropentafluoroethane	mg/kg																					
cis-1,2-Dichloroethene	mg/kg									0.001	U	0.001	U	0.001	U	0.001	U	0.062	U	0.055	U	
cis-1,3-Dichloropropene	mg/kg									0.001	U	0.001	U	0.001	U	0.001	U	0.062	U	0.055	U	
Cumene	mg/kg																					
Dichlorodifluoromethane	mg/kg									0.002	U	0.002	U	0.002	U	0.002	U	0.12	U	0.11	U	
Dichlorofluoromethane	mg/kg									0.002	U	0.002	U	0.002	U	0.002	U	0.12	U	0.11	U	
Ethane	ug/L		1	U	1	U	1	U	1	U												
Ethyl Chloride	mg/kg									0.002	U	0.002	U	0.002	U	0.002	U	0.12	U	0.11	U	
Ethylbenzene	mg/kg									0.001	U	0.001	U	0.001	U	0.001	U	0.63		0.055	U	
Fluoromethane	mg/kg																					
Hexane	mg/kg																					
Isobutyl Alcohol	mg/kg																					
Meta- And Para-Xylene	mg/kg																					
Methacrylonitrile	mg/kg																					
Methane	ug/L		10	U	300		10	U	10	U												
Methyl Bromide	mg/kg									0.002	U	0.002	U	0.002	U	0.002	U	0.12	U	0.11	U	
Methyl Chloride	mg/kg									0.002	U	0.002	U	0.002	U	0.002	U	0.12	U	0.11	U	
Methyl Ethyl Ketone	mg/kg																					
Methyl Isobutyl Ketone	mg/kg																					
Methyl Methacrylate	mg/kg																					
Methyl Tertiary Butyl Ether	mg/kg																					
Methylene Chloride	mg/kg									0.021		0.006		0.006		0.004		0.12	U	0.11	U	
N-Butylbenzene	mg/kg																					
N-Propylbenzene	mg/kg																					
Ortho-Xylene	mg/kg																					
Propionitrile	mg/kg																					
sec-Butylbenzene	mg/kg																					
Styrene	mg/kg																					
tert-Butylbenzene	mg/kg																					
Tetrachloroethene	mg/kg									0.001	U	0.001	U	0.001	U	0.001	U	0.85		1.7		
Tetrahydrofuran	mg/kg																					
Toluene	mg/kg									0.001	U	0.003		0.002		0.001	U	2.4		0.055	U	
trans-1,2-Dichloroethene	mg/kg									0.001	U	0.001	U	0.001	U	0.001	U	0.062	U	0.055	U	
trans-1,3-Dichloropropene	mg/kg									0.001	U	0.001	U	0.001	U	0.001	U	0.062	U	0.055	U	
Trichloroethene	mg/kg									0.001	U	0.001	U	0.001	U	0.001	U	0.062	U	0.055	U	
Trichlorofluoromethane	mg/kg									0.002	U	0.004		0.004		0.002	U	0.18		1.7		
Vinyl Chloride	mg/kg									0.001	U	0.001	U	0.001	U	0.001	U	0.062	U	0.055	U	
Vinyl Fluoride	mg/kg																					
Xylenes	mg/kg									0.001	U	0.001		0.002		0.001	U	5.2		0.055	U	

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	21586007	21586008	21586009	21586011	21586012	21586014	21586015	21586016	21586017	21586019	
Location ID	D15-BOR-11	D15-BOR-11	D15-BOR-11	D15-BOR-12	D15-BOR-12	D15-BOR-13	D15-BOR-13	D15-BOR-13	D15-BOR-13	D15-BOR-13	E16-BOR-01
Depth Interval (ft)	6.50-7.00	8.00-8.50	11.50-12.00	2.00-2.50	5.00-5.50	0.50-1.00	3.00-3.50	12.00-12.50	14.00-14.50	5.50-6.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Date	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/26/2009	
Chemical Class	Units										
<b>General Chemistry</b>											
Black Carbon	mg/kg										
Percent Moisture	%	28.1	15.6	14.4	10.3	15.1		14.7	14.1	15.1	12.5
Percent Solids	%										
Total Organic Carbon	mg/kg										
<b>Metals</b>											
Aluminum	mg/kg										
Antimony	mg/kg										
Arsenic	mg/kg										
Barium	mg/kg										
Beryllium	mg/kg										
Cadmium	mg/kg										
Calcium	mg/kg										
Chromium	mg/kg										
Cobalt	mg/kg										
Copper	mg/kg										
Iron	mg/kg										
Lead	mg/kg										
Magnesium	mg/kg										
Manganese	mg/kg										
Mercury	mg/kg										
Nickel	mg/kg										
Potassium	mg/kg										
Selenium	mg/kg										
Silver	mg/kg										
Sodium	mg/kg										
Thallium	mg/kg										
Tin	mg/kg										
Titanium	mg/kg										
Vanadium	mg/kg										
Zinc	mg/kg										
<b>Metals - AVS/SEM</b>											
Acid Volatile Sulfide	umol/g										
Arsenic	umol/g										
Cadmium	umol/g										
Copper	umol/g										
Lead	umol/g										
Zinc	umol/g										
<b>Metals - Leachate</b>											
Lead	ug/L										
<b>Per and Polyfluorinated Organic Substances</b>											
Perfluorobutane Sulfonic Acid	mg/kg										
Perfluorobutanoic Acid	mg/kg										
Perfluorodecane Sulfonic Acid	mg/kg										
Perfluorodecanoic Acid	mg/kg										
Perfluorododecanoic Acid	mg/kg										
Perfluoroheptanoic Acid	mg/kg										
Perfluorohexane Sulfonic Acid	mg/kg										
Perfluorohexanoic Acid	mg/kg										
Perfluorononanoic Acid	mg/kg										
Perfluorooctane Sulfonamide	mg/kg										
Perfluoropentanoic Acid	mg/kg										
Perfluorotetradecanoic Acid	mg/kg										
Perfluorotridecanoic Acid	mg/kg										
Perfluoroundecanoic Acid	mg/kg										
PFOA	mg/kg										
PFOA(trial)	mg/kg										
PFOS	mg/kg										
PFOS (trial)	mg/kg										
<b>Pesticides and Herbicides</b>											
4,4'-DDD	mg/kg										
4,4'-DDE	mg/kg										
4,4'-DDT	mg/kg										
Aldrin	mg/kg										
Alpha Chlordane	mg/kg										
Alpha-BHC	mg/kg										
beta-BHC	mg/kg										
delta-BHC	mg/kg										
Dieldrin	mg/kg										
Endosulfan I	mg/kg										
Endosulfan II	mg/kg										
Endosulfan Sulfate	mg/kg										
Endrin	mg/kg										
Endrin Aldehyde	mg/kg										
Endrin Ketone	mg/kg										
Gamma Chlordane	mg/kg										

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	21586007	21586008	21586009	21586011	21586012	21586014	21586015	21586016	21586017	21586019	
Location ID	D15-BOR-11	D15-BOR-11	D15-BOR-11	D15-BOR-12	D15-BOR-12	D15-BOR-13	D15-BOR-13	D15-BOR-13	D15-BOR-13	E16-BOR-01	
Depth Interval (ft)	6.50-7.00	8.00-8.50	11.50-12.00	2.00-2.50	5.00-5.50	0.50-1.00	3.00-3.50	12.00-12.50	14.00-14.50	5.50-6.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Date	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/26/2009	
Chemical Class											
Chemical	Units										
Heptachlor	mg/kg										
Heptachlor Epoxide	mg/kg										
Lindane	mg/kg										
Methoxychlor	mg/kg										
Toxaphene	mg/kg										
<b>Physical Properties</b>											
0.001 MM	% PASSING										
0.002 MM	% PASSING										
0.005 MM	% PASSING										
0.02 MM	% PASSING										
0.05 MM	% PASSING										
0.064 MM	% PASSING										
0.075 MM	% PASSING										
0.15 MM	% PASSING										
0.3 MM	% PASSING										
0.6 MM	% PASSING										
1.18 MM	% PASSING										
19 MM	% PASSING										
2.36 MM	% PASSING										
3.35 MM	% PASSING										
37.5 MM	% PASSING										
4.75 MM	% PASSING										
75 MM	% PASSING										
Density	PCF										
<b>Polychlorinated Biphenyls - TICs</b>											
1,1'-Biphenyl, 2,3-dichloro-	mg/kg										
Unknown Biphenyl	mg/kg										
<b>Polychlorinated Biphenyls</b>											
Heptachlorobiphenyl	mg/kg										
Hexachlorobiphenyl	mg/kg										
Octachlorobiphenyl	mg/kg										
PCB 1	mg/kg										
PCB 10	mg/kg										
PCB 100	mg/kg										
PCB 101	mg/kg										
PCB 102	mg/kg										
PCB 103	mg/kg										
PCB 104	mg/kg										
PCB 105	mg/kg										
PCB 106	mg/kg										
PCB 107	mg/kg										
PCB 107/123	mg/kg										
PCB 108	mg/kg										
PCB 109	mg/kg										
PCB 11	mg/kg										
PCB 110	mg/kg										
PCB 111	mg/kg										
PCB 112	mg/kg										
PCB 113	mg/kg										
PCB 114	mg/kg										
PCB 115	mg/kg										
PCB 116	mg/kg										
PCB 117	mg/kg										
PCB 118	mg/kg										
PCB 119	mg/kg										
PCB 12	mg/kg										
PCB 120	mg/kg										
PCB 121	mg/kg										
PCB 121/95/88	mg/kg										
PCB 122	mg/kg										
PCB 123	mg/kg										
PCB 124	mg/kg										
PCB 125	mg/kg										
PCB 126	mg/kg										
PCB 127	mg/kg										
PCB 128	mg/kg										
PCB 129	mg/kg										
PCB 129/158	mg/kg										
PCB 13	mg/kg										
PCB 130	mg/kg										
PCB 130/164	mg/kg										
PCB 131	mg/kg										
PCB 132	mg/kg										
PCB 133	mg/kg										
PCB 134	mg/kg										
PCB 135	mg/kg										

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	21586007	21586008	21586009	21586011	21586012	21586014	21586015	21586016	21586017	21586019
Location ID	D15-BOR-11	D15-BOR-11	D15-BOR-11	D15-BOR-12	D15-BOR-12	D15-BOR-13	D15-BOR-13	D15-BOR-13	D15-BOR-13	E16-BOR-01
Depth Interval (ft)	6.50-7.00	8.00-8.50	11.50-12.00	2.00-2.50	5.00-5.50	0.50-1.00	3.00-3.50	12.00-12.50	14.00-14.50	5.50-6.00
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Date	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/26/2009
Chemical Class										
Chemical	Units									
PCB 136	mg/kg									
PCB 137	mg/kg									
PCB 138	mg/kg									
PCB 139	mg/kg									
PCB 14	mg/kg									
PCB 140	mg/kg									
PCB 141	mg/kg									
PCB 142	mg/kg									
PCB 143	mg/kg									
PCB 143/139	mg/kg									
PCB 144	mg/kg									
PCB 145	mg/kg									
PCB 146	mg/kg									
PCB 147	mg/kg									
PCB 148	mg/kg									
PCB 149	mg/kg									
PCB 15	mg/kg									
PCB 150	mg/kg									
PCB 151	mg/kg									
PCB 152	mg/kg									
PCB 153	mg/kg									
PCB 154	mg/kg									
PCB 155	mg/kg									
PCB 156	mg/kg									
PCB 157	mg/kg									
PCB 158	mg/kg									
PCB 159	mg/kg									
PCB 16	mg/kg									
PCB 160	mg/kg									
PCB 161	mg/kg									
PCB 162	mg/kg									
PCB 163	mg/kg									
PCB 163/160	mg/kg									
PCB 164	mg/kg									
PCB 165	mg/kg									
PCB 166	mg/kg									
PCB 167	mg/kg									
PCB 168	mg/kg									
PCB 169	mg/kg									
PCB 17	mg/kg									
PCB 170	mg/kg									
PCB 171	mg/kg									
PCB 172	mg/kg									
PCB 173	mg/kg									
PCB 174	mg/kg									
PCB 175	mg/kg									
PCB 176	mg/kg									
PCB 177	mg/kg									
PCB 178	mg/kg									
PCB 179	mg/kg									
PCB 18	mg/kg									
PCB 180	mg/kg									
PCB 181	mg/kg									
PCB 182	mg/kg									
PCB 182/175	mg/kg									
PCB 183	mg/kg									
PCB 184	mg/kg									
PCB 185	mg/kg									
PCB 186	mg/kg									
PCB 187	mg/kg									
PCB 188	mg/kg									
PCB 189	mg/kg									
PCB 19	mg/kg									
PCB 190	mg/kg									
PCB 191	mg/kg									
PCB 192	mg/kg									
PCB 193	mg/kg									
PCB 194	mg/kg									
PCB 195	mg/kg									
PCB 196	mg/kg									
PCB 197	mg/kg									
PCB 198	mg/kg									
PCB 199	mg/kg									
PCB 2	mg/kg									
PCB 20	mg/kg									
PCB 200	mg/kg									

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	21586007	21586008	21586009	21586011	21586012	21586014	21586015	21586016	21586017	21586019
Location ID	D15-BOR-11	D15-BOR-11	D15-BOR-11	D15-BOR-12	D15-BOR-12	D15-BOR-13	D15-BOR-13	D15-BOR-13	D15-BOR-13	E16-BOR-01
Depth Interval (ft)	6.50-7.00	8.00-8.50	11.50-12.00	2.00-2.50	5.00-5.50	0.50-1.00	3.00-3.50	12.00-12.50	14.00-14.50	5.50-6.00
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Date	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/26/2009
Chemical Class										
Chemical	Units									
PCB 201	mg/kg									
PCB 202	mg/kg									
PCB 203	mg/kg									
PCB 204	mg/kg									
PCB 204/200	mg/kg									
PCB 205	mg/kg									
PCB 206	mg/kg									
PCB 207	mg/kg									
PCB 208	mg/kg									
PCB 209	mg/kg									
PCB 21	mg/kg									
PCB 21/20	mg/kg									
PCB 22	mg/kg									
PCB 23	mg/kg									
PCB 24	mg/kg									
PCB 25	mg/kg									
PCB 26	mg/kg									
PCB 27	mg/kg									
PCB 28	mg/kg									
PCB 29	mg/kg									
PCB 3	mg/kg									
PCB 30	mg/kg									
PCB 31	mg/kg									
PCB 32	mg/kg									
PCB 33	mg/kg									
PCB 34	mg/kg									
PCB 35	mg/kg									
PCB 36	mg/kg									
PCB 37	mg/kg									
PCB 38	mg/kg									
PCB 39	mg/kg									
PCB 4	mg/kg									
PCB 4/10	mg/kg									
PCB 40	mg/kg									
PCB 41	mg/kg									
PCB 42	mg/kg									
PCB 43	mg/kg									
PCB 44	mg/kg									
PCB 45	mg/kg									
PCB 46	mg/kg									
PCB 47	mg/kg									
PCB 48	mg/kg									
PCB 49	mg/kg									
PCB 5	mg/kg									
PCB 50	mg/kg									
PCB 51	mg/kg									
PCB 52	mg/kg									
PCB 53	mg/kg									
PCB 54	mg/kg									
PCB 55	mg/kg									
PCB 56	mg/kg									
PCB 57	mg/kg									
PCB 58	mg/kg									
PCB 59	mg/kg									
PCB 6	mg/kg									
PCB 60	mg/kg									
PCB 61	mg/kg									
PCB 62	mg/kg									
PCB 63	mg/kg									
PCB 64	mg/kg									
PCB 65	mg/kg									
PCB 65/75/62	mg/kg									
PCB 66	mg/kg									
PCB 67	mg/kg									
PCB 67/58	mg/kg									
PCB 68	mg/kg									
PCB 68/64	mg/kg									
PCB 69	mg/kg									
PCB 7	mg/kg									
PCB 70	mg/kg									
PCB 71	mg/kg									
PCB 72	mg/kg									
PCB 73	mg/kg									
PCB 73/46	mg/kg									
PCB 74	mg/kg									
PCB 75	mg/kg									

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	21586007	21586008	21586009	21586011	21586012	21586014	21586015	21586016	21586017	21586019	
Location ID	D15-BOR-11	D15-BOR-11	D15-BOR-11	D15-BOR-12	D15-BOR-12	D15-BOR-13	D15-BOR-13	D15-BOR-13	D15-BOR-13	E16-BOR-01	
Depth Interval (ft)	6.50-7.00	8.00-8.50	11.50-12.00	2.00-2.50	5.00-5.50	0.50-1.00	3.00-3.50	12.00-12.50	14.00-14.50	5.50-6.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Date	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/26/2009	
Chemical Class	Units										
PCB 76	mg/kg										
PCB 77	mg/kg										
PCB 78	mg/kg										
PCB 79	mg/kg										
PCB 8	mg/kg										
PCB 80	mg/kg										
PCB 81	mg/kg										
PCB 82	mg/kg										
PCB 83	mg/kg										
PCB 83/125/112	mg/kg										
PCB 84	mg/kg										
PCB 85	mg/kg										
PCB 86	mg/kg										
PCB 86/109	mg/kg										
PCB 87	mg/kg										
PCB 87/111	mg/kg										
PCB 88	mg/kg										
PCB 89	mg/kg										
PCB 89/84	mg/kg										
PCB 9	mg/kg										
PCB 90	mg/kg										
PCB 91	mg/kg										
PCB 92	mg/kg										
PCB 93	mg/kg										
PCB 94	mg/kg										
PCB 95	mg/kg										
PCB 96	mg/kg										
PCB 97	mg/kg										
PCB 98	mg/kg										
PCB 99	mg/kg										
PCB-100/93	mg/kg										
PCB-107/124	mg/kg										
PCB-108/119/86/97/125/87	mg/kg										
PCB-113/90/101	mg/kg										
PCB-116/85	mg/kg										
PCB-128/166	mg/kg										
PCB-13/12	mg/kg										
PCB-139/140	mg/kg										
PCB-147/149	mg/kg										
PCB-151/135	mg/kg										
PCB-153/168	mg/kg										
PCB-156/157	mg/kg										
PCB-163/138/129	mg/kg										
PCB-171/173	mg/kg										
PCB-180/193	mg/kg										
PCB-198/199	mg/kg										
PCB-21/33	mg/kg										
PCB-26/29	mg/kg										
PCB-28/20	mg/kg										
PCB-30/18	mg/kg										
PCB-44/47/65	mg/kg										
PCB-50/53	mg/kg										
PCB-59/62/75	mg/kg										
PCB-61/70/74/76	mg/kg										
PCB-69/49	mg/kg										
PCB-71/40	mg/kg										
PCB-90/101	mg/kg										
Pentachlorobiphenyl	mg/kg										
Tetrachlorobiphenyl	mg/kg										
Total Decachlorobiphenyls (congeners)	mg/kg										
Total Dichlorobiphenyls (congeners)	mg/kg										
Total Heptachlorobiphenyls (congeners)	mg/kg										
Total Hexachlorobiphenyls (congeners)	mg/kg										
Total Monochlorobiphenyls (congeners)	mg/kg										
Total Nonachlorobiphenyls (congeners)	mg/kg										
Total Octachlorobiphenyls (congeners)	mg/kg										
Total PCB (congeners)	mg/kg										
Total Pentachlorobiphenyls (congeners)	mg/kg										
Total Tetrachlorobiphenyls (congeners)	mg/kg										
Total Trichlorobiphenyls (congeners)	mg/kg										
Trichlorobiphenyl (total)	mg/kg										
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>											
Benzo[e]pyrene	mg/kg										
Chrysene, 1-methyl-	mg/kg										
Naphthalene, 1-methyl-	mg/kg										
Pyrene, 1-methyl-	mg/kg										

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA						
Field Sample ID	21586007	21586008	21586009	21586011	21586012	21586014	21586015	21586016	21586017	21586019							
Location ID	D15-BOR-11	D15-BOR-11	D15-BOR-11	D15-BOR-12	D15-BOR-12	D15-BOR-13	D15-BOR-13	D15-BOR-13	D15-BOR-13	E16-BOR-01							
Depth Interval (ft)	6.50-7.00	8.00-8.50	11.50-12.00	2.00-2.50	5.00-5.50	0.50-1.00	3.00-3.50	12.00-12.50	14.00-14.50	5.50-6.00							
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS							
Date	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/26/2009							
Chemical Class																	
Chemical	Units																
<b>Polycyclic Aromatic Hydrocarbons</b>																	
Acenaphthene	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.039	U	0.039	U	0.038	U
Acenaphthylene	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.039	U	0.039	U	0.038	U
Anthracene	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.039	U	0.039	U	0.038	U
Benzo(A)Anthracene	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.039	U	0.039	U	0.038	U
Benzo(B)Fluoranthene	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.039	U	0.039	U	0.038	U
Benzo(G,H,I)Perylene	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.039	U	0.039	U	0.038	U
Benzo(K)Fluoranthene	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.039	U	0.039	U	0.038	U
Benzo(A)Pyrene	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.039	U	0.039	U	0.038	U
Chrysene	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.039	U	0.039	U	0.038	U
Dibenz(A,H)Anthracene	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.039	U	0.039	U	0.038	U
Fluoranthene	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.039	U	0.039	U	0.038	U
Fluorene	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.039	U	0.039	U	0.038	U
Indeno (1,2,3-CD) Pyrene	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.039	U	0.039	U	0.038	U
Naphthalene	mg/kg	0.046	U	0.054	U	0.044	U	0.037	U	0.039	U	0.039	U	0.039	U	0.2	U
Phenanthrene	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.039	U	0.039	U	0.038	U
Pyrene	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.039	U	0.039	U	0.038	U
Total PAHs (Detections + 1/2 MDL)	mg/kg	0.368	U	0.3465	U	0.3365	U	0.296	U	0.312	U	0.312	U	0.312	U	0.485	U
Total PAHs (Detections Only)	mg/kg	0.368	U	0.054	U	0.044	U	0.296	U	0.312	U	0.312	U	0.312	U	0.2	U
<b>Semivolatile Organic Compounds - TICs</b>																	
1,2,4-Trithiolane	mg/kg																
1,4-Benzenediol, 2-chloro-	mg/kg																
11H-Benzo[blfluorene	mg/kg																
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg																
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg																
3-PENTEN-2-ONE, 4-METHYL-	mg/kg																
7H-Benz[de]anthracen-7-one	mg/kg																
9,10-Anthracenedione	mg/kg																
9-Octadecenamamide, (Z)-	mg/kg																
Acetamide, 2-chloro-N-(ethox	mg/kg																
Alachlor	mg/kg																
Benzenamine, 3-methyl-	mg/kg																
Benzenamine, 4,4',4"-methy	mg/kg																
Benzenamine, 4,4'-methyleneb	mg/kg																
Benzene, 1,2,3,4-tetrachloro	mg/kg																
Benzene, 1,2,3,5-tetrachloro	mg/kg																
Benzene, 1,2,3-trichloro-	mg/kg																
Benzene, 1,3,5-trichloro-	mg/kg																
Benzene, 1,3-bis(1-methyleth	mg/kg																
Benzene, 1,4-bis(1-methyleth	mg/kg																
Benzofuran, 2,3-dihydro-	mg/kg																
CYCLIC OCTAATOMIC SULFUR	mg/kg																
Diphenyl Ether	mg/kg																
Docosane	mg/kg																
Heneicosane	mg/kg																
Hexacosane	mg/kg																
Hexadecane	mg/kg																
Hexatriacontane	mg/kg																
m-Chloroaniline	mg/kg																
N,N-Diethylaniline	mg/kg																
n-Hexadecanoic acid	mg/kg																
Nonadecane	mg/kg																
o-Chloroaniline	mg/kg																
Octacosane	mg/kg																
Octadecane	mg/kg																
Octadecane, 1-chloro-	mg/kg																
Octadecanoic acid	mg/kg																
Parachlorophenol	mg/kg																
Pentadecane	mg/kg																
Perylene	mg/kg																
Phenol, 2,5-dichloro-	mg/kg																
Phenol, 3-chloro-	mg/kg																
Phenol, 4,4'-(1-methylethyl)	mg/kg																
Tetracosane	mg/kg																
Tetradecane	mg/kg																
Tetraethylene glycol	mg/kg																
Total SVOC TICs	mg/kg																
Triacontane	mg/kg																
Tributyl phosphate	mg/kg																
Tridecanoic acid	mg/kg																
Triphenyl phosphate	mg/kg																
UNKNOWN	mg/kg																
Unknown acid	mg/kg																
Unknown Alcohol	mg/kg																
Unknown Aldol Condensate	mg/kg																
UNKNOWN ALKANE	mg/kg																

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	
Field Sample ID	21586007	21586008	21586009	21586011	21586012	21586014	21586015	21586016	21586017	21586019		
Location ID	D15-BOR-11	D15-BOR-11	D15-BOR-11	D15-BOR-12	D15-BOR-12	D15-BOR-13	D15-BOR-13	D15-BOR-13	D15-BOR-13	D15-BOR-13	E16-BOR-01	
Depth Interval (ft)	6.50-7.00	8.00-8.50	11.50-12.00	2.00-2.50	5.00-5.50	0.50-1.00	3.00-3.50	12.00-12.50	14.00-14.50	5.50-6.00		
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS		
Date	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/26/2009		
Chemical Class												
Chemical	Units											
Unknown Alkene	mg/kg											
Unknown Amide	mg/kg											
Unknown Amine	mg/kg											
UNKNOWN AROMATIC	mg/kg											
Unknown Carboxylic Acid	mg/kg											
Unknown Cycloalkane	mg/kg											
Unknown Hydrocarbon	mg/kg											
Unknown Ketone	mg/kg											
Unknown PAH	mg/kg											
UNKNOWN SILOXANE	mg/kg											
<b>Semivolatile Organic Compounds</b>												
1,2,4-Trichlorobenzene	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.89
1,2-Diphenylhydrazine	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.038
1,4-Dioxane	mg/kg											
1-Naphthylamine	mg/kg	0.23	U	0.2	U	0.19	U	0.19	U	0.2	U	0.19
2,3,4,6-Tetrachlorophenol	mg/kg											
2,4,5-Trichlorophenol	mg/kg											
2,4,6-Trichlorophenol	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.038
2,4-Dichlorophenol	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.038
2,4-Dimethylphenol	mg/kg	0.093	U	0.079	U	0.078	U	0.074	U	0.079	U	0.076
2,4-Dinitrophenol	mg/kg	0.93	U	0.79	U	0.78	U	0.74	U	0.79	U	0.76
2,4-Dinitrotoluene	mg/kg	0.093	U	0.079	U	0.078	U	0.074	U	0.079	U	0.076
2,6-Dinitrotoluene	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.038
2-Chloronaphthalene	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.038
2-Chlorophenol	mg/kg	0.1		0.092		0.039		0.037		0.039		0.038
2-Methylnaphthalene	mg/kg											
2-Methylphenol (O-Cresol)	mg/kg											
2-Naphthylamine	mg/kg	0.23	U	0.2	U	0.19	U	0.19	U	0.2	U	0.19
2-Nitroaniline	mg/kg											
2-Nitrophenol	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.038
3,3'-Dichlorobenzidine	mg/kg	0.14	U	0.12	U	0.12	U	0.11	U	0.12	U	0.11
3,3'-Dimethylbenzidine	mg/kg											
3-Nitroaniline	mg/kg											
4,6-Dinitro-2-Methylphenol	mg/kg	0.23	U	0.2	U	0.19	U	0.19	U	0.2	U	0.19
4-Aminobiphenyl	mg/kg	0.23	U	0.2	U	0.19	U	0.19	U	0.2	U	0.19
4-Bromophenyl Phenyl Ether	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.038
4-Chloro-3-Methylphenol	mg/kg	0.093	U	0.079	U	0.078	U	0.074	U	0.079	U	0.076
4-Chloroaniline	mg/kg	0.093	U	0.079	U	0.078	U	0.074	U	0.079	U	0.076
4-Chlorophenyl Phenyl Ether	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.038
4-Methylphenol (P-Cresol)	mg/kg											
4-Nitroaniline	mg/kg											
4-Nitrophenol	mg/kg	0.23	U	0.2	U	0.19	U	0.19	U	0.2	U	0.19
Acetophenone	mg/kg											
Aniline	mg/kg	0.23	U	0.2	U	0.19	U	0.19	U	0.2	U	0.19
Benzidine	mg/kg	1.6	U	1.4	U	1.4	U	1.3	U	1.4	U	1.3
Biphenyl	mg/kg											
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg											
Bis(2-Chloroethoxy)Methane	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.038
Bis(2-Chloroethyl)Ether	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.038
Bis(2-Chloroisopropyl)Ether	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.038
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.093	U	0.079	U	0.097	U	0.074	U	0.1	U	0.076
Butyl Benzyl Phthalate	mg/kg	0.093	U	0.079	U	0.078	U	0.074	U	0.079	U	0.076
Carbazole	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.038
Dibenzofuran	mg/kg											
Diethyl Phthalate	mg/kg	0.093	U	0.079	U	0.078	U	0.074	U	0.079	U	0.076
Dimethyl Phthalate	mg/kg	0.093	U	0.079	U	0.078	U	0.074	U	0.079	U	0.076
Di-N-Butyl Phthalate	mg/kg	0.093	U	0.079	U	0.078	U	0.074	U	0.079	U	0.076
Diphenyl Ether	mg/kg											
Hexachlorobenzene	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.038
Hexachlorobutadiene	mg/kg	0.093	U	0.079	U	0.078	U	0.074	U	0.079	U	0.076
Hexachlorocyclopentadiene	mg/kg	0.23	U	0.2	U	0.19	U	0.19	U	0.2	U	0.19
Hexachloroethane	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.038
Hexachloropropylene	mg/kg											
Isophorone	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.038
N-Dioctyl Phthalate	mg/kg	0.093	U	0.079	U	0.078	U	0.074	U	0.079	U	0.076
Nitrobenzene	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.038
N-Nitrosodimethylamine	mg/kg	0.093	U	0.079	U	0.078	U	0.074	U	0.079	U	0.076
N-Nitrosodi-N-Propylamine	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.038
N-Nitrosodiphenylamine	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.038
O-Toluidine	mg/kg	0.28	U	0.24	U	0.23	U	0.22	U	0.23	U	0.23
Parathion	mg/kg											
Pentachlorobenzene	mg/kg											
Pentachlorophenol	mg/kg	0.23	U	0.2	U	0.19	U	0.19	U	0.2	U	0.19
Phenol	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.038
<b>Volatile Organic Compounds - TICs</b>												
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg											

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA														
Field Sample ID	21586007	21586008	21586009	21586011	21586012	21586014	21586015	21586016	21586017	21586019															
Location ID	D15-BOR-11	D15-BOR-11	D15-BOR-11	D15-BOR-12	D15-BOR-12	D15-BOR-13	D15-BOR-13	D15-BOR-13	D15-BOR-13	E16-BOR-01															
Depth Interval (ft)	6.50-7.00	8.00-8.50	11.50-12.00	2.00-2.50	5.00-5.50	0.50-1.00	3.00-3.50	12.00-12.50	14.00-14.50	5.50-6.00															
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS															
Date	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/26/2009															
Chemical Class																									
Chemical	Units																								
1-Butene	mg/kg																								
1-Heptene	mg/kg																								
1-Propene, 2-methyl-	mg/kg																								
Azulene	mg/kg																								
BENZENE, 1,2,4-TRICHLORO-	mg/kg																								
BENZENE, 1,2-DICHLORO-	mg/kg																								
BENZENE, 1,4-DICHLORO-	mg/kg																								
Camphene	mg/kg																								
CYCLOHEXANE	mg/kg																								
Cyclohexane, methyl-	mg/kg																								
Cyclotrisiloxane, hexamethyl	mg/kg																								
Diphenyl Ether	mg/kg																								
Ethane, 1,1,2,2-tetrachloro-	mg/kg																								
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg																								
Ethane, 1,2-dichloro-1,1-dif	mg/kg																								
Ethene, 1,1-dichloro-2,2-dif	mg/kg																								
Hexane, 2-methyl-	mg/kg																								
Hexane, 3-methyl-	mg/kg																								
METHANE, CHLOROFLUORO-	mg/kg																								
Naphthalene	mg/kg																								
NAPHTHALENE, 2-METHYL-	mg/kg																								
Nonanal	mg/kg																								
Norflurane	mg/kg																								
Pentane, 2,3-dimethyl-	mg/kg																								
Phenol, 4-(1,1,3,3-tetrameth	mg/kg																								
Propene	mg/kg																								
Sulfur dioxide	mg/kg																								
Tridecane	mg/kg																								
UNKNOWN	mg/kg																								
UNKNOWN ALICYCLIC	mg/kg																								
UNKNOWN ALIPHATIC	mg/kg																								
UNKNOWN ALKANE	mg/kg																								
UNKNOWN AROMATIC	mg/kg																								
UNKNOWN SILOXANE	mg/kg																								
<b>Volatile Organic Compounds</b>																									
1,1,1,2-Tetrachloroethane	mg/kg																								
1,1,1-Trichloroethane	mg/kg	0.066	U	0.001	U	0.064	U	0.001	U	0.001	U	0.055	U												
1,1,1-Trichlorotrifluoroethane	mg/kg																								
1,1,2,2-Tetrachloroethane	mg/kg	0.066	U	0.002	U	0.064	U	0.001	U	0.001	U	0.011	U	0.008	U	0.055	U								
1,1,2-Trichloroethane	mg/kg	0.066	U	0.001	U	0.064	U	0.001	U	0.001	U	0.001	U	0.001	U	0.055	U								
1,1,2-Trichlorotrifluoroethane	mg/kg	7.1	U	0.27	U	32	U	0.011	U	0.027	U	0.017	U	0.97	U	0.07	U	0.23	U	0.11	U				
1,1,2-Trifluoroethane	mg/kg																								
1,1-Dichloro-1-Fluoroethane	mg/kg																								
1,1-Dichloroethane	mg/kg	0.066	U	0.001	U	0.064	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.055	U				
1,1-Dichloroethene	mg/kg	0.066	U	0.001	U	0.088	U	0.001	U	0.001	U	0.001	U	0.011	U	0.001	U	0.001	U	0.055	U				
1,1-Dichloropropene	mg/kg																								
1,2,4-Trimethylbenzene	mg/kg																								
1,2-Dibromoethane (EDB)	mg/kg																								
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg																								
1,2-Dichloro-1-Fluoroethane	mg/kg																								
1,2-Dichlorobenzene	mg/kg	1.1	U	0.2	U	0.32	U	0.037	U	0.039	U	0.001	U	0.28	U	0.039	U	0.039	U	0.039	U	9.9	U		
1,2-Dichloroethane	mg/kg	0.066	U	0.001	U	0.064	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.003	U	0.001	U	0.055	U		
1,2-Dichloroethene	mg/kg																								
1,2-Dichloropropane	mg/kg	0.066	U	0.001	U	0.064	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.055	U		
1,2-Dichlorotetrafluoroethane	mg/kg																								
1,3,5-Trimethylbenzene	mg/kg																								
1,3-Dichlorobenzene	mg/kg	0.046	U	0.039	U	0.039	U	0.037	U	0.039	U	0.039	U	0.039	U	0.039	U	0.039	U	0.039	U	0.039	U	0.58	U
1,4-Dichlorobenzene	mg/kg	1.4	U	0.19	U	0.21	U	0.037	U	0.039	U	0.039	U	0.039	U	0.039	U	0.039	U	0.039	U	0.039	U	13	U
1-Chloro-1,1-Difluoroethane	mg/kg																								
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg																								
2-Chloro-1,1,1-Trifluoroethane	mg/kg																								
2-Chloroethyl Vinyl Ether	mg/kg	0.13	U			0.13	U																	0.11	U
2-Chlorotoluene	mg/kg																								
2-Hexanone	mg/kg																								
4-Chlorotoluene	mg/kg																								
4-Isopropyltoluene	mg/kg																								
Acetone	mg/kg	0.47	U	0.065	U	1.1	U	0.02	U	0.037	U	0.013	U	0.1	U	0.023	U	0.022	U	0.022	U	0.38	U	0.38	U
Acrolein	mg/kg	1.3	U	0.023	U	1.3	U	0.022	U	0.028	U	0.02	U	0.022	U	0.028	U	0.028	U	0.028	U	0.025	U	1.1	U
Acrylonitrile	mg/kg	0.27	U	0.005	U	0.26	U	0.004	U	0.006	U	0.004	U	0.004	U	0.006	U	0.006	U	0.006	U	0.005	U	0.22	U
Benzene	mg/kg	1.2	U	0.022	U	0.33	U	0.0005	U	0.03	U	0.0005	U	0.006	U	0.0007	U	0.0006	U	0.0007	U	0.0006	U	0.027	U
Bromodichloromethane	mg/kg	0.066	U	0.001	U	0.064	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.055	U
Bromoform	mg/kg	0.066	U	0.001	U	0.064	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.055	U
Carbon Disulfide	mg/kg	0.51	U	0.006	U	0.078	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.055	U
Carbon Tetrachloride	mg/kg	0.066	U	0.001	U	0.078	U	0.001	U	0.005	U	0.001	U	0.001	U	0.038	U	0.001	U	0.001	U	0.001	U	0.25	U
CFC-1113	mg/kg																								
Chlorobenzene	mg/kg	14	U	0.28	U	13	U	0.002	U	0.19	U	0.001	U	0.098	U	0.003	U	0.003	U	0.003	U	0.003	U	0.63	U

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA		
	Field Sample ID	21586007	21586008	21586009	21586011	21586012	21586014	21586015	21586016	21586017	21586019		
Chemical	Location ID	D15-BOR-11	D15-BOR-11	D15-BOR-11	D15-BOR-12	D15-BOR-12	D15-BOR-13	D15-BOR-13	D15-BOR-13	D15-BOR-13	E16-BOR-01		
Units	Depth Interval (ft)	6.50-7.00	8.00-8.50	11.50-12.00	2.00-2.50	5.00-5.50	0.50-1.00	3.00-3.50	12.00-12.50	14.00-14.50	5.50-6.00		
	Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS		
	Date	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/27/2009	3/26/2009		
Chlorodibromomethane	mg/kg	0.066	U	0.001	U	0.064	U	0.001	U	0.001	U	0.055	U
Chlorodifluoromethane	mg/kg												
Chlorofluoromethane	mg/kg												
Chloroform	mg/kg	0.32		0.007		0.16		0.004		0.007		0.001	U
Chloropentafluoroethane	mg/kg												
cis-1,2-Dichloroethene	mg/kg	0.066	U	0.001	U	0.064	U	0.001	U	0.001	U	0.013	
cis-1,3-Dichloropropene	mg/kg	0.066	U	0.001	U	0.064	U	0.001	U	0.001	U	0.001	U
Cumene	mg/kg												
Dichlorodifluoromethane	mg/kg	0.13	U	0.002	U	0.13	U	0.002	U	0.003	U	0.006	
Dichlorofluoromethane	mg/kg	2.8		0.022		0.13	U	0.003		0.003	U	0.008	
Ethane	ug/L												
Ethyl Chloride	mg/kg	0.13	U	0.002	U	0.13	U	0.002	U	0.003	U	0.003	U
Ethylbenzene	mg/kg	0.066	U	0.001	U	0.064	U	0.001	U	0.001	U	0.001	U
Fluoromethane	mg/kg												
Hexane	mg/kg												
Isobutyl Alcohol	mg/kg												
Meta- And Para-Xylene	mg/kg												
Methacrylonitrile	mg/kg												
Methane	ug/L												
Methyl Bromide	mg/kg	0.13	U	0.002	U	0.13	U	0.002	U	0.002	U	0.002	U
Methyl Chloride	mg/kg	0.13	U	0.002	U	0.13	U	0.002	U	0.002	U	0.002	U
Methyl Ethyl Ketone	mg/kg												
Methyl Isobutyl Ketone	mg/kg												
Methyl Methacrylate	mg/kg												
Methyl Tertiary Butyl Ether	mg/kg												
Methylene Chloride	mg/kg	0.56		0.03		0.13	U	0.016		0.014		0.006	
N-Butylbenzene	mg/kg												
N-Propylbenzene	mg/kg												
Ortho-Xylene	mg/kg												
Propionitrile	mg/kg												
sec-Butylbenzene	mg/kg												
Styrene	mg/kg												
tert-Butylbenzene	mg/kg												
Tetrachloroethene	mg/kg	0.65		0.009		2		0.001	U	0.001	U	0.001	U
Tetrahydrofuran	mg/kg												
Toluene	mg/kg	0.066	U	0.002		0.064	U	0.001	U	0.001	U	0.005	
trans-1,2-Dichloroethene	mg/kg	0.066	U	0.001	U	0.064	U	0.001	U	0.001	U	0.001	U
trans-1,3-Dichloropropene	mg/kg	0.066	U	0.001	U	0.064	U	0.001	U	0.001	U	0.001	U
Trichloroethene	mg/kg	0.066	U	0.001	U	0.064	U	0.001	U	0.001	U	0.029	
Trichlorofluoromethane	mg/kg	20		0.28		18		0.011		0.048		0.005	
Vinyl Chloride	mg/kg	0.066	U	0.001	U	0.064	U	0.001	U	0.001	U	0.003	
Vinyl Fluoride	mg/kg												
Xylenes	mg/kg	0.066	U	0.001	U	0.064	U	0.001	U	0.001	U	0.008	

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	21586020	21586021	21586024	21586025	21586026	21586028	21586029	22423786	22423788	22423790	22423797	
Location ID	E16-BOR-01	E16-BOR-01	E16-BOR-02	E16-BOR-02	E16-BOR-02	D16-BOR-01	D16-BOR-01	DER1-13	DER1-14	DER1-15	DER1-13	
Depth Interval (ft)	10.50-11.00	14.50-15.00	0.50-1.00	10.00-10.50	13.00-13.50	7.00-7.50	12.50-13.00	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Date	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/27/2009	3/27/2009	9/22/2009	9/22/2009	9/22/2009	9/22/2009	
Chemical Class	Units											
<b>General Chemistry</b>												
Black Carbon	mg/kg							885	2310	185	1195	
Percent Moisture	%	20	21.8		17.4	22.2	10.2	64.1	37.5	29.8	61.1	
Percent Solids	%											
Total Organic Carbon	mg/kg							10500	315	3065	15200	
<b>Metals</b>												
Aluminum	mg/kg							20000	6860	5420		
Antimony	mg/kg							2.79	3.71	2.6		
Arsenic	mg/kg							9.25	4.26	2.82		
Barium	mg/kg							92.3	42.6	41.8		
Beryllium	mg/kg							1.19	0.48	0.307		
Cadmium	mg/kg							1.23	0.648	0.309		
Calcium	mg/kg							4220	9100	2950		
Chromium	mg/kg							49.4	21.4	20.3		
Cobalt	mg/kg							12.2	5.44	2.67		
Copper	mg/kg							36.5	18.4	11.4		
Iron	mg/kg							28500	12000	9780		
Lead	mg/kg							39.8	20.9	74.8		
Magnesium	mg/kg							5900	2200	1140		
Manganese	mg/kg							1060	262	147		
Mercury	mg/kg							0.187	0.0909	0.459		
Nickel	mg/kg							30.4	12.1	10.1		
Potassium	mg/kg							3510	1280	1000		
Selenium	mg/kg							3.26	1.52	1.38		
Silver	mg/kg							0.501	0.28	0.254		
Sodium	mg/kg							721	406	123		
Thallium	mg/kg							4.04	2.25	2.05		
Tin	mg/kg							8.84	4.23	18		
Titanium	mg/kg											
Vanadium	mg/kg							50.5	21.2	14.5		
Zinc	mg/kg							190	94.2	67		
<b>Metals - AVS/SEM</b>												
Acid Volatile Sulfide	umol/g											
Arsenic	umol/g											
Cadmium	umol/g											
Copper	umol/g											
Lead	umol/g											
Zinc	umol/g											
<b>Metals - Leachate</b>												
Lead	ug/L											
<b>Per and Polyfluorinated Organic Substances</b>												
Perfluorobutane Sulfonic Acid	mg/kg											
Perfluorobutanoic Acid	mg/kg											
Perfluorodecane Sulfonic Acid	mg/kg											
Perfluorodecanoic Acid	mg/kg											
Perfluorododecanoic Acid	mg/kg											
Perfluoroheptanoic Acid	mg/kg											
Perfluorohexane Sulfonic Acid	mg/kg											
Perfluorohexanoic Acid	mg/kg											
Perfluorononanoic Acid	mg/kg											
Perfluorooctane Sulfonamide	mg/kg											
Perfluoropentanoic Acid	mg/kg											
Perfluorotetradecanoic Acid	mg/kg											
Perfluorotridecanoic Acid	mg/kg											
Perfluoroundecanoic Acid	mg/kg											
PFOA	mg/kg											
PFOA(trial)	mg/kg											
PFOS	mg/kg											
PFOS (trial)	mg/kg											
<b>Pesticides and Herbicides</b>												
4,4'-DDD	mg/kg											
4,4'-DDE	mg/kg											
4,4'-DDT	mg/kg											
Aldrin	mg/kg											
Alpha Chlordane	mg/kg											
Alpha-BHC	mg/kg											
beta-BHC	mg/kg											
delta-BHC	mg/kg											
Dieldrin	mg/kg											
Endosulfan I	mg/kg											
Endosulfan II	mg/kg											
Endosulfan Sulfate	mg/kg											
Endrin	mg/kg											
Endrin Aldehyde	mg/kg											
Endrin Ketone	mg/kg											
Gamma Chlordane	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	21586020	21586021	21586024	21586025	21586026	21586028	21586029	22423786	22423788	22423790	22423797	
Location ID	E16-BOR-01	E16-BOR-01	E16-BOR-02	E16-BOR-02	E16-BOR-02	D16-BOR-01	D16-BOR-01	DER1-13	DER1-14	DER1-15	DER1-13	
Depth Interval (ft)	10.50-11.00	14.50-15.00	0.50-1.00	10.00-10.50	13.00-13.50	7.00-7.50	12.50-13.00	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Date	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/27/2009	3/27/2009	9/22/2009	9/22/2009	9/22/2009	9/22/2009	
Chemical Class	Units											
Heptachlor	mg/kg											
Heptachlor Epoxide	mg/kg											
Lindane	mg/kg											
Methoxychlor	mg/kg											
Toxaphene	mg/kg											
<b>Physical Properties</b>												
0.001 MM	% PASSING							11	0.5	U	0.5	U
0.002 MM	% PASSING							21	1		1.5	
0.005 MM	% PASSING							34.5	3		3	
0.02 MM	% PASSING							63	7		5	
0.05 MM	% PASSING							81.5	14		6	
0.064 MM	% PASSING							88	18		7	
0.075 MM	% PASSING							91.5	21.5		7.9	
0.15 MM	% PASSING							94.5	40.5		17.3	
0.3 MM	% PASSING							96	71.2		84.9	
0.6 MM	% PASSING							97.4	81.7		97.4	
1.18 MM	% PASSING							98.7	87.3		98.6	
19 MM	% PASSING							100	97.2		100	
2.36 MM	% PASSING							99.1	89.6		99.5	
3.35 MM	% PASSING							99.5	90.2		99.7	
37.5 MM	% PASSING							100	100		100	
4.75 MM	% PASSING							99.7	90.8		99.8	
75 MM	% PASSING							100	100		100	
Density	PCF											
<b>Polychlorinated Biphenyls - TICs</b>												
1,1'-Biphenyl, 2,3-dichloro-	mg/kg											
Unknown Biphenyl	mg/kg											
<b>Polychlorinated Biphenyls</b>												
Heptachlorobiphenyl	mg/kg											
Hexachlorobiphenyl	mg/kg											
Octachlorobiphenyl	mg/kg											
PCB 1	mg/kg											
PCB 10	mg/kg											
PCB 100	mg/kg											
PCB 101	mg/kg											
PCB 102	mg/kg											
PCB 103	mg/kg											
PCB 104	mg/kg											
PCB 105	mg/kg											
PCB 106	mg/kg											
PCB 107	mg/kg											
PCB 107/123	mg/kg											
PCB 108	mg/kg											
PCB 109	mg/kg											
PCB 11	mg/kg											
PCB 110	mg/kg											
PCB 111	mg/kg											
PCB 112	mg/kg											
PCB 113	mg/kg											
PCB 114	mg/kg											
PCB 115	mg/kg											
PCB 116	mg/kg											
PCB 117	mg/kg											
PCB 118	mg/kg											
PCB 119	mg/kg											
PCB 12	mg/kg											
PCB 120	mg/kg											
PCB 121	mg/kg											
PCB 121/95/88	mg/kg											
PCB 122	mg/kg											
PCB 123	mg/kg											
PCB 124	mg/kg											
PCB 125	mg/kg											
PCB 126	mg/kg											
PCB 127	mg/kg											
PCB 128	mg/kg											
PCB 129	mg/kg											
PCB 129/158	mg/kg											
PCB 13	mg/kg											
PCB 130	mg/kg											
PCB 130/164	mg/kg											
PCB 131	mg/kg											
PCB 132	mg/kg											
PCB 133	mg/kg											
PCB 134	mg/kg											
PCB 135	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	21586020	21586021	21586024	21586025	21586026	21586028	21586029	22423786	22423788	22423790	22423797	
Location ID	E16-BOR-01	E16-BOR-01	E16-BOR-02	E16-BOR-02	E16-BOR-02	D16-BOR-01	D16-BOR-01	DER1-13	DER1-14	DER1-15	DER1-13	
Depth Interval (ft)	10.50-11.00	14.50-15.00	0.50-1.00	10.00-10.50	13.00-13.50	7.00-7.50	12.50-13.00	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Date	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/27/2009	3/27/2009	9/22/2009	9/22/2009	9/22/2009	9/22/2009	
Chemical Class												
Chemical	Units											
PCB 136	mg/kg											
PCB 137	mg/kg											
PCB 138	mg/kg											
PCB 139	mg/kg											
PCB 14	mg/kg											
PCB 140	mg/kg											
PCB 141	mg/kg											
PCB 142	mg/kg											
PCB 143	mg/kg											
PCB 143/139	mg/kg											
PCB 144	mg/kg											
PCB 145	mg/kg											
PCB 146	mg/kg											
PCB 147	mg/kg											
PCB 148	mg/kg											
PCB 149	mg/kg											
PCB 15	mg/kg											
PCB 150	mg/kg											
PCB 151	mg/kg											
PCB 152	mg/kg											
PCB 153	mg/kg											
PCB 154	mg/kg											
PCB 155	mg/kg											
PCB 156	mg/kg											
PCB 157	mg/kg											
PCB 158	mg/kg											
PCB 159	mg/kg											
PCB 16	mg/kg											
PCB 160	mg/kg											
PCB 161	mg/kg											
PCB 162	mg/kg											
PCB 163	mg/kg											
PCB 163/160	mg/kg											
PCB 164	mg/kg											
PCB 165	mg/kg											
PCB 166	mg/kg											
PCB 167	mg/kg											
PCB 168	mg/kg											
PCB 169	mg/kg											
PCB 17	mg/kg											
PCB 170	mg/kg											
PCB 171	mg/kg											
PCB 172	mg/kg											
PCB 173	mg/kg											
PCB 174	mg/kg											
PCB 175	mg/kg											
PCB 176	mg/kg											
PCB 177	mg/kg											
PCB 178	mg/kg											
PCB 179	mg/kg											
PCB 18	mg/kg											
PCB 180	mg/kg											
PCB 181	mg/kg											
PCB 182	mg/kg											
PCB 182/175	mg/kg											
PCB 183	mg/kg											
PCB 184	mg/kg											
PCB 185	mg/kg											
PCB 186	mg/kg											
PCB 187	mg/kg											
PCB 188	mg/kg											
PCB 189	mg/kg											
PCB 19	mg/kg											
PCB 190	mg/kg											
PCB 191	mg/kg											
PCB 192	mg/kg											
PCB 193	mg/kg											
PCB 194	mg/kg											
PCB 195	mg/kg											
PCB 196	mg/kg											
PCB 197	mg/kg											
PCB 198	mg/kg											
PCB 199	mg/kg											
PCB 2	mg/kg											
PCB 20	mg/kg											
PCB 200	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	21586020	21586021	21586024	21586025	21586026	21586028	21586029	22423786	22423788	22423790	22423797	
Location ID	E16-BOR-01	E16-BOR-01	E16-BOR-02	E16-BOR-02	E16-BOR-02	D16-BOR-01	D16-BOR-01	DER1-13	DER1-14	DER1-15	DER1-13	
Depth Interval (ft)	10.50-11.00	14.50-15.00	0.50-1.00	10.00-10.50	13.00-13.50	7.00-7.50	12.50-13.00	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Date	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/27/2009	3/27/2009	9/22/2009	9/22/2009	9/22/2009	9/22/2009	
Chemical Class												
Chemical	Units											
PCB 201	mg/kg											
PCB 202	mg/kg											
PCB 203	mg/kg											
PCB 204	mg/kg											
PCB 204/200	mg/kg											
PCB 205	mg/kg											
PCB 206	mg/kg											
PCB 207	mg/kg											
PCB 208	mg/kg											
PCB 209	mg/kg											
PCB 21	mg/kg											
PCB 21/20	mg/kg											
PCB 22	mg/kg											
PCB 23	mg/kg											
PCB 24	mg/kg											
PCB 25	mg/kg											
PCB 26	mg/kg											
PCB 27	mg/kg											
PCB 28	mg/kg											
PCB 29	mg/kg											
PCB 3	mg/kg											
PCB 30	mg/kg											
PCB 31	mg/kg											
PCB 32	mg/kg											
PCB 33	mg/kg											
PCB 34	mg/kg											
PCB 35	mg/kg											
PCB 36	mg/kg											
PCB 37	mg/kg											
PCB 38	mg/kg											
PCB 39	mg/kg											
PCB 4	mg/kg											
PCB 4/10	mg/kg											
PCB 40	mg/kg											
PCB 41	mg/kg											
PCB 42	mg/kg											
PCB 43	mg/kg											
PCB 44	mg/kg											
PCB 45	mg/kg											
PCB 46	mg/kg											
PCB 47	mg/kg											
PCB 48	mg/kg											
PCB 49	mg/kg											
PCB 5	mg/kg											
PCB 50	mg/kg											
PCB 51	mg/kg											
PCB 52	mg/kg											
PCB 53	mg/kg											
PCB 54	mg/kg											
PCB 55	mg/kg											
PCB 56	mg/kg											
PCB 57	mg/kg											
PCB 58	mg/kg											
PCB 59	mg/kg											
PCB 6	mg/kg											
PCB 60	mg/kg											
PCB 61	mg/kg											
PCB 62	mg/kg											
PCB 63	mg/kg											
PCB 64	mg/kg											
PCB 65	mg/kg											
PCB 65/75/62	mg/kg											
PCB 66	mg/kg											
PCB 67	mg/kg											
PCB 67/58	mg/kg											
PCB 68	mg/kg											
PCB 68/64	mg/kg											
PCB 69	mg/kg											
PCB 7	mg/kg											
PCB 70	mg/kg											
PCB 71	mg/kg											
PCB 72	mg/kg											
PCB 73	mg/kg											
PCB 73/46	mg/kg											
PCB 74	mg/kg											
PCB 75	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	21586020	21586021	21586024	21586025	21586026	21586028	21586029	22423786	22423788	22423790	22423797	
Location ID	E16-BOR-01	E16-BOR-01	E16-BOR-02	E16-BOR-02	E16-BOR-02	D16-BOR-01	D16-BOR-01	DER1-13	DER1-14	DER1-15	DER1-13	
Depth Interval (ft)	10.50-11.00	14.50-15.00	0.50-1.00	10.00-10.50	13.00-13.50	7.00-7.50	12.50-13.00	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Date	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/27/2009	3/27/2009	9/22/2009	9/22/2009	9/22/2009	9/22/2009	
Chemical Class	Units											
PCB 76	mg/kg											
PCB 77	mg/kg											
PCB 78	mg/kg											
PCB 79	mg/kg											
PCB 8	mg/kg											
PCB 80	mg/kg											
PCB 81	mg/kg											
PCB 82	mg/kg											
PCB 83	mg/kg											
PCB 83/125/112	mg/kg											
PCB 84	mg/kg											
PCB 85	mg/kg											
PCB 86	mg/kg											
PCB 86/109	mg/kg											
PCB 87	mg/kg											
PCB 87/111	mg/kg											
PCB 88	mg/kg											
PCB 89	mg/kg											
PCB 89/84	mg/kg											
PCB 9	mg/kg											
PCB 90	mg/kg											
PCB 91	mg/kg											
PCB 92	mg/kg											
PCB 93	mg/kg											
PCB 94	mg/kg											
PCB 95	mg/kg											
PCB 96	mg/kg											
PCB 97	mg/kg											
PCB 98	mg/kg											
PCB 99	mg/kg											
PCB-100/93	mg/kg											
PCB-107/124	mg/kg											
PCB-108/119/86/97/125/87	mg/kg											
PCB-113/90/101	mg/kg											
PCB-116/85	mg/kg											
PCB-128/166	mg/kg											
PCB-13/12	mg/kg											
PCB-139/140	mg/kg											
PCB-147/149	mg/kg											
PCB-151/135	mg/kg											
PCB-153/168	mg/kg											
PCB-156/157	mg/kg											
PCB-163/138/129	mg/kg											
PCB-171/173	mg/kg											
PCB-180/193	mg/kg											
PCB-198/199	mg/kg											
PCB-21/33	mg/kg											
PCB-26/29	mg/kg											
PCB-28/20	mg/kg											
PCB-30/18	mg/kg											
PCB-44/47/65	mg/kg											
PCB-50/53	mg/kg											
PCB-59/62/75	mg/kg											
PCB-61/70/74/76	mg/kg											
PCB-69/49	mg/kg											
PCB-71/40	mg/kg											
PCB-90/101	mg/kg											
Pentachlorobiphenyl	mg/kg											
Tetrachlorobiphenyl	mg/kg											
Total Decachlorobiphenyls (congeners)	mg/kg											
Total Dichlorobiphenyls (congeners)	mg/kg											
Total Heptachlorobiphenyls (congeners)	mg/kg											
Total Hexachlorobiphenyls (congeners)	mg/kg											
Total Monochlorobiphenyls (congeners)	mg/kg											
Total Nonachlorobiphenyls (congeners)	mg/kg											
Total Octachlorobiphenyls (congeners)	mg/kg											
Total PCB (congeners)	mg/kg											
Total Pentachlorobiphenyls (congeners)	mg/kg											
Total Tetrachlorobiphenyls (congeners)	mg/kg											
Total Trichlorobiphenyls (congeners)	mg/kg											
Trichlorobiphenyl (total)	mg/kg											
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>												
Benzo[e]pyrene	mg/kg											
Chrysene, 1-methyl-	mg/kg											
Naphthalene, 1-methyl-	mg/kg											
Pyrene, 1-methyl-	mg/kg											

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	21586020	21586021	21586024	21586025	21586026	21586028	21586029	22423786	22423788	22423790	22423797	
Location ID	E16-BOR-01	E16-BOR-01	E16-BOR-02	E16-BOR-02	E16-BOR-02	D16-BOR-01	D16-BOR-01	DER1-13	DER1-14	DER1-15	DER1-13	
Depth Interval (ft)	10.50-11.00	14.50-15.00	0.50-1.00	10.00-10.50	13.00-13.50	7.00-7.50	12.50-13.00	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Date	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/27/2009	3/27/2009	9/22/2009	9/22/2009	9/22/2009	9/22/2009	
Chemical Class												
Chemical	Units											
<b>Polycyclic Aromatic Hydrocarbons</b>												
Acenaphthene	mg/kg	0.042 U	0.043 U		0.04 U	0.043 U	0.037 U	0.039 U	0.093 U	0.091	0.047 U	
Acenaphthylene	mg/kg	0.042 U	0.043 U		0.04 U	0.043 U	0.037 U	0.039 U	0.093 U	0.19	0.047 U	
Anthracene	mg/kg	0.042 U	0.043 U		0.04 U	0.043 U	0.037 U	0.039 U	0.093 U	0.42	0.047 U	
Benzo(A)Anthracene	mg/kg	0.042 U	0.043 U		0.04 U	0.043 U	0.037 U	0.039 U	0.22	1.6	0.068	
Benzo(B)Fluoranthene	mg/kg	0.042 U	0.043 U		0.04 U	0.043 U	0.037 U	0.039 U	0.31	2	0.079	
Benzo(G,H,I)Perylene	mg/kg	0.042 U	0.043 U		0.04 U	0.043 U	0.037 U	0.039 U	0.18	0.66	0.05	
Benzo(K)Fluoranthene	mg/kg	0.042 U	0.043 U		0.04 U	0.043 U	0.037 U	0.039 U	0.16	0.82	0.047 U	
Benzo(A)Pyrene	mg/kg	0.042 U	0.043 U		0.04 U	0.043 U	0.037 U	0.039 U	0.24	1.4	0.081	
Chrysene	mg/kg	0.042 U	0.043 U		0.04 U	0.043 U	0.037 U	0.039 U	0.31	2.2	0.15	
Dibenz(A,H)Anthracene	mg/kg	0.042 U	0.043 U		0.04 U	0.043 U	0.037 U	0.039 U	0.093 U	0.22	0.047 U	
Fluoranthene	mg/kg	0.042 U	0.043 U		0.04 U	0.043 U	0.037 U	0.039 U	0.33	3.2	0.056	
Fluorene	mg/kg	0.068	0.043 U		0.04 U	0.043 U	0.037 U	0.039 U	0.093 U	0.11	0.047 U	
Indeno (1,2,3-CD) Pyrene	mg/kg	0.042 U	0.043 U		0.04 U	0.043 U	0.037 U	0.039 U	0.15	0.64	0.047 U	
Naphthalene	mg/kg	0.93	0.11		0.048	0.043 U	0.037 U	0.039 U	0.093 U	0.13	0.13	
Phenanthrene	mg/kg	0.24	0.043 U		0.04 U	0.043 U	0.037 U	0.039 U	0.19	0.9	0.063	
Pyrene	mg/kg	0.042 U	0.043 U		0.04 U	0.043 U	0.037 U	0.039 U	0.42	3.3	0.095	
Total PAHs (Detections + 1/2 MDL)	mg/kg	1.511	0.4325		0.348	0.344 U	0.296 U	0.312 U	2.789	17.881	0.9365	
Total PAHs (Detections Only)	mg/kg	1.238	0.11		0.048	0.344 U	0.296 U	0.312 U	2.51	17.881	0.772	
<b>Semivolatile Organic Compounds - TICs</b>												
1,2,4-Trithiolane	mg/kg											
1,4-Benzenediol, 2-chloro-	mg/kg											
11H-Benzo[b]fluorene	mg/kg											
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg											
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg							57	21	31		
3-PENTEN-2-ONE, 4-METHYL-	mg/kg											
7H-Benz[de]anthracen-7-one	mg/kg											
9,10-Anthracenedione	mg/kg											
9-Octadecenamido, (Z)-	mg/kg											
Acetamide, 2-chloro-N-(ethox	mg/kg											
Alachlor	mg/kg											
Benzenamine, 3-methyl-	mg/kg											
Benzenamine, 4,4',4"-methy	mg/kg											
Benzenamine, 4,4'-methyleneb	mg/kg											
Benzene, 1,2,3,4-tetrachloro	mg/kg											
Benzene, 1,2,3,5-tetrachloro	mg/kg											
Benzene, 1,2,3-trichloro-	mg/kg											
Benzene, 1,3,5-trichloro-	mg/kg											
Benzene, 1,3-bis(1-methyleth	mg/kg											
Benzene, 1,4-bis(1-methyleth	mg/kg											
Benzofuran, 2,3-dihydro-	mg/kg											
CYCLIC OCTAATOMIC SULFUR	mg/kg							29	4.6			
Diphenyl Ether	mg/kg											
Docosane	mg/kg											
Heneicosane	mg/kg											
Hexacosane	mg/kg											
Hexadecane	mg/kg											
Hexatriacontane	mg/kg											
m-Chloroaniline	mg/kg											
N,N-Diethylaniline	mg/kg											
n-Hexadecanoic acid	mg/kg											
Nonadecane	mg/kg											
o-Chloroaniline	mg/kg											
Octacosane	mg/kg											
Octadecane	mg/kg											
Octadecane, 1-chloro-	mg/kg											
Octadecanoic acid	mg/kg											
Parachlorophenol	mg/kg											
Pentadecane	mg/kg											
Perylene	mg/kg											
Phenol, 2,5-dichloro-	mg/kg											
Phenol, 3-chloro-	mg/kg											
Phenol, 4,4'-(1-methylethyl)	mg/kg											
Tetracosane	mg/kg											
Tetradecane	mg/kg											
Tetraethylene glycol	mg/kg											
Total SVOC TICs	mg/kg											
Triacotane	mg/kg											
Tributyl phosphate	mg/kg											
Tridecanoic acid	mg/kg											
Triphenyl phosphate	mg/kg											
UNKNOWN	mg/kg							2.482105263	1.17826087	0.893333333		
Unknown acid	mg/kg											
Unknown Alcohol	mg/kg											
Unknown Aldol Condensate	mg/kg											
UNKNOWN ALKANE	mg/kg							2.285		0.975		

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	21586020	21586021	21586024	21586025	21586026	21586028	21586029	22423786	22423788	22423790	22423797	
Location ID	E16-BOR-01	E16-BOR-01	E16-BOR-02	E16-BOR-02	E16-BOR-02	D16-BOR-01	D16-BOR-01	DER1-13	DER1-14	DER1-15	DER1-13	
Depth Interval (ft)	10.50-11.00	14.50-15.00	0.50-1.00	10.00-10.50	13.00-13.50	7.00-7.50	12.50-13.00	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Date	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/27/2009	3/27/2009	9/22/2009	9/22/2009	9/22/2009	9/22/2009	
Chemical Class												
Chemical	Units											
Unknown Alkene	mg/kg											
Unknown Amide	mg/kg											
Unknown Amine	mg/kg											
UNKNOWN AROMATIC	mg/kg											
Unknown Carboxylic Acid	mg/kg											
Unknown Cycloalkane	mg/kg											
Unknown Hydrocarbon	mg/kg											
Unknown Ketone	mg/kg											
Unknown PAH	mg/kg											
UNKNOWN SILOXANE	mg/kg											
<b>Semivolatile Organic Compounds</b>												
1,2,4-Trichlorobenzene	mg/kg	5.6	0.1		0.078	0.085	0.037	0.039	0.1	0.053	0.047	
1,2-Diphenylhydrazine	mg/kg	0.094	0.043	U	0.04	0.043	0.037	0.039	0.093	0.053	0.047	
1,4-Dioxane	mg/kg											
1-Naphthylamine	mg/kg	0.21	0.21	U	0.2	0.21	0.19	0.19	0.46	0.27	0.24	
2,3,4,6-Tetrachlorophenol	mg/kg											
2,4,5-Trichlorophenol	mg/kg											
2,4,6-Trichlorophenol	mg/kg	0.042	0.043	U	0.04	0.043	0.037	0.039	0.093	0.053	0.047	
2,4-Dichlorophenol	mg/kg	0.15	0.043	U	0.21	0.043	0.037	0.039	0.093	0.053	0.047	
2,4-Dimethylphenol	mg/kg	0.099	0.085	U	0.081	0.086	0.074	0.078	0.19	0.11	0.095	
2,4-Dinitrophenol	mg/kg	0.83	0.85	U	0.81	0.86	0.74	0.78	1.9	1.1	0.95	
2,4-Dinitrotoluene	mg/kg	0.083	0.085	U	0.081	0.086	0.074	0.078	0.19	0.11	0.095	
2,6-Dinitrotoluene	mg/kg	0.042	0.043	U	0.04	0.043	0.037	0.039	0.093	0.053	0.047	
2-Chloronaphthalene	mg/kg	0.042	0.043	U	0.04	0.043	0.037	0.039	0.093	0.053	0.047	
2-Chlorophenol	mg/kg	0.071	0.16		0.058	0.043	0.037	0.039	0.093	0.053	0.047	
2-Methylnaphthalene	mg/kg											
2-Methylphenol (O-Cresol)	mg/kg											
2-Naphthylamine	mg/kg	0.21	0.21	U	0.2	0.21	0.19	0.19	0.46	0.27	0.24	
2-Nitroaniline	mg/kg											
2-Nitrophenol	mg/kg	0.042	0.043	U	0.04	0.043	0.037	0.039	0.093	0.053	0.047	
3,3'-Dichlorobenzidine	mg/kg	0.13	0.13	U	0.12	0.13	0.11	0.12	0.28	0.16	0.14	
3,3'-Dimethylbenzidine	mg/kg											
3-Nitroaniline	mg/kg											
4,6-Dinitro-2-Methylphenol	mg/kg	0.21	0.21	U	0.2	0.21	0.19	0.19	0.46	0.27	0.24	
4-Aminobiphenyl	mg/kg	0.21	0.21	U	0.2	0.21	0.19	0.19	0.46	0.27	0.24	
4-Bromophenyl Phenyl Ether	mg/kg	0.042	0.043	U	0.04	0.043	0.037	0.039	0.093	0.053	0.047	
4-Chloro-3-Methylphenol	mg/kg	0.083	0.085	U	0.081	0.086	0.074	0.078	0.19	0.11	0.095	
4-Chloroaniline	mg/kg	0.083	0.085	U	0.081	0.086	0.074	0.078	0.19	0.11	0.095	
4-Chlorophenyl Phenyl Ether	mg/kg	0.042	0.043	U	0.04	0.043	0.037	0.039	0.093	0.053	0.047	
4-Methylphenol (P-Cresol)	mg/kg											
4-Nitroaniline	mg/kg											
4-Nitrophenol	mg/kg	0.21	0.21	U	0.2	0.21	0.19	0.19	0.46	0.27	0.24	
Acetophenone	mg/kg											
Aniline	mg/kg	0.21	0.21	U	0.21	0.21	0.19	0.19	0.46	0.27	0.24	
Benzidine	mg/kg	1.5	1.5	U	1.4	1.5	1.3	1.4	3.2	1.9	1.7	
Biphenyl	mg/kg											
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg											
Bis(2-Chloroethoxy)Methane	mg/kg	0.042	0.043	U	0.04	0.043	0.037	0.039	0.093	0.053	0.047	
Bis(2-Chloroethyl)Ether	mg/kg	0.042	0.043	U	0.04	0.043	0.037	0.039	0.093	0.053	0.047	
Bis(2-Chloroisopropyl)Ether	mg/kg	0.042	0.043	U	0.04	0.043	0.037	0.039	0.093	0.053	0.047	
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.083	0.085	U	0.081	0.086	0.074	0.078	0.19	0.11	0.095	
Butyl Benzyl Phthalate	mg/kg	0.083	0.085	U	0.081	0.086	0.074	0.078	0.19	0.11	0.095	
Carbazole	mg/kg	0.042	0.043	U	0.04	0.043	0.037	0.039	0.093	0.053	0.047	
Dibenzofuran	mg/kg											
Diethyl Phthalate	mg/kg	0.083	0.085	U	0.081	0.086	0.074	0.078	0.19	0.11	0.095	
Dimethyl Phthalate	mg/kg	0.083	0.085	U	0.081	0.086	0.074	0.078	0.19	0.11	0.095	
Di-N-Butyl Phthalate	mg/kg	0.083	0.085	U	0.081	0.086	0.074	0.078	0.19	0.11	0.095	
Diphenyl Ether	mg/kg											
Hexachlorobenzene	mg/kg	1.1	0.043	U	0.045	0.043	0.037	0.039	0.093	0.053	0.047	
Hexachlorobutadiene	mg/kg	0.083	0.085	U	0.081	0.086	0.074	0.078	0.19	0.11	0.095	
Hexachlorocyclopentadiene	mg/kg	0.21	0.21	U	0.2	0.21	0.19	0.19	0.46	0.27	0.24	
Hexachloroethane	mg/kg	0.042	0.043	U	0.04	0.043	0.037	0.039	0.093	0.053	0.047	
Hexachloropropylene	mg/kg											
Isophorone	mg/kg	0.042	0.043	U	0.04	0.043	0.037	0.039	0.093	0.053	0.047	
N-Dioctyl Phthalate	mg/kg	0.083	0.085	U	0.081	0.086	0.074	0.078	0.19	0.11	0.095	
Nitrobenzene	mg/kg	0.042	0.043	U	0.04	0.043	0.037	0.039	0.093	0.053	0.047	
N-Nitrosodimethylamine	mg/kg	0.083	0.085	U	0.081	0.086	0.074	0.078	0.19	0.11	0.095	
N-Nitrosodi-N-Propylamine	mg/kg	0.042	0.043	U	0.04	0.043	0.037	0.039	0.093	0.053	0.047	
N-Nitrosodiphenylamine	mg/kg	0.042	0.043	U	0.04	0.043	0.037	0.039	0.093	0.053	0.047	
O-Toluidine	mg/kg	0.25	0.26	U	0.24	0.26	0.22	0.23	0.56	0.32	0.28	
Parathion	mg/kg											
Pentachlorobenzene	mg/kg											
Pentachlorophenol	mg/kg	0.21	0.21	U	0.2	0.21	0.19	0.19	0.46	0.27	0.24	
Phenol	mg/kg	0.042	0.12		0.09	0.043	0.037	0.039	0.093	0.053	0.047	
<b>Volatile Organic Compounds - TICs</b>												
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg											

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA										
Field Sample ID	21586020	21586021	21586024	21586025	21586026	21586028	21586029	22423786	22423788	22423790	22423797											
Location ID	E16-BOR-01	E16-BOR-01	E16-BOR-02	E16-BOR-02	E16-BOR-02	D16-BOR-01	D16-BOR-01	DER1-13	DER1-14	DER1-15	DER1-13											
Depth Interval (ft)	10.50-11.00	14.50-15.00	0.50-1.00	10.00-10.50	13.00-13.50	7.00-7.50	12.50-13.00	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00											
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS											
Date	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/27/2009	3/27/2009	9/22/2009	9/22/2009	9/22/2009	9/22/2009											
Chemical Class																						
Chemical	Units																					
1-Butene	mg/kg																					
1-Heptene	mg/kg																					
1-Propene, 2-methyl-	mg/kg																					
Azulene	mg/kg																					
BENZENE, 1,2,4-TRICHLORO-	mg/kg																					
BENZENE, 1,2-DICHLORO-	mg/kg																					
BENZENE, 1,4-DICHLORO-	mg/kg																					
Camphene	mg/kg																					
CYCLOHEXANE	mg/kg																					
Cyclohexane, methyl-	mg/kg																					
Cyclotrisiloxane, hexamethyl	mg/kg																					
Diphenyl Ether	mg/kg																					
Ethane, 1,1,2,2-tetrachloro-	mg/kg																					
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg																					
Ethane, 1,2-dichloro-1,1-dif	mg/kg																					
Ethene, 1,1-dichloro-2,2-dif	mg/kg																					
Hexane, 2-methyl-	mg/kg																					
Hexane, 3-methyl-	mg/kg																					
METHANE, CHLOROFLUORO-	mg/kg																					
Naphthalene	mg/kg																					
NAPHTHALENE, 2-METHYL-	mg/kg																					
Nonanal	mg/kg																					
Norflurane	mg/kg																					
Pentane, 2,3-dimethyl-	mg/kg																					
Phenol, 4-(1,1,3,3-tetrameth	mg/kg																					
Propene	mg/kg																					
Sulfur dioxide	mg/kg																					
Tridecane	mg/kg																					
UNKNOWN	mg/kg																					
UNKNOWN ALICYCLIC	mg/kg																					
UNKNOWN ALIPHATIC	mg/kg																					
UNKNOWN ALKANE	mg/kg																					
UNKNOWN AROMATIC	mg/kg																					
UNKNOWN SILOXANE	mg/kg											0.022										
<b>Volatile Organic Compounds</b>																						
1,1,1,2-Tetrachloroethane	mg/kg																					
1,1,1-Trichloroethane	mg/kg	0.056	U	0.061	U	0.049	U	0.053	U	0.059	U	0.001	U	0.001	U	0.004	U					
1,1,1-Trichlorotrifluoroethane	mg/kg																					
1,1,2,2-Tetrachloroethane	mg/kg	0.056	U	0.061	U	0.049	U	0.053	U	0.059	U	0.001	U	0.001	U	0.004	U					
1,1,2-Trichloroethane	mg/kg	0.056	U	0.061	U	0.049	U	0.053	U	0.059	U	0.001	U	0.001	U	0.004	U					
1,1,2-Trichlorotrifluoroethane	mg/kg	0.34		0.12	U	0.098	U	0.11	U	0.12	U	0.009		0.007		0.009	U					
1,1,2-Trifluoroethane	mg/kg																					
1,1-Dichloro-1-Fluoroethane	mg/kg																					
1,1-Dichloroethane	mg/kg	0.056	U	0.061	U	0.049	U	0.053	U	0.059	U	0.001	U	0.001	U	0.004	U					
1,1-Dichloroethene	mg/kg	0.056	U	0.061	U	0.049	U	0.053	U	0.059	U	0.001	U	0.001	U	0.004	U					
1,1-Dichloropropene	mg/kg																					
1,2,4-Trimethylbenzene	mg/kg																					
1,2-Dibromoethane (EDB)	mg/kg																					
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg																					
1,2-Dichloro-1-Fluoroethane	mg/kg																					
1,2-Dichlorobenzene	mg/kg	21		1.3				0.091		0.72		0.037	U	0.039	U	0.31		0.1		1.7		
1,2-Dichloroethane	mg/kg	0.056	U	0.061	U	0.049	U	0.053	U	0.059	U	0.001	U	0.001	U					0.004	U	
1,2-Dichloroethene	mg/kg																					
1,2-Dichloropropane	mg/kg	0.056	U	0.061	U	0.049	U	0.053	U	0.059	U	0.001	U	0.001	U					0.004	U	
1,2-Dichlorotetrafluoroethane	mg/kg																					
1,3,5-Trimethylbenzene	mg/kg																					
1,3-Dichlorobenzene	mg/kg	1.6		0.087				0.04	U	0.046		0.037	U	0.039	U	0.093	U	0.053	U	0.047	U	
1,4-Dichlorobenzene	mg/kg	33		2.3				0.13		1.5		0.037	U	0.039	U	0.19		0.053	U	0.1		
1-Chloro-1,1-Difluoroethane	mg/kg																					
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg																					
2-Chloro-1,1,1-Trifluoroethane	mg/kg																					
2-Chloroethyl Vinyl Ether	mg/kg	0.11	U	0.12	U	0.098	U	0.11	U	0.12	U											
2-Chlorotoluene	mg/kg																					
2-Hexanone	mg/kg																					
4-Chlorotoluene	mg/kg																					
4-Isopropyltoluene	mg/kg																					
Acetone	mg/kg	0.39	U	0.43	U	0.34	U	0.37	U	0.41	U	0.022		0.027							0.27	
Acrolein	mg/kg	1.1	U	1.2	U	0.98	U	1.1	U	1.2	U	0.023	U	0.025	U						0.09	U
Acrylonitrile	mg/kg	0.22	U	0.25	U	0.2	U	0.21	U	0.24	U	0.005	U	0.005	U						0.018	U
Benzene	mg/kg	1.1		6.9		0.37		2		0.029	U	0.0007		0.0006	U						0.002	U
Bromodichloromethane	mg/kg	0.056	U	0.061	U	0.049	U	0.053	U	0.059	U	0.001	U	0.001	U						0.004	U
Bromoform	mg/kg	0.056	U	0.061	U	0.049	U	0.053	U	0.059	U	0.001	U	0.001	U						0.004	U
Carbon Disulfide	mg/kg	0.12		0.49		0.049	U	0.053	U	0.059	U	0.002		0.001	U						0.016	
Carbon Tetrachloride	mg/kg	29		0.48		0.049	U	0.053	U	0.059	U	0.001	U	0.001	U						0.004	U
CFC-1113	mg/kg																					
Chlorobenzene	mg/kg	34		50		1.7		3.6		5.9		0.007		0.097							0.011	

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Chemical Class	River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
	Field Sample ID	21586020	21586021	21586024	21586025	21586026	21586028	21586029	22423786	22423788	22423790	22423797
Chemical	Location ID	E16-BOR-01	E16-BOR-01	E16-BOR-02	E16-BOR-02	E16-BOR-02	D16-BOR-01	D16-BOR-01	DER1-13	DER1-14	DER1-15	DER1-13
Units	Depth Interval (ft)	10.50-11.00	14.50-15.00	0.50-1.00	10.00-10.50	13.00-13.50	7.00-7.50	12.50-13.00	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00
	Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
	Date	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/26/2009	3/27/2009	3/27/2009	9/22/2009	9/22/2009	9/22/2009	9/22/2009
Chlorodibromomethane	mg/kg	0.056 U	0.061 U	0.049 U	0.053 U	0.059 U	0.001 U	0.001 U				0.004 U
Chlorodifluoromethane	mg/kg											
Chlorofluoromethane	mg/kg											
Chloroform	mg/kg	2.4	2.2	0.049 U	0.33	0.059 U	0.001 U	0.001 U				0.004 U
Chloropentafluoroethane	mg/kg											
cis-1,2-Dichloroethene	mg/kg	0.056 U	0.061 U	0.049 U	0.053 U	0.059 U	0.001 U	0.001 U				0.004 U
cis-1,3-Dichloropropene	mg/kg	0.056 U	0.061 U	0.049 U	0.053 U	0.059 U	0.001 U	0.001 U				0.004 U
Cumene	mg/kg											
Dichlorodifluoromethane	mg/kg	0.11 U	0.12 U	0.098 U	0.11 U	0.12 U	0.002 U	0.002 U				0.009 U
Dichlorofluoromethane	mg/kg	0.11 U	0.12 U	0.098 U	0.11 U	0.12 U	0.002 U	0.002 U				0.009 U
Ethane	ug/L											
Ethyl Chloride	mg/kg	0.11 U	0.12 U	0.098 U	0.11 U	0.12 U	0.002 U	0.002 U				0.009 U
Ethylbenzene	mg/kg	2.1	0.66	0.063	0.053 U	0.059 U	0.001 U	0.001 U				0.004 U
Fluoromethane	mg/kg											
Hexane	mg/kg											
Isobutyl Alcohol	mg/kg											
Meta- And Para-Xylene	mg/kg											
Methacrylonitrile	mg/kg											
Methane	ug/L											
Methyl Bromide	mg/kg	0.11 U	0.12 U	0.098 U	0.11 U	0.12 U	0.002 U	0.002 U				0.009 U
Methyl Chloride	mg/kg	0.11 U	0.12 U	0.098 U	0.11 U	0.12 U	0.002 U	0.002 U				0.009 U
Methyl Ethyl Ketone	mg/kg											
Methyl Isobutyl Ketone	mg/kg											
Methyl Methacrylate	mg/kg											
Methyl Tertiary Butyl Ether	mg/kg											
Methylene Chloride	mg/kg	0.11 U	0.2	0.098 U	0.11 U	0.12 U	0.002 U	0.002 U				0.009 U
N-Butylbenzene	mg/kg											
N-Propylbenzene	mg/kg											
Ortho-Xylene	mg/kg											
Propionitrile	mg/kg											
sec-Butylbenzene	mg/kg											
Styrene	mg/kg											
tert-Butylbenzene	mg/kg											
Tetrachloroethene	mg/kg	0.063	0.061 U	0.049 U	0.053 U	0.059 U	0.001 U	0.001 U				0.004 U
Tetrahydrofuran	mg/kg											
Toluene	mg/kg	5.1	11	0.22	0.56	0.31	0.001 U	0.001 U				0.008
trans-1,2-Dichloroethene	mg/kg	0.056 U	0.061 U	0.049 U	0.053 U	0.059 U	0.001 U	0.001 U				0.004 U
trans-1,3-Dichloropropene	mg/kg	0.056 U	0.061 U	0.049 U	0.053 U	0.059 U	0.001 U	0.001 U				0.004 U
Trichloroethene	mg/kg	0.56 U	0.061 U	0.049 U	0.053 U	0.059 U	0.001 U	0.001 U				0.004 U
Trichlorofluoromethane	mg/kg	1.9	0.14	0.098 U	0.11 U	0.12 U	0.014	0.011				0.009 U
Vinyl Chloride	mg/kg	0.056 U	0.061 U	0.049 U	0.053 U	0.059 U	0.001 U	0.001 U				0.004 U
Vinyl Fluoride	mg/kg											
Xylenes	mg/kg	19	4.7	0.4	0.053 U	0.059 U	0.001 U	0.001 U				0.006

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA								
Field Sample ID	22423798	22423799	22465068	22465069	22498905	22499340	22499341	22522912	23633169	23633171	23633173	23633174	
Location ID	DER1-14	DER1-15	DER1-12	DER1-12	DER1-12	DER1-13	DER1-15	DER1-12	DER2-13-SD	DER2-14-SD	DER2-15-SD	DER2-15-SD	
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	
Sample Purpose	FS	FS	FS	DUP									
Date	9/22/2009	9/22/2009	9/24/2009	9/24/2009	10/2/2009	9/22/2009	9/22/2009	9/25/2009	4/23/2010	4/23/2010	4/23/2010	4/23/2010	
Chemical Class	Units												
<b>General Chemistry</b>													
Black Carbon	mg/kg	3110	185	1885					1505	2180	2340	2790	
Percent Moisture	%	32.9	23.9	35.6	30.2				48.5	49.4	56.6	57	
Percent Solids	%												
Total Organic Carbon	mg/kg	7190	1280	6490				4310	13600	11750	15050	14250	
<b>Metals</b>													
Aluminum	mg/kg			9970					14600	15400	19500	20400	
Antimony	mg/kg			1.55 U					1.87 U	1.98 U	2.26 U	2.3 U	
Arsenic	mg/kg			3.56					7.89	10.2	12	12.6	
Barium	mg/kg			55.6					65.5	81.1	88.6	93.5	
Beryllium	mg/kg			0.106 U					0.928	1	1.3	1.37	
Cadmium	mg/kg			0.321					1.19	1.27	1.6	1.65	
Calcium	mg/kg			4480					4010	4610	3930	4200	
Chromium	mg/kg			31.9					35.8	38.8	48.1	51.1	
Cobalt	mg/kg			5.87					9.13	10.4	13.3	13.9	
Copper	mg/kg			18.5					20	25.7	29.1	31.2	
Iron	mg/kg			16900					21400	23800	29700	30900	
Lead	mg/kg			32.7					33.6	39.6	42.6	45.7	
Magnesium	mg/kg			2670					4100	4060	5780	6200	
Manganese	mg/kg			342					601	638	993	1040	
Mercury	mg/kg			0.756					0.154	0.157	0.236	0.133	
Nickel	mg/kg			15.3					19.5	22.1	28	31.2	
Potassium	mg/kg			1950					2550	2530	3170	3420	
Selenium	mg/kg			1.52 U					1.83 U	1.94 U	2.21 U	2.49	
Silver	mg/kg			0.28 U					0.668	0.733	0.874	0.988	
Sodium	mg/kg			318					350	276	515	610	
Thallium	mg/kg			2.25 U					2.71 U	2.67 U	3.29 U	3.34 U	
Tin	mg/kg			4.89					5.11	7.18	6.24	6.83	
Titanium	mg/kg												
Vanadium	mg/kg			26.9					34.9	38.7	48.5	51.4	
Zinc	mg/kg			92.9					135	154	199	208	
<b>Metals - AVS/SEM</b>													
Acid Volatile Sulfide	umol/g												
Arsenic	umol/g												
Cadmium	umol/g												
Copper	umol/g												
Lead	umol/g												
Zinc	umol/g												
<b>Metals - Leachate</b>													
Lead	ug/L												
<b>Per and Polyfluorinated Organic Substances</b>													
Perfluorobutane Sulfonic Acid	mg/kg												
Perfluorobutanoic Acid	mg/kg												
Perfluorodecane Sulfonic Acid	mg/kg												
Perfluorodecanoic Acid	mg/kg												
Perfluorododecanoic Acid	mg/kg												
Perfluoroheptanoic Acid	mg/kg												
Perfluorohexane Sulfonic Acid	mg/kg												
Perfluorohexanoic Acid	mg/kg												
Perfluorononanoic Acid	mg/kg												
Perfluorooctane Sulfonamide	mg/kg												
Perfluoropentanoic Acid	mg/kg												
Perfluorotetradecanoic Acid	mg/kg												
Perfluorotridecanoic Acid	mg/kg												
Perfluoroundecanoic Acid	mg/kg												
PFOA	mg/kg												
PFOA(trial)	mg/kg												
PFOS	mg/kg												
PFOS (trial)	mg/kg												
<b>Pesticides and Herbicides</b>													
4,4'-DDD	mg/kg												
4,4'-DDE	mg/kg												
4,4'-DDT	mg/kg												
Aldrin	mg/kg												
Alpha Chlordane	mg/kg												
Alpha-BHC	mg/kg												
beta-BHC	mg/kg												
delta-BHC	mg/kg												
Dieldrin	mg/kg												
Endosulfan I	mg/kg												
Endosulfan II	mg/kg												
Endosulfan Sulfate	mg/kg												
Endrin	mg/kg												
Endrin Aldehyde	mg/kg												
Endrin Ketone	mg/kg												
Gamma Chlordane	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	22423798	22423799	22465068	22465069	22498905	22499340	22499341	22522912	23633169	23633171	23633173	23633174	
Location ID	DER1-14	DER1-15	DER1-12	DER1-12	DER1-12	DER1-13	DER1-15	DER1-12	DER2-13-SD	DER2-14-SD	DER2-15-SD	DER2-15-SD	
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	DUP	
Date	9/22/2009	9/22/2009	9/24/2009	9/24/2009	10/2/2009	9/22/2009	9/22/2009	9/25/2009	4/23/2010	4/23/2010	4/23/2010	4/23/2010	
Chemical Class													
Chemical	Units												
Heptachlor	mg/kg												
Heptachlor Epoxide	mg/kg												
Lindane	mg/kg												
Methoxychlor	mg/kg												
Toxaphene	mg/kg												
<b>Physical Properties</b>													
0.001 MM	% PASSING			1					4.5	2	13.5	13.5	
0.002 MM	% PASSING			1					10	9	21.5	22	
0.005 MM	% PASSING			2					15.5	19	31	32	
0.02 MM	% PASSING			8					28.5	40.5	54.5	51	
0.05 MM	% PASSING			19.5					52.5	60.5	76.5	75	
0.064 MM	% PASSING			32					66	72.5	85	85	
0.075 MM	% PASSING			37.7					74.1	78.5	90	90.2	
0.15 MM	% PASSING			54.6					91.9	90.8	96.3	96.1	
0.3 MM	% PASSING			96.9					96.9	96.1	97.3	97.2	
0.6 MM	% PASSING			98.5					97.8	97.5	98.1	98.1	
1.18 MM	% PASSING			99.1					98.5	98.6	98.7	98.9	
19 MM	% PASSING			100					100	100	100	100	
2.36 MM	% PASSING			99.2					98.7	99.2	99.2	99.4	
3.35 MM	% PASSING			99.7					99.3	99.5	99.5	99.7	
37.5 MM	% PASSING			100					100	100	100	100	
4.75 MM	% PASSING			99.9					99.7	99.7	99.8	99.9	
75 MM	% PASSING			100					100	100	100	100	
Density	PCF												
<b>Polychlorinated Biphenyls - TICs</b>													
1,1'-Biphenyl, 2,3-dichloro-	mg/kg												
Unknown Biphenyl	mg/kg												
<b>Polychlorinated Biphenyls</b>													
Heptachlorobiphenyl	mg/kg												
Hexachlorobiphenyl	mg/kg												
Octachlorobiphenyl	mg/kg												
PCB 1	mg/kg					0.00693	0.000529	0.000717					
PCB 10	mg/kg					0.0000677	0.0000175	0.0000601					
PCB 100	mg/kg												
PCB 101	mg/kg												
PCB 102	mg/kg					0.0000527	0.0000699	0.0000343					
PCB 103	mg/kg					0.0000277	0.0000466	0.0000342					
PCB 104	mg/kg					0.00000317	0.00000482	0.00000339					
PCB 105	mg/kg					0.000478	0.000673	0.000337					
PCB 106	mg/kg					0.0000149	0.00000501	0.00000408	U				
PCB 107	mg/kg												
PCB 107/123	mg/kg												
PCB 108	mg/kg												
PCB 109	mg/kg					0.000098	0.000148	0.000064					
PCB 11	mg/kg					0.00115	0.000568	0.000341					
PCB 110	mg/kg					0.00116	0.00182	0.000834					
PCB 111	mg/kg					0.00000824	0.00000517	0.00000389					
PCB 112	mg/kg					0.00000657	0.0000965	0.00000827					
PCB 113	mg/kg												
PCB 114	mg/kg					0.0000335	0.0000323	0.0000201					
PCB 115	mg/kg					0.00000277	0.00000529	0.000011	U				
PCB 116	mg/kg												
PCB 117	mg/kg					0.0000294	0.0000385	0.0000334					
PCB 118	mg/kg					0.00109	0.00176	0.000745					
PCB 119	mg/kg												
PCB 12	mg/kg												
PCB 120	mg/kg					0.0000175	0.0000212	0.00000805					
PCB 121	mg/kg					0.00000344	0.00000431	0.00000189	U				
PCB 121/95/88	mg/kg												
PCB 122	mg/kg					0.000027	0.0000272	0.0000162					
PCB 123	mg/kg					0.0000289	0.0000416	0.0000225					
PCB 124	mg/kg												
PCB 125	mg/kg												
PCB 126	mg/kg					0.0000172	0.0000117	0.00000834					
PCB 127	mg/kg					0.00000738	0.00000533	0.00000386	U				
PCB 128	mg/kg												
PCB 129	mg/kg												
PCB 129/158	mg/kg												
PCB 13	mg/kg												
PCB 130	mg/kg					0.000132	0.000235	0.000111					
PCB 130/164	mg/kg												
PCB 131	mg/kg					0.0000178	0.0000252	0.000018					
PCB 132	mg/kg					0.000448	0.000747	0.000353					
PCB 133	mg/kg					0.0000539	0.0000803	0.000047					
PCB 134	mg/kg					0.0000777	0.000128	0.0000594					
PCB 135	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	Chemical	Units	River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
			Field Sample ID	22423798	22423799	22465068	22465069	22498905	22499340	22499341	22522912	23633169	23633171	23633173
			Location ID	DER1-14	DER1-15	DER1-12	DER1-12	DER1-12	DER1-13	DER1-15	DER1-12	DER2-13-SD	DER2-14-SD	DER2-15-SD
			Depth Interval (ft)	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50
			Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
			Date	9/22/2009	9/22/2009	9/24/2009	9/24/2009	10/2/2009	9/22/2009	9/22/2009	9/25/2009	4/23/2010	4/23/2010	4/23/2010
	PCB 136	mg/kg						0.000234	0.000368	0.000184				
	PCB 137	mg/kg						0.000047	0.0000682	0.0000321				
	PCB 138	mg/kg												
	PCB 139	mg/kg												
	PCB 14	mg/kg						0.001	0.0000639	0.0000733				
	PCB 140	mg/kg												
	PCB 141	mg/kg						0.000238	0.000337	0.000174				
	PCB 142	mg/kg						0.0000182	0.00000418	0.00000132				
	PCB 143	mg/kg						0.00000735	0.0000101	0.0000033				
	PCB 143/139	mg/kg												
	PCB 144	mg/kg						0.0000624	0.0000957	0.0000486				
	PCB 145	mg/kg						0.00000181	0.00000106	0.00000114				
	PCB 146	mg/kg						0.00027	0.000496	0.00022				
	PCB 147	mg/kg												
	PCB 148	mg/kg						0.0000123	0.0000193	0.0000106				
	PCB 149	mg/kg												
	PCB 15	mg/kg						0.00289	0.00081	0.000414				
	PCB 150	mg/kg						0.0000124	0.0000225	0.0000115				
	PCB 151	mg/kg												
	PCB 152	mg/kg						0.00000248	0.0000026	0.00000221				
	PCB 153	mg/kg												
	PCB 154	mg/kg						0.000066	0.000154	0.0000532				
	PCB 155	mg/kg						0.00000917	0.0000164	0.0000107				
	PCB 156	mg/kg												
	PCB 157	mg/kg												
	PCB 158	mg/kg						0.000121	0.000196	0.0000952				
	PCB 159	mg/kg						0.0000323	0.0000222	0.0000223				
	PCB 16	mg/kg						0.00069	0.000186	0.000415				
	PCB 160	mg/kg						0.0000533	0.00000306	0.00000164				
	PCB 161	mg/kg						0.00000367	0.00000348	0.00000186				
	PCB 162	mg/kg						0.0000253	0.0000196	0.0000225				
	PCB 163	mg/kg												
	PCB 163/160	mg/kg												
	PCB 164	mg/kg						0.000137	0.000202	0.0001				
	PCB 165	mg/kg						0.00000476	0.00000453	0.00000131				
	PCB 166	mg/kg												
	PCB 167	mg/kg						0.0000832	0.000122	0.0000662				
	PCB 168	mg/kg												
	PCB 169	mg/kg						0.0000102	0.0000024	0.0000128				
	PCB 17	mg/kg						0.000556	0.000226	0.000195				
	PCB 170	mg/kg						0.000306	0.000519	0.000251				
	PCB 171	mg/kg												
	PCB 172	mg/kg						0.0000976	0.000131	0.0000672				
	PCB 173	mg/kg												
	PCB 174	mg/kg						0.000379	0.000581	0.000276				
	PCB 175	mg/kg						0.0000355	0.0000496	0.0000283				
	PCB 176	mg/kg						0.0000567	0.0000971	0.000046				
	PCB 177	mg/kg						0.000223	0.000409	0.000174				
	PCB 178	mg/kg						0.000129	0.000254	0.000098				
	PCB 179	mg/kg						0.000212	0.000367	0.000158				
	PCB 18	mg/kg												
	PCB 180	mg/kg												
	PCB 181	mg/kg						0.0000148	0.0000058	0.00000351				
	PCB 182	mg/kg						0.000015	0.0000135	0.00000547				
	PCB 182/175	mg/kg												
	PCB 183	mg/kg						0.000279	0.000466	0.000214				
	PCB 184	mg/kg						0.0000109	0.0000128	0.0000127				
	PCB 185	mg/kg						0.000042	0.00000141	0.0000666				
	PCB 186	mg/kg						0.00000273	0.0000039	0.00000377				
	PCB 187	mg/kg						0.000684	0.00106	0.00049				
	PCB 188	mg/kg						0.0000178	0.0000389	0.00000951				
	PCB 189	mg/kg						0.0000307	0.0000299	0.0000359				
	PCB 19	mg/kg						0.000131	0.0000894	0.000101				
	PCB 190	mg/kg						0.0000994	0.000137	0.0000687				
	PCB 191	mg/kg						0.0000208	0.0000233	0.0000132				
	PCB 192	mg/kg						0.0000278	0.00000128	0.00000137				
	PCB 193	mg/kg												
	PCB 194	mg/kg						0.000442	0.000454	0.000237				
	PCB 195	mg/kg						0.0000902	0.000157	0.0000699				
	PCB 196	mg/kg						0.000216	0.000443	0.000146				
	PCB 197	mg/kg						0.0000239	0.0000611	0.0000196				
	PCB 198	mg/kg												
	PCB 199	mg/kg												
	PCB 2	mg/kg						0.00346	0.000327	0.000234				
	PCB 20	mg/kg												
	PCB 200	mg/kg						0.0000653	0.0000973	0.0000421				

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	22423798	22423799	22465068	22465069	22498905	22499340	22499341	22522912	23633169	23633171	23633173	23633174
Location ID	DER1-14	DER1-15	DER1-12	DER1-12	DER1-12	DER1-13	DER1-15	DER1-12	DER2-13-SD	DER2-14-SD	DER2-15-SD	DER2-15-SD
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	DUP
Date	9/22/2009	9/22/2009	9/24/2009	9/24/2009	10/2/2009	9/22/2009	9/22/2009	9/25/2009	4/23/2010	4/23/2010	4/23/2010	4/23/2010
Chemical Class												
Chemical	Units											
PCB 201	mg/kg					0.00012	0.00025	0.000083				
PCB 202	mg/kg					0.000273	0.000528	0.000178				
PCB 203	mg/kg					0.000343	0.000524	0.000217				
PCB 204	mg/kg					0.0000158	0.00000848	0.00000326				
PCB 204/200	mg/kg											
PCB 205	mg/kg					0.0000356	0.000031	0.0000173				
PCB 206	mg/kg					0.00274	0.00495	0.00142				
PCB 207	mg/kg					0.000257	0.00049	0.000138				
PCB 208	mg/kg					0.00119	0.00269	0.000731				
PCB 209	mg/kg					0.00389	0.00858	0.002				
PCB 21	mg/kg											
PCB 21/20	mg/kg											
PCB 22	mg/kg					0.000564	0.000203	0.000153				
PCB 23	mg/kg					0.0000689	0.0000647	0.0000093				
PCB 24	mg/kg					0.000404	0.0000338	0.000035				
PCB 25	mg/kg					0.000239	0.000125	0.00013				
PCB 26	mg/kg											
PCB 27	mg/kg					0.000179	0.0000832	0.000106				
PCB 28	mg/kg											
PCB 29	mg/kg											
PCB 3	mg/kg					0.00523	0.000436	0.00131				
PCB 30	mg/kg											
PCB 31	mg/kg					0.00167	0.000684	0.000331				
PCB 32	mg/kg					0.000369	0.000225	0.000134				
PCB 33	mg/kg											
PCB 34	mg/kg					0.000213	0.0000181	0.0000163				
PCB 35	mg/kg					0.000875	0.000139	0.000119				
PCB 36	mg/kg					0.00022	0.0000194	0.0000209				
PCB 37	mg/kg					0.00393	0.000689	0.000327				
PCB 38	mg/kg					0.0000185	0.00000823	0.0000171				
PCB 39	mg/kg					0.000407	0.0000269	0.0000215				
PCB 4	mg/kg					0.0025	0.000292	0.00111				
PCB 4/10	mg/kg											
PCB 40	mg/kg											
PCB 41	mg/kg					0.0000704	0.0000548	0.0000528				
PCB 42	mg/kg					0.00028	0.000308	0.000233				
PCB 43	mg/kg					0.0000486	0.0000309	0.0000239				
PCB 44	mg/kg											
PCB 45	mg/kg					0.000116	0.0000999	0.0000721				
PCB 46	mg/kg					0.0000561	0.0000561	0.0000415				
PCB 47	mg/kg											
PCB 48	mg/kg					0.000163	0.00011	0.0000906				
PCB 49	mg/kg											
PCB 5	mg/kg					0.000455	0.0000992	0.000182				
PCB 50	mg/kg											
PCB 51	mg/kg					0.000067	0.000117	0.0000597				
PCB 52	mg/kg					0.000881	0.000967	0.000529				
PCB 53	mg/kg											
PCB 54	mg/kg					0.0000102	0.0000151	0.00000849				
PCB 55	mg/kg					0.0000153	0.00000127	0.00000586				
PCB 56	mg/kg					0.000503	0.000479	0.000425				
PCB 57	mg/kg					0.0000166	0.00000807	0.00000496				
PCB 58	mg/kg					0.0000116	0.00000998	0.00000461				
PCB 59	mg/kg											
PCB 6	mg/kg					0.00118	0.000182	0.000315				
PCB 60	mg/kg					0.000185	0.000147	0.000106				
PCB 61	mg/kg											
PCB 62	mg/kg											
PCB 63	mg/kg					0.0000504	0.0000368	0.0000201				
PCB 64	mg/kg					0.000357	0.000354	0.000205				
PCB 65	mg/kg											
PCB 65/75/62	mg/kg											
PCB 66	mg/kg					0.000789	0.00103	0.00048				
PCB 67	mg/kg					0.0000369	0.0000357	0.0000165				
PCB 67/58	mg/kg											
PCB 68	mg/kg					0.0000158	0.0000025	0.00000975				
PCB 68/64	mg/kg											
PCB 69	mg/kg											
PCB 7	mg/kg					0.00021	0.0000359	0.0000494				
PCB 70	mg/kg											
PCB 71	mg/kg											
PCB 72	mg/kg					0.0000368	0.0000305	0.0000109				
PCB 73	mg/kg					0.00000572	0.0000117	0.00000029				
PCB 73/46	mg/kg											
PCB 74	mg/kg											
PCB 75	mg/kg											



**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA				
Field Sample ID	22423798	22423799	22465068	22465069	22498905	22499340	22499341	22522912	23633169	23633171	23633173	23633174					
Location ID	DER1-14	DER1-15	DER1-12	DER1-12	DER1-12	DER1-13	DER1-15	DER1-12	DER2-13-SD	DER2-14-SD	DER2-15-SD	DER2-15-SD					
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50					
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	DUP					
Date	9/22/2009	9/22/2009	9/24/2009	9/24/2009	10/2/2009	9/22/2009	9/22/2009	9/25/2009	4/23/2010	4/23/2010	4/23/2010	4/23/2010					
Chemical Class	Units																
<b>Polycyclic Aromatic Hydrocarbons</b>																	
Acenaphthene	mg/kg			0.052	U					0.19	U	0.2	U	0.23	U	0.23	U
Acenaphthylene	mg/kg			0.052	U					0.19	U	0.2	U	0.23	U	0.23	U
Anthracene	mg/kg			0.052	U					0.19	U	0.2	U	0.23	U	0.23	U
Benzo(A)Anthracene	mg/kg			0.052	U					0.32		0.33		0.23		0.23	U
Benzo(B)Fluoranthene	mg/kg			0.052	U					0.34		0.34		0.27		0.31	
Benzo(G,H,I)Perylene	mg/kg			0.052	U					0.19	U	0.2	U	0.23	U	0.23	U
Benzo(K)Fluoranthene	mg/kg			0.052	U					0.19	U	0.2	U	0.23	U	0.23	U
Benzo(A)Pyrene	mg/kg			0.052	U					0.24		0.26		0.23		0.23	U
Chrysene	mg/kg			0.052	U					0.42		0.61		0.25		0.23	U
Dibenz(A,H)Anthracene	mg/kg			0.052	U					0.19	U	0.2	U	0.23	U	0.23	U
Fluoranthene	mg/kg			0.068						0.7		0.5		0.32		0.33	
Fluorene	mg/kg			0.052	U					0.19	U	0.2	U	0.23	U	0.23	U
Indeno (1,2,3-CD) Pyrene	mg/kg			0.052	U					0.19	U	0.2	U	0.23	U	0.23	U
Naphthalene	mg/kg			0.052	U					0.19	U	0.2	U	0.23	U	0.23	U
Phenanthrene	mg/kg			0.052	U					0.37		0.27		0.26		0.23	U
Pyrene	mg/kg			0.064						0.77		0.63		0.43		0.39	
Total PAHs (Detections + 1/2 MDL)	mg/kg			0.496						4.015		3.84		2.91		2.64	
Total PAHs (Detections Only)	mg/kg			0.132						3.16		2.94		1.76		1.26	
<b>Semivolatile Organic Compounds - TICs</b>																	
1,2,4-Trithiolane	mg/kg																
1,4-Benzenediol, 2-chloro-	mg/kg																
11H-Benzo[b]fluorene	mg/kg																
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg																
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg			22						5.5		5.7				6.5	
3-PENTEN-2-ONE, 4-METHYL-	mg/kg																
7H-Benz[de]anthracen-7-one	mg/kg																
9,10-Anthracenedione	mg/kg																
9-Octadecenamido, (Z)-	mg/kg																
Acetamide, 2-chloro-N-(ethox	mg/kg																
Alachlor	mg/kg																
Benzenamine, 3-methyl-	mg/kg																
Benzenamine, 4,4',4"-methy	mg/kg																
Benzenamine, 4,4'-methyleneb	mg/kg																
Benzene, 1,2,3,4-tetrachloro	mg/kg																
Benzene, 1,2,3,5-tetrachloro	mg/kg																
Benzene, 1,2,3-trichloro-	mg/kg																
Benzene, 1,3,5-trichloro-	mg/kg																
Benzene, 1,3-bis(1-methyleth	mg/kg																
Benzene, 1,4-bis(1-methyleth	mg/kg																
Benzofuran, 2,3-dihydro-	mg/kg																
CYCLIC OCTAATOMIC SULFUR	mg/kg											35		65		42	
Diphenyl Ether	mg/kg																
Docosane	mg/kg																
Heneicosane	mg/kg																
Hexacosane	mg/kg																
Hexadecane	mg/kg																
Hexatriacontane	mg/kg																
m-Chloroaniline	mg/kg																
N,N-Diethylaniline	mg/kg																
n-Hexadecanoic acid	mg/kg																
Nonadecane	mg/kg																
o-Chloroaniline	mg/kg																
Octacosane	mg/kg																
Octadecane	mg/kg																
Octadecane, 1-chloro-	mg/kg																
Octadecanoic acid	mg/kg																
Parachlorophenol	mg/kg																
Pentadecane	mg/kg																
Perylene	mg/kg																
Phenol, 2,5-dichloro-	mg/kg																
Phenol, 3-chloro-	mg/kg																
Phenol, 4,4'-(1-methylethyl)	mg/kg																
Tetracosane	mg/kg																
Tetradecane	mg/kg																
Tetraethylene glycol	mg/kg																
Total SVOC TICs	mg/kg																
Triaccontane	mg/kg																
Tributyl phosphate	mg/kg																
Tridecanoic acid	mg/kg																
Triphenyl phosphate	mg/kg																
UNKNOWN	mg/kg			0.566315789						3.965217391		2.164615385		2.953333333		3.340625	
Unknown acid	mg/kg																
Unknown Alcohol	mg/kg																
Unknown Aldol Condensate	mg/kg																
UNKNOWN ALKANE	mg/kg			0.606						2.3		1.2		2.433333333		2.5	

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA											
Field Sample ID	22423798	22423799	22465068	22465069	22498905	22499340	22499341	22522912	23633169	23633171	23633173	23633174				
Location ID	DER1-14	DER1-15	DER1-12	DER1-12	DER1-12	DER1-13	DER1-15	DER1-12	DER2-13-SD	DER2-14-SD	DER2-15-SD	DER2-15-SD				
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50				
Sample Purpose	FS	FS	FS	DUP												
Date	9/22/2009	9/22/2009	9/24/2009	9/24/2009	10/2/2009	9/22/2009	9/22/2009	9/25/2009	4/23/2010	4/23/2010	4/23/2010	4/23/2010				
Chemical Class	Units															
Unknown Alkene	mg/kg															
Unknown Amide	mg/kg															
Unknown Amine	mg/kg															
UNKNOWN AROMATIC	mg/kg															
Unknown Carboxylic Acid	mg/kg															
Unknown Cycloalkane	mg/kg															
Unknown Hydrocarbon	mg/kg															
Unknown Ketone	mg/kg															
Unknown PAH	mg/kg															
UNKNOWN SILOXANE	mg/kg															
<b>Semivolatile Organic Compounds</b>																
1,2,4-Trichlorobenzene	mg/kg			0.052	U				0.19	U	0.2	U	0.23	U	0.23	U
1,2-Diphenylhydrazine	mg/kg			0.052	U				0.19	U	0.2	U	0.23	U	0.23	U
1,4-Dioxane	mg/kg															
1-Naphthylamine	mg/kg			0.26	U				0.97	U	0.99	U	1.2	U	1.2	U
2,3,4,6-Tetrachlorophenol	mg/kg															
2,4,5-Trichlorophenol	mg/kg															
2,4,6-Trichlorophenol	mg/kg			0.052	U				0.19	U	0.2	U	0.23	U	0.23	U
2,4-Dichlorophenol	mg/kg			0.052	U				0.19	U	0.2	U	0.23	U	0.23	U
2,4-Dimethylphenol	mg/kg			0.1	U				0.39	U	0.4	U	0.46	U	0.47	U
2,4-Dinitrophenol	mg/kg			1	U				3.9	U	4	U	4.6	U	4.7	U
2,4-Dinitrotoluene	mg/kg			0.1	U				0.39	U	0.4	U	0.46	U	0.47	U
2,6-Dinitrotoluene	mg/kg			0.052	U				0.19	U	0.2	U	0.23	U	0.23	U
2-Chloronaphthalene	mg/kg			0.052	U				0.19	U	0.2	U	0.23	U	0.23	U
2-Chlorophenol	mg/kg			0.052	U				0.19	U	0.2	U	0.23	U	0.23	U
2-Methylnaphthalene	mg/kg															
2-Methylphenol (O-Cresol)	mg/kg															
2-Naphthylamine	mg/kg			0.26	U				0.97	U	0.99	U	1.2	U	1.2	U
2-Nitroaniline	mg/kg															
2-Nitrophenol	mg/kg			0.052	U				0.19	U	0.2	U	0.23	U	0.23	U
3,3'-Dichlorobenzidine	mg/kg			0.16	U				0.58	U	0.59	U	0.69	U	0.7	U
3,3'-Dimethylbenzidine	mg/kg															
3-Nitroaniline	mg/kg															
4,6-Dinitro-2-Methylphenol	mg/kg			0.26	U				0.97	U	0.99	U	1.2	U	1.2	U
4-Aminobiphenyl	mg/kg			0.26	U				0.97	U	0.99	U	1.2	U	1.2	U
4-Bromophenyl Phenyl Ether	mg/kg			0.052	U				0.19	U	0.2	U	0.23	U	0.23	U
4-Chloro-3-Methylphenol	mg/kg			0.1	U				0.39	U	0.4	U	0.46	U	0.47	U
4-Chloroaniline	mg/kg			0.1	U				0.39	U	0.4	U	0.46	U	0.47	U
4-Chlorophenyl Phenyl Ether	mg/kg			0.052	U				0.19	U	0.2	U	0.23	U	0.23	U
4-Methylphenol (P-Cresol)	mg/kg															
4-Nitroaniline	mg/kg															
4-Nitrophenol	mg/kg			0.26	U				0.97	U	0.99	U	1.2	U	1.2	U
Acetophenone	mg/kg															
Aniline	mg/kg			0.26	U				0.97	U	0.99	U	1.2	U	1.2	U
Benzidine	mg/kg			1.8	U				6.8	U	6.9	U	8.1	U	8.1	U
Biphenyl	mg/kg															
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg															
Bis(2-Chloroethoxy)Methane	mg/kg			0.052	U				0.19	U	0.2	U	0.23	U	0.23	U
Bis(2-Chloroethyl)Ether	mg/kg			0.052	U				0.19	U	0.2	U	0.23	U	0.23	U
Bis(2-Chloroisopropyl)Ether	mg/kg			0.052	U				0.19	U	0.2	U	0.23	U	0.23	U
Bis(2-Ethylhexyl)Phthalate	mg/kg			0.1	U				0.39	U	0.4	U	0.46	U	0.47	U
Butyl Benzyl Phthalate	mg/kg			0.1	U				0.39	U	0.4	U	0.46	U	0.47	U
Carbazole	mg/kg			0.052	U				0.19	U	0.2	U	0.23	U	0.23	U
Dibenzofuran	mg/kg															
Diethyl Phthalate	mg/kg			0.1	U				0.39	U	0.4	U	0.46	U	0.47	U
Dimethyl Phthalate	mg/kg			0.1	U				0.39	U	0.4	U	0.46	U	0.47	U
Di-N-Butyl Phthalate	mg/kg			0.1	U				0.39	U	0.4	U	0.46	U	0.47	U
Diphenyl Ether	mg/kg															
Hexachlorobenzene	mg/kg			0.052	U				0.19	U	0.2	U	0.23	U	0.23	U
Hexachlorobutadiene	mg/kg			0.1	U				0.39	U	0.4	U	0.46	U	0.47	U
Hexachlorocyclopentadiene	mg/kg			0.26	U				0.97	U	0.99	U	1.2	U	1.2	U
Hexachloroethane	mg/kg			0.052	U				0.19	U	0.2	U	0.23	U	0.23	U
Hexachloropropylene	mg/kg															
Isophorone	mg/kg			0.052	U				0.19	U	0.2	U	0.23	U	0.23	U
N-Dioctyl Phthalate	mg/kg			0.1	U				0.39	U	0.4	U	0.46	U	0.47	U
Nitrobenzene	mg/kg			0.052	U				0.19	U	0.2	U	0.23	U	0.23	U
N-Nitrosodimethylamine	mg/kg			0.1	U				0.39	U	0.4	U	0.46	U	0.47	U
N-Nitrosodi-N-Propylamine	mg/kg			0.052	U				0.19	U	0.2	U	0.23	U	0.23	U
N-Nitrosodiphenylamine	mg/kg			0.052	U				0.19	U	0.2	U	0.23	U	0.23	U
O-Toluidine	mg/kg			0.31	U				1.2	U	1.2	U	1.4	U	1.4	U
Parathion	mg/kg															
Pentachlorobenzene	mg/kg															
Pentachlorophenol	mg/kg			0.26	U				0.97	U	0.99	U	1.2	U	1.2	U
Phenol	mg/kg			0.052	U				0.19	U	0.2	U	0.23	U	0.23	U
<b>Volatile Organic Compounds - TICs</b>																
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg															

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA								
Field Sample ID	22423798	22423799	22465068	22465069	22498905	22499340	22499341	22522912	23633169	23633171	23633173	23633174	
Location ID	DER1-14	DER1-15	DER1-12	DER1-12	DER1-12	DER1-13	DER1-15	DER1-12	DER2-13-SD	DER2-14-SD	DER2-15-SD	DER2-15-SD	
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	
Sample Purpose	FS	FS	FS	DUP									
Date	9/22/2009	9/22/2009	9/24/2009	9/24/2009	10/2/2009	9/22/2009	9/22/2009	9/25/2009	4/23/2010	4/23/2010	4/23/2010	4/23/2010	
Chemical Class	Units												
1-Butene	mg/kg												
1-Heptene	mg/kg												
1-Propene, 2-methyl-	mg/kg												
Azulene	mg/kg												
BENZENE, 1,2,4-TRICHLORO-	mg/kg												
BENZENE, 1,2-DICHLORO-	mg/kg												
BENZENE, 1,4-DICHLORO-	mg/kg												
Camphene	mg/kg												
CYCLOHEXANE	mg/kg												
Cyclohexane, methyl-	mg/kg												
Cyclotrisiloxane, hexamethyl	mg/kg												
Diphenyl Ether	mg/kg												
Ethane, 1,1,2,2-tetrachloro-	mg/kg												
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg												
Ethane, 1,2-dichloro-1,1-dif	mg/kg												
Ethene, 1,1-dichloro-2,2-dif	mg/kg												
Hexane, 2-methyl-	mg/kg												
Hexane, 3-methyl-	mg/kg												
METHANE, CHLOROFLUORO-	mg/kg												
Naphthalene	mg/kg	0.76			0.014								
NAPHTHALENE, 2-METHYL-	mg/kg				0.012								
Nonanal	mg/kg												
Norflurane	mg/kg												
Pentane, 2,3-dimethyl-	mg/kg												
Phenol, 4-(1,1,3,3-tetrameth	mg/kg												
Propene	mg/kg												
Sulfur dioxide	mg/kg												
Tridecane	mg/kg												
UNKNOWN	mg/kg	0.54			0.008								
UNKNOWN ALICYCLIC	mg/kg				0.008								
UNKNOWN ALIPHATIC	mg/kg												
UNKNOWN ALKANE	mg/kg												
UNKNOWN AROMATIC	mg/kg	5			0.014								
UNKNOWN SILOXANE	mg/kg	0.008			0.009								
<b>Volatile Organic Compounds</b>													
1,1,1,2-Tetrachloroethane	mg/kg												
1,1,1-Trichloroethane	mg/kg	0.001 U	0.062 U		0.001 U								
1,1,1-Trichlorotrifluoroethane	mg/kg												
1,1,2,2-Tetrachloroethane	mg/kg	0.001 U	0.062 U		0.001 U								
1,1,2-Trichloroethane	mg/kg	0.001 U	0.062 U		0.001 U								
1,1,2-Trichlorotrifluoroethane	mg/kg	0.003 U	0.19		0.003 U								
1,1,2-Trifluoroethane	mg/kg												
1,1-Dichloro-1-Fluoroethane	mg/kg												
1,1-Dichloroethane	mg/kg	0.001 U	0.062 U		0.001 U								
1,1-Dichloroethene	mg/kg	0.001 U	0.062 U		0.001 U								
1,1-Dichloropropene	mg/kg												
1,2,4-Trimethylbenzene	mg/kg												
1,2-Dibromoethane (EDB)	mg/kg												
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg												
1,2-Dichloro-1-Fluoroethane	mg/kg												
1,2-Dichlorobenzene	mg/kg		0.052 U					0.21	0.61	0.31	0.29		
1,2-Dichloroethane	mg/kg	0.001 U	0.062 U		0.001 U								
1,2-Dichloroethene	mg/kg												
1,2-Dichloropropane	mg/kg	0.001 U	0.062 U		0.001 U								
1,2-Dichlorotetrafluoroethane	mg/kg												
1,3,5-Trimethylbenzene	mg/kg												
1,3-Dichlorobenzene	mg/kg		0.052 U					0.19 U	0.2 U	0.23 U	0.23 U		
1,4-Dichlorobenzene	mg/kg		0.052 U					0.19 U	0.96	0.23 U	0.23 U		
1-Chloro-1,1-Difluoroethane	mg/kg												
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg												
2-Chloro-1,1,1-Trifluoroethane	mg/kg												
2-Chloroethyl Vinyl Ether	mg/kg	0.12 U											
2-Chlorotoluene	mg/kg												
2-Hexanone	mg/kg												
4-Chlorotoluene	mg/kg												
4-Isopropyltoluene	mg/kg												
Acetone	mg/kg	0.029	0.43 U		0.086								
Acrolein	mg/kg	0.027 U	1.2 U		0.029 U								
Acrylonitrile	mg/kg	0.005 U	0.25 U		0.006 U								
Benzene	mg/kg	0.0007 U	0.06		0.002								
Bromodichloromethane	mg/kg	0.001 U	0.062 U		0.001 U								
Bromoform	mg/kg	0.001 U	0.062 U		0.001 U								
Carbon Disulfide	mg/kg	0.002	0.062 U		0.004								
Carbon Tetrachloride	mg/kg	0.001 U	0.062 U		0.001 U								
CFC-1113	mg/kg												
Chlorobenzene	mg/kg	0.001 U	4		0.015								

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA	
		Field Sample ID	22423798	22423799	22465068	22465069	22498905	22499340	22499341	22522912	23633169	23633171	23633173	23633174	23633173	23633174	23633173	23633174	23633173
Chemical	Location ID	DER1-14	DER1-15	DER1-12	DER1-12	DER1-12	DER1-13	DER1-15	DER1-12	DER2-13-SD	DER2-14-SD	DER2-15-SD							
Units	Depth Interval (ft)	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50
Chemical	Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Chemical	Date	9/22/2009	9/22/2009	9/24/2009	9/24/2009	10/2/2009	9/22/2009	9/22/2009	9/25/2009	4/23/2010	4/23/2010	4/23/2010	4/23/2010	4/23/2010	4/23/2010	4/23/2010	4/23/2010	4/23/2010	4/23/2010
Chlorodibromomethane	mg/kg	0.001	U	0.062	U		0.001	U											
Chlorodifluoromethane	mg/kg																		
Chlorofluoromethane	mg/kg																		
Chloroform	mg/kg	0.001	U	0.062	U		0.001	U											
Chloropentafluoroethane	mg/kg																		
cis-1,2-Dichloroethene	mg/kg	0.001	U	0.062	U		0.001	U											
cis-1,3-Dichloropropene	mg/kg	0.001	U	0.062	U		0.001	U											
Cumene	mg/kg																		
Dichlorodifluoromethane	mg/kg	0.003	U	0.12	U		0.003	U											
Dichlorofluoromethane	mg/kg	0.003	U	0.12	U		0.003	U											
Ethane	ug/L																		
Ethyl Chloride	mg/kg	0.003	U	0.12	U		0.003	U											
Ethylbenzene	mg/kg	0.001	U	0.062	U		0.001	U											
Fluoromethane	mg/kg																		
Hexane	mg/kg																		
Isobutyl Alcohol	mg/kg																		
Meta- And Para-Xylene	mg/kg																		
Methacrylonitrile	mg/kg																		
Methane	ug/L																		
Methyl Bromide	mg/kg	0.003	U	0.12	U		0.003	U											
Methyl Chloride	mg/kg	0.003	U	0.12	U		0.003	U											
Methyl Ethyl Ketone	mg/kg																		
Methyl Isobutyl Ketone	mg/kg																		
Methyl Methacrylate	mg/kg																		
Methyl Tertiary Butyl Ether	mg/kg																		
Methylene Chloride	mg/kg	0.003	U	0.12	U		0.004												
N-Butylbenzene	mg/kg																		
N-Propylbenzene	mg/kg																		
Ortho-Xylene	mg/kg																		
Propionitrile	mg/kg																		
sec-Butylbenzene	mg/kg																		
Styrene	mg/kg																		
tert-Butylbenzene	mg/kg																		
Tetrachloroethene	mg/kg	0.001	U	0.78			0.001	U											
Tetrahydrofuran	mg/kg																		
Toluene	mg/kg	0.003		0.062	U		0.008												
trans-1,2-Dichloroethene	mg/kg	0.001	U	0.062	U		0.001	U											
trans-1,3-Dichloropropene	mg/kg	0.001	U	0.062	U		0.001	U											
Trichloroethene	mg/kg	0.001	U	0.062	U		0.001	U											
Trichlorofluoromethane	mg/kg	0.003	U	0.12	U		0.003	U											
Vinyl Chloride	mg/kg	0.001	U	0.062	U		0.001	U											
Vinyl Fluoride	mg/kg																		
Xylenes	mg/kg	0.001	U	0.062	U		0.001												

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA											
Field Sample ID	23659386	23659388	23659390	23683238	23683244	23683249	23687892	23687893	23708849	23708850	23708851	23708852	
Location ID	DER2-17-SD	DER2-18-SD	DER2-19-SD	DER2-17-SD	DER2-18-SD	DER2-19-SD	DER2-16-SD	DER2-16-SD	DER2-13-SD	DER2-14-SD	DER2-15-SD	DER2-15-SD	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	
Sample Purpose	FS	DUP											
Date	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/20/2010	4/20/2010	4/23/2010	4/23/2010	4/23/2010	4/23/2010	
Chemical Class	Units												
<b>General Chemistry</b>													
Black Carbon	mg/kg	1990	9000	8070				2005					
Percent Moisture	%	46.9	59.6	57.4	30.4	49.7	54.2	59.8	54.9	41.8	15.6	42	50.2
Percent Solids	%												
Total Organic Carbon	mg/kg	12700	21800	31850	35500	14750	27600	20300	22400	17150	12650	21650	19300
<b>Metals</b>													
Aluminum	mg/kg	14000	19200	16700				20100					
Antimony	mg/kg	1.86 U	2.43 U	2.3 U				2.46 U					
Arsenic	mg/kg	8.66	13.8	11				9.02					
Barium	mg/kg	69.9	104	95.9				75.8					
Beryllium	mg/kg	0.768	1.15	0.939				0.973					
Cadmium	mg/kg	0.666	1.02	0.875				0.608					
Calcium	mg/kg	4380	4460	5040				3490					
Chromium	mg/kg	36.8	53.5	46				48.9					
Cobalt	mg/kg	9.53	13.4	11.6				11.9					
Copper	mg/kg	25.4	53.1	36.6				24.8					
Iron	mg/kg	22500	31200	28300				29800					
Lead	mg/kg	39.5	62.3	46.4				36.9					
Magnesium	mg/kg	4250	5440	5200				6330					
Manganese	mg/kg	648	1020	937				1120					
Mercury	mg/kg	0.185	0.252	0.263				0.113					
Nickel	mg/kg	21.2	30.1	28.3				26.9					
Potassium	mg/kg	2370	3110	2850				3490					
Selenium	mg/kg	1.83 U	2.38 U	2.26 U				2.41 U					
Silver	mg/kg	0.336 U	0.546 U	0.414 U				0.443 U					
Sodium	mg/kg	331	535	433				719					
Thallium	mg/kg	2.7 U	3.52 U	3.34 U				3.57 U					
Tin	mg/kg	6.42	12.2	9				6.02					
Titanium	mg/kg												
Vanadium	mg/kg	36.4	51.8	42.2				50.5					
Zinc	mg/kg	150	216	193				164					
<b>Metals - AVS/SEM</b>													
Acid Volatile Sulfide	umol/g												
Arsenic	umol/g												
Cadmium	umol/g												
Copper	umol/g												
Lead	umol/g												
Zinc	umol/g												
<b>Metals - Leachate</b>													
Lead	ug/L												
<b>Per and Polyfluorinated Organic Substances</b>													
Perfluorobutane Sulfonic Acid	mg/kg												
Perfluorobutanoic Acid	mg/kg												
Perfluorodecane Sulfonic Acid	mg/kg												
Perfluorodecanoic Acid	mg/kg												
Perfluorododecanoic Acid	mg/kg												
Perfluoroheptanoic Acid	mg/kg												
Perfluorohexane Sulfonic Acid	mg/kg												
Perfluorohexanoic Acid	mg/kg												
Perfluorononanoic Acid	mg/kg												
Perfluorooctane Sulfonamide	mg/kg												
Perfluoropentanoic Acid	mg/kg												
Perfluorotetradecanoic Acid	mg/kg												
Perfluorotridecanoic Acid	mg/kg												
Perfluoroundecanoic Acid	mg/kg												
PFOA	mg/kg												
PFOA(trial)	mg/kg												
PFOS	mg/kg												
PFOS (trial)	mg/kg												
<b>Pesticides and Herbicides</b>													
4,4'-DDD	mg/kg												
4,4'-DDE	mg/kg												
4,4'-DDT	mg/kg												
Aldrin	mg/kg												
Alpha Chlordane	mg/kg												
Alpha-BHC	mg/kg												
beta-BHC	mg/kg												
delta-BHC	mg/kg												
Dieldrin	mg/kg												
Endosulfan I	mg/kg												
Endosulfan II	mg/kg												
Endosulfan Sulfate	mg/kg												
Endrin	mg/kg												
Endrin Aldehyde	mg/kg												
Endrin Ketone	mg/kg												
Gammax Chlordane	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA											
Field Sample ID	23659386	23659388	23659390	23683238	23683244	23683249	23687892	23687893	23708849	23708850	23708851	23708852	
Location ID	DER2-17-SD	DER2-18-SD	DER2-19-SD	DER2-17-SD	DER2-18-SD	DER2-19-SD	DER2-16-SD	DER2-16-SD	DER2-13-SD	DER2-14-SD	DER2-15-SD	DER2-15-SD	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	
Sample Purpose	FS	DUP											
Date	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/20/2010	4/20/2010	4/23/2010	4/23/2010	4/23/2010	4/23/2010	
Chemical Class	Units												
Heptachlor	mg/kg												
Heptachlor Epoxide	mg/kg												
Lindane	mg/kg												
Methoxychlor	mg/kg												
Toxaphene	mg/kg												
<b>Physical Properties</b>													
0.001 MM	% PASSING	4	10	4.5			14						
0.002 MM	% PASSING	7.5	15	10			22.5						
0.005 MM	% PASSING	14.5	26	19			36						
0.02 MM	% PASSING	34	56.5	47.5			67						
0.05 MM	% PASSING	63.5	70	70			83						
0.064 MM	% PASSING	79.5	76.5	79			89						
0.075 MM	% PASSING	87.7	81.1	84.4			92.8						
0.15 MM	% PASSING	95.2	85	92.4			95.3						
0.3 MM	% PASSING	97.4	87.6	95.4			96.4						
0.6 MM	% PASSING	98.2	90.6	97.3			97.2						
1.18 MM	% PASSING	98.4	93.1	98.6			98.3						
19 MM	% PASSING	100	100	100			100						
2.36 MM	% PASSING	98.8	96.8	99.1			99.3						
3.35 MM	% PASSING	99.3	98.3	99.8			99.8						
37.5 MM	% PASSING	100	100	100			100						
4.75 MM	% PASSING	99.7	99.3	99.8			99.9						
75 MM	% PASSING	100	100	100			100						
Density	PCF												
<b>Polychlorinated Biphenyls - TICs</b>													
1,1'-Biphenyl, 2,3-dichloro-	mg/kg												
Unknown Biphenyl	mg/kg												
<b>Polychlorinated Biphenyls</b>													
Heptachlorobiphenyl	mg/kg												
Hexachlorobiphenyl	mg/kg												
Octachlorobiphenyl	mg/kg												
PCB 1	mg/kg						0.00048						
PCB 10	mg/kg						0.0000143						
PCB 100	mg/kg												
PCB 101	mg/kg												
PCB 102	mg/kg						0.000115						
PCB 103	mg/kg						0.000063						
PCB 104	mg/kg						0.00000485						
PCB 105	mg/kg						0.000541						
PCB 106	mg/kg						0.00000517	U					
PCB 107	mg/kg												
PCB 107/123	mg/kg												
PCB 108	mg/kg												
PCB 109	mg/kg						0.000161						
PCB 11	mg/kg						0.000501						
PCB 110	mg/kg						0.00212						
PCB 111	mg/kg						0.0000905						
PCB 112	mg/kg						0.00000507	U					
PCB 113	mg/kg												
PCB 114	mg/kg						0.0000233						
PCB 115	mg/kg						0.00000509	U					
PCB 116	mg/kg												
PCB 117	mg/kg						0.0000587						
PCB 118	mg/kg						0.00161						
PCB 119	mg/kg												
PCB 12	mg/kg												
PCB 120	mg/kg						0.0000263						
PCB 121	mg/kg						0.00000587	U					
PCB 121/95/88	mg/kg												
PCB 122	mg/kg						0.000021						
PCB 123	mg/kg						0.000028						
PCB 124	mg/kg												
PCB 125	mg/kg												
PCB 126	mg/kg						0.000012						
PCB 127	mg/kg						0.00000623	U					
PCB 128	mg/kg												
PCB 129	mg/kg												
PCB 129/158	mg/kg												
PCB 13	mg/kg												
PCB 130	mg/kg						0.000214						
PCB 130/164	mg/kg												
PCB 131	mg/kg						0.0000224						
PCB 132	mg/kg						0.000745						
PCB 133	mg/kg						0.000102						
PCB 134	mg/kg						0.000154						
PCB 135	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA						
Field Sample ID	23659386	23659388	23659390	23683238	23683244	23683249	23687892	23687893	23708849	23708850	23708851	23708852
Location ID	DER2-17-SD	DER2-18-SD	DER2-19-SD	DER2-17-SD	DER2-18-SD	DER2-19-SD	DER2-16-SD	DER2-16-SD	DER2-13-SD	DER2-14-SD	DER2-15-SD	DER2-15-SD
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00
Sample Purpose	FS	FS	FS	FS	FS	DUP						
Date	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/20/2010	4/20/2010	4/23/2010	4/23/2010	4/23/2010	4/23/2010
Chemical Class												
Chemical	Units											
PCB 136	mg/kg						0.000422					
PCB 137	mg/kg						0.0000816					
PCB 138	mg/kg											
PCB 139	mg/kg											
PCB 14	mg/kg						0.0000501					
PCB 140	mg/kg											
PCB 141	mg/kg						0.00029					
PCB 142	mg/kg						0.00000702	U				
PCB 143	mg/kg						0.00000604	U				
PCB 143/139	mg/kg											
PCB 144	mg/kg						0.0000953					
PCB 145	mg/kg						0.00000448	U				
PCB 146	mg/kg						0.000467					
PCB 147	mg/kg											
PCB 148	mg/kg						0.0000293					
PCB 149	mg/kg											
PCB 15	mg/kg						0.000899					
PCB 150	mg/kg						0.0000359					
PCB 151	mg/kg											
PCB 152	mg/kg						0.00000404					
PCB 153	mg/kg											
PCB 154	mg/kg						0.000161					
PCB 155	mg/kg						0.0000171					
PCB 156	mg/kg											
PCB 157	mg/kg											
PCB 158	mg/kg						0.000169					
PCB 159	mg/kg						0.00000148	U				
PCB 16	mg/kg						0.000213					
PCB 160	mg/kg						0.00000053	U				
PCB 161	mg/kg						0.000000484	U				
PCB 162	mg/kg						0.0000282					
PCB 163	mg/kg											
PCB 163/160	mg/kg											
PCB 164	mg/kg						0.000182					
PCB 165	mg/kg						0.00000378					
PCB 166	mg/kg											
PCB 167	mg/kg						0.000114					
PCB 168	mg/kg											
PCB 169	mg/kg						0.00000196	U				
PCB 17	mg/kg						0.000222					
PCB 170	mg/kg						0.000569					
PCB 171	mg/kg											
PCB 172	mg/kg						0.000125					
PCB 173	mg/kg											
PCB 174	mg/kg						0.000686					
PCB 175	mg/kg						0.0000448					
PCB 176	mg/kg						0.00013					
PCB 177	mg/kg						0.000467					
PCB 178	mg/kg						0.000253					
PCB 179	mg/kg						0.00042					
PCB 18	mg/kg											
PCB 180	mg/kg											
PCB 181	mg/kg						0.00000649					
PCB 182	mg/kg						0.0000195					
PCB 182/175	mg/kg											
PCB 183	mg/kg						0.000403					
PCB 184	mg/kg						0.0000146					
PCB 185	mg/kg						0.00000125	U				
PCB 186	mg/kg						0.000000476	U				
PCB 187	mg/kg						0.00107					
PCB 188	mg/kg						0.0000387					
PCB 189	mg/kg						0.0000304					
PCB 19	mg/kg						0.0000729					
PCB 190	mg/kg						0.000123					
PCB 191	mg/kg						0.0000238					
PCB 192	mg/kg						0.00000911	U				
PCB 193	mg/kg											
PCB 194	mg/kg						0.000481					
PCB 195	mg/kg						0.000164					
PCB 196	mg/kg						0.000465					
PCB 197	mg/kg						0.00007					
PCB 198	mg/kg											
PCB 199	mg/kg											
PCB 2	mg/kg						0.000299					
PCB 20	mg/kg											
PCB 200	mg/kg						0.0000458					

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA											
Field Sample ID	23659386	23659388	23659390	23683238	23683244	23683249	23687892	23687893	23708849	23708850	23708851	23708852
Location ID	DER2-17-SD	DER2-18-SD	DER2-19-SD	DER2-17-SD	DER2-18-SD	DER2-19-SD	DER2-16-SD	DER2-16-SD	DER2-13-SD	DER2-14-SD	DER2-15-SD	DER2-15-SD
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00
Sample Purpose	FS	DUP										
Date	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/20/2010	4/20/2010	4/23/2010	4/23/2010	4/23/2010	4/23/2010
Chemical Class												
Chemical	Units											
PCB 201	mg/kg						0.000187					
PCB 202	mg/kg						0.000516					
PCB 203	mg/kg						0.000601					
PCB 204	mg/kg						0.00000887					
PCB 204/200	mg/kg											
PCB 205	mg/kg						0.0000296					
PCB 206	mg/kg						0.00552					
PCB 207	mg/kg						0.000524					
PCB 208	mg/kg						0.0028					
PCB 209	mg/kg						0.0105					
PCB 21	mg/kg											
PCB 21/20	mg/kg											
PCB 22	mg/kg						0.000201					
PCB 23	mg/kg						0.0000841					
PCB 24	mg/kg						0.0000285					
PCB 25	mg/kg						0.000145					
PCB 26	mg/kg											
PCB 27	mg/kg						0.000092					
PCB 28	mg/kg											
PCB 29	mg/kg											
PCB 3	mg/kg						0.000412					
PCB 30	mg/kg											
PCB 31	mg/kg						0.000646					
PCB 32	mg/kg						0.000204					
PCB 33	mg/kg											
PCB 34	mg/kg						0.0000206					
PCB 35	mg/kg						0.000122					
PCB 36	mg/kg						0.0000186					
PCB 37	mg/kg						0.000542					
PCB 38	mg/kg						0.00000268					
PCB 39	mg/kg						0.000034					
PCB 4	mg/kg						0.000261					
PCB 4/10	mg/kg											
PCB 40	mg/kg											
PCB 41	mg/kg						0.0000263					
PCB 42	mg/kg						0.000331					
PCB 43	mg/kg						0.000029					
PCB 44	mg/kg											
PCB 45	mg/kg						0.000111					
PCB 46	mg/kg						0.0000633					
PCB 47	mg/kg											
PCB 48	mg/kg						0.0000998					
PCB 49	mg/kg											
PCB 5	mg/kg						0.0000829					
PCB 50	mg/kg											
PCB 51	mg/kg						0.000146					
PCB 52	mg/kg						0.00121					
PCB 53	mg/kg											
PCB 54	mg/kg						0.000017					
PCB 55	mg/kg						0.0000845					
PCB 56	mg/kg						0.000503					
PCB 57	mg/kg						0.0000098					
PCB 58	mg/kg						0.0000118					
PCB 59	mg/kg											
PCB 6	mg/kg						0.000167					
PCB 60	mg/kg						0.000114					
PCB 61	mg/kg											
PCB 62	mg/kg											
PCB 63	mg/kg						0.0000441					
PCB 64	mg/kg						0.000442					
PCB 65	mg/kg											
PCB 65/75/62	mg/kg											
PCB 66	mg/kg						0.00108					
PCB 67	mg/kg						0.0000355					
PCB 67/58	mg/kg											
PCB 68	mg/kg						0.0000537					
PCB 68/64	mg/kg											
PCB 69	mg/kg											
PCB 7	mg/kg						0.0000298					
PCB 70	mg/kg											
PCB 71	mg/kg											
PCB 72	mg/kg						0.0000405					
PCB 73	mg/kg						0.0000118					
PCB 73/46	mg/kg											
PCB 74	mg/kg											
PCB 75	mg/kg											

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Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA											
Field Sample ID	23659386	23659388	23659390	23683238	23683244	23683249	23687892	23687893	23708849	23708850	23708851	23708852	
Location ID	DER2-17-SD	DER2-18-SD	DER2-19-SD	DER2-17-SD	DER2-18-SD	DER2-19-SD	DER2-16-SD	DER2-16-SD	DER2-13-SD	DER2-14-SD	DER2-15-SD	DER2-15-SD	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	
Sample Purpose	FS	DUP											
Date	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/20/2010	4/20/2010	4/23/2010	4/23/2010	4/23/2010	4/23/2010	
Chemical Class	Units												
PCB 76	mg/kg												
PCB 77	mg/kg												
PCB 78	mg/kg						0.000337						
PCB 79	mg/kg						0.0000115	U					
PCB 8	mg/kg						0.0000236						
PCB 80	mg/kg						0.000326						
PCB 81	mg/kg						0.0000115	U					
PCB 82	mg/kg						0.0000516						
PCB 83	mg/kg						0.000186						
PCB 83/125/112	mg/kg						0.0000953						
PCB 84	mg/kg						0.000497						
PCB 85	mg/kg												
PCB 86	mg/kg												
PCB 86/109	mg/kg												
PCB 87	mg/kg												
PCB 87/111	mg/kg												
PCB 88	mg/kg						0.00000824	U					
PCB 89	mg/kg						0.0000211						
PCB 89/84	mg/kg												
PCB 9	mg/kg						0.000076						
PCB 90	mg/kg												
PCB 91	mg/kg						0.000458						
PCB 92	mg/kg						0.000485						
PCB 93	mg/kg												
PCB 94	mg/kg						0.0000336						
PCB 95	mg/kg						0.00141						
PCB 96	mg/kg						0.0000277						
PCB 97	mg/kg												
PCB 98	mg/kg						0.00000675	U					
PCB 99	mg/kg						0.00123						
PCB-100/93	mg/kg						0.0000706						
PCB-107/124	mg/kg						0.0000578						
PCB-108/119/86/97/125/87	mg/kg						0.00122						
PCB-113/90/101	mg/kg						0.00218						
PCB-116/85	mg/kg						0.000308						
PCB-128/166	mg/kg						0.000363						
PCB-13/12	mg/kg						0.000369						
PCB-139/140	mg/kg						0.000057						
PCB-147/149	mg/kg						0.00223						
PCB-151/135	mg/kg						0.00104						
PCB-153/168	mg/kg						0.00254						
PCB-156/157	mg/kg						0.000243						
PCB-163/138/129	mg/kg						0.00267						
PCB-171/173	mg/kg						0.000179						
PCB-180/193	mg/kg						0.00136						
PCB-198/199	mg/kg						0.0016						
PCB-21/33	mg/kg						0.000377						
PCB-26/29	mg/kg						0.000217						
PCB-28/20	mg/kg						0.000996						
PCB-30/18	mg/kg						0.000433						
PCB-44/47/65	mg/kg						0.00122						
PCB-50/53	mg/kg						0.000204						
PCB-59/62/75	mg/kg						0.000118						
PCB-61/70/74/76	mg/kg						0.00153						
PCB-69/49	mg/kg						0.000942						
PCB-71/40	mg/kg						0.00058						
PCB-90/101	mg/kg												
Pentachlorobiphenyl	mg/kg												
Tetrachlorobiphenyl	mg/kg												
Total Decachlorobiphenyls (congeners)	mg/kg												
Total Dichlorobiphenyls (congeners)	mg/kg						0.00278						
Total Heptachlorobiphenyls (congeners)	mg/kg						0.00597						
Total Hexachlorobiphenyls (congeners)	mg/kg						0.0125						
Total Monochlorobiphenyls (congeners)	mg/kg						0.00119						
Total Nonachlorobiphenyls (congeners)	mg/kg						0.00885						
Total Octachlorobiphenyls (congeners)	mg/kg						0.00417						
Total PCB (congeners)	mg/kg						0.073						
Total Pentachlorobiphenyls (congeners)	mg/kg						0.0131						
Total Tetrachlorobiphenyls (congeners)	mg/kg						0.00935						
Total Trichlorobiphenyls (congeners)	mg/kg						0.00459						
Trichlorobiphenyl (total)	mg/kg												
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>													
Benzo[e]pyrene	mg/kg												
Chrysene, 1-methyl-	mg/kg												
Naphthalene, 1-methyl-	mg/kg												
Pyrene, 1-methyl-	mg/kg												

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	23659386	23659388	23659390	23683238	23683244	23683249	23687892	23687893	23708849	23708850	23708851	23708852	
Location ID	DER2-17-SD	DER2-18-SD	DER2-19-SD	DER2-17-SD	DER2-18-SD	DER2-19-SD	DER2-16-SD	DER2-16-SD	DER2-13-SD	DER2-14-SD	DER2-15-SD	DER2-15-SD	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	DUP	
Date	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/20/2010	4/20/2010	4/23/2010	4/23/2010	4/23/2010	4/23/2010	
Chemical Class	Units												
<b>Polycyclic Aromatic Hydrocarbons</b>													
Acenaphthene	mg/kg	0.13	U	0.29		0.16	U			0.083	U		
Acenaphthylene	mg/kg	0.13	U	0.17	U	0.16	U			0.083	U		
Anthracene	mg/kg	0.13	U	0.17	U	0.28				0.083	U		
Benzo(A)Anthracene	mg/kg	0.13	U	0.21		0.46				0.096			
Benzo(B)Fluoranthene	mg/kg	0.13	U	0.2		0.47				0.14			
Benzo(G,H,I)Perylene	mg/kg	0.13	U	0.17	U	0.21				0.083	U		
Benzo(K)Fluoranthene	mg/kg	0.13	U	0.17	U	0.17				0.083	U		
Benzo(A)Pyrene	mg/kg	0.13	U	0.17	U	0.29				0.098			
Chrysene	mg/kg	0.13	U	0.31		0.75				0.15			
Dibenz(A,H)Anthracene	mg/kg	0.13	U	0.17	U	0.16	U			0.083	U		
Fluoranthene	mg/kg	0.14		0.37		1				0.17			
Fluorene	mg/kg	0.13	U	0.21		0.16	U			0.083	U		
Indeno (1,2,3-CD) Pyrene	mg/kg	0.13	U	0.17	U	0.17				0.083	U		
Naphthalene	mg/kg	0.18		0.67		0.55				0.15			
Phenanthrene	mg/kg	0.13	U	0.37		0.68				0.13			
Pyrene	mg/kg	0.16		0.47		1.1				0.19			
Total PAHs (Detections + 1/2 MDL)	mg/kg	1.39		3.695		6.45				1.456			
Total PAHs (Detections Only)	mg/kg	0.61		3.1		6.13				1.124			
<b>Semivolatile Organic Compounds - TICs</b>													
1,2,4-Trithiolane	mg/kg												
1,4-Benzenediol, 2-chloro-	mg/kg												
11H-Benzo[b]fluorene	mg/kg												
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg												
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg								5.2				
3-PENTEN-2-ONE, 4-METHYL-	mg/kg												
7H-Benz[de]anthracen-7-one	mg/kg												
9,10-Anthracenedione	mg/kg												
9-Octadecenamido, (Z)-	mg/kg												
Acetamide, 2-chloro-N-(ethox	mg/kg												
Alachlor	mg/kg												
Benzenamine, 3-methyl-	mg/kg												
Benzenamine, 4,4',4"-methy	mg/kg												
Benzenamine, 4,4'-methyleneb	mg/kg												
Benzene, 1,2,3,4-tetrachloro	mg/kg												
Benzene, 1,2,3,5-tetrachloro	mg/kg												
Benzene, 1,2,3-trichloro-	mg/kg												
Benzene, 1,3,5-trichloro-	mg/kg												
Benzene, 1,3-bis(1-methyleth	mg/kg												
Benzene, 1,4-bis(1-methyleth	mg/kg												
Benzofuran, 2,3-dihydro-	mg/kg												
CYCLIC OCTAATOMIC SULFUR	mg/kg												
Diphenyl Ether	mg/kg												
Docosane	mg/kg												
Heneicosane	mg/kg												
Hexacosane	mg/kg												
Hexadecane	mg/kg												
Hexatriacontane	mg/kg												
m-Chloroaniline	mg/kg												
N,N-Diethylaniline	mg/kg												
n-Hexadecanoic acid	mg/kg												
Nonadecane	mg/kg												
o-Chloroaniline	mg/kg												
Octacosane	mg/kg												
Octadecane	mg/kg												
Octadecane, 1-chloro-	mg/kg												
Octadecanoic acid	mg/kg												
Parachlorophenol	mg/kg												
Pentadecane	mg/kg												
Perylene	mg/kg												
Phenol, 2,5-dichloro-	mg/kg												
Phenol, 3-chloro-	mg/kg												
Phenol, 4,4'-(1-methylethyl)	mg/kg												
Tetracosane	mg/kg												
Tetradecane	mg/kg												
Tetraethylene glycol	mg/kg												
Total SVOC TICs	mg/kg												
Triacotane	mg/kg												
Tributyl phosphate	mg/kg												
Tridecanoic acid	mg/kg												
Triphenyl phosphate	mg/kg												
UNKNOWN	mg/kg	2.356153846		2.804		3.206				1.557619048			
Unknown acid	mg/kg												
Unknown Alcohol	mg/kg												
Unknown Aldol Condensate	mg/kg												
UNKNOWN ALKANE	mg/kg									1.633333333			

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA											
Field Sample ID	23659386	23659388	23659390	23683238	23683244	23683249	23687892	23687893	23708849	23708850	23708851	23708852	
Location ID	DER2-17-SD	DER2-18-SD	DER2-19-SD	DER2-17-SD	DER2-18-SD	DER2-19-SD	DER2-16-SD	DER2-16-SD	DER2-13-SD	DER2-14-SD	DER2-15-SD	DER2-15-SD	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	
Sample Purpose	FS	DUP											
Date	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/20/2010	4/20/2010	4/23/2010	4/23/2010	4/23/2010	4/23/2010	
Chemical Class	Units												
Unknown Alkene	mg/kg												
Unknown Amide	mg/kg												
Unknown Amine	mg/kg												
UNKNOWN AROMATIC	mg/kg												
Unknown Carboxylic Acid	mg/kg												
Unknown Cycloalkane	mg/kg												
Unknown Hydrocarbon	mg/kg												
Unknown Ketone	mg/kg												
Unknown PAH	mg/kg												
UNKNOWN SILOXANE	mg/kg												
<b>Semivolatile Organic Compounds</b>													
1,2,4-Trichlorobenzene	mg/kg	0.13		0.43		0.63				0.083	U		
1,2-Diphenylhydrazine	mg/kg	0.13	U	0.17	U	0.16	U			0.083	U		
1,4-Dioxane	mg/kg												
1-Naphthylamine	mg/kg	0.63	U	0.83	U	0.78	U			0.41	U		
2,3,4,6-Tetrachlorophenol	mg/kg												
2,4,5-Trichlorophenol	mg/kg												
2,4,6-Trichlorophenol	mg/kg	0.13	U	0.17	U	0.16	U			0.083	U		
2,4-Dichlorophenol	mg/kg	0.13	U	0.17	U	0.16	U			0.083	U		
2,4-Dimethylphenol	mg/kg	0.25	U	0.33	U	0.31	U			0.17	U		
2,4-Dinitrophenol	mg/kg	2.5	U	3.3	U	3.1	U			1.7	U		
2,4-Dinitrotoluene	mg/kg	0.25	U	0.33	U	0.31	U			0.17	U		
2,6-Dinitrotoluene	mg/kg	0.13	U	0.17	U	0.16	U			0.083	U		
2-Chloronaphthalene	mg/kg	0.13	U	0.17	U	0.16	U			0.083	U		
2-Chlorophenol	mg/kg	0.13	U	0.17	U	0.16	U			0.083	U		
2-Methylnaphthalene	mg/kg												
2-Methylphenol (O-Cresol)	mg/kg												
2-Naphthylamine	mg/kg	0.63	U	0.83	U	0.78	U			0.41	U		
2-Nitroaniline	mg/kg												
2-Nitrophenol	mg/kg	0.13	U	0.17	U	0.16	U			0.083	U		
3,3'-Dichlorobenzidine	mg/kg	0.38	U	0.5	U	0.47	U			0.25	U		
3,3'-Dimethylbenzidine	mg/kg												
3-Nitroaniline	mg/kg												
4,6-Dinitro-2-Methylphenol	mg/kg	0.63	U	0.83	U	0.78	U			0.41	U		
4-Aminobiphenyl	mg/kg	0.63	U	0.83	U	0.78	U			0.41	U		
4-Bromophenyl Phenyl Ether	mg/kg	0.13	U	0.17	U	0.16	U			0.083	U		
4-Chloro-3-Methylphenol	mg/kg	0.25	U	0.33	U	0.31	U			0.17	U		
4-Chloroaniline	mg/kg	0.25	U	2.1	U	0.31	U			0.17	U		
4-Chlorophenyl Phenyl Ether	mg/kg	0.13	U	0.17	U	0.16	U			0.083	U		
4-Methylphenol (P-Cresol)	mg/kg												
4-Nitroaniline	mg/kg												
4-Nitrophenol	mg/kg	0.63	U	0.83	U	0.78	U			0.41	U		
Acetophenone	mg/kg												
Aniline	mg/kg	0.63	U	0.83	U	0.78	U			0.41	U		
Benzidine	mg/kg	4.4	U	5.8	U	5.5	U			2.9	U		
Biphenyl	mg/kg												
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg												
Bis(2-Chloroethoxy)Methane	mg/kg	0.13	U	0.17	U	0.16	U			0.083	U		
Bis(2-Chloroethyl)Ether	mg/kg	0.13	U	0.17	U	0.16	U			0.083	U		
Bis(2-Chloroisopropyl)Ether	mg/kg	0.13	U	0.17	U	0.16	U			0.083	U		
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.25	U	1.2	U	0.37	U			0.17	U		
Butyl Benzyl Phthalate	mg/kg	0.25	U	2.8	U	0.31	U			0.17	U		
Carbazole	mg/kg	0.13	U	0.17	U	0.16	U			0.083	U		
Dibenzofuran	mg/kg												
Diethyl Phthalate	mg/kg	0.41		0.36		1.5				0.17	U		
Dimethyl Phthalate	mg/kg	0.25	U	0.33	U	0.31	U			0.17	U		
Di-N-Butyl Phthalate	mg/kg	0.25	U	0.33	U	0.43				0.17	U		
Diphenyl Ether	mg/kg												
Hexachlorobenzene	mg/kg	0.13	U	0.17	U	0.16	U			0.083	U		
Hexachlorobutadiene	mg/kg	0.25	U	0.33	U	0.31	U			0.17	U		
Hexachlorocyclopentadiene	mg/kg	0.63	U	0.83	U	0.78	U			0.41	U		
Hexachloroethane	mg/kg	0.13	U	0.17	U	0.16	U			0.083	U		
Hexachloropropylene	mg/kg												
Isophorone	mg/kg	0.13	U	0.17	U	0.16	U			0.083	U		
N-Dioctyl Phthalate	mg/kg	0.25	U	0.33	U	0.31	U			0.17	U		
Nitrobenzene	mg/kg	0.13	U	0.17	U	0.16	U			0.083	U		
N-Nitrosodimethylamine	mg/kg	0.25	U	0.33	U	0.31	U			0.17	U		
N-Nitrosodi-N-Propylamine	mg/kg	0.13	U	0.17	U	0.16	U			0.083	U		
N-Nitrosodiphenylamine	mg/kg	0.13	U	0.28	U	0.16	U			0.083	U		
O-Toluidine	mg/kg	0.75	U	0.99	U	0.94	U			0.5	U		
Parathion	mg/kg												
Pentachlorobenzene	mg/kg												
Pentachlorophenol	mg/kg	0.63	U	0.83	U	0.78	U			0.41	U		
Phenol	mg/kg	0.13	U	0.17	U	0.16	U			0.083	U		
<b>Volatile Organic Compounds - TICs</b>													
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg												

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA						
Field Sample ID	23659386	23659388	23659390	23683238	23683244	23683249	23687892	23687893	23708849	23708850	23708851	23708852	
Location ID	DER2-17-SD	DER2-18-SD	DER2-19-SD	DER2-17-SD	DER2-18-SD	DER2-19-SD	DER2-16-SD	DER2-16-SD	DER2-13-SD	DER2-14-SD	DER2-15-SD	DER2-15-SD	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	DUP							
Date	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/20/2010	4/20/2010	4/23/2010	4/23/2010	4/23/2010	4/23/2010	
Chemical Class	Units												
1-Butene	mg/kg												
1-Heptene	mg/kg												
1-Propene, 2-methyl-	mg/kg												
Azulene	mg/kg												
BENZENE, 1,2,4-TRICHLORO-	mg/kg						0.031						
BENZENE, 1,2-DICHLORO-	mg/kg						0.044						
BENZENE, 1,4-DICHLORO-	mg/kg												
Camphene	mg/kg												
CYCLOHEXANE	mg/kg								0.12				
Cyclohexane, methyl-	mg/kg												
Cyclotrisiloxane, hexamethyl	mg/kg												
Diphenyl Ether	mg/kg												
Ethane, 1,1,2,2-tetrachloro-	mg/kg												
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg												
Ethane, 1,2-dichloro-1,1-dif	mg/kg												
Ethene, 1,1-dichloro-2,2-dif	mg/kg												
Hexane, 2-methyl-	mg/kg												
Hexane, 3-methyl-	mg/kg												
METHANE, CHLOROFLUORO-	mg/kg												
Naphthalene	mg/kg								0.034				
NAPHTHALENE, 2-METHYL-	mg/kg												
Nonanal	mg/kg												
Norflurane	mg/kg												
Pentane, 2,3-dimethyl-	mg/kg												
Phenol, 4-(1,1,3,3-tetrameth	mg/kg												
Propene	mg/kg												
Sulfur dioxide	mg/kg												
Tridecane	mg/kg												
UNKNOWN	mg/kg				0.35		0.031666667		0.0225	0.046428571		0.0201	0.029666667
UNKNOWN ALICYCLIC	mg/kg											0.013	0.019
UNKNOWN ALIPHATIC	mg/kg						1.3						
UNKNOWN ALKANE	mg/kg								0.024666667	0.05375		0.02	0.029666667
UNKNOWN AROMATIC	mg/kg				8.1		5.25		0.024333333	0.062		0.012	0.081
UNKNOWN SILOXANE	mg/kg						0.024		0.048		0.013	0.026	0.028
<b>Volatile Organic Compounds</b>													
1,1,1,2-Tetrachloroethane	mg/kg												
1,1,1-Trichloroethane	mg/kg				0.065	U	0.11	U	0.003	U			
1,1,1-Trichlorotrifluoroethane	mg/kg												
1,1,2,2-Tetrachloroethane	mg/kg				0.065	U	0.11	U	0.003	U			
1,1,2-Trichloroethane	mg/kg				0.065	U	0.11	U	0.003	U	0.002	U	0.002
1,1,2-Trichlorotrifluoroethane	mg/kg				22		24		0.006	U	0.004	U	0.005
1,1,2-Trifluoroethane	mg/kg												
1,1-Dichloro-1-Fluoroethane	mg/kg												
1,1-Dichloroethane	mg/kg				0.065	U	0.11	U	0.003	U	0.002	U	0.002
1,1-Dichloroethene	mg/kg				0.067		0.11	U	0.003	U	0.002	U	0.002
1,1-Dichloropropene	mg/kg												
1,2,4-Trimethylbenzene	mg/kg												
1,2-Dibromoethane (EDB)	mg/kg												
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg												
1,2-Dichloro-1-Fluoroethane	mg/kg												
1,2-Dichlorobenzene	mg/kg	3.2	7.4	2.8				0.22					
1,2-Dichloroethane	mg/kg				0.065	U	0.11	U	0.003	U	0.002	U	0.002
1,2-Dichloroethene	mg/kg												
1,2-Dichloropropane	mg/kg				0.065	U	0.11	U	0.003	U	0.002	U	0.002
1,2-Dichlorotetrafluoroethane	mg/kg												
1,3,5-Trimethylbenzene	mg/kg												
1,3-Dichlorobenzene	mg/kg	0.16	0.21	0.36				0.083	U				
1,4-Dichlorobenzene	mg/kg	4.8	2	2.1				0.13					
1-Chloro-1,1-Difluoroethane	mg/kg												
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg												
2-Chloro-1,1,1-Trifluoroethane	mg/kg												
2-Chloroethyl Vinyl Ether	mg/kg						0.13	U	0.23	U			
2-Chlorotoluene	mg/kg												
2-Hexanone	mg/kg												
4-Chlorotoluene	mg/kg												
4-Isopropyltoluene	mg/kg												
Acetone	mg/kg				0.45	U	0.79	U	0.05		0.12	0.063	0.007
Acrolein	mg/kg				1.3	U	2.3	U	0.062	U	0.042	U	0.021
Acrylonitrile	mg/kg				0.26	U	0.45	U	0.012	U	0.013	U	0.008
Benzene	mg/kg				2.6		0.057	U	0.009		0.002	U	0.0006
Bromodichloromethane	mg/kg				0.065	U	0.11	U	0.003	U	0.002	U	0.001
Bromoform	mg/kg				0.065	U	0.11	U	0.003	U	0.002	U	0.001
Carbon Disulfide	mg/kg				0.065	U	0.11	U	0.003	U	0.007	U	0.002
Carbon Tetrachloride	mg/kg				0.065	U	0.11	U	0.003	U	0.002	U	0.001
CFC-1113	mg/kg												
Chlorobenzene	mg/kg				58		0.91		0.032		0.21	0.28	0.006

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone	MZ-FPA											
	Field Sample ID	23659386	23659388	23659390	23683238	23683244	23683249	23687892	23687893	23708849	23708850	23708851	23708852
Chemical	Location ID	DER2-17-SD	DER2-18-SD	DER2-19-SD	DER2-17-SD	DER2-18-SD	DER2-19-SD	DER2-16-SD	DER2-16-SD	DER2-13-SD	DER2-14-SD	DER2-15-SD	DER2-15-SD
Units	Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00
	Sample Purpose	FS	DUP										
	Date	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/27/2010	4/20/2010	4/20/2010	4/23/2010	4/23/2010	4/23/2010	4/23/2010
Chlorodibromomethane	mg/kg				0.065 U	0.11 U	0.003 U		0.003 U	0.002 U	0.001 U	0.002 U	0.002 U
Chlorodifluoromethane	mg/kg												
Chlorofluoromethane	mg/kg												
Chloroform	mg/kg				0.25	0.11 U	0.003 U		0.003 U	0.002 U	0.001 U	0.002 U	0.002 U
Chloropentafluoroethane	mg/kg												
cis-1,2-Dichloroethene	mg/kg				0.065 U	3.7	0.003 U		0.003 U	0.002 U	0.001 U	0.002 U	0.002 U
cis-1,3-Dichloropropene	mg/kg				0.065 U	0.11 U	0.003 U		0.003 U	0.002 U	0.001 U	0.002 U	0.002 U
Cumene	mg/kg												
Dichlorodifluoromethane	mg/kg				0.13 U	0.23 U	0.006 U		0.006 U	0.004 U	0.002 U	0.004 U	0.005 U
Dichlorofluoromethane	mg/kg				2.1	0.5	0.006 U		0.006 U	0.004 U	0.002 U	0.004 U	0.005 U
Ethane	ug/L												
Ethyl Chloride	mg/kg				0.13 U	0.23 U	0.006 U		0.006 U	0.004 U	0.002 U	0.004 U	0.005 U
Ethylbenzene	mg/kg				0.17	0.11 U	0.003 U		0.003 U	0.002 U	0.001 U	0.002 U	0.002 U
Fluoromethane	mg/kg												
Hexane	mg/kg												
Isobutyl Alcohol	mg/kg												
Meta- And Para-Xylene	mg/kg												
Methacrylonitrile	mg/kg												
Methane	ug/L												
Methyl Bromide	mg/kg				0.13 U	0.23 U	0.006 U		0.006 U	0.004 U	0.002 U	0.004 U	0.005 U
Methyl Chloride	mg/kg				0.13 U	0.23 U	0.006 U		0.006 U	0.004 U	0.002 U	0.004 U	0.005 U
Methyl Ethyl Ketone	mg/kg												
Methyl Isobutyl Ketone	mg/kg												
Methyl Methacrylate	mg/kg												
Methyl Tertiary Butyl Ether	mg/kg												
Methylene Chloride	mg/kg				0.56	0.23 U	0.006 U		0.006 U	0.004 U	0.002 U	0.004 U	0.005 U
N-Butylbenzene	mg/kg												
N-Propylbenzene	mg/kg												
Ortho-Xylene	mg/kg												
Propionitrile	mg/kg												
sec-Butylbenzene	mg/kg												
Styrene	mg/kg												
tert-Butylbenzene	mg/kg												
Tetrachloroethene	mg/kg				2.2	1.1	0.003		0.003 U	0.002 U	0.001 U	0.002 U	0.002 U
Tetrahydrofuran	mg/kg												
Toluene	mg/kg				0.19	1.3	0.014		0.004	0.004	0.001 U	0.006	0.006
trans-1,2-Dichloroethene	mg/kg				0.065 U	0.11 U	0.003 U		0.003 U	0.002 U	0.001 U	0.002 U	0.002 U
trans-1,3-Dichloropropene	mg/kg				0.065 U	0.11 U	0.003 U		0.003 U	0.002 U	0.001 U	0.002 U	0.002 U
Trichloroethene	mg/kg				0.065 U	1.5	0.003 U		0.003 U	0.002 U	0.001 U	0.002 U	0.002 U
Trichlorofluoromethane	mg/kg				18	0.68	0.006 U		0.006 U	0.004 U	0.002 U	0.004 U	0.005 U
Vinyl Chloride	mg/kg				0.065 U	0.72	0.003 U		0.003 U	0.002 U	0.001 U	0.002 U	0.002 U
Vinyl Fluoride	mg/kg												
Xylenes	mg/kg				0.95	0.19	0.022		0.007	0.009	0.001 U	0.014	0.016

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	23716451	23716452	23948635	23948637	23948639	24834439	24834440	24847987	24847988	24847990	24847991	24847993	
Location ID	DER2-20-SD	DER2-20-SD	DER1-12	DER1-13	DER1-15	DER3-26	DER3-26	DER3-10	DER3-10	DER3-11	DER3-11	DER3-12	
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	
Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	
Date	5/4/2010	5/4/2010	4/20/2010	4/20/2010	4/22/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	
Chemical Class	Units												
<b>General Chemistry</b>													
Black Carbon	mg/kg	3585						2170		2420		2920	
Percent Moisture	%	47.1	24.7	33	53	31	48.7	59.6	35.2	48.2	17	45.4	
Percent Solids	%												
Total Organic Carbon	mg/kg	13450	44350				34200	41800	11050	13100		8420	
<b>Metals</b>													
Aluminum	mg/kg	20200						5330		9520		10100	
Antimony	mg/kg	1.84	U					1.51	U	1.91	U	1.83	
Arsenic	mg/kg	9.7						3.02		4.08		6.21	
Barium	mg/kg	105						24.9		57.8		53.6	
Beryllium	mg/kg	0.864						0.43		0.621		0.683	
Cadmium	mg/kg	0.787						0.392		0.55		0.819	
Calcium	mg/kg	10000						1750		2150		2340	
Chromium	mg/kg	51.4						16.2		24.5		28.5	
Cobalt	mg/kg	8.69						3.62		5.24		6.88	
Copper	mg/kg	44.9						9.95		14.4		19.8	
Iron	mg/kg	25600						8330		14000		16000	
Lead	mg/kg	66.1						13.5		21.2		24.4	
Magnesium	mg/kg	4410						1790		2660		3220	
Manganese	mg/kg	637						211		441		562	
Mercury	mg/kg	2.94						0.0611		0.211		0.113	
Nickel	mg/kg	23.1						9.41		13.6		16.5	
Potassium	mg/kg	4210						922		1560		1620	
Selenium	mg/kg	2.71						1.48	U	1.87	U	1.79	
Silver	mg/kg	0.33	U					0.272	U	0.403		0.33	
Sodium	mg/kg	783						364		457		472	
Thallium	mg/kg	2.66	U					2.10	U	2.77	U	2.66	
Tin	mg/kg	12.6						3.73		4.79		4.09	
Titanium	mg/kg												
Vanadium	mg/kg	47.6						14.9		23.6		26.7	
Zinc	mg/kg	154						53		80.6		107	
<b>Metals - AVS/SEM</b>													
Acid Volatile Sulfide	umol/g												
Arsenic	umol/g												
Cadmium	umol/g												
Copper	umol/g												
Lead	umol/g												
Zinc	umol/g												
<b>Metals - Leachate</b>													
Lead	ug/L												
<b>Per and Polyfluorinated Organic Substances</b>													
Perfluorobutane Sulfonic Acid	mg/kg												
Perfluorobutanoic Acid	mg/kg												
Perfluorodecane Sulfonic Acid	mg/kg												
Perfluorodecanoic Acid	mg/kg												
Perfluorododecanoic Acid	mg/kg												
Perfluoroheptanoic Acid	mg/kg												
Perfluorohexane Sulfonic Acid	mg/kg												
Perfluorohexanoic Acid	mg/kg												
Perfluorononanoic Acid	mg/kg												
Perfluorooctane Sulfonamide	mg/kg												
Perfluoropentanoic Acid	mg/kg												
Perfluorotetradecanoic Acid	mg/kg												
Perfluorotridecanoic Acid	mg/kg												
Perfluoroundecanoic Acid	mg/kg												
PFOA	mg/kg				0.06	0.0053							
PFOA(trial)	mg/kg				0.06	0.0053							
PFOS	mg/kg			0.00017	U	0.00358	0.00017	U					
PFOS (trial)	mg/kg			0.00017	U	0.0015	0.00017	U					
<b>Pesticides and Herbicides</b>													
4,4'-DDD	mg/kg												
4,4'-DDE	mg/kg												
4,4'-DDT	mg/kg												
Aldrin	mg/kg												
Alpha Chlordane	mg/kg												
Alpha-BHC	mg/kg												
beta-BHC	mg/kg												
delta-BHC	mg/kg												
Dieldrin	mg/kg												
Endosulfan I	mg/kg												
Endosulfan II	mg/kg												
Endosulfan Sulfate	mg/kg												
Endrin	mg/kg												
Endrin Aldehyde	mg/kg												
Endrin Ketone	mg/kg												
Gamma Chlordane	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	23716451	23716452	23948635	23948637	23948639	24834439	24834440	24847987	24847988	24847990	24847991	24847993	
Location ID	DER2-20-SD	DER2-20-SD	DER1-12	DER1-13	DER1-15	DER3-26	DER3-26	DER3-10	DER3-10	DER3-11	DER3-11	DER3-12	
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	
Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	
Date	5/4/2010	5/4/2010	4/20/2010	4/20/2010	4/22/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	
Chemical Class													
Chemical	Units												
Heptachlor	mg/kg												
Heptachlor Epoxide	mg/kg												
Lindane	mg/kg												
Methoxychlor	mg/kg												
Toxaphene	mg/kg												
<b>Physical Properties</b>													
0.001 MM	% PASSING	5						1		1.5		2	
0.002 MM	% PASSING	7.5						1.5		5		7	
0.005 MM	% PASSING	13						2		9		12	
0.02 MM	% PASSING	27						8		18		21.5	
0.05 MM	% PASSING	38						11.5		29		50	
0.064 MM	% PASSING	42						15		35		72	
0.075 MM	% PASSING	44.5						16.8		37.4		83.2	
0.15 MM	% PASSING	55.8						23.5		39.8		95.4	
0.3 MM	% PASSING	68.8						32.2		51.2		97.7	
0.6 MM	% PASSING	74.5						37.9		67		98.6	
1.18 MM	% PASSING	79.7						44.1		76.5		99.3	
19 MM	% PASSING	100						79.8		100		100	
2.36 MM	% PASSING	86.1						51.1		82.6		99.8	
3.35 MM	% PASSING	89.4						55.1		88		99.9	
37.5 MM	% PASSING	100						100		100		100	
4.75 MM	% PASSING	93.8						59		92.8		100	
75 MM	% PASSING	100						100		100		100	
Density	PCF												
<b>Polychlorinated Biphenyls - TICs</b>													
1,1'-Biphenyl, 2,3-dichloro-	mg/kg												
Unknown Biphenyl	mg/kg												
<b>Polychlorinated Biphenyls</b>													
Heptachlorobiphenyl	mg/kg												
Hexachlorobiphenyl	mg/kg												
Octachlorobiphenyl	mg/kg												
PCB 1	mg/kg												
PCB 10	mg/kg												
PCB 100	mg/kg												
PCB 101	mg/kg												
PCB 102	mg/kg												
PCB 103	mg/kg												
PCB 104	mg/kg												
PCB 105	mg/kg												
PCB 106	mg/kg												
PCB 107	mg/kg												
PCB 107/123	mg/kg												
PCB 108	mg/kg												
PCB 109	mg/kg												
PCB 11	mg/kg												
PCB 110	mg/kg												
PCB 111	mg/kg												
PCB 112	mg/kg												
PCB 113	mg/kg												
PCB 114	mg/kg												
PCB 115	mg/kg												
PCB 116	mg/kg												
PCB 117	mg/kg												
PCB 118	mg/kg												
PCB 119	mg/kg												
PCB 12	mg/kg												
PCB 120	mg/kg												
PCB 121	mg/kg												
PCB 121/95/88	mg/kg												
PCB 122	mg/kg												
PCB 123	mg/kg												
PCB 124	mg/kg												
PCB 125	mg/kg												
PCB 126	mg/kg												
PCB 127	mg/kg												
PCB 128	mg/kg												
PCB 129	mg/kg												
PCB 129/158	mg/kg												
PCB 13	mg/kg												
PCB 130	mg/kg												
PCB 130/164	mg/kg												
PCB 131	mg/kg												
PCB 132	mg/kg												
PCB 133	mg/kg												
PCB 134	mg/kg												
PCB 135	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	23716451	23716452	23948635	23948637	23948639	24834439	24834440	24847987	24847988	24847990	24847991	24847993	
Location ID	DER2-20-SD	DER2-20-SD	DER1-12	DER1-13	DER1-15	DER3-26	DER3-26	DER3-10	DER3-10	DER3-11	DER3-11	DER3-12	
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	
Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	
Date	5/4/2010	5/4/2010	4/20/2010	4/20/2010	4/22/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	
Chemical Class													
Chemical	Units												
PCB 136	mg/kg												
PCB 137	mg/kg												
PCB 138	mg/kg												
PCB 139	mg/kg												
PCB 14	mg/kg												
PCB 140	mg/kg												
PCB 141	mg/kg												
PCB 142	mg/kg												
PCB 143	mg/kg												
PCB 143/139	mg/kg												
PCB 144	mg/kg												
PCB 145	mg/kg												
PCB 146	mg/kg												
PCB 147	mg/kg												
PCB 148	mg/kg												
PCB 149	mg/kg												
PCB 15	mg/kg												
PCB 150	mg/kg												
PCB 151	mg/kg												
PCB 152	mg/kg												
PCB 153	mg/kg												
PCB 154	mg/kg												
PCB 155	mg/kg												
PCB 156	mg/kg												
PCB 157	mg/kg												
PCB 158	mg/kg												
PCB 159	mg/kg												
PCB 16	mg/kg												
PCB 160	mg/kg												
PCB 161	mg/kg												
PCB 162	mg/kg												
PCB 163	mg/kg												
PCB 163/160	mg/kg												
PCB 164	mg/kg												
PCB 165	mg/kg												
PCB 166	mg/kg												
PCB 167	mg/kg												
PCB 168	mg/kg												
PCB 169	mg/kg												
PCB 17	mg/kg												
PCB 170	mg/kg												
PCB 171	mg/kg												
PCB 172	mg/kg												
PCB 173	mg/kg												
PCB 174	mg/kg												
PCB 175	mg/kg												
PCB 176	mg/kg												
PCB 177	mg/kg												
PCB 178	mg/kg												
PCB 179	mg/kg												
PCB 18	mg/kg												
PCB 180	mg/kg												
PCB 181	mg/kg												
PCB 182	mg/kg												
PCB 182/175	mg/kg												
PCB 183	mg/kg												
PCB 184	mg/kg												
PCB 185	mg/kg												
PCB 186	mg/kg												
PCB 187	mg/kg												
PCB 188	mg/kg												
PCB 189	mg/kg												
PCB 19	mg/kg												
PCB 190	mg/kg												
PCB 191	mg/kg												
PCB 192	mg/kg												
PCB 193	mg/kg												
PCB 194	mg/kg												
PCB 195	mg/kg												
PCB 196	mg/kg												
PCB 197	mg/kg												
PCB 198	mg/kg												
PCB 199	mg/kg												
PCB 2	mg/kg												
PCB 20	mg/kg												
PCB 200	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	23716451	23716452	23948635	23948637	23948639	24834439	24834440	24847987	24847988	24847990	24847991	24847993	
Location ID	DER2-20-SD	DER2-20-SD	DER1-12	DER1-13	DER1-15	DER3-26	DER3-26	DER3-10	DER3-10	DER3-11	DER3-11	DER3-12	
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	
Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	
Date	5/4/2010	5/4/2010	4/20/2010	4/20/2010	4/22/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	
Chemical Class	Chemical	Units											
	PCB 201	mg/kg											
	PCB 202	mg/kg											
	PCB 203	mg/kg											
	PCB 204	mg/kg											
	PCB 204/200	mg/kg											
	PCB 205	mg/kg											
	PCB 206	mg/kg											
	PCB 207	mg/kg											
	PCB 208	mg/kg											
	PCB 209	mg/kg											
	PCB 21	mg/kg											
	PCB 21/20	mg/kg											
	PCB 22	mg/kg											
	PCB 23	mg/kg											
	PCB 24	mg/kg											
	PCB 25	mg/kg											
	PCB 26	mg/kg											
	PCB 27	mg/kg											
	PCB 28	mg/kg											
	PCB 29	mg/kg											
	PCB 3	mg/kg											
	PCB 30	mg/kg											
	PCB 31	mg/kg											
	PCB 32	mg/kg											
	PCB 33	mg/kg											
	PCB 34	mg/kg											
	PCB 35	mg/kg											
	PCB 36	mg/kg											
	PCB 37	mg/kg											
	PCB 38	mg/kg											
	PCB 39	mg/kg											
	PCB 4	mg/kg											
	PCB 4/10	mg/kg											
	PCB 40	mg/kg											
	PCB 41	mg/kg											
	PCB 42	mg/kg											
	PCB 43	mg/kg											
	PCB 44	mg/kg											
	PCB 45	mg/kg											
	PCB 46	mg/kg											
	PCB 47	mg/kg											
	PCB 48	mg/kg											
	PCB 49	mg/kg											
	PCB 5	mg/kg											
	PCB 50	mg/kg											
	PCB 51	mg/kg											
	PCB 52	mg/kg											
	PCB 53	mg/kg											
	PCB 54	mg/kg											
	PCB 55	mg/kg											
	PCB 56	mg/kg											
	PCB 57	mg/kg											
	PCB 58	mg/kg											
	PCB 59	mg/kg											
	PCB 6	mg/kg											
	PCB 60	mg/kg											
	PCB 61	mg/kg											
	PCB 62	mg/kg											
	PCB 63	mg/kg											
	PCB 64	mg/kg											
	PCB 65	mg/kg											
	PCB 65/75/62	mg/kg											
	PCB 66	mg/kg											
	PCB 67	mg/kg											
	PCB 67/58	mg/kg											
	PCB 68	mg/kg											
	PCB 68/64	mg/kg											
	PCB 69	mg/kg											
	PCB 7	mg/kg											
	PCB 70	mg/kg											
	PCB 71	mg/kg											
	PCB 72	mg/kg											
	PCB 73	mg/kg											
	PCB 73/46	mg/kg											
	PCB 74	mg/kg											
	PCB 75	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	23716451	23716452	23948635	23948637	23948639	24834439	24834440	24847987	24847988	24847990	24847991	24847993	
Location ID	DER2-20-SD	DER2-20-SD	DER1-12	DER1-13	DER1-15	DER3-26	DER3-26	DER3-10	DER3-10	DER3-11	DER3-11	DER3-12	
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	
Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	
Date	5/4/2010	5/4/2010	4/20/2010	4/20/2010	4/22/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	
Chemical Class	Units												
PCB 76	mg/kg												
PCB 77	mg/kg												
PCB 78	mg/kg												
PCB 79	mg/kg												
PCB 8	mg/kg												
PCB 80	mg/kg												
PCB 81	mg/kg												
PCB 82	mg/kg												
PCB 83	mg/kg												
PCB 83/125/112	mg/kg												
PCB 84	mg/kg												
PCB 85	mg/kg												
PCB 86	mg/kg												
PCB 86/109	mg/kg												
PCB 87	mg/kg												
PCB 87/111	mg/kg												
PCB 88	mg/kg												
PCB 89	mg/kg												
PCB 89/84	mg/kg												
PCB 9	mg/kg												
PCB 90	mg/kg												
PCB 91	mg/kg												
PCB 92	mg/kg												
PCB 93	mg/kg												
PCB 94	mg/kg												
PCB 95	mg/kg												
PCB 96	mg/kg												
PCB 97	mg/kg												
PCB 98	mg/kg												
PCB 99	mg/kg												
PCB-100/93	mg/kg												
PCB-107/124	mg/kg												
PCB-108/119/86/97/125/87	mg/kg												
PCB-113/90/101	mg/kg												
PCB-116/85	mg/kg												
PCB-128/166	mg/kg												
PCB-13/12	mg/kg												
PCB-139/140	mg/kg												
PCB-147/149	mg/kg												
PCB-151/135	mg/kg												
PCB-153/168	mg/kg												
PCB-156/157	mg/kg												
PCB-163/138/129	mg/kg												
PCB-171/173	mg/kg												
PCB-180/193	mg/kg												
PCB-198/199	mg/kg												
PCB-21/33	mg/kg												
PCB-26/29	mg/kg												
PCB-28/20	mg/kg												
PCB-30/18	mg/kg												
PCB-44/47/65	mg/kg												
PCB-50/53	mg/kg												
PCB-59/62/75	mg/kg												
PCB-61/70/74/76	mg/kg												
PCB-69/49	mg/kg												
PCB-71/40	mg/kg												
PCB-90/101	mg/kg												
Pentachlorobiphenyl	mg/kg												
Tetrachlorobiphenyl	mg/kg												
Total Decachlorobiphenyls (congeners)	mg/kg												
Total Dichlorobiphenyls (congeners)	mg/kg												
Total Heptachlorobiphenyls (congeners)	mg/kg												
Total Hexachlorobiphenyls (congeners)	mg/kg												
Total Monochlorobiphenyls (congeners)	mg/kg												
Total Nonachlorobiphenyls (congeners)	mg/kg												
Total Octachlorobiphenyls (congeners)	mg/kg												
Total PCB (congeners)	mg/kg												
Total Pentachlorobiphenyls (congeners)	mg/kg												
Total Tetrachlorobiphenyls (congeners)	mg/kg												
Total Trichlorobiphenyls (congeners)	mg/kg												
Trichlorobiphenyl (total)	mg/kg												
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>													
Benzo[e]pyrene	mg/kg												
Chrysene, 1-methyl-	mg/kg												
Naphthalene, 1-methyl-	mg/kg												
Pyrene, 1-methyl-	mg/kg												

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	
Field Sample ID	23716451	23716452	23948635	23948637	23948639	24834439	24834440	24847987	24847988	24847990	24847991	24847993		
Location ID	DER2-20-SD	DER2-20-SD	DER1-12	DER1-13	DER1-15	DER3-26	DER3-26	DER3-10	DER3-10	DER3-11	DER3-11	DER3-12		
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50		
Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS		
Date	5/4/2010	5/4/2010	4/20/2010	4/20/2010	4/22/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010		
Chemical Class	Units													
<b>Polycyclic Aromatic Hydrocarbons</b>														
Acenaphthene	mg/kg	0.73						0.15	U		0.19	U	0.18	U
Acenaphthylene	mg/kg	0.14						0.15	U		0.19	U	0.18	U
Anthracene	mg/kg	1.9						0.15	U		0.19	U	0.18	U
Benzo(A)Anthracene	mg/kg	5.3						0.22			0.19	U	0.29	
Benzo(B)Fluoranthene	mg/kg	4.5						0.22			0.19	U	0.36	
Benzo(G,H,I)Perylene	mg/kg	1.8						0.15	U		0.19	U	0.18	U
Benzo(K)Fluoranthene	mg/kg	1.7						0.15	U		0.19	U	0.18	U
Benzo(A)Pyrene	mg/kg	4						0.21			0.19	U	0.33	
Chrysene	mg/kg	9.5						0.22			0.19	U	0.28	
Dibenz(A,H)Anthracene	mg/kg	0.66						0.15	U		0.19	U	0.18	U
Fluoranthene	mg/kg	6.3						0.21			0.19	U	0.39	
Fluorene	mg/kg	0.64						0.15	U		0.19	U	0.18	U
Indeno (1,2,3-CD) Pyrene	mg/kg	1.7						0.15	U		0.19	U	0.18	U
Naphthalene	mg/kg	1.1						0.15	U		0.19	U	0.18	U
Phenanthrene	mg/kg	4.5						0.15	U		0.19	U	0.21	
Pyrene	mg/kg	6.7						0.23			0.2		0.42	
Total PAHs (Detections + 1/2 MDL)	mg/kg	51.17						2.06			1.625		3.09	
Total PAHs (Detections Only)	mg/kg	51.17						1.31			0.2		2.28	
<b>Semivolatile Organic Compounds - TICs</b>														
1,2,4-Trithiolane	mg/kg													
1,4-Benzenediol, 2-chloro-	mg/kg													
11H-Benzo[b]fluorene	mg/kg													
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg													
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg													
3-PENTEN-2-ONE, 4-METHYL-	mg/kg													
7H-Benz[de]anthracen-7-one	mg/kg													
9,10-Anthracenedione	mg/kg													
9-Octadecenamamide, (Z)-	mg/kg													
Acetamide, 2-chloro-N-(ethox	mg/kg													
Alachlor	mg/kg													
Benzenamine, 3-methyl-	mg/kg													
Benzenamine, 4,4',4"-methy	mg/kg													
Benzenamine, 4,4'-methyleneb	mg/kg													
Benzene, 1,2,3,4-tetrachloro	mg/kg													
Benzene, 1,2,3,5-tetrachloro	mg/kg													
Benzene, 1,2,3-trichloro-	mg/kg													
Benzene, 1,3,5-trichloro-	mg/kg													
Benzene, 1,3-bis(1-methyleth	mg/kg													
Benzene, 1,4-bis(1-methyleth	mg/kg													
Benzofuran, 2,3-dihydro-	mg/kg													
CYCLIC OCTAATOMIC SULFUR	mg/kg													
Diphenyl Ether	mg/kg													
Docosane	mg/kg													
Heneicosane	mg/kg													
Hexacosane	mg/kg													
Hexadecane	mg/kg													
Hexatriacontane	mg/kg													
m-Chloroaniline	mg/kg													
N,N-Diethylaniline	mg/kg													
n-Hexadecanoic acid	mg/kg													
Nonadecane	mg/kg													
o-Chloroaniline	mg/kg													
Octacosane	mg/kg													
Octadecane	mg/kg													
Octadecane, 1-chloro-	mg/kg													
Octadecanoic acid	mg/kg													
Parachlorophenol	mg/kg													
Pentadecane	mg/kg													
Perylene	mg/kg													
Phenol, 2,5-dichloro-	mg/kg													
Phenol, 3-chloro-	mg/kg													
Phenol, 4,4'-(1-methylethyl)	mg/kg													
Tetracosane	mg/kg													
Tetradecane	mg/kg													
Tetraethylene glycol	mg/kg													
Total SVOC TICs	mg/kg													
Triacontane	mg/kg													
Tributyl phosphate	mg/kg													
Tridecanoic acid	mg/kg													
Triphenyl phosphate	mg/kg													
UNKNOWN	mg/kg	1.127727273						1.1975		2.343571429		2.412142857		
Unknown acid	mg/kg													
Unknown Alcohol	mg/kg													
Unknown Aldol Condensate	mg/kg													
UNKNOWN ALKANE	mg/kg							1.7		3.74		1.8		

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	23716451	23716452	23948635	23948637	23948639	24834439	24834440	24847987	24847988	24847990	24847991	24847993	
Location ID	DER2-20-SD	DER2-20-SD	DER1-12	DER1-13	DER1-15	DER3-26	DER3-26	DER3-10	DER3-10	DER3-11	DER3-11	DER3-12	
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	
Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	
Date	5/4/2010	5/4/2010	4/20/2010	4/20/2010	4/22/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	
Chemical Class	Units												
Unknown Alkene	mg/kg												
Unknown Amide	mg/kg												
Unknown Amine	mg/kg												
UNKNOWN AROMATIC	mg/kg												
Unknown Carboxylic Acid	mg/kg							0.915					
Unknown Cycloalkane	mg/kg												
Unknown Hydrocarbon	mg/kg												
Unknown Ketone	mg/kg												
Unknown PAH	mg/kg												
UNKNOWN SILOXANE	mg/kg												
<b>Semivolatile Organic Compounds</b>													
1,2,4-Trichlorobenzene	mg/kg	0.59						0.15	U	0.25		0.18	U
1,2-Diphenylhydrazine	mg/kg	0.063	U					0.15	U	0.19	U	0.18	U
1,4-Dioxane	mg/kg												
1-Naphthylamine	mg/kg	0.43						0.77	U	0.97	U	0.92	U
2,3,4,6-Tetrachlorophenol	mg/kg												
2,4,5-Trichlorophenol	mg/kg												
2,4,6-Trichlorophenol	mg/kg	0.063	U					0.15	U	0.19	U	0.18	U
2,4-Dichlorophenol	mg/kg	0.063	U					0.15	U	0.19	U	0.18	U
2,4-Dimethylphenol	mg/kg	0.13	U					0.31	U	0.39	U	0.37	U
2,4-Dinitrophenol	mg/kg	1.3	U					3.1	U	3.9	U	3.7	U
2,4-Dinitrotoluene	mg/kg	0.13	U					0.31	U	0.39	U	0.37	U
2,6-Dinitrotoluene	mg/kg	0.063	U					0.15	U	0.19	U	0.18	U
2-Chloronaphthalene	mg/kg	0.1						0.15	U	0.19	U	0.18	U
2-Chlorophenol	mg/kg	0.063	U					0.15	U	0.19	U	0.18	U
2-Methylnaphthalene	mg/kg												
2-Methylphenol (O-Cresol)	mg/kg												
2-Naphthylamine	mg/kg	0.32	U					0.77	U	0.97	U	0.92	U
2-Nitroaniline	mg/kg												
2-Nitrophenol	mg/kg	0.063	U					0.15	U	0.19	U	0.18	U
3,3'-Dichlorobenzidine	mg/kg	0.19	U					0.46	U	0.58	U	0.55	U
3,3'-Dimethylbenzidine	mg/kg												
3-Nitroaniline	mg/kg												
4,6-Dinitro-2-Methylphenol	mg/kg	0.32	U					0.77	U	0.97	U	0.92	U
4-Aminobiphenyl	mg/kg	0.32	U					0.77	U	0.97	U	0.92	U
4-Bromophenyl Phenyl Ether	mg/kg	0.063	U					0.15	U	0.19	U	0.18	U
4-Chloro-3-Methylphenol	mg/kg	0.13	U					0.31	U	0.39	U	0.37	U
4-Chloroaniline	mg/kg	2.3						0.31	U	0.39	U	0.37	U
4-Chlorophenyl Phenyl Ether	mg/kg	0.063	U					0.15	U	0.19	U	0.18	U
4-Methylphenol (P-Cresol)	mg/kg												
4-Nitroaniline	mg/kg												
4-Nitrophenol	mg/kg	0.32	U					0.77	U	0.97	U	0.92	U
Acetophenone	mg/kg												
Aniline	mg/kg	0.32	U					0.77	U	0.97	U	0.92	U
Benzidine	mg/kg	2.2	U					5.4	U	6.8	U	6.4	U
Biphenyl	mg/kg												
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg												
Bis(2-Chloroethoxy)Methane	mg/kg	0.063	U					0.15	U	0.19	U	0.18	U
Bis(2-Chloroethyl)Ether	mg/kg	0.063	U					0.15	U	0.19	U	0.18	U
Bis(2-Chloroisopropyl)Ether	mg/kg	0.063	U					0.15	U	0.19	U	0.18	U
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.35						0.31	U	0.39	U	0.37	U
Butyl Benzyl Phthalate	mg/kg	0.13	U					0.31	U	0.39	U	0.37	U
Carbazole	mg/kg	0.35						0.15	U	0.19	U	0.18	U
Dibenzofuran	mg/kg												
Diethyl Phthalate	mg/kg	0.13	U					0.31	U	0.39	U	0.37	U
Dimethyl Phthalate	mg/kg	0.13	U					0.31	U	0.39	U	0.37	U
Di-N-Butyl Phthalate	mg/kg	0.19						0.31	U	0.39	U	0.37	U
Diphenyl Ether	mg/kg												
Hexachlorobenzene	mg/kg	0.063	U					0.15	U	0.19	U	0.18	U
Hexachlorobutadiene	mg/kg	0.13	U					0.31	U	0.39	U	0.37	U
Hexachlorocyclopentadiene	mg/kg	0.32	U					0.77	U	0.97	U	0.92	U
Hexachloroethane	mg/kg	0.063	U					0.15	U	0.19	U	0.18	U
Hexachloropropylene	mg/kg												
Isophorone	mg/kg	0.063	U					0.15	U	0.19	U	0.18	U
N-Dioctyl Phthalate	mg/kg	0.13	U					0.31	U	0.39	U	0.37	U
Nitrobenzene	mg/kg	0.34						0.56		0.59		0.18	U
N-Nitrosodimethylamine	mg/kg	0.13	U					0.31	U	0.39	U	0.37	U
N-Nitrosodi-N-Propylamine	mg/kg	0.063	U					0.15	U	0.19	U	0.18	U
N-Nitrosodiphenylamine	mg/kg	0.55						0.15	U	0.19	U	0.18	U
O-Toluidine	mg/kg	0.36	U					0.93	U	1.2	U	1.1	U
Parathion	mg/kg												
Pentachlorobenzene	mg/kg												
Pentachlorophenol	mg/kg	0.32	U					0.77	U	0.97	U	0.92	U
Phenol	mg/kg	0.14						0.15	U	0.19	U	0.18	U
<b>Volatile Organic Compounds - TICs</b>													
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg							0.039					

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	
Field Sample ID	23716451	23716452	23948635	23948637	23948639	24834439	24834440	24847987	24847988	24847990	24847991	24847993		
Location ID	DER2-20-SD	DER2-20-SD	DER1-12	DER1-13	DER1-15	DER3-26	DER3-26	DER3-10	DER3-10	DER3-11	DER3-11	DER3-12		
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50		
Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS		
Date	5/4/2010	5/4/2010	4/20/2010	4/20/2010	4/22/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010		
Chemical Class	Units													
1-Butene	mg/kg													
1-Heptene	mg/kg													
1-Propene, 2-methyl-	mg/kg													
Azulene	mg/kg													
BENZENE, 1,2,4-TRICHLORO-	mg/kg													
BENZENE, 1,2-DICHLORO-	mg/kg						0.044							
BENZENE, 1,4-DICHLORO-	mg/kg													
Camphene	mg/kg													
CYCLOHEXANE	mg/kg													
Cyclohexane, methyl-	mg/kg													
Cyclotrisiloxane, hexamethyl	mg/kg													
Diphenyl Ether	mg/kg													
Ethane, 1,1,2,2-tetrachloro-	mg/kg													
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg													
Ethane, 1,2-dichloro-1,1-dif	mg/kg													
Ethene, 1,1-dichloro-2,2-dif	mg/kg													
Hexane, 2-methyl-	mg/kg													
Hexane, 3-methyl-	mg/kg													
METHANE, CHLOROFLUORO-	mg/kg													
Naphthalene	mg/kg													
NAPHTHALENE, 2-METHYL-	mg/kg													
Nonanal	mg/kg													
Norflurane	mg/kg													
Pentane, 2,3-dimethyl-	mg/kg													
Phenol, 4-(1,1,3,3-tetrameth	mg/kg													
Propene	mg/kg													
Sulfur dioxide	mg/kg													
Tridecane	mg/kg													
UNKNOWN	mg/kg		0.0075				0.4865		0.012					
UNKNOWN ALICYCLIC	mg/kg													
UNKNOWN ALIPHATIC	mg/kg													
UNKNOWN ALKANE	mg/kg													
UNKNOWN AROMATIC	mg/kg						0.024					0.42		
UNKNOWN SILOXANE	mg/kg		0.0135				0.045	0.0295	0.019	0.0135	0.0255		0.0225	
<b>Volatile Organic Compounds</b>														
1,1,1,2-Tetrachloroethane	mg/kg													
1,1,1-Trichloroethane	mg/kg		0.001	U			0.002	U	0.003	U	0.001	U	0.002	U
1,1,1-Trichlorotrifluoroethane	mg/kg													
1,1,2,2-Tetrachloroethane	mg/kg		0.001	U			0.002	U	0.003	U	0.001	U	0.002	U
1,1,2-Trichloroethane	mg/kg		0.001	U			0.002	U	0.003	U	0.001	U	0.002	U
1,1,2-Trichlorotrifluoroethane	mg/kg		0.003	U			0.018	U	0.36	U	0.003	U	0.002	U
1,1,2-Trifluoroethane	mg/kg													
1,1-Dichloro-1-Fluoroethane	mg/kg													
1,1-Dichloroethane	mg/kg		0.001	U			0.002	U	0.003	U	0.001	U	0.002	U
1,1-Dichloroethene	mg/kg		0.001	U			0.002	U	0.003	U	0.001	U	0.002	U
1,1-Dichloropropene	mg/kg													
1,2,4-Trimethylbenzene	mg/kg													
1,2-Dibromoethane (EDB)	mg/kg													
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg													
1,2-Dichloro-1-Fluoroethane	mg/kg													
1,2-Dichlorobenzene	mg/kg	3.9							1.6		0.77		0.38	
1,2-Dichloroethane	mg/kg		0.001	U			0.002	U	0.003	U	0.001	U	0.002	U
1,2-Dichloroethene	mg/kg													
1,2-Dichloropropane	mg/kg		0.001	U			0.002	U	0.003	U	0.001	U	0.002	U
1,2-Dichlorotetrafluoroethane	mg/kg													
1,3,5-Trimethylbenzene	mg/kg													
1,3-Dichlorobenzene	mg/kg	0.43												
1,4-Dichlorobenzene	mg/kg	1.5							0.15	U	0.19	U	0.18	U
1-Chloro-1,1-Difluoroethane	mg/kg								0.15	U	0.45		0.37	
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg													
2-Chloro-1,1,1-Trifluoroethane	mg/kg													
2-Chloroethyl Vinyl Ether	mg/kg											0.098	U	
2-Chlorotoluene	mg/kg													
2-Hexanone	mg/kg													
4-Chlorotoluene	mg/kg													
4-Isopropyltoluene	mg/kg													
Acetone	mg/kg		0.013				0.027		0.059		0.034		0.04	
Acrolein	mg/kg		0.027	U			0.04	U	0.055	U	0.027	U	0.044	U
Acrylonitrile	mg/kg		0.005	U			0.008	U	0.011	U	0.005	U	0.009	U
Benzene	mg/kg		0.0007	U			0.008	U	0.007	U	0.0007	U	0.0005	U
Bromodichloromethane	mg/kg		0.001	U			0.002	U	0.003	U	0.001	U	0.002	U
Bromoform	mg/kg		0.001	U			0.002	U	0.003	U	0.001	U	0.002	U
Carbon Disulfide	mg/kg		0.001	U			0.005	U	0.013	U	0.011	U	0.003	U
Carbon Tetrachloride	mg/kg		0.001	U			0.002	U	0.003	U	0.001	U	0.002	U
CFC-1113	mg/kg													
Chlorobenzene	mg/kg		0.009				0.034		0.066		0.001	U	0.001	U

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	MZ-FPA												
		Field Sample ID	23716451	23716452	23948635	23948637	23948639	24834439	24834440	24847987	24847988	24847990	24847991	24847993
Chemical	Location ID	DER2-20-SD	DER2-20-SD	DER1-12	DER1-13	DER1-15	DER3-26	DER3-26	DER3-10	DER3-10	DER3-11	DER3-11	DER3-12	
Units	Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	
	Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	
	Date	5/4/2010	5/4/2010	4/20/2010	4/20/2010	4/22/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	
Chlorodibromomethane	mg/kg		0.001 U				0.002 U	0.003 U	0.001 U	0.001 U	0.002 U	0.049 U	0.002 U	
Chlorodifluoromethane	mg/kg													
Chlorofluoromethane	mg/kg													
Chloroform	mg/kg		0.001 U				0.002 U	0.01	0.001 U	0.001 U	0.002 U	0.049 U	0.002 U	
Chloropentafluoroethane	mg/kg													
cis-1,2-Dichloroethene	mg/kg		0.001 U				0.002 U	0.004	0.001 U	0.001 U	0.002 U	0.049 U	0.002 U	
cis-1,3-Dichloropropene	mg/kg		0.001 U				0.002 U	0.003 U	0.001 U	0.001 U	0.002 U	0.049 U	0.002 U	
Cumene	mg/kg													
Dichlorodifluoromethane	mg/kg		0.003 U				0.004 U	0.005 U	0.003 U	0.002 U	0.004 U	0.098 U	0.005 U	
Dichlorofluoromethane	mg/kg		0.003 U				0.029	0.088	0.003 U	0.002 U	0.004 U	0.098 U	0.005 U	
Ethane	ug/L													
Ethyl Chloride	mg/kg		0.003 U				0.004 U	0.005 U	0.003 U	0.002 U	0.004 U	0.098 U	0.005 U	
Ethylbenzene	mg/kg		0.001 U				0.002 U	0.003 U	0.001 U	0.001 U	0.002 U	0.049 U	0.002 U	
Fluoromethane	mg/kg													
Hexane	mg/kg													
Isobutyl Alcohol	mg/kg													
Meta- And Para-Xylene	mg/kg													
Methacrylonitrile	mg/kg													
Methane	ug/L													
Methyl Bromide	mg/kg		0.003 U				0.004 U	0.005 U	0.003 U	0.002 U	0.004 U	0.098 U	0.005 U	
Methyl Chloride	mg/kg		0.003 U				0.004 U	0.005 U	0.003 U	0.002 U	0.004 U	0.098 U	0.005 U	
Methyl Ethyl Ketone	mg/kg													
Methyl Isobutyl Ketone	mg/kg													
Methyl Methacrylate	mg/kg													
Methyl Tertiary Butyl Ether	mg/kg													
Methylene Chloride	mg/kg		0.003 U				0.004 U	0.005 U	0.003 U	0.002 U	0.004 U	0.098 U	0.005 U	
N-Butylbenzene	mg/kg													
N-Propylbenzene	mg/kg													
Ortho-Xylene	mg/kg													
Propionitrile	mg/kg													
sec-Butylbenzene	mg/kg													
Styrene	mg/kg													
tert-Butylbenzene	mg/kg													
Tetrachloroethene	mg/kg		0.001 U				0.003	0.055	0.001 U	0.001 U	0.002 U	0.049 U	0.002 U	
Tetrahydrofuran	mg/kg													
Toluene	mg/kg		0.001 U				0.005	0.023	0.001 U	0.001 U	0.002 U	0.055	0.002 U	
trans-1,2-Dichloroethene	mg/kg		0.001 U				0.002 U	0.003 U	0.001 U	0.001 U	0.002 U	0.049 U	0.002 U	
trans-1,3-Dichloropropene	mg/kg		0.001 U				0.002 U	0.003 U	0.001 U	0.001 U	0.002 U	0.049 U	0.002 U	
Trichloroethene	mg/kg		0.001 U				0.002 U	0.005	0.001 U	0.001 U	0.002 U	0.049 U	0.002 U	
Trichlorofluoromethane	mg/kg		0.003 U				0.005	0.2	0.003 U	0.002 U	0.004 U	0.098 U	0.005 U	
Vinyl Chloride	mg/kg		0.001 U				0.002 U	0.01	0.001 U	0.001 U	0.002 U	0.049 U	0.002 U	
Vinyl Fluoride	mg/kg													
Xylenes	mg/kg		0.001 U				0.002	0.014	0.001 U	0.001 U	0.002 U	0.095	0.002 U	

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA										
Field Sample ID	24847994	24848007	24848009	24848011	24848013	24848015	24895124	24895126	24911672	24911673	D15-BOR-14-(0.5-1.0)	D15-BOR-14-(0.0-0.5)	
Location ID	DER3-12	DER3-21	DER3-22	DER3-23	DER3-24	DER3-25	DER3-08	DER3-09	DER3-08	DER3-09	D15-BOR-14	D15-BOR-14	
Depth Interval (ft)	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	
Sample Purpose	FS	FS											
Date	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	10/26/2016	10/26/2016	
Chemical Class	Units												
<b>General Chemistry</b>													
Black Carbon	mg/kg						4600	5220					
Percent Moisture	%	47.9	48.4	39.6	59.3	55.8	60.6	59.6	41	57.1	22.3	10.3	11.55
Percent Solids	%												
Total Organic Carbon	mg/kg		9830	2320	23400	20900	23600	18400	8830			266 U	300 U
<b>Metals</b>													
Aluminum	mg/kg						19300	10200				5780	5910
Antimony	mg/kg						2.45 U	1.66 U				0.134	0.424
Arsenic	mg/kg						13.4	6.91				5.59	45.7
Barium	mg/kg						99	44.4				32.8	34.9
Beryllium	mg/kg						1.03	0.562				0.58	1.01
Cadmium	mg/kg						1.11	0.839				0.037 U	0.0518
Calcium	mg/kg						4430	2470				132	539
Chromium	mg/kg						50.6	27.7				69	47.6
Cobalt	mg/kg						13.8	7.34				8.19	9.77
Copper	mg/kg						33.1	17.9				11.3	14.6
Iron	mg/kg						30400	17000				13400	43900
Lead	mg/kg						52.5	66.2				6.11	13.6
Magnesium	mg/kg						5930	3550				867	994
Manganese	mg/kg						1140	527				103	144
Mercury	mg/kg						0.181	0.0884				0.0111 U	0.0226
Nickel	mg/kg						29.4	14.9				20.5	13.7
Potassium	mg/kg						2920	1730				910	1040
Selenium	mg/kg						2.4 U	1.63 U				0.0833 U	0.0762
Silver	mg/kg						0.441 U	0.299 U				0.0492	0.0363
Sodium	mg/kg						970	517				92.9	135
Thallium	mg/kg						3.55 U	2.41 U				0.0767	0.088
Tin	mg/kg						6.35	4.51					
Titanium	mg/kg												
Vanadium	mg/kg						48	26.8				36.3	49.9
Zinc	mg/kg						194	124				21.2	37.2
<b>Metals - AVS/SEM</b>													
Acid Volatile Sulfide	umol/g												
Arsenic	umol/g												
Cadmium	umol/g												
Copper	umol/g												
Lead	umol/g												
Zinc	umol/g												
<b>Metals - Leachate</b>													
Lead	ug/L												
<b>Per and Polyfluorinated Organic Substances</b>													
Perfluorobutane Sulfonic Acid	mg/kg											0.0008 U	0.0008 U
Perfluorobutanoic Acid	mg/kg											0.0008 U	0.0008 U
Perfluorodecane Sulfonic Acid	mg/kg											0.0008 U	0.0008 U
Perfluorodecanoic Acid	mg/kg											0.0008 U	0.0008 U
Perfluorododecanoic Acid	mg/kg											0.002 U	0.002 U
Perfluoroheptanoic Acid	mg/kg											0.0008 U	0.0008 U
Perfluorohexane Sulfonic Acid	mg/kg											0.0008 U	0.0008 U
Perfluorohexanoic Acid	mg/kg											0.0008 U	0.0008 U
Perfluorononanoic Acid	mg/kg											0.0008 U	0.0008 U
Perfluorooctane Sulfonamide	mg/kg											0.0008 U	0.0008 U
Perfluoropentanoic Acid	mg/kg											0.0008 U	0.0008 U
Perfluorotetradecanoic Acid	mg/kg											0.002 U	0.002 U
Perfluorotridecanoic Acid	mg/kg											0.0008 U	0.0008 U
Perfluoroundecanoic Acid	mg/kg											0.0008 U	0.0008 U
PFOA	mg/kg											0.0008 U	0.0008 U
PFOA(trial)	mg/kg												
PFOS	mg/kg											0.0008 U	0.0008 U
PFOS (trial)	mg/kg												
<b>Pesticides and Herbicides</b>													
4,4'-DDD	mg/kg												
4,4'-DDE	mg/kg												
4,4'-DDT	mg/kg												
Aldrin	mg/kg												
Alpha-Chlordane	mg/kg												
Alpha-BHC	mg/kg												
beta-BHC	mg/kg												
delta-BHC	mg/kg												
Dieldrin	mg/kg												
Endosulfan I	mg/kg												
Endosulfan II	mg/kg												
Endosulfan Sulfate	mg/kg												
Endrin	mg/kg												
Endrin Aldehyde	mg/kg												
Endrin Ketone	mg/kg												
Gamma-Chlordane	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA										
Field Sample ID	24847994	24848007	24848009	24848011	24848013	24848015	24895124	24895126	24911672	24911673	D15-BOR-14-(0.5-1.0)	D15-BOR-14-(0-0.5)	
Location ID	DER3-12	DER3-21	DER3-22	DER3-23	DER3-24	DER3-25	DER3-08	DER3-09	DER3-08	DER3-09	D15-BOR-14	D15-BOR-14	
Depth Interval (ft)	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	
Sample Purpose	FS	FS											
Date	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	10/26/2016	10/26/2016	
Chemical Class	Units												
Heptachlor	mg/kg												
Heptachlor Epoxide	mg/kg												
Lindane	mg/kg												
Methoxychlor	mg/kg												
Toxaphene	mg/kg												
<b>Physical Properties</b>													
0.001 MM	% PASSING						7	2			0.5	1	
0.002 MM	% PASSING						12	6			0.5	1	
0.005 MM	% PASSING						22	11			0.5	1	
0.02 MM	% PASSING						52	19			1	1	
0.05 MM	% PASSING						78	32.5			3	4	
0.064 MM	% PASSING						87	40			6	6	
0.075 MM	% PASSING						90.2	43.7			6.3	6.2	
0.15 MM	% PASSING						93.9	62.4			8	9.9	
0.3 MM	% PASSING						96	83.3			11.2	19.1	
0.6 MM	% PASSING						97.1	85.7			18.4	27.5	
1.18 MM	% PASSING						97.7	87.2			39.2	34.8	
19 MM	% PASSING						100	100			100	100	
2.36 MM	% PASSING						98.7	89.3			62.6	43.1	
3.35 MM	% PASSING						99.1	91.6			76.6	54	
37.5 MM	% PASSING						100	100			100	100	
4.75 MM	% PASSING						99.2	94.3			87.6	68	
75 MM	% PASSING						100	100			100	100	
Density	PCF												
<b>Polychlorinated Biphenyls - TICs</b>													
1,1'-Biphenyl, 2,3-dichloro-	mg/kg												
Unknown Biphenyl	mg/kg												
<b>Polychlorinated Biphenyls</b>													
Heptachlorobiphenyl	mg/kg												
Hexachlorobiphenyl	mg/kg												
Octachlorobiphenyl	mg/kg												
PCB 1	mg/kg										0.026	0.0517	
PCB 10	mg/kg										0.0000531	0.0000923	
PCB 100	mg/kg												
PCB 101	mg/kg												
PCB 102	mg/kg										0.00000125	0.00000207	
PCB 103	mg/kg										0.00000144	0.00000238	
PCB 104	mg/kg										0.00000719	0.00000344	
PCB 105	mg/kg										0.00000928	0.0000366	
PCB 106	mg/kg										0.00000108	0.00000214	
PCB 107	mg/kg												
PCB 107/123	mg/kg												
PCB 108	mg/kg												
PCB 109	mg/kg										0.00000235	0.00000721	
PCB 11	mg/kg										0.000146	0.000192	
PCB 110	mg/kg										0.0000284	0.0000818	
PCB 111	mg/kg										0.00000101	0.00000168	
PCB 112	mg/kg										0.00000109	0.00000181	
PCB 113	mg/kg												
PCB 114	mg/kg										0.0000011	0.00000265	
PCB 115	mg/kg										0.00000121	0.000002	
PCB 116	mg/kg												
PCB 117	mg/kg										0.00000131	0.00000217	
PCB 118	mg/kg										0.0000223	0.0000699	
PCB 119	mg/kg												
PCB 12	mg/kg												
PCB 120	mg/kg										0.000001	0.00000166	
PCB 121	mg/kg										0.00000109	0.00000181	
PCB 121/95/88	mg/kg												
PCB 122	mg/kg										0.00000116	0.00000278	
PCB 123	mg/kg										0.00000113	0.00000216	
PCB 124	mg/kg												
PCB 125	mg/kg												
PCB 126	mg/kg										0.00000107	0.00000185	
PCB 127	mg/kg										0.00000955	0.00000201	
PCB 128	mg/kg												
PCB 129	mg/kg												
PCB 129/158	mg/kg												
PCB 13	mg/kg												
PCB 130	mg/kg												
PCB 130/164	mg/kg										0.0000019	0.00000719	
PCB 131	mg/kg										0.00000111	0.00000171	
PCB 132	mg/kg										0.00001	0.0000275	
PCB 133	mg/kg										0.00000987	0.00000241	
PCB 134	mg/kg										0.00000117	0.00000413	
PCB 135	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	Chemical	Units	River Zone	MZ-FPA	MZ-FPA										
			Field Sample ID	24847994	24848007	24848009	24848011	24848013	24848015	24895124	24895126	24911672	24911673	D15-BOR-14-(0.5-1.0)	D15-BOR-14-(0-0.5)
			Location ID	DER3-12	DER3-21	DER3-22	DER3-23	DER3-24	DER3-25	DER3-08	DER3-09	DER3-08	DER3-09	D15-BOR-14	D15-BOR-14
			Depth Interval (ft)	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50
			Sample Purpose	FS	FS										
			Date	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	10/26/2016	10/26/2016
	PCB 136	mg/kg												0.0000366	0.0000105
	PCB 137	mg/kg												0.00000127	0.00000498
	PCB 138	mg/kg													
	PCB 139	mg/kg													
	PCB 14	mg/kg												0.000194	0.000274
	PCB 140	mg/kg													
	PCB 141	mg/kg												0.00000597	0.0000173
	PCB 142	mg/kg												0.00000107 U	0.00000165 U
	PCB 143	mg/kg												0.00000103 U	0.00000158 U
	PCB 143/139	mg/kg													
	PCB 144	mg/kg												0.00000194	0.00000441
	PCB 145	mg/kg												0.00000819 U	0.00000963 U
	PCB 146	mg/kg												0.00000654	0.0000169
	PCB 147	mg/kg													
	PCB 148	mg/kg												0.000001 U	0.00000154 U
	PCB 149	mg/kg													
	PCB 15	mg/kg												0.000237	0.000321
	PCB 150	mg/kg												0.00000078 U	0.00000916 U
	PCB 151	mg/kg													
	PCB 152	mg/kg												0.000000783 U	0.00000921 U
	PCB 153	mg/kg													
	PCB 154	mg/kg												0.00000886 U	0.00000257
	PCB 155	mg/kg												0.00000846 U	0.00000995 U
	PCB 156	mg/kg													
	PCB 157	mg/kg													
	PCB 158	mg/kg												0.00000267	0.00000862
	PCB 159	mg/kg												0.000000766 U	0.00000257
	PCB 16	mg/kg												0.0000237	0.0000472
	PCB 160	mg/kg												0.00000304	0.00000984
	PCB 161	mg/kg												0.000000714 U	0.0000011 U
	PCB 162	mg/kg												0.000000795 U	0.00000168 U
	PCB 163	mg/kg													
	PCB 163/160	mg/kg													
	PCB 164	mg/kg												0.00000338	0.0000086
	PCB 165	mg/kg												0.000000793 U	0.00000122 U
	PCB 166	mg/kg													
	PCB 167	mg/kg												0.00000216	0.00000504
	PCB 168	mg/kg													
	PCB 169	mg/kg												0.00000106 U	0.00000231 U
	PCB 17	mg/kg												0.00000983	0.0000168
	PCB 170	mg/kg												0.00000779	0.0000239
	PCB 171	mg/kg													
	PCB 172	mg/kg												0.0000023	0.00000743
	PCB 173	mg/kg													
	PCB 174	mg/kg												0.00000824	0.0000298
	PCB 175	mg/kg												0.00000101 U	0.00000149 U
	PCB 176	mg/kg												0.000000635 U	0.0000023
	PCB 177	mg/kg												0.00000481	0.0000147
	PCB 178	mg/kg												0.00000264	0.00000719
	PCB 179	mg/kg												0.00000347	0.0000106
	PCB 18	mg/kg													
	PCB 180	mg/kg													
	PCB 181	mg/kg												0.00000998 U	0.00000147 U
	PCB 182	mg/kg												0.00000925 U	0.00000137 U
	PCB 182/175	mg/kg													
	PCB 183	mg/kg												0.00000427	0.0000166
	PCB 184	mg/kg												0.000000739 U	0.00000103 U
	PCB 185	mg/kg												0.00000203	0.00000411
	PCB 186	mg/kg												0.000000673 U	0.00000939 U
	PCB 187	mg/kg												0.0000123	0.0000444
	PCB 188	mg/kg												0.00000083 U	0.00000116 U
	PCB 189	mg/kg												0.000000867 U	0.00000314
	PCB 19	mg/kg												0.00000484	0.0000078
	PCB 190	mg/kg												0.00000245	0.00000749
	PCB 191	mg/kg												0.000000787 U	0.00000116 U
	PCB 192	mg/kg												0.00000156	0.00000488
	PCB 193	mg/kg													
	PCB 194	mg/kg												0.0000112	0.0000393
	PCB 195	mg/kg												0.00000237	0.00000792
	PCB 196	mg/kg												0.00000436	0.0000155
	PCB 197	mg/kg												0.00000092 U	0.00000266
	PCB 198	mg/kg													
	PCB 199	mg/kg													
	PCB 2	mg/kg												0.0119	0.0205
	PCB 20	mg/kg													
	PCB 200	mg/kg												0.00000918 U	0.00000414

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	Field Sample ID	MZ-FPA	MZ-FPA										
			24847994	24848007	24848009	24848011	24848013	24848015	24895124	24895126	24911672	24911673	D15-BOR-14-(0.5-1.0)	D15-BOR-14-(0-0.5)
Chemical	Location ID	Depth Interval (ft)	DER3-12	DER3-21	DER3-22	DER3-23	DER3-24	DER3-25	DER3-08	DER3-09	DER3-08	DER3-09	D15-BOR-14	D15-BOR-14
Units	Sample Purpose	Date	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50
			FS	FS										
			11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	10/26/2016	10/26/2016
PCB 201	mg/kg												0.0000181	0.0000524
PCB 202	mg/kg												0.0000399	0.000135
PCB 203	mg/kg												0.0000798	0.000299
PCB 204	mg/kg												0.00000955	0.000016
PCB 204/200	mg/kg													
PCB 205	mg/kg												0.0000129	0.000033
PCB 206	mg/kg												0.0000415	0.000151
PCB 207	mg/kg												0.0000555	0.000187
PCB 208	mg/kg												0.0000159	0.0000525
PCB 209	mg/kg												0.0000587	0.000208
PCB 21	mg/kg													
PCB 21/20	mg/kg													
PCB 22	mg/kg												0.0000234	0.0000453
PCB 23	mg/kg												0.0000462	0.000115
PCB 24	mg/kg												0.0000203	0.0000429
PCB 25	mg/kg												0.0000553	0.000145
PCB 26	mg/kg													
PCB 27	mg/kg												0.0000288	0.0000646
PCB 28	mg/kg													
PCB 29	mg/kg													
PCB 3	mg/kg												0.00735	0.0132
PCB 30	mg/kg													
PCB 31	mg/kg												0.0000413	0.0000916
PCB 32	mg/kg												0.0000377	0.0000717
PCB 33	mg/kg													
PCB 34	mg/kg												0.0000611	0.000168
PCB 35	mg/kg												0.0000239	0.000051
PCB 36	mg/kg												0.0000107	0.0000168
PCB 37	mg/kg												0.000136	0.000165
PCB 38	mg/kg												0.0000129	0.0000182
PCB 39	mg/kg												0.0000306	0.0000389
PCB 4	mg/kg												0.00378	0.00656
PCB 4/10	mg/kg													
PCB 40	mg/kg													
PCB 41	mg/kg												0.0000143	0.0000208
PCB 42	mg/kg												0.0000459	0.0000845
PCB 43	mg/kg												0.000015	0.0000326
PCB 44	mg/kg													
PCB 45	mg/kg												0.0000314	0.0000482
PCB 46	mg/kg												0.0000152	0.000022
PCB 47	mg/kg													
PCB 48	mg/kg												0.0000343	0.0000597
PCB 49	mg/kg													
PCB 5	mg/kg												0.000983	0.00157
PCB 50	mg/kg													
PCB 51	mg/kg												0.0000116	0.0000168
PCB 52	mg/kg												0.000027	0.0000529
PCB 53	mg/kg													
PCB 54	mg/kg												0.0000126	0.0000139
PCB 55	mg/kg												0.0000167	0.0000186
PCB 56	mg/kg												0.0000133	0.0000316
PCB 57	mg/kg												0.000017	0.0000188
PCB 58	mg/kg												0.0000158	0.0000175
PCB 59	mg/kg													
PCB 6	mg/kg												0.00187	0.00265
PCB 60	mg/kg												0.0000462	0.0000744
PCB 61	mg/kg													
PCB 62	mg/kg													
PCB 63	mg/kg												0.0000218	0.000047
PCB 64	mg/kg												0.0000105	0.0000172
PCB 65	mg/kg													
PCB 65/75/62	mg/kg													
PCB 66	mg/kg												0.0000161	0.0000366
PCB 67	mg/kg												0.0000154	0.0000299
PCB 67/58	mg/kg													
PCB 68	mg/kg												0.0000183	0.0000189
PCB 68/64	mg/kg													
PCB 69	mg/kg													
PCB 7	mg/kg												0.000342	0.000496
PCB 70	mg/kg													
PCB 71	mg/kg													
PCB 72	mg/kg												0.0000164	0.0000361
PCB 73	mg/kg												0.00000932	0.0000135
PCB 73/46	mg/kg													
PCB 74	mg/kg													
PCB 75	mg/kg													

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA										
		24847994 DER3-12 0.50-1.00 FS 11/18/2010	24848007 DER3-21 0.00-0.50 FS 11/18/2010	24848009 DER3-22 0.00-0.50 FS 11/18/2010	24848011 DER3-23 0.00-0.50 FS 11/18/2010	24848013 DER3-24 0.00-0.50 FS 11/18/2010	24848015 DER3-25 0.00-0.50 FS 11/18/2010	24895124 DER3-08 0.00-0.50 FS 11/16/2010	24895126 DER3-09 0.00-0.50 FS 11/16/2010	24911672 DER3-08 0.50-1.00 FS 11/16/2010	24911673 DER3-09 0.50-1.00 FS 11/16/2010	D15-BOR-14-(0.5-1.0) D15-BOR-14 0.50-1.00 FS 10/26/2016	D15-BOR-14-(0-0.5) D15-BOR-14 0.00-0.50 FS 10/26/2016
Chemical	Units												
PCB 76	mg/kg												
PCB 77	mg/kg												
PCB 78	mg/kg										0.0000987	0.0000227	
PCB 79	mg/kg										0.0000143 U	0.0000002 U	
PCB 8	mg/kg										0.0000147 U	0.0000376	
PCB 80	mg/kg										0.0000175 U	0.00396	
PCB 81	mg/kg										0.0000177 U	0.0000163 U	
PCB 82	mg/kg										0.0000175 U	0.0000194 U	
PCB 83	mg/kg										0.000002 U	0.0000102	
PCB 83/125/112	mg/kg										0.000002 U	0.0000472	
PCB 84	mg/kg										0.00000787	0.0000182	
PCB 85	mg/kg												
PCB 86	mg/kg												
PCB 86/109	mg/kg												
PCB 87	mg/kg												
PCB 87/111	mg/kg												
PCB 88	mg/kg										0.0000185 U	0.0000274 U	
PCB 89	mg/kg										0.0000165 U	0.0000273 U	
PCB 89/84	mg/kg												
PCB 9	mg/kg										0.00187	0.00282	
PCB 90	mg/kg												
PCB 91	mg/kg										0.0000343	0.0000897	
PCB 92	mg/kg										0.000043	0.0000144	
PCB 93	mg/kg												
PCB 94	mg/kg										0.0000167 U	0.0000276 U	
PCB 95	mg/kg										0.0000191	0.0000529	
PCB 96	mg/kg										0.00000729 U	0.00000856 U	
PCB 97	mg/kg												
PCB 98	mg/kg										0.0000179 U	0.0000297 U	
PCB 99	mg/kg										0.0000121	0.0000349	
PCB-100/93	mg/kg										0.0000151 U	0.0000249 U	
PCB-107/124	mg/kg										0.000011 U	0.0000405	
PCB-108/119/86/97/125/87	mg/kg										0.0000195	0.0000555	
PCB-113/90/101	mg/kg										0.0000257	0.0000739	
PCB-116/85	mg/kg										0.0000132	0.000032	
PCB-128/166	mg/kg										0.0000541	0.0000189	
PCB-13/12	mg/kg										0.000989	0.00146	
PCB-139/140	mg/kg										0.00000962 U	0.0000148 U	
PCB-147/149	mg/kg										0.0000229	0.0000687	
PCB-151/135	mg/kg										0.0000105	0.0000313	
PCB-153/168	mg/kg										0.0000242	0.0000753	
PCB-156/157	mg/kg										0.0000477	0.0000144	
PCB-163/138/129	mg/kg										0.0000301	0.0000904	
PCB-171/173	mg/kg										0.0000224	0.0000822	
PCB-180/193	mg/kg										0.0000217	0.0000717	
PCB-198/199	mg/kg										0.0000205	0.0000688	
PCB-21/33	mg/kg										0.000253	0.000435	
PCB-26/29	mg/kg										0.0000209	0.0000497	
PCB-28/20	mg/kg										0.000028	0.0000581	
PCB-30/18	mg/kg										0.0000447	0.0000759	
PCB-44/47/65	mg/kg										0.0000234	0.000046	
PCB-50/53	mg/kg										0.0000183	0.0000413	
PCB-59/62/75	mg/kg										0.0000302	0.000056	
PCB-61/70/74/76	mg/kg										0.0000403	0.0000901	
PCB-69/49	mg/kg										0.0000104	0.000022	
PCB-71/40	mg/kg										0.0000918	0.0000178	
PCB-90/101	mg/kg												
Pentachlorobiphenyl	mg/kg												
Tetrachlorobiphenyl	mg/kg												
Total Decachlorobiphenyls (congeners)	mg/kg												
Total Dichlorobiphenyls (congeners)	mg/kg										0.0132	0.0204	
Total Heptachlorobiphenyls (congeners)	mg/kg										0.0000758	0.000256	
Total Hexachlorobiphenyls (congeners)	mg/kg										0.00014	0.000431	
Total Monochlorobiphenyls (congeners)	mg/kg										0.0453	0.0854	
Total Nonachlorobiphenyls (congeners)	mg/kg										0.0000628	0.000222	
Total Octachlorobiphenyls (congeners)	mg/kg										0.0000522	0.00019	
Total PCB (congeners)	mg/kg										0.0599335	0.109214	
Total Pentachlorobiphenyls (congeners)	mg/kg										0.000167	0.000515	
Total Tetrachlorobiphenyls (congeners)	mg/kg										0.000183	0.000392	
Total Trichlorobiphenyls (congeners)	mg/kg										0.000694	0.0012	
Trichlorobiphenyl (total)	mg/kg												
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>													
Benzo[e]pyrene	mg/kg												
Chrysene, 1-methyl-	mg/kg												
Naphthalene, 1-methyl-	mg/kg												
Pyrene, 1-methyl-	mg/kg												

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA						
Field Sample ID	24847994	24848007	24848009	24848011	24848013	24848015	24895124	24895126	24911672	24911673	D15-BOR-14-(0.5-1.0)	D15-BOR-14-(0-0.5)	
Location ID	DER3-12	DER3-21	DER3-22	DER3-23	DER3-24	DER3-25	DER3-08	DER3-09	DER3-08	DER3-09	D15-BOR-14	D15-BOR-14	
Depth Interval (ft)	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	
Sample Purpose	FS	FS	FS	FS	FS	FS							
Chemical Class													
Chemical													
Units													
Date	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	10/26/2016	10/26/2016	
<b>Polycyclic Aromatic Hydrocarbons</b>													
Acenaphthene	mg/kg						0.083	U	0.056	U	0.004	U	
Acenaphthylene	mg/kg						0.083	U	0.064		0.004	U	
Anthracene	mg/kg						0.083	U	0.14		0.004	U	
Benzo(A)Anthracene	mg/kg						0.093		0.51		0.004	U	
Benzo(B)Fluoranthene	mg/kg						0.12		0.57		0.005		
Benzo(G,H,I)Perylene	mg/kg						0.083	U	0.25		0.004	U	
Benzo(K)Fluoranthene	mg/kg						0.083	U	0.27		0.004	U	
Benzo(A)Pyrene	mg/kg						0.085		0.45		0.004	U	
Chrysene	mg/kg						0.092		0.57		0.004	U	
Dibenz(A,H)Anthracene	mg/kg						0.083	U	0.078		0.004	U	
Fluoranthene	mg/kg						0.15		0.62		0.004	U	
Fluorene	mg/kg						0.083	U	0.056	U	0.004	U	
Indeno (1,2,3-CD) Pyrene	mg/kg						0.083	U	0.23		0.004	U	
Naphthalene	mg/kg						0.16		0.14		0.059	U	
Phenanthrene	mg/kg						0.1		0.26		0.009	U	
Pyrene	mg/kg						0.19		0.8		0.004	U	
Total PAHs (Detections + 1/2 MDL)	mg/kg						1.322		5.008		0.103	U	
Total PAHs (Detections Only)	mg/kg						0.99		4.952		0.081	U	
<b>Semivolatile Organic Compounds - TICs</b>													
1,2,4-Trithiolane	mg/kg												
1,4-Benzenediol, 2-chloro-	mg/kg												
11H-Benzo[blfluorene	mg/kg												
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg												
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg												
3-PENTEN-2-ONE, 4-METHYL-	mg/kg												
7H-Benz[de]anthracen-7-one	mg/kg												
9,10-Anthracenedione	mg/kg												
9-Octadecenamamide, (Z)-	mg/kg												
Acetamide, 2-chloro-N-(ethox	mg/kg												
Alachlor	mg/kg												
Benzenamine, 3-methyl-	mg/kg												
Benzenamine, 4,4',4"-methy	mg/kg												
Benzenamine, 4,4'-methyleneb	mg/kg												
Benzene, 1,2,3,4-tetrachloro	mg/kg											0.22	
Benzene, 1,2,3,5-tetrachloro	mg/kg											0.24	
Benzene, 1,2,3-trichloro-	mg/kg											0.18	
Benzene, 1,3,5-trichloro-	mg/kg												
Benzene, 1,3-bis(1-methyleth	mg/kg												
Benzene, 1,4-bis(1-methyleth	mg/kg												
Benzofuran, 2,3-dihydro-	mg/kg												
CYCLIC OCTAATOMIC SULFUR	mg/kg										0.45		
Diphenyl Ether	mg/kg												
Docosane	mg/kg												
Heneicosane	mg/kg												
Hexacosane	mg/kg												
Hexadecane	mg/kg												
Hexatriacontane	mg/kg												
m-Chloroaniline	mg/kg												
N,N-Diethylaniline	mg/kg												
n-Hexadecanoic acid	mg/kg												
Nonadecane	mg/kg												
o-Chloroaniline	mg/kg												
Octacosane	mg/kg												
Octadecane	mg/kg												
Octadecane, 1-chloro-	mg/kg												
Octadecanoic acid	mg/kg												
Parachlorophenol	mg/kg												
Pentadecane	mg/kg												
Perylene	mg/kg												
Phenol, 2,5-dichloro-	mg/kg												
Phenol, 3-chloro-	mg/kg												
Phenol, 4,4'-(1-methylethyl)	mg/kg												
Tetracosane	mg/kg										0.64	0.81	
Tetradecane	mg/kg												
Tetraethylene glycol	mg/kg												
Total SVOC TICs	mg/kg										7.4	4.2	
Triacontane	mg/kg												
Tributyl phosphate	mg/kg												
Tridecanoic acid	mg/kg												
Triphenyl phosphate	mg/kg												
UNKNOWN	mg/kg						0.977777778		0.500833333		0.311176471	0.365714286	
Unknown acid	mg/kg												
Unknown Alcohol	mg/kg												
Unknown Aldol Condensate	mg/kg										0.36		
UNKNOWN ALKANE	mg/kg						58.38166667		1.18		0.2		

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA										
Field Sample ID	24847994	24848007	24848009	24848011	24848013	24848015	24895124	24895126	24911672	24911673	D15-BOR-14-(0.5-1.0)	D15-BOR-14-(0-0.5)	
Location ID	DER3-12	DER3-21	DER3-22	DER3-23	DER3-24	DER3-25	DER3-08	DER3-09	DER3-08	DER3-09	D15-BOR-14	D15-BOR-14	
Depth Interval (ft)	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	
Sample Purpose	FS	FS											
Date	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	10/26/2016	10/26/2016	
Chemical Class	Units												
Unknown Alkene	mg/kg												
Unknown Amide	mg/kg												
Unknown Amine	mg/kg												
UNKNOWN AROMATIC	mg/kg						0.52	0.51					
Unknown Carboxylic Acid	mg/kg							0.39					
Unknown Cycloalkane	mg/kg												
Unknown Hydrocarbon	mg/kg												
Unknown Ketone	mg/kg												
Unknown PAH	mg/kg												
UNKNOWN SILOXANE	mg/kg												
<b>Semivolatile Organic Compounds</b>													
1,2,4-Trichlorobenzene	mg/kg						0.12	0.056	U		0.21	1.3	
1,2-Diphenylhydrazine	mg/kg						0.083	U	0.056	U	0.019	U	0.025
1,4-Dioxane	mg/kg										0.11	U	0.11
1-Naphthylamine	mg/kg						0.41	U	0.28	U	0.19	U	0.18
2,3,4,6-Tetrachlorophenol	mg/kg										0.075	U	0.073
2,4,5-Trichlorophenol	mg/kg										0.019	U	0.018
2,4,6-Trichlorophenol	mg/kg						0.083	U	0.056	U	0.019	U	0.018
2,4-Dichlorophenol	mg/kg						0.083	U	0.056	U	0.019	U	0.018
2,4-Dimethylphenol	mg/kg						0.17	U	0.11	U	0.019	U	0.018
2,4-Dinitrophenol	mg/kg						1.7	U	1.1	U	0.34	U	0.33
2,4-Dinitrotoluene	mg/kg						0.17	U	0.11	U	0.075	U	0.073
2,6-Dinitrotoluene	mg/kg						0.083	U	0.056	U	0.019	U	0.018
2-Chloronaphthalene	mg/kg						0.083	U	0.056	U	0.008	U	0.007
2-Chlorophenol	mg/kg						0.083	U	0.056	U	0.019	U	0.018
2-Methylnaphthalene	mg/kg										0.011	U	0.049
2-Methylphenol (O-Cresol)	mg/kg										0.019	U	0.018
2-Naphthylamine	mg/kg						0.41	U	0.28	U	0.19	U	0.18
2-Nitroaniline	mg/kg										0.019	U	0.018
2-Nitrophenol	mg/kg						0.083	U	0.056	U	0.019	U	0.018
3,3'-Dichlorobenzidine	mg/kg						0.25	U	0.17	U	0.11	U	0.11
3,3'-Dimethylbenzidine	mg/kg												
3-Nitroaniline	mg/kg										0.075	U	0.073
4,6-Dinitro-2-Methylphenol	mg/kg						0.41	U	0.28	U	0.19	U	0.18
4-Aminobiphenyl	mg/kg						0.41	U	0.28	U	0.19	U	0.18
4-Bromophenyl Phenyl Ether	mg/kg						0.083	U	0.056	U	0.019	U	0.018
4-Chloro-3-Methylphenol	mg/kg						0.17	U	0.11	U	0.019	U	0.018
4-Chloroaniline	mg/kg						0.17	U	0.11	U	0.074	U	0.15
4-Chlorophenyl Phenyl Ether	mg/kg						0.083	U	0.056	U	0.019	U	0.018
4-Methylphenol (P-Cresol)	mg/kg										0.019	U	0.018
4-Nitroaniline	mg/kg										0.075	U	0.073
4-Nitrophenol	mg/kg						0.41	U	0.28	U	0.19	U	0.18
Acetophenone	mg/kg										0.019	U	0.018
Aniline	mg/kg						0.41	U	0.28	U	0.19	U	0.18
Benzidine	mg/kg						2.9	U	2	U	0.28	U	0.27
Biphenyl	mg/kg										0.019	U	0.047
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg										0.019	U	0.018
Bis(2-Chloroethoxy)Methane	mg/kg						0.083	U	0.056	U	0.019	U	0.018
Bis(2-Chloroethyl)Ether	mg/kg						0.083	U	0.056	U	0.019	U	0.018
Bis(2-Chloroisopropyl)Ether	mg/kg						0.083	U	0.056	U			
Bis(2-Ethylhexyl)Phthalate	mg/kg						0.17	U	0.11	U	0.075	U	0.073
Butyl Benzyl Phthalate	mg/kg						0.17	U	0.11	U	0.075	U	0.073
Carbazole	mg/kg						0.083	U	0.056	U	0.019	U	0.018
Dibenzofuran	mg/kg										0.019	U	0.085
Diethyl Phthalate	mg/kg						0.17	U	0.11	U	0.075	U	0.073
Dimethyl Phthalate	mg/kg						0.17	U	0.11	U	0.075	U	0.073
Di-N-Butyl Phthalate	mg/kg						0.17	U	0.11	U	0.075	U	0.073
Diphenyl Ether	mg/kg										0.019	U	0.018
Hexachlorobenzene	mg/kg						0.083	U	0.056	U	0.094	U	0.094
Hexachlorobutadiene	mg/kg						0.17	U	0.11	U	0.019	U	0.018
Hexachlorocyclopentadiene	mg/kg						0.41	U	0.28	U	0.19	U	0.18
Hexachloroethane	mg/kg						0.083	U	0.056	U	0.038	U	0.036
Hexachloropropylene	mg/kg												
Isophorone	mg/kg						0.083	U	0.056	U	0.019	U	0.018
N-Dioctyl Phthalate	mg/kg						0.17	U	0.11	U	0.075	U	0.073
Nitrobenzene	mg/kg						2.2		0.68		0.019	U	0.018
N-Nitrosodimethylamine	mg/kg						0.17	U	0.11	U	0.075	U	0.073
N-Nitrosodi-N-Propylamine	mg/kg						0.083	U	0.056	U	0.019	U	0.018
N-Nitrosodiphenylamine	mg/kg						0.087		0.06		0.019	U	0.018
O-Toluidine	mg/kg						0.5	U	0.34	U	0.23	U	0.22
Parathion	mg/kg										0.19	U	0.18
Pentachlorobenzene	mg/kg										0.019	U	0.02
Pentachlorophenol	mg/kg						0.41	U	0.28	U	0.038	U	0.036
Phenol	mg/kg						0.11		0.056	U	0.019	U	0.028
<b>Volatile Organic Compounds - TICs</b>													
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	24847994	24848007	24848009	24848011	24848013	24848015	24895124	24895126	24911672	24911673	D15-BOR-14-(0.5-1.0)	D15-BOR-14-(0.5-1.0)		
Location ID	DER3-12	DER3-21	DER3-22	DER3-23	DER3-24	DER3-25	DER3-08	DER3-09	DER3-08	DER3-09	D15-BOR-14	D15-BOR-14		
Depth Interval (ft)	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50		
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS		
Date	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/16/2010	11/16/2010	11/16/2010	11/16/2010	10/26/2016	10/26/2016		
Chemical Class														
Chemical	Units													
1-Butene	mg/kg													
1-Heptene	mg/kg													
1-Propene, 2-methyl-	mg/kg													
Azulene	mg/kg													
BENZENE, 1,2,4-TRICHLORO-	mg/kg													
BENZENE, 1,2-DICHLORO-	mg/kg			0.13		0.033								
BENZENE, 1,4-DICHLORO-	mg/kg			0.31										
Camphene	mg/kg													
CYCLOHEXANE	mg/kg													
Cyclohexane, methyl-	mg/kg													
Cyclotrisiloxane, hexamethyl	mg/kg													
Diphenyl Ether	mg/kg													
Ethane, 1,1,2,2-tetrachloro-	mg/kg													
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg					1.2								
Ethane, 1,2-dichloro-1,1-dif	mg/kg													
Ethene, 1,1-dichloro-2,2-dif	mg/kg													
Hexane, 2-methyl-	mg/kg													
Hexane, 3-methyl-	mg/kg													
METHANE, CHLOROFLUORO-	mg/kg					0.25								
Naphthalene	mg/kg													
NAPHTHALENE, 2-METHYL-	mg/kg													
Nonanal	mg/kg													
Norflurane	mg/kg													
Pentane, 2,3-dimethyl-	mg/kg													
Phenol, 4-(1,1,3,3-tetrameth	mg/kg													
Propene	mg/kg													
Sulfur dioxide	mg/kg													
Tridecane	mg/kg													
UNKNOWN	mg/kg	0.198142857	0.85		1.2	0.1512	0.2405	0.64		0.13				
UNKNOWN ALICYCLIC	mg/kg													
UNKNOWN ALIPHATIC	mg/kg													
UNKNOWN ALKANE	mg/kg	0.050666667												
UNKNOWN AROMATIC	mg/kg						0.036							
UNKNOWN SILOXANE	mg/kg		0.014		0.031	0.019	0.039	0.03	0.026	0.019	0.017			
<b>Volatile Organic Compounds</b>														
1,1,1,2-Tetrachloroethane	mg/kg											0.069	0.001	
1,1,1-Trichloroethane	mg/kg	0.002	U	0.002	U	0.002	U	0.003	U	0.004	U	0.002	U	
1,1,1-Trichlorotrifluoroethane	mg/kg											0.006	0.005	
1,1,2,2-Tetrachloroethane	mg/kg	0.002	U	0.002	U	0.002	U	0.003	U	0.004	U	0.002	U	
1,1,2-Trichloroethane	mg/kg	0.002	U	0.002	U	0.002	U	0.003	U	0.004	U	0.004	U	
1,1,2-Trichlorotrifluoroethane	mg/kg	0.005	U	0.004	U	0.88	U	0.007	U	1.1	U	0.008	U	
1,1,2-Trifluoroethane	mg/kg											0.14	0.007	
1,1-Dichloro-1-Fluoroethane	mg/kg											0.002	U	
1,1-Dichloroethane	mg/kg	0.002	U	0.002	U	0.002	U	0.003	U	0.004	U	0.004	U	
1,1-Dichloroethene	mg/kg	0.002	U	0.002	U	0.003	U	0.003	U	0.004	U	0.002	U	
1,1-Dichloropropene	mg/kg											0.069	0.001	
1,2,4-Trimethylbenzene	mg/kg											0.069	0.015	
1,2-Dibromoethane (EDB)	mg/kg											0.069	0.001	
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg											0.001	U	
1,2-Dichloro-1-Fluoroethane	mg/kg											0.001	U	
1,2-Dichlorobenzene	mg/kg											0.001	U	
1,2-Dichloroethane	mg/kg	0.002	U	0.002	U	0.002	U	0.003	U	0.004	U	0.004	U	
1,2-Dichloroethene	mg/kg											0.069	0.001	
1,2-Dichloropropane	mg/kg	0.002	U	0.002	U	0.002	U	0.003	U	0.004	U	0.004	U	
1,2-Dichlorotetrafluoroethane	mg/kg											0.069	0.001	
1,3,5-Trimethylbenzene	mg/kg											0.069	0.007	
1,3-Dichlorobenzene	mg/kg											0.069	0.001	
1,4-Dichlorobenzene	mg/kg											0.069	0.001	
1-Chloro-1,1-Difluoroethane	mg/kg											0.069	0.001	
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg											0.069	0.001	
2-Chloro-1,1,1-Trifluoroethane	mg/kg											0.069	0.001	
2-Chloroethyl Vinyl Ether	mg/kg											0.14	0.002	
2-Chlorotoluene	mg/kg											0.069	0.001	
2-Hexanone	mg/kg											0.21	0.003	
4-Chlorotoluene	mg/kg											0.069	0.001	
4-Isopropyltoluene	mg/kg											0.069	0.002	
Acetone	mg/kg	0.042		0.067		0.028		0.023	U	0.063		0.051		
Acrolein	mg/kg	0.049	U	0.043	U	0.03	U	0.066	U	0.055	U	0.081	U	
Acrylonitrile	mg/kg	0.01	U	0.009	U	0.006	U	0.013	U	0.011	U	0.016	U	
Benzene	mg/kg	0.001	U	0.001	U	0.006	U	0.002	U	4	U	0.007	U	
Bromodichloromethane	mg/kg	0.002	U	0.002	U	0.002	U	0.003	U	0.004	U	0.004	U	
Bromoform	mg/kg	0.002	U	0.002	U	0.002	U	0.003	U	0.003	U	0.004	U	
Carbon Disulfide	mg/kg	0.011		0.01		0.007		0.007		0.005		0.008		
Carbon Tetrachloride	mg/kg	0.002	U	0.002	U	0.005	U	0.003	U	0.004	U	0.004	U	
CFC-1113	mg/kg											0.14	0.002	
Chlorobenzene	mg/kg	0.018		0.008		0.3		0.003	U	52		0.031		

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA										
		24847994 DER3-12 0.50-1.00 FS 11/18/2010	24848007 DER3-21 0.00-0.50 FS 11/18/2010	24848009 DER3-22 0.00-0.50 FS 11/18/2010	24848011 DER3-23 0.00-0.50 FS 11/18/2010	24848013 DER3-24 0.00-0.50 FS 11/18/2010	24848015 DER3-25 0.00-0.50 FS 11/18/2010	24895124 DER3-08 0.00-0.50 FS 11/16/2010	24895126 DER3-09 0.00-0.50 FS 11/16/2010	24911672 DER3-08 0.50-1.00 FS 11/16/2010	24911673 DER3-09 0.50-1.00 FS 11/16/2010	D15-BOR-14-(0.5-1.0) D15-BOR-14 0.50-1.00 FS 10/26/2016	D15-BOR-14-(0-0.5) D15-BOR-14 0.00-0.50 FS 10/26/2016	
Chemical	Units													
Chlorodibromomethane	mg/kg	0.002 U	0.002 U	0.002 U	0.003 U	0.003 U	0.004 U	0.004 U	0.002 U	0.004 U	0.001 U	0.069 U	0.001 U	
Chlorodifluoromethane	mg/kg											0.002 U	0.002 U	
Chlorofluoromethane	mg/kg											0.001 U	0.001 U	
Chloroform	mg/kg	0.002 U	0.002 U	0.022 U	0.003 U	0.04 U	0.004 U	0.004 U	0.002 U	0.004 U	0.001 U	0.28 U	0.004 U	
Chloropentafluoroethane	mg/kg											0.018 U	0.016 U	
cis-1,2-Dichloroethene	mg/kg	0.002 U	0.002 U	0.002 U	0.003 U	0.016 U	0.004 U	0.004 U	0.002 U	0.004 U	0.001 U	0.069 U	0.001 U	
cis-1,3-Dichloropropene	mg/kg	0.002 U	0.002 U	0.002 U	0.003 U	0.003 U	0.004 U	0.004 U	0.002 U	0.004 U	0.001 U	0.069 U	0.001 U	
Cumene	mg/kg											0.069 U	0.001 U	
Dichlorodifluoromethane	mg/kg	0.005 U	0.004 U	0.003 U	0.007 U	0.006 U	0.008 U	0.007 U	0.005 U	0.008 U	0.003 U	0.14 U	0.002 U	
Dichlorofluoromethane	mg/kg	0.005 U	0.004 U	0.005 U	0.007 U	4.5 U	0.029 U	0.007 U	0.005 U	0.008 U	0.003 U	0.14 U	0.002 U	
Ethane	ug/L													
Ethyl Chloride	mg/kg	0.005 U	0.004 U	0.003 U	0.007 U	0.006 U	0.008 U	0.007 U	0.005 U	0.008 U	0.003 U	0.14 U	0.002 U	
Ethylbenzene	mg/kg	0.002 U	0.002 U	0.002 U	0.003 U	0.004 U	0.004 U	0.004 U	0.002 U	0.004 U	0.001 U	0.069 U	0.004 U	
Fluoromethane	mg/kg											0.004 U	0.003 U	
Hexane	mg/kg											0.069 U	0.001 U	
Isobutyl Alcohol	mg/kg											6.9 U	0.11 U	
Meta- And Para-Xylene	mg/kg											0.11 U	0.027 U	
Methacrylonitrile	mg/kg											0.35 U	0.006 U	
Methane	ug/L													
Methyl Bromide	mg/kg	0.005 U	0.004 U	0.003 U	0.007 U	0.006 U	0.008 U	0.007 U	0.005 U	0.008 U	0.003 U	0.14 U	0.002 U	
Methyl Chloride	mg/kg	0.005 U	0.004 U	0.003 U	0.007 U	0.006 U	0.008 U	0.007 U	0.005 U	0.008 U	0.003 U	0.14 U	0.002 U	
Methyl Ethyl Ketone	mg/kg											0.28 U	0.004 U	
Methyl Isobutyl Ketone	mg/kg											0.21 U	0.003 U	
Methyl Methacrylate	mg/kg											0.069 U	0.001 U	
Methyl Tertiary Butyl Ether	mg/kg											0.035 U	0.0006 U	
Methylene Chloride	mg/kg	0.005 U	0.004 U	0.003 U	0.007 U	0.006 U	0.008 U	0.007 U	0.005 U	0.008 U	0.003 U	0.14 U	0.002 U	
N-Butylbenzene	mg/kg											0.069 U	0.001 U	
N-Propylbenzene	mg/kg											0.069 U	0.001 U	
Ortho-Xylene	mg/kg											0.069 U	0.009 U	
Propionitrile	mg/kg											2.1 U	0.033 U	
sec-Butylbenzene	mg/kg											0.069 U	0.001 U	
Styrene	mg/kg											0.069 U	0.001 U	
tert-Butylbenzene	mg/kg											0.069 U	0.001 U	
Tetrachloroethene	mg/kg	0.002 U	0.002 U	0.1 U	0.003 U	0.01 U	0.004 U	0.004 U	0.002 U	0.004 U	0.001 U	0.069 U	0.003 U	
Tetrahydrofuran	mg/kg											0.28 U	0.004 U	
Toluene	mg/kg	0.002 U	0.002 U	0.004 U	0.003 U	0.031 U	0.023 U	0.004 U	0.002 U	0.004 U	0.001 U	0.093 U	0.006 U	
trans-1,2-Dichloroethene	mg/kg	0.002 U	0.002 U	0.002 U	0.003 U	0.003 U	0.004 U	0.004 U	0.002 U	0.004 U	0.001 U	0.069 U	0.001 U	
trans-1,3-Dichloropropene	mg/kg	0.002 U	0.002 U	0.002 U	0.003 U	0.003 U	0.004 U	0.004 U	0.002 U	0.004 U	0.001 U	0.069 U	0.001 U	
Trichloroethene	mg/kg	0.002 U	0.002 U	0.01 U	0.003 U	0.01 U	0.004 U	0.004 U	0.002 U	0.004 U	0.001 U	0.069 U	0.001 U	
Trichlorofluoromethane	mg/kg	0.005 U	0.004 U	0.038 U	0.007 U	1 U	0.008 U	0.007 U	0.005 U	0.008 U	0.003 U	0.14 U	0.002 U	
Vinyl Chloride	mg/kg	0.002 U	0.002 U	0.002 U	0.003 U	0.003 U	0.004 U	0.004 U	0.002 U	0.004 U	0.001 U	0.069 U	0.001 U	
Vinyl Fluoride	mg/kg											0.007 U	0.006 U	
Xylenes	mg/kg	0.003 U	0.002 U	0.002 U	0.003 U	0.013 U	0.015 U	0.004 U	0.002 U	0.005 U	0.001 U	0.11 U	0.036 U	

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class Chemical	River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
	Field Sample ID	D15-BOR-14-(0-0.5)-DUP	D15-BOR-14-(4.0-4.5)	D15-BOR-14-(5.0-5.5)	D15-BOR-14-(6.5-7.0)	D15-BOR-14-(6.5-7.0)-D	D15-BOR-15-(0.5-1.0)	D15-BOR-15-(0-0.5)	D15-BOR-15-(5.0-5.5)	D15-BOR-15-(6.0-6.5)	D15-BOR-15-(7.0-7.5)	D15-BOR-15-(7.5-8.0)	D15-BOR-16(0.5-1.0)
	Location ID	D15-BOR-14	D15-BOR-14	D15-BOR-14	D15-BOR-14	D15-BOR-14	D15-BOR-15	D15-BOR-15	D15-BOR-15	D15-BOR-15	D15-BOR-15	D15-BOR-15	D15-BOR-16
	Depth Interval (ft)	0.00-0.50	4.00-4.50	5.00-5.50	6.50-7.00	6.50-7.00	0.50-1.00	0.00-0.50	5.00-5.50	6.00-6.50	7.00-7.50	7.50-8.00	0.50-1.00
	Sample Purpose	DUP	FS	FS	FS	DUP	FS	FS	FS	FS	FS	FS	FS
	Date	10/26/2016	10/26/2016	10/26/2016	10/26/2016	10/26/2016	10/27/2016	10/27/2016	10/27/2016	10/27/2016	10/27/2016	10/27/2016	11/1/2016
	Units												
<b>General Chemistry</b>													
Black Carbon	mg/kg						7830	8270					14400
Percent Moisture	%		12.9	9.9	12.5	11.5	0.212	0.609					0.198
Percent Solids	%						3.05	7.23					3.49
Total Organic Carbon	mg/kg		238 U	233 U	237 U	195 U	52.1	88.2					54.9
<b>Metals</b>													
Aluminum	mg/kg						0.373	0.585					0.603
Antimony	mg/kg						0.0528	0.179					0.0492
Arsenic	mg/kg						155	2430					481
Barium	mg/kg						25.1	46.4					29.4
Beryllium	mg/kg						11.1	10.7					10.1
Cadmium	mg/kg						12.4	29.1					17.5
Calcium	mg/kg						8800	13100					16900
Chromium	mg/kg						9.3	44.6					13.6
Cobalt	mg/kg						1540	2010					2520
Copper	mg/kg						99	247					141
Iron	mg/kg						0.0108 U	0.454					0.0759
Lead	mg/kg						17	21.4					17.8
Magnesium	mg/kg						1280	1420					1990
Manganese	mg/kg						0.0756 U	0.209					0.0913 U
Mercury	mg/kg						0.0204 U	0.164					0.0247 U
Nickel	mg/kg						84.7	288					205
Potassium	mg/kg						0.135	0.134					0.15
Selenium	mg/kg												
Silver	mg/kg												
Sodium	mg/kg												
Thallium	mg/kg												
Tin	mg/kg												
Titanium	mg/kg												
Vanadium	mg/kg						42.1	40.4					44
Zinc	mg/kg						23	60.3					43.5
<b>Metals - AVS/SEM</b>													
Acid Volatile Sulfide	umol/g												
Arsenic	umol/g												
Cadmium	umol/g												
Copper	umol/g												
Lead	umol/g												
Zinc	umol/g												
<b>Metals - Leachate</b>													
Lead	ug/L												
<b>Per and Polyfluorinated Organic Substances</b>													
Perfluorobutane Sulfonic Acid	mg/kg	0.0008 U											
Perfluorobutanoic Acid	mg/kg	0.0008 U											
Perfluorodecane Sulfonic Acid	mg/kg	0.0008 U											
Perfluorodecanoic Acid	mg/kg	0.0008 U											
Perfluorododecanoic Acid	mg/kg	0.002 U											
Perfluoroheptanoic Acid	mg/kg	0.0008 U											
Perfluorohexane Sulfonic Acid	mg/kg	0.0008 U											
Perfluorohexanoic Acid	mg/kg	0.0008 U											
Perfluorononanoic Acid	mg/kg	0.0008 U											
Perfluorooctane Sulfonamide	mg/kg	0.0008 U											
Perfluoropentanoic Acid	mg/kg	0.0008 U											
Perfluorotetradecanoic Acid	mg/kg	0.002 U											
Perfluorotridecanoic Acid	mg/kg	0.0008 U											
Perfluoroundecanoic Acid	mg/kg	0.0008 U											
PFOA	mg/kg	0.0008 U											
PFOA(trial)	mg/kg												
PFOS	mg/kg	0.0008 U											
PFOS (trial)	mg/kg												
<b>Pesticides and Herbicides</b>													
4,4'-DDD	mg/kg												
4,4'-DDE	mg/kg												
4,4'-DDT	mg/kg												
Aldrin	mg/kg												
Alpha Chlordane	mg/kg												
Alpha-BHC	mg/kg												
beta-BHC	mg/kg												
delta-BHC	mg/kg												
Dieldrin	mg/kg												
Endosulfan I	mg/kg												
Endosulfan II	mg/kg												
Endosulfan Sulfate	mg/kg												
Endrin	mg/kg												
Endrin Aldehyde	mg/kg												
Endrin Ketone	mg/kg												
Gamma Chlordane	mg/kg												

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	Field Sample ID	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D15-BOR-14-(0-0.5)-DUP	D15-BOR-14-(4.0-4.5)	D15-BOR-14-(5.0-5.5)	D15-BOR-14-(6.5-7.0)	D15-BOR-14-(6.5-7.0)-D	D15-BOR-15-(0.5-1.0)	D15-BOR-15-(0-0.5)	D15-BOR-15-(5.0-5.5)	D15-BOR-15-(6.0-6.5)	D15-BOR-15-(7.0-7.5)	D15-BOR-15-(7.5-8.0)	D15-BOR-16(0.5-1.0)
Location ID	Location ID	D15-BOR-14	D15-BOR-14	D15-BOR-14	D15-BOR-14	D15-BOR-14	D15-BOR-15	D15-BOR-15	D15-BOR-15	D15-BOR-15	D15-BOR-15	D15-BOR-15	D15-BOR-16
Depth Interval (ft)	Depth Interval (ft)	0.00-0.50	4.00-4.50	5.00-5.50	6.50-7.00	6.50-7.00	0.50-1.00	0.00-0.50	5.00-5.50	6.00-6.50	7.00-7.50	7.50-8.00	0.50-1.00
Sample Purpose	Sample Purpose	DUP	FS	FS	FS	DUP	FS	FS	FS	FS	FS	FS	FS
Date	Date	10/26/2016	10/26/2016	10/26/2016	10/26/2016	10/26/2016	10/27/2016	10/27/2016	10/27/2016	10/27/2016	10/27/2016	10/27/2016	11/1/2016
Chemical Class	Units												
Heptachlor	mg/kg												
Heptachlor Epoxide	mg/kg												
Lindane	mg/kg												
Methoxychlor	mg/kg												
Toxaphene	mg/kg												
<b>Physical Properties</b>													
0.001 MM	% PASSING		3	0.5 U	1.5		0.5 U	0.5 U	0.5 U	0.5 U	1		1
0.002 MM	% PASSING		3	0.5 U	1.5		0.5	0.5 U	0.5 U	0.5 U	1.5		2
0.005 MM	% PASSING		3	0.5 U	1.5		0.5	1	0.5 U	0.5 U	1.5		3
0.02 MM	% PASSING		3	0.5 U	3		1	8.5	1	1	2.5		3
0.05 MM	% PASSING		4	3	3		2.5	29	2	3	3.5		9
0.064 MM	% PASSING		5	4	2.5		4.5	42	4	4	4.5		13
0.075 MM	% PASSING		5.9	4	2.4		5.1	46.6	4.2	4.4	4.9		16.1
0.15 MM	% PASSING		7.5	5.7	2.9		7	60	5.5	5.6	6.1		26.2
0.3 MM	% PASSING		22.9	18.9	6.5		15.4	79.6	13	8	7.8		65.2
0.6 MM	% PASSING		53.2	35.2	29.5		30.4	85.6	21.4	11	9.4		79.6
1.18 MM	% PASSING		80.3	79	72.9		40.4	87.9	40.9	24.6	12.6		86.8
19 MM	% PASSING		100	100	100		92.8	100	93.3	97.5	54.9		100
2.36 MM	% PASSING		89.6	94.3	86.7		50.1	89.1	53.9	50.6	16.9		90.6
3.35 MM	% PASSING		93.4	97.1	90.7		58.1	95.9	64.3	64.5	21.3		94.3
37.5 MM	% PASSING		100	100	100		100	100	100	100	100		100
4.75 MM	% PASSING		95.8	98.7	93.8		67.8	99.1	77	76.4	26.5		97.6
75 MM	% PASSING		100	100	100		100	100	100	100	100		100
Density	PCF												
<b>Polychlorinated Biphenyls - TICs</b>													
1,1'-Biphenyl, 2,3-dichloro-	mg/kg										1.6		
Unknown Biphenyl	mg/kg												
<b>Polychlorinated Biphenyls</b>													
Heptachlorobiphenyl	mg/kg												
Hexachlorobiphenyl	mg/kg												
Octachlorobiphenyl	mg/kg												
PCB 1	mg/kg						0.00861	0.15					0.00172
PCB 10	mg/kg						0.0000419	0.00154					0.0000225
PCB 100	mg/kg												
PCB 101	mg/kg												
PCB 102	mg/kg						0.00000101 U	0.0000357					0.0000147
PCB 103	mg/kg						0.00000111 U	0.0000228					0.0000039 U
PCB 104	mg/kg						0.000000578 U	0.00000258					0.000000485 U
PCB 105	mg/kg						0.0000118	0.000374					0.000107
PCB 106	mg/kg						0.000000832 U	0.0000141					0.0000067
PCB 107	mg/kg												
PCB 107/123	mg/kg												
PCB 108	mg/kg												
PCB 109	mg/kg						0.00000358	0.0000898					0.0000251
PCB 11	mg/kg						0.00112	0.006					0.00023
PCB 110	mg/kg						0.000034	0.00119					0.000358
PCB 111	mg/kg						0.000000782 U	0.00000647 U					0.00000305 U
PCB 112	mg/kg						0.000000853 U	0.00000706 U					0.00000531
PCB 113	mg/kg												
PCB 114	mg/kg						0.00000147	0.0000262					0.00000534
PCB 115	mg/kg						0.000000897 U	0.00000742 U					0.00000316 U
PCB 116	mg/kg												
PCB 117	mg/kg						0.000000857 U	0.0000245					0.0000145
PCB 118	mg/kg						0.0000279	0.000851					0.000212
PCB 119	mg/kg												
PCB 12	mg/kg												
PCB 120	mg/kg						0.000000793 U	0.0000122					0.00000672
PCB 121	mg/kg						0.00000087 U	0.0000072 U					0.00000309 U
PCB 121/95/88	mg/kg												
PCB 122	mg/kg						0.000000916 U	0.0000169					0.00000334 U
PCB 123	mg/kg						0.000000891 U	0.0000204					0.00000338 U
PCB 124	mg/kg												
PCB 125	mg/kg												
PCB 126	mg/kg						0.000000609 U	0.0000122					0.00000369
PCB 127	mg/kg						0.000000711 U	0.00000643 U					0.00000421 U
PCB 128	mg/kg												
PCB 129	mg/kg												
PCB 129/158	mg/kg												
PCB 13	mg/kg												
PCB 130	mg/kg						0.00000299	0.000103					0.0000376
PCB 130/164	mg/kg												
PCB 131	mg/kg						0.000000509 U	0.0000192					0.00000388
PCB 132	mg/kg						0.0000107	0.000412					0.000109
PCB 133	mg/kg						0.00000114	0.000047					0.0000196
PCB 134	mg/kg						0.00000231	0.0000603					0.0000174
PCB 135	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	
		D15-BOR-14-(0-0.5)-DUP	D15-BOR-14-(4.0-4.5)	D15-BOR-14-(5.0-5.5)	D15-BOR-14-(6.5-7.0)	D15-BOR-14-(6.5-7.0)-D	D15-BOR-15-(0.5-1.0)	D15-BOR-15-(0-0.5)	D15-BOR-15-(5.0-5.5)	D15-BOR-15-(6.0-6.5)	D15-BOR-15-(7.0-7.5)	D15-BOR-15-(7.5-8.0)	D15-BOR-16(0.5-1.0)
Chemical	Units	D15-BOR-14 0.00-0.50 DUP 10/26/2016	D15-BOR-14 4.00-4.50 FS 10/26/2016	D15-BOR-14 5.00-5.50 FS 10/26/2016	D15-BOR-14 6.50-7.00 FS 10/26/2016	D15-BOR-14 6.50-7.00 DUP 10/26/2016	D15-BOR-15 0.50-1.00 FS 10/27/2016	D15-BOR-15 0.00-0.50 FS 10/27/2016	D15-BOR-15 5.00-5.50 FS 10/27/2016	D15-BOR-15 6.00-6.50 FS 10/27/2016	D15-BOR-15 7.00-7.50 FS 10/27/2016	D15-BOR-15 7.50-8.00 FS 10/27/2016	D15-BOR-16 0.50-1.00 FS 11/1/2016
PCB 136	mg/kg						0.00000494	0.000158					0.0000654
PCB 137	mg/kg						0.00000157	0.0000634					0.0000182
PCB 138	mg/kg												
PCB 139	mg/kg												
PCB 14	mg/kg						0.0032	0.0181					0.000289
PCB 140	mg/kg												
PCB 141	mg/kg						0.00000713	0.000228					0.0000632
PCB 142	mg/kg						0.00000477	U 0.0000184					0.00000744
PCB 143	mg/kg						0.00000466	U 0.000016					0.00000203
PCB 143/139	mg/kg												
PCB 144	mg/kg						0.0000115	0.0000564					0.0000146
PCB 145	mg/kg						0.00000421	U 0.00000676	U				0.00000593
PCB 146	mg/kg						0.00000984	0.000301					0.0000738
PCB 147	mg/kg												
PCB 148	mg/kg						0.00000458	U 0.00000969					0.00000819
PCB 149	mg/kg												
PCB 15	mg/kg						0.00192	0.00613					0.000397
PCB 150	mg/kg						0.00000411	U 0.00000636					0.00000211
PCB 151	mg/kg												
PCB 152	mg/kg						0.00000409	U 0.00000656	U				0.00000573
PCB 153	mg/kg												
PCB 154	mg/kg						0.000001	0.000039					0.00000892
PCB 155	mg/kg						0.00000447	U 0.00000532					0.00000195
PCB 156	mg/kg												
PCB 157	mg/kg												
PCB 158	mg/kg						0.00000278	0.000118					0.0000339
PCB 159	mg/kg						0.00000148	0.0000253					0.0000107
PCB 16	mg/kg						0.000638	0.00356					0.000193
PCB 160	mg/kg						0.00000274	0.0000513					0.0000319
PCB 161	mg/kg						0.00000329	U 0.0000067	U				0.00000151
PCB 162	mg/kg						0.00000499	U 0.000018					0.0000115
PCB 163	mg/kg												
PCB 163/160	mg/kg												
PCB 164	mg/kg						0.00000359	0.000119					0.0000377
PCB 165	mg/kg						0.00000372	U 0.00000758	U				0.00000717
PCB 166	mg/kg												
PCB 167	mg/kg						0.00000216	0.0000686					0.0000246
PCB 168	mg/kg												
PCB 169	mg/kg						0.00000521	U 0.00000201	U				0.00000104
PCB 17	mg/kg						0.00016	0.000848					0.0001
PCB 170	mg/kg						0.0000107	0.000284					0.0000943
PCB 171	mg/kg												
PCB 172	mg/kg						0.00000364	0.0000778					0.0000271
PCB 173	mg/kg												
PCB 174	mg/kg						0.0000141	0.00042					0.000118
PCB 175	mg/kg						0.00000845	U 0.000025					0.00000866
PCB 176	mg/kg						0.00000198	0.0000441					0.0000142
PCB 177	mg/kg						0.00000802	0.000232					0.000059
PCB 178	mg/kg						0.00000386	0.000102					0.0000347
PCB 179	mg/kg						0.00000592	0.000199					0.0000432
PCB 18	mg/kg												
PCB 180	mg/kg												
PCB 181	mg/kg						0.00000798	U 0.0000122					0.00000687
PCB 182	mg/kg						0.00000767	U 0.0000109					0.00000449
PCB 182/175	mg/kg												
PCB 183	mg/kg						0.00000675	0.000246					0.0000585
PCB 184	mg/kg						0.00000661	U 0.00000556					0.00000277
PCB 185	mg/kg						0.00000199	0.0000533					0.0000196
PCB 186	mg/kg						0.00000308	U 0.00000211					0.00000102
PCB 187	mg/kg						0.0000219	0.000688					0.000172
PCB 188	mg/kg						0.00000621	U 0.0000103					0.00000174
PCB 189	mg/kg						0.00000105	0.0000223					0.00000883
PCB 19	mg/kg						0.00000648	0.000613					0.0000149
PCB 190	mg/kg						0.00000348	0.0000768					0.0000246
PCB 191	mg/kg						0.00000627	U 0.0000153					0.00000614
PCB 192	mg/kg						0.00000885	0.0000218					0.0000143
PCB 193	mg/kg												
PCB 194	mg/kg						0.0000207	0.000423					0.000146
PCB 195	mg/kg						0.00000352	0.000106					0.0000235
PCB 196	mg/kg						0.00000597	0.00019					0.0000649
PCB 197	mg/kg						0.00000102	0.000022					0.00000659
PCB 198	mg/kg												
PCB 199	mg/kg												
PCB 2	mg/kg						0.00776	0.144					0.00159
PCB 20	mg/kg												
PCB 200	mg/kg						0.00000158	0.0000501					0.0000128

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone	Field Sample ID	MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA	
			D15-BOR-14-(0-0.5)-DUP	D15-BOR-14-(4.0-4.5)	D15-BOR-14-(5.0-5.5)	D15-BOR-14-(6.5-7.0)	D15-BOR-14-(6.5-7.0)-D	D15-BOR-15-(0.5-1.0)	D15-BOR-15-(0-0.5)	D15-BOR-15-(5.0-5.5)	D15-BOR-15-(6.0-6.5)	D15-BOR-15-(7.0-7.5)	D15-BOR-15-(7.5-8.0)	D15-BOR-16(0.5-1.0)
Chemical	Location ID	Depth Interval (ft)	D15-BOR-14 0.00-0.50 DUP	D15-BOR-14 4.00-4.50 FS	D15-BOR-14 5.00-5.50 FS	D15-BOR-14 6.50-7.00 FS	D15-BOR-14 6.50-7.00 DUP	D15-BOR-15 0.50-1.00 FS	D15-BOR-15 0.00-0.50 FS	D15-BOR-15 5.00-5.50 FS	D15-BOR-15 6.00-6.50 FS	D15-BOR-15 7.00-7.50 FS	D15-BOR-15 7.50-8.00 FS	D15-BOR-16 0.50-1.00 FS
Units	Sample Purpose	Date	10/26/2016	10/26/2016	10/26/2016	10/26/2016	10/26/2016	10/27/2016	10/27/2016	10/27/2016	10/27/2016	10/27/2016	10/27/2016	11/1/2016
PCB 201								0.0000252	0.0000804					0.0000195
PCB 202								0.0000617	0.000185					0.0000449
PCB 203								0.0000125	0.000313					0.000118
PCB 204								0.00000451 U	0.0000733					0.0000599
PCB 204/200														
PCB 205								0.0000119	0.0000253					0.0000111
PCB 206								0.0000628	0.0016					0.000575
PCB 207								0.0000531	0.000167					0.000055
PCB 208								0.0000204	0.000657					0.000196
PCB 209								0.0000685	0.00204					0.00103
PCB 21														
PCB 21/20														
PCB 22								0.000185	0.000831					0.000224
PCB 23								0.000067	0.000184					0.0000328
PCB 24								0.000544	0.00193					0.0000986
PCB 25								0.0000355	0.000239					0.00009
PCB 26														
PCB 27								0.0000189	0.000148					0.0000252
PCB 28														
PCB 29														
PCB 3								0.00676	0.13					0.0021
PCB 30														
PCB 31								0.000395	0.00202					0.000517
PCB 32								0.0000409	0.000262					0.0000508
PCB 33														
PCB 34								0.0000895	0.000317					0.0000826
PCB 35								0.000135	0.000698					0.000227
PCB 36								0.0000312	0.000218					0.0000886
PCB 37								0.000344	0.00247					0.000692
PCB 38								0.00000419	0.0000206					0.00000429 U
PCB 39								0.0000596	0.000398					0.000165
PCB 4								0.00269	0.0834					0.00109
PCB 4/10														
PCB 40														
PCB 41								0.00000239	0.000042					0.000018
PCB 42								0.00000476	0.000176					0.0000686
PCB 43								0.00000238	0.0000367					0.0000189
PCB 44														
PCB 45								0.00000329	0.0000951					0.0000368
PCB 46								0.00000127 U	0.0000342					0.0000154
PCB 47														
PCB 48								0.000005	0.000107					0.0000519
PCB 49														
PCB 5								0.00121	0.0345					0.000258
PCB 50														
PCB 51								0.00000141	0.0000433					0.0000131
PCB 52								0.0000325	0.000796					0.000319
PCB 53														
PCB 54								0.000000901 U	0.0000041					0.000000892 U
PCB 55								0.00000153 U	0.000013					0.00000525
PCB 56								0.0000224	0.000462					0.000216
PCB 57								0.00000143 U	0.0000119					0.00000617
PCB 58								0.00000148 U	0.00001					0.00000363
PCB 59														
PCB 6								0.00318	0.068					0.000587
PCB 60								0.00000542	0.000117					0.00000211 U
PCB 61														
PCB 62														
PCB 63								0.00000352	0.0000403					0.0000186
PCB 64								0.00000997	0.000269					0.0000973
PCB 65														
PCB 65/75/62														
PCB 66								0.0000214	0.000661					0.000232
PCB 67								0.00000209	0.0000313					0.0000125
PCB 67/58														
PCB 68								0.00000136 U	0.0000262					0.000004
PCB 68/64														
PCB 69														
PCB 7								0.000551	0.0116					0.0000887
PCB 70														
PCB 71														
PCB 72								0.00000198	0.0000299					0.0000122
PCB 73								0.000000793 U	0.00000735					0.00000142
PCB 73/46														
PCB 74														
PCB 75														

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Chemical Class	River Zone	Field Sample ID	MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA	
			D15-BOR-14-(0-0.5)-DUP	D15-BOR-14-(4.0-4.5)	D15-BOR-14-(5.0-5.5)	D15-BOR-14-(6.5-7.0)	D15-BOR-14-(6.5-7.0)-D	D15-BOR-15-(0.5-1.0)	D15-BOR-15-(0-0.5)	D15-BOR-15-(5.0-5.5)	D15-BOR-15-(6.0-6.5)	D15-BOR-15-(7.0-7.5)	D15-BOR-15-(7.5-8.0)	D15-BOR-16(0.5-1.0)		
Chemical	Location ID	Depth Interval (ft)	D15-BOR-14 0.00-0.50 DUP	D15-BOR-14 4.00-4.50 FS	D15-BOR-14 5.00-5.50 FS	D15-BOR-14 6.50-7.00 FS	D15-BOR-14 6.50-7.00 DUP	D15-BOR-15 0.50-1.00 FS	D15-BOR-15 0.00-0.50 FS	D15-BOR-15 5.00-5.50 FS	D15-BOR-15 6.00-6.50 FS	D15-BOR-15 7.00-7.50 FS	D15-BOR-15 7.50-8.00 FS	D15-BOR-16 0.50-1.00 FS		
Units	Sample Purpose	Date	10/26/2016	10/26/2016	10/26/2016	10/26/2016	10/26/2016	10/27/2016	10/27/2016	10/27/2016	10/27/2016	10/27/2016	10/27/2016	11/1/2016		
PCB 76																
PCB 77								0.0000129	0.000253					0.000107		
PCB 78								0.00000157 U	0.0000047					0.00000224 U		
PCB 79								0.00000226	0.0000364					0.0000166		
PCB 8								0.00712	0.136					0.000939		
PCB 80								0.00000134 U	0.0000026 U					0.00000209		
PCB 81								0.00000152 U	0.00000896					0.00000226 U		
PCB 82								0.00000432	0.000125					0.0000441		
PCB 83								0.00000138 U	0.0000064					0.0000246		
PCB 83/125/112																
PCB 84								0.0000084	0.000255					0.0000849		
PCB 85																
PCB 86																
PCB 86/109																
PCB 87																
PCB 87/111																
PCB 88								0.00000137 U	0.0000114 U					0.00000468 U		
PCB 89								0.00000133 U	0.000011 U					0.00000475 U		
PCB 89/84																
PCB 9								0.00268	0.0755					0.000507		
PCB 90																
PCB 91								0.00000438	0.000131					0.0000427		
PCB 92								0.00000717	0.000214					0.0000677		
PCB 93																
PCB 94																
PCB 95								0.00000129 U	0.0000107 U					0.00000455 U		
PCB 96								0.0000208	0.000706					0.000224		
PCB 96								0.00000369 U	0.0000105					0.00000385		
PCB 97																
PCB 98								0.00000135 U	0.0000346					0.000005 U		
PCB 99								0.0000197	0.000528					0.000165		
PCB-100/93								0.0000012 U	0.0000267					0.00000423 U		
PCB-107/124								0.00000158	0.0000433					0.0000124		
PCB-108/119/86/97/125/87								0.0000234	0.000715					0.000247		
PCB-113/90/101								0.0000309	0.000989					0.000297		
PCB-116/85								0.0000144	0.000309					0.0000997		
PCB-128/166								0.00000707	0.000232					0.0000656		
PCB-13/12								0.0089	0.0419					0.00114		
PCB-139/140								0.00000437 U	0.0000282					0.00000459		
PCB-147/149								0.0000287	0.00107					0.000278		
PCB-151/135								0.0000152	0.000479					0.000136		
PCB-153/168								0.0000319	0.00114					0.000278		
PCB-156/157								0.00000577	0.000178					0.0000558		
PCB-163/138/129								0.0000363	0.00136					0.000339		
PCB-171/173								0.00000408	0.0000997					0.0000286		
PCB-180/193								0.0000315	0.000879					0.000237		
PCB-198/199								0.0000378	0.000741					0.000312		
PCB-21/33								0.000694	0.00262					0.000474		
PCB-26/29								0.000255	0.000897					0.000173		
PCB-28/20								0.00029	0.00148					0.000408		
PCB-30/18								0.00154	0.00488					0.000318		
PCB-44/47/65								0.0000254	0.000676					0.000257		
PCB-50/53								0.0000255	0.000906					0.0000337		
PCB-59/62/75								0.00000533	0.0000954					0.0000294		
PCB-61/70/74/76								0.0000589	0.00115					0.000467		
PCB-69/49								0.0000113	0.000408					0.000151		
PCB-71/40								0.00000903	0.000304					0.000127		
PCB-90/101																
Pentachlorobiphenyl																
Tetrachlorobiphenyl																
Total Decachlorobiphenyls (congeners)																
Total Dichlorobiphenyls (congeners)								0.0326	0.482					0.00555		
Total Heptachlorobiphenyls (congeners)								0.00012	0.00353					0.000986		
Total Hexachlorobiphenyls (congeners)								0.00018	0.00642					0.00175		
Total Monochlorobiphenyls (congeners)								0.0231	0.424					0.00541		
Total Nonachlorobiphenyls (congeners)								0.0000886	0.00242					0.000826		
Total Octachlorobiphenyls (congeners)								0.000093	0.00214					0.000765		
Total PCB (congeners)								0.0623001	0.96003					0.024707		
Total Pentachlorobiphenyls (congeners)								0.000214	0.00684					0.00207		
Total Tetrachlorobiphenyls (congeners)								0.000246	0.00604					0.00234		
Total Trichlorobiphenyls (congeners)								0.00559	0.0246					0.00398		
Trichlorobiphenyl (total)																
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>																
Benzo[e]pyrene																
Chrysene, 1-methyl-																
Naphthalene, 1-methyl-																
Pyrene, 1-methyl-																

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	D15-BOR-14-(0-0.5)-DUP	D15-BOR-14-(4.0-4.5)	D15-BOR-14-(5.0-5.5)	D15-BOR-14-(6.5-7.0)	D15-BOR-14-(6.5-7.0)-D	D15-BOR-15-(0.5-1.0)	D15-BOR-15-(0-0.5)	D15-BOR-15-(5.0-5.5)	D15-BOR-15-(6.0-6.5)	D15-BOR-15-(7.0-7.5)	D15-BOR-15-(7.5-8.0)	D15-BOR-16(0.5-1.0)	
Location ID	D15-BOR-14	D15-BOR-14	D15-BOR-14	D15-BOR-14	D15-BOR-14	D15-BOR-15	D15-BOR-15	D15-BOR-15	D15-BOR-15	D15-BOR-15	D15-BOR-15	D15-BOR-16	
Depth Interval (ft)	0.00-0.50	4.00-4.50	5.00-5.50	6.50-7.00	6.50-7.00	0.50-1.00	0.00-0.50	5.00-5.50	6.00-6.50	7.00-7.50	7.50-8.00	0.50-1.00	
Sample Purpose	DUP	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Date	10/26/2016	10/26/2016	10/26/2016	10/26/2016	10/26/2016	10/27/2016	10/27/2016	10/27/2016	10/27/2016	10/27/2016	10/27/2016	11/1/2016	
Chemical Class	Units												
<b>Polycyclic Aromatic Hydrocarbons</b>													
Acenaphthene	mg/kg		0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	
Acenaphthylene	mg/kg		0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	
Anthracene	mg/kg		0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	
Benzo(A)Anthracene	mg/kg		0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	
Benzo(B)Fluoranthene	mg/kg		0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	
Benzo(G,H,I)Perylene	mg/kg		0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	
Benzo(K)Fluoranthene	mg/kg		0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	
Benzo(A)Pyrene	mg/kg		0.005	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	
Chrysene	mg/kg		0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	
Dibenz(A,H)Anthracene	mg/kg		0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	
Fluoranthene	mg/kg		0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	
Fluorene	mg/kg		0.005	0.008	0.015	0.011	0.006	0.046	0.011	0.004	0.009	0.94	
Indeno (1,2,3-CD) Pyrene	mg/kg		0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	
Naphthalene	mg/kg		0.11	0.14	0.23	0.19	0.023	0.64	0.013	0.037	0.037	11	
Phenanthrene	mg/kg		0.012	0.018	0.03	0.024	0.011	0.081	0.008	0.027	2.3	0.015	
Pyrene	mg/kg		0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.061	0.004 U	0.004 U	0.004 U	0.019	
Total PAHs (Detections + 1/2 MDL)	mg/kg		0.158	0.194	0.301	0.251	0.066	1.234	0.051	0.101	15.944	0.083	
Total PAHs (Detections Only)	mg/kg		0.136	0.17	0.275	0.225	0.04	1.234	0.025	0.077	15.944	0.057	
<b>Semivolatile Organic Compounds - TICs</b>													
1,2,4-Trithiolane	mg/kg												
1,4-Benzenediol, 2-chloro-	mg/kg												
11H-Benzo[b]fluorene	mg/kg												
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg												
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg												
3-PENTEN-2-ONE, 4-METHYL-	mg/kg												
7H-Benz[de]anthracen-7-one	mg/kg												
9,10-Anthracenedione	mg/kg									0.86			
9-Octadecenamamide, (Z)-	mg/kg												
Acetamide, 2-chloro-N-(ethox	mg/kg												
Alachlor	mg/kg												
Benzenamine, 3-methyl-	mg/kg			0.29									
Benzenamine, 4,4',4"-methy	mg/kg												
Benzenamine, 4,4'-methyleneb	mg/kg												
Benzene, 1,2,3,4-tetrachloro	mg/kg										0.98		
Benzene, 1,2,3,5-tetrachloro	mg/kg										1.1		
Benzene, 1,2,3-trichloro-	mg/kg												
Benzene, 1,3,5-trichloro-	mg/kg							0.21					
Benzene, 1,3-bis(1-methyleth	mg/kg												
Benzene, 1,4-bis(1-methyleth	mg/kg												
Benzofuran, 2,3-dihydro-	mg/kg												
CYCLIC OCTAATOMIC SULFUR	mg/kg					0.19		0.41		4.6		0.2	
Diphenyl Ether	mg/kg												
Docosane	mg/kg												
Heneicosane	mg/kg												
Hexacosane	mg/kg												
Hexadecane	mg/kg												
Hexatriacontane	mg/kg												
m-Chloroaniline	mg/kg												
N,N-Diethylaniline	mg/kg										0.16		
n-Hexadecanoic acid	mg/kg												
Nonadecane	mg/kg												
o-Chloroaniline	mg/kg												
Octacosane	mg/kg												
Octadecane	mg/kg												
Octadecane, 1-chloro-	mg/kg												
Octadecanoic acid	mg/kg												
Parachlorophenol	mg/kg												
Pentadecane	mg/kg												
Perylene	mg/kg												
Phenol, 2,5-dichloro-	mg/kg												
Phenol, 3-chloro-	mg/kg												
Phenol, 4,4'-(1-methylethyl)	mg/kg		0.52	0.31		0.24						0.2	
Tetracosane	mg/kg												
Tetradecane	mg/kg												
Tetraethylene glycol	mg/kg												
Total SVOC TICs	mg/kg		2.9	6	1.1	1.4	1.3	2.1	7.1	39	15	0.82	
Triacotane	mg/kg												
Tributyl phosphate	mg/kg												
Tridecanoic acid	mg/kg												
Triphenyl phosphate	mg/kg												
UNKNOWN	mg/kg		0.4725	0.665		0.195		0.28	0.27466667	1.087894737	0.92	0.4	
Unknown acid	mg/kg								0.19	4.6			
Unknown Alcohol	mg/kg								0.38	0.73			
Unknown Aldol Condensate	mg/kg		0.31	0.8			0.55		1.4			0.48	
UNKNOWN ALKANE	mg/kg			0.36								0.82	

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	Field Sample ID	MZ-FPA													
		D15-BOR-14-(0-0.5)-DUP	D15-BOR-14-(4.0-4.5)	D15-BOR-14-(5.0-5.5)	D15-BOR-14-(6.5-7.0)	D15-BOR-14-(6.5-7.0)-D	D15-BOR-15-(0.5-1.0)	D15-BOR-15-(0-0.5)	D15-BOR-15-(5.0-5.5)	D15-BOR-15-(6.0-6.5)	D15-BOR-15-(7.0-7.5)	D15-BOR-15-(7.5-8.0)	D15-BOR-16(0.5-1.0)		
Location ID	D15-BOR-14	D15-BOR-14	D15-BOR-14	D15-BOR-14	D15-BOR-14	D15-BOR-15	D15-BOR-15	D15-BOR-15	D15-BOR-15	D15-BOR-15	D15-BOR-15	D15-BOR-16			
Depth Interval (ft)	0.00-0.50	4.00-4.50	5.00-5.50	6.50-7.00	6.50-7.00	0.50-1.00	0.00-0.50	5.00-5.50	6.00-6.50	7.00-7.50	7.50-8.00	0.50-1.00			
Sample Purpose	DUP	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS			
Date	10/26/2016	10/26/2016	10/26/2016	10/26/2016	10/26/2016	10/27/2016	10/27/2016	10/27/2016	10/27/2016	10/27/2016	10/27/2016	11/1/2016			
Chemical Class	Units														
Unknown Alkene	mg/kg								0.28						
Unknown Amide	mg/kg						0.16	0.26				1.4			
Unknown Amine	mg/kg				0.26		0.16		0.215	3.6	0.61	2.6			
UNKNOWN AROMATIC	mg/kg														
Unknown Carboxylic Acid	mg/kg														
Unknown Cycloalkane	mg/kg							0.19							
Unknown Hydrocarbon	mg/kg										0.32				
Unknown Ketone	mg/kg														
Unknown PAH	mg/kg				0.16										
UNKNOWN SILOXANE	mg/kg							0.27							
<b>Semivolatile Organic Compounds</b>															
1,2,4-Trichlorobenzene	mg/kg		0.37	0.52		0.98	0.81	0.034	1.2	0.018	0.045	19	0.044	0.066	
1,2-Diphenylhydrazine	mg/kg	0.019	U	0.018	U	0.025	U	0.022	U	0.018	U	0.018	U	0.021	U
1,4-Dioxane	mg/kg	0.11	U	0.11	U	0.11	U	0.11	U	0.13	U	0.11	U	0.12	U
1-Naphthylamine	mg/kg	0.19	U	0.18	U	0.19	U	0.18	U	0.22	U	0.18	U	0.21	U
2,3,4,6-Tetrachlorophenol	mg/kg	0.076	U	0.073	U	0.075	U	0.075	U	0.088	U	0.073	U	0.079	U
2,4,5-Trichlorophenol	mg/kg	0.019	U	0.018	U	0.019	U	0.019	U	0.022	U	0.018	U	0.019	U
2,4,6-Trichlorophenol	mg/kg	0.019	U	0.018	U	0.019	U	0.019	U	0.022	U	0.018	U	0.019	U
2,4-Dichlorophenol	mg/kg	0.019	U	0.018	U	0.019	U	0.019	U	0.022	U	0.018	U	0.02	U
2,4-Dimethylphenol	mg/kg	0.019	U	0.018	U	0.019	U	0.019	U	0.022	U	0.018	U	0.02	U
2,4-Dinitrophenol	mg/kg	0.34	U	0.33	U	0.34	U	0.34	U	0.32	U	0.33	U	0.34	U
2,4-Dinitrotoluene	mg/kg	0.076	U	0.073	U	0.075	U	0.075	U	0.088	U	0.073	U	0.079	U
2,6-Dinitrotoluene	mg/kg	0.019	U	0.018	U	0.019	U	0.019	U	0.022	U	0.018	U	0.019	U
2-Chloronaphthalene	mg/kg	0.008	U	0.007	U	0.008	U	0.008	U	0.009	U	0.007	U	0.008	U
2-Chlorophenol	mg/kg	0.019	U	0.018	U	0.019	U	0.019	U	0.022	U	0.018	U	0.02	U
2-Methylnaphthalene	mg/kg	0.019	U	0.026	U	0.048	U	0.039	U	0.099	U	0.004	U	0.009	U
2-Methylphenol (O-Cresol)	mg/kg	0.019	U	0.018	U	0.019	U	0.019	U	0.022	U	0.018	U	0.019	U
2-Naphthylamine	mg/kg	0.19	U	0.18	U	0.19	U	0.18	U	0.22	U	0.18	U	0.21	U
2-Nitroaniline	mg/kg	0.019	U	0.018	U	0.019	U	0.019	U	0.022	U	0.018	U	0.02	U
2-Nitrophenol	mg/kg	0.019	U	0.018	U	0.019	U	0.019	U	0.022	U	0.018	U	0.02	U
3,3'-Dichlorobenzidine	mg/kg	0.11	U	0.11	U	0.11	U	0.11	U	0.13	U	0.11	U	0.12	U
3,3'-Dimethylbenzidine	mg/kg														
3-Nitroaniline	mg/kg	0.076	U	0.073	U	0.075	U	0.075	U	0.088	U	0.073	U	0.079	U
4,6-Dinitro-2-Methylphenol	mg/kg	0.19	U	0.18	U	0.19	U	0.18	U	0.22	U	0.18	U	0.21	U
4-Aminobiphenyl	mg/kg	0.19	U	0.18	U	0.19	U	0.18	U	0.22	U	0.18	U	0.21	U
4-Bromophenyl Phenyl Ether	mg/kg	0.019	U	0.018	U	0.019	U	0.019	U	0.022	U	0.018	U	0.02	U
4-Chloro-3-Methylphenol	mg/kg	0.019	U	0.018	U	0.019	U	0.019	U	0.022	U	0.018	U	0.02	U
4-Chloroaniline	mg/kg	0.055	U	0.082	U	0.12	U	0.11	U	0.036	U	0.036	U	0.04	U
4-Chlorophenyl Phenyl Ether	mg/kg	0.019	U	0.018	U	0.019	U	0.019	U	0.022	U	0.018	U	0.02	U
4-Methylphenol (P-Cresol)	mg/kg	0.019	U	0.018	U	0.019	U	0.019	U	0.022	U	0.018	U	0.02	U
4-Nitroaniline	mg/kg	0.076	U	0.073	U	0.075	U	0.075	U	0.088	U	0.073	U	0.079	U
4-Nitrophenol	mg/kg	0.19	U	0.18	U	0.19	U	0.18	U	0.22	U	0.18	U	0.21	U
Acetophenone	mg/kg	0.019	U	0.018	U	0.019	U	0.019	U	0.022	U	0.018	U	0.02	U
Aniline	mg/kg	0.19	U	0.18	U	0.19	U	0.18	U	0.22	U	0.18	U	0.21	U
Benzidine	mg/kg	0.28	U	0.28	U	0.28	U	0.27	U	0.33	U	0.27	U	0.3	U
Biphenyl	mg/kg	0.019	U	0.021	U	0.034	U	0.028	U	0.018	U	0.038	U	0.02	U
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg	0.019	U	0.018	U	0.019	U	0.019	U	0.022	U	0.018	U	0.02	U
Bis(2-Chloroethoxy)Methane	mg/kg	0.019	U	0.018	U	0.019	U	0.019	U	0.022	U	0.018	U	0.02	U
Bis(2-Chloroethyl)Ether	mg/kg	0.019	U	0.018	U	0.019	U	0.019	U	0.022	U	0.018	U	0.02	U
Bis(2-Chloroisopropyl)Ether	mg/kg														
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.076	U	0.073	U	0.075	U	0.075	U	0.072	U	0.073	U	0.07	U
Butyl Benzyl Phthalate	mg/kg	0.076	U	0.073	U	0.075	U	0.075	U	0.088	U	0.073	U	0.079	U
Carbazole	mg/kg	0.019	U	0.018	U	0.019	U	0.019	U	0.022	U	0.018	U	0.02	U
Dibenzofuran	mg/kg	0.02	U	0.025	U	0.04	U	0.034	U	0.034	U	0.018	U	0.04	U
Diethyl Phthalate	mg/kg	0.076	U	0.073	U	0.075	U	0.075	U	0.088	U	0.073	U	0.079	U
Dimethyl Phthalate	mg/kg	0.076	U	0.073	U	0.075	U	0.075	U	0.088	U	0.073	U	0.079	U
Di-N-Butyl Phthalate	mg/kg	0.076	U	0.073	U	0.075	U	0.075	U	0.088	U	0.073	U	0.079	U
Diphenyl Ether	mg/kg	0.019	U	0.018	U	0.019	U	0.019	U	0.022	U	0.018	U	0.02	U
Hexachlorobenzene	mg/kg	0.004	U	0.004	U	0.004	U	0.004	U	0.006	U	0.004	U	0.004	U
Hexachlorobutadiene	mg/kg	0.019	U	0.018	U	0.019	U	0.019	U	0.022	U	0.018	U	0.02	U
Hexachlorocyclopentadiene	mg/kg	0.19	U	0.18	U	0.19	U	0.18	U	0.22	U	0.18	U	0.21	U
Hexachloroethane	mg/kg	0.038	U	0.037	U	0.038	U	0.038	U	0.044	U	0.036	U	0.035	U
Hexachloropropylene	mg/kg														
Isophorone	mg/kg	0.019	U	0.018	U	0.019	U	0.019	U	0.022	U	0.018	U	0.02	U
N-Dioctyl Phthalate	mg/kg	0.076	U	0.073	U	0.075	U	0.075	U	0.088	U	0.073	U	0.079	U
Nitrobenzene	mg/kg	0.019	U	0.018	U	0.019	U	0.019	U	0.022	U	0.018	U	0.02	U
N-Nitrosodimethylamine	mg/kg	0.076	U	0.073	U	0.075	U	0.075	U	0.088	U	0.073	U	0.079	U
N-Nitrosodi-N-Propylamine	mg/kg	0.019	U	0.018	U	0.019	U	0.019	U	0.022	U	0.018	U	0.02	U
N-Nitrosodiphenylamine	mg/kg	0.019	U	0.018	U	0.019	U	0.019	U	0.022	U	0.018	U	0.02	U
O-Toluidine	mg/kg	0.23	U	0.22	U	0.23	U	0.23	U	0.27	U	0.22	U	0.23	U
Parathion	mg/kg	0.19	U	0.18	U	0.19	U	0.18	U	0.22	U	0.18	U	0.21	U
Pentachlorobenzene	mg/kg	0.019	U	0.018	U	0.021	U	0.019	U	0.057	U	0.018	U	0.02	U
Pentachlorophenol	mg/kg	0.038	U	0.037	U	0.038	U	0.038	U	0.044	U	0.036	U	0.035	U
Phenol	mg/kg	0.019	U	0.018	U	0.022	U	0.019	U	0.022	U	0.018	U	0.02	U
<b>Volatile Organic Compounds - TICs</b>															
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg														

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D15-BOR-14-(0-0.5)-DUP	D15-BOR-14-(4.0-4.5)	D15-BOR-14-(5.0-5.5)	D15-BOR-14-(6.5-7.0)	D15-BOR-14-(6.5-7.0)-D	D15-BOR-15-(0.5-1.0)	D15-BOR-15-(0-0.5)	D15-BOR-15-(5.0-5.5)	D15-BOR-15-(6.0-6.5)	D15-BOR-15-(7.0-7.5)	D15-BOR-15-(7.5-8.0)	D15-BOR-16(0.5-1.0)
Location ID	Location ID	D15-BOR-14	D15-BOR-14	D15-BOR-14	D15-BOR-14	D15-BOR-14	D15-BOR-15	D15-BOR-15	D15-BOR-15	D15-BOR-15	D15-BOR-15	D15-BOR-16	
Depth Interval (ft)	Depth Interval (ft)	0.00-0.50	4.00-4.50	5.00-5.50	6.50-7.00	6.50-7.00	0.50-1.00	0.00-0.50	5.00-5.50	6.00-6.50	7.00-7.50	7.50-8.00	
Sample Purpose	Sample Purpose	DUP	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Date	Date	10/26/2016	10/26/2016	10/26/2016	10/26/2016	10/26/2016	10/27/2016	10/27/2016	10/27/2016	10/27/2016	10/27/2016	11/1/2016	
Chemical Class	Units												
1-Butene	mg/kg												
1-Heptene	mg/kg												
1-Propene, 2-methyl-	mg/kg												
Azulene	mg/kg												
BENZENE, 1,2,4-TRICHLORO-	mg/kg												
BENZENE, 1,2-DICHLORO-	mg/kg												
BENZENE, 1,4-DICHLORO-	mg/kg												
Camphene	mg/kg												
CYCLOHEXANE	mg/kg												
Cyclohexane, methyl-	mg/kg												
Cyclotrisiloxane, hexamethyl	mg/kg												
Diphenyl Ether	mg/kg												
Ethane, 1,1,2,2-tetrachloro-	mg/kg												
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg												
Ethane, 1,2-dichloro-1,1-dif	mg/kg												
Ethene, 1,1-dichloro-2,2-dif	mg/kg												
Hexane, 2-methyl-	mg/kg												
Hexane, 3-methyl-	mg/kg												
METHANE, CHLOROFLUORO-	mg/kg												
Naphthalene	mg/kg												
NAPHTHALENE, 2-METHYL-	mg/kg												
Nonanal	mg/kg												
Norflurane	mg/kg												
Pentane, 2,3-dimethyl-	mg/kg												
Phenol, 4-(1,1,3,3-tetrameth	mg/kg												
Propene	mg/kg												
Sulfur dioxide	mg/kg												
Tridecane	mg/kg												
UNKNOWN	mg/kg												
UNKNOWN ALICYCLIC	mg/kg												
UNKNOWN ALIPHATIC	mg/kg												
UNKNOWN ALKANE	mg/kg												
UNKNOWN AROMATIC	mg/kg												
UNKNOWN SILOXANE	mg/kg												
<b>Volatile Organic Compounds</b>													
1,1,1,2-Tetrachloroethane	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.048 U	0.047 U	0.058 U
1,1,1-Trichloroethane	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.048 U	0.047 U	0.058 U
1,1,1-Trichlorotrifluoroethane	mg/kg		0.005 U	0.006 U	0.006 U	0.007 U	0.031 U	0.42 U	0.008 U	0.006 U	0.82 U	0.17 U	0.006 U
1,1,2,2-Tetrachloroethane	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.048 U	0.047 U	0.058 U
1,1,2-Trichloroethane	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.048 U	0.047 U	0.058 U
1,1,2-Trichlorotrifluoroethane	mg/kg		0.11 U	0.19 U	0.11 U	0.14 U	0.11 U	5.1 U	0.026 U	0.023 U	2.7 U	0.093 U	0.12 U
1,1,2-Trifluoroethane	mg/kg		0.002 U	0.002 U	0.002 U	0.003 U	0.002 U	0.003 U	0.002 U	0.002 U	0.003 U	0.002 U	0.002 U
1,1-Dichloro-1-Fluoroethane	mg/kg		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.0009 U	0.001 U
1,1-Dichloroethane	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.048 U	0.047 U	0.058 U
1,1-Dichloroethene	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.048 U	0.047 U	0.058 U
1,1-Dichloropropene	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.048 U	0.047 U	0.058 U
1,2,4-Trimethylbenzene	mg/kg		0.055 U	0.095 U	0.13 U	0.068 U	0.054 U	0.18 U	0.001 U	0.001 U	0.046 U	0.047 U	0.058 U
1,2-Dibromoethane (EDB)	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.048 U	0.047 U	0.058 U
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg		0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.025 U	0.001 U	0.001 U	0.002 U	0.041 U	0.022 U
1,2-Dichloro-1-Fluoroethane	mg/kg		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.0009 U	0.001 U
1,2-Dichlorobenzene	mg/kg		1.4 U	4.4 U	5.4 U	2.5 U	2.1 U	15 U	0.096 U	0.11 U	19 U	2.5 U	2.7 U
1,2-Dichloroethane	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.048 U	0.047 U	0.058 U
1,2-Dichloroethene	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.048 U	0.047 U	0.058 U
1,2-Dichloropropane	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.048 U	0.047 U	0.058 U
1,2-Dichlorotetrafluoroethane	mg/kg		0.002 U	0.002 U	0.002 U	0.003 U	0.004 U	0.034 U	0.002 U	0.002 U	0.011 U	0.015 U	0.002 U
1,3,5-Trimethylbenzene	mg/kg		0.055 U	0.095 U	0.062 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.023 U	0.047 U	0.058 U
1,3-Dichlorobenzene	mg/kg		0.081 U	0.22 U	0.33 U	0.14 U	0.16 U	1.3 U	0.004 U	0.005 U	1.7 U	0.18 U	0.13 U
1,4-Dichlorobenzene	mg/kg		2.2 U	6 U	8.7 U	3.7 U	3.7 U	28 U	0.11 U	0.11 U	34 U	4.5 U	4.4 U
1-Chloro-1,1-Difluoroethane	mg/kg		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.0009 U	0.001 U
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.009 U	0.057 U	0.002 U	0.001 U	0.002 U	0.001 U
2-Chloro-1,1,1-Trifluoroethane	mg/kg		0.11 U	0.19 U	0.11 U	0.14 U	0.11 U	0.23 U	0.002 U	0.002 U	0.095 U	0.093 U	0.12 U
2-Chloroethyl Vinyl Ether	mg/kg												
2-Chlorotoluene	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.048 U	0.047 U	0.058 U
2-Hexanone	mg/kg		0.16 U	0.29 U	0.17 U	0.2 U	0.35 U	0.35 U	0.003 U	0.003 U	0.14 U	0.14 U	0.17 U
4-Chlorotoluene	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.053 U	0.047 U	0.058 U
4-Isopropyltoluene	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.1 U	0.047 U	0.058 U
Acetone	mg/kg		0.38 U	0.67 U	0.4 U	0.47 U	0.38 U	0.82 U	0.013 U	0.026 U	0.33 U	0.33 U	0.41 U
Acrolein	mg/kg												
Acrylonitrile	mg/kg												
Benzene	mg/kg		0.088 U	0.048 U	0.069 U	0.034 U	0.027 U	0.14 U	0.001 U	0.002 U	1.2 U	0.96 U	0.35 U
Bromodichloromethane	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.048 U	0.047 U	0.058 U
Bromoform	mg/kg												
Carbon Disulfide	mg/kg		0.055 U	0.095 U	0.072 U	0.068 U	0.054 U	0.12 U	0.008 U	0.019 U	0.048 U	0.047 U	0.058 U
Carbon Tetrachloride	mg/kg		0.56 U	0.095 U	0.22 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.094 U	0.047 U	0.058 U
CFC-1113	mg/kg		0.11 U	0.19 U	0.11 U	0.14 U	0.11 U	0.23 U	0.002 U	0.002 U	0.095 U	0.093 U	0.12 U
Chlorobenzene	mg/kg		1.2 U	0.21 U	2.5 U	0.18 U	2.6 U	20 U	0.096 U	0.086 U	24 U	14 U	3.9 U

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D15-BOR-14-(0-0.5)-DUP D15-BOR-14 0.00-0.50 DUP 10/26/2016	D15-BOR-14-(4.0-4.5) D15-BOR-14 4.00-4.50 FS 10/26/2016	D15-BOR-14-(5.0-5.5) D15-BOR-14 5.00-5.50 FS 10/26/2016	D15-BOR-14-(6.5-7.0) D15-BOR-14 6.50-7.00 FS 10/26/2016	D15-BOR-14-(6.5-7.0)-D D15-BOR-14 6.50-7.00 DUP 10/26/2016	D15-BOR-15-(0.5-1.0) D15-BOR-15 0.50-1.00 FS 10/27/2016	D15-BOR-15-(0-0.5) D15-BOR-15 0.00-0.50 FS 10/27/2016	D15-BOR-15-(5.0-5.5) D15-BOR-15 5.00-5.50 FS 10/27/2016	D15-BOR-15-(6.0-6.5) D15-BOR-15 6.00-6.50 FS 10/27/2016	D15-BOR-15-(7.0-7.5) D15-BOR-15 7.00-7.50 FS 10/27/2016	D15-BOR-15-(7.5-8.0) D15-BOR-15 7.50-8.00 FS 10/27/2016	D15-BOR-16(0.5-1.0) D15-BOR-16 0.50-1.00 FS 11/1/2016
Chemical	Units												
Chlorodibromomethane	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.048 U	0.047 U	0.058 U
Chlorodifluoromethane	mg/kg		0.002 U	0.002 U	0.002 U	0.003 U	0.002 U	0.003 U	0.002 U	0.002 U	0.003 U	0.002 U	0.002 U
Chlorofluoromethane	mg/kg		0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.0009 U	0.001 U
Chloroform	mg/kg		0.16	0.095 U	0.16	0.068 U	0.054 U	0.19	0.001	0.002	0.45	0.57	0.56
Chloropentafluoroethane	mg/kg		0.016 U	0.018 U	0.017 U	0.02 U	0.018 U	0.022 U	0.016 U	0.018 U	0.023 U	0.013 U	0.018 U
cis-1,2-Dichloroethene	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.048 U	0.047 U	0.058 U
cis-1,3-Dichloropropene	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.048 U	0.047 U	0.058 U
Cumene	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.048 U	0.047 U	0.058 U
Dichlorodifluoromethane	mg/kg		0.11 U	0.19 U	0.11 U	0.14 U	0.11 U	0.23 U	0.002 U	0.002 U	0.095 U	0.093 U	0.12 U
Dichlorofluoromethane	mg/kg		0.11 U	0.19 U	0.11 U	0.14 U	0.11 U	0.23 U	0.002 U	0.002 U	0.095 U	0.093 U	0.12 U
Ethane	ug/L												
Ethyl Chloride	mg/kg		0.11 U	0.19 U	0.11 U	0.14 U	0.11 U	0.23 U	0.002 U	0.002 U	0.095 U	0.093 U	0.12 U
Ethylbenzene	mg/kg		0.055 U	0.095 U	0.066	0.068 U	0.054 U	0.25	0.001 U	0.001 U	0.4	0.077	0.075
Fluoromethane	mg/kg		0.003 U	0.004 U	0.003 U	0.004 U	0.004 U	0.004 U	0.003 U	0.004 U	0.005 U	0.003 U	0.004 U
Hexane	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.048 U	0.047 U	0.058 U
Isobutyl Alcohol	mg/kg		5.5 U	9.5 U	5.7 U	6.8 U	5.4 U	12 U	0.11 U	0.11 U	4.8 U	4.7 U	5.8 U
Meta- And Para-Xylene	mg/kg		0.12	0.095 U	0.4	0.075	0.093	1.1	0.006	0.005	3	0.49	0.32
Methacrylonitrile	mg/kg		0.27 U	0.48 U	0.28 U	0.34 U	0.27 U	0.58 U	0.005 U	0.005 U	0.24 U	0.23 U	0.29 U
Methane	ug/L												
Methyl Bromide	mg/kg												
Methyl Chloride	mg/kg		0.11 U	0.19 U	0.11 U	0.14 U	0.11 U	0.23 U	0.002 U	0.002 U	0.095 U	0.093 U	0.12 U
Methyl Ethyl Ketone	mg/kg		0.22 U	0.38 U	0.23 U	0.27 U	0.22 U	0.47 U	0.004 U	0.004 U	0.19 U	0.19 U	0.23 U
Methyl Isobutyl Ketone	mg/kg		0.16 U	0.29 U	0.17 U	0.2 U	0.16 U	0.35 U	0.003 U	0.003 U	0.14 U	0.14 U	0.17 U
Methyl Methacrylate	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.048 U	0.047 U	0.058 U
Methyl Tertiary Butyl Ether	mg/kg		0.027 U	0.048 U	0.028 U	0.034 U	0.027 U	0.058 U	0.0005 U	0.0005 U	0.024 U	0.023 U	0.029 U
Methylene Chloride	mg/kg		0.11 U	0.19 U	0.11 U	0.14 U	0.11 U	0.23 U	0.002 U	0.002 U	0.095 U	0.093 U	0.12 U
N-Butylbenzene	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.048 U	0.047 U	0.058 U
N-Propylbenzene	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.048 U	0.047 U	0.058 U
Ortho-Xylene	mg/kg		0.055 U	0.095 U	0.12	0.068 U	0.054 U	0.37	0.002	0.001	0.73	0.12	0.091
Propionitrile	mg/kg		1.6 U	2.9 U	1.7 U	2 U	1.6 U	3.5 U	0.033 U	0.033 U	1.4 U	1.4 U	1.7 U
sec-Butylbenzene	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.048 U	0.047 U	0.058 U
Styrene	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.048 U	0.047 U	0.058 U
tert-Butylbenzene	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.048 U	0.047 U	0.058 U
Tetrachloroethene	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.13	2	0.005	0.005	0.77	0.14	0.058 U
Tetrahydrofuran	mg/kg		0.22 U	0.38 U	0.23 U	0.27 U	0.22 U	0.47 U	0.004 U	0.004 U	0.19 U	0.19 U	0.23 U
Toluene	mg/kg		0.095	0.095 U	0.14	0.068 U	0.054 U	0.12 U	0.001 U	0.002	1.4	0.77	0.39
trans-1,2-Dichloroethene	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.048 U	0.047 U	0.058 U
trans-1,3-Dichloropropene	mg/kg												
Trichloroethene	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.048 U	0.047 U	0.058 U
Trichlorofluoromethane	mg/kg		0.11 U	0.19 U	0.11 U	0.14 U	0.11 U	0.49	0.002	0.002	0.42	0.093 U	0.12 U
Vinyl Chloride	mg/kg		0.055 U	0.095 U	0.057 U	0.068 U	0.054 U	0.12 U	0.001 U	0.001 U	0.048 U	0.047 U	0.058 U
Vinyl Fluoride	mg/kg		0.007 U	0.007 U	0.007 U	0.008 U	0.007 U	0.009 U	0.006 U	0.007 U	0.009 U	0.005 U	0.007 U
Xylenes	mg/kg		0.12	0.095 U	0.52	0.075	0.093	1.5	0.007	0.007	3.7	0.61	0.41

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D15-BOR-16(0-0.5)	D15-BOR-16(3.5-4.0)	D15-BOR-16(6.0-6.5)	D15-BOR-16(8.5-9.0)	D15-BOR-16(9.0-9.2)	D15-BOR-17(0.5-1.0)	D15-BOR-17(0-0.5)	D15-BOR-17(3.0-3.4)	D15-BOR-17(4.5-5.0)	D15-BOR-17(6.5-7.0)	D15-BOR-18(0.5-1.0)	D15-BOR-18(0-0.5)
Location ID	Depth Interval (ft)	D15-BOR-16	D15-BOR-16	D15-BOR-16	D15-BOR-16	D15-BOR-16	D15-BOR-17	D15-BOR-17	D15-BOR-17	D15-BOR-17	D15-BOR-17	D15-BOR-18	D15-BOR-18
Sample Purpose	Date	0.00-0.50	3.50-4.00	6.00-6.50	8.50-9.00	9.00-9.20	0.50-1.00	0.00-0.50	3.00-3.40	4.50-5.00	6.50-7.00	0.50-1.00	0.00-0.50
Chemical Class	Units	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Chemical		11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016	10/31/2016	10/31/2016	10/31/2016	10/31/2016	10/31/2016	10/27/2016	10/27/2016
<b>General Chemistry</b>													
Black Carbon	mg/kg						9810	22100				8500	7290
Percent Moisture	%	25.7	12.1	10.1	13	19.4	17.2	51.4	19.9	8.6	11.6	12.6	12.5
Percent Solids	%												
Total Organic Carbon	mg/kg	2950	222 U	214 U	201 U		192 U	25500	184 U	188 U	153 U	197 U	203 U
<b>Metals</b>													
Aluminum	mg/kg	15700											
Antimony	mg/kg	0.357					0.167	0.716				0.223	0.322
Arsenic	mg/kg	6.77					3.17	15.6				2.47	4.29
Barium	mg/kg	78.7					39	126				46.7	44.4
Beryllium	mg/kg	0.725					0.338	1.21				0.552	0.536
Cadmium	mg/kg	0.194					0.0712	0.719				0.0419 U	0.0376 U
Calcium	mg/kg	1100					706	4340				168	209
Chromium	mg/kg	41.4					20.4	64.7				22.7	26.9
Cobalt	mg/kg	14.3					5.58	15.6				7.37	6.28
Copper	mg/kg	29.4					11.5	47.5				13.2	13.5
Iron	mg/kg	19600					12300	30500				13800	15600
Lead	mg/kg	25.3					13.1	71.8				8.11	12.3
Magnesium	mg/kg	3110					1710	5640				1760	1150
Manganese	mg/kg	287					116	944				87.2	79.3
Mercury	mg/kg	0.124					0.129	0.318				0.0111 U	0.0311
Nickel	mg/kg	21.9					11.5	32.1				13.6	14.2
Potassium	mg/kg	2340					1410	3860				1140	1030
Selenium	mg/kg	0.154					0.0785 U	0.609				0.0943 U	0.0846 U
Silver	mg/kg	0.0865					0.0271	0.63				0.0255 U	0.0229 U
Sodium	mg/kg	550					142	884				127	168
Thallium	mg/kg	0.171					0.0841	0.247				0.12	0.0933
Tin	mg/kg												
Titanium	mg/kg												
Vanadium	mg/kg	55.8					26.6	67.8				29.6	38.3
Zinc	mg/kg	69.6					30.1	190				41	34.4
<b>Metals - AVS/SEM</b>													
Acid Volatile Sulfide	umol/g												
Arsenic	umol/g												
Cadmium	umol/g												
Copper	umol/g												
Lead	umol/g												
Zinc	umol/g												
<b>Metals - Leachate</b>													
Lead	ug/L												
<b>Per and Polyfluorinated Organic Substances</b>													
Perfluorobutane Sulfonic Acid	mg/kg												
Perfluorobutanoic Acid	mg/kg												
Perfluorodecane Sulfonic Acid	mg/kg												
Perfluorodecanoic Acid	mg/kg												
Perfluorododecanoic Acid	mg/kg												
Perfluoroheptanoic Acid	mg/kg												
Perfluorohexane Sulfonic Acid	mg/kg												
Perfluorohexanoic Acid	mg/kg												
Perfluorononanoic Acid	mg/kg												
Perfluorooctane Sulfonamide	mg/kg												
Perfluoropentanoic Acid	mg/kg												
Perfluorotetradecanoic Acid	mg/kg												
Perfluorotridecanoic Acid	mg/kg												
Perfluoroundecanoic Acid	mg/kg												
PFOA	mg/kg												
PFOA(trial)	mg/kg												
PFOS	mg/kg												
PFOS (trial)	mg/kg												
<b>Pesticides and Herbicides</b>													
4,4'-DDD	mg/kg												
4,4'-DDE	mg/kg												
4,4'-DDT	mg/kg												
Aldrin	mg/kg												
Alpha Chlordane	mg/kg												
Alpha-BHC	mg/kg												
beta-BHC	mg/kg												
delta-BHC	mg/kg												
Dieldrin	mg/kg												
Endosulfan I	mg/kg												
Endosulfan II	mg/kg												
Endosulfan Sulfate	mg/kg												
Endrin	mg/kg												
Endrin Aldehyde	mg/kg												
Endrin Ketone	mg/kg												
Gamma Chlordane	mg/kg												

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	Field Sample ID	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D15-BOR-16(0-0.5)	D15-BOR-16(3.5-4.0)	D15-BOR-16(6.0-6.5)	D15-BOR-16(8.5-9.0)	D15-BOR-16(9.0-9.2)	D15-BOR-17(0.5-1.0)	D15-BOR-17(0-0.5)	D15-BOR-17(3.0-3.4)	D15-BOR-17(4.5-5.0)	D15-BOR-17(6.5-7.0)	D15-BOR-18(0.5-1.0)	D15-BOR-18(0-0.5)
Location ID	Depth Interval (ft)	D15-BOR-16	D15-BOR-16	D15-BOR-16	D15-BOR-16	D15-BOR-16	D15-BOR-17	D15-BOR-17	D15-BOR-17	D15-BOR-17	D15-BOR-17	D15-BOR-18	D15-BOR-18
Sample Purpose	Date	0.00-0.50	3.50-4.00	6.00-6.50	8.50-9.00	9.00-9.20	0.50-1.00	0.00-0.50	3.00-3.40	4.50-5.00	6.50-7.00	0.50-1.00	0.00-0.50
Chemical Class	Units	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Chemical	Units	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016	10/31/2016	10/31/2016	10/31/2016	10/31/2016	10/31/2016	10/27/2016	10/27/2016
Heptachlor	mg/kg												
Heptachlor Epoxide	mg/kg												
Lindane	mg/kg												
Methoxychlor	mg/kg												
Toxaphene	mg/kg												
<b>Physical Properties</b>													
0.001 MM	% PASSING	1	3	0.5 U	0.5 U		4	11	3	2	2	0.5 U	0.5 U
0.002 MM	% PASSING	2	3	0.5 U	0.5 U		4	13	3	2	2	0.5	0.5
0.005 MM	% PASSING	3	3	0.5 U	0.5 U		4	21	3	2	2	1	0.5
0.02 MM	% PASSING	6	3	2	1		4	40	3	2	2	1.5	1
0.05 MM	% PASSING	11	4	3	2		9	66	7	3	3	2.5	2
0.064 MM	% PASSING	15	5	4	2		13	74	11	3.7	3.8	4.5	2.5
0.075 MM	% PASSING	17.2	5.8	5.1	2.1		14.9	77.7	13.2	3.7	3.8	5.3	3.1
0.15 MM	% PASSING	29.5	7.9	6.1	2.3		22.1	84.5	17	4.9	4.6	7.8	5.8
0.3 MM	% PASSING	74.1	20.4	14.6	3.2		48	93.8	30.8	8.4	6.8	11.6	10.6
0.6 MM	% PASSING	87.9	63.7	33.4	11		81.9	97.2	69.2	17.4	10.4	23.8	18.4
1.18 MM	% PASSING	94.1	89.2	72.3	43.1		95.6	98.8	83.9	47.9	24.6	52.8	30.2
19 MM	% PASSING	100	100	100	100		100	100	100	100	89.8	100	100
2.36 MM	% PASSING	97.2	93.7	88	74.4		99	99.1	87.6	77.1	47.5	65.7	37.8
3.35 MM	% PASSING	98.8	95.6	94.9	85.2		99.5	99.9	89.9	87.5	57	73	48
37.5 MM	% PASSING	100	100	100	100		100	100	100	100	100	100	100
4.75 MM	% PASSING	99.6	97.1	97.9	91.7		99.6	100	92.3	92.9	64.9	80.2	64.3
75 MM	% PASSING	100	100	100	100		100	100	100	100	100	100	100
Density	PCF												
<b>Polychlorinated Biphenyls - TICs</b>													
1,1'-Biphenyl, 2,3-dichloro-	mg/kg												
Unknown Biphenyl	mg/kg												
<b>Polychlorinated Biphenyls</b>													
Heptachlorobiphenyl	mg/kg												
Hexachlorobiphenyl	mg/kg												
Octachlorobiphenyl	mg/kg												
PCB 1	mg/kg	0.00202					0.00768	0.0674				0.000256	0.0572
PCB 10	mg/kg	0.0000229					0.0000159	0.000114				0.00000826	0.000283
PCB 100	mg/kg												
PCB 101	mg/kg												
PCB 102	mg/kg	0.0000118					0.00000757	0.000159				0.000000884 U	0.0000111 U
PCB 103	mg/kg	0.00000591					0.00000273	0.0000987				0.000000947 U	0.0000242 U
PCB 104	mg/kg	0.00000395					0.00000396 U	0.00000671				0.0000004 U	0.00000275 U
PCB 105	mg/kg	0.000108					0.0000675	0.00152				0.00000671	0.000113
PCB 106	mg/kg	0.0000482					0.00000162	0.0000172 U				0.000000711 U	0.00000916 U
PCB 107	mg/kg												
PCB 107/123	mg/kg												
PCB 108	mg/kg												
PCB 109	mg/kg	0.0000253					0.000014	0.000329				0.00000166	0.0000322
PCB 11	mg/kg	0.000203					0.000143	0.00148				0.000122	0.00435
PCB 110	mg/kg	0.000355					0.000197	0.00485				0.0000166	0.00023
PCB 111	mg/kg	0.0000269					0.00000105	0.0000159 U				0.000000667 U	0.0000086 U
PCB 112	mg/kg	0.0000447					0.000000933 U	0.0000171 U				0.000000729 U	0.00000939 U
PCB 113	mg/kg												
PCB 114	mg/kg	0.0000633					0.00000376	0.0000581				0.000000809 U	0.0000231
PCB 115	mg/kg	0.0000168 U					0.000000927 U	0.0000158 U				0.000000766 U	0.00000987 U
PCB 116	mg/kg												
PCB 117	mg/kg	0.00000862					0.00000513	0.0000957				0.000000732 U	0.000015
PCB 118	mg/kg	0.000228					0.000139	0.0028				0.0000159	0.000179
PCB 119	mg/kg												
PCB 12	mg/kg												
PCB 120	mg/kg	0.00000461					0.00000212	0.0000472				0.000000678 U	0.00000873 U
PCB 121	mg/kg	0.00000164 U					0.000000906 U	0.0000167 U				0.000000743 U	0.00000958 U
PCB 121/95/88	mg/kg												
PCB 122	mg/kg	0.00000365					0.00000266	0.0000528				0.000000865 U	0.0000112 U
PCB 123	mg/kg	0.000006					0.00000216	0.0000659				0.000000761 U	0.0000098 U
PCB 124	mg/kg												
PCB 125	mg/kg												
PCB 126	mg/kg	0.00000362					0.00000178	0.0000277				0.000000453 U	0.0000102
PCB 127	mg/kg	0.00000242 U					0.00000131 U	0.000021 U				0.000000679 U	0.00000963 U
PCB 128	mg/kg												
PCB 129	mg/kg												
PCB 129/158	mg/kg												
PCB 13	mg/kg												
PCB 130	mg/kg	0.000029					0.0000143	0.000364				0.00000203	0.000023
PCB 130/164	mg/kg												
PCB 131	mg/kg	0.00000474					0.00000274	0.0000558				0.000000553 U	0.0000482
PCB 132	mg/kg	0.000109					0.0000649	0.00163				0.00000079	0.000098
PCB 133	mg/kg	0.0000144					0.00000717	0.000152				0.000000501 U	0.0000155
PCB 134	mg/kg	0.0000177					0.0000148	0.000321				0.000000602 U	0.0000186
PCB 135	mg/kg												

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D15-BOR-16(0-0.5) D15-BOR-16 0.00-0.50 FS 11/1/2016	D15-BOR-16(3.5-4.0) D15-BOR-16 3.50-4.00 FS 11/1/2016	D15-BOR-16(6.0-6.5) D15-BOR-16 6.00-6.50 FS 11/1/2016	D15-BOR-16(8.5-9.0) D15-BOR-16 8.50-9.00 FS 11/1/2016	D15-BOR-16(9.0-9.2) D15-BOR-16 9.00-9.20 FS 11/1/2016	D15-BOR-17(0.5-1.0) D15-BOR-17 0.50-1.00 FS 10/31/2016	D15-BOR-17(0-0.5) D15-BOR-17 0.00-0.50 FS 10/31/2016	D15-BOR-17(3.0-3.4) D15-BOR-17 3.00-3.40 FS 10/31/2016	D15-BOR-17(4.5-5.0) D15-BOR-17 4.50-5.00 FS 10/31/2016	D15-BOR-17(6.5-7.0) D15-BOR-17 6.50-7.00 FS 10/31/2016	D15-BOR-18(0.5-1.0) D15-BOR-18 0.50-1.00 FS 10/27/2016
Chemical	Units											
PCB 136	mg/kg	0.0000485				0.0000263	0.000723				0.0000249	0.0000555
PCB 137	mg/kg	0.0000141				0.00000729	0.000143				0.00000161	0.0000214
PCB 138	mg/kg											
PCB 139	mg/kg											
PCB 14	mg/kg	0.000229				0.00014	0.000666				0.000238	0.0128
PCB 140	mg/kg											
PCB 141	mg/kg	0.0000556				0.0000314	0.000751				0.00000534	0.000104
PCB 142	mg/kg	0.00000578				0.0000021	0.00000327 U				0.000000517 U	0.00000994
PCB 143	mg/kg	0.00000279				0.000000535 U	0.00000276 U				0.000000506 U	0.00000421 U
PCB 143/139	mg/kg											
PCB 144	mg/kg	0.0000146				0.00000721	0.000222				0.00000492 U	0.0000478
PCB 145	mg/kg	0.00000326 U				0.0000042 U	0.00000199 U				0.00000325 U	0.00000248 U
PCB 146	mg/kg	0.0000668				0.0000031	0.00105				0.00000384	0.0000913
PCB 147	mg/kg											
PCB 148	mg/kg	0.00000232				0.00000108	0.0000333				0.00000487 U	0.0000122
PCB 149	mg/kg											
PCB 15	mg/kg	0.00035				0.000167	0.00238				0.000246	0.00734
PCB 150	mg/kg	0.00000171				0.000000636	0.0000282				0.000000317 U	0.0000134
PCB 151	mg/kg											
PCB 152	mg/kg	0.000000315 U				0.000000406 U	0.00000561				0.000000316 U	0.00000241 U
PCB 153	mg/kg											
PCB 154	mg/kg	0.00001				0.00000395	0.000189				0.000000436 U	0.0000211
PCB 155	mg/kg	0.00000153				0.000000421 U	0.0000225				0.000000345 U	0.00000263 U
PCB 156	mg/kg											
PCB 157	mg/kg											
PCB 158	mg/kg	0.0000245				0.0000157	0.000351				0.00000265	0.0000644
PCB 159	mg/kg	0.00000838				0.00000377	0.00007				0.000000508 U	0.0000224
PCB 16	mg/kg	0.000144				0.000102	0.00503				0.0000802	0.00373
PCB 160	mg/kg	0.0000182				0.00000614	0.00000213 U				0.00000217	0.0000193
PCB 161	mg/kg	0.00000829				0.000000406 U	0.00000209 U				0.000000357 U	0.00000297 U
PCB 162	mg/kg	0.00000764				0.00000222	0.0000414				0.000000511 U	0.0000145
PCB 163	mg/kg											
PCB 163/160	mg/kg											
PCB 164	mg/kg	0.0000319				0.0000153	0.00038				0.00000225	0.0000291
PCB 165	mg/kg	0.00000214				0.000000458 U	0.00000519				0.000000404 U	0.00000336 U
PCB 166	mg/kg											
PCB 167	mg/kg	0.0000191				0.00000846	0.000195				0.0000015	0.0000182
PCB 168	mg/kg											
PCB 169	mg/kg	0.000000874 U				0.00000102 U	0.00000979 U				0.000000653 U	0.00000491 U
PCB 17	mg/kg	0.00008				0.000045	0.000718				0.0000386	0.00118
PCB 170	mg/kg	0.000079				0.0000452	0.00122				0.00000678	0.000159
PCB 171	mg/kg											
PCB 172	mg/kg	0.000022				0.00000967	0.000247				0.00000177	0.0000603
PCB 173	mg/kg											
PCB 174	mg/kg	0.000108				0.0000501	0.00154				0.000007	0.000361
PCB 175	mg/kg	0.00000719				0.00000296	0.0000676				0.000000734 U	0.0000198
PCB 176	mg/kg	0.0000124				0.00000638	0.000163				0.000000674	0.0000352
PCB 177	mg/kg	0.0000613				0.0000293	0.00098				0.00000334	0.00015
PCB 178	mg/kg	0.0000292				0.000014	0.000351				0.00000159	0.0000937
PCB 179	mg/kg	0.0000464				0.0000238	0.000689				0.00000179	0.000196
PCB 18	mg/kg											
PCB 180	mg/kg											
PCB 181	mg/kg	0.00000381				0.00000152	0.0000103				0.000000693 U	0.00000347 U
PCB 182	mg/kg	0.0000035				0.000000975 U	0.0000255				0.000000666 U	0.0000162
PCB 182/175	mg/kg											
PCB 183	mg/kg	0.000053				0.0000264	0.000852				0.00000319	0.000245
PCB 184	mg/kg	0.00000192				0.000000322 U	0.0000163				0.000000458 U	0.00000641
PCB 185	mg/kg	0.0000162				0.00000625	0.000145				0.00000117	0.0000568
PCB 186	mg/kg	0.00000744				0.000000316 U	0.00000179 U				0.00000045 U	0.00000245 U
PCB 187	mg/kg	0.00016				0.0000759	0.00239				0.00000888	0.000792
PCB 188	mg/kg	0.00000222				0.000000309 U	0.0000383				0.000000466 U	0.0000156
PCB 189	mg/kg	0.00000593				0.00000314	0.0000644				0.000000442 U	0.0000183
PCB 19	mg/kg	0.0000161				0.00000802	0.000207				0.00000555	0.000164
PCB 190	mg/kg	0.0000253				0.0000109	0.000264				0.0000017	0.0000592
PCB 191	mg/kg	0.00000481				0.00000241	0.0000447				0.000000544 U	0.00000272 U
PCB 192	mg/kg	0.00000844				0.00000305	0.00000429 U				0.000000585 U	0.00000292 U
PCB 193	mg/kg											
PCB 194	mg/kg	0.000115				0.000049	0.00108				0.00000803	0.000677
PCB 195	mg/kg	0.0000213				0.0000106	0.000354				0.00000139	0.000135
PCB 196	mg/kg	0.0000506				0.0000247	0.000822				0.00000265	0.000301
PCB 197	mg/kg	0.00000659				0.00000322	0.0000957				0.000000502 U	0.00000213
PCB 198	mg/kg											
PCB 199	mg/kg											
PCB 2	mg/kg	0.00193				0.00329	0.0137				0.000452	0.0344
PCB 20	mg/kg											
PCB 200	mg/kg	0.0000108				0.00000586	0.000188				0.000000499 U	0.0000838

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D15-BOR-16(0-0.5) D15-BOR-16 0.00-0.50 FS 11/1/2016	D15-BOR-16(3.5-4.0) D15-BOR-16 3.50-4.00 FS 11/1/2016	D15-BOR-16(6.0-6.5) D15-BOR-16 6.00-6.50 FS 11/1/2016	D15-BOR-16(8.5-9.0) D15-BOR-16 8.50-9.00 FS 11/1/2016	D15-BOR-16(9.0-9.2) D15-BOR-16 9.00-9.20 FS 11/1/2016	D15-BOR-17(0.5-1.0) D15-BOR-17 0.50-1.00 FS 10/31/2016	D15-BOR-17(0-0.5) D15-BOR-17 0.00-0.50 FS 10/31/2016	D15-BOR-17(3.0-3.4) D15-BOR-17 3.00-3.40 FS 10/31/2016	D15-BOR-17(4.5-5.0) D15-BOR-17 4.50-5.00 FS 10/31/2016	D15-BOR-17(6.5-7.0) D15-BOR-17 6.50-7.00 FS 10/31/2016	D15-BOR-18(0.5-1.0) D15-BOR-18 0.50-1.00 FS 10/27/2016
PCB 201	mg/kg	0.0000176					0.00000969	0.000383			0.00000133	0.000137
PCB 202	mg/kg	0.0000448					0.0000268	0.000922			0.00000264	0.000392
PCB 203	mg/kg	0.0000852					0.0000418	0.00135			0.00000424	0.000731
PCB 204	mg/kg	0.00000429					0.00000661	0.0000859			0.00000531	0.0000285
PCB 204/200	mg/kg											
PCB 205	mg/kg	0.00000869					0.00000433	0.0000607			0.00000608	0.0000244
PCB 206	mg/kg	0.000526					0.000316	0.00702			0.000025	0.00229
PCB 207	mg/kg	0.0000495					0.0000283	0.000561			0.00000261	0.000192
PCB 208	mg/kg	0.000199					0.00013	0.00334			0.00000876	0.000935
PCB 209	mg/kg	0.000783					0.000434	0.0106			0.0000336	0.00178
PCB 21	mg/kg											
PCB 21/20	mg/kg											
PCB 22	mg/kg	0.000197					0.000111	0.00394			0.0000879	0.00231
PCB 23	mg/kg	0.0000232					0.0000521	0.000034			0.00000551	0.000832
PCB 24	mg/kg	0.0000664					0.0000232	0.000171			0.0000347	0.00209
PCB 25	mg/kg	0.000092					0.0000583	0.000551			0.0000145	0.000395
PCB 26	mg/kg											
PCB 27	mg/kg	0.0000249					0.0000158	0.000243			0.00000621	0.0000992
PCB 28	mg/kg											
PCB 29	mg/kg											
PCB 3	mg/kg	0.00237					0.0025	0.00957			0.000617	0.029
PCB 30	mg/kg											
PCB 31	mg/kg	0.000427					0.000189	0.00267			0.000227	0.00368
PCB 32	mg/kg	0.0000477					0.0000256	0.000538			0.00000318	0.00026
PCB 33	mg/kg											
PCB 34	mg/kg	0.0000557					0.0000169	0.000129			0.0000101	0.00123
PCB 35	mg/kg	0.00019					0.0000919	0.00325			0.0000237	0.00158
PCB 36	mg/kg	0.000062					0.0000152	0.0000891			0.00000921	0.000468
PCB 37	mg/kg	0.000608					0.000179	0.00376			0.0000764	0.00484
PCB 38	mg/kg	0.0000186	U				0.0000169	0.0000123	U		0.00000142	0.0000763
PCB 39	mg/kg	0.000109					0.0000264	0.000139			0.0000171	0.00117
PCB 4	mg/kg	0.00102					0.000976	0.00551			0.000248	0.0175
PCB 4/10	mg/kg											
PCB 40	mg/kg											
PCB 41	mg/kg	0.000022					0.0000127	0.000113			0.0000173	0.0000331
PCB 42	mg/kg	0.0000821					0.0000433	0.000892			0.0000401	0.000714
PCB 43	mg/kg	0.0000181					0.00000857	0.000115			0.0000131	0.0000664
PCB 44	mg/kg											
PCB 45	mg/kg	0.0000446					0.0000265	0.000454			0.0000656	0.000158
PCB 46	mg/kg	0.0000198					0.0000106	0.000211			0.0000259	0.0000526
PCB 47	mg/kg											
PCB 48	mg/kg	0.0000567					0.0000278	0.000403			0.0000504	0.000135
PCB 49	mg/kg											
PCB 5	mg/kg	0.000278					0.00023	0.00375			0.000136	0.01
PCB 50	mg/kg											
PCB 51	mg/kg	0.0000126					0.00000903	0.000414			0.000013	0.0000251
PCB 52	mg/kg	0.00035					0.000195	0.00356			0.000257	0.000947
PCB 53	mg/kg											
PCB 54	mg/kg	0.0000122					0.00000625	0.0000228			0.00000602	0.0000605
PCB 55	mg/kg	0.0000529					0.00000328	0.0000362			0.00000895	0.0000148
PCB 56	mg/kg	0.000244					0.000206	0.0126			0.0000107	0.00075
PCB 57	mg/kg	0.0000536					0.00000167	0.0000273			0.00000834	0.0000313
PCB 58	mg/kg	0.00000352					0.00000161	0.0000405			0.0000086	0.0000635
PCB 59	mg/kg											
PCB 6	mg/kg	0.000588					0.000516	0.00368			0.000301	0.0217
PCB 60	mg/kg	0.0000438					0.0000242	0.000383			0.00000425	0.0000959
PCB 61	mg/kg											
PCB 62	mg/kg											
PCB 63	mg/kg	0.0000205					0.00000608	0.000124			0.00000205	0.000113
PCB 64	mg/kg	0.000116					0.0000603	0.00106			0.0000638	0.000172
PCB 65	mg/kg											
PCB 65/75/62	mg/kg											
PCB 66	mg/kg	0.000275					0.000131	0.00279			0.0000177	0.000646
PCB 67	mg/kg	0.0000139					0.00000754	0.0000965			0.00000144	0.000038
PCB 67/58	mg/kg											
PCB 68	mg/kg	0.00000497					0.00000311	0.000244			0.000000795	0.0000116
PCB 68/64	mg/kg											
PCB 69	mg/kg											
PCB 7	mg/kg	0.0000976					0.0000908	0.000407			0.0000473	0.00317
PCB 70	mg/kg											
PCB 71	mg/kg											
PCB 72	mg/kg	0.0000119					0.00000428	0.0000859			0.00000122	0.0000377
PCB 73	mg/kg	0.00000155					0.00000116	0.0000214			0.000000646	0.00000502
PCB 73/46	mg/kg											
PCB 74	mg/kg											
PCB 75	mg/kg											

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D15-BOR-16(0-0.5) D15-BOR-16 0.00-0.50 FS 11/1/2016	D15-BOR-16(3.5-4.0) D15-BOR-16 3.50-4.00 FS 11/1/2016	D15-BOR-16(6.0-6.5) D15-BOR-16 6.00-6.50 FS 11/1/2016	D15-BOR-16(8.5-9.0) D15-BOR-16 8.50-9.00 FS 11/1/2016	D15-BOR-16(9.0-9.2) D15-BOR-16 9.00-9.20 FS 11/1/2016	D15-BOR-17(0.5-1.0) D15-BOR-17 0.50-1.00 FS 10/31/2016	D15-BOR-17(0-0.5) D15-BOR-17 0.00-0.50 FS 10/31/2016	D15-BOR-17(3.0-3.4) D15-BOR-17 3.00-3.40 FS 10/31/2016	D15-BOR-17(4.5-5.0) D15-BOR-17 4.50-5.00 FS 10/31/2016	D15-BOR-17(6.5-7.0) D15-BOR-17 6.50-7.00 FS 10/31/2016	D15-BOR-18(0.5-1.0) D15-BOR-18 0.50-1.00 FS 10/27/2016
Chemical	Units											
PCB 76	mg/kg											
PCB 77	mg/kg	0.000112				0.0000876	0.00554				0.0000572	0.000562
PCB 78	mg/kg	0.0000152 U				0.0000179 U	0.000115 U				0.00000918 U	0.0000678 U
PCB 79	mg/kg	0.0000134				0.0000482	0.0000962				0.0000165	0.0000634
PCB 8	mg/kg	0.000941				0.000751	0.00466				0.000536	0.0234
PCB 80	mg/kg	0.0000125 U				0.0000147 U	0.0000933 U				0.00000781 U	0.0000577 U
PCB 81	mg/kg	0.0000279				0.000018 U	0.000116 U				0.00000888 U	0.000062
PCB 82	mg/kg	0.0000415				0.000023	0.000446				0.0000195	0.0000289
PCB 83	mg/kg	0.0000196				0.0000123	0.000288				0.0000118 U	0.0000152 U
PCB 83/125/112	mg/kg											
PCB 84	mg/kg	0.0000931				0.0000516	0.00111				0.00000397	0.0000708
PCB 85	mg/kg											
PCB 86	mg/kg											
PCB 86/109	mg/kg											
PCB 87	mg/kg											
PCB 87/111	mg/kg											
PCB 88	mg/kg	0.0000248 U				0.0000137 U	0.0000258 U				0.0000117 U	0.0000151 U
PCB 89	mg/kg	0.0000674				0.0000321	0.0000624				0.0000114 U	0.0000147 U
PCB 89/84	mg/kg											
PCB 9	mg/kg	0.000537				0.000473	0.00197				0.000235	0.0147
PCB 90	mg/kg											
PCB 91	mg/kg	0.0000478				0.0000254	0.000609				0.0000197	0.0000432
PCB 92	mg/kg	0.0000696				0.0000376	0.000908				0.0000357	0.0000733
PCB 93	mg/kg											
PCB 94	mg/kg	0.0000357				0.0000201	0.0000459				0.000011 U	0.0000142 U
PCB 95	mg/kg	0.000244				0.000138	0.00308				0.0000125	0.000256
PCB 96	mg/kg	0.0000532				0.0000238	0.0000442				0.00000394 U	0.00000271 U
PCB 97	mg/kg											
PCB 98	mg/kg	0.000004				0.0000147 U	0.0000301				0.0000115 U	0.00139
PCB 99	mg/kg	0.000146				0.0000778	0.00188				0.0000101	0.000112
PCB-100/93	mg/kg	0.0000068				0.00000276	0.000117				0.00000102 U	0.0000224
PCB-107/124	mg/kg	0.0000123				0.0000765	0.000118				0.00000741 U	0.0000161
PCB-108/119/86/97/125/87	mg/kg	0.000206				0.000114	0.0023				0.0000121	0.0012
PCB-113/90/101	mg/kg	0.000311				0.00018	0.00371				0.0000159	0.000518
PCB-116/85	mg/kg	0.0000786				0.0000352	0.000556				0.0000677	0.0000792
PCB-128/166	mg/kg	0.0000563				0.0000313	0.000706				0.0000055	0.0000692
PCB-13/12	mg/kg	0.000978				0.000588	0.00615				0.000811	0.0364
PCB-139/140	mg/kg	0.00000579				0.00000367	0.0000899				0.00000475 U	0.0000173
PCB-147/149	mg/kg	0.0003				0.000146	0.00496				0.0000184	0.000437
PCB-151/135	mg/kg	0.000143				0.0000664	0.00208				0.00000738	0.000246
PCB-153/168	mg/kg	0.000275				0.000151	0.00435				0.0000189	0.000485
PCB-156/157	mg/kg	0.0000413				0.0000223	0.000462				0.00000474	0.0000421
PCB-163/138/129	mg/kg	0.000319				0.000177	0.005				0.0000274	0.000355
PCB-171/173	mg/kg	0.000027				0.0000126	0.000393				0.0000017	0.0000749
PCB-180/193	mg/kg	0.000207				0.00011	0.00313				0.0000156	0.000857
PCB-198/199	mg/kg	0.000232				0.000103	0.00309				0.0000141	0.0014
PCB-21/33	mg/kg	0.000395				0.000199	0.00714				0.000154	0.00595
PCB-26/29	mg/kg	0.000136				0.0000739	0.00111				0.00004	0.00195
PCB-28/20	mg/kg	0.000375				0.000228	0.00516				0.000196	0.00263
PCB-30/18	mg/kg	0.000229				0.000118	0.00179				0.000165	0.00377
PCB-44/47/65	mg/kg	0.000294				0.000156	0.00371				0.000208	0.000542
PCB-50/53	mg/kg	0.00004				0.0000226	0.000561				0.000053	0.000204
PCB-59/62/75	mg/kg	0.0000319				0.0000162	0.000319				0.0000155	0.000193
PCB-61/70/74/76	mg/kg	0.000508				0.000276	0.00508				0.0000545	0.000847
PCB-69/49	mg/kg	0.000175				0.0000951	0.00212				0.000119	0.000427
PCB-71/40	mg/kg	0.000162				0.0000971	0.00368				0.0000681	0.000314
PCB-90/101	mg/kg											
Pentachlorobiphenyl	mg/kg											
Tetrachlorobiphenyl	mg/kg											
Total Decachlorobiphenyls (congeners)	mg/kg											
Total Dichlorobiphenyls (congeners)	mg/kg	0.00525				0.00409	0.0308				0.00293	0.152
Total Heptachlorobiphenyls (congeners)	mg/kg	0.000885				0.000434	0.0126				0.0000551	0.00322
Total Hexachlorobiphenyls (congeners)	mg/kg	0.00165				0.000864	0.0244				0.000114	0.0024
Total Monochlorobiphenyls (congeners)	mg/kg	0.00632				0.0135	0.0906				0.00132	0.121
Total Nonachlorobiphenyls (congeners)	mg/kg	0.000774				0.000474	0.0109				0.0000363	0.00341
Total Octachlorobiphenyls (congeners)	mg/kg	0.000597				0.000279	0.00835				0.0000343	0.00391
Total PCB (congeners)	mg/kg	0.024299				0.024305	0.29515				0.0069633	0.33803
Total Pentachlorobiphenyls (congeners)	mg/kg	0.00207				0.00116	0.0254				0.00011	0.00465
Total Tetrachlorobiphenyls (congeners)	mg/kg	0.00269				0.00154	0.0448				0.00111	0.00726
Total Trichlorobiphenyls (congeners)	mg/kg	0.00328				0.00153	0.0367				0.00122	0.0384
Trichlorobiphenyl (total)	mg/kg											
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>												
Benzo[e]pyrene	mg/kg											
Chrysene, 1-methyl-	mg/kg											
Naphthalene, 1-methyl-	mg/kg											
Pyrene, 1-methyl-	mg/kg											

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	D15-BOR-16(0-0.5)	D15-BOR-16(3.5-4.0)	D15-BOR-16(6.0-6.5)	D15-BOR-16(8.5-9.0)	D15-BOR-16(9.0-9.2)	D15-BOR-17(0.5-1.0)	D15-BOR-17(0-0.5)	D15-BOR-17(3.0-3.4)	D15-BOR-17(4.5-5.0)	D15-BOR-17(6.5-7.0)	D15-BOR-18(0.5-1.0)	D15-BOR-18(0-0.5)	
Location ID	D15-BOR-16	D15-BOR-16	D15-BOR-16	D15-BOR-16	D15-BOR-16	D15-BOR-17	D15-BOR-17	D15-BOR-17	D15-BOR-17	D15-BOR-17	D15-BOR-18	D15-BOR-18	
Depth Interval (ft)	0.00-0.50	3.50-4.00	6.00-6.50	8.50-9.00	9.00-9.20	0.50-1.00	0.00-0.50	3.00-3.40	4.50-5.00	6.50-7.00	0.50-1.00	0.00-0.50	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Date	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016	10/31/2016	10/31/2016	10/31/2016	10/31/2016	10/31/2016	10/27/2016	10/27/2016	
Chemical Class	Units												
<b>Polycyclic Aromatic Hydrocarbons</b>													
Acenaphthene	mg/kg	0.014	0.004 U	0.004 U	0.004 U	0.004 U	0.007	0.022	0.004 U	0.004 U	0.008	0.004 U	0.008
Acenaphthylene	mg/kg	0.012	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.007	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Anthracene	mg/kg	0.027	0.004 U	0.004 U	0.011	0.004 U	0.01	0.021	0.004 U	0.004 U	0.005	0.004 U	0.009
Benzo(A)Anthracene	mg/kg	0.065	0.004 U	0.004 U	0.004 U	0.004 U	0.013	0.018	0.004 U	0.004 U	0.005	0.004 U	0.01
Benzo(B)Fluoranthene	mg/kg	0.08	0.004 U	0.004 U	0.004 U	0.004 U	0.017	0.032	0.004 U	0.004 U	0.004 U	0.004 U	0.01
Benzo(G,H,I)Perylene	mg/kg	0.042	0.004 U	0.004 U	0.004 U	0.004 U	0.011	0.021	0.004 U	0.004 U	0.004 U	0.004 U	0.004
Benzo(K)Fluoranthene	mg/kg	0.034	0.004 U	0.004 U	0.004 U	0.004 U	0.007	0.014	0.004 U	0.004 U	0.004 U	0.004 U	0.004
Benzo(A)Pyrene	mg/kg	0.068	0.004 U	0.004 U	0.004 U	0.004 U	0.014	0.025	0.004 U	0.004 U	0.004 U	0.004 U	0.01
Chrysene	mg/kg	0.12	0.004 U	0.004 U	0.004 U	0.004 U	0.021	0.047	0.004 U	0.004 U	0.01	0.004 U	0.018
Dibenz(A,H)Anthracene	mg/kg	0.018	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.007	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Fluoranthene	mg/kg	0.076	0.004 U	0.004 U	0.004 U	0.004 U	0.02	0.042	0.004 U	0.004 U	0.008	0.018	0.041
Fluorene	mg/kg	0.021	0.004 U	0.004 U	0.011	0.004 U	0.011	0.02	0.004 U	0.004 U	0.021	0.004 U	0.011
Indeno (1,2,3-CD) Pyrene	mg/kg	0.038	0.004 U	0.004 U	0.004 U	0.004 U	0.008	0.017	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Naphthalene	mg/kg	0.14	0.005	0.008	0.028	0.026	0.1	0.69	0.025	0.007	0.29	0.004 U	0.01
Phenanthrene	mg/kg	0.041	0.004 U	0.004 U	0.007	0.004 U	0.016	0.041	0.004 U	0.004 U	0.04	0.006	0.022
Pyrene	mg/kg	0.1	0.004 U	0.004 U	0.004 U	0.004 U	0.024	0.048	0.004 U	0.004 U	0.011	0.025	0.051
Total PAHs (Detections + 1/2 MDL)	mg/kg	0.896	0.035	0.038	0.081	0.056	0.283	1.072	0.055	0.037	0.412	0.075	0.214
Total PAHs (Detections Only)	mg/kg	0.896	0.005	0.008	0.057	0.026	0.279	1.072	0.025	0.007	0.398	0.049	0.208
<b>Semivolatile Organic Compounds - TICs</b>													
1,2,4-Trithiolane	mg/kg												
1,4-Benzenediol, 2-chloro-	mg/kg												
11H-Benzo[b]fluorene	mg/kg												
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg												
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg												
3-PENTEN-2-ONE, 4-METHYL-	mg/kg												
7H-Benz[de]anthracen-7-one	mg/kg												
9,10-Anthracenedione	mg/kg												
9-Octadecenamamide, (Z)-	mg/kg												
Acetamide, 2-chloro-N-(ethox	mg/kg												
Alachlor	mg/kg	0.52											
Benzenamine, 3-methyl-	mg/kg												
Benzenamine, 4,4',4"-methy	mg/kg												
Benzenamine, 4,4'-methyleneb	mg/kg												
Benzene, 1,2,3,4-tetrachloro	mg/kg												
Benzene, 1,2,3,5-tetrachloro	mg/kg												
Benzene, 1,2,3-trichloro-	mg/kg												
Benzene, 1,3,5-trichloro-	mg/kg												
Benzene, 1,3-bis(1-methyleth	mg/kg												
Benzene, 1,4-bis(1-methyleth	mg/kg												
Benzofuran, 2,3-dihydro-	mg/kg												
CYCLIC OCTAATOMIC SULFUR	mg/kg												
Diphenyl Ether	mg/kg												
Docosane	mg/kg												
Heneicosane	mg/kg												
Hexacosane	mg/kg				0.36								
Hexadecane	mg/kg												
Hexatriacontane	mg/kg				0.35								
m-Chloroaniline	mg/kg												
N,N-Diethylaniline	mg/kg												
n-Hexadecanoic acid	mg/kg												
Nonadecane	mg/kg	0.24											
o-Chloroaniline	mg/kg												
Octacosane	mg/kg			0.34				0.34					
Octadecane	mg/kg												
Octadecane, 1-chloro-	mg/kg												
Octadecanoic acid	mg/kg												
Parachlorophenol	mg/kg												
Pentadecane	mg/kg												
Perylene	mg/kg												
Phenol, 2,5-dichloro-	mg/kg												
Phenol, 3-chloro-	mg/kg												
Phenol, 4,4'-(1-methylethyl)	mg/kg	4.8		0.86	0.52	0.48	0.19	0.28			0.17		
Tetracosane	mg/kg												
Tetradecane	mg/kg												
Tetraethylene glycol	mg/kg												
Total SVOC TICs	mg/kg	9.7	1.3	3.7	7.6	1.6	0.19	5.2	1.2	0.86	0.67	1.4	1.3
Triacotane	mg/kg												
Tributyl phosphate	mg/kg												
Tridecanoic acid	mg/kg												
Triphenyl phosphate	mg/kg												
UNKNOWN	mg/kg	0.784			0.416666667	0.17		0.382					
Unknown acid	mg/kg				0.365			0.35	0.26				
Unknown Alcohol	mg/kg												
Unknown Aldol Condensate	mg/kg		0.56	0.9	0.91	0.52			0.42	0.36		0.78	0.73
UNKNOWN ALKANE	mg/kg				0.29			0.325					

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D15-BOR-16(0-0.5)	D15-BOR-16(3.5-4.0)	D15-BOR-16(6.0-6.5)	D15-BOR-16(8.5-9.0)	D15-BOR-16(9.0-9.2)	D15-BOR-17(0.5-1.0)	D15-BOR-17(0-0.5)	D15-BOR-17(3.0-3.4)	D15-BOR-17(4.5-5.0)	D15-BOR-17(6.5-7.0)	D15-BOR-18(0.5-1.0)	D15-BOR-18(0-0.5)
Chemical Class	Location ID	D15-BOR-16	D15-BOR-16	D15-BOR-16	D15-BOR-16	D15-BOR-16	D15-BOR-17	D15-BOR-17	D15-BOR-17	D15-BOR-17	D15-BOR-17	D15-BOR-18	D15-BOR-18
Chemical	Depth Interval (ft)	0.00-0.50	3.50-4.00	6.00-6.50	8.50-9.00	9.00-9.20	0.50-1.00	0.00-0.50	3.00-3.40	4.50-5.00	6.50-7.00	0.50-1.00	0.00-0.50
Units	Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
	Date	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016	10/31/2016	10/31/2016	10/31/2016	10/31/2016	10/31/2016	10/27/2016	10/27/2016
Unknown Alkene													
Unknown Amide													
Unknown Amine													
UNKNOWN AROMATIC													
Unknown Carboxylic Acid													
Unknown Cycloalkane													
Unknown Hydrocarbon		0.27											
Unknown Ketone													
Unknown PAH													
UNKNOWN SILOXANE													
<b>Semivolatile Organic Compounds</b>													
1,2,4-Trichlorobenzene	mg/kg	0.14	0.019	0.016	0.019	0.031	0.24	0.42	0.028	0.018	0.47	0.019	0.023
1,2-Diphenylhydrazine	mg/kg	0.022	0.019	0.018	0.019	0.02	0.02	0.034	0.021	0.018	0.057	0.019	0.019
1,4-Dioxane	mg/kg	0.13	0.11	0.11	0.11	0.12	0.12	0.2	0.12	0.11	0.11	0.11	0.11
1-Naphthylamine	mg/kg	0.22	0.19	0.18	0.19	0.2	0.2	0.34	0.21	0.18	0.19	0.19	0.19
2,3,4,6-Tetrachlorophenol	mg/kg	0.089	0.076	0.074	0.076	0.082	0.08	0.14	0.082	0.072	0.075	0.076	0.076
2,4,5-Trichlorophenol	mg/kg	0.022	0.019	0.018	0.019	0.02	0.02	0.034	0.021	0.018	0.019	0.019	0.019
2,4,6-Trichlorophenol	mg/kg	0.022	0.019	0.018	0.019	0.02	0.02	0.034	0.021	0.018	0.019	0.019	0.019
2,4-Dichlorophenol	mg/kg	0.049	0.023	0.018	0.036	0.16	0.055	0.12	0.045	0.018	0.048	0.019	0.019
2,4-Dimethylphenol	mg/kg	0.022	0.019	0.018	0.019	0.024	0.02	0.034	0.021	0.018	0.019	0.019	0.019
2,4-Dinitrophenol	mg/kg	0.4	0.34	0.33	0.34	0.37	0.36	0.61	0.37	0.33	0.34	0.34	0.34
2,4-Dinitrotoluene	mg/kg	0.089	0.076	0.074	0.076	0.082	0.08	0.14	0.082	0.072	0.075	0.076	0.076
2,6-Dinitrotoluene	mg/kg	0.022	0.019	0.018	0.019	0.02	0.02	0.034	0.021	0.018	0.019	0.019	0.019
2-Chloronaphthalene	mg/kg	0.009	0.008	0.007	0.008	0.008	0.008	0.014	0.008	0.007	0.008	0.008	0.008
2-Chlorophenol	mg/kg	0.042	0.019	0.018	0.02	0.077	0.02	0.23	0.031	0.018	0.044	0.019	0.019
2-Methylnaphthalene	mg/kg	0.027	0.004	0.004	0.006	0.004	0.022	0.073	0.004	0.004	0.07	0.004	0.004
2-Methylphenol (O-Cresol)	mg/kg	0.022	0.019	0.018	0.019	0.021	0.02	0.034	0.021	0.018	0.019	0.019	0.019
2-Naphthylamine	mg/kg	0.22	0.19	0.18	0.19	0.2	0.2	0.34	0.21	0.18	0.19	0.19	0.19
2-Nitroaniline	mg/kg	0.022	0.019	0.018	0.019	0.02	0.02	0.034	0.021	0.018	0.019	0.019	0.019
2-Nitrophenol	mg/kg	0.022	0.019	0.018	0.019	0.02	0.02	0.034	0.021	0.018	0.019	0.019	0.019
3,3'-Dichlorobenzidine	mg/kg	0.13	0.11	0.11	0.11	0.12	0.12	0.2	0.12	0.11	0.11	0.11	0.11
3,3'-Dimethylbenzidine	mg/kg												
3-Nitroaniline	mg/kg	0.089	0.076	0.074	0.076	0.082	0.08	0.14	0.082	0.072	0.075	0.076	0.076
4,6-Dinitro-2-Methylphenol	mg/kg	0.22	0.19	0.18	0.19	0.2	0.2	0.34	0.21	0.18	0.19	0.19	0.19
4-Aminobiphenyl	mg/kg	0.22	0.19	0.18	0.19	0.2	0.2	0.34	0.21	0.18	0.19	0.19	0.19
4-Bromophenyl Phenyl Ether	mg/kg	0.022	0.019	0.018	0.019	0.02	0.02	0.034	0.021	0.018	0.019	0.019	0.019
4-Chloro-3-Methylphenol	mg/kg	0.022	0.019	0.018	0.019	0.02	0.02	0.034	0.021	0.018	0.019	0.019	0.019
4-Chloroaniline	mg/kg	0.044	0.038	0.037	0.038	0.041	0.04	0.068	0.041	0.036	0.038	0.038	0.038
4-Chlorophenyl Phenyl Ether	mg/kg	0.022	0.019	0.018	0.019	0.02	0.02	0.034	0.021	0.018	0.019	0.019	0.019
4-Methylphenol (P-Cresol)	mg/kg	0.022	0.019	0.018	0.02	0.022	0.02	0.034	0.021	0.018	0.019	0.019	0.019
4-Nitroaniline	mg/kg	0.089	0.076	0.074	0.076	0.082	0.08	0.14	0.082	0.072	0.075	0.076	0.076
4-Nitrophenol	mg/kg	0.22	0.19	0.18	0.19	0.2	0.2	0.34	0.21	0.18	0.19	0.19	0.19
Acetophenone	mg/kg	0.025	0.019	0.018	0.019	0.02	0.02	0.034	0.021	0.018	0.019	0.019	0.019
Aniline	mg/kg	0.22	0.19	0.18	0.19	0.2	0.2	0.34	0.21	0.18	0.19	0.19	0.19
Benzidine	mg/kg	0.33	0.29	0.28	0.29	0.31	0.3	0.51	0.31	0.27	0.28	0.29	0.28
Biphenyl	mg/kg	0.022	0.019	0.018	0.019	0.02	0.02	0.037	0.021	0.018	0.032	0.019	0.019
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg	0.022	0.019	0.018	0.019	0.02	0.02	0.034	0.021	0.018	0.019	0.019	0.019
Bis(2-Chloroethoxy)Methane	mg/kg	0.022	0.019	0.018	0.019	0.02	0.02	0.034	0.021	0.018	0.019	0.019	0.019
Bis(2-Chloroethyl)Ether	mg/kg	0.022	0.019	0.018	0.019	0.02	0.02	0.034	0.021	0.018	0.019	0.019	0.019
Bis(2-Chloroisopropyl)Ether	mg/kg												
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.089	0.076	0.074	0.076	0.082	0.08	0.14	0.082	0.072	0.075	0.076	0.076
Butyl Benzyl Phthalate	mg/kg	0.089	0.076	0.074	0.076	0.082	0.08	0.14	0.082	0.072	0.075	0.076	0.076
Carbazole	mg/kg	0.022	0.019	0.018	0.019	0.02	0.02	0.034	0.021	0.018	0.019	0.019	0.019
Dibenzofuran	mg/kg	0.022	0.019	0.018	0.019	0.02	0.02	0.034	0.021	0.018	0.019	0.019	0.019
Diethyl Phthalate	mg/kg	0.089	0.076	0.074	0.076	0.082	0.08	0.14	0.082	0.072	0.075	0.076	0.076
Dimethyl Phthalate	mg/kg	0.089	0.076	0.074	0.076	0.082	0.08	0.14	0.082	0.072	0.075	0.076	0.076
Di-N-Butyl Phthalate	mg/kg	0.089	0.076	0.074	0.076	0.082	0.08	0.14	0.082	0.072	0.075	0.076	0.076
Diphenyl Ether	mg/kg	0.022	0.019	0.018	0.019	0.02	0.02	0.044	0.021	0.018	0.019	0.019	0.019
Hexachlorobenzene	mg/kg	0.004	0.004	0.004	0.004	0.004	0.004	0.007	0.004	0.004	0.005	0.004	0.004
Hexachlorobutadiene	mg/kg	0.022	0.019	0.018	0.019	0.02	0.02	0.034	0.021	0.018	0.019	0.019	0.019
Hexachlorocyclopentadiene	mg/kg	0.22	0.19	0.18	0.19	0.2	0.2	0.34	0.21	0.18	0.19	0.19	0.19
Hexachloroethane	mg/kg	0.044	0.038	0.037	0.038	0.041	0.04	0.068	0.041	0.036	0.038	0.038	0.038
Hexachloropropylene	mg/kg												
Isophorone	mg/kg	0.022	0.019	0.018	0.019	0.02	0.02	0.034	0.021	0.018	0.019	0.019	0.019
N-Dioctyl Phthalate	mg/kg	0.089	0.076	0.074	0.076	0.082	0.08	0.14	0.082	0.072	0.075	0.076	0.076
Nitrobenzene	mg/kg	0.022	0.019	0.018	0.019	0.02	0.02	0.034	0.021	0.018	0.019	0.019	0.019
N-Nitrosodimethylamine	mg/kg	0.089	0.076	0.074	0.076	0.082	0.08	0.14	0.082	0.072	0.075	0.076	0.076
N-Nitrosodi-N-Propylamine	mg/kg	0.022	0.019	0.018	0.019	0.02	0.02	0.034	0.021	0.018	0.019	0.019	0.019
N-Nitrosodiphenylamine	mg/kg	0.022	0.019	0.018	0.019	0.02	0.02	0.034	0.021	0.018	0.019	0.019	0.019
O-Toluidine	mg/kg	0.27	0.23	0.22	0.23	0.25	0.24	0.41	0.25	0.22	0.23	0.23	0.23
Parathion	mg/kg	0.22	0.19	0.18	0.19	0.2	0.2	0.34	0.21	0.18	0.19	0.19	0.19
Pentachlorobenzene	mg/kg	0.022	0.019	0.018	0.019	0.02	0.02	0.034	0.021	0.018	0.023	0.019	0.019
Pentachlorophenol	mg/kg	0.044	0.038	0.037	0.038	0.041	0.04	0.068	0.041	0.036	0.038	0.038	0.038
Phenol	mg/kg	0.022	0.019	0.018	0.019	0.02	0.02	0.041	0.021	0.018	0.019	0.019	0.019
<b>Volatile Organic Compounds - TICs</b>													
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA												
		D15-BOR-16(0-0.5) D15-BOR-16 0.00-0.50 FS 11/1/2016	D15-BOR-16(3.5-4.0) D15-BOR-16 3.50-4.00 FS 11/1/2016	D15-BOR-16(6.0-6.5) D15-BOR-16 6.00-6.50 FS 11/1/2016	D15-BOR-16(8.5-9.0) D15-BOR-16 8.50-9.00 FS 11/1/2016	D15-BOR-16(9.0-9.2) D15-BOR-16 9.00-9.20 FS 11/1/2016	D15-BOR-17(0.5-1.0) D15-BOR-17 0.50-1.00 FS 10/31/2016	D15-BOR-17(0-0.5) D15-BOR-17 0.00-0.50 FS 10/31/2016	D15-BOR-17(3.0-3.4) D15-BOR-17 3.00-3.40 FS 10/31/2016	D15-BOR-17(4.5-5.0) D15-BOR-17 4.50-5.00 FS 10/31/2016	D15-BOR-17(6.5-7.0) D15-BOR-17 6.50-7.00 FS 10/31/2016	D15-BOR-18(0.5-1.0) D15-BOR-18 0.50-1.00 FS 10/27/2016	D15-BOR-18(0-0.5) D15-BOR-18 0.00-0.50 FS 10/27/2016												
1-Butene	mg/kg																								
1-Heptene	mg/kg																								
1-Propene, 2-methyl-	mg/kg																								
Azulene	mg/kg																								
BENZENE, 1,2,4-TRICHLORO-	mg/kg																								
BENZENE, 1,2-DICHLORO-	mg/kg																								
BENZENE, 1,4-DICHLORO-	mg/kg																								
Camphene	mg/kg																								
CYCLOHEXANE	mg/kg																								
Cyclohexane, methyl-	mg/kg																								
Cyclotrisiloxane, hexamethyl	mg/kg																								
Diphenyl Ether	mg/kg																								
Ethane, 1,1,2,2-tetrachloro-	mg/kg																								
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg																								
Ethane, 1,2-dichloro-1,1-dif	mg/kg																								
Ethene, 1,1-dichloro-2,2-dif	mg/kg																								
Hexane, 2-methyl-	mg/kg																								
Hexane, 3-methyl-	mg/kg																								
METHANE, CHLOROFLUORO-	mg/kg																								
Naphthalene	mg/kg																								
NAPHTHALENE, 2-METHYL-	mg/kg																								
Nonanal	mg/kg																								
Norflurane	mg/kg									14															
Pentane, 2,3-dimethyl-	mg/kg																								
Phenol, 4-(1,1,3,3-tetrameth	mg/kg																								
Propene	mg/kg																								
Sulfur dioxide	mg/kg																								
Tridecane	mg/kg																								
UNKNOWN	mg/kg																								
UNKNOWN ALICYCLIC	mg/kg																								
UNKNOWN ALIPHATIC	mg/kg																								
UNKNOWN ALKANE	mg/kg																								
UNKNOWN AROMATIC	mg/kg																								
UNKNOWN SILOXANE	mg/kg																								
<b>Volatile Organic Compounds</b>																									
1,1,1,2-Tetrachloroethane	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.058	U	0.001	U	0.001	U
1,1,1-Trichloroethane	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.058	U	0.001	U	0.001	U
1,1,1-Trichlorotrifluoroethane	mg/kg	0.006	U	0.006	U	0.011	U	0.006	U	0.006	U	0.19	U	1.3	U	0.064	U	0.005	U	0.01	U	0.005	U	0.011	U
1,1,2,2-Tetrachloroethane	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.058	U	0.001	U	0.001	U
1,1,2-Trichloroethane	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.058	U	0.001	U	0.001	U
1,1,2-Trichlorotrifluoroethane	mg/kg	0.14	U	0.044	U	0.002	U	0.12	U	0.11	U	10	U	14	U	0.51	U	0.002	U	0.12	U	0.13	U	0.05	U
1,1,2-Trifluoroethane	mg/kg	0.003	U	0.003	U	0.004	U	0.002	U	0.002	U	0.002	U	0.005	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U
1,1-Dichloro-1-Fluoroethane	mg/kg	0.001	U	0.001	U	0.002	U	0.001	U	0.001	U	0.001	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
1,1-Dichloroethane	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.058	U	0.001	U	0.001	U
1,1-Dichloroethene	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.058	U	0.001	U	0.001	U
1,1-Dichloropropene	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.058	U	0.001	U	0.001	U
1,2,4-Trimethylbenzene	mg/kg	0.069	U	0.004	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.15	U	0.001	U	0.001	U
1,2-Dibromoethane (EDB)	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.058	U	0.001	U	0.001	U
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg	0.02	U	0.001	U	0.002	U	0.001	U	0.002	U	0.004	U	0.064	U	0.005	U	0.001	U	0.001	U	0.001	U	0.001	U
1,2-Dichloro-1-Fluoroethane	mg/kg	0.001	U	0.001	U	0.002	U	0.001	U	0.001	U	0.001	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
1,2-Dichlorobenzene	mg/kg	10	U	0.24	U	0.12	U	0.7	U	2	U	61	U	130	U	0.87	U	0.005	U	3.5	U	0.006	U	0.005	U
1,2-Dichloroethane	mg/kg	0.069	U	0.004	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.058	U	0.001	U	0.001	U
1,2-Dichloroethene	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.058	U	0.001	U	0.001	U
1,2-Dichloropropane	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.058	U	0.001	U	0.001	U
1,2-Dichlorotetrafluoroethane	mg/kg	0.003	U	0.003	U	0.004	U	0.002	U	0.002	U	0.012	U	0.12	U	0.003	U	0.002	U	0.002	U	0.002	U	0.002	U
1,3,5-Trimethylbenzene	mg/kg	0.069	U	0.002	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.094	U	0.001	U	0.001	U
1,3-Dichlorobenzene	mg/kg	0.55	U	0.025	U	0.004	U	0.06	U	0.12	U	5.3	U	9.3	U	0.06	U	0.001	U	0.26	U	0.001	U	0.001	U
1,4-Dichlorobenzene	mg/kg	17	U	0.32	U	0.11	U	1.2	U	4.1	U	120	U	230	U	1.4	U	0.006	U	6.6	U	0.008	U	0.008	U
1-Chloro-1,1-Difluoroethane	mg/kg	0.001	U	0.001	U	0.002	U	0.001	U	0.001	U	0.001	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg	0.001	U	0.001	U	0.002	U	0.001	U	0.001	U	0.02	U	0.19	U	0.023	U	0.001	U	0.001	U	0.001	U	0.001	U
2-Chloro-1,1,1-Trifluoroethane	mg/kg	0.14	U	0.002	U	0.002	U	0.12	U	0.11	U	10	U	2.6	U	0.11	U	0.002	U	0.12	U	0.002	U	0.002	U
2-Chloroethyl Vinyl Ether	mg/kg																								
2-Chlorotoluene	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.058	U	0.001	U	0.001	U
2-Hexanone	mg/kg	0.21	U	0.004	U	0.003	U	0.18	U	0.17	U	16	U	4	U	0.16	U	0.003	U	0.17	U	0.003	U	0.003	U
4-Chlorotoluene	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.058	U	0.001	U	0.001	U
4-Isopropyltoluene	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.07	U	0.001	U	0.001	U
Acetone	mg/kg	0.48	U	0.022	U	0.014	U	0.42	U	0.39	U	36	U	9.3	U	0.38	U	0.016	U	0.41	U	0.019	U	0.018	U
Acrolein	mg/kg																								
Acrylonitrile	mg/kg																								
Benzene	mg/kg	1.1	U	0.63	U	0.009	U	0.13	U	4.2	U	2.6	U	0.89	U	0.057	U	0.0006	U	0.029	U	0.001	U	0.0006	U
Bromodichloromethane	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA D15-BOR-16(0-0.5)		MZ-FPA D15-BOR-16(3.5-4.0)		MZ-FPA D15-BOR-16(6.0-6.5)		MZ-FPA D15-BOR-16(8.5-9.0)		MZ-FPA D15-BOR-16(9.0-9.2)		MZ-FPA D15-BOR-17(0.5-1.0)		MZ-FPA D15-BOR-17(0-0.5)		MZ-FPA D15-BOR-17(3.0-3.4)		MZ-FPA D15-BOR-17(4.5-5.0)		MZ-FPA D15-BOR-17(6.5-7.0)		MZ-FPA D15-BOR-18(0.5-1.0)		MZ-FPA D15-BOR-18(0-0.5)	
		Units	0.00-0.50 FS 11/1/2016	3.50-4.00 FS 11/1/2016	6.00-6.50 FS 11/1/2016	8.50-9.00 FS 11/1/2016	9.00-9.20 FS 11/1/2016	0.50-1.00 FS 10/31/2016	0.00-0.50 FS 10/31/2016	3.00-3.40 FS 10/31/2016	4.50-5.00 FS 10/31/2016	6.50-7.00 FS 10/31/2016	0.50-1.00 FS 10/27/2016	0.00-0.50 FS 10/27/2016											
Chlorodibromomethane	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.058	U	0.001	U	0.001	U
Chlorodifluoromethane	mg/kg	0.003	U	0.003	U	0.004	U	0.002	U	0.002	U	0.002	U	0.005	U	0.003	U	0.002	U	0.002	U	0.002	U	0.002	U
Chlorofluoromethane	mg/kg	0.001	U	0.001	U	0.002	U	0.001	U	0.001	U	0.001	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Chloroform	mg/kg	0.76	U	1.7	U	0.029	U	0.11	U	1.4	U	5.2	U	1.3	U	0.097	U	0.001	U	0.058	U	0.019	U	0.001	U
Chloropentafluoroethane	mg/kg	0.019	U	0.019	U	0.032	U	0.018	U	0.016	U	0.018	U	0.036	U	0.021	U	0.016	U	0.015	U	0.016	U	0.016	U
cis-1,2-Dichloroethene	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.058	U	0.001	U	0.001	U
cis-1,3-Dichloropropene	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.058	U	0.001	U	0.001	U
Cumene	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.058	U	0.001	U	0.001	U
Dichlorodifluoromethane	mg/kg	0.14	U	0.002	U	0.002	U	0.12	U	0.11	U	10	U	2.6	U	0.11	U	0.002	U	0.12	U	0.002	U	0.002	U
Dichlorofluoromethane	mg/kg	0.14	U	0.019	U	0.002	U	0.12	U	0.11	U	10	U	2.6	U	0.11	U	0.002	U	0.12	U	0.003	U	0.002	U
Ethane	ug/L																								
Ethyl Chloride	mg/kg	0.14	U	0.002	U	0.002	U	0.12	U	0.11	U	10	U	2.6	U	0.11	U	0.002	U	0.12	U	0.002	U	0.002	U
Ethylbenzene	mg/kg	0.26	U	0.043	U	0.001	U	0.06	U	0.17	U	5.2	U	2	U	0.054	U	0.001	U	0.071	U	0.001	U	0.001	U
Fluoromethane	mg/kg	0.004	U	0.004	U	0.006	U	0.004	U	0.003	U	0.004	U	0.007	U	0.004	U	0.003	U	0.003	U	0.003	U	0.003	U
Hexane	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.058	U	0.001	U	0.001	U
Isobutyl Alcohol	mg/kg	6.9	U	0.12	U	0.11	U	6	U	5.6	U	520	U	130	U	5.4	U	0.11	U	5.8	U	0.11	U	0.11	U
Meta- And Para-Xylene	mg/kg	0.31	U	0.18	U	0.007	U	0.06	U	0.64	U	5.2	U	7.5	U	0.054	U	0.001	U	0.66	U	0.001	U	0.001	U
Methacrylonitrile	mg/kg	0.34	U	0.006	U	0.005	U	0.3	U	0.28	U	26	U	6.6	U	0.27	U	0.006	U	0.29	U	0.006	U	0.006	U
Methane	ug/L																								
Methyl Bromide	mg/kg																								
Methyl Chloride	mg/kg	0.14	U	0.002	U	0.002	U	0.12	U	0.11	U	10	U	2.6	U	0.11	U	0.002	U	0.12	U	0.002	U	0.002	U
Methyl Ethyl Ketone	mg/kg	0.28	U	0.005	U	0.004	U	0.24	U	0.22	U	21	U	5.3	U	0.21	U	0.004	U	0.23	U	0.004	U	0.005	U
Methyl Isobutyl Ketone	mg/kg	0.21	U	0.004	U	0.003	U	0.18	U	0.17	U	16	U	4	U	0.16	U	0.003	U	0.17	U	0.003	U	0.003	U
Methyl Methacrylate	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.058	U	0.001	U	0.001	U
Methyl Tertiary Butyl Ether	mg/kg	0.034	U	0.0006	U	0.0005	U	0.03	U	0.028	U	2.6	U	0.66	U	0.027	U	0.0006	U	0.029	U	0.0006	U	0.0006	U
Methylene Chloride	mg/kg	0.14	U	0.019	U	0.002	U	0.12	U	0.11	U	10	U	2.6	U	0.11	U	0.002	U	0.12	U	0.002	U	0.002	U
N-Butylbenzene	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.058	U	0.001	U	0.001	U
N-Propylbenzene	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.058	U	0.001	U	0.001	U
Ortho-Xylene	mg/kg	0.1	U	0.082	U	0.004	U	0.06	U	0.18	U	5.2	U	2.7	U	0.054	U	0.001	U	0.13	U	0.001	U	0.001	U
Propionitrile	mg/kg	2.1	U	0.035	U	0.032	U	1.8	U	1.7	U	160	U	40	U	1.6	U	0.033	U	1.7	U	0.033	U	0.034	U
sec-Butylbenzene	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.058	U	0.001	U	0.001	U
Styrene	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.058	U	0.001	U	0.001	U
tert-Butylbenzene	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.058	U	0.001	U	0.001	U
Tetrachloroethene	mg/kg	0.069	U	0.003	U	0.001	U	0.06	U	0.056	U	5.2	U	17	U	0.19	U	0.001	U	0.058	U	0.043	U	0.014	U
Tetrahydrofuran	mg/kg	0.28	U	0.005	U	0.004	U	0.24	U	0.22	U	21	U	5.3	U	0.21	U	0.004	U	0.23	U	0.004	U	0.005	U
Toluene	mg/kg	0.53	U	0.51	U	0.009	U	0.082	U	1.7	U	5.2	U	1.3	U	0.054	U	0.001	U	0.059	U	0.001	U	0.001	U
trans-1,2-Dichloroethene	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.058	U	0.001	U	0.001	U
trans-1,3-Dichloropropene	mg/kg																								
Trichloroethene	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.058	U	0.008	U	0.001	U
Trichlorofluoromethane	mg/kg	0.14	U	0.1	U	0.002	U	0.12	U	0.29	U	10	U	2.6	U	0.14	U	0.002	U	0.12	U	0.047	U	0.005	U
Vinyl Chloride	mg/kg	0.069	U	0.001	U	0.001	U	0.06	U	0.056	U	5.2	U	1.3	U	0.054	U	0.001	U	0.058	U	0.001	U	0.001	U
Vinyl Fluoride	mg/kg	0.008	U	0.008	U	0.013	U	0.007	U	0.008	U	0.007	U	0.014	U	0.008	U	0.006	U	0.008	U	0.006	U	0.006	U
Xylenes	mg/kg	0.41	U	0.26	U	0.011	U	0.06	U	0.82	U	5.2	U	10	U	0.054	U	0.001	U	0.78	U	0.001	U	0.001	U

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class Chemical	River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
	Field Sample ID	D15-BOR-18(5.0-5.5)	D15-BOR-18(6.0-6.5)	D15-BOR-18(8.3-8.8)	D15-BOR-19-(0.5-1.0)	D15-BOR-19-(0-0.5)	D15-BOR-19-(3.5-4.0)	D15-BOR-19-(5.5-6.0)	D15-BOR-19-(6.8-7.0)	D15-BOR-19-(8.0-8.5)	D15-BOR-19-(8.0-8.5)-D	D15-BOR-20(0.5-1.0)	D15-BOR-20(0-0.5)
	Location ID	D15-BOR-18	D15-BOR-18	D15-BOR-18	D15-BOR-19	D15-BOR-19	D15-BOR-19	D15-BOR-19	D15-BOR-19	D15-BOR-19	D15-BOR-19	D15-BOR-20	D15-BOR-20
	Depth Interval (ft)	5.00-5.50	6.00-6.50	8.30-8.80	0.50-1.00	0.00-0.50	3.50-4.00	5.50-6.00	6.80-7.00	8.00-8.50	8.00-8.50	0.50-1.00	0.00-0.50
	Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	DUP	FS	FS
	Date	10/27/2016	10/27/2016	10/27/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/25/2016	10/25/2016
	Units												
<b>General Chemistry</b>													
Black Carbon	mg/kg				6910	12400							
Percent Moisture	%	11.1	9.3	7.1	11.8	22.2	9.9	7	16.6	18.1	18.9	44.9	34.85
Percent Solids	%												
Total Organic Carbon	mg/kg	188 U	182 U	390	196 U	263 U	188 U	144 U	423				
<b>Metals</b>													
Aluminum	mg/kg				6910	12400							
Antimony	mg/kg				0.151	0.24							
Arsenic	mg/kg				2.7	3.52							
Barium	mg/kg				28.1	80.8							
Beryllium	mg/kg				0.301	0.565							
Cadmium	mg/kg				0.0326 U	0.0453 U							
Calcium	mg/kg				109	254							
Chromium	mg/kg				28.1	44.7							
Cobalt	mg/kg				5.79	12.9							
Copper	mg/kg				13.2	26.4							
Iron	mg/kg				12400	16900							
Lead	mg/kg				6.39	14.8							
Magnesium	mg/kg				1150	2550							
Manganese	mg/kg				86.8	153							
Mercury	mg/kg				0.011 U	0.0122 U							
Nickel	mg/kg				13.8	25.6							
Potassium	mg/kg				851	1850							
Selenium	mg/kg				0.0734 U	0.102 U							
Silver	mg/kg				0.0198 U	0.0276 U							
Sodium	mg/kg				54.9	133							
Thallium	mg/kg				0.0905	0.247							
Tin	mg/kg												
Titanium	mg/kg												
Vanadium	mg/kg				47.1	67.4							
Zinc	mg/kg				17.5	35.1							
<b>Metals - AVS/SEM</b>													
Acid Volatile Sulfide	umol/g												
Arsenic	umol/g												
Cadmium	umol/g												
Copper	umol/g												
Lead	umol/g												
Zinc	umol/g												
<b>Metals - Leachate</b>													
Lead	ug/L												
<b>Per and Polyfluorinated Organic Substances</b>													
Perfluorobutane Sulfonic Acid	mg/kg											0.0008 U	0.0008 U
Perfluorobutanoic Acid	mg/kg											0.0045 U	0.0008 U
Perfluorodecane Sulfonic Acid	mg/kg											0.0008 U	0.0008 U
Perfluorodecanoic Acid	mg/kg											0.02 U	0.0008 U
Perfluorododecanoic Acid	mg/kg											0.0039 U	0.002 U
Perfluoroheptanoic Acid	mg/kg											0.0014 U	0.0008 U
Perfluorohexane Sulfonic Acid	mg/kg											0.0008 U	0.0008 U
Perfluorohexanoic Acid	mg/kg											0.04 U	0.00091 U
Perfluorononanoic Acid	mg/kg											0.0043 U	0.0008 U
Perfluorooctane Sulfonamide	mg/kg											0.0008 U	0.0008 U
Perfluoropentanoic Acid	mg/kg											0.002 U	0.0008 U
Perfluorotetradecanoic Acid	mg/kg											0.002 U	0.002 U
Perfluorotridecanoic Acid	mg/kg											0.0017 U	0.0008 U
Perfluoroundecanoic Acid	mg/kg											0.0057 U	0.0008 U
PFOA	mg/kg											0.024 U	0.0014 U
PFOA(trial)	mg/kg												
PFOS	mg/kg											0.0041 U	0.0008 U
PFOS (trial)	mg/kg												
<b>Pesticides and Herbicides</b>													
4,4'-DDD	mg/kg												
4,4'-DDE	mg/kg												
4,4'-DDT	mg/kg												
Aldrin	mg/kg												
Alpha-Chlordane	mg/kg												
Alpha-BHC	mg/kg												
beta-BHC	mg/kg												
delta-BHC	mg/kg												
Dieldrin	mg/kg												
Endosulfan I	mg/kg												
Endosulfan II	mg/kg												
Endosulfan Sulfate	mg/kg												
Endrin	mg/kg												
Endrin Aldehyde	mg/kg												
Endrin Ketone	mg/kg												
Gamma-Chlordane	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D15-BOR-18(5.0-5.5)	D15-BOR-18(6.0-6.5)	D15-BOR-18(8.3-8.8)	D15-BOR-19(0.5-1.0)	D15-BOR-19(0-0.5)	D15-BOR-19(3.5-4.0)	D15-BOR-19(5.5-6.0)	D15-BOR-19(6.8-7.0)	D15-BOR-19(8.0-8.5)	D15-BOR-19(8.0-8.5)-D	D15-BOR-20(0.5-1.0)	D15-BOR-20(0-0.5)
Location ID	Depth Interval (ft)	D15-BOR-18	D15-BOR-18	D15-BOR-18	D15-BOR-19	D15-BOR-19	D15-BOR-19	D15-BOR-19	D15-BOR-19	D15-BOR-19	D15-BOR-19	D15-BOR-20	D15-BOR-20
Sample Purpose	Date	5.00-5.50	6.00-6.50	8.30-8.80	0.50-1.00	0.00-0.50	3.50-4.00	5.50-6.00	6.80-7.00	8.00-8.50	8.00-8.50	0.50-1.00	0.00-0.50
Chemical Class	Units	FS	FS	FS	FS	FS	FS	FS	FS	FS	DUP	FS	FS
Chemical	Units	10/27/2016	10/27/2016	10/27/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/25/2016	10/25/2016
Heptachlor	mg/kg												
Heptachlor Epoxide	mg/kg												
Lindane	mg/kg												
Methoxychlor	mg/kg												
Toxaphene	mg/kg												
<b>Physical Properties</b>													
0.001 MM	% PASSING	2	0.5 U	0.5 U	1	2	0.5 U	0.5 U	10			0.5 U	0.5 U
0.002 MM	% PASSING	2	0.5 U	0.5 U	1	3	0.5 U	1	12			4.5	1
0.005 MM	% PASSING	2	1	0.5	1	4	1	2	17			11	4
0.02 MM	% PASSING	2	1	2	2	11	2	3	30			25	11
0.05 MM	% PASSING	3	2	3.5	4	20	3	5	49			40	19
0.064 MM	% PASSING	4	3	5	5	24	5	5	55			45	25
0.075 MM	% PASSING	4.8	3.3	5.5	3.3	26.1	5.5	5.3	58.6			46.7	26.8
0.15 MM	% PASSING	6.1	4	7.3	7.5	34.1	8.2	6.6	70.9			49.9	35.4
0.3 MM	% PASSING	12.3	8	11.3	13.9	50.2	13.8	9.7	75.3			55	83.6
0.6 MM	% PASSING	37.3	16.8	15.5	22.9	58.2	29.1	17.8	78			59.6	89.6
1.18 MM	% PASSING	58	39.9	20.5	32.3	62.9	61.4	21.6	79.4			64.8	91.4
19 MM	% PASSING	96.2	95.5	74.4	92.9	100	100	53.4	100			100	100
2.36 MM	% PASSING	67.4	51.8	28	46.2	67.6	77.9	24.9	80.8			69.3	91.9
3.35 MM	% PASSING	74.8	63.2	34.6	53.9	73.6	84.1	28.3	86.1			79.9	95.1
37.5 MM	% PASSING	100	100	100	100	100	100	100	100			100	100
4.75 MM	% PASSING	82.6	77.1	43	61.4	80.7	88.8	33	90.1			88.6	97.6
75 MM	% PASSING	100	100	100	100	100	100	100	100			100	100
Density	PCF											78.0347	89.896
<b>Polychlorinated Biphenyls - TICs</b>													
1,1'-Biphenyl, 2,3-dichloro-	mg/kg												
Unknown Biphenyl	mg/kg												
<b>Polychlorinated Biphenyls</b>													
Heptachlorobiphenyl	mg/kg												
Hexachlorobiphenyl	mg/kg												
Octachlorobiphenyl	mg/kg												
PCB 1	mg/kg				0.00172	0.000639							
PCB 10	mg/kg				0.0000166	0.00000946							
PCB 100	mg/kg												
PCB 101	mg/kg												
PCB 102	mg/kg				0.000000883	0.000000833	U						
PCB 103	mg/kg				0.00000097	0.000000916	U						
PCB 104	mg/kg				0.000000488	0.000000417	U						
PCB 105	mg/kg				0.00000428	0.00000422							
PCB 106	mg/kg				0.000000803	0.000000758	U						
PCB 107	mg/kg												
PCB 107/123	mg/kg												
PCB 108	mg/kg												
PCB 109	mg/kg				0.000000805	0.00000076	U						
PCB 11	mg/kg				0.000442	0.000235							
PCB 110	mg/kg				0.0000165	0.0000145							
PCB 111	mg/kg				0.000000753	0.00000071	U						
PCB 112	mg/kg				0.000000775	0.000000731	U						
PCB 113	mg/kg												
PCB 114	mg/kg				0.000000896	0.000000771	U						
PCB 115	mg/kg				0.000000832	0.000000785	U						
PCB 116	mg/kg												
PCB 117	mg/kg				0.000000799	0.000000754	U						
PCB 118	mg/kg				0.0000102	0.00000867							
PCB 119	mg/kg												
PCB 12	mg/kg												
PCB 120	mg/kg				0.000000745	0.000000703	U						
PCB 121	mg/kg				0.000000765	0.000000722	U						
PCB 121/95/88	mg/kg												
PCB 122	mg/kg				0.000000823	0.000000794	U						
PCB 123	mg/kg				0.000000883	0.000000834	U						
PCB 124	mg/kg												
PCB 125	mg/kg												
PCB 126	mg/kg				0.00000116	0.000000768	U						
PCB 127	mg/kg				0.000000969	0.000000936	U						
PCB 128	mg/kg												
PCB 129	mg/kg												
PCB 129/158	mg/kg												
PCB 13	mg/kg												
PCB 130	mg/kg				0.000000734	0.000000631	U						
PCB 130/164	mg/kg												
PCB 131	mg/kg				0.000000701	0.000000603	U						
PCB 132	mg/kg				0.000000525	0.000000463							
PCB 133	mg/kg				0.000000647	0.000000556	U						
PCB 134	mg/kg				0.000000762	0.000000655	U						
PCB 135	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	Field Sample ID	MZ-FPA		MZ-FPA		MZ-FPA									
			D15-BOR-18(5.0-5.5)	D15-BOR-18(6.0-6.5)	D15-BOR-18(8.3-8.8)	D15-BOR-19(0.5-1.0)	D15-BOR-19(0-0.5)	D15-BOR-19(3.5-4.0)	D15-BOR-19(5.5-6.0)	D15-BOR-19(6.8-7.0)	D15-BOR-19(8.0-8.5)	D15-BOR-19(8.0-8.5)-D	D15-BOR-20(0.5-1.0)	D15-BOR-20(0-0.5)		
Chemical	Location ID	Depth Interval (ft)	D15-BOR-18 5.00-5.50 FS	D15-BOR-18 6.00-6.50 FS	D15-BOR-18 8.30-8.80 FS	D15-BOR-19 0.50-1.00 FS	D15-BOR-19 0.00-0.50 FS	D15-BOR-19 3.50-4.00 FS	D15-BOR-19 5.50-6.00 FS	D15-BOR-19 6.80-7.00 FS	D15-BOR-19 8.00-8.50 FS	D15-BOR-19 8.00-8.50 DUP	D15-BOR-20 0.50-1.00 FS	D15-BOR-20 0.00-0.50 FS		
Units	Sample Purpose	Date	10/27/2016	10/27/2016	10/27/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/25/2016	10/25/2016		
PCB 136						0.00000225	0.00000247									
PCB 137						0.000000585 U	0.000000503 U									
PCB 138																
PCB 139																
PCB 14						0.00056	0.000275									
PCB 140																
PCB 141						0.00000254	0.00000197									
PCB 142						0.000000714 U	0.000000613 U									
PCB 143						0.000000664 U	0.000000571 U									
PCB 143/139																
PCB 144						0.000000626 U	0.000000538 U									
PCB 145						0.000000468 U	0.000000421 U									
PCB 146						0.000000593 U	0.00000132									
PCB 147																
PCB 148						0.000000621 U	0.000000534 U									
PCB 149																
PCB 15						0.000614	0.000333									
PCB 150						0.000000437 U	0.000000392 U									
PCB 151																
PCB 152						0.000000449 U	0.000000404 U									
PCB 153																
PCB 154						0.000000563 U	0.000000484 U									
PCB 155						0.000000465 U	0.000000418 U									
PCB 156																
PCB 157																
PCB 158						0.000000465 U	0.0000004 U									
PCB 159						0.000000898 U	0.000000534 U									
PCB 16						0.000232	0.000119									
PCB 160						0.000000522 U	0.000000449 U									
PCB 161						0.000000486 U	0.000000418 U									
PCB 162						0.000000888 U	0.000000528 U									
PCB 163																
PCB 163/160																
PCB 164						0.000000501 U	0.000000956									
PCB 165						0.000000534 U	0.000000459 U									
PCB 166																
PCB 167						0.000000888 U	0.000000528 U									
PCB 168																
PCB 169						0.00000111 U	0.000000617 U									
PCB 17						0.0000763	0.0000399									
PCB 170						0.00000534	0.0000037									
PCB 171																
PCB 172						0.000000895 U	0.00000134 U									
PCB 173																
PCB 174						0.00000377	0.00000427									
PCB 175						0.000000827 U	0.00000124 U									
PCB 176						0.000000465 U	0.000000466 U									
PCB 177						0.000000914 U	0.00000249									
PCB 178						0.000000678 U	0.000000679 U									
PCB 179						0.000000515 U	0.000000516 U									
PCB 18																
PCB 180																
PCB 181						0.000000799 U	0.00000119 U									
PCB 182						0.000000756 U	0.00000113 U									
PCB 182/175																
PCB 183						0.00000294	0.00000218									
PCB 184						0.00000053 U	0.000000531 U									
PCB 185						0.00000079 U	0.00000118 U									
PCB 186						0.000000515 U	0.000000516 U									
PCB 187						0.0000048	0.00000432									
PCB 188						0.000000554 U	0.000000555 U									
PCB 189						0.00000111 U	0.000000877 U									
PCB 19						0.0000128	0.00000718									
PCB 190						0.000000772 U	0.000000942 U									
PCB 191						0.000000664 U	0.000000993 U									
PCB 192						0.000000892 U	0.00000103 U									
PCB 193																
PCB 194						0.00000572	0.00000282									
PCB 195						0.00000149	0.00000142 U									
PCB 196						0.00000168	0.00000212									
PCB 197						0.000000448 U	0.000000478 U									
PCB 198																
PCB 199																
PCB 2						0.00194	0.0011									
PCB 20																
PCB 200						0.00000049 U	0.000000524 U									

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA									
		D15-BOR-18(5.0-5.5)	D15-BOR-18(6.0-6.5)	D15-BOR-18(8.3-8.8)	D15-BOR-19(0.5-1.0)	D15-BOR-19(0-0.5)	D15-BOR-19(3.5-4.0)	D15-BOR-19(5.5-6.0)	D15-BOR-19(6.8-7.0)	D15-BOR-19(8.0-8.5)	D15-BOR-19(8.0-8.5)-D	D15-BOR-20(0.5-1.0)	D15-BOR-20(0-0.5)
Chemical	Units	D15-BOR-18 5.00-5.50 FS 10/27/2016	D15-BOR-18 6.00-6.50 FS 10/27/2016	D15-BOR-18 8.30-8.80 FS 10/27/2016	D15-BOR-19 0.50-1.00 FS 10/29/2016	D15-BOR-19 0.00-0.50 FS 10/29/2016	D15-BOR-19 3.50-4.00 FS 10/29/2016	D15-BOR-19 5.50-6.00 FS 10/29/2016	D15-BOR-19 6.80-7.00 FS 10/29/2016	D15-BOR-19 8.00-8.50 FS 10/29/2016	D15-BOR-19 8.00-8.50 DUP 10/29/2016	D15-BOR-20 0.50-1.00 FS 10/25/2016	D15-BOR-20 0.00-0.50 FS 10/25/2016
PCB 201	mg/kg				0.00000463 U	0.00000495 U							
PCB 202	mg/kg				0.00000461 U	0.00000493 U							
PCB 203	mg/kg				0.0000245	0.0000203							
PCB 204	mg/kg				0.00000494 U	0.00000528 U							
PCB 204/200	mg/kg												
PCB 205	mg/kg				0.00000891 U	0.0000101 U							
PCB 206	mg/kg				0.00000871	0.00000893							
PCB 207	mg/kg				0.0000159 U	0.0000151 U							
PCB 208	mg/kg				0.0000304	0.0000038							
PCB 209	mg/kg				0.0000116	0.0000149							
PCB 21	mg/kg												
PCB 21/20	mg/kg												
PCB 22	mg/kg				0.0000921	0.0000436							
PCB 23	mg/kg				0.0000172 U	0.0000178 U							
PCB 24	mg/kg				0.000169	0.0000833							
PCB 25	mg/kg				0.0000341	0.0000243							
PCB 26	mg/kg												
PCB 27	mg/kg				0.0000176	0.0000103							
PCB 28	mg/kg												
PCB 29	mg/kg												
PCB 3	mg/kg				0.00227	0.00115							
PCB 30	mg/kg												
PCB 31	mg/kg				0.000249	0.000115							
PCB 32	mg/kg				0.0000263	0.0000155							
PCB 33	mg/kg												
PCB 34	mg/kg				0.0000438	0.0000141							
PCB 35	mg/kg				0.0000111	0.00000745							
PCB 36	mg/kg				0.0000109	0.00000321							
PCB 37	mg/kg				0.0000238	0.0000172							
PCB 38	mg/kg				0.0000178 U	0.0000184 U							
PCB 39	mg/kg				0.0000185	0.00000481							
PCB 4	mg/kg				0.000843	0.000478							
PCB 4/10	mg/kg												
PCB 40	mg/kg												
PCB 41	mg/kg				0.0000189 U	0.00000152 U							
PCB 42	mg/kg				0.0000622	0.00000493							
PCB 43	mg/kg				0.0000117 U	0.00000137 U							
PCB 44	mg/kg												
PCB 45	mg/kg				0.00000629	0.00000484							
PCB 46	mg/kg				0.0000184 U	0.00000148 U							
PCB 47	mg/kg												
PCB 48	mg/kg				0.00000332	0.00000296							
PCB 49	mg/kg												
PCB 5	mg/kg				0.000331	0.000167							
PCB 50	mg/kg												
PCB 51	mg/kg				0.0000015 U	0.00000121 U							
PCB 52	mg/kg				0.0000322	0.0000248							
PCB 53	mg/kg												
PCB 54	mg/kg				0.0000119 U	0.000000941 U							
PCB 55	mg/kg				0.0000174 U	0.00000145 U							
PCB 56	mg/kg				0.0000144	0.0000117							
PCB 57	mg/kg				0.0000017 U	0.00000142 U							
PCB 58	mg/kg				0.00000158 U	0.00000131 U							
PCB 59	mg/kg												
PCB 6	mg/kg				0.00146	0.000793							
PCB 60	mg/kg				0.0000017 U	0.00000141 U							
PCB 61	mg/kg												
PCB 62	mg/kg												
PCB 63	mg/kg				0.0000015 U	0.00000125 U							
PCB 64	mg/kg				0.00000773	0.00000797							
PCB 65	mg/kg												
PCB 65/75/62	mg/kg												
PCB 66	mg/kg				0.00000943	0.0000105							
PCB 67	mg/kg				0.00000158 U	0.00000131 U							
PCB 67/58	mg/kg												
PCB 68	mg/kg				0.00000153 U	0.00000127 U							
PCB 68/64	mg/kg												
PCB 69	mg/kg												
PCB 7	mg/kg				0.000176	0.0000913							
PCB 70	mg/kg												
PCB 71	mg/kg												
PCB 72	mg/kg				0.00000165 U	0.00000138 U							
PCB 73	mg/kg				0.0000012 U	0.000000969 U							
PCB 73/46	mg/kg												
PCB 74	mg/kg												
PCB 75	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	Field Sample ID	MZ-FPA		MZ-FPA		MZ-FPA									
			D15-BOR-18(5.0-5.5)	D15-BOR-18(6.0-6.5)	D15-BOR-18(8.3-8.8)	D15-BOR-19(0.5-1.0)	D15-BOR-19(0-0.5)	D15-BOR-19(3.5-4.0)	D15-BOR-19(5.5-6.0)	D15-BOR-19(6.8-7.0)	D15-BOR-19(8.0-8.5)	D15-BOR-19(8.0-8.5)-D	D15-BOR-20(0.5-1.0)	D15-BOR-20(0-0.5)		
Chemical	Location ID	Depth Interval (ft)	D15-BOR-18 5.00-5.50 FS	D15-BOR-18 6.00-6.50 FS	D15-BOR-18 8.30-8.80 FS	D15-BOR-19 0.50-1.00 FS	D15-BOR-19 0.00-0.50 FS	D15-BOR-19 3.50-4.00 FS	D15-BOR-19 5.50-6.00 FS	D15-BOR-19 6.80-7.00 FS	D15-BOR-19 8.00-8.50 FS	D15-BOR-19 8.00-8.50 DUP	D15-BOR-20 0.50-1.00 FS	D15-BOR-20 0.00-0.50 FS		
Units	Sample Purpose	Date	10/27/2016	10/27/2016	10/27/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/25/2016	10/25/2016		
PCB 76																
PCB 77						0.0000538	0.0000481									
PCB 78						0.0000183 U	0.0000153 U									
PCB 79						0.0000152 U	0.0000127 U									
PCB 8						0.00215	0.00117									
PCB 80						0.0000149 U	0.0000124 U									
PCB 81						0.0000192 U	0.000016 U									
PCB 82						0.0000243	0.0000201									
PCB 83						0.0000129 U	0.0000122 U									
PCB 83/125/112																
PCB 84						0.0000509	0.0000475									
PCB 85																
PCB 86																
PCB 86/109																
PCB 87																
PCB 87/111																
PCB 88						0.0000113 U	0.0000107 U									
PCB 89						0.0000116 U	0.0000109 U									
PCB 89/84																
PCB 9						0.000979	0.000523									
PCB 90																
PCB 91						0.000024	0.0000178									
PCB 92						0.0000278	0.0000238									
PCB 93																
PCB 94						0.000011 U	0.0000104 U									
PCB 95						0.0000124	0.0000108									
PCB 96						0.00000522 U	0.00000446 U									
PCB 97																
PCB 98						0.0000126 U	0.0000119 U									
PCB 99						0.0000775	0.0000736									
PCB-100/93						0.0000105 U	0.00000995 U									
PCB-107/124						0.00000812 U	0.00000767 U									
PCB-108/119/86/97/125/87						0.0000106	0.0000909									
PCB-113/90/101						0.0000144	0.0000132									
PCB-116/85						0.0000294	0.0000281									
PCB-128/166						0.0000107 U	0.0000197									
PCB-13/12						0.00142	0.0008									
PCB-139/140						0.00000616 U	0.00000529 U									
PCB-147/149						0.0000112	0.0000117									
PCB-151/135						0.0000503	0.0000503									
PCB-153/168						0.0000106	0.0000092									
PCB-156/157						0.0000141 U	0.0000127									
PCB-163/138/129						0.0000131	0.0000117									
PCB-171/173						0.00000919 U	0.0000137 U									
PCB-180/193						0.0000102	0.0000784									
PCB-198/199						0.0000571	0.0000427									
PCB-21/33						0.000161	0.0000808									
PCB-26/29						0.000103	0.0000448									
PCB-28/20						0.00013	0.0000647									
PCB-30/18						0.000373	0.000183									
PCB-44/47/65						0.0000244	0.0000206									
PCB-50/53						0.0000372	0.0000266									
PCB-59/62/75						0.0000265	0.0000161									
PCB-61/70/74/76						0.0000254	0.0000279									
PCB-69/49						0.0000119	0.0000118									
PCB-71/40						0.0000989	0.0000102									
PCB-90/101																
Pentachlorobiphenyl																
Tetrachlorobiphenyl																
Total Decachlorobiphenyls (congeners)																
Total Dichlorobiphenyls (congeners)						0.00899	0.00488									
Total Heptachlorobiphenyls (congeners)						0.0000271	0.0000248									
Total Hexachlorobiphenyls (congeners)						0.0000499	0.0000522									
Total Monochlorobiphenyls (congeners)						0.00594	0.00288									
Total Nonachlorobiphenyls (congeners)						0.0000117	0.0000127									
Total Octachlorobiphenyls (congeners)						0.0000171	0.0000112									
Total PCB (congeners)						0.0170821	0.0089834									
Total Pentachlorobiphenyls (congeners)						0.0000917	0.0000816									
Total Tetrachlorobiphenyls (congeners)						0.000163	0.000147									
Total Trichlorobiphenyls (congeners)						0.00178	0.000879									
Trichlorobiphenyl (total)																
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>																
Benzo[e]pyrene																
Chrysene, 1-methyl-																
Naphthalene, 1-methyl-																
Pyrene, 1-methyl-																

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	D15-BOR-18(5.0-5.5)	D15-BOR-18(6.0-6.5)	D15-BOR-18(8.3-8.8)	D15-BOR-19(0.5-1.0)	D15-BOR-19(0-0.5)	D15-BOR-19(3.5-4.0)	D15-BOR-19(5.5-6.0)	D15-BOR-19(6.8-7.0)	D15-BOR-19(8.0-8.5)	D15-BOR-19(8.0-8.5)-D	D15-BOR-20(0.5-1.0)	D15-BOR-20(0-0.5)	
Location ID	D15-BOR-18	D15-BOR-18	D15-BOR-18	D15-BOR-19	D15-BOR-19	D15-BOR-19	D15-BOR-19	D15-BOR-19	D15-BOR-19	D15-BOR-19	D15-BOR-20	D15-BOR-20	
Depth Interval (ft)	5.00-5.50	6.00-6.50	8.30-8.80	0.50-1.00	0.00-0.50	3.50-4.00	5.50-6.00	6.80-7.00	8.00-8.50	8.00-8.50	0.50-1.00	0.00-0.50	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	DUP	FS	FS	
Date	10/27/2016	10/27/2016	10/27/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/25/2016	10/25/2016	
Chemical Class	Units												
<b>Polycyclic Aromatic Hydrocarbons</b>													
Acenaphthene	mg/kg	0.004 U	0.004 U	0.36	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	
Acenaphthylene	mg/kg	0.004 U	0.004 U	0.012	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	
Anthracene	mg/kg	0.004 U	0.004 U	0.22	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	
Benzo(A)Anthracene	mg/kg	0.004 U	0.004 U	0.075	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	
Benzo(B)Fluoranthene	mg/kg	0.004 U	0.004 U	0.042	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	
Benzo(G,H,I)Perylene	mg/kg	0.004 U	0.004 U	0.015	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	
Benzo(K)Fluoranthene	mg/kg	0.004 U	0.004 U	0.019	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	
Benzo(A)Pyrene	mg/kg	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	
Chrysene	mg/kg	0.004 U	0.004 U	0.19	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	
Dibenz(A,H)Anthracene	mg/kg	0.004 U	0.004 U	0.006	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	
Fluoranthene	mg/kg	0.004 U	0.004 U	0.32	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	
Fluorene	mg/kg	0.004 U	0.005	0.84	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	
Indeno (1,2,3-CD) Pyrene	mg/kg	0.004 U	0.004 U	0.011	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	
Naphthalene	mg/kg	0.012	0.03	11	0.004 U	0.007	0.004 U	0.014	0.21	0.15	0.038		
Phenanthrene	mg/kg	0.006	0.023	2.1	0.004 U	0.004 U	0.004 U	0.004 U	0.023	0.008	0.004 U		
Pyrene	mg/kg	0.004 U	0.004	0.21	0.004 U	0.004 U	0.004 U	0.004 U	0.007	0.004 U	0.004 U		
Total PAHs (Detections + 1/2 MDL)	mg/kg	0.046	0.086	15.422	0.032 U	0.037	0.032 U	0.047	0.296	0.19	0.068		
Total PAHs (Detections Only)	mg/kg	0.018	0.062	15.42	0.032 U	0.007	0.032 U	0.019	0.28	0.164	0.038		
<b>Semivolatile Organic Compounds - TICs</b>													
1,2,4-Trithiolane	mg/kg												
1,4-Benzenediol, 2-chloro-	mg/kg												
11H-Benzo[b]fluorene	mg/kg												
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg												
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg												
3-PENTEN-2-ONE, 4-METHYL-	mg/kg												
7H-Benz[de]anthracen-7-one	mg/kg												
9,10-Anthracenedione	mg/kg			0.9									
9-Octadecanamide, (Z)-	mg/kg												
Acetamide, 2-chloro-N-(ethox	mg/kg												
Alachlor	mg/kg												
Benzenamine, 3-methyl-	mg/kg												
Benzenamine, 4,4',4"-methy	mg/kg												
Benzenamine, 4,4'-methyleneb	mg/kg												
Benzene, 1,2,3,4-tetrachloro	mg/kg			0.91									
Benzene, 1,2,3,5-tetrachloro	mg/kg												
Benzene, 1,2,3-trichloro-	mg/kg												
Benzene, 1,3,5-trichloro-	mg/kg			0.18									
Benzene, 1,3-bis(1-methyleth	mg/kg												
Benzene, 1,4-bis(1-methyleth	mg/kg												
Benzofuran, 2,3-dihydro-	mg/kg												
CYCLIC OCTAATOMIC SULFUR	mg/kg												
Diphenyl Ether	mg/kg												
Docosane	mg/kg												
Heneicosane	mg/kg												
Hexacosane	mg/kg												
Hexadecane	mg/kg												
Hexatriacontane	mg/kg												
m-Chloroaniline	mg/kg												
N,N-Diethylaniline	mg/kg												
n-Hexadecanoic acid	mg/kg												
Nonadecane	mg/kg												
o-Chloroaniline	mg/kg												
Octacosane	mg/kg												
Octadecane	mg/kg												
Octadecane, 1-chloro-	mg/kg												
Octadecanoic acid	mg/kg												
Parachlorophenol	mg/kg												
Pentadecane	mg/kg												
Perylene	mg/kg												
Phenol, 2,5-dichloro-	mg/kg												
Phenol, 3-chloro-	mg/kg								0.3				
Phenol, 4,4'-(1-methylethyl)	mg/kg												
Tetracosane	mg/kg							0.59					
Tetradecane	mg/kg							0.19		0.22			
Tetraethylene glycol	mg/kg												
Total SVOC TICs	mg/kg	1.5	1.5	11	1.2	1.5	1.2	4	2	0.82	3		
Triacotane	mg/kg												
Tributyl phosphate	mg/kg												
Tridecanoic acid	mg/kg												
Triphenyl phosphate	mg/kg												
UNKNOWN	mg/kg	0.29	0.173333333	0.838				1.7	0.1825	0.41	0.416666667		
Unknown acid	mg/kg								0.29				
Unknown Alcohol	mg/kg												
Unknown Aldol Condensate	mg/kg	0.66	0.56		0.67	0.86	0.62	0.62			0.8		
UNKNOWN ALKANE	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA								
		D15-BOR-18(5.0-5.5)	D15-BOR-18(6.0-6.5)	D15-BOR-18(8.3-8.8)	D15-BOR-19(0.5-1.0)	D15-BOR-19(0-0.5)	D15-BOR-19(3.5-4.0)	D15-BOR-19(5.5-6.0)	D15-BOR-19(6.8-7.0)	D15-BOR-19(8.0-8.5)	D15-BOR-19(8.0-8.5)-D	D15-BOR-20(0.5-1.0)	D15-BOR-20(0-0.5)								
Location ID	Location ID	D15-BOR-18	D15-BOR-18	D15-BOR-18	D15-BOR-19	D15-BOR-19	D15-BOR-19	D15-BOR-19	D15-BOR-19	D15-BOR-19	D15-BOR-19	D15-BOR-19	D15-BOR-20								
Depth Interval (ft)	Depth Interval (ft)	5.00-5.50	6.00-6.50	8.30-8.80	0.50-1.00	0.00-0.50	3.50-4.00	5.50-6.00	6.80-7.00	8.00-8.50	8.00-8.50	0.50-1.00	0.00-0.50								
Sample Purpose	Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	DUP	FS	FS								
Date	Date	10/27/2016	10/27/2016	10/27/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/25/2016	10/25/2016								
Chemical Class	Units																				
Unknown Alkene	mg/kg																				
Unknown Amide	mg/kg			0.7																	
Unknown Amine	mg/kg								0.24												
UNKNOWN AROMATIC	mg/kg																				
Unknown Carboxylic Acid	mg/kg																				
Unknown Cycloalkane	mg/kg																				
Unknown Hydrocarbon	mg/kg			1.24						0.19											
Unknown Ketone	mg/kg																				
Unknown PAH	mg/kg																				
UNKNOWN SILOXANE	mg/kg																				
<b>Semivolatile Organic Compounds</b>																					
1,2,4-Trichlorobenzene	mg/kg	0.019	U	0.042		19		0.019	U	0.021	U	0.018	U	0.018	U	0.27		0.16		0.027	
1,2-Diphenylhydrazine	mg/kg	0.019	U	0.018	U	0.85		0.019	U	0.021	U	0.018	U	0.018	U	0.02	U	0.02	U	0.02	U
1,4-Dioxane	mg/kg	0.11	U	0.11	U	0.11	U	0.11	U	0.13	U	0.11	U	0.11	U	0.12	U	0.12	U	0.12	U
1-Naphthylamine	mg/kg	0.19	U	0.18	U	0.18	U	0.19	U	0.21	U	0.18	U	0.18	U	0.2	U	0.2	U	0.2	U
2,3,4,6-Tetrachlorophenol	mg/kg	0.074	U	0.073	U	0.071	U	0.075	U	0.085	U	0.073	U	0.071	U	0.079	U	0.08	U	0.082	U
2,4,5-Trichlorophenol	mg/kg	0.019	U	0.018	U	0.018	U	0.019	U	0.021	U	0.018	U	0.018	U	0.02	U	0.02	U	0.02	U
2,4,6-Trichlorophenol	mg/kg	0.019	U	0.018	U	0.018	U	0.019	U	0.021	U	0.018	U	0.018	U	0.02	U	0.02	U	0.02	U
2,4-Dichlorophenol	mg/kg	0.019	U	0.018	U	0.018	U	0.019	U	0.057		0.018	U	0.018	U	0.02	U	0.02	U	0.02	U
2,4-Dimethylphenol	mg/kg	0.019	U	0.018	U	0.018	U	0.019	U	0.021	U	0.018	U	0.018	U	0.038		0.035		0.02	U
2,4-Dinitrophenol	mg/kg	0.33	U	0.33	U	0.32	U	0.34	U	0.38	U	0.33	U	0.32	U	0.36	U	0.36	U	0.37	U
2,4-Dinitrotoluene	mg/kg	0.074	U	0.073	U	0.071	U	0.075	U	0.085	U	0.073	U	0.071	U	0.079	U	0.08	U	0.082	U
2,6-Dinitrotoluene	mg/kg	0.019	U	0.018	U	0.018	U	0.019	U	0.021	U	0.018	U	0.018	U	0.02	U	0.02	U	0.02	U
2-Chloronaphthalene	mg/kg	0.007	U	0.007	U	0.024		0.008	U	0.009	U	0.007	U	0.007	U	0.008	U	0.008	U	0.008	U
2-Chlorophenol	mg/kg	0.019	U	0.018	U	0.018	U	0.019	U	0.065		0.021	U	0.063		0.27		0.02	U	0.097	
2-Methylnaphthalene	mg/kg	0.004	U	0.006		1.8		0.004	U	0.004	U	0.004	U	0.004	U	0.033		0.018		0.004	
2-Methylphenol (O-Cresol)	mg/kg	0.019	U	0.018	U	0.018	U	0.019	U	0.021	U	0.018	U	0.018	U	0.027		0.02	U	0.02	U
2-Naphthylamine	mg/kg	0.19	U	0.18	U	0.18	U	0.19	U	0.21	U	0.18	U	0.18	U	0.2	U	0.2	U	0.2	U
2-Nitroaniline	mg/kg	0.019	U	0.018	U	0.018	U	0.019	U	0.021	U	0.018	U	0.018	U	0.02	U	0.02	U	0.02	U
2-Nitrophenol	mg/kg	0.019	U	0.018	U	0.018	U	0.019	U	0.021	U	0.018	U	0.018	U	0.02	U	0.02	U	0.02	U
3,3'-Dichlorobenzidine	mg/kg	0.11	U	0.11	U	0.11	U	0.11	U	0.13	U	0.11	U	0.11	U	0.12	U	0.12	U	0.12	U
3,3'-Dimethylbenzidine	mg/kg																				
3-Nitroaniline	mg/kg	0.074	U	0.073	U	0.071	U	0.075	U	0.085	U	0.073	U	0.071	U	0.079	U	0.08	U	0.082	U
4,6-Dinitro-2-Methylphenol	mg/kg	0.19	U	0.18	U	0.18	U	0.19	U	0.21	U	0.18	U	0.18	U	0.2	U	0.2	U	0.2	U
4-Aminobiphenyl	mg/kg	0.19	U	0.18	U	0.18	U	0.19	U	0.21	U	0.18	U	0.18	U	0.2	U	0.2	U	0.2	U
4-Bromophenyl Phenyl Ether	mg/kg	0.019	U	0.018	U	0.018	U	0.019	U	0.021	U	0.018	U	0.018	U	0.02	U	0.02	U	0.02	U
4-Chloro-3-Methylphenol	mg/kg	0.019	U	0.018	U	0.018	U	0.019	U	0.021	U	0.018	U	0.018	U	0.02	U	0.02	U	0.02	U
4-Chloroaniline	mg/kg	0.037	U	0.037	U	0.035	U	0.038	U	0.042	U	0.037	U	0.035	U	0.04	U	0.04	U	0.041	U
4-Chlorophenyl Phenyl Ether	mg/kg	0.019	U	0.018	U	0.018	U	0.019	U	0.021	U	0.018	U	0.018	U	0.02	U	0.02	U	0.02	U
4-Methylphenol (P-Cresol)	mg/kg	0.019	U	0.018	U	0.018	U	0.019	U	0.021	U	0.018	U	0.018	U	0.028		0.02	U	0.02	U
4-Nitroaniline	mg/kg	0.074	U	0.073	U	0.071	U	0.075	U	0.085	U	0.073	U	0.071	U	0.079	U	0.08	U	0.082	U
4-Nitrophenol	mg/kg	0.19	U	0.18	U	0.18	U	0.19	U	0.21	U	0.18	U	0.18	U	0.2	U	0.2	U	0.2	U
Acetophenone	mg/kg	0.019	U	0.018	U	0.018	U	0.019	U	0.021	U	0.018	U	0.018	U	0.02	U	0.02	U	0.02	U
Aniline	mg/kg	0.19	U	0.18	U	0.18	U	0.19	U	0.21	U	0.18	U	0.18	U	0.18	U	0.18	U	0.18	U
Benzidine	mg/kg	0.28	U	0.27	U	0.26	U	0.28	U	0.32	U	0.28	U	0.27	U	0.3	U	0.3	U	0.31	U
Biphenyl	mg/kg	0.019	U	0.018	U	0.018	U	0.019	U	0.021	U	0.018	U	0.018	U	0.02	U	0.02	U	0.02	U
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg	0.019	U	0.018	U	0.018	U	0.019	U	0.021	U	0.018	U	0.018	U	0.02	U	0.02	U	0.02	U
Bis(2-Chloroethoxy)Methane	mg/kg	0.019	U	0.018	U	0.018	U	0.019	U	0.021	U	0.018	U	0.018	U	0.02	U	0.02	U	0.02	U
Bis(2-Chloroethyl)Ether	mg/kg	0.019	U	0.018	U	0.018	U	0.019	U	0.021	U	0.018	U	0.018	U	0.02	U	0.02	U	0.02	U
Bis(2-Chloroisopropyl)Ether	mg/kg																				
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.074	U	0.073	U	0.071	U	0.075	U	0.085	U	0.073	U	0.071	U	0.079	U	0.08	U	0.082	U
Butyl Benzyl Phthalate	mg/kg	0.074	U	0.073	U	0.071	U	0.075	U	0.085	U	0.073	U	0.071	U	0.079	U	0.08	U	0.082	U
Carbazole	mg/kg	0.019	U	0.018	U	0.018	U	0.019	U	0.021	U	0.018	U	0.018	U	0.02	U	0.02	U	0.02	U
Dibenzofuran	mg/kg	0.019	U	0.018	U	0.018	U	0.019	U	0.021	U	0.018	U	0.018	U	0.02	U	0.02	U	0.02	U
Diethyl Phthalate	mg/kg	0.074	U	0.073	U	0.071	U	0.075	U	0.085	U	0.073	U	0.071	U	0.079	U	0.08	U	0.082	U
Dimethyl Phthalate	mg/kg	0.074	U	0.073	U	0.071	U	0.075	U	0.085	U	0.073	U	0.071	U	0.079	U	0.08	U	0.082	U
Di-N-Butyl Phthalate	mg/kg	0.074	U	0.073	U	0.071	U	0.075	U	0.085	U	0.073	U	0.071	U	0.079	U	0.08	U	0.082	U
Diphenyl Ether	mg/kg	0.019	U	0.018	U	0.018	U	0.019	U	0.021	U	0.018	U	0.018	U	0.02	U	0.02	U	0.02	U
Hexachlorobenzene	mg/kg	0.004	U	0.004	U	0.026		0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U
Hexachlorobutadiene	mg/kg	0.019	U	0.018	U	0.018	U	0.019	U	0.021	U	0.018	U	0.018	U	0.02	U	0.02	U	0.02	U
Hexachlorocyclopentadiene	mg/kg	0.19	U	0.18	U	0.18	U	0.19	U	0.21	U	0.18	U	0.18	U	0.2	U	0.2	U	0.2	U
Hexachloroethane	mg/kg	0.037	U	0.037	U	0.035	U	0.038	U	0.042	U	0.037	U	0.035	U	0.04	U	0.04	U	0.041	U
Hexachloropropylene	mg/kg																				
Isophorone	mg/kg	0.019	U	0.018	U	0.018	U	0.019	U	0.021	U	0.018	U	0.018	U	0.02	U	0.02	U	0.02	U
N-Dioctyl Phthalate	mg/kg	0.074	U	0.073	U	0.071	U	0.075	U	0.085	U	0.073	U	0.071	U	0.079	U	0.08	U	0.082	U
Nitrobenzene	mg/kg	0.019	U	0.018	U	0.018	U	0.019	U	0.021	U	0.018	U	0.0							

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA						
		D15-BOR-18(5.0-5.5)	D15-BOR-18(6.0-6.5)	D15-BOR-18(8.3-8.8)	D15-BOR-19-(0.5-1.0)	D15-BOR-19-(0-0.5)	D15-BOR-19-(3.5-4.0)	D15-BOR-19-(5.5-6.0)	D15-BOR-19-(6.8-7.0)	D15-BOR-19-(8.0-8.5)	D15-BOR-19-(8.0-8.5)-D	D15-BOR-20(0.5-1.0)	D15-BOR-20(0-0.5)						
Location ID	Location ID	D15-BOR-18	D15-BOR-18	D15-BOR-18	D15-BOR-19	D15-BOR-19	D15-BOR-19	D15-BOR-19	D15-BOR-19	D15-BOR-19	D15-BOR-19	D15-BOR-19	D15-BOR-19						
Depth Interval (ft)	Depth Interval (ft)	5.00-5.50	6.00-6.50	8.30-8.80	0.50-1.00	0.00-0.50	3.50-4.00	5.50-6.00	6.80-7.00	8.00-8.50	8.00-8.50	0.50-1.00	0.00-0.50						
Sample Purpose	Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	DUP	FS	FS						
Date	Date	10/27/2016	10/27/2016	10/27/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/25/2016	10/25/2016						
Chemical Class	Units																		
1-Butene	mg/kg																		
1-Heptene	mg/kg																		
1-Propene, 2-methyl-	mg/kg																		
Azulene	mg/kg																		
BENZENE, 1,2,4-TRICHLORO-	mg/kg																		
BENZENE, 1,2-DICHLORO-	mg/kg																		
BENZENE, 1,4-DICHLORO-	mg/kg																		
Camphene	mg/kg																		
CYCLOHEXANE	mg/kg																		
Cyclohexane, methyl-	mg/kg																		
Cyclotrisiloxane, hexamethyl	mg/kg																		
Diphenyl Ether	mg/kg																		
Ethane, 1,1,2,2-tetrachloro-	mg/kg																		
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg																		
Ethane, 1,2-dichloro-1,1-dif	mg/kg																		
Ethene, 1,1-dichloro-2,2-dif	mg/kg																		
Hexane, 2-methyl-	mg/kg																		
Hexane, 3-methyl-	mg/kg																		
METHANE, CHLOROFLUORO-	mg/kg																		
Naphthalene	mg/kg																		
NAPHTHALENE, 2-METHYL-	mg/kg																		
Nonanal	mg/kg																		
Norflurane	mg/kg																		
Pentane, 2,3-dimethyl-	mg/kg																		
Phenol, 4-(1,1,3,3-tetrameth	mg/kg																		
Propene	mg/kg																		
Sulfur dioxide	mg/kg																		
Tridecane	mg/kg																		
UNKNOWN	mg/kg																		
UNKNOWN ALICYCLIC	mg/kg																		
UNKNOWN ALIPHATIC	mg/kg																		
UNKNOWN ALKANE	mg/kg																		
UNKNOWN AROMATIC	mg/kg																		
UNKNOWN SILOXANE	mg/kg																		
<b>Volatile Organic Compounds</b>																			
1,1,1,2-Tetrachloroethane	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.001	U	1.7	U	0.054	U	0.05	U
1,1,1-Trichloroethane	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.001	U	1.7	U	0.054	U	0.05	U
1,1,1-Trichlorotrifluoroethane	mg/kg	0.005	U	0.033	U	0.64	U	0.005	U	0.006	U	0.006	U	0.3	U	0.006	U	0.005	U
1,1,2,2-Tetrachloroethane	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.001	U	1.7	U	0.054	U	0.05	U
1,1,2-Trichloroethane	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.001	U	1.7	U	0.054	U	0.05	U
1,1,2-Trichlorotrifluoroethane	mg/kg	0.006	U	0.1	U	190	U	0.002	U	0.12	U	0.29	U	0.13	U	0.11	U	0.1	U
1,1,2-Trifluoroethane	mg/kg	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U
1,1-Dichloro-1-Fluoroethane	mg/kg	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.0008	U	0.001	U	0.0009	U
1,1-Dichloroethane	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.001	U	1.7	U	0.054	U	0.05	U
1,1-Dichloroethene	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.003	U	1.7	U	0.054	U	0.05	U
1,1-Dichloropropene	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.001	U	1.7	U	0.054	U	0.05	U
1,2,4-Trimethylbenzene	mg/kg	0.001	U	0.052	U	6.5	U	0.001	U	0.061	U	0.001	U	11	U	0.054	U	0.05	U
1,2-Dibromoethane (EDB)	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.001	U	1.7	U	0.054	U	0.05	U
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg	0.001	U	0.005	U	0.01	U	0.001	U	0.001	U	0.001	U	0.069	U	0.004	U	0.006	U
1,2-Dichloro-1-Fluoroethane	mg/kg	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.0008	U	0.001	U	0.0009	U
1,2-Dichlorobenzene	mg/kg	0.04	U	0.88	U	340	U	0.046	U	2	U	0.25	U	600	U	2.3	U	1.9	U
1,2-Dichloroethane	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.004	U	0.003	U	1.7	U	0.054	U
1,2-Dichloroethene	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.001	U	1.7	U	0.054	U	0.05	U
1,2-Dichloropropane	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.001	U	1.7	U	0.054	U	0.05	U
1,2-Dichlorotetrafluoroethane	mg/kg	0.002	U	0.002	U	0.057	U	0.002	U	0.002	U	0.002	U	0.059	U	0.002	U	0.002	U
1,3,5-Trimethylbenzene	mg/kg	0.001	U	0.052	U	3.3	U	0.001	U	0.061	U	0.001	U	6.1	U	0.054	U	0.05	U
1,3-Dichlorobenzene	mg/kg	0.001	U	0.058	U	29	U	0.001	U	0.13	U	0.012	U	60	U	0.16	U	0.14	U
1,4-Dichlorobenzene	mg/kg	0.035	U	1.2	U	820	U	0.037	U	3.5	U	0.3	U	1300	U	4.5	U	3.8	U
1-Chloro-1,1-Difluoroethane	mg/kg	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.0008	U	0.001	U	0.0009	U
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg	0.001	U	0.009	U	0.004	U	0.001	U	0.001	U	0.001	U	0.029	U	0.001	U	0.003	U
2-Chloro-1,1,1-Trifluoroethane	mg/kg	0.002	U	0.1	U	2.7	U	0.002	U	0.12	U	0.002	U	3.5	U	0.11	U	0.1	U
2-Chloroethyl Vinyl Ether	mg/kg																		
2-Chlorotoluene	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.001	U	2.7	U	0.054	U	0.05	U
2-Hexanone	mg/kg	0.003	U	0.15	U	4	U	0.003	U	0.18	U	0.003	U	5.2	U	0.16	U	0.15	U
4-Chlorotoluene	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.001	U	2.2	U	0.054	U	0.05	U
4-Isopropyltoluene	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.001	U	3	U	0.054	U	0.05	U
Acetone	mg/kg	0.017	U	0.36	U	9.4	U	0.033	U	0.43	U	0.019	U	12	U	0.38	U	0.35	U
Acrolein	mg/kg																		
Acrylonitrile	mg/kg																		
Benzene	mg/kg	0.0008	U	0.028	U	3	U	0.004	U	0.73	U	0.41	U	0.3	U	34	U	2.8	U
Bromodichloromethane	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.001	U	1.7	U	0.054	U	0.05	U
Bromoform	mg/kg																		
Carbon Disulfide	mg/kg	0.007	U	0.1	U	1.3	U	0.002	U	0.061	U	0.047	U	1.7	U	0.054	U	0.05	U
Carbon Tetrachloride	mg/kg	0.001	U	0.052	U	7.7	U	0.001	U	0.061	U	0.001	U	1.7	U	0.054	U	0.05	U
CFC-1113	mg/kg	0.002	U	0.1	U	2.7	U	0.002	U	0.12	U	0.015	U	0.008	U	3.5	U	0.11	U
Chlorobenzene	mg/kg	0.024	U	0.34	U	630	U	0.063	U	11	U	1	U	0.055	U	1400	U	17	U

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	Field Sample ID	MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA															
		D15-BOR-18(5.0-5.5)	D15-BOR-18(6.0-6.5)	D15-BOR-18(8.3-8.8)	D15-BOR-19(0.5-1.0)	D15-BOR-19(0-0.5)	D15-BOR-19(3.5-4.0)	D15-BOR-19(5.5-6.0)	D15-BOR-19(6.8-7.0)	D15-BOR-19(8.0-8.5)	D15-BOR-19(8.0-8.5)-D	D15-BOR-20(0.5-1.0)	D15-BOR-20(0-0.5)										
Location ID	Depth Interval (ft)	D15-BOR-18 5.00-5.50	D15-BOR-18 6.00-6.50	D15-BOR-18 8.30-8.80	D15-BOR-19 0.50-1.00	D15-BOR-19 0.00-0.50	D15-BOR-19 3.50-4.00	D15-BOR-19 5.50-6.00	D15-BOR-19 6.80-7.00	D15-BOR-19 8.00-8.50	D15-BOR-19 8.00-8.50 DUP	D15-BOR-20 0.50-1.00	D15-BOR-20 0.00-0.50										
Sample Purpose	Date	FS	FS	FS																			
Chemical Class	Units	10/27/2016	10/27/2016	10/27/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/29/2016	10/25/2016	10/25/2016										
Chlorodibromomethane	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.001	U	0.001	U	1.7	U	0.054	U	0.05	U		
Chlorodifluoromethane	mg/kg	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U										
Chlorofluoromethane	mg/kg	0.001	U	0.001	U	0.001	U	0.0009	U	0.001	U	0.0009	U										
Chloroform	mg/kg	0.001	U	0.052	U	1.3	U	0.003	U	0.58	U	0.33	U	0.25	U	6.8	U	0.78	U	0.97	U		
Chloropentafluoroethane	mg/kg	0.015	U	0.018	U	0.016	U	0.016	U	0.015	U	0.017	U	0.017	U	0.012	U	0.017	U	0.014	U		
cis-1,2-Dichloroethene	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.001	U	0.001	U	1.7	U	0.054	U	0.05	U		
cis-1,3-Dichloropropene	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.001	U	0.001	U	1.7	U	0.054	U	0.05	U		
Cumene	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.001	U	0.001	U	1.7	U	0.054	U	0.05	U		
Dichlorodifluoromethane	mg/kg	0.002	U	0.1	U	2.7	U	0.002	U	0.12	U	0.002	U	0.002	U	3.5	U	0.11	U	0.1	U		
Dichlorofluoromethane	mg/kg	0.002	U	0.1	U	2.7	U	0.002	U	0.12	U	0.01	U	0.008	U	3.5	U	0.11	U	0.1	U		
Ethane	ug/L																						
Ethyl Chloride	mg/kg	0.002	U	0.1	U	2.7	U	0.002	U	0.12	U	0.002	U	0.002	U	3.5	U	0.11	U	0.1	U		
Ethylbenzene	mg/kg	0.001	U	0.052	U	11	U	0.001	U	0.061	U	0.015	U	0.01	U	20	U	0.076	U	0.072	U		
Fluoromethane	mg/kg	0.003	U	0.004	U	0.003	U	0.003	U	0.004	U	0.003	U	0.003	U	0.002	U	0.003	U	0.003	U		
Hexane	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.001	U	0.001	U	1.7	U	0.054	U	0.05	U		
Isobutyl Alcohol	mg/kg	0.11	U	5.2	U	130	U	0.11	U	6.1	U	0.11	U	0.11	U	170	U	6.4	U	5	U		
Meta- And Para-Xylene	mg/kg	0.001	U	0.052	U	74	U	0.001	U	0.31	U	0.075	U	0.051	U	150	U	0.52	U	0.49	U		
Methacrylonitrile	mg/kg	0.005	U	0.26	U	6.7	U	0.006	U	0.3	U	0.006	U	0.005	U	8.6	U	0.27	U	0.25	U		
Methane	ug/L																						
Methyl Bromide	mg/kg																						
Methyl Chloride	mg/kg	0.002	U	0.1	U	2.7	U	0.002	U	0.12	U	0.002	U	0.002	U	3.5	U	0.11	U	0.1	U		
Methyl Ethyl Ketone	mg/kg	0.004	U	0.21	U	5.4	U	0.005	U	0.24	U	0.004	U	0.004	U	6.9	U	0.22	U	0.2	U		
Methyl Isobutyl Ketone	mg/kg	0.003	U	0.15	U	4	U	0.003	U	0.16	U	0.003	U	0.003	U	5.2	U	0.16	U	0.15	U		
Methyl Methacrylate	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.001	U	0.001	U	1.7	U	0.054	U	0.05	U		
Methyl Tertiary Butyl Ether	mg/kg	0.0005	U	0.026	U	0.67	U	0.0006	U	0.03	U	0.0006	U	0.0005	U	0.86	U	0.027	U	0.025	U		
Methylene Chloride	mg/kg	0.002	U	0.1	U	2.7	U	0.003	U	0.12	U	0.011	U	0.006	U	3.5	U	0.11	U	0.1	U		
N-Butylbenzene	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.001	U	0.001	U	1.7	U	0.054	U	0.05	U		
N-Propylbenzene	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.001	U	0.001	U	1.7	U	0.054	U	0.05	U		
Ortho-Xylene	mg/kg	0.001	U	0.052	U	17	U	0.001	U	0.089	U	0.029	U	0.018	U	35	U	0.12	U	0.12	U		
Propionitrile	mg/kg	0.032	U	1.5	U	40	U	0.034	U	1.8	U	0.033	U	0.032	U	52	U	1.6	U	1.5	U		
sec-Butylbenzene	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.001	U	0.001	U	1.7	U	0.054	U	0.05	U		
Styrene	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.001	U	0.001	U	1.7	U	0.054	U	0.05	U		
tert-Butylbenzene	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.001	U	0.001	U	1.7	U	0.054	U	0.05	U		
Tetrachloroethene	mg/kg	0.002	U	0.052	U	31	U	0.001	U	0.095	U	0.022	U	0.01	U	3.8	U	0.054	U	0.05	U		
Tetrahydrofuran	mg/kg	0.004	U	0.21	U	5.4	U	0.005	U	0.24	U	0.004	U	0.004	U	6.9	U	0.22	U	0.2	U		
Toluene	mg/kg	0.001	U	0.052	U	25	U	0.003	U	0.63	U	0.25	U	0.16	U	76	U	1	U	1.2	U		
trans-1,2-Dichloroethene	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.001	U	0.001	U	1.7	U	0.054	U	0.05	U		
trans-1,3-Dichloropropene	mg/kg																						
Trichloroethene	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.005	U	0.002	U	1.7	U	0.054	U	0.05	U		
Trichlorofluoromethane	mg/kg	0.002	U	0.1	U	4.9	U	0.002	U	0.12	U	0.11	U	0.057	U	8.3	U	0.19	U	0.2	U		
Vinyl Chloride	mg/kg	0.001	U	0.052	U	1.3	U	0.001	U	0.061	U	0.001	U	0.001	U	1.7	U	0.054	U	0.05	U		
Vinyl Fluoride	mg/kg	0.006	U	0.007	U	0.006	U	0.006	U	0.007	U	0.007	U	0.007	U	0.005	U	0.007	U	0.006	U		
Xylenes	mg/kg	0.001	U	0.052	U	91	U	0.001	U	0.4	U	0.1	U	0.068	U	180	U	0.64	U	0.61	U		

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D15-BOR-21-(0.5-1.0)	D15-BOR-21-(0-0.5)	D15-BOR-21-(4.5-5.0)	D15-BOR-21-(6.0-6.5)	D15-BOR-21-(7.8-8.0)	D15-BOR-21-(8.0-8.3)	D15-BOR-22-(0.5-1.0)	D15-BOR-22-(0-0.5)	D15-BOR-22-(2.0-2.5)	D15-BOR-22-(7.0-7.5)	D15-BOR-22-(7.8-8.0)	D15-BOR-22-(8.0-8.2)
Location ID	D15-BOR-21	D15-BOR-21	D15-BOR-21	D15-BOR-21	D15-BOR-21	D15-BOR-21	D15-BOR-21	D15-BOR-22	D15-BOR-22	D15-BOR-22	D15-BOR-22	D15-BOR-22	D15-BOR-22
Depth Interval (ft)	0.50-1.00	0.00-0.50	4.50-5.00	6.00-6.50	7.80-8.00	8.00-8.30	0.50-1.00	0.00-0.50	2.00-2.50	7.00-7.50	7.80-8.00	8.00-8.20	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Date	11/4/2017	11/4/2017	11/4/2017	11/4/2017	11/4/2017	11/4/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	
Chemical Class	Units												
<b>General Chemistry</b>													
Black Carbon	mg/kg												
Percent Moisture	%	49.3	46.5	11.7	10.9	8.7	18.9	16.2	41.3	9.9	10	9.5	20.6
Percent Solids	%												
Total Organic Carbon	mg/kg	38600	29500	343	246	561	1030	550	20200	231	255	607	1310
<b>Metals</b>													
Aluminum	mg/kg	22600	14500					10500	14300				
Antimony	mg/kg	1.53	0.324					0.254	0.238				
Arsenic	mg/kg	26.3	9.62					2.09	6.87				
Barium	mg/kg	120	78.5					46	79.4				
Beryllium	mg/kg	1.54	0.832					0.297	0.703				
Cadmium	mg/kg	1.51	0.624					0.173	0.381				
Calcium	mg/kg	3720	3420					179	3080				
Chromium	mg/kg	121	41					16.9	37.1				
Cobalt	mg/kg	16.6	12.1					10.1	10.2				
Copper	mg/kg	89.2	32.2					13.6	23.1				
Iron	mg/kg	36800	24700					9100	21700				
Lead	mg/kg	349	45.4					10.5	30.9				
Magnesium	mg/kg	5660	4680					2120	4100				
Manganese	mg/kg	850	713					67.6	393				
Mercury	mg/kg	1.18	0.17					0.0112 U	0.829				
Nickel	mg/kg	42.2	24.5					16.6	20.8				
Potassium	mg/kg	3310	2360					2040	2680				
Selenium	mg/kg	2.62	0.619					0.104 U	0.415				
Silver	mg/kg	1.17	0.559					0.0303 U	0.214				
Sodium	mg/kg	835	957					112	475				
Thallium	mg/kg	0.219	0.144					0.13	0.148				
Tin	mg/kg												
Titanium	mg/kg												
Vanadium	mg/kg	91.5	38.3					17	34.3				
Zinc	mg/kg	322	166					57.8	115				
<b>Metals - AVS/SEM</b>													
Acid Volatile Sulfide	umol/g												
Arsenic	umol/g												
Cadmium	umol/g												
Copper	umol/g												
Lead	umol/g												
Zinc	umol/g												
<b>Metals - Leachate</b>													
Lead	ug/L												
<b>Per and Polyfluorinated Organic Substances</b>													
Perfluorobutane Sulfonic Acid	mg/kg												
Perfluorobutanoic Acid	mg/kg												
Perfluorodecane Sulfonic Acid	mg/kg												
Perfluorodecanoic Acid	mg/kg												
Perfluorododecanoic Acid	mg/kg												
Perfluoroheptanoic Acid	mg/kg												
Perfluorohexane Sulfonic Acid	mg/kg												
Perfluorohexanoic Acid	mg/kg												
Perfluorononanoic Acid	mg/kg												
Perfluorooctane Sulfonamide	mg/kg												
Perfluoropentanoic Acid	mg/kg												
Perfluorotetradecanoic Acid	mg/kg												
Perfluorotridecanoic Acid	mg/kg												
Perfluoroundecanoic Acid	mg/kg												
PFOA	mg/kg												
PFOA(trial)	mg/kg												
PFOS	mg/kg												
PFOS (trial)	mg/kg												
<b>Pesticides and Herbicides</b>													
4,4'-DDD	mg/kg												
4,4'-DDE	mg/kg												
4,4'-DDT	mg/kg												
Aldrin	mg/kg												
Alpha Chlordane	mg/kg												
Alpha-BHC	mg/kg												
beta-BHC	mg/kg												
delta-BHC	mg/kg												
Dieldrin	mg/kg												
Endosulfan I	mg/kg												
Endosulfan II	mg/kg												
Endosulfan Sulfate	mg/kg												
Endrin	mg/kg												
Endrin Aldehyde	mg/kg												
Endrin Ketone	mg/kg												
Gamma Chlordane	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D15-BOR-21-(0.5-1.0)	D15-BOR-21-(0-0.5)	D15-BOR-21-(4.5-5.0)	D15-BOR-21-(6.0-6.5)	D15-BOR-21-(7.8-8.0)	D15-BOR-21-(8.0-8.3)	D15-BOR-22-(0.5-1.0)	D15-BOR-22-(0-0.5)	D15-BOR-22-(2.0-2.5)	D15-BOR-22-(7.0-7.5)	D15-BOR-22-(7.8-8.0)
Location ID	Location ID	D15-BOR-21	D15-BOR-21	D15-BOR-21	D15-BOR-21	D15-BOR-21	D15-BOR-21	D15-BOR-22	D15-BOR-22	D15-BOR-22	D15-BOR-22	D15-BOR-22
Depth Interval (ft)	Depth Interval (ft)	0.50-1.00	0.00-0.50	4.50-5.00	6.00-6.50	7.80-8.00	8.00-8.30	0.50-1.00	0.00-0.50	2.00-2.50	7.00-7.50	7.80-8.00
Sample Purpose	Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Date	Date	11/4/2017	11/4/2017	11/4/2017	11/4/2017	11/4/2017	11/4/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017
Chemical Class	Units											
Chemical	mg/kg											
Heptachlor	mg/kg											
Heptachlor Epoxide	mg/kg											
Lindane	mg/kg											
Methoxychlor	mg/kg											
Toxaphene	mg/kg											
<b>Physical Properties</b>												
0.001 MM	% PASSING	5	5					0.5	U	1		
0.002 MM	% PASSING	11	11					0.5	U	3		
0.005 MM	% PASSING	21	20.5					0.5	U	7		
0.02 MM	% PASSING	49.5	45.5					0.5	U	22.5		
0.05 MM	% PASSING	69	71					1.5		44.5		
0.064 MM	% PASSING	75	79					3		56		
0.075 MM	% PASSING	77.1	82.6					3.4		60.7		
0.15 MM	% PASSING	82.3	88.7					3.9		72.3		
0.3 MM	% PASSING	89.1	94					7.1		83.3		
0.6 MM	% PASSING	93.3	96.4					43.2		95.2		
1.18 MM	% PASSING	96.5	97.5					68.5		98.1		
19 MM	% PASSING	100	100					100		100		
2.36 MM	% PASSING	98.3	98.2					77.6		98.7		
3.35 MM	% PASSING	99.7	99.3					81.8		99.1		
37.5 MM	% PASSING	100	100					100		100		
4.75 MM	% PASSING	100	99.5					85.5		99.5		
75 MM	% PASSING	100	100					100		100		
Density	PCF											
<b>Polychlorinated Biphenyls - TICs</b>												
1,1'-Biphenyl, 2,3-dichloro-	mg/kg											
Unknown Biphenyl	mg/kg											
<b>Polychlorinated Biphenyls</b>												
Heptachlorobiphenyl	mg/kg											
Hexachlorobiphenyl	mg/kg											
Octachlorobiphenyl	mg/kg											
PCB 1	mg/kg	0.00125	0.000476					0.00189		0.174		
PCB 10	mg/kg	0.0000897	0.0000631					0.0000187		0.0006		
PCB 100	mg/kg											
PCB 101	mg/kg											
PCB 102	mg/kg	0.000605	0.0000261					0.00000638	U	0.0000421		
PCB 103	mg/kg	0.000173	0.0000216					0.00000626	U	0.000018		
PCB 104	mg/kg	0.00000428	0.00000113					0.00000415	U	0.0000022		
PCB 105	mg/kg	0.00264	0.000162					0.00000859		0.000323		
PCB 106	mg/kg	0.000013	0.0000041	U				0.00000582	U	0.00000816	U	
PCB 107	mg/kg											
PCB 107/123	mg/kg											
PCB 108	mg/kg											
PCB 109	mg/kg	0.00065	0.0000462					0.00000179		0.0000742		
PCB 11	mg/kg	0.00105	0.00017					0.000202		0.00122		
PCB 110	mg/kg	0.0112	0.000765					0.0000273		0.000994		
PCB 111	mg/kg	0.0000126	0.00000397	U				0.00000524	U	0.00000769	U	
PCB 112	mg/kg	0.0000135	0.00000425	U				0.00000564	U	0.00000805	U	
PCB 113	mg/kg											
PCB 114	mg/kg	0.000192	0.0000105					0.00000634	U	0.0000252		
PCB 115	mg/kg	0.0000134	0.0000124	U				0.00000565	U	0.00000802	U	
PCB 116	mg/kg											
PCB 117	mg/kg	0.0000156	0.0000155	U				0.00000572		0.0000256		
PCB 118	mg/kg	0.00673	0.00043					0.0000231		0.00074		
PCB 119	mg/kg											
PCB 12	mg/kg											
PCB 120	mg/kg	0.0000495	0.00000815					0.00000529	U	0.00000766	U	
PCB 121	mg/kg	0.0000132	0.00000417	U				0.00000518	U	0.00000759	U	
PCB 121/95/88	mg/kg											
PCB 122	mg/kg	0.000131	0.00000944					0.00000632	U	0.00000967	U	
PCB 123	mg/kg	0.000135	0.0000101					0.00000644	U	0.000015		
PCB 124	mg/kg											
PCB 125	mg/kg											
PCB 126	mg/kg	0.0000199	0.00000316					0.0000055	U	0.00000824		
PCB 127	mg/kg	0.000015	0.00000391	U				0.00000578	U	0.00000921	U	
PCB 128	mg/kg											
PCB 129	mg/kg											
PCB 129/158	mg/kg											
PCB 13	mg/kg											
PCB 130	mg/kg	0.000589	0.0000689					0.00000189		0.000144		
PCB 130/164	mg/kg											
PCB 131	mg/kg	0.000118	0.00000887					0.00000536	U	0.000014		
PCB 132	mg/kg	0.0031	0.000274					0.00000743		0.000507		
PCB 133	mg/kg	0.000214	0.0000349					0.00000966		0.0000585		
PCB 134	mg/kg	0.000603	0.0000519					0.00000143		0.0000867		
PCB 135	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D15-BOR-21-(0.5-1.0) D15-BOR-21 0.50-1.00 FS 11/4/2017	D15-BOR-21-(0-0.5) D15-BOR-21 0.00-0.50 FS 11/4/2017	D15-BOR-21-(4.5-5.0) D15-BOR-21 4.50-5.00 FS 11/4/2017	D15-BOR-21-(6.0-6.5) D15-BOR-21 6.00-6.50 FS 11/4/2017	D15-BOR-21-(7.8-8.0) D15-BOR-21 7.80-8.00 FS 11/4/2017	D15-BOR-21-(8.0-8.3) D15-BOR-21 8.00-8.30 FS 11/4/2017	D15-BOR-22-(0.5-1.0) D15-BOR-22 0.50-1.00 FS 11/3/2017	D15-BOR-22-(0-0.5) D15-BOR-22 0.00-0.50 FS 11/3/2017	D15-BOR-22-(2.0-2.5) D15-BOR-22 2.00-2.50 FS 11/3/2017	D15-BOR-22-(7.0-7.5) D15-BOR-22 7.00-7.50 FS 11/3/2017	D15-BOR-22-(7.8-8.0) D15-BOR-22 7.80-8.00 FS 11/3/2017
Chemical	Units											
PCB 136	mg/kg	0.00139	0.000158				0.0000452	0.000197				
PCB 137	mg/kg	0.000245	0.0000191				0.00000613	0.0000357				
PCB 138	mg/kg											
PCB 139	mg/kg											
PCB 14	mg/kg	0.000263	0.0000949				0.000396	0.00282				
PCB 140	mg/kg											
PCB 141	mg/kg	0.00155	0.00011				0.0000388	0.000643				
PCB 142	mg/kg	0.00000735 U	0.00000424				0.00000532 U	0.0000931				
PCB 143	mg/kg	0.00000659 U	0.00000888 U				0.00000491 U	0.0000124 U				
PCB 143/139	mg/kg											
PCB 144	mg/kg	0.000464	0.0000313				0.00000972	0.000085				
PCB 145	mg/kg	0.0000057	0.00000602 U				0.00000403 U	0.0000105 U				
PCB 146	mg/kg	0.0018	0.000234				0.00000447	0.000517				
PCB 147	mg/kg											
PCB 148	mg/kg	0.0000388	0.0000703				0.00000472 U	0.0000898				
PCB 149	mg/kg											
PCB 15	mg/kg	0.0013	0.000167				0.000946	0.00178				
PCB 150	mg/kg	0.0000345	0.0000103				0.00000376 U	0.0000109				
PCB 151	mg/kg											
PCB 152	mg/kg	0.0000847	0.0000128				0.00000381 U	0.0000101 U				
PCB 153	mg/kg											
PCB 154	mg/kg	0.000234	0.0000476				0.00000431 U	0.0000538				
PCB 155	mg/kg	0.0000231	0.0000062				0.00000392 U	0.0000724				
PCB 156	mg/kg											
PCB 157	mg/kg											
PCB 158	mg/kg	0.000678	0.0000537				0.0000021	0.000261				
PCB 159	mg/kg	0.000162	0.0000152				0.00000465 U	0.000102				
PCB 16	mg/kg	0.00783	0.000165				0.0000972	0.000909				
PCB 160	mg/kg	0.00000491 U	0.0000126				0.00000384 U	0.0000231				
PCB 161	mg/kg	0.00000488 U	0.00000642 U				0.00000373 U	0.00000974 U				
PCB 162	mg/kg	0.0000456	0.0000104				0.00000462 U	0.0000219				
PCB 163	mg/kg											
PCB 163/160	mg/kg											
PCB 164	mg/kg	0.000623	0.0000734				0.00000201	0.000216				
PCB 165	mg/kg	0.0000641	0.00000696 U				0.000004 U	0.0000106 U				
PCB 166	mg/kg											
PCB 167	mg/kg	0.000314	0.0000362				0.00000126	0.000184				
PCB 168	mg/kg											
PCB 169	mg/kg	0.0000577 U	0.0000036				0.00000058 U	0.0000176				
PCB 17	mg/kg	0.00686	0.000132				0.0000447	0.000396				
PCB 170	mg/kg	0.00231	0.000241				0.00000541	0.00303				
PCB 171	mg/kg											
PCB 172	mg/kg	0.000462	0.0000522				0.00000133	0.00053				
PCB 173	mg/kg											
PCB 174	mg/kg	0.00328	0.000335				0.00000572	0.00237				
PCB 175	mg/kg	0.000149	0.0000187				0.00000652 U	0.000108				
PCB 176	mg/kg	0.00035	0.0000348				0.00000791	0.000241				
PCB 177	mg/kg	0.00183	0.000208				0.0000342	0.00141				
PCB 178	mg/kg	0.000595	0.0000881				0.00000154	0.000501				
PCB 179	mg/kg	0.00136	0.000157				0.00000305	0.000741				
PCB 18	mg/kg											
PCB 180	mg/kg											
PCB 181	mg/kg	0.0000223	0.00000202 U				0.00000635 U	0.00000261 U				
PCB 182	mg/kg	0.0000323	0.00000813				0.00000594 U	0.00000248 U				
PCB 182/175	mg/kg											
PCB 183	mg/kg	0.00169	0.000188				0.00000333	0.00159				
PCB 184	mg/kg	0.0000132	0.00000536				0.00000296 U	0.0000685				
PCB 185	mg/kg	0.000286	0.0000216				0.00000676	0.000192				
PCB 186	mg/kg	0.0000113	0.00000545 U				0.00000287 U	0.00000817 U				
PCB 187	mg/kg	0.00397	0.00054				0.00000858	0.0029				
PCB 188	mg/kg	0.0000188	0.0000136				0.00000288 U	0.0000128				
PCB 189	mg/kg	0.0000852	0.0000104				0.00000464 U	0.000156				
PCB 19	mg/kg	0.00103	0.0000355				0.0000966	0.000807				
PCB 190	mg/kg	0.00041	0.0000506				0.00000099	0.000633				
PCB 191	mg/kg	0.0000898	0.00000935				0.00000513 U	0.000134				
PCB 192	mg/kg	0.00000298 U	0.00000503				0.00000534 U	0.00000633				
PCB 193	mg/kg											
PCB 194	mg/kg	0.00154	0.000225				0.00000444	0.00223				
PCB 195	mg/kg	0.000583	0.0000672				0.00000479 U	0.000868				
PCB 196	mg/kg	0.000729	0.000164				0.00000349	0.00114				
PCB 197	mg/kg	0.000058	0.0000224				0.00000187 U	0.00008				
PCB 198	mg/kg											
PCB 199	mg/kg											
PCB 2	mg/kg	0.000872	0.000425				0.0035	0.075				
PCB 20	mg/kg											
PCB 200	mg/kg	0.000182	0.0000271				0.00000668	0.000223				

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA											
		D15-BOR-21-(0.5-1.0)	D15-BOR-21-(0-0.5)	D15-BOR-21-(4.5-5.0)	D15-BOR-21-(6.0-6.5)	D15-BOR-21-(7.8-8.0)	D15-BOR-21-(8.0-8.3)	D15-BOR-22-(0.5-1.0)	D15-BOR-22-(0-0.5)	D15-BOR-22-(2.0-2.5)	D15-BOR-22-(7.0-7.5)	D15-BOR-22-(7.8-8.0)	D15-BOR-22-(8.0-8.2)
Chemical	Units	D15-BOR-21 0.50-1.00 FS 11/4/2017	D15-BOR-21 0.00-0.50 FS 11/4/2017	D15-BOR-21 4.50-5.00 FS 11/4/2017	D15-BOR-21 6.00-6.50 FS 11/4/2017	D15-BOR-21 7.80-8.00 FS 11/4/2017	D15-BOR-21 8.00-8.30 FS 11/4/2017	D15-BOR-22 0.50-1.00 FS 11/3/2017	D15-BOR-22 0.00-0.50 FS 11/3/2017	D15-BOR-22 2.00-2.50 FS 11/3/2017	D15-BOR-22 7.00-7.50 FS 11/3/2017	D15-BOR-22 7.80-8.00 FS 11/3/2017	D15-BOR-22 8.00-8.20 FS 11/3/2017
PCB 201	mg/kg	0.000269	0.0000714					0.00000138	0.000254				
PCB 202	mg/kg	0.000678	0.000183					0.00000724	0.000393				
PCB 203	mg/kg	0.00103	0.000228					0.00000777	0.00132				
PCB 204	mg/kg	0.0000503	0.0000358					0.00000199	U	0.00000394			
PCB 204/200	mg/kg												
PCB 205	mg/kg	0.0000724	0.0000115					0.00000041	U	0.000116			
PCB 206	mg/kg	0.00552	0.0017					0.0000978	0.00263				
PCB 207	mg/kg	0.000472	0.000159					0.00000594	0.000224				
PCB 208	mg/kg	0.0026	0.000827					0.000045	0.00115				
PCB 209	mg/kg	0.011	0.0024					0.000108	0.00331				
PCB 21	mg/kg												
PCB 21/20	mg/kg												
PCB 22	mg/kg	0.00547	0.000144					0.000021	0.000414				
PCB 23	mg/kg	0.0000338	0.00000959					0.0000047	0.0000735				
PCB 24	mg/kg	0.000309	0.0000371					0.0000339	0.000346				
PCB 25	mg/kg	0.00271	0.000133					0.00000424	0.000151				
PCB 26	mg/kg												
PCB 27	mg/kg	0.00107	0.0000552					0.00000629	0.000088				
PCB 28	mg/kg												
PCB 29	mg/kg												
PCB 3	mg/kg	0.001	0.00031					0.00507	0.0418				
PCB 30	mg/kg												
PCB 31	mg/kg	0.0141	0.000376					0.0000418	0.00095				
PCB 32	mg/kg	0.00374	0.0000853					0.0000154	0.000174				
PCB 33	mg/kg												
PCB 34	mg/kg	0.000239	0.000029					0.00000647	0.000146				
PCB 35	mg/kg	0.000672	0.0000795					0.000061	0.000356				
PCB 36	mg/kg	0.0000651	0.0000292					0.00000446	0.00012				
PCB 37	mg/kg	0.003	0.000352					0.000124	0.00131				
PCB 38	mg/kg	0.0000325	0.00000198	U				0.00000127	U	0.00000628	U		
PCB 39	mg/kg	0.000226	0.0000504					0.0000121	0.00024				
PCB 4	mg/kg	0.00277	0.000315					0.00172	0.0518				
PCB 4/10	mg/kg												
PCB 40	mg/kg												
PCB 41	mg/kg	0.000935	0.0000242					0.00000137	0.0000277				
PCB 42	mg/kg	0.00532	0.000163					0.00000402	0.000127				
PCB 43	mg/kg	0.000694	0.0000227					0.00000879	U	0.0000239			
PCB 44	mg/kg												
PCB 45	mg/kg	0.00328	0.0000749					0.00000142	0.0000675				
PCB 46	mg/kg	0.00131	0.0000383					0.00000873	U	0.0000264			
PCB 47	mg/kg												
PCB 48	mg/kg	0.00435	0.000079					0.00000297	0.0000681				
PCB 49	mg/kg												
PCB 5	mg/kg	0.000648	0.0000656					0.0000227	0.00374				
PCB 50	mg/kg												
PCB 51	mg/kg	0.000897	0.0000659					0.00000649	U	0.000027			
PCB 52	mg/kg	0.0199	0.000646					0.0000175	0.000619				
PCB 53	mg/kg												
PCB 54	mg/kg	0.000044	0.00000642					0.00000385	U	0.00000487			
PCB 55	mg/kg	0.000242	0.00000918					0.00000787	U	0.00000505	U		
PCB 56	mg/kg	0.00829	0.000245					0.000041	0.000264				
PCB 57	mg/kg	0.0000763	0.00000493					0.00000073	U	0.00000916			
PCB 58	mg/kg	0.0000684	0.00000493					0.000000708	U	0.00000725			
PCB 59	mg/kg												
PCB 6	mg/kg	0.00384	0.000243					0.00132	0.0155				
PCB 60	mg/kg	0.00196	0.0000578					0.00000304	0.0000685				
PCB 61	mg/kg												
PCB 62	mg/kg												
PCB 63	mg/kg	0.00056	0.0000192					0.00000112	0.0000319				
PCB 64	mg/kg	0.00664	0.000199					0.00000557	0.000207				
PCB 65	mg/kg												
PCB 65/75/62	mg/kg												
PCB 66	mg/kg	0.0129	0.000416					0.0000186	0.000456				
PCB 67	mg/kg	0.000537	0.0000185					0.000000964	0.0000218				
PCB 67/58	mg/kg												
PCB 68	mg/kg	0.0000993	0.00002					0.000000854	U	0.00000961			
PCB 68/64	mg/kg												
PCB 69	mg/kg												
PCB 7	mg/kg	0.000289	0.0000324					0.000187	0.00236				
PCB 70	mg/kg												
PCB 71	mg/kg												
PCB 72	mg/kg	0.000181	0.000016					0.000000701	U	0.0000205			
PCB 73	mg/kg	0.000000914	U	0.00000717				0.000000568	U	0.00000447			
PCB 73/46	mg/kg												
PCB 74	mg/kg												
PCB 75	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA	
		D15-BOR-21-(0.5-1.0)	D15-BOR-21-(0-0.5)	D15-BOR-21-(4.5-5.0)	D15-BOR-21-(6.0-6.5)	D15-BOR-21-(7.8-8.0)	D15-BOR-21-(8.0-8.3)	D15-BOR-22-(0.5-1.0)	D15-BOR-22-(0-0.5)	D15-BOR-22-(2.0-2.5)	D15-BOR-22-(7.0-7.5)	D15-BOR-22-(7.8-8.0)	D15-BOR-22-(8.0-8.2)		
PCB 76	mg/kg														
PCB 77	mg/kg	0.00133	0.000083												
PCB 78	mg/kg	0.0000199 U	0.0000277 U												
PCB 79	mg/kg	0.000158	0.0000109												
PCB 8	mg/kg	0.00536	0.000388												
PCB 80	mg/kg	0.0000158 U	0.0000219 U												
PCB 81	mg/kg	0.0000346	0.0000239 U												
PCB 82	mg/kg	0.00153	0.0000642												
PCB 83	mg/kg	0.000522	0.0000374												
PCB 83/125/112	mg/kg														
PCB 84	mg/kg	0.0035	0.000203												
PCB 85	mg/kg														
PCB 86	mg/kg														
PCB 86/109	mg/kg														
PCB 87	mg/kg														
PCB 87/111	mg/kg														
PCB 88	mg/kg	0.0000238 U	0.000197												
PCB 89	mg/kg	0.000283	0.0000118												
PCB 89/84	mg/kg														
PCB 9	mg/kg	0.000868	0.00015												
PCB 90	mg/kg														
PCB 91	mg/kg	0.00154	0.0000459 U												
PCB 92	mg/kg	0.00222	0.000162												
PCB 93	mg/kg														
PCB 94	mg/kg	0.000114	0.0000105												
PCB 95	mg/kg	0.00859	0.000557												
PCB 96	mg/kg	0.000189	0.0000112												
PCB 97	mg/kg														
PCB 98	mg/kg	0.0000207 U	0.0000134												
PCB 99	mg/kg	0.0059	0.000406												
PCB-100/93	mg/kg	0.000184	0.0000234												
PCB-107/124	mg/kg	0.000277	0.0000177												
PCB-108/119/86/97/125/87	mg/kg	0.00681	0.000381												
PCB-113/90/101	mg/kg	0.0106	0.000669												
PCB-116/85	mg/kg	0.00203	0.000112												
PCB-128/166	mg/kg	0.00134	0.000143												
PCB-131/12	mg/kg	0.00205	0.000302												
PCB-139/140	mg/kg	0.000174	0.0000187												
PCB-147/149	mg/kg	0.00845	0.000895												
PCB-151/135	mg/kg	0.00402	0.000381												
PCB-153/168	mg/kg	0.00759	0.000784												
PCB-156/157	mg/kg	0.000832	0.0000803												
PCB-163/138/129	mg/kg	0.00869	0.000853												
PCB-171/173	mg/kg	0.000825	0.0000805												
PCB-180/193	mg/kg	0.00539	0.00058												
PCB-198/199	mg/kg	0.00211	0.000558												
PCB-21/33	mg/kg	0.00694	0.000244												
PCB-26/29	mg/kg	0.0036	0.000125												
PCB-28/20	mg/kg	0.0172	0.000411												
PCB-30/18	mg/kg	0.0126	0.000285												
PCB-44/47/65	mg/kg	0.0171	0.000593												
PCB-50/53	mg/kg	0.00238	0.000107												
PCB-59/62/75	mg/kg	0.00163	0.0000509												
PCB-61/70/74/76	mg/kg	0.0225	0.000673												
PCB-69/49	mg/kg	0.0108	0.000388												
PCB-71/40	mg/kg	0.0089	0.000304												
PCB-90/101	mg/kg														
Pentachlorobiphenyl	mg/kg														
Tetrachlorobiphenyl	mg/kg														
Total Decachlorobiphenyls (congeners)	mg/kg														
Total Dichlorobiphenyls (congeners)	mg/kg	0.0185	0.00193												
Total Heptachlorobiphenyls (congeners)	mg/kg	0.0232	0.00265												
Total Hexachlorobiphenyls (congeners)	mg/kg	0.0433	0.00443												
Total Monochlorobiphenyls (congeners)	mg/kg	0.00313	0.00121												
Total Nonachlorobiphenyls (congeners)	mg/kg	0.00858	0.00268												
Total Octachlorobiphenyls (congeners)	mg/kg	0.00725	0.00156												
Total PCB (congeners)	mg/kg	0.40246	0.02839												
Total Pentachlorobiphenyls (congeners)	mg/kg	0.0668	0.0044												
Total Tetrachlorobiphenyls (congeners)	mg/kg	0.133	0.00435												
Total Trichlorobiphenyls (congeners)	mg/kg	0.0877	0.00278												
Trichlorobiphenyl (total)	mg/kg														
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>															
Benzo[e]pyrene	mg/kg														
Chrysene, 1-methyl-	mg/kg														
Naphthalene, 1-methyl-	mg/kg														
Pyrene, 1-methyl-	mg/kg														

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	D15-BOR-21-(0.5-1.0)	D15-BOR-21-(0-0.5)	D15-BOR-21-(4.5-5.0)	D15-BOR-21-(6.0-6.5)	D15-BOR-21-(7.8-8.0)	D15-BOR-21-(8.0-8.3)	D15-BOR-22-(0.5-1.0)	D15-BOR-22-(0-0.5)	D15-BOR-22-(2.0-2.5)	D15-BOR-22-(7.0-7.5)	D15-BOR-22-(7.8-8.0)	D15-BOR-22-(8.0-8.2)	
Location ID	D15-BOR-21	D15-BOR-21	D15-BOR-21	D15-BOR-21	D15-BOR-21	D15-BOR-21	D15-BOR-22	D15-BOR-22	D15-BOR-22	D15-BOR-22	D15-BOR-22	D15-BOR-22	
Depth Interval (ft)	0.50-1.00	0.00-0.50	4.50-5.00	6.00-6.50	7.80-8.00	8.00-8.30	0.50-1.00	0.00-0.50	2.00-2.50	7.00-7.50	7.80-8.00	8.00-8.20	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Chemical Class	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	
Chemical	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	
<b>Polycyclic Aromatic Hydrocarbons</b>													
Acenaphthene	mg/kg	0.028	0.017	0.004	U	0.004	U	0.004	U	0.005	0.17	0.004	U
Acenaphthylene	mg/kg	0.012	0.018	0.004	U	0.004	U	0.004	U	0.004	0.024	0.004	U
Anthracene	mg/kg	0.028	0.025	0.004	U	0.004	U	0.004	U	0.004	0.059	0.004	U
Benzo(A)Anthracene	mg/kg	0.047	0.078	0.004	U	0.004	U	0.004	U	0.004	0.1	0.004	U
Benzo(B)Fluoranthene	mg/kg	0.05	0.095	0.004	U	0.004	U	0.004	U	0.004	0.098	0.004	U
Benzo(G,H,I)Perylene	mg/kg	0.028	0.057	0.004	U	0.004	U	0.004	U	0.004	0.05	0.004	U
Benzo(K)Fluoranthene	mg/kg	0.02	0.05	0.004	U	0.004	U	0.004	U	0.004	0.049	0.004	U
Benzo(A)Pyrene	mg/kg	0.045	0.08	0.004	U	0.004	U	0.004	U	0.004	0.086	0.004	U
Chrysene	mg/kg	0.069	0.1	0.004	U	0.004	U	0.004	U	0.004	0.2	0.004	U
Dibenz(A,H)Anthracene	mg/kg	0.013	0.018	0.004	U	0.004	U	0.004	U	0.004	0.015	0.004	U
Fluoranthene	mg/kg	0.069	0.11	0.004	U	0.004	U	0.004	U	0.004	0.15	0.004	U
Fluorene	mg/kg	0.024	0.017	0.004	U	0.004	U	0.004	U	0.016	0.26	0.004	U
Indeno (1,2,3-CD) Pyrene	mg/kg	0.027	0.059	0.004	U	0.004	U	0.004	U	0.004	0.039	0.004	U
Naphthalene	mg/kg	0.088	0.093	0.004	U	0.004	U	0.011	0.006	0.024	0.43	0.004	U
Phenanthrene	mg/kg	0.061	0.061	0.004	U	0.004	U	0.004	U	0.055	1	0.019	0.007
Pyrene	mg/kg	0.074	0.11	0.004	U	0.004	U	0.004	U	0.004	0.16	0.004	U
Total PAHs (Detections + 1/2 MDL)	mg/kg	0.683	0.988	0.032	U	0.032	U	0.041	0.036	0.124	2.89	0.051	0.049
Total PAHs (Detections Only)	mg/kg	0.683	0.988	0.032	U	0.032	U	0.011	0.006	0.1	2.89	0.023	0.021
<b>Semivolatile Organic Compounds - TICs</b>													
1,2,4-Trithiolane	mg/kg												
1,4-Benzenediol, 2-chloro-	mg/kg												
11H-Benzo[b]fluorene	mg/kg												
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg												
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg												
3-PENTEN-2-ONE, 4-METHYL-	mg/kg												
7H-Benz[de]anthracen-7-one	mg/kg												
9,10-Anthracenedione	mg/kg												
9-Octadecenamido, (Z)-	mg/kg												
Acetamide, 2-chloro-N-(ethox	mg/kg												
Alachlor	mg/kg		0.33										
Benzenamine, 3-methyl-	mg/kg												
Benzenamine, 4,4',4"-methy	mg/kg												
Benzenamine, 4,4'-methyleneb	mg/kg												
Benzene, 1,2,3,4-tetrachloro	mg/kg												
Benzene, 1,2,3,5-tetrachloro	mg/kg												
Benzene, 1,2,3-trichloro-	mg/kg												
Benzene, 1,3,5-trichloro-	mg/kg												
Benzene, 1,3-bis(1-methyleth	mg/kg												
Benzene, 1,4-bis(1-methyleth	mg/kg												
Benzofuran, 2,3-dihydro-	mg/kg												
CYCLIC OCTAATOMIC SULFUR	mg/kg								2				
Diphenyl Ether	mg/kg												
Docosane	mg/kg												
Heneicosane	mg/kg												
Hexacosane	mg/kg												
Hexadecane	mg/kg												
Hexatriacontane	mg/kg												
m-Chloroaniline	mg/kg	0.45											
N,N-Diethylaniline	mg/kg												
n-Hexadecanoic acid	mg/kg	0.29	0.27				0.23	0.18					0.2
Nonadecane	mg/kg												
o-Chloroaniline	mg/kg												
Octacosane	mg/kg												
Octadecane	mg/kg												
Octadecane, 1-chloro-	mg/kg												
Octadecanoic acid	mg/kg												
Parachlorophenol	mg/kg												
Pentadecane	mg/kg												
Perylene	mg/kg												
Phenol, 2,5-dichloro-	mg/kg												
Phenol, 3-chloro-	mg/kg												
Phenol, 4,4'-(1-methylethyl)	mg/kg	1.1	2.7			0.17	0.46	0.21	3.9				
Tetracosane	mg/kg												
Tetradecane	mg/kg												
Tetraethylene glycol	mg/kg												
Total SVOC TICs	mg/kg	12	14	0.6	0.62	0.98	0.96	3.8	17	0.52	0.56	0.51	0.6
Triacotane	mg/kg												
Tributyl phosphate	mg/kg												
Tridecanoic acid	mg/kg												
Triphenyl phosphate	mg/kg												
UNKNOWN	mg/kg	0.502857143	0.538461538			0.21		0.2475	0.736153846				
Unknown acid	mg/kg												
Unknown Alcohol	mg/kg												
Unknown Aldol Condensate	mg/kg	0.5	1.4	0.39	0.39	0.17	0.27	0.43		0.38	0.37	0.36	0.4
UNKNOWN ALKANE	mg/kg												

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	Field Sample ID	MZ-FPA																							
		D15-BOR-21-(0.5-1.0)	D15-BOR-21-(0-0.5)	D15-BOR-21-(4.5-5.0)	D15-BOR-21-(6.0-6.5)	D15-BOR-21-(7.8-8.0)	D15-BOR-21-(8.0-8.3)	D15-BOR-22-(0.5-1.0)	D15-BOR-22-(0-0.5)	D15-BOR-22-(2.0-2.5)	D15-BOR-22-(7.0-7.5)	D15-BOR-22-(7.8-8.0)	D15-BOR-22-(8.0-8.2)												
Location ID	D15-BOR-21	D15-BOR-21	D15-BOR-21	D15-BOR-21	D15-BOR-21	D15-BOR-21	D15-BOR-22	D15-BOR-22	D15-BOR-22	D15-BOR-22	D15-BOR-22	D15-BOR-22													
Depth Interval (ft)	0.50-1.00	0.00-0.50	4.50-5.00	6.00-6.50	7.80-8.00	8.00-8.30	0.50-1.00	0.00-0.50	2.00-2.50	7.00-7.50	7.80-8.00	8.00-8.20													
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS													
Date	11/4/2017	11/4/2017	11/4/2017	11/4/2017	11/4/2017	11/4/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017													
Chemical Class	Units																								
Unknown Alkene	mg/kg																								
Unknown Amide	mg/kg																								
Unknown Amine	mg/kg																								
UNKNOWN AROMATIC	mg/kg																								
Unknown Carboxylic Acid	mg/kg																								
Unknown Cycloalkane	mg/kg																								
Unknown Hydrocarbon	mg/kg																								
Unknown Ketone	mg/kg																								
Unknown PAH	mg/kg																								
UNKNOWN SILOXANE	mg/kg																								
<b>Semivolatile Organic Compounds</b>																									
1,2,4-Trichlorobenzene	mg/kg	0.033	U	0.048	U	0.019	U	0.019	U	0.018	U	0.02	U	0.02	U	0.018	U	0.018	U	0.018	U	0.018	U	0.021	U
1,2-Diphenylhydrazine	mg/kg	0.033	U	0.031	U	0.019	U	0.019	U	0.018	U	0.02	U	0.02	U	0.028	U	0.018	U	0.018	U	0.018	U	0.021	U
1,4-Dioxane	mg/kg	0.2	U	0.19	U	0.11	U	0.11	U	0.12	U	0.12	U	0.17	U	0.11	U	0.11	U	0.11	U	0.11	U	0.12	U
1-Naphthylamine	mg/kg	0.33	U	0.31	U	0.19	U	0.19	U	0.18	U	0.2	U	0.28	U	0.18	U	0.18	U	0.18	U	0.18	U	0.21	U
2,3,4,6-Tetrachlorophenol	mg/kg	0.13	U	0.12	U	0.075	U	0.074	U	0.073	U	0.082	U	0.079	U	0.11	U	0.074	U	0.074	U	0.073	U	0.083	U
2,4,5-Trichlorophenol	mg/kg	0.033	U	0.031	U	0.019	U	0.019	U	0.018	U	0.02	U	0.02	U	0.028	U	0.018	U	0.018	U	0.018	U	0.021	U
2,4,6-Trichlorophenol	mg/kg	0.033	U	0.031	U	0.019	U	0.019	U	0.018	U	0.02	U	0.02	U	0.028	U	0.018	U	0.018	U	0.018	U	0.021	U
2,4-Dichlorophenol	mg/kg	0.033	U	0.031	U	0.019	U	0.019	U	0.018	U	0.02	U	0.02	U	0.028	U	0.018	U	0.018	U	0.018	U	0.021	U
2,4-Dimethylphenol	mg/kg	0.033	U	0.031	U	0.019	U	0.019	U	0.018	U	0.02	U	0.02	U	0.028	U	0.018	U	0.018	U	0.018	U	0.021	U
2,4-Dinitrophenol	mg/kg	0.59	U	0.56	U	0.34	U	0.33	U	0.33	U	0.37	U	0.36	U	0.5	U	0.33	U	0.33	U	0.33	U	0.37	U
2,4-Dinitrotoluene	mg/kg	0.13	U	0.12	U	0.075	U	0.074	U	0.073	U	0.082	U	0.079	U	0.11	U	0.074	U	0.074	U	0.073	U	0.083	U
2,6-Dinitrotoluene	mg/kg	0.033	U	0.031	U	0.019	U	0.019	U	0.018	U	0.02	U	0.02	U	0.028	U	0.018	U	0.018	U	0.018	U	0.021	U
2-Chloronaphthalene	mg/kg	0.013	U	0.012	U	0.007	U	0.007	U	0.007	U	0.008	U	0.008	U	0.011	U	0.007	U	0.007	U	0.007	U	0.008	U
2-Chlorophenol	mg/kg	0.033	U	0.031	U	0.019	U	0.019	U	0.018	U	0.02	U	0.02	U	0.028	U	0.018	U	0.018	U	0.018	U	0.021	U
2-Methylnaphthalene	mg/kg	0.054	U	0.035	U	0.004	U	0.004	U	0.004	U	0.004	U	0.007	U	0.021	U	0.004	U	0.004	U	0.004	U	0.004	U
2-Methylphenol (O-Cresol)	mg/kg	0.033	U	0.031	U	0.019	U	0.019	U	0.018	U	0.02	U	0.02	U	0.028	U	0.018	U	0.018	U	0.018	U	0.021	U
2-Naphthylamine	mg/kg	0.33	U	0.31	U	0.19	U	0.19	U	0.18	U	0.2	U	0.2	U	0.28	U	0.18	U	0.18	U	0.18	U	0.21	U
2-Nitroaniline	mg/kg	0.033	U	0.031	U	0.019	U	0.019	U	0.018	U	0.02	U	0.02	U	0.028	U	0.018	U	0.018	U	0.018	U	0.021	U
2-Nitrophenol	mg/kg	0.033	U	0.031	U	0.019	U	0.019	U	0.018	U	0.02	U	0.02	U	0.028	U	0.018	U	0.018	U	0.018	U	0.021	U
3,3'-Dichlorobenzidine	mg/kg	0.2	U	0.19	U	0.11	U	0.11	U	0.12	U	0.12	U	0.17	U	0.11	U	0.11	U	0.11	U	0.11	U	0.12	U
3,3'-Dimethylbenzidine	mg/kg																								
3-Nitroaniline	mg/kg	0.13	U	0.12	U	0.075	U	0.074	U	0.073	U	0.082	U	0.079	U	0.11	U	0.074	U	0.074	U	0.073	U	0.083	U
4,6-Dinitro-2-Methylphenol	mg/kg	0.33	U	0.31	U	0.19	U	0.19	U	0.18	U	0.2	U	0.2	U	0.28	U	0.18	U	0.18	U	0.18	U	0.21	U
4-Aminobiphenyl	mg/kg	0.33	U	0.31	U	0.19	U	0.19	U	0.18	U	0.2	U	0.2	U	0.28	U	0.18	U	0.18	U	0.18	U	0.21	U
4-Bromophenyl Phenyl Ether	mg/kg	0.033	U	0.031	U	0.019	U	0.019	U	0.018	U	0.02	U	0.02	U	0.028	U	0.018	U	0.018	U	0.018	U	0.021	U
4-Chloro-3-Methylphenol	mg/kg	0.033	U	0.031	U	0.019	U	0.019	U	0.018	U	0.02	U	0.02	U	0.028	U	0.018	U	0.018	U	0.018	U	0.021	U
4-Chloroaniline	mg/kg	0.065	U	0.062	U	0.037	U	0.037	U	0.036	U	0.041	U	0.04	U	0.056	U	0.037	U	0.037	U	0.036	U	0.042	U
4-Chlorophenyl Phenyl Ether	mg/kg	0.033	U	0.031	U	0.019	U	0.019	U	0.018	U	0.02	U	0.02	U	0.028	U	0.018	U	0.018	U	0.018	U	0.021	U
4-Methylphenol (P-Cresol)	mg/kg	0.041	U	0.095	U	0.019	U	0.019	U	0.018	U	0.02	U	0.02	U	0.028	U	0.018	U	0.018	U	0.018	U	0.021	U
4-Nitroaniline	mg/kg	0.13	U	0.12	U	0.075	U	0.074	U	0.073	U	0.082	U	0.079	U	0.11	U	0.074	U	0.074	U	0.073	U	0.083	U
4-Nitrophenol	mg/kg	0.33	U	0.31	U	0.19	U	0.19	U	0.18	U	0.2	U	0.2	U	0.28	U	0.18	U	0.18	U	0.18	U	0.21	U
Acetophenone	mg/kg	0.033	U	0.031	U	0.019	U	0.019	U	0.018	U	0.02	U	0.02	U	0.028	U	0.018	U	0.018	U	0.018	U	0.021	U
Aniline	mg/kg	0.33	U	0.31	U	0.19	U	0.19	U	0.18	U	0.2	U	0.2	U	0.28	U	0.18	U	0.18	U	0.18	U	0.21	U
Benzidine	mg/kg	0.49	U	0.47	U	0.28	U	0.27	U	0.27	U	0.31	U	0.28	U	0.42	U	0.28	U	0.28	U	0.27	U	0.31	U
Biphenyl	mg/kg	0.033	U	0.031	U	0.019	U	0.019	U	0.018	U	0.02	U	0.02	U	0.028	U	0.018	U	0.018	U	0.018	U	0.021	U
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg	0.033	U	0.031	U	0.019	U	0.019	U	0.018	U	0.02	U	0.02	U	0.028	U	0.018	U	0.018	U	0.018	U	0.021	U
Bis(2-Chloroethoxy)Methane	mg/kg	0.033	U	0.031	U	0.019	U	0.019	U	0.018	U	0.02	U	0.02	U	0.028	U	0.018	U	0.018	U	0.018	U	0.021	U
Bis(2-Chloroethyl)Ether	mg/kg	0.033	U	0.031	U	0.019	U	0.019	U	0.018	U	0.02	U	0.02	U	0.028	U	0.018	U	0.018	U	0.018	U	0.021	U
Bis(2-Chloroisopropyl)Ether	mg/kg																								
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.22	U	0.12	U	0.075	U	0.074	U	0.073	U	0.082	U	0.079	U	0.11	U	0.074	U	0.074	U	0.073	U	0.083	U
Butyl Benzyl Phthalate	mg/kg	0.13	U	0.12	U	0.075	U	0.074	U	0.073	U	0.082	U	0.079	U	0.11	U	0.074	U	0.074	U	0.073	U	0.083	U
Carbazole	mg/kg	0.033	U	0.031	U	0.019	U	0.019	U	0.018	U	0.02	U	0.02	U	0.028	U	0.018	U	0.018	U	0.018	U	0.021	U
Dibenzofuran	mg/kg	0.033	U	0.031	U	0.019	U	0.019	U	0.018	U	0.02	U	0.02	U	0.028	U	0.018	U	0.018	U	0.018	U	0.021	U
Diethyl Phthalate	mg/kg	0.13	U	0.12	U	0.075	U	0.074	U	0.073	U	0.082	U	0.079	U	0.11	U	0.074	U	0.074	U	0.073	U	0.083	U
Dimethyl Phthalate	mg/kg	0.13	U	0.12	U	0.075	U	0.074	U	0.073	U	0.082	U	0.079	U	0.11	U	0.074	U	0.074	U	0.073	U	0.083	U
Di-N-Butyl Phthalate	mg/kg	0.13	U	0.12	U	0.075	U	0.074	U	0.073	U	0.082	U	0.079	U	0.11	U	0.074	U	0.074	U	0.073	U	0.083	U
Diphenyl Ether	mg/kg	0.042	U	0.031	U	0.019	U	0.019	U	0.018	U	0.02	U	0.02	U	0.028	U	0.018	U	0.018	U	0.018	U	0.021	U
Hexachlorobenzene	mg/kg	0.007	U	0.006	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.006	U	0.004	U	0.004	U	0.004	U	0.004	U
Hexachlorobutadiene	mg/kg	0.033	U	0.031	U	0.019	U	0.019	U	0.018	U	0.02	U	0.02	U	0.028	U	0.018	U	0.018	U	0.018	U	0.021	U
Hexachlorocyclopentadiene	mg/kg	0.33	U	0.31	U	0.19	U	0.19	U	0.18	U	0.2	U	0.2	U	0.28	U	0.18	U	0.18	U	0.18	U	0.21	U
Hexachloroethane	mg/kg	0.065	U	0.062	U	0.037	U	0.037	U	0.036	U	0.041													

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	MZ-FPA																			
		D15-BOR-21-(0.5-1.0)																			
Location ID	Location ID	D15-BOR-21																			
Depth Interval (ft)	Depth Interval (ft)	0.50-1.00	0.50-1.00	4.50-5.00	6.00-6.50	7.80-8.00	8.00-8.30	8.00-8.30	8.00-8.30	8.00-8.30	8.00-8.30	8.00-8.30	8.00-8.30	8.00-8.30	8.00-8.30						
Sample Purpose	Sample Purpose	FS																			
Date	Date	11/4/2017	11/4/2017	11/4/2017	11/4/2017	11/4/2017	11/4/2017	11/4/2017	11/4/2017	11/4/2017	11/4/2017	11/4/2017	11/4/2017	11/4/2017	11/4/2017						
Chemical Class	Chemical Class																				
Chemical	Units																				
1-Butene	mg/kg																				
1-Heptene	mg/kg																				
1-Propene, 2-methyl-	mg/kg							0.005				0.035									
Azulene	mg/kg																				
BENZENE, 1,2,4-TRICHLORO-	mg/kg																				
BENZENE, 1,2-DICHLORO-	mg/kg																				
BENZENE, 1,4-DICHLORO-	mg/kg																				
Camphene	mg/kg																				
CYCLOHEXANE	mg/kg																				
Cyclohexane, methyl-	mg/kg											0.17									
Cyclotrisiloxane, hexamethyl	mg/kg																				
Diphenyl Ether	mg/kg																				
Ethane, 1,1,2,2-tetrachloro-	mg/kg											0.14									
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg																				
Ethane, 1,2-dichloro-1,1-dif	mg/kg																				
Ethene, 1,1-dichloro-2,2-dif	mg/kg																				
Hexane, 2-methyl-	mg/kg											0.019									
Hexane, 3-methyl-	mg/kg											0.028									
METHANE, CHLOROFLUORO-	mg/kg																				
Naphthalene	mg/kg																				
NAPHTHALENE, 2-METHYL-	mg/kg																				
Nonanal	mg/kg																				
Norflurane	mg/kg																				
Pentane, 2,3-dimethyl-	mg/kg											0.013									
Phenol, 4-(1,1,3,3-tetrameth	mg/kg																				
Propene	mg/kg																				
Sulfur dioxide	mg/kg																				
Tridecane	mg/kg																				
UNKNOWN	mg/kg	0.099214286										0.072									
UNKNOWN ALICYCLIC	mg/kg																				
UNKNOWN ALIPHATIC	mg/kg																				
UNKNOWN ALKANE	mg/kg											0.12									
UNKNOWN AROMATIC	mg/kg																				
UNKNOWN SILOXANE	mg/kg																				
<b>Volatile Organic Compounds</b>																					
1,1,1,2-Tetrachloroethane	mg/kg	0.002	U	0.002	U	0.001	U	0.058	U	0.001	U	0.052	U	0.003	U	0.004	U	0.001	U	0.061	U
1,1,1-Trichloroethane	mg/kg	0.002	U	0.002	U	0.001	U	0.058	U	0.001	U	0.052	U	0.001	U	0.002	U	0.001	U	0.061	U
1,1,1-Trichlorotrifluoroethane	mg/kg	0.011	U	0.011	U	0.005	U	0.006	U	0.007	U	0.006	U	0.006	U	0.011	U	0.005	U	0.006	U
1,1,2,2-Tetrachloroethane	mg/kg	0.002	U	0.002	U	0.001	U	0.058	U	0.001	U	0.052	U	0.001	U	0.008	U	0.001	U	0.061	U
1,1,2-Trichloroethane	mg/kg	0.002	U	0.002	U	0.001	U	0.058	U	0.001	U	0.052	U	0.001	U	0.002	U	0.001	U	0.061	U
1,1,2-Trichlorotrifluoroethane	mg/kg	0.004	U	0.005	U	0.002	U	0.12	U	0.005	U	0.1	U	0.15	U	0.98	U	0.014	U	0.018	U
1,1,2-Trifluoroethane	mg/kg	0.004	U	0.004	U	0.002	U	0.002	U	0.003	U	0.002	U	0.002	U	0.004	U	0.002	U	0.002	U
1,1-Dichloro-1-Fluoroethane	mg/kg	0.002	U	0.002	U	0.001	U	0.002	U	0.001	U	0.001	U								
1,1-Dichloroethane	mg/kg	0.002	U	0.002	U	0.001	U	0.058	U	0.001	U	0.052	U	0.001	U	0.002	U	0.001	U	0.061	U
1,1-Dichloroethene	mg/kg	0.002	U	0.002	U	0.001	U	0.058	U	0.001	U	0.052	U	0.003	U	0.068	U	0.001	U	0.061	U
1,1-Dichloropropene	mg/kg	0.002	U	0.002	U	0.001	U	0.058	U	0.001	U	0.052	U	0.001	U	0.002	U	0.001	U	0.061	U
1,2,4-Trimethylbenzene	mg/kg	0.006	U	0.002	U	0.001	U	0.058	U	0.001	U	0.052	U	0.001	U	0.039	U	0.001	U	0.061	U
1,2-Dibromoethane (EDB)	mg/kg	0.002	U	0.002	U	0.001	U	0.058	U	0.001	U	0.052	U	0.001	U	0.002	U	0.001	U	0.061	U
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.006	U	0.001	U	0.11	U	0.001	U	0.002	U
1,2-Dichloro-1-Fluoroethane	mg/kg	0.002	U	0.002	U	0.001	U	0.002	U	0.001	U	0.001	U								
1,2-Dichlorobenzene	mg/kg	0.012	U	0.007	U	0.002	U	0.14	U	0.049	U	0.73	U	0.039	U	4.3	U	0.006	U	0.18	U
1,2-Dichloroethane	mg/kg	0.002	U	0.002	U	0.001	U	0.058	U	0.001	U	0.052	U	0.001	U	0.002	U	0.001	U	0.061	U
1,2-Dichloroethene	mg/kg	0.002	U	0.002	U	0.001	U	0.058	U	0.001	U	0.052	U	0.001	U	0.014	U	0.001	U	0.061	U
1,2-Dichloropropane	mg/kg	0.002	U	0.002	U	0.001	U	0.058	U	0.001	U	0.052	U	0.001	U	0.002	U	0.001	U	0.061	U
1,2-Dichlorotetrafluoroethane	mg/kg	0.004	U	0.004	U	0.002	U	0.002	U	0.003	U	0.002	U	0.002	U	0.034	U	0.002	U	0.002	U
1,3,5-Trimethylbenzene	mg/kg	0.003	U	0.002	U	0.001	U	0.058	U	0.001	U	0.052	U	0.001	U	0.006	U	0.001	U	0.061	U
1,3-Dichlorobenzene	mg/kg	0.004	U	0.002	U	0.001	U	0.058	U	0.004	U	0.06	U	0.001	U	0.31	U	0.001	U	0.008	U
1,4-Dichlorobenzene	mg/kg	0.019	U	0.004	U	0.005	U	0.3	U	0.11	U	1.4	U	0.063	U	11	U	0.006	U	0.24	U
1-Chloro-1,1-Difluoroethane	mg/kg	0.002	U	0.002	U	0.001	U	0.002	U	0.001	U	0.001	U								
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg	0.002	U	0.002	U	0.001	U	0.1	U	0.001	U	0.012	U								
2-Chloro-1,1,1-Trifluoroethane	mg/kg	0.004	U	0.005	U	0.002	U	0.12	U	0.002	U	0.1	U	0.002	U	0.004	U	0.002	U	0.002	U
2-Chloroethyl Vinyl Ether	mg/kg																			0.12	U
2-Chlorotoluene	mg/kg	0.008	U	0.002	U	0.001	U	0.058	U	0.001	U	0.052	U	0.001	U	0.01	U	0.001	U	0.061	U
2-Hexanone	mg/kg	0.007	U	0.007	U	0.003	U	0.17	U	0.003	U	0.16	U	0.004	U	0.006	U	0.003	U	0.003	U
4-Chlorotoluene	mg/kg	0.002	U	0.002	U	0.001	U	0.058	U	0.001	U	0.052	U	0.001	U	0.004	U	0.001	U	0.061	U
4-Isopropyltoluene	mg/kg	0.002	U	0.002	U	0.001	U	0.058	U	0.001	U	0.052	U	0.001	U	0.014	U	0.001	U	0.061	U
Acetone	mg/kg	0.19	U	0.18	U	0.054	U	0.4	U	0.032	U	0.36	U	0.053	U	0.43	U	0.029	U	0.036	U
Acrolein	mg/kg																				
Acrylonitrile	mg/kg																				
Benzene	mg/kg	0.002	U	0.001	U	0.0008	U	0.2	U	0.026	U	1.1	U	0.017	U	0.22	U	0.001	U	0.005	U
Bromodichloromethane	mg/kg	0.002	U	0.002	U	0.001	U	0.058	U	0.001	U	0.052	U	0.001	U	0.002	U	0.001	U	0.001	U
Bromoform	mg/kg																				
Carbon Disulfide	mg/kg	0.005	U	0.004	U	0.001	U	0.058	U	0.001	U	0.052	U	0.016	U	0.083	U	0.001	U	0.001	U
Carbon Tetrachloride	mg/kg	0.002	U	0.002	U	0.001	U	0.058	U	0.001	U	0.052	U	0.001	U	0.002	U	0.001	U	0.001	U
CFC-1113	mg/kg	0.004	U	0.005	U	0.002	U	0.12	U	0.002	U	0.1	U	0.002	U	0.026	U	0.002	U	0.002	U
Chlorobenzene	mg/kg	0.21	U	0.057	U	0.018	U	1.6	U	0.19	U	7.4	U	0.2	U	9.5	U	0.007	U	0.48	U

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA		MZ-FPA											
		D15-BOR-21-(0.5-1.0)	D15-BOR-21-(0-0.5)	D15-BOR-21-(4.5-5.0)	D15-BOR-21-(6.0-6.5)	D15-BOR-21-(7.8-8.0)	D15-BOR-21-(8.0-8.3)	D15-BOR-22-(0.5-1.0)	D15-BOR-22-(0-0.5)	D15-BOR-22-(2.0-2.5)	D15-BOR-22-(7.0-7.5)	D15-BOR-22-(7.8-8.0)	D15-BOR-22-(8.0-8.2)		
Chemical	Units	D15-BOR-21 0.50-1.00 FS 11/4/2017	D15-BOR-21 0.00-0.50 FS 11/4/2017	D15-BOR-21 4.50-5.00 FS 11/4/2017	D15-BOR-21 6.00-6.50 FS 11/4/2017	D15-BOR-21 7.80-8.00 FS 11/4/2017	D15-BOR-21 8.00-8.30 FS 11/4/2017	D15-BOR-22 0.50-1.00 FS 11/3/2017	D15-BOR-22 0.00-0.50 FS 11/3/2017	D15-BOR-22 2.00-2.50 FS 11/3/2017	D15-BOR-22 7.00-7.50 FS 11/3/2017	D15-BOR-22 7.80-8.00 FS 11/3/2017	D15-BOR-22 8.00-8.20 FS 11/3/2017		
Chlorodibromomethane	mg/kg	0.002 U	0.002 U	0.001 U	0.058 U	0.001 U	0.052 U	0.001 U	0.002 U	0.001 U	0.001 U	0.001 U	0.061 U		
Chlorodifluoromethane	mg/kg	0.004 U	0.004 U	0.002 U	0.002 U	0.003 U	0.002 U	0.002 U	0.004 U	0.002 U	0.002 U	0.002 U	0.002 U		
Chlorofluoromethane	mg/kg	0.002 U	0.002 U	0.001 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U						
Chloroform	mg/kg	0.002 U	0.002 U	0.001 U	0.058 U	0.002 U	0.12 U	0.025 U	0.16 U	0.001 U	0.007 U	0.004 U	0.11 U		
Chloropentafluoroethane	mg/kg	0.032 U	0.032 U	0.016 U	0.017 U	0.021 U	0.017 U	0.017 U	0.032 U	0.015 U	0.016 U	0.017 U	0.018 U		
cis-1,2-Dichloroethene	mg/kg	0.002 U	0.002 U	0.001 U	0.058 U	0.001 U	0.052 U	0.001 U	0.014 U	0.001 U	0.001 U	0.001 U	0.061 U		
cis-1,3-Dichloropropene	mg/kg	0.002 U	0.002 U	0.001 U	0.058 U	0.001 U	0.052 U	0.001 U	0.002 U	0.001 U	0.001 U	0.001 U	0.061 U		
Cumene	mg/kg	0.002 U	0.002 U	0.001 U	0.058 U	0.001 U	0.052 U	0.001 U	0.32 U	0.001 U	0.001 U	0.001 U	0.061 U		
Dichlorodifluoromethane	mg/kg	0.004 U	0.005 U	0.002 U	0.12 U	0.002 U	0.1 U	0.002 U	0.034 U	0.002 U	0.002 U	0.002 U	0.12 U		
Dichlorofluoromethane	mg/kg	0.004 U	0.005 U	0.002 U	0.12 U	0.002 U	0.1 U	0.016 U	0.004 U	0.002 U	0.002 U	0.002 U	0.12 U		
Ethane	ug/L														
Ethyl Chloride	mg/kg	0.004 U	0.005 U	0.002 U	0.12 U	0.002 U	0.1 U	0.002 U	0.004 U	0.002 U	0.002 U	0.002 U	0.12 U		
Ethylbenzene	mg/kg	0.002 U	0.002 U	0.001 U	0.058 U	0.003 U	0.052 U	0.001 U	0.013 U	0.001 U	0.003 U	0.003 U	0.061 U		
Fluoromethane	mg/kg	0.006 U	0.006 U	0.003 U	0.003 U	0.004 U	0.003 U	0.003 U	0.006 U	0.003 U	0.003 U	0.003 U	0.004 U		
Hexane	mg/kg	0.002 U	0.002 U	0.001 U	0.058 U	0.001 U	0.052 U	0.001 U	0.002 U	0.001 U	0.001 U	0.001 U	0.061 U		
Isobutyl Alcohol	mg/kg	0.22 U	0.23 U	0.1 U	5.8 U	0.1 U	5.2 U	0.12 U	0.2 U	0.11 U	0.11 U	0.11 U	6.3 U		
Meta- And Para-Xylene	mg/kg	0.004 U	0.002 U	0.001 U	0.058 U	0.003 U	0.068 U	0.001 U	0.012 U	0.001 U	0.02 U	0.001 U	0.11 U		
Methacrylonitrile	mg/kg	0.011 U	0.011 U	0.005 U	0.29 U	0.005 U	0.26 U	0.006 U	0.01 U	0.006 U	0.006 U	0.006 U	0.3 U		
Methane	ug/L														
Methyl Bromide	mg/kg														
Methyl Chloride	mg/kg	0.004 U	0.005 U	0.002 U	0.12 U	0.002 U	0.1 U	0.002 U	0.004 U	0.002 U	0.002 U	0.002 U	0.12 U		
Methyl Ethyl Ketone	mg/kg	0.02 U	0.018 U	0.004 U	0.23 U	0.004 U	0.21 U	0.005 U	0.034 U	0.005 U	0.004 U	0.004 U	0.24 U		
Methyl Isobutyl Ketone	mg/kg	0.007 U	0.007 U	0.003 U	0.17 U	0.003 U	0.16 U	0.004 U	0.006 U	0.003 U	0.003 U	0.003 U	0.18 U		
Methyl Methacrylate	mg/kg	0.002 U	0.002 U	0.001 U	0.058 U	0.001 U	0.052 U	0.001 U	0.002 U	0.001 U	0.001 U	0.001 U	0.061 U		
Methyl Tertiary Butyl Ether	mg/kg	0.001 U	0.001 U	0.0005 U	0.029 U	0.0005 U	0.026 U	0.0006 U	0.001 U	0.0006 U	0.0006 U	0.0006 U	0.03 U		
Methylene Chloride	mg/kg	0.004 U	0.005 U	0.002 U	0.12 U	0.002 U	0.1 U	0.004 U	0.011 U	0.002 U	0.002 U	0.002 U	0.12 U		
N-Butylbenzene	mg/kg	0.002 U	0.002 U	0.001 U	0.058 U	0.001 U	0.052 U	0.001 U	0.004 U	0.001 U	0.001 U	0.001 U	0.061 U		
N-Propylbenzene	mg/kg	0.002 U	0.002 U	0.001 U	0.058 U	0.001 U	0.052 U	0.001 U	0.01 U	0.001 U	0.001 U	0.001 U	0.061 U		
Ortho-Xylene	mg/kg	0.006 U	0.002 U	0.001 U	0.058 U	0.002 U	0.063 U	0.001 U	0.009 U	0.001 U	0.009 U	0.001 U	0.09 U		
Propionitrile	mg/kg	0.066 U	0.068 U	0.031 U	1.7 U	0.03 U	1.6 U	0.035 U	0.06 U	0.034 U	0.033 U	0.033 U	1.8 U		
sec-Butylbenzene	mg/kg	0.002 U	0.002 U	0.001 U	0.058 U	0.001 U	0.052 U	0.001 U	0.014 U	0.001 U	0.001 U	0.001 U	0.061 U		
Styrene	mg/kg	0.002 U	0.002 U	0.001 U	0.058 U	0.001 U	0.052 U	0.001 U	0.002 U	0.001 U	0.001 U	0.001 U	0.061 U		
tert-Butylbenzene	mg/kg	0.002 U	0.002 U	0.001 U	0.058 U	0.001 U	0.052 U	0.001 U	0.008 U	0.001 U	0.001 U	0.001 U	0.061 U		
Tetrachloroethene	mg/kg	0.002 U	0.002 U	0.001 U	0.058 U	0.001 U	0.052 U	0.1 U	6.5 U	0.002 U	0.015 U	0.001 U	0.17 U		
Tetrahydrofuran	mg/kg	0.009 U	0.009 U	0.004 U	0.23 U	0.004 U	0.21 U	0.005 U	0.008 U	0.005 U	0.004 U	0.004 U	0.24 U		
Toluene	mg/kg	0.003 U	0.002 U	0.001 U	0.058 U	0.001 U	0.052 U	0.001 U	0.006 U	0.001 U	0.013 U	0.001 U	0.061 U		
trans-1,2-Dichloroethene	mg/kg	0.002 U	0.002 U	0.001 U	0.058 U	0.001 U	0.052 U	0.001 U	0.002 U	0.001 U	0.001 U	0.001 U	0.061 U		
trans-1,3-Dichloropropene	mg/kg														
Trichloroethene	mg/kg	0.002 U	0.002 U	0.001 U	0.058 U	0.001 U	0.052 U	0.009 U	0.26 U	0.001 U	0.001 U	0.001 U	0.061 U		
Trichlorofluoromethane	mg/kg	0.004 U	0.005 U	0.002 U	0.12 U	0.002 U	0.1 U	0.22 U	0.31 U	0.005 U	0.006 U	0.002 U	0.12 U		
Vinyl Chloride	mg/kg	0.002 U	0.002 U	0.001 U	0.058 U	0.001 U	0.052 U	0.001 U	0.006 U	0.001 U	0.001 U	0.001 U	0.061 U		
Vinyl Fluoride	mg/kg	0.013 U	0.013 U	0.007 U	0.007 U	0.008 U	0.007 U	0.007 U	0.013 U	0.006 U	0.006 U	0.007 U	0.007 U		
Xylenes	mg/kg	0.01 U	0.002 U	0.001 U	0.058 U	0.005 U	0.13 U	0.001 U	0.021 U	0.001 U	0.029 U	0.001 U	0.2 U		

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D15-BOR-22-(8.0-8.2)-D	D15-BOR-22-(8.0-8.5)	D15-BOR-23-(0.5-1.0)	D15-BOR-23-(0-0.5)	D15-BOR-23-(0-0.5)-D	D15-BOR-23-(3.0-3.5)	D15-BOR-23-(5.0-6.0)	D15-BOR-23-(8.0-8.5)	D15-BOR-23-(9.5-9.7)	D15-BOR-24-(0.5-1.0)	D15-BOR-24-(0-0.5)	D15-BOR-24-(2.7-3.0)
Location ID	Depth Interval (ft)	D15-BOR-22	D15-BOR-22	D15-BOR-23	D15-BOR-23	D15-BOR-23	D15-BOR-23	D15-BOR-23	D15-BOR-23	D15-BOR-23	D15-BOR-24	D15-BOR-24	D15-BOR-24
Sample Purpose	Date	8.00-8.20 DUP	8.00-8.50 FS	0.50-1.00 FS	0.00-0.50 FS	0.00-0.50 DUP	3.00-3.50 FS	5.00-6.00 FS	8.00-8.50 FS	9.50-9.70 FS	0.50-1.00 FS	0.00-0.50 FS	2.70-3.00 FS
Chemical Class	Units	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/1/2017	11/1/2017	11/1/2017
<b>General Chemistry</b>													
Black Carbon	mg/kg			7530	16300						12600	2920	
Percent Moisture	%	21		23.2	48.3		10.1	11.9	7.6	18.1	35	16.4	10.9
Percent Solids	%												
Total Organic Carbon	mg/kg	1340		7870	28900		353	156	169	997	21100	4720	626
<b>Metals</b>													
Aluminum	mg/kg			7530	16300						12600	2920	
Antimony	mg/kg			0.354	0.233						0.478	0.899	
Arsenic	mg/kg			5.67	13						8.2	3.35	
Barium	mg/kg			46.6	94.8						56.9	14.5	
Beryllium	mg/kg			0.384	0.897						0.648	0.134	
Cadmium	mg/kg			0.291	0.833						0.382	0.0567	
Calcium	mg/kg			3870	3420						3890	616	
Chromium	mg/kg			26.9	46.8						35.6	25.4	
Cobalt	mg/kg			6.25	14						8.9	2.13	
Copper	mg/kg			27.1	44.3						23.2	17.6	
Iron	mg/kg			12800	26900						24600	11800	
Lead	mg/kg			85.8	50.9						31.9	31.4	
Magnesium	mg/kg			2340	5040						3800	564	
Manganese	mg/kg			333	888						440	120	
Mercury	mg/kg			0.307	0.192						0.513	0.682	
Nickel	mg/kg			16.2	31.6						17.1	4.47	
Potassium	mg/kg			1270	2710						2190	508	
Selenium	mg/kg			0.41	0.843						0.478	0.121	
Silver	mg/kg			0.188	0.58						0.161	0.0673	
Sodium	mg/kg			281	740						549	162	
Thallium	mg/kg			0.0773	0.188						0.119	0.038	
Tin	mg/kg												
Titanium	mg/kg												
Vanadium	mg/kg			24.8	43.5						38.1	16.9	
Zinc	mg/kg			79.6	186						110	27.9	
<b>Metals - AVS/SEM</b>													
Acid Volatile Sulfide	umol/g												
Arsenic	umol/g												
Cadmium	umol/g												
Copper	umol/g												
Lead	umol/g												
Zinc	umol/g												
<b>Metals - Leachate</b>													
Lead	ug/L												
<b>Per and Polyfluorinated Organic Substances</b>													
Perfluorobutane Sulfonic Acid	mg/kg												
Perfluorobutanoic Acid	mg/kg												
Perfluorodecane Sulfonic Acid	mg/kg												
Perfluorodecanoic Acid	mg/kg												
Perfluorododecanoic Acid	mg/kg												
Perfluoroheptanoic Acid	mg/kg												
Perfluorohexane Sulfonic Acid	mg/kg												
Perfluorohexanoic Acid	mg/kg												
Perfluorononanoic Acid	mg/kg												
Perfluorooctane Sulfonamide	mg/kg												
Perfluoropentanoic Acid	mg/kg												
Perfluorotetradecanoic Acid	mg/kg												
Perfluorotridecanoic Acid	mg/kg												
Perfluoroundecanoic Acid	mg/kg												
PFOA	mg/kg												
PFOA(trial)	mg/kg												
PFOS	mg/kg												
PFOS (trial)	mg/kg												
<b>Pesticides and Herbicides</b>													
4,4'-DDD	mg/kg												
4,4'-DDE	mg/kg												
4,4'-DDT	mg/kg												
Aldrin	mg/kg												
Alpha Chlordane	mg/kg												
Alpha-BHC	mg/kg												
beta-BHC	mg/kg												
delta-BHC	mg/kg												
Dieldrin	mg/kg												
Endosulfan I	mg/kg												
Endosulfan II	mg/kg												
Endosulfan Sulfate	mg/kg												
Endrin	mg/kg												
Endrin Aldehyde	mg/kg												
Endrin Ketone	mg/kg												
Gamma Chlordane	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D15-BOR-22-(8.0-8.2)-D	D15-BOR-22-(8.0-8.5)	D15-BOR-23-(0.5-1.0)	D15-BOR-23-(0-0.5)	D15-BOR-23-(0-0.5)-D	D15-BOR-23-(3.0-3.5)	D15-BOR-23-(5.0-6.0)	D15-BOR-23-(8.0-8.5)	D15-BOR-23-(9.5-9.7)	D15-BOR-24-(0.5-1.0)	D15-BOR-24-(0-0.5)
Location ID	Depth Interval (ft)	D15-BOR-22	D15-BOR-22	D15-BOR-23	D15-BOR-23	D15-BOR-23	D15-BOR-23	D15-BOR-23	D15-BOR-23	D15-BOR-23	D15-BOR-24	D15-BOR-24
Sample Purpose	Date	8.00-8.20 DUP	8.00-8.50 FS	0.50-1.00 FS	0.00-0.50 FS	0.00-0.50 DUP	3.00-3.50 FS	5.00-6.00 FS	8.00-8.50 FS	9.50-9.70 FS	0.50-1.00 FS	0.00-0.50 FS
Chemical Class	Units	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/1/2017	11/1/2017
Chemical												
Heptachlor	mg/kg											
Heptachlor Epoxide	mg/kg											
Lindane	mg/kg											
Methoxychlor	mg/kg											
Toxaphene	mg/kg											
<b>Physical Properties</b>												
0.001 MM	% PASSING		21.5	0.5	5						0.5 U	0.5 U
0.002 MM	% PASSING		27	3	10						0.5	0.5 U
0.005 MM	% PASSING		36	7	18						2.5	0.5 U
0.02 MM	% PASSING		63	23	40						11.5	0.5 U
0.05 MM	% PASSING		80.5	53	67						17.5	0.5 U
0.064 MM	% PASSING		85.5	68.5	75						23	0.5
0.075 MM	% PASSING		87.7	74.3	78.7						25.5	0.85
0.15 MM	% PASSING		95.2	86.3	88.4						30.2	4.5
0.3 MM	% PASSING		97.7	93.3	94.5						70.6	55.6
0.6 MM	% PASSING		98.7	96.2	95.7						85.3	86.1
1.18 MM	% PASSING		99.4	97.4	96.1						90.1	95.3
19 MM	% PASSING		100	100	100						100	100
2.36 MM	% PASSING		99.7	98.1	96.6						93.4	99
3.35 MM	% PASSING		100	99.2	97.2						96.9	99.7
37.5 MM	% PASSING		100	100	100						100	100
4.75 MM	% PASSING		100	99.7	97.6						98.9	99.9
75 MM	% PASSING		100	100	100						100	100
Density	PCF											
<b>Polychlorinated Biphenyls - TICs</b>												
1,1'-Biphenyl, 2,3-dichloro-	mg/kg											
Unknown Biphenyl	mg/kg											
<b>Polychlorinated Biphenyls</b>												
Heptachlorobiphenyl	mg/kg											
Hexachlorobiphenyl	mg/kg											
Octachlorobiphenyl	mg/kg											
PCB 1	mg/kg			0.00716	0.0037	0.00112					0.00159	0.0018
PCB 10	mg/kg			0.0000983	0.0000279	0.00000849					0.0000204	0.0000235
PCB 100	mg/kg											
PCB 101	mg/kg											
PCB 102	mg/kg			0.000578	0.0000493	0.0000313					0.000031	0.0000288
PCB 103	mg/kg			0.000131	0.0000227	0.0000149					0.0000218	0.0000235
PCB 104	mg/kg			0.00000457	0.00000173	0.00000182					0.00000264	0.00000166
PCB 105	mg/kg			0.00523	0.000548	0.000303					0.000291	0.000317
PCB 106	mg/kg			0.000021 U	0.00000666 U	0.00000381 U					0.000031	0.00003
PCB 107	mg/kg											
PCB 107/123	mg/kg											
PCB 108	mg/kg											
PCB 109	mg/kg			0.000869	0.000121	0.0000605					0.0000792	0.0000955
PCB 11	mg/kg			0.00791	0.000451	0.000362					0.000653	0.000808
PCB 110	mg/kg			0.0136	0.00153	0.000921					0.00116	0.00122
PCB 111	mg/kg			0.0000198 U	0.00000599 U	0.00000343 U					0.0000111	0.0000219
PCB 112	mg/kg			0.000036	0.00000645 U	0.00000369 U					0.0000238	0.0000279
PCB 113	mg/kg											
PCB 114	mg/kg			0.000348	0.000024	0.0000158					0.0000316	0.0000363
PCB 115	mg/kg			0.0000207 U	0.00000647 U	0.0000037 U					0.00000661 U	0.00000725 U
PCB 116	mg/kg											
PCB 117	mg/kg			0.00033	0.0000227	0.0000153					0.0000253	0.0000298
PCB 118	mg/kg			0.0108	0.00118	0.000738					0.000674	0.000757
PCB 119	mg/kg											
PCB 12	mg/kg											
PCB 120	mg/kg			0.0000416	0.00000988	0.00000511					0.0000174	0.0000311
PCB 121	mg/kg			0.0000195 U	0.00000593 U	0.00000339 U					0.00000687 U	0.00000754 U
PCB 121/95/88	mg/kg											
PCB 122	mg/kg			0.00019	0.0000208	0.00000999					0.0000188	0.0000188
PCB 123	mg/kg			0.000254	0.0000225	0.0000129					0.0000169	0.0000222
PCB 124	mg/kg											
PCB 125	mg/kg											
PCB 126	mg/kg			0.0000573	0.0000115	0.00000367					0.0000146	0.0000201
PCB 127	mg/kg			0.000025 U	0.00000722 U	0.00000436 U					0.00000788 U	0.00000827 U
PCB 128	mg/kg											
PCB 129	mg/kg											
PCB 129/158	mg/kg											
PCB 13	mg/kg											
PCB 130	mg/kg			0.000779	0.000129	0.0000961					0.00011	0.000192
PCB 130/164	mg/kg											
PCB 131	mg/kg			0.00016	0.0000204	0.0000153					0.0000149	0.0000177
PCB 132	mg/kg			0.0038	0.000545	0.000423					0.000391	0.000467
PCB 133	mg/kg			0.000247	0.0000481	0.0000378					0.0000631	0.000128
PCB 134	mg/kg			0.000715	0.0000948	0.0000662					0.0000562	0.0000634
PCB 135	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D15-BOR-22-(8.0-8.2)-D D15-BOR-22 8.00-8.20 DUP 11/3/2017	D15-BOR-22-(8.0-8.5) D15-BOR-22 8.00-8.50 FS 11/3/2017	D15-BOR-23-(0.5-1.0) D15-BOR-23 0.50-1.00 FS 11/3/2017	D15-BOR-23-(0-0.5) D15-BOR-23 0.00-0.50 FS 11/3/2017	D15-BOR-23-(0-0.5)-D D15-BOR-23 0.00-0.50 DUP 11/3/2017	D15-BOR-23-(3.0-3.5) D15-BOR-23 3.00-3.50 FS 11/3/2017	D15-BOR-23-(5.0-6.0) D15-BOR-23 5.00-6.00 FS 11/3/2017	D15-BOR-23-(8.0-8.5) D15-BOR-23 8.00-8.50 FS 11/3/2017	D15-BOR-23-(9.5-9.7) D15-BOR-23 9.50-9.70 FS 11/3/2017	D15-BOR-24-(0.5-1.0) D15-BOR-24 0.50-1.00 FS 11/1/2017	D15-BOR-24-(0-0.5) D15-BOR-24 0.00-0.50 FS 11/1/2017
Chemical	Units											
PCB 136	mg/kg			0.00177	0.000286	0.000204					0.000194	0.000211
PCB 137	mg/kg			0.000404	0.0000561	0.0000407					0.0000608	0.000059
PCB 138	mg/kg											
PCB 139	mg/kg											
PCB 14	mg/kg			0.00153	0.0000749	0.000153					0.00128	0.00104
PCB 140	mg/kg											
PCB 141	mg/kg			0.00202	0.000269	0.000193					0.000226	0.00026
PCB 142	mg/kg			0.0000109 U	0.00000706 U	0.0000281					0.0000574	0.0000477
PCB 143	mg/kg			0.00000975 U	0.00000652 U	0.0000232					0.0000168	0.0000117
PCB 143/139	mg/kg											
PCB 144	mg/kg			0.000523	0.0000673	0.0000509					0.0000494	0.000054
PCB 145	mg/kg			0.0000827	0.0000131	0.0000055 U					0.0000206	0.0000306
PCB 146	mg/kg			0.00191	0.00036	0.000268					0.000308	0.00047
PCB 147	mg/kg											
PCB 148	mg/kg			0.0000299	0.0000103	0.0000076					0.0000115	0.0000143
PCB 149	mg/kg											
PCB 15	mg/kg			0.00367	0.000686	0.000335					0.00111	0.00138
PCB 150	mg/kg			0.000034	0.0000122	0.0000849					0.0000969	0.000009
PCB 151	mg/kg											
PCB 152	mg/kg			0.000015	0.0000291	0.0000167					0.0000222	0.0000183
PCB 153	mg/kg											
PCB 154	mg/kg			0.000157	0.0000568	0.0000434					0.0000484	0.0000386
PCB 155	mg/kg			0.000018	0.00000895	0.0000055					0.00000729	0.0000078
PCB 156	mg/kg											
PCB 157	mg/kg											
PCB 158	mg/kg			0.00101	0.000142	0.000101					0.0000862	0.000108
PCB 159	mg/kg			0.0001	0.0000159	0.0000123					0.0000291	0.0000471
PCB 16	mg/kg			0.00617	0.00419	0.00036					0.000691	0.00071
PCB 160	mg/kg			0.0000082 U	0.00000051 U	0.00000684					0.000164	0.000165
PCB 161	mg/kg			0.00000764 U	0.00000495 U	0.00000538 U					0.00000747	0.00000951
PCB 162	mg/kg			0.0000749	0.0000161	0.00000984					0.0000325	0.0000808
PCB 163	mg/kg											
PCB 163/160	mg/kg											
PCB 164	mg/kg			0.000836	0.000122	0.0000974					0.000143	0.000256
PCB 165	mg/kg			0.00000557	0.00000531 U	0.0000014					0.0000644	0.0000107
PCB 166	mg/kg											
PCB 167	mg/kg			0.000452	0.0000794	0.0000576					0.000075	0.000144
PCB 168	mg/kg											
PCB 169	mg/kg			0.0000032 U	0.00000419 U	0.00000167					0.00000416	0.0000113
PCB 17	mg/kg			0.00385	0.000272	0.000153					0.000377	0.000376
PCB 170	mg/kg			0.00247	0.000464	0.000343					0.000301	0.000347
PCB 171	mg/kg											
PCB 172	mg/kg			0.00048	0.0000953	0.0000677					0.0000963	0.000144
PCB 173	mg/kg											
PCB 174	mg/kg			0.00303	0.00057	0.000415					0.000409	0.000492
PCB 175	mg/kg			0.000138	0.0000296	0.0000192					0.0000253	0.0000389
PCB 176	mg/kg			0.000395	0.0000693	0.0000438					0.0000481	0.0000532
PCB 177	mg/kg			0.00161	0.000357	0.000259					0.000218	0.000231
PCB 178	mg/kg			0.000696	0.000142	0.0000959					0.000111	0.000141
PCB 179	mg/kg			0.00146	0.000257	0.000172					0.000185	0.000184
PCB 18	mg/kg											
PCB 180	mg/kg											
PCB 181	mg/kg			0.0000227	0.00000451	0.00000358					0.0000219	0.0000325
PCB 182	mg/kg			0.0000193	0.00000866	0.00000624					0.0000164	0.0000251
PCB 182/175	mg/kg											
PCB 183	mg/kg			0.00156	0.000317	0.000227					0.00021	0.000229
PCB 184	mg/kg			0.0000139	0.00000759	0.00000327					0.0000104	0.0000139
PCB 185	mg/kg			0.000266	0.0000485	0.0000384					0.0000597	0.0000809
PCB 186	mg/kg			0.00000494 U	0.00000597 U	0.00000404 U					0.00000535	0.00000662
PCB 187	mg/kg			0.00338	0.000787	0.000594					0.000584	0.00071
PCB 188	mg/kg			0.000021	0.0000122	0.00000893					0.0000121	0.0000122
PCB 189	mg/kg			0.000111	0.0000242	0.0000172					0.0000257	0.0000504
PCB 19	mg/kg			0.000699	0.00011	0.0000445					0.0000761	0.0000621
PCB 190	mg/kg			0.000466	0.0000926	0.0000683					0.0000916	0.000117
PCB 191	mg/kg			0.000101	0.0000179	0.0000126					0.0000183	0.0000342
PCB 192	mg/kg			0.00000743	0.0000011 U	0.00000206					0.00000474	0.000008
PCB 193	mg/kg											
PCB 194	mg/kg			0.00154	0.000356	0.00027					0.000385	0.000759
PCB 195	mg/kg			0.000546	0.000121	0.0000861					0.0000866	0.0001
PCB 196	mg/kg			0.000913	0.000264	0.000184					0.000227	0.000297
PCB 197	mg/kg			0.0000756	0.0000357	0.0000235					0.0000272	0.0000321
PCB 198	mg/kg											
PCB 199	mg/kg											
PCB 2	mg/kg			0.00433	0.00101	0.000781					0.00163	0.00178
PCB 20	mg/kg											
PCB 200	mg/kg			0.000216	0.0000494	0.0000342					0.000045	0.0000627

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	Field Sample ID	MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA	
			D15-BOR-22-(8.0-8.2)-D	D15-BOR-22-(8.0-8.5)	D15-BOR-23-(0.5-1.0)	D15-BOR-23-(0-0.5)	D15-BOR-23-(0-0.5)-D	D15-BOR-23-(3.0-3.5)	D15-BOR-23-(5.0-6.0)	D15-BOR-23-(8.0-8.5)	D15-BOR-23-(9.5-9.7)	D15-BOR-24-(0.5-1.0)	D15-BOR-24-(0-0.5)	D15-BOR-24-(2.7-3.0)
Chemical	Location ID	Depth Interval (ft)	D15-BOR-22 8.00-8.20 DUP	D15-BOR-22 8.00-8.50 FS	D15-BOR-23 0.50-1.00 FS	D15-BOR-23 0.00-0.50 FS	D15-BOR-23 0.00-0.50 DUP	D15-BOR-23 3.00-3.50 FS	D15-BOR-23 5.00-6.00 FS	D15-BOR-23 8.00-8.50 FS	D15-BOR-23 9.50-9.70 FS	D15-BOR-24 0.50-1.00 FS	D15-BOR-24 0.00-0.50 FS	D15-BOR-24 2.70-3.00 FS
Units	Sample Purpose	Date	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/1/2017	11/1/2017	11/1/2017
PCB 201		mg/kg			0.00029	0.00011	0.0000773					0.0000829	0.0000983	
PCB 202		mg/kg			0.000744	0.000285	0.000209					0.000225	0.000332	
PCB 203		mg/kg			0.00133	0.000378	0.000275					0.00038	0.000613	
PCB 204		mg/kg			0.00000814	0.00000326	0.00000285					0.0000143	0.00003	
PCB 204/200		mg/kg												
PCB 205		mg/kg			0.0000784	0.0000194	0.000016					0.0000358	0.0000646	
PCB 206		mg/kg			0.00623	0.0031	0.00248					0.00378	0.00393	
PCB 207		mg/kg			0.000457	0.00027	0.000192					0.000345	0.000338	
PCB 208		mg/kg			0.00285	0.00156	0.00118					0.00161	0.00146	
PCB 209		mg/kg			0.0127	0.00553	0.00401					0.00657	0.00471	
PCB 21		mg/kg												
PCB 21/20		mg/kg												
PCB 22		mg/kg			0.00487	0.00227	0.00021					0.0008	0.00092	
PCB 23		mg/kg			0.000138	0.0000107	0.0000146					0.000138	0.000145	
PCB 24		mg/kg			0.000491	0.0000457	0.0000515					0.000377	0.000509	
PCB 25		mg/kg			0.00814	0.000121	0.000352					0.000307	0.000391	
PCB 26		mg/kg												
PCB 27		mg/kg			0.00324	0.000112	0.000165					0.000127	0.000132	
PCB 28		mg/kg												
PCB 29		mg/kg												
PCB 3		mg/kg			0.00539	0.00121	0.000675					0.00139	0.00194	
PCB 30		mg/kg												
PCB 31		mg/kg			0.0109	0.000659	0.000354					0.00177	0.00207	
PCB 32		mg/kg			0.00259	0.000228	0.00011					0.000207	0.000216	
PCB 33		mg/kg												
PCB 34		mg/kg			0.000334	0.0000191	0.0000313					0.000332	0.000419	
PCB 35		mg/kg			0.00189	0.00185	0.000138					0.000816	0.000932	
PCB 36		mg/kg			0.000783	0.0000163	0.0000519					0.000263	0.000375	
PCB 37		mg/kg			0.00558	0.00191	0.000378					0.0027	0.00328	
PCB 38		mg/kg			0.0000376	0.00000338 U	0.00000336					0.0000107	0.0000114	
PCB 39		mg/kg			0.000415	0.0000222	0.0000498					0.000554	0.000789	
PCB 4		mg/kg			0.00399	0.00196	0.000476					0.00113	0.0011	
PCB 4/10		mg/kg												
PCB 40		mg/kg												
PCB 41		mg/kg			0.00158	0.0000513	0.0000276					0.000051	0.0000793	
PCB 42		mg/kg			0.0046	0.000295	0.000146					0.000182	0.000254	
PCB 43		mg/kg			0.000704	0.000038	0.00002					0.0000582	0.0000717	
PCB 44		mg/kg												
PCB 45		mg/kg			0.00269	0.000183	0.0000816					0.000125	0.000195	
PCB 46		mg/kg			0.00106	0.000068	0.0000351					0.0000427	0.0000571	
PCB 47		mg/kg												
PCB 48		mg/kg			0.00358	0.00014	0.0000778					0.000114	0.000177	
PCB 49		mg/kg												
PCB 5		mg/kg			0.0019	0.00233	0.000146					0.000419	0.000366	
PCB 50		mg/kg												
PCB 51		mg/kg			0.00062	0.0000542	0.0000377					0.0000365	0.000027	
PCB 52		mg/kg			0.0158	0.00107	0.000582					0.000813	0.00117	
PCB 53		mg/kg												
PCB 54		mg/kg			0.0000342	0.00000727	0.00000516					0.00000555	0.00000304	
PCB 55		mg/kg			0.000165	0.0000119	0.00000522					0.0000113	0.0000161	
PCB 56		mg/kg			0.0113	0.00949	0.000536					0.000384	0.000557	
PCB 57		mg/kg			0.0000803	0.00000965	0.00000419					0.0000223	0.0000289	
PCB 58		mg/kg			0.0000121 U	0.0000129	0.00000319					0.0000152	0.0000202	
PCB 59		mg/kg												
PCB 6		mg/kg			0.00451	0.00133	0.000281					0.00125	0.00123	
PCB 60		mg/kg			0.00292	0.000144	0.0000783					0.000108	0.000143	
PCB 61		mg/kg												
PCB 62		mg/kg												
PCB 63		mg/kg			0.000549	0.0000468	0.000019					0.0000619	0.0000887	
PCB 64		mg/kg			0.00656	0.000357	0.000184					0.000291	0.000437	
PCB 65		mg/kg												
PCB 65/75/62		mg/kg												
PCB 66		mg/kg			0.0133	0.00086	0.00044					0.000543	0.000698	
PCB 67		mg/kg			0.00048	0.000031	0.0000167					0.0000362	0.0000528	
PCB 67/58		mg/kg												
PCB 68		mg/kg			0.0000682	0.0000239	0.00000854					0.0000215	0.0000223	
PCB 68/64		mg/kg												
PCB 69		mg/kg												
PCB 7		mg/kg			0.000575	0.0000642	0.0000355					0.000187	0.000165	
PCB 70		mg/kg												
PCB 71		mg/kg												
PCB 72		mg/kg			0.000138	0.0000156	0.0000116					0.0000426	0.0000674	
PCB 73		mg/kg			0.000025	0.00000459	0.00000314					0.00000655	0.00000657	
PCB 73/46		mg/kg												
PCB 74		mg/kg												
PCB 75		mg/kg												

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone	Field Sample ID	MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA	
			D15-BOR-22-(8.0-8.2)-D	D15-BOR-22-(8.0-8.5)	D15-BOR-23-(0.5-1.0)	D15-BOR-23-(0-0.5)	D15-BOR-23-(0-0.5)-D	D15-BOR-23-(3.0-3.5)	D15-BOR-23-(5.0-6.0)	D15-BOR-23-(8.0-8.5)	D15-BOR-23-(9.5-9.7)	D15-BOR-24-(0.5-1.0)	D15-BOR-24-(0-0.5)	D15-BOR-24-(2.7-3.0)		
Chemical	Units	D15-BOR-22 8.00-8.20 DUP 11/3/2017	D15-BOR-22 8.00-8.50 FS 11/3/2017	D15-BOR-23 0.50-1.00 FS 11/3/2017	D15-BOR-23 0.00-0.50 FS 11/3/2017	D15-BOR-23 0.00-0.50 DUP 11/3/2017	D15-BOR-23 3.00-3.50 FS 11/3/2017	D15-BOR-23 5.00-6.00 FS 11/3/2017	D15-BOR-23 8.00-8.50 FS 11/3/2017	D15-BOR-23 9.50-9.70 FS 11/3/2017	D15-BOR-24 0.50-1.00 FS 11/1/2017	D15-BOR-24 0.00-0.50 FS 11/1/2017	D15-BOR-24 2.70-3.00 FS 11/1/2017			
PCB 76	mg/kg															
PCB 77	mg/kg			0.00356	0.00403	0.000188										
PCB 78	mg/kg			0.000134 U	0.0000351 U	0.0000226 U					0.000283	0.000385				
PCB 79	mg/kg			0.000146	0.0000296	0.0000106					0.0000606	0.0000716				
PCB 8	mg/kg			0.00767	0.00167	0.000525					0.0000468	0.0000747				
PCB 80	mg/kg			0.000109 U	0.0000282 U	0.0000181 U					0.00239	0.00201				
PCB 81	mg/kg			0.0000573	0.00000485	0.00000226 U					0.0000694	0.000013				
PCB 82	mg/kg			0.00214	0.000183	0.000104					0.0000112	0.000013				
PCB 83	mg/kg			0.000843	0.0000705	0.0000389					0.000106	0.000122				
PCB 83/125/112	mg/kg										0.0000499	0.0000366				
PCB 84	mg/kg			0.00394	0.000368	0.000226										
PCB 85	mg/kg										0.00025	0.000268				
PCB 86	mg/kg															
PCB 86/109	mg/kg															
PCB 87	mg/kg															
PCB 87/111	mg/kg															
PCB 88	mg/kg			0.0000289 U	0.00000979 U	0.0000056 U										
PCB 89	mg/kg			0.000326	0.0000207	0.0000117					0.0000109 U	0.000012 U				
PCB 89/84	mg/kg										0.0000175	0.0000184				
PCB 9	mg/kg			0.00247	0.000373	0.000173										
PCB 90	mg/kg										0.00102	0.000984				
PCB 91	mg/kg			0.00189	0.000179	0.000113										
PCB 92	mg/kg			0.00227	0.000263	0.000168					0.000132	0.000129				
PCB 93	mg/kg										0.000212	0.000224				
PCB 94	mg/kg			0.00012	0.0000137	0.00000767										
PCB 95	mg/kg			0.00917	0.000951	0.000595					0.0000101 U	0.0000111 U				
PCB 96	mg/kg			0.000267	0.0000193	0.0000124					0.000688	0.000727				
PCB 97	mg/kg										0.0000133	0.0000168				
PCB 98	mg/kg			0.0000826	0.0000209	0.00000624										
PCB 99	mg/kg			0.0059	0.00066	0.000391					0.0000121	0.0000417				
PCB-100/93	mg/kg			0.00017	0.0000246	0.0000191					0.000434	0.000443				
PCB-107/124	mg/kg			0.000424	0.0000432	0.000025					0.0000327	0.0000298				
PCB-108/119/86/97/125/87	mg/kg			0.00902	0.000888	0.000536					0.0000426	0.0000504				
PCB-113/90/101	mg/kg			0.0114	0.00127	0.000801					0.000682	0.000703				
PCB-116/85	mg/kg			0.00251	0.000231	0.000156					0.00087	0.000959				
PCB-128/166	mg/kg			0.00151	0.000253	0.000192					0.000502	0.000374				
PCB-13/12	mg/kg			0.00672	0.00265	0.000502					0.000268	0.000265				
PCB-139/140	mg/kg			0.000196	0.0000309	0.0000226					0.00292	0.00332				
PCB-147/149	mg/kg			0.00874	0.00147	0.00114					0.000251	0.0000301				
PCB-151/135	mg/kg			0.00394	0.000636	0.000485					0.00106	0.00118				
PCB-153/168	mg/kg			0.00855	0.00155	0.00114					0.000507	0.000639				
PCB-156/157	mg/kg			0.00132	0.000185	0.000135					0.00105	0.00117				
PCB-163/138/129	mg/kg			0.0109	0.00185	0.00138					0.00016	0.000248				
PCB-171/173	mg/kg			0.000806	0.000156	0.000113					0.00121	0.00134				
PCB-180/193	mg/kg			0.00561	0.00109	0.000795					0.000104	0.000113				
PCB-198/199	mg/kg			0.00284	0.000867	0.000683					0.000849	0.00114				
PCB-21/33	mg/kg			0.00811	0.00374	0.000344					0.00103	0.00173				
PCB-26/29	mg/kg			0.00274	0.000269	0.000127					0.00182	0.00165				
PCB-28/20	mg/kg			0.0132	0.00214	0.000446					0.000626	0.000709				
PCB-30/18	mg/kg			0.00799	0.000741	0.000345					0.00125	0.00137				
PCB-44/47/65	mg/kg			0.0153	0.00123	0.00052					0.00112	0.00129				
PCB-50/53	mg/kg			0.00217	0.000158	0.0000804					0.0008	0.00106				
PCB-59/62/75	mg/kg			0.00139	0.0000987	0.0000447					0.000104	0.000135				
PCB-61/70/74/76	mg/kg			0.0237	0.00172	0.000703					0.0000866	0.000126				
PCB-69/49	mg/kg			0.00892	0.000569	0.000313					0.00112	0.00157				
PCB-71/40	mg/kg			0.00812	0.00221	0.000318					0.000416	0.000532				
PCB-90/101	mg/kg										0.00031	0.000418				
Pentachlorobiphenyl	mg/kg															
Tetrachlorobiphenyl	mg/kg															
Total Decachlorobiphenyls (congeners)	mg/kg															
Total Dichlorobiphenyls (congeners)	mg/kg			0.0411	0.0116	0.003					0.0124	0.0124				
Total Heptachlorobiphenyls (congeners)	mg/kg			0.0227	0.00455	0.00331					0.00345	0.00427				
Total Hexachlorobiphenyls (congeners)	mg/kg			0.0502	0.00832	0.00626					0.00646	0.00776				
Total Monochlorobiphenyls (congeners)	mg/kg			0.0169	0.00593	0.00257					0.00461	0.00552				
Total Nonachlorobiphenyls (congeners)	mg/kg			0.00953	0.00493	0.00386					0.00574	0.00573				
Total Octachlorobiphenyls (congeners)	mg/kg			0.00858	0.00249	0.00186					0.00254	0.00412				
Total PCB (congeners)	mg/kg			0.45681	0.09383	0.03844					0.06882	0.07625				
Total Pentachlorobiphenyls (congeners)	mg/kg			0.0829	0.00878	0.00534					0.00649	0.00683				
Total Tetrachlorobiphenyls (congeners)	mg/kg			0.13	0.023	0.0045					0.00616	0.00851				
Total Trichlorobiphenyls (congeners)	mg/kg			0.0822	0.0187	0.00373					0.0144	0.0164				
Trichlorobiphenyl (total)	mg/kg															
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>																
Benzo[e]pyrene	mg/kg															
Chrysene, 1-methyl-	mg/kg															
Naphthalene, 1-methyl-	mg/kg															
Pyrene, 1-methyl-	mg/kg															



Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA	
		D15-BOR-22-(8.0-8.2)-D	D15-BOR-22-(8.0-8.5)	D15-BOR-23-(0.5-1.0)	D15-BOR-23-(0-0.5)	D15-BOR-23-(0-0.5)-D	D15-BOR-23-(3.0-3.5)	D15-BOR-23-(5.0-6.0)	D15-BOR-23-(8.0-8.5)	D15-BOR-23-(9.5-9.7)	D15-BOR-24-(0.5-1.0)	D15-BOR-24-(0-0.5)	D15-BOR-24-(2.7-3.0)		
Location ID	Location ID	D15-BOR-22	D15-BOR-22	D15-BOR-23	D15-BOR-23	D15-BOR-23	D15-BOR-23	D15-BOR-23	D15-BOR-23	D15-BOR-23	D15-BOR-24	D15-BOR-24	D15-BOR-24	D15-BOR-24	
Depth Interval (ft)	Depth Interval (ft)	8.00-8.20	8.00-8.50	0.50-1.00	0.00-0.50	0.00-0.50	3.00-3.50	5.00-6.00	8.00-8.50	9.50-9.70	0.50-1.00	0.00-0.50	2.70-3.00		
Sample Purpose	Sample Purpose	DUP	FS	FS	FS	DUP	FS	FS	FS	FS	FS	FS	FS		
Date	Date	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/1/2017	11/1/2017	11/1/2017		
Chemical Class	Units														
Unknown Alkene	mg/kg														
Unknown Amide	mg/kg														
Unknown Amine	mg/kg														
UNKNOWN AROMATIC	mg/kg														
Unknown Carboxylic Acid	mg/kg														
Unknown Cycloalkane	mg/kg														
Unknown Hydrocarbon	mg/kg														
Unknown Ketone	mg/kg														
Unknown PAH	mg/kg														
UNKNOWN SILOXANE	mg/kg														
<b>Semivolatile Organic Compounds</b>															
1,2,4-Trichlorobenzene	mg/kg	0.026		0.079	0.12		0.018	0.019	0.018	0.02	0.042	0.021	0.019		
1,2-Diphenylhydrazine	mg/kg	0.021	U		0.022	U	0.018	U	0.019	U	0.018	U	0.019	U	
1,4-Dioxane	mg/kg	0.13	U	0.13	0.19	U	0.11	U	0.11	U	0.12	U	0.12	U	
1-Naphthylamine	mg/kg	0.21	U	0.22	0.18	U	0.18	U	0.19	U	0.2	U	0.19	U	
2,3,4,6-Tetrachlorophenol	mg/kg	0.084	U	0.086	0.13	U	0.074	U	0.076	U	0.071	U	0.08	U	
2,4,5-Trichlorophenol	mg/kg	0.021	U	0.022	0.032	U	0.018	U	0.019	U	0.018	U	0.019	U	
2,4,6-Trichlorophenol	mg/kg	0.021	U	0.022	0.032	U	0.018	U	0.019	U	0.018	U	0.019	U	
2,4-Dichlorophenol	mg/kg	0.021	U	0.022	0.032	U	0.018	U	0.019	U	0.018	U	0.019	U	
2,4-Dimethylphenol	mg/kg	0.021	U	0.022	0.032	U	0.018	U	0.019	U	0.018	U	0.019	U	
2,4-Dinitrophenol	mg/kg	0.38	U	0.39	0.57	U	0.33	U	0.34	U	0.32	U	0.36	U	
2,4-Dinitrotoluene	mg/kg	0.084	U	0.086	0.13	U	0.074	U	0.076	U	0.071	U	0.08	U	
2,6-Dinitrotoluene	mg/kg	0.021	U	0.022	0.032	U	0.018	U	0.019	U	0.018	U	0.019	U	
2-Chloronaphthalene	mg/kg	0.008	U	0.009	0.013	U	0.007	U	0.008	U	0.008	U	0.007	U	
2-Chlorophenol	mg/kg	0.026		0.084	0.09		0.018	0.019	0.018	0.02	0.14	0.02	0.019		
2-Methylnaphthalene	mg/kg	0.009		0.046	0.13		0.004	0.004	0.004	0.004	0.036	0.052	0.004		
2-Methylphenol (O-Cresol)	mg/kg	0.021	U	0.022	0.032	U	0.018	U	0.019	U	0.018	U	0.019	U	
2-Naphthylamine	mg/kg	0.21	U	0.22	0.32	U	0.18	U	0.19	U	0.18	U	0.19	U	
2-Nitroaniline	mg/kg	0.021	U	0.022	0.032	U	0.018	U	0.019	U	0.018	U	0.019	U	
2-Nitrophenol	mg/kg	0.021	U	0.022	0.032	U	0.018	U	0.019	U	0.018	U	0.019	U	
3,3'-Dichlorobenzidine	mg/kg	0.13	U	0.13	0.19	U	0.11	U	0.11	U	0.12	U	0.11	U	
3,3'-Dimethylbenzidine	mg/kg														
3-Nitroaniline	mg/kg	0.084	U	0.086	0.13	U	0.074	U	0.076	U	0.071	U	0.08	U	
4,6-Dinitro-2-Methylphenol	mg/kg	0.21	U	0.22	0.32	U	0.18	U	0.19	U	0.18	U	0.19	U	
4-Aminobiphenyl	mg/kg	0.21	U	0.22	0.32	U	0.18	U	0.19	U	0.18	U	0.19	U	
4-Bromophenyl Phenyl Ether	mg/kg	0.021	U	0.022	0.032	U	0.018	U	0.019	U	0.018	U	0.019	U	
4-Chloro-3-Methylphenol	mg/kg	0.021	U	0.022	0.032	U	0.018	U	0.019	U	0.018	U	0.019	U	
4-Chloroaniline	mg/kg	0.042	U	0.089	0.16		0.037	0.038	0.038	0.035	0.04	0.051	0.04	0.037	
4-Chlorophenyl Phenyl Ether	mg/kg	0.021	U	0.022	0.032	U	0.018	U	0.019	U	0.018	U	0.019	U	
4-Methylphenol (P-Cresol)	mg/kg	0.021	U	0.022	0.067		0.018	0.019	0.018	0.02	0.032	0.02	0.019		
4-Nitroaniline	mg/kg	0.084	U	0.086	0.13	U	0.074	U	0.076	U	0.071	U	0.08	U	
4-Nitrophenol	mg/kg	0.21	U	0.22	0.32	U	0.18	U	0.19	U	0.18	U	0.19	U	
Acetophenone	mg/kg	0.021	U	0.022	0.032	U	0.018	U	0.019	U	0.018	U	0.019	U	
Aniline	mg/kg	0.21	U	0.22	0.32	U	0.18	U	0.19	U	0.18	U	0.19	U	
Benzidine	mg/kg	0.31	U	0.32	0.48	U	0.27	U	0.28	U	0.2	U	0.28	U	
Biphenyl	mg/kg	0.021	U	0.036	0.077		0.018	0.019	0.018	0.02	0.025	0.02	0.019		
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg	0.021	U	0.022	0.032	U	0.018	U	0.019	U	0.018	U	0.019	U	
Bis(2-Chloroethoxy)Methane	mg/kg	0.021	U	0.022	0.032	U	0.018	U	0.019	U	0.018	U	0.019	U	
Bis(2-Chloroethyl)Ether	mg/kg	0.021	U	0.022	0.032	U	0.018	U	0.019	U	0.018	U	0.019	U	
Bis(2-Chloroisopropyl)Ether	mg/kg														
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.084	U	0.086	0.13	U	0.074	U	0.076	U	0.071	U	0.08	U	
Butyl Benzyl Phthalate	mg/kg	0.084	U	0.097	0.3		0.074	0.076	0.076	0.071	0.081	0.1	0.08	0.074	
Carbazole	mg/kg	0.021	U	0.022	0.032	U	0.018	U	0.019	U	0.018	U	0.019	U	
Dibenzofuran	mg/kg	0.021	U	0.022	0.038		0.018	0.019	0.018	0.02	0.025	0.02	0.019		
Diethyl Phthalate	mg/kg	0.084	U	0.086	0.13	U	0.074	U	0.076	U	0.071	U	0.08	U	
Dimethyl Phthalate	mg/kg	0.084	U	0.086	0.13	U	0.074	U	0.076	U	0.071	U	0.08	U	
Di-N-Butyl Phthalate	mg/kg	0.084	U	0.086	0.13	U	0.074	U	0.076	U	0.071	U	0.08	U	
Diphenyl Ether	mg/kg	0.021	U	0.058	0.087		0.018	0.019	0.018	0.02	0.025	0.02	0.019		
Hexachlorobenzene	mg/kg	0.004	U	0.004	0.006	U	0.004	U	0.004	U	0.004	U	0.004	U	
Hexachlorobutadiene	mg/kg	0.021	U	0.022	0.032	U	0.018	U	0.019	U	0.018	U	0.019	U	
Hexachlorocyclopentadiene	mg/kg	0.21	U	0.22	0.32	U	0.18	U	0.19	U	0.18	U	0.19	U	
Hexachloroethane	mg/kg	0.042	U	0.043	0.064	U	0.037	U	0.038	U	0.035	U	0.04	0.037	
Hexachloropropylene	mg/kg														
Isophorone	mg/kg	0.021	U	0.022	0.032	U	0.018	U	0.019	U	0.018	U	0.019	U	
N-Dioctyl Phthalate	mg/kg	0.084	U	0.086	0.13	U	0.074	U	0.076	U	0.071	U	0.08	U	
Nitrobenzene	mg/kg	0.021	U	0.025	0.032	U	0.018	U	0.019	U	0.018	U	0.019	U	
N-Nitrosodimethylamine	mg/kg	0.084	U	0.086	0.13	U	0.074	U	0.076	U	0.071	U	0.08	U	
N-Nitrosodi-N-Propylamine	mg/kg	0.021	U	0.022	0.032	U	0.018	U	0.019	U	0.018	U	0.019	U	
N-Nitrosodiphenylamine	mg/kg	0.021	U	0.046	0.068		0.018	0.019	0.018	0.02	0.025	0.02	0.019		
O-Toluidine	mg/kg	0.25	U	0.26	0.38	U	0.22	U	0.23	U	0.21	U	0.24	U	
Parathion	mg/kg	0.21	U	0.22	0.32	U	0.18	U	0.19	U	0.18	U	0.19	U	
Pentachlorobenzene	mg/kg	0.021	U	0.022	0.032	U	0.018	U	0.019	U	0.018	U	0.019	U	
Pentachlorophenol	mg/kg	0.042	U	0.043	0.064	U	0.037	U	0.038	U	0.035	U	0.04	0.037	
Phenol	mg/kg	0.021	U	0.039	0.11		0.018	0.019	0.018	0.02	0.025	0.02	0.019	U	
<b>Volatile Organic Compounds - TICs</b>															
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg														

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA							
		D15-BOR-22-(8.0-8.2)-D	D15-BOR-22-(8.0-8.5)	D15-BOR-23-(0.5-1.0)	D15-BOR-23-(0-0.5)	D15-BOR-23-(0-0.5)-D	D15-BOR-23-(3.0-3.5)	D15-BOR-23-(5.0-6.0)	D15-BOR-23-(8.0-8.5)	D15-BOR-23-(9.5-9.7)	D15-BOR-24-(0.5-1.0)	D15-BOR-24-(0-0.5)	D15-BOR-24-(2.7-3.0)								
Location ID	Location ID	D15-BOR-22	D15-BOR-22	D15-BOR-23	D15-BOR-23	D15-BOR-23	D15-BOR-23	D15-BOR-23	D15-BOR-23	D15-BOR-23	D15-BOR-24	D15-BOR-24	D15-BOR-24	D15-BOR-24	D15-BOR-24						
Depth Interval (ft)	Depth Interval (ft)	8.00-8.20	8.00-8.50	0.50-1.00	0.00-0.50	0.00-0.50	3.00-3.50	5.00-6.00	8.00-8.50	9.50-9.70	0.50-1.00	0.00-0.50	2.70-3.00								
Sample Purpose	Sample Purpose	DUP	FS	FS	FS	DUP	FS	FS	FS	FS	FS	FS	FS								
Date	Date	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/3/2017	11/1/2017	11/1/2017	11/1/2017								
Chemical Class	Chemical																				
Units	Units																				
1-Butene	mg/kg																				
1-Heptene	mg/kg																				
1-Propene, 2-methyl-	mg/kg																				
Azulene	mg/kg																				
BENZENE, 1,2,4-TRICHLORO-	mg/kg																				
BENZENE, 1,2-DICHLORO-	mg/kg																				
BENZENE, 1,4-DICHLORO-	mg/kg																				
Camphene	mg/kg																				
CYCLOHEXANE	mg/kg																				
Cyclohexane, methyl-	mg/kg																				
Cyclotrisiloxane, hexamethyl	mg/kg							0.006													
Diphenyl Ether	mg/kg																				
Ethane, 1,1,2,2-tetrachloro-	mg/kg																				
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg																				
Ethane, 1,2-dichloro-1,1-dif	mg/kg																				
Ethene, 1,1-dichloro-2,2-dif	mg/kg																				
Hexane, 2-methyl-	mg/kg																				
Hexane, 3-methyl-	mg/kg																				
METHANE, CHLOROFLUORO-	mg/kg																				
Naphthalene	mg/kg																				
NAPHTHALENE, 2-METHYL-	mg/kg																				
Nonanal	mg/kg																				
Norflurane	mg/kg																				
Pentane, 2,3-dimethyl-	mg/kg																				
Phenol, 4-(1,1,3,3-tetrameth	mg/kg																				
Propene	mg/kg																				
Sulfur dioxide	mg/kg																				
Tridecane	mg/kg																				
UNKNOWN	mg/kg																				
UNKNOWN ALICYCLIC	mg/kg																				
UNKNOWN ALIPHATIC	mg/kg																				
UNKNOWN ALKANE	mg/kg																				
UNKNOWN AROMATIC	mg/kg																				
UNKNOWN SILOXANE	mg/kg																				
<b>Volatile Organic Compounds</b>																					
1,1,1,2-Tetrachloroethane	mg/kg	0.057	U	0.061	U	0.12	U	0.001	U	0.001	U	0.001	U	0.06	U	0.096	U	0.001	U	0.001	U
1,1,1-Trichloroethane	mg/kg	0.057	U	0.061	U	0.12	U	0.001	U	0.001	U	0.001	U	0.06	U	0.096	U	0.001	U	0.001	U
1,1,1-Trichlorotrifluoroethane	mg/kg	0.006	U	0.007	U	0.011	U	0.005	U	0.005	U	0.005	U	0.006	U	0.008	U	0.006	U	0.006	U
1,1,2,2-Tetrachloroethane	mg/kg	0.057	U	0.061	U	0.12	U	0.003	U	0.001	U	0.001	U	0.06	U	0.096	U	0.001	U	0.001	U
1,1,2-Trichloroethane	mg/kg	0.057	U	0.061	U	0.12	U	0.001	U	0.001	U	0.001	U	0.06	U	0.096	U	0.001	U	0.001	U
1,1,2-Trichlorotrifluoroethane	mg/kg	0.11	U	0.63	U	0.61	U	0.043	U	0.002	U	0.066	U	1.3	U	0.19	U	0.002	U	0.002	U
1,1,2-Trifluoroethane	mg/kg	0.002	U	0.003	U	0.004	U	0.002	U	0.002	U	0.002	U	0.003	U	0.003	U	0.002	U	0.002	U
1,1-Dichloro-1-Fluoroethane	mg/kg	0.001	U	0.001	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.002	U	0.001	U	0.001	U
1,1-Dichloroethane	mg/kg	0.057	U	0.061	U	0.12	U	0.001	U	0.001	U	0.001	U	0.06	U	0.096	U	0.001	U	0.001	U
1,1-Dichloroethene	mg/kg	0.057	U	0.061	U	0.12	U	0.001	U	0.001	U	0.001	U	0.06	U	0.096	U	0.001	U	0.001	U
1,1-Dichloropropene	mg/kg	0.057	U	0.061	U	0.12	U	0.001	U	0.001	U	0.001	U	0.06	U	0.096	U	0.001	U	0.001	U
1,2,4-Trimethylbenzene	mg/kg	0.057	U	0.061	U	0.12	U	0.001	U	0.001	U	0.001	U	0.06	U	0.096	U	0.001	U	0.001	U
1,2-Dibromoethane (EDB)	mg/kg	0.057	U	0.061	U	0.12	U	0.001	U	0.001	U	0.001	U	0.06	U	0.096	U	0.001	U	0.001	U
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg	0.003	U	0.027	U	0.98	U	0.001	U	0.001	U	0.001	U	0.027	U	0.002	U	0.001	U	0.001	U
1,2-Dichloro-1-Fluoroethane	mg/kg	0.001	U	0.001	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.002	U	0.001	U	0.001	U
1,2-Dichlorobenzene	mg/kg	1.3	U	3	U	7.8	U	0.011	U	0.001	U	0.002	U	0.15	U	1.5	U	0.004	U	0.04	U
1,2-Dichloroethane	mg/kg	0.057	U	0.061	U	0.12	U	0.001	U	0.001	U	0.001	U	0.06	U	0.096	U	0.001	U	0.001	U
1,2-Dichloroethene	mg/kg	0.057	U	0.061	U	0.12	U	0.001	U	0.001	U	0.001	U	0.06	U	0.096	U	0.001	U	0.001	U
1,2-Dichloropropane	mg/kg	0.057	U	0.061	U	0.12	U	0.001	U	0.001	U	0.001	U	0.06	U	0.096	U	0.001	U	0.001	U
1,2-Dichlorotetrafluoroethane	mg/kg	0.004	U	0.085	U	0.55	U	0.002	U	0.002	U	0.002	U	0.093	U	0.003	U	0.002	U	0.002	U
1,3,5-Trimethylbenzene	mg/kg	0.057	U	0.061	U	0.12	U	0.001	U	0.001	U	0.001	U	0.06	U	0.096	U	0.001	U	0.001	U
1,3-Dichlorobenzene	mg/kg	0.072	U	0.11	U	0.31	U	0.001	U	0.001	U	0.001	U	0.06	U	1.1	U	0.001	U	0.001	U
1,4-Dichlorobenzene	mg/kg	2.1	U	5.8	U	13	U	0.015	U	0.001	U	0.004	U	0.26	U	6.6	U	0.01	U	0.032	U
1-Chloro-1,1-Difluoroethane	mg/kg	0.001	U	0.001	U	0.006	U	0.001	U	0.001	U	0.001	U	0.004	U	0.002	U	0.001	U	0.001	U
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg	0.019	U	0.19	U	2.1	U	0.008	U	0.001	U	0.001	U	0.73	U	0.002	U	0.001	U	0.001	U
2-Chloro-1,1,1-Trifluoroethane	mg/kg	0.11	U	0.12	U	0.24	U	0.002	U	0.002	U	0.002	U	0.12	U	0.19	U	0.002	U	0.002	U
2-Chloroethyl Vinyl Ether	mg/kg																				
2-Chlorotoluene	mg/kg	0.057	U	0.061	U	0.15	U	0.001	U	0.001	U	0.001	U	0.06	U	0.096	U	0.001	U	0.001	U
2-Hexanone	mg/kg	0.17	U	0.18	U	0.36	U	0.003	U	0.003	U	0.003	U	0.18	U	0.29	U	0.003	U	0.003	U
4-Chlorotoluene	mg/kg	0.057	U	0.061	U	0.12	U	0.001	U	0.001	U	0.001	U	0.06	U	0.096	U	0.001	U	0.001	U
4-Isopropyltoluene	mg/kg	0.057	U	0.061	U	0.12	U	0.001	U	0.001	U	0.001	U	0.06	U	0.096	U	0.001	U	0.001	U
Acetone	mg/kg	0.4	U	0.43	U	0.84	U	0.017	U	0.015	U	0.019	U	0.42	U	0.67	U	0.016	U	0.054	U
Acrolein	mg/kg																				
Acrylonitrile	mg/kg																				
Benzene	mg/kg	0.37	U	0.84	U	2.2	U	0.018	U	0.0009	U	0.007	U	1	U	1.3	U	0.0008	U	0.01	U
Bromodichloromethane	mg/kg	0.057	U	0.061	U	0.12	U	0.001	U	0.001	U	0.001	U	0.06	U	0.096	U	0.001	U	0.001	U
Bromoform	mg/kg																				
Carbon Disulfide	mg/kg	0.057	U	0.061	U	0.12	U	0.001	U	0.001	U	0.001	U	0.06	U	0.096	U	0.004	U	0.017	U
Carbon Tetrachloride	mg/kg	0.057	U	0.061	U	0.12	U	0.001	U	0.001	U	0.001	U	0.095	U	0.096	U	0.001	U	0.001	U
CFC-1113	mg/kg	0.11	U	0.12	U	0.24	U	0.002	U	0.002	U	0.002	U	0.12	U	0.19	U	0.002	U	0.002	U
Chlorobenzene	mg/kg	7.2	U	26	U	88	U	0.085	U	0.006	U	0.043	U	4.6	U	45	U	0.028	U	0.02	U

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D15-BOR-22-(8.0-8.2)-D D15-BOR-22 8.00-8.20 DUP 11/3/2017	D15-BOR-22-(8.0-8.5) D15-BOR-22 8.00-8.50 FS 11/3/2017	D15-BOR-23-(0.5-1.0) D15-BOR-23 0.50-1.00 FS 11/3/2017	D15-BOR-23-(0-0.5) D15-BOR-23 0.00-0.50 FS 11/3/2017	D15-BOR-23-(0-0.5)-D D15-BOR-23 0.00-0.50 DUP 11/3/2017	D15-BOR-23-(3.0-3.5) D15-BOR-23 3.00-3.50 FS 11/3/2017	D15-BOR-23-(5.0-6.0) D15-BOR-23 5.00-6.00 FS 11/3/2017	D15-BOR-23-(8.0-8.5) D15-BOR-23 8.00-8.50 FS 11/3/2017	D15-BOR-23-(9.5-9.7) D15-BOR-23 9.50-9.70 FS 11/3/2017	D15-BOR-24-(0.5-1.0) D15-BOR-24 0.50-1.00 FS 11/1/2017	D15-BOR-24-(0-0.5) D15-BOR-24 0.00-0.50 FS 11/1/2017	D15-BOR-24-(2.7-3.0) D15-BOR-24 2.70-3.00 FS 11/1/2017
Chemical	Units												
Chlorodibromomethane	mg/kg	0.057 U		0.061 U	0.12 U		0.001 U	0.001 U	0.001 U	0.06 U	0.096 U	0.001 U	0.001 U
Chlorodifluoromethane	mg/kg	0.002 U		0.003 U	0.004 U		0.002 U	0.002 U	0.002 U	0.004 U	0.003 U	0.002 U	0.002 U
Chlorofluoromethane	mg/kg	0.001 U		0.001 U	0.008 U		0.001 U	0.001 U	0.001 U	0.003 U	0.045 U	0.001 U	0.001 U
Chloroform	mg/kg	0.22 U		0.096 U	0.21 U		0.003 U	0.001 U	0.001 U	0.07 U	0.096 U	0.001 U	0.001 U
Chloropentafluoroethane	mg/kg	0.019 U		0.021 U	0.032 U		0.015 U	0.016 U	0.016 U	0.017 U	0.023 U	0.017 U	0.017 U
cis-1,2-Dichloroethene	mg/kg	0.057 U		0.061 U	0.12 U		0.001 U	0.001 U	0.001 U	0.06 U	0.096 U	0.001 U	0.001 U
cis-1,3-Dichloropropene	mg/kg	0.057 U		0.061 U	0.12 U		0.001 U	0.001 U	0.001 U	0.06 U	0.096 U	0.001 U	0.001 U
Cumene	mg/kg	0.057 U		0.061 U	0.12 U		0.001 U	0.001 U	0.001 U	0.06 U	0.096 U	0.001 U	0.001 U
Dichlorodifluoromethane	mg/kg	0.11 U		0.12 U	0.24 U		0.002 U	0.002 U	0.002 U	0.12 U	0.19 U	0.002 U	0.002 U
Dichlorofluoromethane	mg/kg	0.11 U		0.12 U	0.47 U		0.002 U	0.002 U	0.002 U	0.12 U	0.19 U	0.002 U	0.002 U
Ethane	ug/L												
Ethyl Chloride	mg/kg	0.11 U		0.12 U	0.24 U		0.002 U	0.002 U	0.002 U	0.12 U	0.19 U	0.002 U	0.002 U
Ethylbenzene	mg/kg	0.069 U		0.061 U	0.12 U		0.001 U	0.001 U	0.001 U	0.06 U	0.41 U	0.001 U	0.001 U
Fluoromethane	mg/kg	0.004 U		0.004 U	0.006 U		0.003 U	0.003 U	0.003 U	0.003 U	0.005 U	0.003 U	0.003 U
Hexane	mg/kg	0.057 U		0.061 U	0.12 U		0.001 U	0.001 U	0.001 U	0.06 U	0.096 U	0.001 U	0.001 U
Isobutyl Alcohol	mg/kg	5.7 U		6.1 U	12 U		0.11 U	0.11 U	0.11 U	6 U	9.6 U	0.11 U	0.11 U
Meta- And Para-Xylene	mg/kg	0.2 U		0.061 U	0.23 U		0.001 U	0.001 U	0.001 U	0.06 U	0.22 U	0.001 U	0.001 U
Methacrylonitrile	mg/kg	0.29 U		0.3 U	0.6 U		0.005 U	0.006 U	0.005 U	0.3 U	0.48 U	0.006 U	0.005 U
Methane	ug/L												
Methyl Bromide	mg/kg												
Methyl Chloride	mg/kg	0.11 U		0.12 U	0.24 U		0.002 U	0.002 U	0.002 U	0.12 U	0.19 U	0.002 U	0.002 U
Methyl Ethyl Ketone	mg/kg	0.23 U		0.24 U	0.48 U		0.004 U	0.004 U	0.004 U	0.24 U	0.39 U	0.004 U	0.004 U
Methyl Isobutyl Ketone	mg/kg	0.17 U		0.18 U	0.36 U		0.003 U	0.003 U	0.003 U	0.18 U	0.29 U	0.003 U	0.003 U
Methyl Methacrylate	mg/kg	0.057 U		0.061 U	0.12 U		0.001 U	0.001 U	0.001 U	0.06 U	0.096 U	0.001 U	0.001 U
Methyl Tertiary Butyl Ether	mg/kg	0.029 U		0.03 U	0.06 U		0.0005 U	0.0006 U	0.0005 U	0.03 U	0.048 U	0.0006 U	0.0005 U
Methylene Chloride	mg/kg	0.11 U		0.2 U	0.36 U		0.008 U	0.002 U	0.002 U	0.14 U	0.19 U	0.002 U	0.002 U
N-Butylbenzene	mg/kg	0.057 U		0.061 U	0.12 U		0.001 U	0.001 U	0.001 U	0.06 U	0.096 U	0.001 U	0.001 U
N-Propylbenzene	mg/kg	0.057 U		0.061 U	0.12 U		0.001 U	0.001 U	0.001 U	0.06 U	0.096 U	0.001 U	0.001 U
Ortho-Xylene	mg/kg	0.14 U		0.061 U	0.12 U		0.001 U	0.001 U	0.001 U	0.06 U	0.096 U	0.001 U	0.001 U
Propionitrile	mg/kg	1.7 U		1.8 U	3.6 U		0.033 U	0.034 U	0.032 U	1.8 U	2.9 U	0.034 U	0.032 U
sec-Butylbenzene	mg/kg	0.057 U		0.061 U	0.12 U		0.001 U	0.001 U	0.001 U	0.06 U	0.096 U	0.001 U	0.001 U
Styrene	mg/kg	0.057 U		0.061 U	0.12 U		0.001 U	0.001 U	0.001 U	0.06 U	0.096 U	0.001 U	0.001 U
tert-Butylbenzene	mg/kg	0.057 U		0.061 U	0.12 U		0.001 U	0.001 U	0.001 U	0.06 U	0.096 U	0.001 U	0.001 U
Tetrachloroethene	mg/kg	0.29 U		2.9 U	5.9 U		0.001 U	0.001 U	0.001 U	0.06 U	0.096 U	0.001 U	0.001 U
Tetrahydrofuran	mg/kg	0.23 U		0.24 U	0.48 U		0.004 U	0.004 U	0.004 U	0.24 U	0.39 U	0.004 U	0.004 U
Toluene	mg/kg	0.08 U		0.061 U	0.13 U		0.001 U	0.001 U	0.001 U	0.06 U	0.096 U	0.001 U	0.002 U
trans-1,2-Dichloroethene	mg/kg	0.057 U		0.061 U	0.12 U		0.001 U	0.001 U	0.001 U	0.06 U	0.096 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/kg												
Trichloroethene	mg/kg	0.057 U		0.11 U	0.26 U		0.001 U	0.001 U	0.001 U	0.06 U	0.096 U	0.001 U	0.001 U
Trichlorofluoromethane	mg/kg	0.11 U		0.24 U	0.31 U		0.003 U	0.003 U	0.008 U	4.4 U	0.19 U	0.002 U	0.002 U
Vinyl Chloride	mg/kg	0.057 U		0.061 U	0.12 U		0.001 U	0.001 U	0.001 U	0.06 U	0.096 U	0.001 U	0.001 U
Vinyl Fluoride	mg/kg	0.007 U		0.008 U	0.013 U		0.006 U	0.007 U	0.006 U	0.007 U	0.009 U	0.007 U	0.007 U
Xylenes	mg/kg	0.34 U		0.061 U	0.23 U		0.001 U	0.001 U	0.001 U	0.06 U	0.22 U	0.001 U	0.001 U

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	Field Sample ID	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA			
		D15-BOR-24-(5.0-5.5)	D15-BOR-24-(6.0-6.5)	D15-BOR-24-(6.5-7.1)	D15-BOR-24-(7.0-7.2)	D15-BOR-24-(7.2-7.7)	D15-BOR-24-(7.2-7.7)-D	D16-BOR-02(0.5-1.0)	D16-BOR-02(0-0.5)	D16-BOR-02(10.8-11.2)	D16-BOR-02(4.5-5.0)	D16-BOR-02(9.0-9.5)	D16-BOR-03(0.5-1.0)			
Location ID	Depth Interval (ft)	D15-BOR-24	D15-BOR-24	D15-BOR-24	D15-BOR-24	D15-BOR-24	D15-BOR-24	D15-BOR-24	D15-BOR-24	D16-BOR-02	D16-BOR-02	D16-BOR-02	D16-BOR-02	D16-BOR-02	D16-BOR-02	D16-BOR-03
Sample Purpose	Date	5.00-5.50 FS	6.00-6.50 FS	6.50-7.10 FS	7.00-7.20 FS	7.20-7.70 FS	7.20-7.70 FS	7.20-7.70 FS	7.20-7.70 DUP	0.50-1.00 FS	0.00-0.50 FS	10.80-11.20 FS	4.50-5.00 FS	9.00-9.50 FS	0.50-1.00 FS	
Chemical Class	Units	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016
<b>General Chemistry</b>																
Black Carbon	mg/kg															
Percent Moisture	%	17.9	8.6	18.2	11.2	25.1	22	22	22	26.7	18.2	10.5	9.5	39.2		
Percent Solids	%															
Total Organic Carbon	mg/kg	647	232	1210	331	2650	3070	4280	6920	216 U	228 U	199 U	20400			
<b>Metals</b>																
Aluminum	mg/kg				4020	18200	19100	7960	8290							15600
Antimony	mg/kg				0.115	0.105	0.127	0.258	0.42							0.893
Arsenic	mg/kg				1.25	9.07	10.2	6.43	5.39							12.2
Barium	mg/kg				7.93	71.3	90.2	48.8	57.2							111
Beryllium	mg/kg				0.199	1.3	1.34	0.374	0.399							0.934
Cadmium	mg/kg				0.0337 U	0.0475	0.0387 U	0.226	0.259							0.668
Calcium	mg/kg				155	839	862	3880	3940							4050
Chromium	mg/kg				11.2	42.7	40.9	23	29.2							49.8
Cobalt	mg/kg				1.71	9.79	9.77	6.57	6.79							13.9
Copper	mg/kg				5.79	37	39.4	12	15.7							37.6
Iron	mg/kg				4310	48600	50900	13200	12700							22800
Lead	mg/kg				3.05	11.2	11.5	20.3	27.8							55.9
Magnesium	mg/kg				197	818	842	2580	2340							4370
Manganese	mg/kg				12	66.5	71.4	256	286							761
Mercury	mg/kg				0.0111 U	0.0288	0.0168	0.107	0.21							0.225
Nickel	mg/kg				3.52	13.1	13.2	12.5	12.1							25.1
Potassium	mg/kg				243	913	924	1460	1570							2630
Selenium	mg/kg				0.0979 U	0.3	0.343	0.153	0.151							0.636
Silver	mg/kg				0.0288 U	0.0469	0.0436	0.182	0.132							0.73
Sodium	mg/kg				92.7	281	294	299	341							544
Thallium	mg/kg				0.028	0.198	0.184	0.094	0.113							0.201
Tin	mg/kg															
Titanium	mg/kg															
Vanadium	mg/kg				20.7	52.9	49.4	25.8	28.7							51.7
Zinc	mg/kg				6.89	32.7	31.9	66.7	64.3							154
<b>Metals - AVS/SEM</b>																
Acid Volatile Sulfide	umol/g															
Arsenic	umol/g															
Cadmium	umol/g															
Copper	umol/g															
Lead	umol/g															
Zinc	umol/g															
<b>Metals - Leachate</b>																
Lead	ug/L															
<b>Per and Polyfluorinated Organic Substances</b>																
Perfluorobutane Sulfonic Acid	mg/kg															
Perfluorobutanoic Acid	mg/kg															
Perfluorodecane Sulfonic Acid	mg/kg															
Perfluorodecanoic Acid	mg/kg															
Perfluorododecanoic Acid	mg/kg															
Perfluoroheptanoic Acid	mg/kg															
Perfluorohexane Sulfonic Acid	mg/kg															
Perfluorohexanoic Acid	mg/kg															
Perfluorononanoic Acid	mg/kg															
Perfluorooctane Sulfonamide	mg/kg															
Perfluoropentanoic Acid	mg/kg															
Perfluorotetradecanoic Acid	mg/kg															
Perfluorotridecanoic Acid	mg/kg															
Perfluoroundecanoic Acid	mg/kg															
PFOA	mg/kg															
PFOA(trial)	mg/kg															
PFOS	mg/kg															
PFOS (trial)	mg/kg															
<b>Pesticides and Herbicides</b>																
4,4'-DDD	mg/kg															
4,4'-DDE	mg/kg															
4,4'-DDT	mg/kg															
Aldrin	mg/kg															
Alpha Chlordane	mg/kg															
Alpha-BHC	mg/kg															
beta-BHC	mg/kg															
delta-BHC	mg/kg															
Dieldrin	mg/kg															
Endosulfan I	mg/kg															
Endosulfan II	mg/kg															
Endosulfan Sulfate	mg/kg															
Endrin	mg/kg															
Endrin Aldehyde	mg/kg															
Endrin Ketone	mg/kg															
Gamma Chlordane	mg/kg															

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA			
		D15-BOR-24-(5.0-5.5)	D15-BOR-24-(6.0-6.5)	D15-BOR-24-(6.5-7.1)	D15-BOR-24-(7.0-7.2)	D15-BOR-24-(7.2-7.7)	D15-BOR-24-(7.2-7.7)-D	D16-BOR-02(0.5-1.0)	D16-BOR-02(0-0.5)	D16-BOR-02(10.8-11.2)	D16-BOR-02(4.5-5.0)	D16-BOR-02(9.0-9.5)	D16-BOR-03(0.5-1.0)			
Location ID	Depth Interval (ft)	D15-BOR-24	D15-BOR-24	D15-BOR-24	D15-BOR-24	D15-BOR-24	D15-BOR-24	D15-BOR-24	D15-BOR-24	D16-BOR-02	D16-BOR-02	D16-BOR-02	D16-BOR-02	D16-BOR-02	D16-BOR-03	
Sample Purpose	Date	5.00-5.50	6.00-6.50	6.50-7.10	7.00-7.20	7.20-7.70	7.20-7.70	7.20-7.70	7.20-7.70	0.50-1.00	0.00-0.50	10.80-11.20	4.50-5.00	9.00-9.50	0.50-1.00	
Chemical Class	Units	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	FS	FS	FS	
Chemical	Units	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016	
Heptachlor	mg/kg															
Heptachlor Epoxide	mg/kg															
Lindane	mg/kg															
Methoxychlor	mg/kg															
Toxaphene	mg/kg															
<b>Physical Properties</b>																
0.001 MM	% PASSING							0.5	U	0.5	U	0.5	U	0.5	U	1
0.002 MM	% PASSING							1		1		0.5	U	0.5	U	7
0.005 MM	% PASSING							2		2		0.5	U	0.5	U	14
0.02 MM	% PASSING							14		7		2		1		32
0.05 MM	% PASSING							57		37		6		2		58
0.064 MM	% PASSING							70		50		9		3		65
0.075 MM	% PASSING							76.5		56.7		11.4		2.9		68.3
0.15 MM	% PASSING							90.3		74.9		25.5		3.5		73.5
0.3 MM	% PASSING							94.7		86.4		82		5.8		76.9
0.6 MM	% PASSING							96.2		90.4		95.8		12.7		79.8
1.18 MM	% PASSING							97		93.1		97.8		37.8		81.5
19 MM	% PASSING							100		100		100		77.9		100
2.36 MM	% PASSING							97.3		94.7		98.8		54		82
3.35 MM	% PASSING							98.6		97.7		99.3		48.4		85.7
37.5 MM	% PASSING							100		100		100		91.4		100
4.75 MM	% PASSING							99.6		99.1		99.9		65		90.5
75 MM	% PASSING							100		100		100		100		100
Density	PCF															
<b>Polychlorinated Biphenyls - TICs</b>																
1,1'-Biphenyl, 2,3-dichloro-	mg/kg															
Unknown Biphenyl	mg/kg															
<b>Polychlorinated Biphenyls</b>																
Heptachlorobiphenyl	mg/kg															
Hexachlorobiphenyl	mg/kg															
Octachlorobiphenyl	mg/kg															
PCB 1	mg/kg							0.0109		0.0237						0.00452
PCB 10	mg/kg							0.000134		0.000255						0.0000556
PCB 100	mg/kg															
PCB 101	mg/kg															
PCB 102	mg/kg							0.0000359		0.000089						0.0000963
PCB 103	mg/kg							0.000014		0.0000265						0.0000606
PCB 104	mg/kg							0.00000244	U	0.00000278	U					0.00000529
PCB 105	mg/kg							0.000317		0.00059						0.000804
PCB 106	mg/kg							0.00000562	U	0.0000221						0.0000146
PCB 107	mg/kg															
PCB 107/123	mg/kg															
PCB 108	mg/kg															
PCB 109	mg/kg							0.0000728		0.000103						0.000184
PCB 11	mg/kg							0.000547		0.00117						0.00228
PCB 110	mg/kg							0.0009		0.00154						0.00275
PCB 111	mg/kg							0.00000519	U	0.00000968						0.0000131
PCB 112	mg/kg							0.00000558	U	0.000015						0.0000153
PCB 113	mg/kg															
PCB 114	mg/kg							0.0000259		0.0000467						0.0000515
PCB 115	mg/kg							0.00000517	U	0.00000834	U					0.0000136
PCB 116	mg/kg															
PCB 117	mg/kg							0.0000241		0.0000391						0.0000622
PCB 118	mg/kg							0.000558		0.001						0.00177
PCB 119	mg/kg															
PCB 12	mg/kg															
PCB 120	mg/kg							0.00000529	U	0.00000761	U					0.0000278
PCB 121	mg/kg							0.00000544	U	0.00000747	U					0.0000133
PCB 121/95/88	mg/kg															
PCB 122	mg/kg							0.0000184		0.0000298						0.0000385
PCB 123	mg/kg							0.000023		0.000029						0.00004
PCB 124	mg/kg															
PCB 125	mg/kg															
PCB 126	mg/kg							0.0000203		0.0000167						0.0000225
PCB 127	mg/kg							0.00000639	U	0.0000095	U					0.000018
PCB 128	mg/kg															
PCB 129	mg/kg															
PCB 129/158	mg/kg															
PCB 13	mg/kg															
PCB 130	mg/kg															
PCB 130/164	mg/kg							0.0000541		0.0000885						0.000241
PCB 131	mg/kg															
PCB 132	mg/kg							0.00000866		0.0000141						0.0000327
PCB 133	mg/kg							0.000203		0.000338						0.000974
PCB 134	mg/kg							0.0000269		0.0000438						0.000118
PCB 135	mg/kg							0.0000502		0.0000571						0.000157

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
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Chemical Class	Chemical	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
			D15-BOR-24-(5.0-5.5)	D15-BOR-24-(6.0-6.5)	D15-BOR-24-(6.5-7.1)	D15-BOR-24-(7.0-7.2)	D15-BOR-24-(7.2-7.7)	D15-BOR-24-(7.2-7.7)-D	D16-BOR-02(0.5-1.0)	D16-BOR-02(0-0.5)	D16-BOR-02(10.8-11.2)	D16-BOR-02(4.5-5.0)	D16-BOR-02(9.0-9.5)
	Units												
	PCB 136								0.0000925	0.000179			0.000455
	PCB 137								0.0000246	0.0000552			0.0000838
	PCB 138												
	PCB 139												
	PCB 14								0.000537	0.00107			0.00196
	PCB 140												
	PCB 141								0.0000953	0.000206			0.000567
	PCB 142								0.0000687	0.0000338			0.000202
	PCB 143								0.0000359 U	0.0000118			0.0000959
	PCB 143/139												
	PCB 144								0.0000338	0.0000444			0.000141
	PCB 145								0.0000287 U	0.0000304 U			0.0000808 U
	PCB 146								0.000148	0.000239			0.000628
	PCB 147												
	PCB 148								0.0000739	0.0000747			0.000239
	PCB 149												
	PCB 15								0.00111	0.00217			0.00373
	PCB 150								0.0000582	0.0000796			0.000199
	PCB 151												
	PCB 152								0.0000264	0.0000286 U			0.0000428
	PCB 153												
	PCB 154								0.0000283	0.0000387			0.000111
	PCB 155								0.0000573	0.0000663			0.000129
	PCB 156												
	PCB 157												
	PCB 158								0.0000583	0.000106			0.000249
	PCB 159								0.0000125	0.0000218			0.0000751
	PCB 16								0.000373	0.000767			0.00108
	PCB 160								0.0000143	0.0000955			0.0000557
	PCB 161								0.0000427	0.0000479			0.0000351
	PCB 162								0.00002	0.000018			0.0000469
	PCB 163												
	PCB 163/160												
	PCB 164								0.0000607	0.000109			0.000291
	PCB 165								0.000041	0.0000321 U			0.0000584
	PCB 166												
	PCB 167								0.0000405	0.0000573			0.000146
	PCB 168												
	PCB 169								0.0000138	0.0000618 U			0.0000384 U
	PCB 17								0.000204	0.000437			0.000605
	PCB 170								0.000134	0.000288			0.00119
	PCB 171												
	PCB 172								0.0000399	0.0000711			0.000229
	PCB 173												
	PCB 174								0.00018	0.000366			0.00159
	PCB 175								0.0000164	0.0000219			0.0000668
	PCB 176								0.0000199	0.0000395			0.000197
	PCB 177								0.000108	0.000211			0.000849
	PCB 178								0.0000396	0.000133			0.000386
	PCB 179								0.0000722	0.000191			0.000761
	PCB 18												
	PCB 180												
	PCB 181								0.0000432 U	0.0000882 U			0.0000134
	PCB 182								0.0000746	0.0000136			0.0000133
	PCB 182/175												
	PCB 183								0.000105	0.000227			0.000964
	PCB 184								0.0000503	0.0000959			0.0000131
	PCB 185								0.0000211	0.0000524			0.000194
	PCB 186								0.0000235 U	0.0000372 U			0.0000098 U
	PCB 187								0.000254	0.000688			0.00208
	PCB 188								0.0000092	0.0000131			0.0000227
	PCB 189								0.0000162	0.0000225			0.0000554
	PCB 19								0.0000853	0.000162			0.000139
	PCB 190								0.0000351	0.0000751			0.000279
	PCB 191								0.0000107	0.0000156			0.0000498
	PCB 192								0.00000615	0.0000248			0.000015
	PCB 193												
	PCB 194								0.000147	0.000753			0.00132
	PCB 195								0.0000417	0.000166			0.000432
	PCB 196								0.000106	0.000273			0.00065
	PCB 197								0.000014	0.0000268			0.0000775
	PCB 198												
	PCB 199												
	PCB 2								0.0106	0.0237			0.00623
	PCB 20												
	PCB 200								0.0000222	0.0000613			0.000178

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
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Chemical Class	River Zone	Field Sample ID	MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA	
			D15-BOR-24-(5.0-5.5)	D15-BOR-24-(6.0-6.5)	D15-BOR-24-(6.5-7.1)	D15-BOR-24-(7.0-7.2)	D15-BOR-24-(7.2-7.7)	D15-BOR-24-(7.2-7.7)-D	D16-BOR-02(0.5-1.0)	D16-BOR-02(0-0.5)	D16-BOR-02(10.8-11.2)	D16-BOR-02(4.5-5.0)	D16-BOR-02(9.0-9.5)	D16-BOR-03(0.5-1.0)
Chemical	Location ID	Depth Interval (ft)	D15-BOR-24 5.00-5.50 FS	D15-BOR-24 6.00-6.50 FS	D15-BOR-24 6.50-7.10 FS	D15-BOR-24 7.00-7.20 FS	D15-BOR-24 7.20-7.70 FS	D15-BOR-24 7.20-7.70 DUP	D16-BOR-02 0.50-1.00 FS	D16-BOR-02 0.00-0.50 FS	D16-BOR-02 10.80-11.20 FS	D16-BOR-02 4.50-5.00 FS	D16-BOR-02 9.00-9.50 FS	D16-BOR-03 0.50-1.00 FS
Units	Sample Purpose	Date	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016
PCB 201									0.0000423	0.000088				0.00027
PCB 202									0.0000952	0.000218				0.000504
PCB 203									0.000167	0.000542				0.000944
PCB 204									0.00000531	0.00000983				0.00000788
PCB 204/200														
PCB 205									0.0000125	0.0000319				0.0000829
PCB 206									0.000935	0.00196				0.00381
PCB 207									0.0000878	0.000176				0.000328
PCB 208									0.000432	0.000738				0.00159
PCB 209									0.00137	0.0018				0.00493
PCB 21														
PCB 21/20														
PCB 22									0.000364	0.000754				0.00121
PCB 23									0.000278	0.000741				0.000164
PCB 24									0.0000943	0.000206				0.000475
PCB 25									0.000142	0.00034				0.000777
PCB 26														
PCB 27									0.0000648	0.000131				0.000245
PCB 28														
PCB 29														
PCB 3									0.0105	0.0225				0.00891
PCB 30														
PCB 31									0.001	0.00209				0.00285
PCB 32									0.000194	0.000343				0.00036
PCB 33														
PCB 34									0.0000583	0.000146				0.00037
PCB 35									0.000222	0.000515				0.00131
PCB 36									0.000061	0.000159				0.000335
PCB 37									0.0000944	0.00024				0.00434
PCB 38									0.00000924 U	0.0000152 U				0.0000269
PCB 39									0.000108	0.000319				0.000662
PCB 4									0.00574	0.0117				0.00189
PCB 4/10														
PCB 40														
PCB 41									0.000179	0.000402				0.000115
PCB 42									0.000505	0.00103				0.000522
PCB 43									0.0000772	0.000189				0.000106
PCB 44														
PCB 45									0.000262	0.000745				0.000272
PCB 46									0.000107	0.000268				0.000109
PCB 47														
PCB 48									0.000374	0.000831				0.000313
PCB 49														
PCB 5									0.00067	0.00141				0.00107
PCB 50														
PCB 51									0.000066	0.000182				0.00014
PCB 52									0.002	0.00509				0.00218
PCB 53														
PCB 54									0.00000554	0.0000107				0.0000168
PCB 55									0.0000222	0.0000417				0.0000344
PCB 56									0.000818	0.00154				0.00145
PCB 57									0.0000117	0.0000215				0.0000314
PCB 58									0.00000542 U	0.0000135				0.0000219
PCB 59														
PCB 6									0.00193	0.00415				0.00307
PCB 60									0.000242	0.000483				0.000294
PCB 61														
PCB 62														
PCB 63									0.0000485	0.00011				0.000106
PCB 64									0.000723	0.00158				0.00071
PCB 65														
PCB 65/75/62														
PCB 66									0.00122	0.00235				0.00179
PCB 67									0.0000397	0.0000735				0.000082
PCB 67/58														
PCB 68									0.0000117	0.0000142				0.0000402
PCB 68/64														
PCB 69														
PCB 7									0.000276	0.000591				0.00052
PCB 70														
PCB 71														
PCB 72									0.0000186	0.0000393				0.0000654
PCB 73									0.000009	0.0000052 U				0.0000114
PCB 73/46														
PCB 74														
PCB 75														

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
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Chemical Class	River Zone	Field Sample ID	MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA			
			D15-BOR-24-(5.0-5.5)	D15-BOR-24-(6.0-6.5)	D15-BOR-24-(6.5-7.1)	D15-BOR-24-(7.0-7.2)	D15-BOR-24-(7.2-7.7)	D15-BOR-24-(7.2-7.7)-D	D16-BOR-02(0.5-1.0)	D16-BOR-02(0-0.5)	D16-BOR-02(10.8-11.2)	D16-BOR-02(4.5-5.0)	D16-BOR-02(9.0-9.5)	D16-BOR-03(0.5-1.0)		
Chemical	Location ID	Depth Interval (ft)	D15-BOR-24	D15-BOR-24	D15-BOR-24	D15-BOR-24	D15-BOR-24	D15-BOR-24	D15-BOR-24	D15-BOR-24	D16-BOR-02	D16-BOR-02	D16-BOR-02	D16-BOR-02	D16-BOR-02	D16-BOR-03
Units	Sample Purpose	Date	5.00-5.50	6.00-6.50	6.50-7.10	7.00-7.20	7.20-7.70	7.20-7.70	7.20-7.70	7.20-7.70	0.50-1.00	0.00-0.50	10.80-11.20	4.50-5.00	9.00-9.50	0.50-1.00
			FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	FS	FS	FS
			11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016
PCB 76																
PCB 77											0.00022	0.000456				0.000823
PCB 78											0.0000105	0.0000101 U				0.000082
PCB 79											0.0000221	0.0000455				0.0000714
PCB 8											0.00381	0.00808				0.00548
PCB 80											0.0000483 U	0.00009805 U				0.0000715
PCB 81											0.000016	0.000014				0.0000179
PCB 82											0.00012	0.000225				0.000266
PCB 83											0.0000574	0.0000891				0.000159
PCB 83/125/112																
PCB 84											0.000265	0.000563				0.000679
PCB 85																
PCB 86																
PCB 86/109																
PCB 87																
PCB 87/111																
PCB 88											0.0000843 U	0.0000114 U				0.0000202 U
PCB 89											0.0000237	0.0000433				0.0000408
PCB 89/84																
PCB 9											0.00175	0.00377				0.00241
PCB 90																
PCB 91											0.000129	0.000267				0.000386
PCB 92											0.00014	0.000258				0.000554
PCB 93																
PCB 94																
PCB 95											0.0000774 U	0.0000254				0.0000361
PCB 96											0.00064	0.00136				0.00188
PCB 97											0.0000228	0.000036				0.0000294
PCB 98																
PCB 99											0.0000165	0.0000127				0.0000329
PCB-100/93											0.000385	0.000713				0.00119
PCB-107/124											0.0000231	0.0000417				0.0000694
PCB-108/119/86/97/125/87											0.0000369	0.0000651				0.0000817
PCB-113/90/101											0.000525	0.00107				0.0015
PCB-116/85											0.000672	0.00127				0.00239
PCB-128/166											0.00017	0.000639				0.00052
PCB-13/12											0.000114	0.000228				0.000445
PCB-139/140											0.00216	0.00445				0.0088
PCB-147/149											0.000019	0.0000196				0.0000468
PCB-151/135											0.000551	0.000977				0.00294
PCB-153/168											0.000247	0.000425				0.00137
PCB-156/157											0.000515	0.000974				0.00304
PCB-163/138/129											0.0000929	0.000141				0.000325
PCB-171/173											0.000689	0.00114				0.00316
PCB-180/193											0.0000575	0.0000909				0.000364
PCB-198/199											0.000361	0.000883				0.00306
PCB-21/33											0.000358	0.00101				0.00174
PCB-26/29											0.000616	0.00127				0.00247
PCB-28/20											0.000268	0.000545				0.000983
PCB-30/18											0.000908	0.00171				0.00249
PCB-44/47/65											0.000741	0.00166				0.00168
PCB-50/53											0.00188	0.00414				0.00194
PCB-59/62/75											0.000232	0.00066				0.000302
PCB-61/70/74/76											0.000159	0.000317				0.000202
PCB-69/49											0.00203	0.00422				0.0031
PCB-71/40											0.00112	0.00248				0.00114
PCB-90/101											0.000932	0.00203				0.000946
Pentachlorobiphenyl																
Tetrachlorobiphenyl																
Total Decachlorobiphenyls (congeners)																
Total Dichlorobiphenyls (congeners)											0.0187	0.0388				0.0313
Total Heptachlorobiphenyls (congeners)											0.0015	0.00344				0.0124
Total Hexachlorobiphenyls (congeners)											0.00325	0.00568				0.0158
Total Monochlorobiphenyls (congeners)											0.032	0.0699				0.0197
Total Nonachlorobiphenyls (congeners)											0.00146	0.00288				0.00573
Total Octachlorobiphenyls (congeners)											0.00101	0.00318				0.0062
Total PCB (congeners)											0.08441	0.17928				0.15136
Total Pentachlorobiphenyls (congeners)											0.00524	0.0102				0.0157
Total Tetrachlorobiphenyls (congeners)											0.0134	0.0294				0.017
Total Trichlorobiphenyls (congeners)											0.00648	0.014				0.0226
Trichlorobiphenyl (total)																
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>																
Benzo[e]pyrene																
Chrysene, 1-methyl-																
Naphthalene, 1-methyl-																
Pyrene, 1-methyl-																

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA																	
Field Sample ID	D15-BOR-24-(5.0-5.5)	D15-BOR-24-(6.0-6.5)	D15-BOR-24-(6.5-7.1)	D15-BOR-24-(7.0-7.2)	D15-BOR-24-(7.2-7.7)	D15-BOR-24-(7.2-7.7)	D15-BOR-24-(7.2-7.7)-D	D16-BOR-02(0.5-1.0)	D16-BOR-02(0-0.5)	D16-BOR-02(10.8-11.2)	D16-BOR-02(4.5-5.0)	D16-BOR-02(9.0-9.5)	D16-BOR-03(0.5-1.0)											
Location ID	D15-BOR-24	D16-BOR-02	D16-BOR-02	D16-BOR-02	D16-BOR-02	D16-BOR-02	D16-BOR-03																	
Depth Interval (ft)	5.00-5.50	6.00-6.50	6.50-7.10	7.00-7.20	7.20-7.70	7.20-7.70	7.20-7.70	0.50-1.00	0.00-0.50	10.80-11.20	4.50-5.00	9.00-9.50	0.50-1.00											
Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	FS											
Date	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016											
Chemical Class	Chemical	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units											
<b>Polycyclic Aromatic Hydrocarbons</b>																								
Acenaphthene	mg/kg	0.004	U	0.004	U	0.004	U	0.004	U	0.038	0.065	0.16	0.004	U	0.004	U	0.049							
Acenaphthylene	mg/kg	0.004	U	0.004	U	0.004	U	0.004	U	0.011	0.014	0.01	0.004	U	0.004	U	0.035							
Anthracene	mg/kg	0.004	U	0.004	U	0.004	U	0.004	U	0.016	0.033	0.036	0.004	U	0.004	U	0.066							
Benzo(A)Anthracene	mg/kg	0.004	U	0.004	U	0.004	U	0.004	U	0.037	0.08	0.08	0.004	U	0.004	U	0.17							
Benzo(B)Fluoranthene	mg/kg	0.004	U	0.004	U	0.004	U	0.004	U	0.047	0.1	0.074	0.004	U	0.004	U	0.23							
Benzo(G,H,I)Perylene	mg/kg	0.004	U	0.004	U	0.004	U	0.004	U	0.026	0.05	0.025	0.004	U	0.004	U	0.11							
Benzo(K)Fluoranthene	mg/kg	0.004	U	0.004	U	0.004	U	0.004	U	0.019	0.041	0.029	0.004	U	0.004	U	0.11							
Benzo(A)Pyrene	mg/kg	0.004	U	0.004	U	0.004	U	0.004	U	0.036	0.07	0.036	0.004	U	0.004	U	0.16							
Chrysene	mg/kg	0.004	U	0.004	U	0.004	U	0.004	U	0.08	0.14	0.1	0.004	U	0.004	U	0.27							
Dibenz(A,H)Anthracene	mg/kg	0.004	U	0.004	U	0.004	U	0.004	U	0.008	0.017	0.006	0.004	U	0.004	U	0.052							
Fluoranthene	mg/kg	0.004	U	0.004	U	0.004	U	0.004	U	0.053	0.13	0.28	0.004	U	0.004	U	0.28							
Fluorene	mg/kg	0.004	U	0.004	U	0.004	U	0.004	U	0.032	0.058	0.16	0.004	U	0.004	U	0.056							
Indeno (1,2,3-CD) Pyrene	mg/kg	0.004	U	0.004	U	0.004	U	0.004	U	0.02	0.041	0.023	0.004	U	0.004	U	0.11							
Naphthalene	mg/kg	0.018	U	0.015	U	0.014	U	0.023	U	0.3	0.37	0.55	0.004	U	0.004	U	0.22							
Phenanthrene	mg/kg	0.004	U	0.004	U	0.004	U	0.004	U	0.072	0.14	0.49	0.004	U	0.004	U	0.2							
Pyrene	mg/kg	0.004	U	0.004	U	0.004	U	0.004	U	0.062	0.13	0.18	0.004	U	0.004	U	0.31							
Total PAHs (Detections + 1/2 MDL)	mg/kg	0.048	U	0.049	U	0.044	U	0.036	U	0.053	0.051	0.857	0.032	U	0.032	U	2.428							
Total PAHs (Detections Only)	mg/kg	0.018	U	0.023	U	0.014	U	0.006	U	0.023	0.021	0.857	0.032	U	0.032	U	2.428							
<b>Semivolatile Organic Compounds - TICs</b>																								
1,2,4-Trithiolane	mg/kg																							
1,4-Benzenediol, 2-chloro-	mg/kg																							
11H-Benzo[b]fluorene	mg/kg																							
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg																							
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg																							
3-PENTEN-2-ONE, 4-METHYL-	mg/kg																							
7H-Benz[de]anthracen-7-one	mg/kg																							
9,10-Anthracenedione	mg/kg																							
9-Octadecanamide, (Z)-	mg/kg																							
Acetamide, 2-chloro-N-(ethox	mg/kg									0.26														
Alachlor	mg/kg												1.2											
Benzenamine, 3-methyl-	mg/kg																							
Benzenamine, 4,4',4"-methy	mg/kg																							
Benzenamine, 4,4'-methyleneb	mg/kg																							
Benzene, 1,2,3,4-tetrachloro	mg/kg																							
Benzene, 1,2,3,5-tetrachloro	mg/kg																							
Benzene, 1,2,3-trichloro-	mg/kg																							
Benzene, 1,3,5-trichloro-	mg/kg																							
Benzene, 1,3-bis(1-methyleth	mg/kg																							
Benzene, 1,4-bis(1-methyleth	mg/kg																							
Benzofuran, 2,3-dihydro-	mg/kg																							
CYCLIC OCTAATOMIC SULFUR	mg/kg	5.2		4.5		4.3		5.2		8.6		4.2		6.2		0.34		1.9						
Diphenyl Ether	mg/kg																							
Docosane	mg/kg																							
Heneicosane	mg/kg																							
Hexacosane	mg/kg																							
Hexadecane	mg/kg																							
Hexatriacontane	mg/kg																							
m-Chloroaniline	mg/kg																							
N,N-Diethylaniline	mg/kg																							
n-Hexadecanoic acid	mg/kg							0.58		0.47														
Nonadecane	mg/kg																							
o-Chloroaniline	mg/kg																							
Octacosane	mg/kg																							
Octadecane	mg/kg																							
Octadecane, 1-chloro-	mg/kg																							
Octadecanoic acid	mg/kg							0.19																
Parachlorophenol	mg/kg									0.23														
Pentadecane	mg/kg																							
Perylene	mg/kg																							
Phenol, 2,5-dichloro-	mg/kg									0.18														
Phenol, 3-chloro-	mg/kg																							
Phenol, 4,4'-(1-methylethyl)	mg/kg			0.22		0.2		0.52		0.44		0.48		2.6		0.38		0.55		2.5				
Tetracosane	mg/kg																							
Tetradecane	mg/kg																							
Tetraethylene glycol	mg/kg																							
Total SVOC TICs	mg/kg	11		7		8.4		12		16		8.3		27		5.8		8.5		2.1		1.7		20
Triacotane	mg/kg																							
Tributyl phosphate	mg/kg																							
Tridecanoic acid	mg/kg																							
Triphenyl phosphate	mg/kg																							
UNKNOWN	mg/kg	0.38		0.24		0.280909091		0.337058824		0.354166667		0.251111111		0.641428571		0.26		0.255					1.92	
Unknown acid	mg/kg					0.21		0.16		0.21		3.573333333		0.365										
Unknown Alcohol	mg/kg																							
Unknown Aldol Condensate	mg/kg	0.39		0.38		0.38		0.4		0.37		0.3						0.53		0.5			4.5	
UNKNOWN ALKANE	mg/kg																							

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	Field Sample ID	MZ-FPA												
		D15-BOR-24-(5.0-5.5)	D15-BOR-24-(6.0-6.5)	D15-BOR-24-(6.5-7.1)	D15-BOR-24-(7.0-7.2)	D15-BOR-24-(7.2-7.7)	D15-BOR-24-(7.2-7.7)-D	D16-BOR-02(0.5-1.0)	D16-BOR-02(0-0.5)	D16-BOR-02(10.8-11.2)	D16-BOR-02(4.5-5.0)	D16-BOR-02(9.0-9.5)	D16-BOR-03(0.5-1.0)	
Location ID	D15-BOR-24	D15-BOR-24	D15-BOR-24	D15-BOR-24	D15-BOR-24	D15-BOR-24	D16-BOR-02	D16-BOR-02	D16-BOR-02	D16-BOR-02	D16-BOR-02	D16-BOR-03		
Depth Interval (ft)	5.00-5.50	6.00-6.50	6.50-7.10	7.00-7.20	7.20-7.70	7.20-7.70	0.50-1.00	0.00-0.50	10.80-11.20	4.50-5.00	9.00-9.50	0.50-1.00		
Sample Purpose	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	FS		
Date	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016		
Chemical Class	Units													
Unknown Alkene	mg/kg													
Unknown Amide	mg/kg													
Unknown Amine	mg/kg													
UNKNOWN AROMATIC	mg/kg													
Unknown Carboxylic Acid	mg/kg									2.2				
Unknown Cycloalkane	mg/kg								0.28					
Unknown Hydrocarbon	mg/kg									0.25	0.465			
Unknown Ketone	mg/kg													
Unknown PAH	mg/kg				0.24									
UNKNOWN SILOXANE	mg/kg													
<b>Semivolatile Organic Compounds</b>														
1,2,4-Trichlorobenzene	mg/kg	0.04	0.03	0.04	0.023	0.09	0.072	0.24	0.3	0.99	0.018	0.018	0.18	
1,2-Diphenylhydrazine	mg/kg	0.02	0.018	0.02	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
1,4-Dioxane	mg/kg	0.12	0.11	0.12	0.11	0.13	0.13	0.13	0.14	0.12	0.11	0.11	0.82	
1-Naphthylamine	mg/kg	0.2	0.18	0.2	0.19	0.22	0.21	0.21	0.23	0.18	0.18	0.18	1.4	
2,3,4,6-Tetrachlorophenol	mg/kg	0.08	0.072	0.081	0.074	0.088	0.085	0.085	0.09	0.081	0.073	0.073	0.55	
2,4,5-Trichlorophenol	mg/kg	0.02	0.018	0.02	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
2,4,6-Trichlorophenol	mg/kg	0.02	0.018	0.02	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
2,4-Dichlorophenol	mg/kg	0.02	0.018	0.02	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
2,4-Dimethylphenol	mg/kg	0.02	0.018	0.02	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
2,4-Dinitrophenol	mg/kg	0.36	0.33	0.36	0.33	0.39	0.38	0.38	0.41	0.37	0.33	0.33	2.5	
2,4-Dinitrotoluene	mg/kg	0.08	0.072	0.081	0.074	0.088	0.085	0.085	0.09	0.081	0.073	0.073	0.55	
2,6-Dinitrotoluene	mg/kg	0.02	0.018	0.02	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
2-Chloronaphthalene	mg/kg	0.008	0.007	0.008	0.007	0.009	0.008	0.009	0.009	0.008	0.007	0.007	0.055	
2-Chlorophenol	mg/kg	0.02	0.018	0.023	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
2-Methylnaphthalene	mg/kg	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.006	0.006	0.006	0.004	0.15	
2-Methylphenol (O-Cresol)	mg/kg	0.02	0.018	0.022	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
2-Naphthylamine	mg/kg	0.2	0.18	0.2	0.19	0.22	0.21	0.21	0.23	0.18	0.18	0.18	1.4	
2-Nitroaniline	mg/kg	0.02	0.018	0.02	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
2-Nitrophenol	mg/kg	0.02	0.018	0.02	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
3,3'-Dichlorobenzidine	mg/kg	0.12	0.11	0.12	0.11	0.13	0.13	0.13	0.14	0.12	0.11	0.11	0.82	
3,3'-Dimethylbenzidine	mg/kg													
3-Nitroaniline	mg/kg	0.08	0.072	0.081	0.074	0.088	0.085	0.085	0.09	0.081	0.073	0.073	0.55	
4,6-Dinitro-2-Methylphenol	mg/kg	0.2	0.18	0.2	0.19	0.22	0.21	0.21	0.23	0.18	0.18	0.18	1.4	
4-Aminobiphenyl	mg/kg	0.2	0.18	0.2	0.19	0.22	0.21	0.21	0.23	0.18	0.18	0.18	1.4	
4-Bromophenyl Phenyl Ether	mg/kg	0.02	0.018	0.02	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
4-Chloro-3-Methylphenol	mg/kg	0.02	0.018	0.02	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
4-Chloroaniline	mg/kg	0.04	0.036	0.04	0.037	0.044	0.042	0.043	0.045	0.041	0.037	0.037	0.27	
4-Chlorophenyl Phenyl Ether	mg/kg	0.02	0.018	0.02	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
4-Methylphenol (P-Cresol)	mg/kg	0.02	0.018	0.023	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
4-Nitroaniline	mg/kg	0.08	0.072	0.081	0.074	0.088	0.085	0.085	0.09	0.081	0.073	0.073	0.55	
4-Nitrophenol	mg/kg	0.2	0.18	0.2	0.19	0.22	0.21	0.21	0.23	0.18	0.18	0.18	1.4	
Acetophenone	mg/kg	0.02	0.018	0.02	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
Aniline	mg/kg	0.2	0.18	0.2	0.19	0.22	0.21	0.21	0.23	0.18	0.18	0.18	1.4	
Benzidine	mg/kg	0.3	0.27	0.3	0.28	0.33	0.32	0.32	0.34	0.28	0.28	0.27	2	
Biphenyl	mg/kg	0.02	0.018	0.02	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg	0.02	0.018	0.02	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
Bis(2-Chloroethoxy)Methane	mg/kg	0.02	0.018	0.02	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
Bis(2-Chloroethyl)Ether	mg/kg	0.02	0.018	0.02	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
Bis(2-Chloroisopropyl)Ether	mg/kg													
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.08	0.072	0.081	0.074	0.088	0.085	0.085	0.09	0.081	0.073	0.073	0.55	
Butyl Benzyl Phthalate	mg/kg	0.08	0.072	0.081	0.074	0.088	0.085	0.085	0.09	0.081	0.073	0.073	0.55	
Carbazole	mg/kg	0.02	0.018	0.02	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
Dibenzofuran	mg/kg	0.02	0.018	0.02	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
Diethyl Phthalate	mg/kg	0.08	0.072	0.081	0.074	0.088	0.085	0.085	0.09	0.081	0.073	0.073	0.55	
Dimethyl Phthalate	mg/kg	0.08	0.072	0.081	0.074	0.088	0.085	0.085	0.09	0.081	0.073	0.073	0.55	
Di-N-Butyl Phthalate	mg/kg	0.08	0.072	0.081	0.074	0.088	0.085	0.085	0.09	0.081	0.073	0.073	0.55	
Diphenyl Ether	mg/kg	0.02	0.018	0.02	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
Hexachlorobenzene	mg/kg	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.004	0.027	
Hexachlorobutadiene	mg/kg	0.02	0.018	0.02	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
Hexachlorocyclopentadiene	mg/kg	0.2	0.18	0.2	0.19	0.22	0.21	0.21	0.23	0.18	0.18	0.18	1.4	
Hexachloroethane	mg/kg	0.04	0.036	0.04	0.037	0.044	0.042	0.043	0.045	0.041	0.037	0.037	0.27	
Hexachloropropylene	mg/kg													
Isophorone	mg/kg	0.02	0.018	0.02	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
N-Dioctyl Phthalate	mg/kg	0.08	0.072	0.081	0.074	0.088	0.085	0.085	0.09	0.081	0.073	0.073	0.55	
Nitrobenzene	mg/kg	0.02	0.018	0.02	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
N-Nitrosodimethylamine	mg/kg	0.08	0.072	0.081	0.074	0.088	0.085	0.085	0.09	0.081	0.073	0.073	0.55	
N-Nitrosodi-N-Propylamine	mg/kg	0.02	0.018	0.02	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
N-Nitrosodiphenylamine	mg/kg	0.02	0.018	0.02	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
O-Toluidine	mg/kg	0.24	0.22	0.24	0.22	0.26	0.25	0.26	0.27	0.24	0.22	0.22	1.6	
Parathion	mg/kg	0.2	0.18	0.2	0.19	0.22	0.21	0.21	0.23	0.18	0.18	0.18	1.4	
Pentachlorobenzene	mg/kg	0.02	0.018	0.02	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
Pentachlorophenol	mg/kg	0.04	0.036	0.04	0.037	0.044	0.042	0.043	0.045	0.041	0.037	0.037	0.27	
Phenol	mg/kg	0.02	0.018	0.023	0.019	0.022	0.021	0.021	0.023	0.02	0.018	0.018	0.14	
<b>Volatile Organic Compounds - TICs</b>														
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg													

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA							
		D15-BOR-24-(5.0-5.5)	D15-BOR-24-(6.0-6.5)	D15-BOR-24-(6.5-7.1)	D15-BOR-24-(7.0-7.2)	D15-BOR-24-(7.2-7.7)	D15-BOR-24-(7.2-7.7)-D	D16-BOR-02(0.5-1.0)	D16-BOR-02(0-0.5)	D16-BOR-02(10.8-11.2)	D16-BOR-02(4.5-5.0)	D16-BOR-02(9.0-9.5)	D16-BOR-03(0.5-1.0)										
Location ID	Depth Interval (ft)	D15-BOR-24	D15-BOR-24	D15-BOR-24	D15-BOR-24	D15-BOR-24	D15-BOR-24	D15-BOR-24	D15-BOR-24	D16-BOR-02	D16-BOR-02	D16-BOR-02	D16-BOR-02	D16-BOR-02	D16-BOR-02	D16-BOR-03							
Sample Purpose	Date	5.00-5.50	6.00-6.50	6.50-7.10	7.00-7.20	7.20-7.70	7.20-7.70	7.20-7.70	7.20-7.70	0.50-1.00	0.00-0.50	10.80-11.20	4.50-5.00	9.00-9.50	0.50-1.00								
Chemical Class	Units	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	FS	FS	FS								
Chemical	Units	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016								
1-Butene	mg/kg																						
1-Heptene	mg/kg																						
1-Propene, 2-methyl-	mg/kg																						
Azulene	mg/kg																						
BENZENE, 1,2,4-TRICHLORO-	mg/kg																						
BENZENE, 1,2-DICHLORO-	mg/kg																						
BENZENE, 1,4-DICHLORO-	mg/kg																						
Camphene	mg/kg																						
CYCLOHEXANE	mg/kg																						
Cyclohexane, methyl-	mg/kg																						
Cyclotrisiloxane, hexamethyl	mg/kg	0.007																					
Diphenyl Ether	mg/kg																						
Ethane, 1,1,2,2-tetrachloro-	mg/kg																						
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg																						
Ethane, 1,2-dichloro-1,1-dif	mg/kg																						
Ethene, 1,1-dichloro-2,2-dif	mg/kg																						
Hexane, 2-methyl-	mg/kg																						
Hexane, 3-methyl-	mg/kg																						
METHANE, CHLOROFLUORO-	mg/kg																						
Naphthalene	mg/kg																						
NAPHTHALENE, 2-METHYL-	mg/kg																						
Nonanal	mg/kg																						
Norflurane	mg/kg																						
Pentane, 2,3-dimethyl-	mg/kg																						
Phenol, 4-(1,1,3,3-tetrameth	mg/kg																						
Propene	mg/kg																						
Sulfur dioxide	mg/kg																						
Tridecane	mg/kg																						
UNKNOWN	mg/kg																						
UNKNOWN ALICYCLIC	mg/kg																						
UNKNOWN ALIPHATIC	mg/kg																						
UNKNOWN ALKANE	mg/kg																						
UNKNOWN AROMATIC	mg/kg																						
UNKNOWN SILOXANE	mg/kg																						
<b>Volatile Organic Compounds</b>																							
1,1,1,2-Tetrachloroethane	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
1,1,1-Trichloroethane	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
1,1,1-Trichlorotrifluoroethane	mg/kg	0.006	U	0.006	U	0.006	U	0.006	U	0.007	U	0.006	U	0.22	U	0.34	U	0.005	U	0.075	U	0.01	U
1,1,2,2-Tetrachloroethane	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
1,1,2-Trichloroethane	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
1,1,2-Trichlorotrifluoroethane	mg/kg	0.002	U	0.002	U	0.099	U	0.005	U	0.12	U	0.12	U	1.6	U	4	U	2900	U	0.074	U	0.23	U
1,1,2-Trifluoroethane	mg/kg	0.002	U	0.002	U	0.002	U	0.002	U	0.003	U	0.003	U	0.002	U	0.003	U	0.003	U	0.002	U	0.004	U
1,1-Dichloro-1-Fluoroethane	mg/kg	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.002	U
1,1-Dichloroethane	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
1,1-Dichloroethene	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.081	U	3.4	U	0.001	U	0.001	U	0.003	U
1,1-Dichloropropene	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
1,2,4-Trimethylbenzene	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
1,2-Dibromoethane (EDB)	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg	0.001	U	0.001	U	0.002	U	0.001	U	0.001	U	0.001	U	0.13	U	0.19	U	0.001	U	0.001	U	0.004	U
1,2-Dichloro-1-Fluoroethane	mg/kg	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.002	U
1,2-Dichlorobenzene	mg/kg	0.17	U	0.017	U	2.8	U	0.095	U	1.5	U	3.9	U	1.5	U	1.8	U	130	U	0.001	U	0.005	U
1,2-Dichloroethane	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
1,2-Dichloroethene	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
1,2-Dichloropropane	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
1,2-Dichlorotetrafluoroethane	mg/kg	0.002	U	0.002	U	0.002	U	0.002	U	0.003	U	0.003	U	0.045	U	0.066	U	6.8	U	0.003	U	0.018	U
1,3,5-Trimethylbenzene	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
1,3-Dichlorobenzene	mg/kg	0.004	U	0.001	U	0.15	U	0.027	U	0.075	U	0.23	U	0.085	U	0.1	U	4.1	U	0.001	U	0.001	U
1,4-Dichlorobenzene	mg/kg	0.14	U	0.018	U	4.8	U	0.13	U	2.4	U	6.8	U	4.2	U	5.2	U	260	U	0.003	U	0.008	U
1-Chloro-1,1-Difluoroethane	mg/kg	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.002	U
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.028	U	0.038	U	0.57	U	0.002	U	0.007	U
2-Chloro-1,1,1-Trifluoroethane	mg/kg	0.002	U	0.002	U	0.099	U	0.002	U	0.12	U	0.12	U	0.11	U	0.16	U	6.8	U	0.002	U	0.002	U
2-Chloroethyl Vinyl Ether	mg/kg																						0.039
2-Chlorotoluene	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
2-Hexanone	mg/kg	0.004	U	0.003	U	0.15	U	0.003	U	0.18	U	0.17	U	0.24	U	0.24	U	10	U	0.003	U	0.003	U
4-Chlorotoluene	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
4-Isopropyltoluene	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
Acetone	mg/kg	0.041	U	0.029	U	0.35	U	0.046	U	0.41	U	0.4	U	0.39	U	0.57	U	24	U	0.015	U	0.029	U
Acrolein	mg/kg																						
Acrylonitrile	mg/kg																						
Benzene	mg/kg	0.021	U	0.007	U	3.2	U	0.81	U	0.29	U	3.4	U	0.029	U	0.046	U	42	U	0.0005	U	0.006	U
Bromodichloromethane	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
Bromoform	mg/kg																						
Carbon Disulfide	mg/kg	0.012	U	0.011	U	0.05	U	0.063	U	0.058	U	0.058	U	0.081	U	3.4	U	0.001	U	0.001	U	0.004	U
Carbon Tetrachloride	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
CFC-1113	mg/kg	0.002	U	0.002	U	0.099	U	0.002	U	0.12	U	0.12	U	0.11	U	0.16	U	6.8	U	0.002	U	0.002	U
Chlorobenzene	mg/kg	0.063	U	0.015	U	6.3	U	0.062	U	1.4	U	7.9	U	4	U	4.8	U	1500	U	0.01	U	0.037	U

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA D15-BOR-24-(5.0-5.5)		MZ-FPA D15-BOR-24-(6.0-6.5)		MZ-FPA D15-BOR-24-(6.5-7.1)		MZ-FPA D15-BOR-24-(7.0-7.2)		MZ-FPA D15-BOR-24-(7.2-7.7)		MZ-FPA D15-BOR-24-(7.2-7.7)-D		MZ-FPA D16-BOR-02(0.5-1.0)		MZ-FPA D16-BOR-02(0-0.5)		MZ-FPA D16-BOR-02(10.8-11.2)		MZ-FPA D16-BOR-02(4.5-5.0)		MZ-FPA D16-BOR-02(9.0-9.5)		MZ-FPA D16-BOR-03(0.5-1.0)	
		Units	D15-BOR-24 5.00-5.50 FS 11/1/2017	D15-BOR-24 6.00-6.50 FS 11/1/2017	D15-BOR-24 6.50-7.10 FS 11/1/2017	D15-BOR-24 7.00-7.20 FS 11/1/2017	D15-BOR-24 7.20-7.70 FS 11/1/2017	D15-BOR-24 7.20-7.70 DUP FS 11/1/2017	D16-BOR-02 0.50-1.00 FS 11/1/2016	D16-BOR-02 0.00-0.50 FS 11/1/2016	D16-BOR-02 10.80-11.20 FS 11/1/2016	D16-BOR-02 4.50-5.00 FS 11/1/2016	D16-BOR-02 9.00-9.50 FS 11/1/2016	D16-BOR-03 0.50-1.00 FS 11/1/2016											
Chlorodibromomethane	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.056	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
Chlorodifluoromethane	mg/kg	0.002	U	0.002	U	0.002	U	0.002	U	0.003	U	0.003	U	0.002	U	0.003	U	0.003	U	0.002	U	0.002	U	0.004	U
Chlorofluoromethane	mg/kg	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.003	U	0.004	U	0.001	U	0.001	U	0.001	U	0.009	U
Chloroform	mg/kg	0.035	U	0.004	U	0.61	U	0.26	U	0.061	U	0.55	U	0.056	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
Chloropentafluoroethane	mg/kg	0.018	U	0.017	U	0.017	U	0.017	U	0.02	U	0.019	U	0.018	U	0.019	U	0.019	U	0.015	U	0.016	U	0.03	U
cis-1,2-Dichloroethene	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.056	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
cis-1,3-Dichloropropene	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.056	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
Cumene	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.056	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
Dichlorodifluoromethane	mg/kg	0.002	U	0.002	U	0.099	U	0.002	U	0.12	U	0.12	U	0.11	U	0.16	U	6.8	U	0.002	U	0.002	U	0.004	U
Dichlorofluoromethane	mg/kg	0.002	U	0.002	U	0.099	U	0.002	U	0.12	U	0.12	U	0.21	U	0.48	U	6.8	U	0.002	U	0.004	U	0.029	U
Ethane	ug/L																								
Ethyl Chloride	mg/kg	0.002	U	0.002	U	0.099	U	0.002	U	0.12	U	0.12	U	0.11	U	0.16	U	6.8	U	0.002	U	0.002	U	0.004	U
Ethylbenzene	mg/kg	0.002	U	0.001	U	0.24	U	0.044	U	0.058	U	0.25	U	0.056	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
Fluoromethane	mg/kg	0.004	U	0.003	U	0.003	U	0.003	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.003	U	0.003	U	0.006	U
Hexane	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.056	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
Isobutyl Alcohol	mg/kg	0.12	U	0.1	U	5	U	0.11	U	5.8	U	5.8	U	5.6	U	8.1	U	340	U	0.11	U	0.11	U	0.18	U
Meta- And Para-Xylene	mg/kg	0.01	U	0.001	U	0.92	U	0.13	U	0.13	U	0.87	U	0.056	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
Methacrylonitrile	mg/kg	0.006	U	0.005	U	0.25	U	0.006	U	0.29	U	0.29	U	0.28	U	0.41	U	17	U	0.005	U	0.005	U	0.009	U
Methane	ug/L																								
Methyl Bromide	mg/kg																								
Methyl Chloride	mg/kg	0.002	U	0.002	U	0.099	U	0.002	U	0.12	U	0.12	U	0.11	U	0.16	U	6.8	U	0.002	U	0.002	U	0.004	U
Methyl Ethyl Ketone	mg/kg	0.005	U	0.004	U	0.2	U	0.005	U	0.23	U	0.23	U	0.23	U	0.33	U	14	U	0.004	U	0.004	U	0.008	U
Methyl Isobutyl Ketone	mg/kg	0.004	U	0.003	U	0.15	U	0.003	U	0.18	U	0.17	U	0.17	U	0.24	U	10	U	0.003	U	0.003	U	0.005	U
Methyl Methacrylate	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.056	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
Methyl Tertiary Butyl Ether	mg/kg	0.0006	U	0.0005	U	0.025	U	0.0006	U	0.029	U	0.029	U	0.028	U	0.041	U	1.7	U	0.0005	U	0.0005	U	0.0009	U
Methylene Chloride	mg/kg	0.004	U	0.002	U	0.099	U	0.016	U	0.12	U	0.12	U	0.11	U	0.16	U	6.8	U	0.002	U	0.003	U	0.004	U
N-Butylbenzene	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.056	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
N-Propylbenzene	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.056	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
Ortho-Xylene	mg/kg	0.005	U	0.001	U	0.34	U	0.057	U	0.058	U	0.33	U	0.056	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
Propionitrile	mg/kg	0.035	U	0.031	U	1.5	U	0.034	U	1.8	U	1.7	U	1.7	U	2.4	U	100	U	0.032	U	0.032	U	0.053	U
sec-Butylbenzene	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.056	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
Styrene	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.056	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
tert-Butylbenzene	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.056	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
Tetrachloroethene	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.36	U	0.43	U	73	U	0.001	U	0.002	U	0.005	U
Tetrahydrofuran	mg/kg	0.005	U	0.004	U	0.2	U	0.005	U	0.23	U	0.23	U	0.23	U	0.33	U	14	U	0.004	U	0.004	U	0.007	U
Toluene	mg/kg	0.018	U	0.004	U	2	U	0.36	U	0.15	U	1.7	U	0.056	U	0.081	U	3.4	U	0.001	U	0.001	U	0.003	U
trans-1,2-Dichloroethene	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.056	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
trans-1,3-Dichloropropene	mg/kg																								
Trichloroethene	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.056	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
Trichlorofluoromethane	mg/kg	0.002	U	0.002	U	0.099	U	0.004	U	0.12	U	0.12	U	0.22	U	1	U	1700	U	0.016	U	0.24	U	0.26	U
Vinyl Chloride	mg/kg	0.001	U	0.001	U	0.05	U	0.001	U	0.058	U	0.058	U	0.056	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U
Vinyl Fluoride	mg/kg	0.007	U	0.007	U	0.007	U	0.007	U	0.008	U	0.008	U	0.007	U	0.008	U	0.008	U	0.006	U	0.006	U	0.012	U
Xylenes	mg/kg	0.016	U	0.001	U	1.3	U	0.19	U	0.13	U	1.2	U	0.056	U	0.081	U	3.4	U	0.001	U	0.001	U	0.002	U

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	D16-BOR-03(0-0.5)	D16-BOR-03(3-3.5)	D16-BOR-03(5.5-6)	D16-BOR-03(9.0-9.5)	D16-BOR-03(9.0-9.5)-D	D16-BOR-03(9.7-10.0)	D16-BOR-04(0.5-1.0)	D16-BOR-04(0-0.5)	D16-BOR-04(4.0-4.5)	D16-BOR-04(5.0-5.5)	D16-BOR-04(6.0-6.5)	D16-BOR-04(7.8-8.1)	
Location ID	D16-BOR-03	D16-BOR-03	D16-BOR-03	D16-BOR-03	D16-BOR-03	D16-BOR-03	D16-BOR-04	D16-BOR-04	D16-BOR-04	D16-BOR-04	D16-BOR-04	D16-BOR-04	
Depth Interval (ft)	0.00-0.50	3.00-3.50	5.50-6.00	9.00-9.50	9.00-9.50	9.70-10.00	0.50-1.00	0.00-0.50	4.00-4.50	5.00-5.50	6.00-6.50	7.80-8.10	
Sample Purpose	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	FS	FS	
Date	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016	10/31/2016	10/31/2016	10/31/2016	10/31/2016	10/31/2016	10/31/2016	
Chemical Class	Units												
<b>General Chemistry</b>													
Black Carbon	mg/kg												
Percent Moisture	%	43.3	14	11.5	10.1	9.3	15.3	28.6	38.9	7.1	7.2	10.8	
Percent Solids	%											34.6	
Total Organic Carbon	mg/kg	28100	215 U	198 U	214 U	236 U		6460	3470	202 U	204 U	185 U	
<b>Metals</b>													
Aluminum	mg/kg	15300						14800	12900				
Antimony	mg/kg	0.642						0.476	0.621				
Arsenic	mg/kg	12.2						6.25	7.5				
Barium	mg/kg	127						70.4	81				
Beryllium	mg/kg	0.898						0.597	0.608				
Cadmium	mg/kg	0.724						0.232	0.401				
Calcium	mg/kg	4190						1420	3330				
Chromium	mg/kg	52.2						39.6	43.9				
Cobalt	mg/kg	13.9						10.5	11.6				
Copper	mg/kg	43.2						23.1	37.1				
Iron	mg/kg	24700						13900	17500				
Lead	mg/kg	65.6						39.1	67.4				
Magnesium	mg/kg	4840						1790	2760				
Manganese	mg/kg	1180						339	468				
Mercury	mg/kg	0.356						0.141	0.232				
Nickel	mg/kg	24.6						13.9	18.4				
Potassium	mg/kg	2960						1440	2070				
Selenium	mg/kg	0.522						0.168	0.377				
Silver	mg/kg	0.234						0.136	0.218				
Sodium	mg/kg	960						255	647				
Thallium	mg/kg	0.205						0.141	0.148				
Tin	mg/kg												
Titanium	mg/kg												
Vanadium	mg/kg	48.7						48.3	44.4				
Zinc	mg/kg	153						55.8	93.2				
<b>Metals - AVS/SEM</b>													
Acid Volatile Sulfide	umol/g												
Arsenic	umol/g												
Cadmium	umol/g												
Copper	umol/g												
Lead	umol/g												
Zinc	umol/g												
<b>Metals - Leachate</b>													
Lead	ug/L												
<b>Per and Polyfluorinated Organic Substances</b>													
Perfluorobutane Sulfonic Acid	mg/kg												
Perfluorobutanoic Acid	mg/kg												
Perfluorodecane Sulfonic Acid	mg/kg												
Perfluorodecanoic Acid	mg/kg												
Perfluorododecanoic Acid	mg/kg												
Perfluoroheptanoic Acid	mg/kg												
Perfluorohexane Sulfonic Acid	mg/kg												
Perfluorohexanoic Acid	mg/kg												
Perfluorononanoic Acid	mg/kg												
Perfluorooctane Sulfonamide	mg/kg												
Perfluoropentanoic Acid	mg/kg												
Perfluorotetradecanoic Acid	mg/kg												
Perfluorotridecanoic Acid	mg/kg												
Perfluoroundecanoic Acid	mg/kg												
PFOA	mg/kg												
PFOA(trial)	mg/kg												
PFOS	mg/kg												
PFOS (trial)	mg/kg												
<b>Pesticides and Herbicides</b>													
4,4'-DDD	mg/kg												
4,4'-DDE	mg/kg												
4,4'-DDT	mg/kg												
Aldrin	mg/kg												
Alpha Chlordane	mg/kg												
Alpha-BHC	mg/kg												
beta-BHC	mg/kg												
delta-BHC	mg/kg												
Dieldrin	mg/kg												
Endosulfan I	mg/kg												
Endosulfan II	mg/kg												
Endosulfan Sulfate	mg/kg												
Endrin	mg/kg												
Endrin Aldehyde	mg/kg												
Endrin Ketone	mg/kg												
Gamma Chlordane	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D16-BOR-03(0-0.5)	D16-BOR-03(3-3.5)	D16-BOR-03(5.5-6)	D16-BOR-03(9.0-9.5)	D16-BOR-03(9.0-9.5)-D	D16-BOR-03(9.7-10.0)	D16-BOR-04(0.5-1.0)	D16-BOR-04(0-0.5)	D16-BOR-04(4.0-4.5)	D16-BOR-04(5.0-5.5)	D16-BOR-04(6.0-6.5)	D16-BOR-04(7.8-8.1)
Location ID	Depth Interval (ft)	D16-BOR-03	D16-BOR-03	D16-BOR-03	D16-BOR-03	D16-BOR-03	D16-BOR-03	D16-BOR-04	D16-BOR-04	D16-BOR-04	D16-BOR-04	D16-BOR-04	D16-BOR-04
Sample Purpose	Date	0.00-0.50 FS	3.00-3.50 FS	5.50-6.00 FS	9.00-9.50 FS	9.00-9.50 DUP	9.70-10.00 FS	0.50-1.00 FS	0.00-0.50 FS	4.00-4.50 FS	5.00-5.50 FS	6.00-6.50 FS	7.80-8.10 FS
Chemical Class	Units	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016	10/31/2016	10/31/2016	10/31/2016	10/31/2016	10/31/2016	10/31/2016
Chemical													
Heptachlor	mg/kg												
Heptachlor Epoxide	mg/kg												
Lindane	mg/kg												
Methoxychlor	mg/kg												
Toxaphene	mg/kg												
<b>Physical Properties</b>													
0.001 MM	% PASSING	4	0.5 U	0.5 U	0.5 U			6	2.5	1	2	2	
0.002 MM	% PASSING	7	0.5 U	0.5 U	0.5 U			8	2.5	1	2	2	
0.005 MM	% PASSING	10	0.5 U	0.5 U	1			13	3	1	2	2	
0.02 MM	% PASSING	25	1	1	4			25	9.5	1	2	4	
0.05 MM	% PASSING	50	2	2	7			37	21.5	2	4	9	
0.064 MM	% PASSING	62	3	3	9			42	27	3	5	11	
0.075 MM	% PASSING	67.3	3.6	3.5	9.3			46	29.1	4.1	5.4	12	
0.15 MM	% PASSING	83.7	4.3	4.4	11.9			50	36.3	5.1	7	14.9	
0.3 MM	% PASSING	91.5	8.2	6.3	16.7			58.4	47.3	8.4	11.6	24.7	
0.6 MM	% PASSING	94.1	22.4	12.2	21.3			66.5	59.6	16.9	24.4	32.7	
1.18 MM	% PASSING	95.8	61.3	27.6	34.4			71.9	72.7	31.3	46.8	55.5	
19 MM	% PASSING	100	100	92.8	74.8			100	100	97.9	94.4	97.3	
2.36 MM	% PASSING	97.4	79.3	50.6	48.7			74.6	81.8	40.3	58	78.6	
3.35 MM	% PASSING	99.2	84.2	60.5	52.7			80.4	87	47.3	66.8	88.2	
37.5 MM	% PASSING	100	100	100	100			100	100	100	100	100	
4.75 MM	% PASSING	99.9	88.9	68.9	56.3			85.7	92.1	57.8	75.2	92.3	
75 MM	% PASSING	100	100	100	100			100	100	100	100	100	
Density	PCF												
<b>Polychlorinated Biphenyls - TICs</b>													
1,1'-Biphenyl, 2,3-dichloro-	mg/kg												
Unknown Biphenyl	mg/kg												
<b>Polychlorinated Biphenyls</b>													
Heptachlorobiphenyl	mg/kg												
Hexachlorobiphenyl	mg/kg												
Octachlorobiphenyl	mg/kg												
PCB 1	mg/kg	0.0216						0.00293	0.00146				
PCB 10	mg/kg	0.000233						0.000147	0.000015				
PCB 100	mg/kg												
PCB 101	mg/kg												
PCB 102	mg/kg	0.000139						0.00138	0.0000317				
PCB 103	mg/kg	0.0000978						0.000423	0.0000226				
PCB 104	mg/kg	0.0000109						0.0000029 U	0.00000197				
PCB 105	mg/kg	0.00128						0.00751	0.000376				
PCB 106	mg/kg	0.0000867						0.0000349 U	0.0000182				
PCB 107	mg/kg												
PCB 107/123	mg/kg												
PCB 108	mg/kg												
PCB 109	mg/kg	0.000303						0.00189	0.0000948				
PCB 11	mg/kg	0.00983						0.00169	0.00105				
PCB 110	mg/kg	0.00394						0.0253	0.00117				
PCB 111	mg/kg	0.0000282						0.000033 U	0.0000054 U				
PCB 112	mg/kg	0.0000405						0.0000618	0.00000921				
PCB 113	mg/kg												
PCB 114	mg/kg	0.0000887						0.000451	0.0000205				
PCB 115	mg/kg	0.0000209 U						0.0000364 U	0.00000597 U				
PCB 116	mg/kg												
PCB 117	mg/kg	0.0000728						0.000622	0.0000292				
PCB 118	mg/kg	0.00263						0.0178	0.000904				
PCB 119	mg/kg												
PCB 12	mg/kg												
PCB 120	mg/kg	0.0000606						0.000129	0.0000151				
PCB 121	mg/kg	0.0000205 U						0.0000327 U	0.00000549 U				
PCB 121/95/88	mg/kg												
PCB 122	mg/kg	0.0000261 U						0.000324	0.00000693 U				
PCB 123	mg/kg	0.0000699						0.000395	0.0000219				
PCB 124	mg/kg												
PCB 125	mg/kg												
PCB 126	mg/kg	0.0000583						0.00012	0.0000163				
PCB 127	mg/kg	0.0000267 U						0.0000343 U	0.00000746 U				
PCB 128	mg/kg												
PCB 129	mg/kg												
PCB 129/158	mg/kg												
PCB 13	mg/kg												
PCB 130	mg/kg	0.00065						0.00142	0.000103				
PCB 130/164	mg/kg												
PCB 131	mg/kg	0.0000387						0.000293	0.0000138				
PCB 132	mg/kg	0.00126						0.00719	0.000378				
PCB 133	mg/kg	0.000412						0.000458	0.0000507				
PCB 134	mg/kg	0.000178						0.00129	0.0000613				
PCB 135	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D16-BOR-03(0-0.5) D16-BOR-03 0.00-0.50 FS 11/1/2016	D16-BOR-03(3-3.5) D16-BOR-03 3.00-3.50 FS 11/1/2016	D16-BOR-03(5.5-6) D16-BOR-03 5.50-6.00 FS 11/1/2016	D16-BOR-03(9.0-9.5) D16-BOR-03 9.00-9.50 FS 11/1/2016	D16-BOR-03(9.0-9.5)-D D16-BOR-03 9.00-9.50 DUP 11/1/2016	D16-BOR-03(9.7-10.0) D16-BOR-03 9.70-10.00 FS 11/1/2016	D16-BOR-04(0.5-1.0) D16-BOR-04 0.50-1.00 FS 10/31/2016	D16-BOR-04(0-0.5) D16-BOR-04 0.00-0.50 FS 10/31/2016	D16-BOR-04(4.0-4.5) D16-BOR-04 4.00-4.50 FS 10/31/2016	D16-BOR-04(5.0-5.5) D16-BOR-04 5.00-5.50 FS 10/31/2016	D16-BOR-04(6.0-6.5) D16-BOR-04 6.00-6.50 FS 10/31/2016	D16-BOR-04(7.8-8.1) D16-BOR-04 7.80-8.10 FS 10/31/2016
Chemical	Units												
PCB 136	mg/kg	0.000717						0.00295	0.000172				
PCB 137	mg/kg	0.000143						0.000708	0.0000453				
PCB 138	mg/kg												
PCB 139	mg/kg												
PCB 14	mg/kg	0.0103											
PCB 140	mg/kg												
PCB 141	mg/kg	0.000606						0.00361	0.000193				
PCB 142	mg/kg	0.000066						0.0000148	0.0000182				
PCB 143	mg/kg	0.0000228						0.00000344 U	0.00000847				
PCB 143/139	mg/kg												
PCB 144	mg/kg	0.000133						0.00091	0.0000471				
PCB 145	mg/kg	0.0000498						0.000017	0.0000014				
PCB 146	mg/kg	0.00148						0.00373	0.000217				
PCB 147	mg/kg												
PCB 148	mg/kg	0.0000355						0.0000808	0.00000988				
PCB 149	mg/kg												
PCB 15	mg/kg	0.017						0.00707	0.00125				
PCB 150	mg/kg	0.0000402						0.0000609	0.0000083				
PCB 151	mg/kg												
PCB 152	mg/kg	0.00000509						0.0000244	0.00000193				
PCB 153	mg/kg												
PCB 154	mg/kg	0.00016						0.000457	0.0000401				
PCB 155	mg/kg	0.0000212						0.0000694	0.00000545				
PCB 156	mg/kg												
PCB 157	mg/kg												
PCB 158	mg/kg	0.00027						0.00192	0.0000987				
PCB 159	mg/kg	0.0000956						0.000233	0.0000197				
PCB 16	mg/kg	0.00547						0.00736	0.00051				
PCB 160	mg/kg	0.000184						0.00000268 U	0.0000497				
PCB 161	mg/kg	0.00000596						0.0000026 U	0.00000355				
PCB 162	mg/kg	0.000378						0.000105	0.0000203				
PCB 163	mg/kg												
PCB 163/160	mg/kg												
PCB 164	mg/kg	0.000677						0.00158	0.000114				
PCB 165	mg/kg	0.0000161						0.00000286 U	0.00000317				
PCB 166	mg/kg												
PCB 167	mg/kg	0.000583						0.000689	0.0000559				
PCB 168	mg/kg												
PCB 169	mg/kg	0.0000654						0.0000126 U	0.00000544				
PCB 17	mg/kg	0.00204						0.00514	0.000267				
PCB 170	mg/kg	0.000936						0.005	0.00027				
PCB 171	mg/kg												
PCB 172	mg/kg	0.000355						0.000933	0.0000686				
PCB 173	mg/kg												
PCB 174	mg/kg	0.00126						0.00644	0.000351				
PCB 175	mg/kg	0.0001						0.000265	0.0000212				
PCB 176	mg/kg	0.000182						0.000825	0.0000449				
PCB 177	mg/kg	0.000667						0.00373	0.000214				
PCB 178	mg/kg	0.000446						0.00167	0.00011				
PCB 179	mg/kg	0.000761						0.00325	0.000173				
PCB 18	mg/kg												
PCB 180	mg/kg												
PCB 181	mg/kg	0.0000309						0.0000444	0.00000834				
PCB 182	mg/kg	0.0000358						0.0000666	0.0000101				
PCB 182/175	mg/kg												
PCB 183	mg/kg	0.00063						0.00346	0.000185				
PCB 184	mg/kg	0.0000283						0.0000394	0.00000515				
PCB 185	mg/kg	0.000135						0.000566	0.0000455				
PCB 186	mg/kg	0.0000085						0.00000238 U	0.00000196				
PCB 187	mg/kg	0.00197						0.00782	0.00055				
PCB 188	mg/kg	0.0000478						0.0000347	0.00000793				
PCB 189	mg/kg	0.000147						0.00021	0.00002				
PCB 19	mg/kg	0.000385						0.000814	0.0000482				
PCB 190	mg/kg	0.000199						0.000924	0.0000692				
PCB 191	mg/kg	0.0000684						0.000196	0.0000161				
PCB 192	mg/kg	0.0000501						0.0000071 U	0.0000176				
PCB 193	mg/kg												
PCB 194	mg/kg	0.00109						0.00301	0.000606				
PCB 195	mg/kg	0.000227						0.00115	0.0000951				
PCB 196	mg/kg	0.000492						0.00175	0.000232				
PCB 197	mg/kg	0.0000688						0.000146	0.00002				
PCB 198	mg/kg												
PCB 199	mg/kg												
PCB 2	mg/kg	0.0275						0.00279	0.002				
PCB 20	mg/kg												
PCB 200	mg/kg	0.000107						0.000443	0.0000486				

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D16-BOR-03(0-0.5) D16-BOR-03 0.00-0.50 FS 11/1/2016	D16-BOR-03(3-3.5) D16-BOR-03 3.00-3.50 FS 11/1/2016	D16-BOR-03(5.5-6) D16-BOR-03 5.50-6.00 FS 11/1/2016	D16-BOR-03(9.0-9.5) D16-BOR-03 9.00-9.50 FS 11/1/2016	D16-BOR-03(9.0-9.5)-D D16-BOR-03 9.00-9.50 DUP 11/1/2016	D16-BOR-03(9.7-10.0) D16-BOR-03 9.70-10.00 FS 11/1/2016	D16-BOR-04(0.5-1.0) D16-BOR-04 0.50-1.00 FS 10/31/2016	D16-BOR-04(0-0.5) D16-BOR-04 0.00-0.50 FS 10/31/2016	D16-BOR-04(4.0-4.5) D16-BOR-04 4.00-4.50 FS 10/31/2016	D16-BOR-04(5.0-5.5) D16-BOR-04 5.00-5.50 FS 10/31/2016	D16-BOR-04(6.0-6.5) D16-BOR-04 6.00-6.50 FS 10/31/2016	D16-BOR-04(7.8-8.1) D16-BOR-04 7.80-8.10 FS 10/31/2016
Chemical	Units												
PCB 201	mg/kg	0.00022					0.000592	0.0000818					
PCB 202	mg/kg	0.000559					0.00133	0.00021					
PCB 203	mg/kg	0.000786					0.00246	0.000561					
PCB 204	mg/kg	0.0000233					0.00000999	0.00000686					
PCB 204/200	mg/kg												
PCB 205	mg/kg	0.0000668					0.000141	0.000021					
PCB 206	mg/kg	0.00488					0.00906	0.00237					
PCB 207	mg/kg	0.000405					0.000719	0.000195					
PCB 208	mg/kg	0.00227					0.00433	0.00079					
PCB 209	mg/kg	0.00651					0.018	0.00208					
PCB 21	mg/kg												
PCB 21/20	mg/kg												
PCB 22	mg/kg	0.007					0.00545	0.000589					
PCB 23	mg/kg	0.00158					0.000114	0.0000837					
PCB 24	mg/kg	0.00275					0.000425	0.000129					
PCB 25	mg/kg	0.00283					0.00218	0.000486					
PCB 26	mg/kg												
PCB 27	mg/kg	0.000795					0.000791	0.000146					
PCB 28	mg/kg												
PCB 29	mg/kg												
PCB 3	mg/kg	0.0371					0.0041	0.00281					
PCB 30	mg/kg												
PCB 31	mg/kg	0.0168					0.0143	0.00132					
PCB 32	mg/kg	0.000901					0.003	0.000158					
PCB 33	mg/kg												
PCB 34	mg/kg	0.00227					0.000322	0.000178					
PCB 35	mg/kg	0.00862					0.00293	0.000843					
PCB 36	mg/kg	0.00215					0.000112	0.000221					
PCB 37	mg/kg	0.0307					0.00727	0.00249					
PCB 38	mg/kg	0.000206					0.000043	0.0000199					
PCB 39	mg/kg	0.00417					0.000356	0.000414					
PCB 4	mg/kg	0.00999					0.00314	0.000526					
PCB 4/10	mg/kg												
PCB 40	mg/kg												
PCB 41	mg/kg	0.000221					0.00181	0.0000554					
PCB 42	mg/kg	0.000767					0.00809	0.000263					
PCB 43	mg/kg	0.000208					0.00134	0.0000473					
PCB 44	mg/kg												
PCB 45	mg/kg	0.000408					0.00576	0.000156					
PCB 46	mg/kg	0.000176					0.00194	0.0000528					
PCB 47	mg/kg												
PCB 48	mg/kg	0.000504					0.00604	0.000162					
PCB 49	mg/kg												
PCB 5	mg/kg	0.00502					0.00242	0.000345					
PCB 50	mg/kg												
PCB 51	mg/kg	0.000309					0.00109	0.0000376					
PCB 52	mg/kg	0.00399					0.0357	0.00114					
PCB 53	mg/kg												
PCB 54	mg/kg	0.0000553					0.0000608	0.00000588					
PCB 55	mg/kg	0.0000898					0.000326	0.0000235					
PCB 56	mg/kg	0.00211					0.0182	0.000724					
PCB 57	mg/kg	0.000105					0.000235	0.0000312					
PCB 58	mg/kg	0.0000742					0.000134	0.000013					
PCB 59	mg/kg												
PCB 6	mg/kg	0.0196					0.00397	0.000965					
PCB 60	mg/kg	0.00087					0.00287	0.000151					
PCB 61	mg/kg												
PCB 62	mg/kg												
PCB 63	mg/kg	0.000391					0.0011	0.000065					
PCB 64	mg/kg	0.00135					0.0116	0.000376					
PCB 65	mg/kg												
PCB 65/75/62	mg/kg												
PCB 66	mg/kg	0.00296					0.0277	0.000861					
PCB 67	mg/kg	0.000195					0.000849	0.0000536					
PCB 67/58	mg/kg												
PCB 68	mg/kg	0.0000811					0.000279	0.0000211					
PCB 68/64	mg/kg												
PCB 69	mg/kg												
PCB 7	mg/kg	0.00256					0.000331	0.000141					
PCB 70	mg/kg												
PCB 71	mg/kg												
PCB 72	mg/kg	0.000241					0.000387	0.0000423					
PCB 73	mg/kg	0.0000274					0.00000376	0.00000714					
PCB 73/46	mg/kg												
PCB 74	mg/kg												
PCB 75	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D16-BOR-03(0-0.5) D16-BOR-03 0.00-0.50 FS 11/1/2016	D16-BOR-03(3-3.5) D16-BOR-03 3.00-3.50 FS 11/1/2016	D16-BOR-03(5.5-6) D16-BOR-03 5.50-6.00 FS 11/1/2016	D16-BOR-03(9.0-9.5) D16-BOR-03 9.00-9.50 FS 11/1/2016	D16-BOR-03(9.0-9.5)-D D16-BOR-03 9.00-9.50 DUP 11/1/2016	D16-BOR-03(9.7-10.0) D16-BOR-03 9.70-10.00 FS 11/1/2016	D16-BOR-04(0.5-1.0) D16-BOR-04 0.50-1.00 FS 10/31/2016	D16-BOR-04(0-0.5) D16-BOR-04 0.00-0.50 FS 10/31/2016	D16-BOR-04(4.0-4.5) D16-BOR-04 4.00-4.50 FS 10/31/2016	D16-BOR-04(5.0-5.5) D16-BOR-04 5.00-5.50 FS 10/31/2016	D16-BOR-04(6.0-6.5) D16-BOR-04 6.00-6.50 FS 10/31/2016	D16-BOR-04(7.8-8.1) D16-BOR-04 7.80-8.10 FS 10/31/2016
Chemical	Units												
PCB 76	mg/kg												
PCB 77	mg/kg	0.00165											
PCB 78	mg/kg	0.000326											
PCB 79	mg/kg	0.000257											
PCB 8	mg/kg	0.0358											
PCB 80	mg/kg	0.0000905 U											
PCB 81	mg/kg	0.0000826											
PCB 82	mg/kg	0.000356											
PCB 83	mg/kg	0.000188											
PCB 83/125/112	mg/kg												
PCB 84	mg/kg	0.000964											
PCB 85	mg/kg												
PCB 86	mg/kg												
PCB 86/109	mg/kg												
PCB 87	mg/kg												
PCB 87/111	mg/kg												
PCB 88	mg/kg	0.000031 U											
PCB 89	mg/kg	0.0000615											
PCB 89/84	mg/kg												
PCB 9	mg/kg	0.0128											
PCB 90	mg/kg												
PCB 91	mg/kg	0.000584											
PCB 92	mg/kg	0.000837											
PCB 93	mg/kg												
PCB 94	mg/kg	0.0000498											
PCB 95	mg/kg	0.00277											
PCB 96	mg/kg	0.0000515											
PCB 97	mg/kg												
PCB 98	mg/kg	0.0000888											
PCB 99	mg/kg	0.0017											
PCB-100/93	mg/kg	0.000125											
PCB-107/124	mg/kg	0.000139											
PCB-108/119/86/97/125/87	mg/kg	0.00225											
PCB-113/90/101	mg/kg	0.00346											
PCB-116/85	mg/kg	0.00106											
PCB-128/166	mg/kg	0.000723											
PCB-13/12	mg/kg	0.0519											
PCB-139/140	mg/kg	0.0000583											
PCB-147/149	mg/kg	0.00351											
PCB-151/135	mg/kg	0.00172											
PCB-153/168	mg/kg	0.0037											
PCB-156/157	mg/kg	0.000687											
PCB-163/138/129	mg/kg	0.00394											
PCB-171/173	mg/kg	0.000322											
PCB-180/193	mg/kg	0.0024											
PCB-198/199	mg/kg	0.00198											
PCB-21/33	mg/kg	0.0188											
PCB-26/29	mg/kg	0.00543											
PCB-28/20	mg/kg	0.0095											
PCB-30/18	mg/kg	0.00788											
PCB-44/47/65	mg/kg	0.00303											
PCB-50/53	mg/kg	0.000464											
PCB-59/62/75	mg/kg	0.000391											
PCB-61/70/74/76	mg/kg	0.00638											
PCB-69/49	mg/kg	0.00186											
PCB-71/40	mg/kg	0.00137											
PCB-90/101	mg/kg												
Pentachlorobiphenyl	mg/kg												
Tetrachlorobiphenyl	mg/kg												
Total Decachlorobiphenyls (congeners)	mg/kg												
Total Dichlorobiphenyls (congeners)	mg/kg	0.175											
Total Heptachlorobiphenyls (congeners)	mg/kg	0.0108											
Total Hexachlorobiphenyls (congeners)	mg/kg	0.0226											
Total Monochlorobiphenyls (congeners)	mg/kg	0.0863											
Total Nonachlorobiphenyls (congeners)	mg/kg	0.00756											
Total Octachlorobiphenyls (congeners)	mg/kg	0.00562											
Total PCB (congeners)	mg/kg	0.49869											
Total Pentachlorobiphenyls (congeners)	mg/kg	0.0236											
Total Tetrachlorobiphenyls (congeners)	mg/kg	0.0307											
Total Trichlorobiphenyls (congeners)	mg/kg	0.13											
Trichlorobiphenyl (total)	mg/kg												
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>													
Benzo[e]pyrene	mg/kg												
Chrysene, 1-methyl-	mg/kg												
Naphthalene, 1-methyl-	mg/kg												
Pyrene, 1-methyl-	mg/kg												

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	D16-BOR-03(0-0.5)	D16-BOR-03(3-3.5)	D16-BOR-03(5.5-6)	D16-BOR-03(9.0-9.5)	D16-BOR-03(9.0-9.5)-D	D16-BOR-03(9.7-10.0)	D16-BOR-04(0.5-1.0)	D16-BOR-04(0-0.5)	D16-BOR-04(4.0-4.5)	D16-BOR-04(5.0-5.5)	D16-BOR-04(6.0-6.5)	D16-BOR-04(7.8-8.1)	
Location ID	D16-BOR-03	D16-BOR-03	D16-BOR-03	D16-BOR-03	D16-BOR-03	D16-BOR-03	D16-BOR-04	D16-BOR-04	D16-BOR-04	D16-BOR-04	D16-BOR-04	D16-BOR-04	
Depth Interval (ft)	0.00-0.50	3.00-3.50	5.50-6.00	9.00-9.50	9.00-9.50	9.70-10.00	0.50-1.00	0.00-0.50	4.00-4.50	5.00-5.50	6.00-6.50	7.80-8.10	
Sample Purpose	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	FS	FS	
Date	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016	10/31/2016	10/31/2016	10/31/2016	10/31/2016	10/31/2016	10/31/2016	
Chemical Class													
Chemical	Units												
<b>Polycyclic Aromatic Hydrocarbons</b>													
Acenaphthene	mg/kg	0.097	0.004 U	0.004 U	0.13	0.17	0.004 U	0.035	0.043	0.004 U	0.004 U	0.004 U	0.005 U
Acenaphthylene	mg/kg	0.07	0.004 U	0.004 U	0.007	0.009	0.004 U	0.012	0.012	0.004 U	0.004 U	0.004 U	0.005 U
Anthracene	mg/kg	0.25	0.004 U	0.004 U	0.04	0.041	0.004 U	0.036	0.041	0.004 U	0.004 U	0.004 U	0.005 U
Benzo(A)Anthracene	mg/kg	0.97	0.004 U	0.004 U	0.076	0.092	0.004 U	0.057	0.078	0.004 U	0.004 U	0.004 U	0.005 U
Benzo(B)Fluoranthene	mg/kg	0.73	0.004 U	0.004 U	0.071	0.09	0.004 U	0.056	0.077	0.004 U	0.004 U	0.004 U	0.005 U
Benzo(G,H,I)Perylene	mg/kg	0.38	0.004 U	0.004 U	0.018	0.03	0.004 U	0.03	0.048	0.004 U	0.004 U	0.004 U	0.005 U
Benzo(K)Fluoranthene	mg/kg	0.35	0.004 U	0.004 U	0.027	0.034	0.004 U	0.021	0.033	0.004 U	0.004 U	0.004 U	0.005 U
Benzo(A)Pyrene	mg/kg	0.62	0.004 U	0.004 U	0.009	0.008	0.004 U	0.049	0.071	0.004 U	0.004 U	0.004 U	0.005 U
Chrysene	mg/kg	1.6	0.004 U	0.004 U	0.095	0.12	0.004 U	0.098	0.2	0.004 U	0.004 U	0.004 U	0.005 U
Dibenz(A,H)Anthracene	mg/kg	0.1	0.004 U	0.004 U	0.009	0.012	0.004 U	0.012	0.016	0.004 U	0.004 U	0.004 U	0.005 U
Fluoranthene	mg/kg	1.1	0.004 U	0.004 U	0.26	0.31	0.007	0.087	0.11	0.004 U	0.004 U	0.004 U	0.005 U
Fluorene	mg/kg	0.13	0.004 U	0.004 U	0.13	0.18	0.004 U	0.041	0.039	0.004 U	0.004 U	0.004 U	0.005 U
Indeno (1,2,3-CD) Pyrene	mg/kg	0.33	0.004 U	0.004 U	0.016	0.026	0.004 U	0.022	0.04	0.004 U	0.004 U	0.004 U	0.005 U
Naphthalene	mg/kg	7.4	0.004 U	0.004 U	0.49	0.88	0.008	0.067	0.093	0.004 U	0.004 U	0.004 U	0.005 U
Phenanthrene	mg/kg	0.85	0.004 U	0.004 U	0.4	0.56	0.013	0.071	0.091	0.004 U	0.004 U	0.004 U	0.005 U
Pyrene	mg/kg	1.2	0.004 U	0.004 U	0.16	0.22	0.006	0.12	0.12	0.004 U	0.004 U	0.004 U	0.005 U
Total PAHs (Detections + 1/2 MDL)	mg/kg	16.177	0.032 U	0.032 U	1.938	2.782	0.058	0.814	1.112	0.032 U	0.032 U	0.032 U	0.04 U
Total PAHs (Detections Only)	mg/kg	16.177	0.032 U	0.032 U	1.938	2.782	0.034	0.814	1.112	0.032 U	0.032 U	0.032 U	0.04 U
<b>Semivolatile Organic Compounds - TICs</b>													
1,2,4-Trithiolane	mg/kg												
1,4-Benzenediol, 2-chloro-	mg/kg					0.21							
11H-Benzo[b]fluorene	mg/kg							0.22					
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg												
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg											0.84	
3-PENTEN-2-ONE, 4-METHYL-	mg/kg												
7H-Benz[de]anthracen-7-one	mg/kg							0.26					
9,10-Anthracenedione	mg/kg												
9-Octadecenamido, (Z)-	mg/kg												
Acetamide, 2-chloro-N-(ethox	mg/kg							0.37	0.39				
Alachlor	mg/kg							0.32					
Benzenamine, 3-methyl-	mg/kg												
Benzenamine, 4,4',4"-methy	mg/kg												
Benzenamine, 4,4'-methyleneb	mg/kg							0.22					
Benzene, 1,2,3,4-tetrachloro	mg/kg												
Benzene, 1,2,3,5-tetrachloro	mg/kg												
Benzene, 1,2,3-trichloro-	mg/kg												
Benzene, 1,3,5-trichloro-	mg/kg												
Benzene, 1,3-bis(1-methyleth	mg/kg												
Benzene, 1,4-bis(1-methyleth	mg/kg												
Benzofuran, 2,3-dihydro-	mg/kg												
CYCLIC OCTAATOMIC SULFUR	mg/kg							0.29					
Diphenyl Ether	mg/kg												
Docosane	mg/kg												
Heneicosane	mg/kg												
Hexacosane	mg/kg												
Hexadecane	mg/kg							0.38					
Hexatriacontane	mg/kg												
m-Chloroaniline	mg/kg												
N,N-Diethylaniline	mg/kg												
n-Hexadecanoic acid	mg/kg												
Nonadecane	mg/kg												
o-Chloroaniline	mg/kg												
Octacosane	mg/kg												
Octadecane	mg/kg												
Octadecane, 1-chloro-	mg/kg												
Octadecanoic acid	mg/kg												
Parachlorophenol	mg/kg												
Pentadecane	mg/kg												
Perylene	mg/kg												
Phenol, 2,5-dichloro-	mg/kg												
Phenol, 3-chloro-	mg/kg												
Phenol, 4,4'-(1-methylethyl)	mg/kg	2.7	0.19	0.3	0.42	0.48	0.86		1.1		0.3	0.17	0.24
Tetracosane	mg/kg												
Tetradecane	mg/kg												
Tetraethylene glycol	mg/kg												
Total SVOC TICs	mg/kg	34	1.7	1.5	3.9	4.8	2	6.8	4.5	1.3	0.97	1.1	1.8
Triacotane	mg/kg												
Tributyl phosphate	mg/kg												
Tridecanoic acid	mg/kg												
Triphenyl phosphate	mg/kg												
UNKNOWN	mg/kg	5.15			0.54	0.5		0.2525	0.235				
Unknown acid	mg/kg												
Unknown Alcohol	mg/kg												
Unknown Aldol Condensate	mg/kg	2.2	0.57	0.52			0.48	0.77	0.8	0.41	0.33	0.45	
UNKNOWN ALKANE	mg/kg							0.36					

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	Field Sample ID	MZ-FPA												
		D16-BOR-03(0-0.5)	D16-BOR-03(3-3.5)	D16-BOR-03(5.5-6)	D16-BOR-03(9.0-9.5)	D16-BOR-03(9.0-9.5)-D	D16-BOR-03(9.7-10.0)	D16-BOR-04(0.5-1.0)	D16-BOR-04(0-0.5)	D16-BOR-04(4.0-4.5)	D16-BOR-04(5.0-5.5)	D16-BOR-04(6.0-6.5)	D16-BOR-04(7.8-8.1)	
Location ID	D16-BOR-03	D16-BOR-03	D16-BOR-03	D16-BOR-03	D16-BOR-03	D16-BOR-03	D16-BOR-04	D16-BOR-04	D16-BOR-04	D16-BOR-04	D16-BOR-04	D16-BOR-04	D16-BOR-04	
Depth Interval (ft)	0.00-0.50	3.00-3.50	5.50-6.00	9.00-9.50	9.00-9.50	9.70-10.00	0.50-1.00	0.00-0.50	4.00-4.50	5.00-5.50	6.00-6.50	7.80-8.10	7.80-8.10	
Sample Purpose	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	FS	FS	FS	
Date	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016	10/31/2016	10/31/2016	10/31/2016	10/31/2016	10/31/2016	10/31/2016	10/31/2016	
Chemical Class	Units													
Unknown Alkene	mg/kg													
Unknown Amide	mg/kg													
Unknown Amine	mg/kg								0.23					
UNKNOWN AROMATIC	mg/kg													
Unknown Carboxylic Acid	mg/kg													
Unknown Cycloalkane	mg/kg													
Unknown Hydrocarbon	mg/kg	2.78	0.19				0.67		0.215	0.256666667				
Unknown Ketone	mg/kg													
Unknown PAH	mg/kg													
UNKNOWN SILOXANE	mg/kg													
<b>Semivolatile Organic Compounds</b>														
1,2,4-Trichlorobenzene	mg/kg	0.47	0.019	0.019	0.019	0.83	1.6	0.02	0.058	0.042	0.018	0.018	0.019	
1,2-Diphenylhydrazine	mg/kg	0.15	0.019	0.019	0.019	0.018	0.018	0.02	0.023	0.027	0.018	0.018	0.019	
1,4-Dioxane	mg/kg	0.88	0.11	0.11	0.11	0.11	0.11	0.14	0.14	0.16	0.11	0.11	0.15	
1-Naphthylamine	mg/kg	1.5	0.19	0.19	0.19	0.18	0.18	0.2	0.23	0.27	0.18	0.18	0.25	
2,3,4,6-Tetrachlorophenol	mg/kg	0.58	0.077	0.077	0.075	0.074	0.073	0.079	0.093	0.11	0.071	0.072	0.074	
2,4,5-Trichlorophenol	mg/kg	0.15	0.019	0.019	0.019	0.018	0.018	0.02	0.023	0.027	0.018	0.018	0.019	
2,4,6-Trichlorophenol	mg/kg	0.15	0.019	0.019	0.019	0.018	0.018	0.02	0.023	0.027	0.018	0.018	0.019	
2,4-Dichlorophenol	mg/kg	0.15	0.019	0.019	0.019	0.028	0.018	0.02	0.023	0.027	0.018	0.018	0.019	
2,4-Dimethylphenol	mg/kg	0.15	0.019	0.019	0.019	0.018	0.018	0.02	0.023	0.027	0.018	0.018	0.019	
2,4-Dinitrophenol	mg/kg	2.6	0.34	0.34	0.34	0.33	0.33	0.5	0.42	0.49	0.32	0.32	0.33	
2,4-Dinitrotoluene	mg/kg	0.58	0.077	0.077	0.075	0.074	0.073	0.13	0.093	0.11	0.071	0.072	0.074	
2,6-Dinitrotoluene	mg/kg	0.15	0.019	0.019	0.019	0.018	0.018	0.02	0.023	0.027	0.018	0.018	0.019	
2-Chloronaphthalene	mg/kg	0.058	0.008	0.008	0.007	0.007	0.007	0.008	0.009	0.011	0.007	0.007	0.007	
2-Chlorophenol	mg/kg	0.15	0.019	0.019	0.019	0.22	0.16	0.02	0.023	0.027	0.018	0.018	0.019	
2-Methylnaphthalene	mg/kg	0.29	0.004	0.004	0.004	0.14	0.21	0.004	0.034	0.044	0.004	0.004	0.005	
2-Methylphenol (O-Cresol)	mg/kg	0.15	0.019	0.019	0.019	0.018	0.018	0.02	0.023	0.027	0.018	0.018	0.019	
2-Naphthylamine	mg/kg	1.5	0.19	0.19	0.19	0.18	0.18	0.2	0.23	0.27	0.18	0.18	0.25	
2-Nitroaniline	mg/kg	0.15	0.019	0.019	0.019	0.018	0.018	0.02	0.023	0.027	0.018	0.018	0.019	
2-Nitrophenol	mg/kg	0.15	0.019	0.019	0.019	0.018	0.018	0.02	0.023	0.027	0.018	0.018	0.019	
3,3'-Dichlorobenzidine	mg/kg	0.88	0.11	0.11	0.11	0.11	0.11	0.12	0.14	0.16	0.11	0.11	0.15	
3,3'-Dimethylbenzidine	mg/kg													
3-Nitroaniline	mg/kg	0.58	0.077	0.077	0.075	0.074	0.073	0.079	0.093	0.11	0.071	0.072	0.074	
4,6-Dinitro-2-Methylphenol	mg/kg	1.5	0.19	0.19	0.19	0.18	0.18	0.2	0.23	0.27	0.18	0.18	0.25	
4-Aminobiphenyl	mg/kg	0.15	0.019	0.019	0.019	0.018	0.018	0.02	0.023	0.027	0.018	0.018	0.019	
4-Bromophenyl Phenyl Ether	mg/kg	0.15	0.019	0.019	0.019	0.018	0.018	0.02	0.023	0.027	0.018	0.018	0.019	
4-Chloro-3-Methylphenol	mg/kg	0.15	0.019	0.019	0.019	0.018	0.018	0.02	0.023	0.027	0.018	0.018	0.019	
4-Chloroaniline	mg/kg	0.29	0.038	0.038	0.037	0.037	0.037	0.039	0.076	0.055	0.035	0.036	0.037	
4-Chlorophenyl Phenyl Ether	mg/kg	0.15	0.019	0.019	0.019	0.018	0.018	0.02	0.023	0.027	0.018	0.018	0.019	
4-Methylphenol (P-Cresol)	mg/kg	0.15	0.019	0.019	0.019	0.018	0.018	0.02	0.023	0.027	0.018	0.018	0.019	
4-Nitroaniline	mg/kg	0.58	0.077	0.077	0.075	0.074	0.073	0.079	0.093	0.11	0.071	0.072	0.074	
4-Nitrophenol	mg/kg	1.5	0.19	0.19	0.19	0.18	0.18	0.2	0.23	0.27	0.18	0.18	0.25	
Acetophenone	mg/kg	0.15	0.019	0.019	0.019	0.031	0.043	0.02	0.023	0.027	0.018	0.018	0.019	
Aniline	mg/kg	1.5	0.19	0.19	0.19	0.18	0.18	0.2	0.23	0.27	0.18	0.18	0.25	
Benzidine	mg/kg	2.2	0.29	0.29	0.28	0.28	0.27	0.29	0.35	0.41	0.28	0.27	0.28	
Biphenyl	mg/kg	0.15	0.019	0.019	0.019	0.051	0.1	0.02	0.023	0.027	0.018	0.018	0.019	
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg	0.15	0.019	0.019	0.019	0.018	0.018	0.02	0.023	0.027	0.018	0.018	0.019	
Bis(2-Chloroethoxy)Methane	mg/kg	0.15	0.019	0.019	0.019	0.018	0.018	0.02	0.023	0.027	0.018	0.018	0.019	
Bis(2-Chloroethyl)Ether	mg/kg	0.15	0.019	0.019	0.019	0.018	0.018	0.02	0.023	0.027	0.018	0.018	0.019	
Bis(2-Chloroisopropyl)Ether	mg/kg													
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.58	0.077	0.077	0.075	0.1	0.12	0.079	0.093	0.11	0.071	0.072	0.074	
Butyl Benzyl Phthalate	mg/kg	0.58	0.077	0.077	0.075	0.074	0.073	0.079	0.093	0.11	0.071	0.072	0.074	
Carbazole	mg/kg	0.15	0.019	0.019	0.019	0.027	0.038	0.02	0.023	0.027	0.018	0.018	0.019	
Dibenzofuran	mg/kg	0.15	0.019	0.019	0.019	0.11	0.15	0.02	0.023	0.027	0.018	0.018	0.019	
Diethyl Phthalate	mg/kg	0.58	0.077	0.077	0.075	0.074	0.073	0.079	0.093	0.11	0.071	0.072	0.074	
Dimethyl Phthalate	mg/kg	0.58	0.077	0.077	0.075	0.074	0.073	0.079	0.093	0.11	0.071	0.072	0.074	
Di-N-Butyl Phthalate	mg/kg	0.58	0.077	0.077	0.075	0.074	0.073	0.079	0.093	0.11	0.071	0.072	0.074	
Diphenyl Ether	mg/kg	0.17	0.019	0.019	0.019	0.018	0.018	0.02	0.023	0.027	0.018	0.018	0.019	
Hexachlorobenzene	mg/kg	0.029	0.004	0.004	0.004	0.014	0.004	0.004	0.005	0.005	0.004	0.004	0.005	
Hexachlorobutadiene	mg/kg	0.15	0.019	0.019	0.019	0.018	0.018	0.02	0.023	0.027	0.018	0.018	0.019	
Hexachlorocyclopentadiene	mg/kg	1.5	0.19	0.19	0.19	0.18	0.18	0.2	0.23	0.27	0.18	0.18	0.25	
Hexachloroethane	mg/kg	0.29	0.038	0.038	0.037	0.056	0.12	0.039	0.046	0.055	0.035	0.036	0.037	
Hexachloropropylene	mg/kg													
Isophorone	mg/kg	0.15	0.019	0.019	0.019	0.018	0.018	0.02	0.023	0.027	0.018	0.018	0.019	
N-Dioctyl Phthalate	mg/kg	0.58	0.077	0.077	0.075	0.074	0.073	0.079	0.093	0.11	0.071	0.072	0.074	
Nitrobenzene	mg/kg	0.15	0.019	0.019	0.019	0.018	0.018	0.02	0.023	0.027	0.018	0.018	0.019	
N-Nitrosodimethylamine	mg/kg	0.58	0.077	0.077	0.075	0.074	0.073	0.079	0.093	0.11	0.071	0.072	0.074	
N-Nitrosodi-N-Propylamine	mg/kg	0.15	0.019	0.019	0.019	0.018	0.018	0.02	0.023	0.027	0.018	0.018	0.019	
N-Nitrosodiphenylamine	mg/kg	0.15	0.019	0.019	0.019	0.018	0.018	0.02	0.023	0.027	0.018	0.018	0.019	
O-Toluidine	mg/kg	1.8	0.23	0.23	0.22	0.22	0.22	0.24	0.28	0.33	0.21	0.21	0.22	
Parathion	mg/kg	1.5	0.19	0.19	0.19	0.18	0.18	0.2	0.23	0.27	0.18	0.18	0.25	
Pentachlorobenzene	mg/kg	0.15	0.019	0.019	0.019	0.027	0.04	0.02	0.023	0.027	0.018	0.018	0.019	
Pentachlorophenol	mg/kg	0.29	0.038	0.038	0.037	0.037	0.037	0.039	0.046	0.055	0.035	0.036	0.037	
Phenol	mg/kg	0.15	0.019	0.019	0.019	0.018	0.018	0.02	0.023	0.027	0.018	0.018	0.019	
<b>Volatile Organic Compounds - TICs</b>														
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg													

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA							
		D16-BOR-03(0-0.5)	D16-BOR-03(3-3.5)	D16-BOR-03(5.5-6)	D16-BOR-03(9.0-9.5)	D16-BOR-03(9.0-9.5)-D	D16-BOR-03(9.7-10.0)	D16-BOR-04(0.5-1.0)	D16-BOR-04(0-0.5)	D16-BOR-04(4.0-4.5)	D16-BOR-04(5.0-5.5)	D16-BOR-04(6.0-6.5)	D16-BOR-04(7.8-8.1)								
Location ID	Depth Interval (ft)	D16-BOR-03 0.00-0.50 FS	D16-BOR-03 3.00-3.50 FS	D16-BOR-03 5.50-6.00 FS	D16-BOR-03 9.00-9.50 FS	D16-BOR-03 9.00-9.50 DUP	D16-BOR-03 9.70-10.00 FS	D16-BOR-04 0.50-1.00 FS	D16-BOR-04 0.00-0.50 FS	D16-BOR-04 4.00-4.50 FS	D16-BOR-04 5.00-5.50 FS	D16-BOR-04 6.00-6.50 FS	D16-BOR-04 7.80-8.10 FS								
Sample Purpose	Date	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016	11/1/2016	10/31/2016	10/31/2016	10/31/2016	10/31/2016	10/31/2016	10/31/2016								
Chemical Class	Units																				
1-Butene	mg/kg																				
1-Heptene	mg/kg																				
1-Propene, 2-methyl-	mg/kg																				
Azulene	mg/kg																				
BENZENE, 1,2,4-TRICHLORO-	mg/kg																				
BENZENE, 1,2-DICHLORO-	mg/kg																				
BENZENE, 1,4-DICHLORO-	mg/kg																				
Camphene	mg/kg																				
CYCLOHEXANE	mg/kg																				
Cyclohexane, methyl-	mg/kg																				
Cyclotrisiloxane, hexamethyl	mg/kg																				
Diphenyl Ether	mg/kg																				
Ethane, 1,1,2,2-tetrachloro-	mg/kg				9																
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg																				
Ethane, 1,2-dichloro-1,1-dif	mg/kg																				
Ethene, 1,1-dichloro-2,2-dif	mg/kg																				
Hexane, 2-methyl-	mg/kg																				
Hexane, 3-methyl-	mg/kg																				
METHANE, CHLOROFLUORO-	mg/kg																				
Naphthalene	mg/kg																				
NAPHTHALENE, 2-METHYL-	mg/kg																				
Nonanal	mg/kg																				
Norflurane	mg/kg																				
Pentane, 2,3-dimethyl-	mg/kg																				
Phenol, 4-(1,1,3,3-tetrameth	mg/kg																				
Propene	mg/kg																				
Sulfur dioxide	mg/kg																				
Tridecane	mg/kg																				
UNKNOWN	mg/kg																				
UNKNOWN ALICYCLIC	mg/kg																				
UNKNOWN ALIPHATIC	mg/kg																				
UNKNOWN ALKANE	mg/kg																				
UNKNOWN AROMATIC	mg/kg																				
UNKNOWN SILOXANE	mg/kg																				
<b>Volatile Organic Compounds</b>																					
1,1,1,2-Tetrachloroethane	mg/kg	0.002	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U
1,1,1-Trichloroethane	mg/kg	0.002	U	0.001	U	0.001	U	1.9	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U
1,1,1-Trichlorotrifluoroethane	mg/kg	0.03	U	0.006	U	0.006	U	0.41	U	0.18	U	0.09	U	0.009	U	0.009	U	0.006	U	0.006	U
1,1,2,2-Tetrachloroethane	mg/kg	0.002	U	0.002	U	0.001	U	1	U	1.4	U	0.079	U	0.002	U	0.002	U	0.001	U	0.001	U
1,1,2-Trichloroethane	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U
1,1,2-Trichlorotrifluoroethane	mg/kg	0.32	U	0.67	U	0.037	U	3600	U	1700	U	34	U	0.003	U	0.003	U	0.002	U	0.002	U
1,1,2-Trifluoroethane	mg/kg	0.006	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.004	U	0.004	U	0.002	U	0.002	U
1,1-Dichloro-1-Fluoroethane	mg/kg	0.003	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.002	U	0.002	U	0.001	U	0.001	U
1,1-Dichloroethane	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U
1,1-Dichloroethene	mg/kg	0.002	U	0.002	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U
1,1-Dichloropropene	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U
1,2,4-Trimethylbenzene	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U
1,2-Dibromoethane (EDB)	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg	0.006	U	0.001	U	0.001	U	5.2	U	1.1	U	0.001	U	0.002	U	0.002	U	0.001	U	0.001	U
1,2-Dichloro-1-Fluoroethane	mg/kg	0.003	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.002	U	0.002	U	0.001	U	0.001	U
1,2-Dichlorobenzene	mg/kg	0.024	U	0.032	U	0.001	U	90	U	89	U	15	U	0.006	U	0.003	U	0.001	U	0.001	U
1,2-Dichloroethane	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U
1,2-Dichloroethene	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U
1,2-Dichloropropane	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U
1,2-Dichlorotetrafluoroethane	mg/kg	0.008	U	0.007	U	0.002	U	43	U	13	U	0.026	U	0.004	U	0.004	U	0.002	U	0.002	U
1,3,5-Trimethylbenzene	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U
1,3-Dichlorobenzene	mg/kg	0.002	U	0.001	U	0.001	U	2.7	U	2.6	U	0.51	U	0.002	U	0.002	U	0.001	U	0.001	U
1,4-Dichlorobenzene	mg/kg	0.016	U	0.029	U	0.001	U	190	U	180	U	32	U	0.006	U	0.002	U	0.001	U	0.001	U
1-Chloro-1,1-Difluoroethane	mg/kg	0.003	U	0.001	U	0.001	U	0.038	U	0.014	U	0.001	U	0.002	U	0.002	U	0.001	U	0.001	U
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg	0.035	U	0.003	U	0.002	U	15	U	3.6	U	0.13	U	0.002	U	0.002	U	0.001	U	0.001	U
2-Chloro-1,1,1-Trifluoroethane	mg/kg	0.018	U	0.002	U	0.002	U	2.1	U	2.7	U	0.12	U	0.003	U	0.003	U	0.002	U	0.002	U
2-Chloroethyl Vinyl Ether	mg/kg																				
2-Chlorotoluene	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U
2-Hexanone	mg/kg	0.005	U	0.004	U	0.004	U	3.1	U	4.1	U	0.18	U	0.005	U	0.005	U	0.003	U	0.003	U
4-Chlorotoluene	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U
4-Isopropyltoluene	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U
Acetone	mg/kg	0.055	U	0.019	U	0.034	U	7.3	U	39	U	0.43	U	0.087	U	0.095	U	0.022	U	0.086	U
Acrolein	mg/kg																				
Acrylonitrile	mg/kg																				
Benzene	mg/kg	0.003	U	0.007	U	0.004	U	49	U	10	U	0.4	U	0.0009	U	0.0008	U	0.0005	U	0.0005	U
Bromodichloromethane	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U
Bromoform	mg/kg																				
Carbon Disulfide	mg/kg	0.003	U	0.002	U	0.001	U	1	U	1.4	U	0.061	U	0.004	U	0.005	U	0.001	U	0.001	U
Carbon Tetrachloride	mg/kg	0.002	U	0.001	U	0.001	U	64	U	28	U	0.19	U	0.002	U	0.002	U	0.001	U	0.001	U
CFC-1113	mg/kg	0.004	U	0.002	U	0.002	U	2.1	U	2.7	U	0.12	U	0.003	U	0.003	U	0.002	U	0.002	U
Chlorobenzene	mg/kg	0.039	U	0.1	U	0.012	U	1500	U	590	U	69	U	0.051	U	0.009	U	0.001	U	0.001	U

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA D16-BOR-03(0-0.5)		MZ-FPA D16-BOR-03(3-3.5)		MZ-FPA D16-BOR-03(5.5-6)		MZ-FPA D16-BOR-03(9.0-9.5)		MZ-FPA D16-BOR-03(9.0-9.5)-D		MZ-FPA D16-BOR-03(9.7-10.0)		MZ-FPA D16-BOR-04(0.5-1.0)		MZ-FPA D16-BOR-04(0-0.5)		MZ-FPA D16-BOR-04(4.0-4.5)		MZ-FPA D16-BOR-04(5.0-5.5)		MZ-FPA D16-BOR-04(6.0-6.5)		MZ-FPA D16-BOR-04(7.8-8.1)			
		Units	D16-BOR-03 0.00-0.50 FS 11/1/2016	D16-BOR-03 3.00-3.50 FS 11/1/2016	D16-BOR-03 5.50-6.00 FS 11/1/2016	D16-BOR-03 9.00-9.50 FS 11/1/2016	D16-BOR-03 9.00-9.50 DUP 11/1/2016	D16-BOR-03 9.70-10.00 FS 11/1/2016	D16-BOR-04 0.50-1.00 FS 10/31/2016	D16-BOR-04 0.00-0.50 FS 10/31/2016	D16-BOR-04 4.00-4.50 FS 10/31/2016	D16-BOR-04 5.00-5.50 FS 10/31/2016	D16-BOR-04 6.00-6.50 FS 10/31/2016	D16-BOR-04 7.80-8.10 FS 10/31/2016													
Chlorodibromomethane	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Chlorodifluoromethane	mg/kg	0.006	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.004	U	0.004	U	0.002	U	0.002	U	0.002	U	0.002	U	0.003	U
Chlorofluoromethane	mg/kg	0.007	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Chloroform	mg/kg	0.003	U	0.003	U	0.002	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.007	U
Chloropentafluoroethane	mg/kg	0.043	U	0.018	U	0.018	U	0.16	U	0.084	U	0.018	U	0.028	U	0.026	U	0.017	U	0.017	U	0.016	U	0.016	U	0.02	U
cis-1,2-Dichloroethene	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
cis-1,3-Dichloropropene	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Cumene	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.032	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Dichlorodifluoromethane	mg/kg	0.004	U	0.002	U	0.002	U	2.1	U	18	U	0.12	U	0.003	U	0.003	U	0.002	U	0.002	U	0.002	U	0.002	U	0.003	U
Dichlorofluoromethane	mg/kg	0.033	U	0.004	U	0.003	U	2.1	U	2.7	U	0.12	U	0.003	U	0.003	U	0.002	U	0.002	U	0.002	U	0.002	U	0.003	U
Ethane	ug/L																										
Ethyl Chloride	mg/kg	0.004	U	0.002	U	0.002	U	2.1	U	2.7	U	0.12	U	0.003	U	0.003	U	0.002	U	0.002	U	0.002	U	0.002	U	0.003	U
Ethylbenzene	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Fluoromethane	mg/kg	0.009	U	0.004	U	0.004	U	0.003	U	0.004	U	0.004	U	0.006	U	0.005	U	0.003	U	0.003	U	0.003	U	0.003	U	0.004	U
Hexane	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Isobutyl Alcohol	mg/kg	0.18	U	0.12	U	0.12	U	100	U	140	U	6.1	U	0.16	U	0.17	U	0.11	U	0.11	U	0.11	U	0.11	U	0.15	U
Meta- And Para-Xylene	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Methacrylonitrile	mg/kg	0.009	U	0.006	U	0.006	U	5.2	U	6.8	U	0.3	U	0.008	U	0.008	U	0.005	U	0.005	U	0.006	U	0.006	U	0.007	U
Methane	ug/L																										
Methyl Bromide	mg/kg																										
Methyl Chloride	mg/kg	0.004	U	0.002	U	0.002	U	2.9	U	2.7	U	0.12	U	0.003	U	0.003	U	0.002	U	0.002	U	0.002	U	0.002	U	0.003	U
Methyl Ethyl Ketone	mg/kg	0.007	U	0.005	U	0.005	U	4.2	U	5.4	U	0.24	U	0.01	U	0.014	U	0.004	U	0.004	U	0.004	U	0.004	U	0.006	U
Methyl Isobutyl Ketone	mg/kg	0.005	U	0.004	U	0.004	U	3.1	U	4.1	U	0.18	U	0.005	U	0.005	U	0.003	U	0.003	U	0.003	U	0.003	U	0.004	U
Methyl Methacrylate	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Methyl Tertiary Butyl Ether	mg/kg	0.0009	U	0.0006	U	0.0006	U	0.52	U	0.68	U	0.03	U	0.0008	U	0.0008	U	0.0005	U	0.0005	U	0.0006	U	0.0006	U	0.0009	U
Methylene Chloride	mg/kg	0.004	U	0.005	U	0.002	U	2.1	U	2.7	U	0.12	U	0.003	U	0.003	U	0.002	U	0.002	U	0.002	U	0.002	U	0.003	U
N-Butylbenzene	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
N-Propylbenzene	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Ortho-Xylene	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.005	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Propionitrile	mg/kg	0.053	U	0.035	U	0.035	U	31	U	41	U	1.8	U	0.049	U	0.05	U	0.032	U	0.032	U	0.033	U	0.033	U	0.044	U
sec-Butylbenzene	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Styrene	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
tert-Butylbenzene	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Tetrachloroethene	mg/kg	0.006	U	0.002	U	0.001	U	62	U	40	U	2.1	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Tetrahydrofuran	mg/kg	0.005	U	0.005	U	0.005	U	4.2	U	5.4	U	0.24	U	0.007	U	0.007	U	0.004	U	0.004	U	0.004	U	0.004	U	0.006	U
Toluene	mg/kg	0.003	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
trans-1,2-Dichloroethene	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
trans-1,3-Dichloropropene	mg/kg																										
Trichloroethene	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Trichlorofluoromethane	mg/kg	0.37	U	0.25	U	0.039	U	2000	U	440	U	1.2	U	0.003	U	0.003	U	0.002	U	0.002	U	0.002	U	0.002	U	0.003	U
Vinyl Chloride	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Vinyl Fluoride	mg/kg	0.017	U	0.007	U	0.007	U	0.006	U	0.007	U	0.007	U	0.011	U	0.011	U	0.007	U	0.007	U	0.007	U	0.007	U	0.008	U
Xylenes	mg/kg	0.002	U	0.001	U	0.001	U	1	U	1.4	U	0.061	U	0.007	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D16-BOR-05(0.5-1.0)	D16-BOR-05(0-0.5)	D16-BOR-05(10.0-10.2)	D16-BOR-05(5.0-6.0)	D16-BOR-05(5.0-6.0)-D	D16-BOR-05(7.5-8.0)	D16-BOR-05(9.0-9.5)	D16-BOR-06(0.5-1.0)	D16-BOR-06(0-0.5)	D16-BOR-06(2.5-3.0)	D16-BOR-06(4.5-5.0)	D16-BOR-06(5.5-6.0)
Location ID	D16-BOR-05	D16-BOR-05	D16-BOR-05	D16-BOR-05	D16-BOR-05	D16-BOR-05	D16-BOR-05	D16-BOR-05	D16-BOR-06	D16-BOR-06	D16-BOR-06	D16-BOR-06	D16-BOR-06
Depth Interval (ft)	0.50-1.00	0.00-0.50	10.00-10.20	5.00-6.00	5.00-6.00	7.50-8.00	9.00-9.50	0.50-1.00	0.00-0.50	2.50-3.00	4.50-5.00	5.50-6.00	
Sample Purpose	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	FS	FS	
Date	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016	
Chemical Class	Units												
<b>General Chemistry</b>													
Black Carbon	mg/kg												
Percent Moisture	%	46.5	48.8	15.7	10.2	10.7	12.5	5.5	46.95	50.15	12.5	12.5	10.7
Percent Solids	%												
Total Organic Carbon	mg/kg	21000	18600		196 U		190 U	193 U	28100	19500	213 U	237 U	
<b>Metals</b>													
Aluminum	mg/kg	17900	17000						19400	16600			
Antimony	mg/kg	0.674	0.396						0.785	0.359			
Arsenic	mg/kg	14.7	10.6						22.9	10.3			
Barium	mg/kg	95.3	109						140	105			
Beryllium	mg/kg	0.978	0.939						1.29	0.866			
Cadmium	mg/kg	0.689	0.502						1.07	0.568			
Calcium	mg/kg	3820	3980						3190	3550			
Chromium	mg/kg	62.4	52						126	51.6			
Cobalt	mg/kg	13.2	12.9						18.4	13.3			
Copper	mg/kg	49	33						61.6	24.8			
Iron	mg/kg	28800	25800						32200	26600			
Lead	mg/kg	74.9	53.9						341	39.8			
Magnesium	mg/kg	4980	4630						4650	5010			
Manganese	mg/kg	893	768						638	952			
Mercury	mg/kg	0.424	0.322						1.28	0.22			
Nickel	mg/kg	32.2	28						32.4	22.3			
Potassium	mg/kg	2870	2950						2940	2880			
Selenium	mg/kg	0.848	0.633						2.15	0.469			
Silver	mg/kg	0.711	0.229						0.874	0.211			
Sodium	mg/kg	745	1110						588	1210			
Thallium	mg/kg	0.179	0.175						0.207	0.165			
Tin	mg/kg												
Titanium	mg/kg												
Vanadium	mg/kg	59.8	49.9						98.7	47.7			
Zinc	mg/kg	186	147						251	144			
<b>Metals - AVS/SEM</b>													
Acid Volatile Sulfide	umol/g												
Arsenic	umol/g												
Cadmium	umol/g												
Copper	umol/g												
Lead	umol/g												
Zinc	umol/g												
<b>Metals - Leachate</b>													
Lead	ug/L												
<b>Per and Polyfluorinated Organic Substances</b>													
Perfluorobutane Sulfonic Acid	mg/kg								0.0008 U	0.0008 U			
Perfluorobutanoic Acid	mg/kg								0.0008 U	0.0008 U			
Perfluorodecane Sulfonic Acid	mg/kg								0.0008 U	0.0008 U			
Perfluorodecanoic Acid	mg/kg								0.0077	0.0008 U			
Perfluorododecanoic Acid	mg/kg								0.0037	0.002 U			
Perfluoroheptanoic Acid	mg/kg								0.0008 U	0.0008 U			
Perfluorohexane Sulfonic Acid	mg/kg								0.0008 U	0.0008 U			
Perfluorohexanoic Acid	mg/kg								0.0053	0.0014			
Perfluorononanoic Acid	mg/kg								0.0026	0.0008 U			
Perfluorooctane Sulfonamide	mg/kg								0.0008 U	0.0008 U			
Perfluoropentanoic Acid	mg/kg								0.0008 U	0.0008 U			
Perfluorotetradecanoic Acid	mg/kg								0.002 U	0.002 U			
Perfluorotridecanoic Acid	mg/kg								0.003	0.0008 U			
Perfluoroundecanoic Acid	mg/kg								0.0025	0.0008 U			
PFOA	mg/kg								0.016	0.0019			
PFOA(trial)	mg/kg												
PFOS	mg/kg								0.0019	0.0008 U			
PFOS (trial)	mg/kg												
<b>Pesticides and Herbicides</b>													
4,4'-DDD	mg/kg												
4,4'-DDE	mg/kg												
4,4'-DDT	mg/kg												
Aldrin	mg/kg												
Alpha Chlordane	mg/kg												
Alpha-BHC	mg/kg												
beta-BHC	mg/kg												
delta-BHC	mg/kg												
Dieldrin	mg/kg												
Endosulfan I	mg/kg												
Endosulfan II	mg/kg												
Endosulfan Sulfate	mg/kg												
Endrin	mg/kg												
Endrin Aldehyde	mg/kg												
Endrin Ketone	mg/kg												
Gamma Chlordane	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D16-BOR-05(0.5-1.0)	D16-BOR-05(0-0.5)	D16-BOR-05(10.0-10.2)	D16-BOR-05(5.0-6.0)	D16-BOR-05(5.0-6.0)-D	D16-BOR-05(7.5-8.0)	D16-BOR-05(9.0-9.5)	D16-BOR-06(0.5-1.0)	D16-BOR-06(0-0.5)	D16-BOR-06(2.5-3.0)	D16-BOR-06(4.5-5.0)	D16-BOR-06(5.5-6.0)
Chemical	Units	D16-BOR-05 0.50-1.00 FS 11/2/2016	D16-BOR-05 0.00-0.50 FS 11/2/2016	D16-BOR-05 10.00-10.20 FS 11/2/2016	D16-BOR-05 5.00-6.00 FS 11/2/2016	D16-BOR-05 5.00-6.00 DUP 11/2/2016	D16-BOR-05 7.50-8.00 FS 11/2/2016	D16-BOR-05 9.00-9.50 FS 11/2/2016	D16-BOR-06 0.50-1.00 FS 10/25/2016	D16-BOR-06 0.00-0.50 FS 10/25/2016	D16-BOR-06 2.50-3.00 FS 10/25/2016	D16-BOR-06 4.50-5.00 FS 10/25/2016	D16-BOR-06 5.50-6.00 FS 10/25/2016
Heptachlor	mg/kg												
Heptachlor Epoxide	mg/kg												
Lindane	mg/kg												
Methoxychlor	mg/kg												
Toxaphene	mg/kg												
<b>Physical Properties</b>													
0.001 MM	% PASSING	4	0.5 U		0.5 U		0.5 U	0.5 U	1	2		0.5 U	0.5 U
0.002 MM	% PASSING	11	2		0.5 U		0.5 U	0.5 U	7	5		0.5 U	0.5 U
0.005 MM	% PASSING	21	8		0.5 U		0.5 U	0.5 U	12	9		0.5 U	0.5 U
0.02 MM	% PASSING	45	30		1		1	1	27	23		1	2
0.05 MM	% PASSING	66	57		2		2	2	37	46		2	5
0.064 MM	% PASSING	74	67		3		3	3	39	56		3	6
0.075 MM	% PASSING	76.7	72.4		3.7		3.2	3.5	40.5	61.4		3.8	6.3
0.15 MM	% PASSING	81.2	81.4		5.5		3.7	4.5	42.8	68.3		5.5	7.9
0.3 MM	% PASSING	88.7	88.8		9.2		6.1	6.5	45.4	71		9.1	10.5
0.6 MM	% PASSING	93.8	93.2		15.2		20.5	10.3	48.4	72		39.9	17.2
1.18 MM	% PASSING	96.8	95.9		23.9		63.1	20.6	52.2	72.5		68.4	28.5
19 MM	% PASSING	100	100		93.8		90.7	95.5	100	100		100	100
2.36 MM	% PASSING	98.3	97.2		34.8		76.4	41	60.5	72.6		77.6	51.6
3.35 MM	% PASSING	99.4	98.3		42.6		79.3	60.5	72.5	78.6		84	67.5
37.5 MM	% PASSING	100	100		100		100	100	100	100		100	100
4.75 MM	% PASSING	100	99		53.7		82.8	71.3	85.2	85.2		91	82.1
75 MM	% PASSING	100	100		100		100	100	100	100		100	100
Density	PCF								66.7977	80.5319			80.5319
<b>Polychlorinated Biphenyls - TICs</b>													
1,1'-Biphenyl, 2,3-dichloro-	mg/kg								0.41				
Unknown Biphenyl	mg/kg												
<b>Polychlorinated Biphenyls</b>													
Heptachlorobiphenyl	mg/kg												
Hexachlorobiphenyl	mg/kg												
Octachlorobiphenyl	mg/kg												
PCB 1	mg/kg	0.00466	0.0017						0.000625	0.018			
PCB 10	mg/kg	0.000056	0.0000213						0.000166	0.00237			
PCB 100	mg/kg												
PCB 101	mg/kg												
PCB 102	mg/kg	0.000246	0.0000732						0.000091 U	0.000335			
PCB 103	mg/kg	0.000135	0.00005						0.0000115 U	0.0000943			
PCB 104	mg/kg	0.0000669	0.0000522						0.00000746 U	0.0000692			
PCB 105	mg/kg	0.00202	0.000681						0.0000712	0.00259			
PCB 106	mg/kg	0.0000181 U	0.0000116 U						0.00000861 U	0.0000755			
PCB 107	mg/kg												
PCB 107/123	mg/kg												
PCB 108	mg/kg												
PCB 109	mg/kg	0.000524	0.000178						0.00000802 U	0.000455			
PCB 11	mg/kg	0.00237	0.000816						0.0000361	0.00299			
PCB 110	mg/kg	0.00828	0.00254						0.0000188	0.00625			
PCB 111	mg/kg	0.0000167 U	0.0000107 U						0.00000808 U	0.0000304			
PCB 112	mg/kg	0.0000179 U	0.0000115 U						0.00000873 U	0.0000493			
PCB 113	mg/kg												
PCB 114	mg/kg	0.000103	0.0000423						0.00000977 U	0.0002			
PCB 115	mg/kg	0.0000166 U	0.0000106 U						0.00000967 U	0.0000225 U			
PCB 116	mg/kg												
PCB 117	mg/kg	0.000134	0.0000425						0.0000105 U	0.000268			
PCB 118	mg/kg	0.00452	0.00159						0.0000135	0.00471			
PCB 119	mg/kg												
PCB 12	mg/kg												
PCB 120	mg/kg	0.0000405	0.0000218						0.00000803 U	0.0000594			
PCB 121	mg/kg	0.0000175 U	0.0000112 U						0.00000872 U	0.0000203 U			
PCB 121/95/88	mg/kg												
PCB 122	mg/kg	0.0000955	0.000029						0.0000103 U	0.000113			
PCB 123	mg/kg	0.0000186 U	0.0000277						0.000009 U	0.000126			
PCB 124	mg/kg												
PCB 125	mg/kg												
PCB 126	mg/kg	0.0000512	0.0000158						0.0000013 U	0.0000645			
PCB 127	mg/kg	0.0000205 U	0.000012 U						0.00000851 U	0.0000199 U			
PCB 128	mg/kg												
PCB 129	mg/kg												
PCB 129/158	mg/kg												
PCB 13	mg/kg												
PCB 130	mg/kg	0.000616	0.000188						0.00000829 U	0.000311			
PCB 130/164	mg/kg												
PCB 131	mg/kg	0.000087	0.0000226						0.00000973 U	0.0000535			
PCB 132	mg/kg	0.00226	0.00076						0.0000062	0.00129			
PCB 133	mg/kg	0.000298	0.0000838						0.00000885 U	0.000165			
PCB 134	mg/kg	0.000452	0.000156						0.0000103 U	0.000216			
PCB 135	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D16-BOR-05(0.5-1.0) D16-BOR-05 0.50-1.00 FS 11/2/2016	D16-BOR-05(0-0.5) D16-BOR-05 0.00-0.50 FS 11/2/2016	D16-BOR-05(10.0-10.2) D16-BOR-05 10.00-10.20 FS 11/2/2016	D16-BOR-05(5.0-6.0) D16-BOR-05 5.00-6.00 FS 11/2/2016	D16-BOR-05(5.0-6.0)-D D16-BOR-05 5.00-6.00 DUP 11/2/2016	D16-BOR-05(7.5-8.0) D16-BOR-05 7.50-8.00 FS 11/2/2016	D16-BOR-05(9.0-9.5) D16-BOR-05 9.00-9.50 FS 11/2/2016	D16-BOR-06(0.5-1.0) D16-BOR-06 0.50-1.00 FS 10/25/2016	D16-BOR-06(0-0.5) D16-BOR-06 0.00-0.50 FS 10/25/2016	D16-BOR-06(2.5-3.0) D16-BOR-06 2.50-3.00 FS 10/25/2016	D16-BOR-06(4.5-5.0) D16-BOR-06 4.50-5.00 FS 10/25/2016
PCB 136	mg/kg	0.00118	0.00037					0.0000304	0.000641			
PCB 137	mg/kg	0.000181	0.0000704					0.00000078 U	0.000194			
PCB 138	mg/kg											
PCB 139	mg/kg											
PCB 14	mg/kg	0.000861	0.000518					0.00000526 U	0.00295			
PCB 140	mg/kg											
PCB 141	mg/kg	0.000998	0.000402					0.00000318	0.000733			
PCB 142	mg/kg	0.00000603 U	0.0000116					0.000000939 U	0.000118			
PCB 143	mg/kg	0.00000508 U	0.0000035 U					0.000000901 U	0.0000414			
PCB 143/139	mg/kg											
PCB 144	mg/kg	0.00026	0.000103					0.000000858 U	0.000187			
PCB 145	mg/kg	0.00000407 U	0.00000289 U					0.000000614 U	0.00000831			
PCB 146	mg/kg	0.00155	0.000553					0.00000242	0.000891			
PCB 147	mg/kg											
PCB 148	mg/kg	0.0000392	0.0000157					0.000000877 U	0.0000484			
PCB 149	mg/kg											
PCB 15	mg/kg	0.00305	0.00135					0.000138	0.00687			
PCB 150	mg/kg	0.0000287	0.0000209					0.000000585 U	0.0000406			
PCB 151	mg/kg											
PCB 152	mg/kg	0.00000369 U	0.00000262 U					0.000000587 U	0.0000101			
PCB 153	mg/kg											
PCB 154	mg/kg	0.000214	0.000105					0.000000776 U	0.000188			
PCB 155	mg/kg	0.000024	0.0000123					0.000000635 U	0.0000248			
PCB 156	mg/kg											
PCB 157	mg/kg											
PCB 158	mg/kg	0.000522	0.000195					0.000000567 U	0.000306			
PCB 159	mg/kg	0.0000712	0.000036					0.00000103 U	0.0000879			
PCB 16	mg/kg	0.00805	0.000581					0.000318	0.00657			
PCB 160	mg/kg	0.00000392 U	0.0000377					0.000000625 U	0.000306			
PCB 161	mg/kg	0.00000386 U	0.00000266 U					0.000000625 U	0.0000171			
PCB 162	mg/kg	0.000148	0.0000298					0.00000104 U	0.0000663			
PCB 163	mg/kg											
PCB 163/160	mg/kg											
PCB 164	mg/kg	0.000743	0.00021					0.000000603 U	0.00034			
PCB 165	mg/kg	0.00000447 U	0.00000308 U					0.000000694 U	0.0000135			
PCB 166	mg/kg											
PCB 167	mg/kg	0.000347	0.000108					0.00000108 U	0.000194			
PCB 168	mg/kg											
PCB 169	mg/kg	0.000011 U	0.00000431 U					0.00000014 U	0.00000442 U			
PCB 17	mg/kg	0.0011	0.000373					0.00021	0.00428			
PCB 170	mg/kg	0.00129	0.000686					0.00000566	0.000837			
PCB 171	mg/kg											
PCB 172	mg/kg	0.000318	0.000134					0.00000179 U	0.000233			
PCB 173	mg/kg											
PCB 174	mg/kg	0.00158	0.000685					0.000000698	0.00116			
PCB 175	mg/kg	0.0000842	0.0000368					0.00000169 U	0.0000757			
PCB 176	mg/kg	0.0002	0.000076					0.000000748 U	0.000126			
PCB 177	mg/kg	0.000978	0.000436					0.00000416	0.000651			
PCB 178	mg/kg	0.000475	0.000164					0.00000105 U	0.000275			
PCB 179	mg/kg	0.000768	0.000298					0.00000258	0.00055			
PCB 18	mg/kg											
PCB 180	mg/kg											
PCB 181	mg/kg	0.00000892 U	0.0000113					0.00000167 U	0.0000451			
PCB 182	mg/kg	0.0000223	0.0000137					0.00000155 U	0.0000413			
PCB 182/175	mg/kg											
PCB 183	mg/kg	0.0008	0.000385					0.00000382	0.000652			
PCB 184	mg/kg	0.0000167	0.00000777					0.000000871 U	0.0000279			
PCB 185	mg/kg	0.000137	0.0000768					0.00000167 U	0.000018			
PCB 186	mg/kg	0.00000398 U	0.00000187 U					0.000000794 U	0.00000857			
PCB 187	mg/kg	0.00218	0.000992					0.00000694	0.00183			
PCB 188	mg/kg	0.0000345	0.000023					0.000000978 U	0.0000503			
PCB 189	mg/kg	0.0000745	0.0000353					0.00000147 U	0.0000665			
PCB 19	mg/kg	0.000275	0.000111					0.000321	0.00435			
PCB 190	mg/kg	0.000249	0.000144					0.00000132 U	0.000222			
PCB 191	mg/kg	0.0000632	0.0000303					0.00000132 U	0.0000492			
PCB 192	mg/kg	0.00000778 U	0.0000131					0.00000142 U	0.0000901			
PCB 193	mg/kg											
PCB 194	mg/kg	0.00095	0.000603					0.00000486	0.000971			
PCB 195	mg/kg	0.000333	0.000173					0.00000254 U	0.000234			
PCB 196	mg/kg	0.000765	0.000417					0.00000286	0.000475			
PCB 197	mg/kg	0.000102	0.0000505					0.000000941 U	0.0000753			
PCB 198	mg/kg											
PCB 199	mg/kg											
PCB 2	mg/kg	0.00236	0.00153					0.0000598	0.00587			
PCB 20	mg/kg											
PCB 200	mg/kg	0.000148	0.0000715					0.00000117	0.00011			

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D16-BOR-05(0.5-1.0) D16-BOR-05 0.50-1.00 FS 11/2/2016	D16-BOR-05(0-0.5) D16-BOR-05 0.00-0.50 FS 11/2/2016	D16-BOR-05(10.0-10.2) D16-BOR-05 10.00-10.20 FS 11/2/2016	D16-BOR-05(5.0-6.0) D16-BOR-05 5.00-6.00 FS 11/2/2016	D16-BOR-05(5.0-6.0)-D D16-BOR-05 5.00-6.00 DUP 11/2/2016	D16-BOR-05(7.5-8.0) D16-BOR-05 7.50-8.00 FS 11/2/2016	D16-BOR-05(9.0-9.5) D16-BOR-05 9.00-9.50 FS 11/2/2016	D16-BOR-06(0.5-1.0) D16-BOR-06 0.50-1.00 FS 10/25/2016	D16-BOR-06(0-0.5) D16-BOR-06 0.00-0.50 FS 10/25/2016	D16-BOR-06(2.5-3.0) D16-BOR-06 2.50-3.00 FS 10/25/2016	D16-BOR-06(4.5-5.0) D16-BOR-06 4.50-5.00 FS 10/25/2016	D16-BOR-06(5.5-6.0) D16-BOR-06 5.50-6.00 FS 10/25/2016
Chemical	Units												
PCB 201	mg/kg	0.000298	0.000162					0.00000915	U	0.00025			
PCB 202	mg/kg	0.00069	0.000338					0.00002214		0.000644			
PCB 203	mg/kg	0.00111	0.000589					0.0000309		0.000785			
PCB 204	mg/kg	0.000106	0.0000878					0.00000977	U	0.000235			
PCB 204/200	mg/kg												
PCB 205	mg/kg	0.0000541	0.0000366					0.00000195	U	0.0000746			
PCB 206	mg/kg	0.00602	0.00344					0.000016		0.00598			
PCB 207	mg/kg	0.000473	0.000309					0.00000173	U	0.000448			
PCB 208	mg/kg	0.00292	0.00172					0.0000067		0.00271			
PCB 209	mg/kg	0.0106	0.00508					0.000019		0.00858			
PCB 21	mg/kg												
PCB 21/20	mg/kg												
PCB 22	mg/kg	0.00567	0.000753					0.000108		0.00392			
PCB 23	mg/kg	0.000121	0.0000616					0.00000247	U	0.000409			
PCB 24	mg/kg	0.000328	0.000143					0.00000832		0.00102			
PCB 25	mg/kg	0.00235	0.000382					0.0000122		0.00162			
PCB 26	mg/kg												
PCB 27	mg/kg	0.000526	0.000119					0.0000346		0.00107			
PCB 28	mg/kg												
PCB 29	mg/kg												
PCB 3	mg/kg	0.00304	0.00167					0.000293		0.00901			
PCB 30	mg/kg												
PCB 31	mg/kg	0.00398	0.00178					0.000337		0.00973			
PCB 32	mg/kg	0.00111	0.000266					0.000149		0.00277			
PCB 33	mg/kg												
PCB 34	mg/kg	0.000222	0.000149					0.00000249	U	0.00086			
PCB 35	mg/kg	0.00526	0.000497					0.00000774		0.00218			
PCB 36	mg/kg	0.000222	0.000133					0.00000238	U	0.000756			
PCB 37	mg/kg	0.00521	0.00167					0.0000321		0.00832			
PCB 38	mg/kg	0.000023	0.00000954	U				0.00000241	U	0.0000568			
PCB 39	mg/kg	0.000241	0.000251					0.00000224	U	0.00141			
PCB 4	mg/kg	0.00317	0.0008					0.00339		0.0553			
PCB 4/10	mg/kg												
PCB 40	mg/kg												
PCB 41	mg/kg	0.00022	0.0000733					0.00000687		0.000748			
PCB 42	mg/kg	0.00159	0.000372					0.0000156		0.00214			
PCB 43	mg/kg	0.000264	0.0000616					0.00000404		0.000441			
PCB 44	mg/kg												
PCB 45	mg/kg	0.000734	0.000202					0.0000437		0.00152			
PCB 46	mg/kg	0.000322	0.000084					0.0000168		0.000548			
PCB 47	mg/kg												
PCB 48	mg/kg	0.000733	0.00023					0.0000161		0.00181			
PCB 49	mg/kg												
PCB 5	mg/kg	0.00638	0.000382					0.0000992		0.00206			
PCB 50	mg/kg												
PCB 51	mg/kg	0.000294	0.0001					0.00000588		0.000327			
PCB 52	mg/kg	0.014	0.00149					0.0000991		0.00877			
PCB 53	mg/kg												
PCB 54	mg/kg	0.0000215	0.0000132					0.00000131	U	0.0000329			
PCB 55	mg/kg	0.0000682	0.0000273					0.00000179	U	0.000112			
PCB 56	mg/kg	0.0197	0.000942					0.000003		0.00558			
PCB 57	mg/kg	0.000173	0.0000257					0.00000182	U	0.0000822			
PCB 58	mg/kg	0.0000569	0.0000115					0.00000169	U	0.0000527			
PCB 59	mg/kg												
PCB 6	mg/kg	0.0035	0.00101					0.00069		0.0101			
PCB 60	mg/kg	0.000621	0.000221					0.00000738		0.0017			
PCB 61	mg/kg												
PCB 62	mg/kg												
PCB 63	mg/kg	0.000232	0.0000718					0.00000184	U	0.000392			
PCB 64	mg/kg	0.00166	0.00047					0.0000266		0.00326			
PCB 65	mg/kg												
PCB 65/75/62	mg/kg												
PCB 66	mg/kg	0.00409	0.00146					0.0000256		0.00741			
PCB 67	mg/kg	0.000235	0.0000681					0.00000165	U	0.000281			
PCB 67/58	mg/kg												
PCB 68	mg/kg	0.000106	0.0000297					0.00000164	U	0.0000669			
PCB 68/64	mg/kg												
PCB 69	mg/kg												
PCB 7	mg/kg	0.000283	0.000143					0.00013		0.00181			
PCB 70	mg/kg												
PCB 71	mg/kg												
PCB 72	mg/kg	0.000152	0.0000417					0.00000176	U	0.000163			
PCB 73	mg/kg	0.0000496	0.00000807					0.00000119	U	0.00000194	U		
PCB 73/46	mg/kg												
PCB 74	mg/kg												
PCB 75	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D16-BOR-05(0.5-1.0) D16-BOR-05 0.50-1.00 FS 11/2/2016	D16-BOR-05(0-0.5) D16-BOR-05 0.00-0.50 FS 11/2/2016	D16-BOR-05(10.0-10.2) D16-BOR-05 10.00-10.20 FS 11/2/2016	D16-BOR-05(5.0-6.0) D16-BOR-05 5.00-6.00 FS 11/2/2016	D16-BOR-05(5.0-6.0)-D D16-BOR-05 5.00-6.00 DUP 11/2/2016	D16-BOR-05(7.5-8.0) D16-BOR-05 7.50-8.00 FS 11/2/2016	D16-BOR-05(9.0-9.5) D16-BOR-05 9.00-9.50 FS 11/2/2016	D16-BOR-06(0.5-1.0) D16-BOR-06 0.50-1.00 FS 10/25/2016	D16-BOR-06(0-0.5) D16-BOR-06 0.00-0.50 FS 10/25/2016	D16-BOR-06(2.5-3.0) D16-BOR-06 2.50-3.00 FS 10/25/2016	D16-BOR-06(4.5-5.0) D16-BOR-06 4.50-5.00 FS 10/25/2016	D16-BOR-06(5.5-6.0) D16-BOR-06 5.50-6.00 FS 10/25/2016
Chemical	Units												
PCB 76	mg/kg												
PCB 77	mg/kg	0.00867	0.000455										
PCB 78	mg/kg	0.0000175 U	0.0000486 U						0.0000163	0.00211			
PCB 79	mg/kg	0.000189	0.000037						0.0000193 U	0.000248			
PCB 8	mg/kg	0.00422	0.00175						0.0000153 U	0.000189			
PCB 80	mg/kg	0.0000517	0.000015						0.00279	0.0339			
PCB 81	mg/kg	0.0000176 U	0.0000107						0.0000157 U	0.0000644 U			
PCB 82	mg/kg	0.00078	0.000238						0.0000188 U	0.0000567			
PCB 83	mg/kg	0.000503	0.000162						0.00000192	0.00107			
PCB 83/125/112	mg/kg								0.0000016 U	0.000435			
PCB 84	mg/kg	0.00247	0.000542										
PCB 85	mg/kg								0.00000617	0.0019			
PCB 86	mg/kg												
PCB 86/109	mg/kg												
PCB 87	mg/kg												
PCB 87/111	mg/kg												
PCB 88	mg/kg	0.0000271 U	0.0000173 U										
PCB 89	mg/kg	0.0000927	0.0000336						0.0000132 U	0.0000307 U			
PCB 89/84	mg/kg								0.0000132 U	0.000175			
PCB 9	mg/kg	0.00128	0.000638										
PCB 90	mg/kg								0.000289	0.00558			
PCB 91	mg/kg	0.001	0.000303										
PCB 92	mg/kg	0.00152	0.000422						0.00000306	0.0011			
PCB 93	mg/kg								0.00000354	0.00115			
PCB 94	mg/kg	0.0000718	0.000026										
PCB 95	mg/kg	0.00697	0.0015						0.00000133 U	0.000131			
PCB 96	mg/kg	0.000106	0.0000284						0.0000161	0.00448			
PCB 97	mg/kg								0.00000756 U	0.000189			
PCB 98	mg/kg	0.000123	0.0000211										
PCB 99	mg/kg	0.00285	0.00099						0.00000143 U	0.000056			
PCB-100/93	mg/kg	0.000108	0.0000665						0.00000945	0.00308			
PCB-107/124	mg/kg	0.000207	0.0000634						0.0000012 U	0.00015			
PCB-108/119/86/97/125/87	mg/kg	0.00447	0.0012						0.00000877 U	0.000232			
PCB-113/90/101	mg/kg	0.0062	0.00185						0.0000131	0.00457			
PCB-116/85	mg/kg	0.000965	0.000351						0.0000162	0.00551			
PCB-128/166	mg/kg	0.00089	0.000352						0.00000413	0.00187			
PCB-131/12	mg/kg	0.00886	0.002						0.00000266	0.000727			
PCB-139/140	mg/kg	0.000109	0.0000436						0.0000391	0.0102			
PCB-147/149	mg/kg	0.00628	0.00227						0.00000843 U	0.0000894			
PCB-151/135	mg/kg	0.00264	0.000966						0.0000157	0.00372			
PCB-153/168	mg/kg	0.00516	0.00219						0.00000734	0.00173			
PCB-156/157	mg/kg	0.000618	0.000251						0.0000137	0.00354			
PCB-163/138/129	mg/kg	0.00719	0.00251						0.00000228	0.000521			
PCB-171/173	mg/kg	0.000407	0.000198						0.0000172	0.00379			
PCB-180/193	mg/kg	0.00319	0.00161						0.00000188 U	0.000286			
PCB-198/199	mg/kg	0.00278	0.00133						0.0000125	0.00228			
PCB-21/33	mg/kg	0.00996	0.00137						0.00000672	0.00204			
PCB-26/29	mg/kg	0.00519	0.000561						0.000155	0.00703			
PCB-28/20	mg/kg	0.008	0.00203						0.0000402	0.00259			
PCB-30/18	mg/kg	0.00315	0.000909						0.000248	0.00908			
PCB-44/47/65	mg/kg	0.00731	0.00134						0.000802	0.0136			
PCB-50/53	mg/kg	0.00125	0.000205						0.0000781	0.00783			
PCB-59/62/75	mg/kg	0.000589	0.000142						0.0000411	0.00126			
PCB-61/70/74/76	mg/kg	0.00734	0.00228						0.00000617	0.000784			
PCB-69/49	mg/kg	0.00619	0.000885						0.000055	0.0128			
PCB-71/40	mg/kg	0.00552	0.00064						0.0000382	0.00484			
PCB-90/101	mg/kg								0.0000356	0.0038			
Pentachlorobiphenyl	mg/kg												
Tetrachlorobiphenyl	mg/kg												
Total Decachlorobiphenyls (congeners)	mg/kg												
Total Dichlorobiphenyls (congeners)	mg/kg	0.034	0.00943						0.00776	0.134			
Total Heptachlorobiphenyls (congeners)	mg/kg	0.0129	0.00605						0.0000427	0.00973			
Total Hexachlorobiphenyls (congeners)	mg/kg	0.0329	0.0121						0.0000737	0.0206			
Total Monochlorobiphenyls (congeners)	mg/kg	0.0101	0.0049						0.000978	0.0329			
Total Nonachlorobiphenyls (congeners)	mg/kg	0.00942	0.00546						0.0000227	0.00914			
Total Octachlorobiphenyls (congeners)	mg/kg	0.00724	0.00377						0.0000209	0.00568			
Total PCB (congeners)	mg/kg	0.30526	0.08399						0.012378	0.41293			
Total Pentachlorobiphenyls (congeners)	mg/kg	0.0446	0.0131						0.000113	0.0415			
Total Tetrachlorobiphenyls (congeners)	mg/kg	0.0825	0.012						0.000568	0.0692			
Total Trichlorobiphenyls (congeners)	mg/kg	0.061	0.0121						0.00278	0.0816			
Trichlorobiphenyl (total)	mg/kg												
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>													
Benzo[e]pyrene	mg/kg												
Chrysene, 1-methyl-	mg/kg												
Naphthalene, 1-methyl-	mg/kg												
Pyrene, 1-methyl-	mg/kg												

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	D16-BOR-05(0.5-1.0)	D16-BOR-05(0-0.5)	D16-BOR-05(10.0-10.2)	D16-BOR-05(5.0-6.0)	D16-BOR-05(5.0-6.0)-D	D16-BOR-05(7.5-8.0)	D16-BOR-05(9.0-9.5)	D16-BOR-06(0.5-1.0)	D16-BOR-06(0-0.5)	D16-BOR-06(2.5-3.0)	D16-BOR-06(4.5-5.0)	D16-BOR-06(5.5-6.0)	D16-BOR-06(5.5-6.0)
Location ID	D16-BOR-05	D16-BOR-05	D16-BOR-05	D16-BOR-05	D16-BOR-05	D16-BOR-05	D16-BOR-05	D16-BOR-05	D16-BOR-06	D16-BOR-06	D16-BOR-06	D16-BOR-06	D16-BOR-06
Depth Interval (ft)	0.50-1.00	0.00-0.50	10.00-10.20	5.00-6.00	5.00-6.00	7.50-8.00	9.00-9.50	0.50-1.00	0.00-0.50	2.50-3.00	4.50-5.00	5.50-6.00	5.50-6.00
Sample Purpose	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	FS	FS	FS
Chemical Class	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date
Chemical	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units
<b>Polycyclic Aromatic Hydrocarbons</b>													
Acenaphthene	mg/kg	0.17	0.046	0.015	0.004 U	0.004 U	0.004 U	0.009	0.06	0.02	0.004 U	0.004 U	0.004 U
Acenaphthylene	mg/kg	0.029	0.025	0.004 U	0.004 U	0.004 U	0.004 U	0.009	0.034	0.024	0.004 U	0.004 U	0.004 U
Anthracene	mg/kg	0.071	0.1	0.007	0.004 U	0.004 U	0.004 U	0.045	0.11	0.16	0.004 U	0.004 U	0.004 U
Benzo(A)Anthracene	mg/kg	0.073	0.2	0.021	0.004 U	0.004 U	0.004 U	0.086	0.18	0.12	0.004 U	0.004 U	0.004 U
Benzo(B)Fluoranthene	mg/kg	0.11	0.31	0.024	0.004 U	0.004 U	0.004 U	0.14	0.2	0.18	0.006	0.004 U	0.004 U
Benzo(G,H,I)Perylene	mg/kg	0.044	0.14	0.007	0.004 U	0.004 U	0.004 U	0.037	0.11	0.081	0.006	0.004 U	0.004 U
Benzo(K)Fluoranthene	mg/kg	0.044	0.11	0.01	0.004 U	0.004 U	0.004 U	0.05	0.087	0.068	0.004	0.004 U	0.004 U
Benzo(A)Pyrene	mg/kg	0.076	0.21	0.005	0.004 U	0.004 U	0.004 U	0.003 U	0.16	0.12	0.005	0.004 U	0.004 U
Chrysene	mg/kg	0.12	0.34	0.022	0.004 U	0.004 U	0.004 U	0.13	0.29	0.15	0.004	0.004 U	0.004 U
Dibenz(A,H)Anthracene	mg/kg	0.016	0.045	0.004 U	0.004 U	0.004 U	0.004 U	0.016	0.036	0.026	0.004 U	0.004 U	0.004 U
Fluoranthene	mg/kg	0.17	0.36	0.061	0.004 U	0.004 U	0.004 U	0.2	0.29	0.23	0.004 U	0.004 U	0.004 U
Fluorene	mg/kg	0.11	0.055	0.022	0.004 U	0.004 U	0.004 U	0.02	0.085	0.031	0.004 U	0.004 U	0.004 U
Indeno (1,2,3-CD) Pyrene	mg/kg	0.04	0.12	0.008	0.004 U	0.004 U	0.004 U	0.032	0.086	0.066	0.004 U	0.004 U	0.004 U
Naphthalene	mg/kg	0.86	0.13	0.044	0.004 U	0.004 U	0.004 U	0.005	0.28	0.11	0.004 U	0.004 U	0.004 U
Phenanthrene	mg/kg	0.21	0.21	0.079	0.008	0.004 U	0.004 U	0.11	0.33	0.12	0.004 U	0.004 U	0.004 U
Pyrene	mg/kg	0.18	0.39	0.041	0.004 U	0.004 U	0.004 U	0.13	0.32	0.23	0.004	0.004 U	0.004 U
Total PAHs (Detections + 1/2 MDL)	mg/kg	2.323	2.791	0.37	0.038	0.032 U	0.034	1.0205	2.658	1.736	0.049	0.032 U	0.032 U
Total PAHs (Detections Only)	mg/kg	2.323	2.791	0.366	0.008	0.032 U	0.004	1.019	2.658	1.736	0.029	0.032 U	0.032 U
<b>Semivolatile Organic Compounds - TICs</b>													
1,2,4-Trithiolane	mg/kg												
1,4-Benzenediol, 2-chloro-	mg/kg			0.16									
11H-Benzo[b]fluorene	mg/kg		0.39										
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg												
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg												
3-PENTEN-2-ONE, 4-METHYL-	mg/kg												
7H-Benz[de]anthracen-7-one	mg/kg		0.77										
9,10-Anthracenedione	mg/kg												
9-Octadecenamamide, (Z)-	mg/kg												
Acetamide, 2-chloro-N-(ethox	mg/kg	1.3							0.84				
Alachlor	mg/kg	4.4							0.5				
Benzenamine, 3-methyl-	mg/kg												
Benzenamine, 4,4',4"-methy	mg/kg												
Benzenamine, 4,4"-methyleneb	mg/kg								0.69				
Benzene, 1,2,3,4-tetrachloro	mg/kg												
Benzene, 1,2,3,5-tetrachloro	mg/kg												
Benzene, 1,2,3-trichloro-	mg/kg												
Benzene, 1,3,5-trichloro-	mg/kg												
Benzene, 1,3-bis(1-methyleth	mg/kg												
Benzene, 1,4-bis(1-methyleth	mg/kg												
Benzofuran, 2,3-dihydro-	mg/kg												
CYCLIC OCTAATOMIC SULFUR	mg/kg									1			
Diphenyl Ether	mg/kg												
Docosane	mg/kg												
Heneicosane	mg/kg												
Hexacosane	mg/kg												
Hexadecane	mg/kg												
Hexatriacontane	mg/kg												
m-Chloroaniline	mg/kg	2.3							0.58				
N,N-Diethylaniline	mg/kg												
n-Hexadecanoic acid	mg/kg									0.39			
Nonadecane	mg/kg		1						0.55	0.51			
o-Chloroaniline	mg/kg												
Octacosane	mg/kg												
Octadecane	mg/kg		0.81										
Octadecane, 1-chloro-	mg/kg												
Octadecanoic acid	mg/kg		0.46										
Parachlorophenol	mg/kg												
Pentadecane	mg/kg												
Perylene	mg/kg							0.14					
Phenol, 2,5-dichloro-	mg/kg												
Phenol, 3-chloro-	mg/kg												
Phenol, 4,4'-(1-methylethyl)	mg/kg	5.2	1.8									0.25	
Tetracosane	mg/kg												
Tetradecane	mg/kg												
Tetraethylene glycol	mg/kg												
Total SVOC TICs	mg/kg	36	20	0.61	1.1		1.2	1.2	15	18	1.4	1.6	
Triacotane	mg/kg												
Tributyl phosphate	mg/kg												
Tridecanoic acid	mg/kg												
Triphenyl phosphate	mg/kg	0.77											
UNKNOWN	mg/kg	0.9875	0.66666667						0.67	0.49			
Unknown acid	mg/kg	1.1	0.865						0.57	0.39			
Unknown Alcohol	mg/kg									1.78333333			
Unknown Aldol Condensate	mg/kg	3	2.6	0.25	0.52		0.5	0.42	1.4	3	0.72	0.69	
UNKNOWN ALKANE	mg/kg									0.31	0.29	0.27	

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA		
		D16-BOR-05(0.5-1.0)	D16-BOR-05(0-0.5)	D16-BOR-05(10.0-10.2)	D16-BOR-05(5.0-6.0)	D16-BOR-05(5.0-6.0)-D	D16-BOR-05(7.5-8.0)	D16-BOR-05(9.0-9.5)	D16-BOR-06(0.5-1.0)	D16-BOR-06(0-0.5)	D16-BOR-06(2.5-3.0)	D16-BOR-06(4.5-5.0)	D16-BOR-06(5.5-6.0)		
Chemical Class	Location ID Depth Interval (ft) Sample Purpose Date	D16-BOR-05	D16-BOR-05	D16-BOR-05	D16-BOR-05	D16-BOR-05	D16-BOR-05	D16-BOR-05	D16-BOR-05	D16-BOR-06	D16-BOR-06	D16-BOR-06	D16-BOR-06		
		0.50-1.00 FS 11/2/2016	0.00-0.50 FS 11/2/2016	10.00-10.20 FS 11/2/2016	5.00-6.00 FS 11/2/2016	5.00-6.00 FS 11/2/2016	7.50-8.00 FS 11/2/2016	9.00-9.50 FS 11/2/2016	0.50-1.00 FS 10/25/2016	0.00-0.50 FS 10/25/2016	2.50-3.00 FS 10/25/2016	4.50-5.00 FS 10/25/2016	5.50-6.00 FS 10/25/2016		
Chemical	Units														
Unknown Alkene	mg/kg														
Unknown Amide	mg/kg														
Unknown Amine	mg/kg														
UNKNOWN AROMATIC	mg/kg														
Unknown Carboxylic Acid	mg/kg														
Unknown Cycloalkane	mg/kg														
Unknown Hydrocarbon	mg/kg	0.823333333	0.446							0.606666667					
Unknown Ketone	mg/kg														
Unknown PAH	mg/kg														
UNKNOWN SILOXANE	mg/kg														
<b>Semivolatile Organic Compounds</b>															
1,2,4-Trichlorobenzene	mg/kg	0.28	0.051	0.063	0.018	0.019	0.019	0.019	0.017	0.07	0.044	0.019	0.019		
1,2-Diphenylhydrazine	mg/kg	0.031	U	U	0.032	U	0.018	U	0.019	U	0.033	U	0.019	U	
1,4-Dioxane	mg/kg	0.19	U	U	0.19	U	0.11	U	0.11	U	0.18	U	0.11	U	
1-Naphthylamine	mg/kg	0.31	U	0.32	U	0.2	U	0.18	U	0.19	U	0.33	U	0.19	U
2,3,4,6-Tetrachlorophenol	mg/kg	0.12	U	0.13	U	0.079	U	0.073	U	0.074	U	0.12	U	0.13	U
2,4,5-Trichlorophenol	mg/kg	0.031	U	0.032	U	0.02	U	0.018	U	0.019	U	0.03	U	0.033	U
2,4,6-Trichlorophenol	mg/kg	0.031	U	0.032	U	0.02	U	0.018	U	0.019	U	0.03	U	0.033	U
2,4-Dichlorophenol	mg/kg	0.031	U	0.032	U	0.02	U	0.018	U	0.019	U	0.03	U	0.033	U
2,4-Dimethylphenol	mg/kg	0.031	U	0.032	U	0.02	U	0.018	U	0.019	U	0.03	U	0.033	U
2,4-Dinitrophenol	mg/kg	0.56	U	0.56	U	0.93	U	0.33	U	0.33	U	0.34	U	0.54	U
2,4-Dinitrotoluene	mg/kg	0.12	U	0.13	U	0.15	U	0.073	U	0.074	U	0.12	U	0.13	U
2,6-Dinitrotoluene	mg/kg	0.031	U	0.032	U	0.02	U	0.018	U	0.019	U	0.03	U	0.033	U
2-Chloronaphthalene	mg/kg	0.012	U	0.013	U	0.008	U	0.007	U	0.007	U	0.046	U	0.013	U
2-Chlorophenol	mg/kg	0.031	U	0.032	U	0.055	U	0.019	U	0.019	U	0.033	U	0.033	U
2-Methylnaphthalene	mg/kg	0.58	U	0.056	U	0.011	U	0.004	U	0.004	U	0.005	U	0.09	U
2-Methylphenol (O-Cresol)	mg/kg	0.031	U	0.032	U	0.02	U	0.018	U	0.019	U	0.03	U	0.033	U
2-Naphthylamine	mg/kg	0.31	U	0.32	U	0.2	U	0.18	U	0.19	U	0.3	U	0.33	U
2-Nitroaniline	mg/kg	0.031	U	0.032	U	0.02	U	0.018	U	0.019	U	0.03	U	0.033	U
2-Nitrophenol	mg/kg	0.031	U	0.032	U	0.02	U	0.018	U	0.019	U	0.03	U	0.033	U
3,3'-Dichlorobenzidine	mg/kg	0.19	U	0.19	U	0.12	U	0.11	U	0.11	U	0.18	U	0.2	U
3,3'-Dimethylbenzidine	mg/kg														
3-Nitroaniline	mg/kg	0.12	U	0.13	U	0.079	U	0.073	U	0.074	U	0.12	U	0.13	U
4,6-Dinitro-2-Methylphenol	mg/kg	0.31	U	0.32	U	0.2	U	0.18	U	0.19	U	0.3	U	0.33	U
4-Aminobiphenyl	mg/kg	0.31	U	0.32	U	0.2	U	0.18	U	0.19	U	0.3	U	0.33	U
4-Bromophenyl Phenyl Ether	mg/kg	0.031	U	0.032	U	0.02	U	0.018	U	0.019	U	0.03	U	0.033	U
4-Chloro-3-Methylphenol	mg/kg	0.031	U	0.032	U	0.02	U	0.018	U	0.019	U	0.03	U	0.033	U
4-Chloroaniline	mg/kg	5.2	U	0.064	U	0.039	U	0.037	U	0.037	U	0.038	U	1.2	U
4-Chlorophenyl Phenyl Ether	mg/kg	0.031	U	0.032	U	0.02	U	0.018	U	0.019	U	0.03	U	0.033	U
4-Methylphenol (P-Cresol)	mg/kg	0.17	U	0.071	U	0.02	U	0.018	U	0.019	U	0.02	U	0.065	U
4-Nitroaniline	mg/kg	0.12	U	0.13	U	0.079	U	0.073	U	0.074	U	0.12	U	0.13	U
4-Nitrophenol	mg/kg	0.31	U	0.32	U	0.2	U	0.18	U	0.19	U	0.3	U	0.33	U
Acetophenone	mg/kg	0.031	U	0.032	U	0.02	U	0.018	U	0.019	U	0.03	U	0.033	U
Aniline	mg/kg	0.31	U	0.32	U	0.2	U	0.18	U	0.19	U	0.3	U	0.33	U
Benzidine	mg/kg	0.47	U	0.48	U	0.29	U	0.28	U	0.28	U	0.45	U	0.49	U
Biphenyl	mg/kg	0.35	U	0.032	U	0.02	U	0.018	U	0.019	U	0.037	U	0.033	U
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg	0.031	U	0.032	U	0.02	U	0.018	U	0.019	U	0.03	U	0.033	U
Bis(2-Chloroethoxy)Methane	mg/kg	0.031	U	0.032	U	0.02	U	0.018	U	0.019	U	0.03	U	0.033	U
Bis(2-Chloroethyl)Ether	mg/kg	0.031	U	0.032	U	0.02	U	0.018	U	0.019	U	0.03	U	0.033	U
Bis(2-Chloroisopropyl)Ether	mg/kg														
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.44	U	0.13	U	0.079	U	0.073	U	0.074	U	0.07	U	0.27	U
Butyl Benzyl Phthalate	mg/kg	1.4	U	0.13	U	0.079	U	0.073	U	0.074	U	0.07	U	0.13	U
Carbazole	mg/kg	0.051	U	0.032	U	0.02	U	0.018	U	0.019	U	0.03	U	0.033	U
Dibenzofuran	mg/kg	0.1	U	0.032	U	0.02	U	0.018	U	0.019	U	0.03	U	0.033	U
Diethyl Phthalate	mg/kg	0.12	U	0.13	U	0.079	U	0.073	U	0.074	U	0.12	U	0.13	U
Dimethyl Phthalate	mg/kg	0.12	U	0.13	U	0.079	U	0.073	U	0.074	U	0.12	U	0.13	U
Di-N-Butyl Phthalate	mg/kg	0.12	U	0.13	U	0.079	U	0.073	U	0.074	U	0.12	U	0.13	U
Diphenyl Ether	mg/kg	0.41	U	0.032	U	0.02	U	0.018	U	0.019	U	0.037	U	0.033	U
Hexachlorobenzene	mg/kg	0.006	U	0.006	U	0.004	U	0.004	U	0.004	U	0.019	U	0.006	U
Hexachlorobutadiene	mg/kg	0.031	U	0.032	U	0.02	U	0.018	U	0.019	U	0.03	U	0.033	U
Hexachlorocyclopentadiene	mg/kg	0.31	U	0.32	U	0.2	U	0.18	U	0.19	U	0.3	U	0.33	U
Hexachloroethane	mg/kg	0.062	U	0.064	U	0.039	U	0.037	U	0.037	U	0.035	U	0.065	U
Hexachloropropylene	mg/kg														
Isophorone	mg/kg	0.031	U	0.032	U	0.02	U	0.018	U	0.019	U	0.03	U	0.033	U
N-Dioctyl Phthalate	mg/kg	0.12	U	0.13	U	0.079	U	0.073	U	0.074	U	0.12	U	0.13	U
Nitrobenzene	mg/kg	0.031	U	0.032	U	0.02	U	0.018	U	0.019	U	0.034	U	0.033	U
N-Nitrosodimethylamine	mg/kg	0.12	U	0.13	U	0.079	U	0.073	U	0.074	U	0.12	U	0.13	U
N-Nitrosodi-N-Propylamine	mg/kg	0.031	U	0.032	U	0.02	U	0.018	U	0.019	U	0.03	U	0.033	U
N-Nitrosodiphenylamine	mg/kg	0.031	U	0.032	U	0.02	U	0.018	U	0.019	U	0.03	U	0.033	U
O-Toluidine	mg/kg	0.37	U	0.38	U	0.24	U	0.22	U	0.22	U	0.23	U	0.36	U
Parathion	mg/kg	0.31	U	0.32	U	0.2	U	0.18	U	0.19	U	0.3	U	0.33	U
Pentachlorobenzene	mg/kg	0.031	U	0.032	U	0.02	U	0.018	U	0.019	U	0.03	U	0.033	U
Pentachlorophenol	mg/kg	0.062	U	0.064	U	0.039	U	0.037	U	0.037	U	0.035	U	0.065	U
Phenol	mg/kg	0.031	U	0.032	U	0.047	U	0.018	U	0.019	U	0.017	U	0.033	U
<b>Volatile Organic Compounds - TICs</b>															
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg														

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA	
		D16-BOR-05(0.5-1.0)	D16-BOR-05(0-0.5)	D16-BOR-05(10.0-10.2)	D16-BOR-05(5.0-6.0)	D16-BOR-05(5.0-6.0)-D	D16-BOR-05(7.5-8.0)	D16-BOR-05(9.0-9.5)	D16-BOR-06(0.5-1.0)	D16-BOR-06(0-0.5)	D16-BOR-06(2.5-3.0)	D16-BOR-06(4.5-5.0)	D16-BOR-06(5.5-6.0)	D16-BOR-06(5.5-6.0)	D16-BOR-06(5.5-6.0)	D16-BOR-06(5.5-6.0)	D16-BOR-06(5.5-6.0)
Location ID	Depth Interval (ft)	D16-BOR-05	D16-BOR-05	D16-BOR-05	D16-BOR-05	D16-BOR-05	D16-BOR-05	D16-BOR-05	D16-BOR-05	D16-BOR-06	D16-BOR-06	D16-BOR-06	D16-BOR-06	D16-BOR-06	D16-BOR-06	D16-BOR-06	D16-BOR-06
Sample Purpose	Date	0.50-1.00	0.00-0.50	10.00-10.20	5.00-6.00	5.00-6.00	7.50-8.00	9.00-9.50	0.50-1.00	0.00-0.50	2.50-3.00	4.50-5.00	5.50-6.00	5.50-6.00	5.50-6.00	5.50-6.00	5.50-6.00
Chemical Class	Units	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Chemical	Units	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016
1-Butene	mg/kg																
1-Heptene	mg/kg																
1-Propene, 2-methyl-	mg/kg																
Azulene	mg/kg																
BENZENE, 1,2,4-TRICHLORO-	mg/kg																
BENZENE, 1,2-DICHLORO-	mg/kg																
BENZENE, 1,4-DICHLORO-	mg/kg																
Camphene	mg/kg																
CYCLOHEXANE	mg/kg																
Cyclohexane, methyl-	mg/kg																
Cyclotrisiloxane, hexamethyl	mg/kg																
Diphenyl Ether	mg/kg																
Ethane, 1,1,2,2-tetrachloro-	mg/kg																
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg																
Ethane, 1,2-dichloro-1,1-dif	mg/kg																
Ethene, 1,1-dichloro-2,2-dif	mg/kg																
Hexane, 2-methyl-	mg/kg																
Hexane, 3-methyl-	mg/kg																
METHANE, CHLOROFLUORO-	mg/kg																
Naphthalene	mg/kg																
NAPHTHALENE, 2-METHYL-	mg/kg																
Nonanal	mg/kg																
Norflurane	mg/kg								0.007								
Pentane, 2,3-dimethyl-	mg/kg																
Phenol, 4-(1,1,3,3-tetrameth	mg/kg																
Propene	mg/kg																
Sulfur dioxide	mg/kg																
Tridecane	mg/kg																
UNKNOWN	mg/kg		0.43														
UNKNOWN ALICYCLIC	mg/kg																
UNKNOWN ALIPHATIC	mg/kg																
UNKNOWN ALKANE	mg/kg																
UNKNOWN AROMATIC	mg/kg																
UNKNOWN SILOXANE	mg/kg																
<b>Volatile Organic Compounds</b>																	
1,1,1,2-Tetrachloroethane	mg/kg	0.12	U	0.002	U	0.2	U	0.001	U	0.001	U	0.055	U	0.002	U	0.002	U
1,1,1-Trichloroethane	mg/kg	0.12	U	0.002	U	0.2	U	0.001	U	0.001	U	0.055	U	0.002	U	0.002	U
1,1,1-Trichlorotrifluoroethane	mg/kg	0.011	U	0.035	U	0.26	U	0.007	U	0.007	U	0.01	U	0.011	U	0.014	U
1,1,2,2-Tetrachloroethane	mg/kg	0.12	U	0.002	U	0.2	U	0.001	U	0.001	U	0.055	U	0.002	U	0.002	U
1,1,2-Trichloroethane	mg/kg	0.12	U	0.002	U	0.2	U	0.001	U	0.001	U	0.055	U	0.002	U	0.002	U
1,1,2-Trichlorotrifluoroethane	mg/kg	0.24	U	0.86	U	37	U	0.041	U	0.021	U	0.11	U	0.004	U	0.005	U
1,1,2-Trifluoroethane	mg/kg	0.004	U	0.005	U	0.002	U	0.003	U	0.003	U	0.002	U	0.005	U	0.005	U
1,1-Dichloro-1-Fluoroethane	mg/kg	0.002	U	0.003	U	0.009	U	0.001	U	0.001	U	0.001	U	0.002	U	0.003	U
1,1-Dichloroethane	mg/kg	0.12	U	0.002	U	0.2	U	0.001	U	0.001	U	0.055	U	0.002	U	0.002	U
1,1-Dichloroethene	mg/kg	0.12	U	0.002	U	0.2	U	0.001	U	0.001	U	0.055	U	0.002	U	0.002	U
1,1-Dichloropropene	mg/kg	0.12	U	0.002	U	0.2	U	0.001	U	0.001	U	0.055	U	0.002	U	0.002	U
1,2,4-Trimethylbenzene	mg/kg	0.12	U	0.002	U	0.2	U	0.001	U	0.001	U	0.055	U	0.002	U	0.002	U
1,2-Dibromoethane (EDB)	mg/kg	0.12	U	0.002	U	0.2	U	0.001	U	0.001	U	0.055	U	0.002	U	0.002	U
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg	0.006	U	0.007	U	0.65	U	0.001	U	0.001	U	0.001	U	0.002	U	0.003	U
1,2-Dichloro-1-Fluoroethane	mg/kg	0.002	U	0.003	U	0.009	U	0.001	U	0.001	U	0.001	U	0.002	U	0.003	U
1,2-Dichlorobenzene	mg/kg	0.54	U	0.036	U	11	U	0.006	U	0.001	U	0.004	U	0.007	U	0.004	U
1,2-Dichloroethane	mg/kg	0.12	U	0.002	U	0.2	U	0.001	U	0.001	U	0.055	U	0.002	U	0.002	U
1,2-Dichloroethene	mg/kg	0.12	U	0.002	U	0.2	U	0.001	U	0.001	U	0.055	U	0.002	U	0.002	U
1,2-Dichloropropane	mg/kg	0.12	U	0.002	U	0.2	U	0.001	U	0.001	U	0.055	U	0.002	U	0.002	U
1,2-Dichlorotetrafluoroethane	mg/kg	0.004	U	0.008	U	2.7	U	0.003	U	0.003	U	0.002	U	0.005	U	0.005	U
1,3,5-Trimethylbenzene	mg/kg	0.12	U	0.002	U	0.2	U	0.001	U	0.001	U	0.055	U	0.002	U	0.002	U
1,3-Dichlorobenzene	mg/kg	0.12	U	0.002	U	0.36	U	0.001	U	0.001	U	0.055	U	0.002	U	0.002	U
1,4-Dichlorobenzene	mg/kg	0.22	U	0.019	U	27	U	0.004	U	0.001	U	0.004	U	0.005	U	0.002	U
1-Chloro-1,1-Difluoroethane	mg/kg	0.002	U	0.003	U	0.005	U	0.001	U	0.001	U	0.001	U	0.002	U	0.003	U
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg	0.009	U	0.02	U	2.3	U	0.001	U	0.001	U	0.002	U	0.002	U	0.003	U
2-Chloro-1,1,1-Trifluoroethane	mg/kg	0.24	U	0.018	U	0.4	U	0.002	U	0.002	U	0.002	U	0.004	U	0.005	U
2-Chloroethyl Vinyl Ether	mg/kg																
2-Chlorotoluene	mg/kg	0.12	U	0.002	U	0.2	U	0.001	U	0.001	U	0.055	U	0.002	U	0.002	U
2-Hexanone	mg/kg	0.36	U	0.007	U	0.6	U	0.003	U	0.003	U	0.17	U	0.006	U	0.007	U
4-Chlorotoluene	mg/kg	0.12	U	0.002	U	0.2	U	0.001	U	0.001	U	0.055	U	0.002	U	0.002	U
4-Isopropyltoluene	mg/kg	0.12	U	0.002	U	0.2	U	0.001	U	0.001	U	0.055	U	0.002	U	0.002	U
Acetone	mg/kg	0.84	U	0.093	U	1.4	U	0.04	U	0.035	U	0.008	U	0.39	U	0.067	U
Acrolein	mg/kg																
Acrylonitrile	mg/kg																
Benzene	mg/kg	0.06	U	0.005	U	3.6	U	0.0005	U	0.0006	U	0.001	U	0.028	U	0.001	U
Bromodichloromethane	mg/kg	0.12	U	0.002	U	0.2	U	0.001	U	0.001	U	0.055	U	0.002	U	0.002	U
Bromoform	mg/kg																
Carbon Disulfide	mg/kg	0.12	U	0.009	U	0.2	U	0.001	U	0.001	U	0.055	U	0.002	U	0.009	U
Carbon Tetrachloride	mg/kg	0.12	U	0.002	U	3.1	U	0.001	U	0.001	U	0.055	U	0.002	U	0.002	U
CFC-1113	mg/kg	0.24	U	0.005	U	0.4	U	0.002	U	0.002	U	0.11	U	0.004	U	0.005	U
Chlorobenzene	mg/kg	2.1	U	0.057	U	170	U	0.005	U	0.002	U	0.009	U	0.1	U	0.029	U

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D16-BOR-05(0.5-1.0) D16-BOR-05 0.50-1.00 FS 11/2/2016	D16-BOR-05(0-0.5) D16-BOR-05 0.00-0.50 FS 11/2/2016	D16-BOR-05(10.0-10.2) D16-BOR-05 10.00-10.20 FS 11/2/2016	D16-BOR-05(5.0-6.0) D16-BOR-05 5.00-6.00 FS 11/2/2016	D16-BOR-05(5.0-6.0)-D D16-BOR-05 5.00-6.00 DUP 11/2/2016	D16-BOR-05(7.5-8.0) D16-BOR-05 7.50-8.00 FS 11/2/2016	D16-BOR-05(9.0-9.5) D16-BOR-05 9.00-9.50 FS 11/2/2016	D16-BOR-06(0.5-1.0) D16-BOR-06 0.50-1.00 FS 10/25/2016	D16-BOR-06(0-0.5) D16-BOR-06 0.00-0.50 FS 10/25/2016	D16-BOR-06(2.5-3.0) D16-BOR-06 2.50-3.00 FS 10/25/2016	D16-BOR-06(4.5-5.0) D16-BOR-06 4.50-5.00 FS 10/25/2016	D16-BOR-06(5.5-6.0) D16-BOR-06 5.50-6.00 FS 10/25/2016
Chlorodibromomethane	mg/kg	0.12 U	0.002 U	0.2 U	0.001 U	0.001 U	0.001 U	0.055 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U
Chlorodifluoromethane	mg/kg	0.004 U	0.005 U	0.002 U	0.003 U	0.003 U	0.002 U	0.002 U	0.005 U	0.005 U	0.003 U	0.002 U	0.002 U
Chlorofluoromethane	mg/kg	0.012 U	0.006 U	0.0009 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U
Chloroform	mg/kg	0.12 U	0.006 U	0.2 U	0.001 U	0.001 U	0.001 U	0.055 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U
Chloropentafluoroethane	mg/kg	0.033 U	0.039 U	0.014 U	0.022 U	0.02 U	0.017 U	0.015 U	0.034 U	0.041 U	0.019 U	0.017 U	0.018 U
cis-1,2-Dichloroethene	mg/kg	0.12 U	0.002 U	0.2 U	0.001 U	0.001 U	0.001 U	0.055 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U
cis-1,3-Dichloropropene	mg/kg	0.12 U	0.002 U	0.2 U	0.001 U	0.001 U	0.001 U	0.055 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U
Cumene	mg/kg	0.12 U	0.002 U	0.2 U	0.001 U	0.001 U	0.001 U	0.055 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U
Dichlorodifluoromethane	mg/kg	0.24 U	0.005 U	0.4 U	0.006 U	0.002 U	0.002 U	0.11 U	0.004 U	0.005 U	0.002 U	0.002 U	0.002 U
Dichlorofluoromethane	mg/kg	0.24 U	0.1 U	0.4 U	0.002 U	0.002 U	0.002 U	0.11 U	0.004 U	0.005 U	0.009 U	0.002 U	0.002 U
Ethane	ug/L												
Ethyl Chloride	mg/kg	0.24 U	0.005 U	0.4 U	0.002 U	0.002 U	0.002 U	0.11 U	0.004 U	0.005 U	0.002 U	0.002 U	0.002 U
Ethylbenzene	mg/kg	0.12 U	0.002 U	0.2 U	0.001 U	0.001 U	0.001 U	0.055 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U
Fluoromethane	mg/kg	0.007 U	0.008 U	0.003 U	0.004 U	0.004 U	0.003 U	0.003 U	0.007 U	0.008 U	0.004 U	0.003 U	0.004 U
Hexane	mg/kg	0.12 U	0.002 U	0.2 U	0.001 U	0.001 U	0.001 U	0.055 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U
Isobutyl Alcohol	mg/kg	12 U	0.24 U	20 U	0.11 U	0.12 U	0.11 U	5.5 U	0.2 U	0.24 U	0.12 U	0.11 U	0.11 U
Meta- And Para-Xylene	mg/kg	0.12 U	0.002 U	0.2 U	0.001 U	0.001 U	0.001 U	0.055 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U
Methacrylonitrile	mg/kg	0.6 U	0.012 U	1 U	0.005 U	0.006 U	0.006 U	0.28 U	0.01 U	0.012 U	0.006 U	0.006 U	0.006 U
Methane	ug/L												
Methyl Bromide	mg/kg												
Methyl Chloride	mg/kg	0.24 U	0.005 U	0.4 U	0.002 U	0.002 U	0.002 U	0.11 U	0.004 U	0.005 U	0.002 U	0.002 U	0.002 U
Methyl Ethyl Ketone	mg/kg	0.48 U	0.009 U	0.8 U	0.004 U	0.005 U	0.005 U	0.22 U	0.008 U	0.024 U	0.005 U	0.005 U	0.004 U
Methyl Isobutyl Ketone	mg/kg	0.36 U	0.007 U	0.6 U	0.003 U	0.003 U	0.003 U	0.17 U	0.006 U	0.007 U	0.004 U	0.003 U	0.003 U
Methyl Methacrylate	mg/kg	0.12 U	0.002 U	0.2 U	0.001 U	0.001 U	0.001 U	0.055 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U
Methyl Tertiary Butyl Ether	mg/kg	0.06 U	0.001 U	0.1 U	0.0005 U	0.0006 U	0.0006 U	0.028 U	0.001 U	0.001 U	0.0006 U	0.0006 U	0.0006 U
Methylene Chloride	mg/kg	0.24 U	0.005 U	0.4 U	0.002 U	0.002 U	0.002 U	0.11 U	0.004 U	0.005 U	0.002 U	0.002 U	0.002 U
N-Butylbenzene	mg/kg	0.12 U	0.002 U	0.2 U	0.001 U	0.001 U	0.001 U	0.055 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U
N-Propylbenzene	mg/kg	0.12 U	0.002 U	0.2 U	0.001 U	0.001 U	0.001 U	0.055 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U
Ortho-Xylene	mg/kg	0.12 U	0.002 U	0.2 U	0.001 U	0.001 U	0.001 U	0.055 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U
Propionitrile	mg/kg	3.6 U	0.071 U	6 U	0.033 U	0.035 U	0.034 U	1.7 U	0.061 U	0.072 U	0.035 U	0.034 U	0.033 U
sec-Butylbenzene	mg/kg	0.12 U	0.002 U	0.2 U	0.001 U	0.001 U	0.001 U	0.055 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U
Styrene	mg/kg	0.12 U	0.002 U	0.2 U	0.001 U	0.001 U	0.001 U	0.055 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U
tert-Butylbenzene	mg/kg	0.12 U	0.002 U	0.2 U	0.001 U	0.001 U	0.001 U	0.055 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U
Tetrachloroethene	mg/kg	0.12 U	0.018 U	1.9 U	0.001 U	0.001 U	0.001 U	0.055 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U
Tetrahydrofuran	mg/kg	0.48 U	0.009 U	0.8 U	0.004 U	0.005 U	0.005 U	0.22 U	0.008 U	0.01 U	0.005 U	0.005 U	0.004 U
Toluene	mg/kg	0.12 U	0.003 U	0.2 U	0.001 U	0.001 U	0.001 U	0.055 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U
trans-1,2-Dichloroethene	mg/kg	0.12 U	0.002 U	0.2 U	0.001 U	0.001 U	0.001 U	0.055 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U
trans-1,3-Dichloropropene	mg/kg												
Trichloroethene	mg/kg	0.12 U	0.002 U	0.2 U	0.001 U	0.001 U	0.001 U	0.055 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U
Trichlorofluoromethane	mg/kg	0.24 U	1 U	4.8 U	0.018 U	0.024 U	0.017 U	0.11 U	0.004 U	0.005 U	0.002 U	0.002 U	0.002 U
Vinyl Chloride	mg/kg	0.12 U	0.002 U	0.2 U	0.001 U	0.001 U	0.001 U	0.055 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U
Vinyl Fluoride	mg/kg	0.013 U	0.015 U	0.006 U	0.009 U	0.008 U	0.007 U	0.006 U	0.014 U	0.016 U	0.008 U	0.007 U	0.007 U
Xylenes	mg/kg	0.12 U	0.002 U	0.2 U	0.001 U	0.001 U	0.001 U	0.055 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	D16-BOR-06(6-6.5)	D16-BOR-06(9-9.5)	D16-BOR-07(0.5-1.0)	D16-BOR-07(0-0.5)	D16-BOR-07(0-0.5)-D	D16-BOR-08(0.5-1.0)	D16-BOR-08(0-0.5)	D16-BOR-09(0.5-1.0)	D16-BOR-09-(0-0.5)	D16-BOR-09-(10.6-11.4)	D16-BOR-09-(5.4-5.9)	D16-BOR-09-(6.6-6.8)	D16-BOR-09-(6.6-6.8)
Location ID	D16-BOR-06	D16-BOR-06	D16-BOR-07	D16-BOR-07	D16-BOR-07	D16-BOR-08	D16-BOR-08	D16-BOR-09	D16-BOR-09	D16-BOR-09	D16-BOR-09	D16-BOR-09	D16-BOR-09
Depth Interval (ft)	6.00-6.50	9.00-9.50	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	10.60-11.40	5.40-5.90	6.60-6.80	6.60-6.80
Sample Purpose	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	FS	FS	FS
Date	10/26/2016	10/26/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016	11/6/2017	11/6/2017	11/6/2017	11/6/2017	11/6/2017
Chemical Class	Units												
<b>General Chemistry</b>													
Black Carbon	mg/kg												
Percent Moisture	%	16.2	11.5	26.9	36.6	34.3	45.6	41.85	48.5	41.9	13	8.5	19.2
Percent Solids	%												
Total Organic Carbon	mg/kg	233 U	216 U						35600	24500	142	407	1210
<b>Metals</b>													
Aluminum	mg/kg								25500	17800			
Antimony	mg/kg								1.87	0.545			
Arsenic	mg/kg								26.7	10			
Barium	mg/kg								127	91.1			
Beryllium	mg/kg								1.45	0.83			
Cadmium	mg/kg								1.23	0.616			
Calcium	mg/kg								4010	4200			
Chromium	mg/kg								129	46			
Cobalt	mg/kg								16.5	11.8			
Copper	mg/kg								88.1	41.7			
Iron	mg/kg								40100	24900			
Lead	mg/kg								483	48.6			
Magnesium	mg/kg								6190	4890			
Manganese	mg/kg								893	658			
Mercury	mg/kg								1.23	0.358			
Nickel	mg/kg								42.1	27.2			
Potassium	mg/kg								4080	3150			
Selenium	mg/kg								2.94	0.647			
Silver	mg/kg								1.17	0.438			
Sodium	mg/kg								915	912			
Thallium	mg/kg								0.307	0.218			
Tin	mg/kg												
Titanium	mg/kg												
Vanadium	mg/kg								95.9	42.9			
Zinc	mg/kg								342	158			
<b>Metals - AVS/SEM</b>													
Acid Volatile Sulfide	umol/g												
Arsenic	umol/g												
Cadmium	umol/g												
Copper	umol/g												
Lead	umol/g												
Zinc	umol/g												
<b>Metals - Leachate</b>													
Lead	ug/L												
<b>Per and Polyfluorinated Organic Substances</b>													
Perfluorobutane Sulfonic Acid	mg/kg			0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U			
Perfluorobutanoic Acid	mg/kg			0.0008 U	0.0008 U	0.0008 U	0.0016	0.0008 U	0.0008 U	0.0008 U			
Perfluorodecane Sulfonic Acid	mg/kg			0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U			
Perfluorodecanoic Acid	mg/kg			0.0017	0.0008 U	0.0008 U	0.0092	0.0008 U	0.0009	0.0008 U			
Perfluorododecanoic Acid	mg/kg			0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U			
Perfluoroheptanoic Acid	mg/kg			0.0008 U	0.0008 U	0.0008 U	0.00082	0.0008 U	0.0008 U	0.0008 U			
Perfluorohexane Sulfonic Acid	mg/kg			0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U			
Perfluorohexanoic Acid	mg/kg			0.0016	0.0008 U	0.0008 U	0.01	0.0008 U	0.0008 U	0.0008 U			
Perfluorononanoic Acid	mg/kg			0.0008 U	0.0008 U	0.0008 U	0.004	0.0008 U	0.0008 U	0.0008 U			
Perfluorooctane Sulfonamide	mg/kg			0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U			
Perfluoropentanoic Acid	mg/kg			0.0008 U	0.0008 U	0.0008 U	0.0011	0.0008 U	0.0008 U	0.0008 U			
Perfluorotetradecanoic Acid	mg/kg			0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U			
Perfluorotridecanoic Acid	mg/kg			0.0008 U	0.0008 U	0.0008 U	0.002	0.0008 U	0.0008 U	0.0008 U			
Perfluoroundecanoic Acid	mg/kg			0.0008 U	0.0008 U	0.0008 U	0.0026	0.0008 U	0.0008 U	0.0008 U			
PFOA	mg/kg			0.0031	0.00089	0.00096	0.022	0.0016	0.0016	0.0016			
PFOA(trial)	mg/kg				0.00092								
PFOS	mg/kg			0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U	0.0008 U			
PFOS (trial)	mg/kg				0.0008 U								
<b>Pesticides and Herbicides</b>													
4,4'-DDD	mg/kg												
4,4'-DDE	mg/kg												
4,4'-DDT	mg/kg												
Aldrin	mg/kg												
Alpha-Chlordane	mg/kg												
Alpha-BHC	mg/kg												
beta-BHC	mg/kg												
delta-BHC	mg/kg												
Dieldrin	mg/kg												
Endosulfan I	mg/kg												
Endosulfan II	mg/kg												
Endosulfan Sulfate	mg/kg												
Endrin	mg/kg												
Endrin Aldehyde	mg/kg												
Endrin Ketone	mg/kg												
Gamma-Chlordane	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D16-BOR-06(6-6.5)	D16-BOR-06(9-9.5)	D16-BOR-07(0.5-1.0)	D16-BOR-07(0-0.5)	D16-BOR-07(0-0.5)-D	D16-BOR-08(0.5-1.0)	D16-BOR-08(0-0.5)	D16-BOR-09(0.5-1.0)	D16-BOR-09(0-0.5)	D16-BOR-09-(10.6-11.4)	D16-BOR-09-(5.4-5.9)	D16-BOR-09-(6.6-6.8)
Location ID	Depth Interval (ft)	D16-BOR-06	D16-BOR-06	D16-BOR-07	D16-BOR-07	D16-BOR-07	D16-BOR-08	D16-BOR-08	D16-BOR-09	D16-BOR-09	D16-BOR-09	D16-BOR-09	D16-BOR-09
Sample Purpose	Date	6.00-6.50	9.00-9.50	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	10.60-11.40	5.40-5.90	6.60-6.80
Chemical Class	Units	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	FS	FS
Chemical	Units	10/26/2016	10/26/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016	10/25/2016	11/6/2017	11/6/2017	11/6/2017	11/6/2017	11/6/2017
Heptachlor	mg/kg												
Heptachlor Epoxide	mg/kg												
Lindane	mg/kg												
Methoxychlor	mg/kg												
Toxaphene	mg/kg												
<b>Physical Properties</b>													
0.001 MM	% PASSING	2	0.5 U	0.5 U	0.5 U			3	0.5 U	6.5		4.5	
0.002 MM	% PASSING	2	0.5 U	0.5 U	0.5 U			7	1	16		11.5	
0.005 MM	% PASSING	2	0.5 U	0.5 U	0.5 U			14	2	28		21	
0.02 MM	% PASSING	3	0.5 U	8	10			27	9	54.5		51	
0.05 MM	% PASSING	4	1	26	20			38	17	74.5		68.5	
0.064 MM	% PASSING	5	2	33	30			41	20	79		73	
0.075 MM	% PASSING	5.2	2.5	36.6	33			42.1	22.9	81.2		74.8	
0.15 MM	% PASSING	6.7	2.8	42.8	51.8			44.6	34.2	84.8		85.4	
0.3 MM	% PASSING	9	5.1	47.1	81.2			51	66	91.5		97.1	
0.6 MM	% PASSING	15.2	19.4	58.3	83			56.3	67.2	95.3		98.6	
1.18 MM	% PASSING	30.2	55.1	72.3	83.8			58.2	67.5	96.9		99.2	
19 MM	% PASSING	100	95.2	100	100			100	100	100		100	
2.36 MM	% PASSING	57.7	68.2	79.5	84.2			58.8	67.6	97.7		99.5	
3.35 MM	% PASSING	76	72.9	85.1	88.4			67.1	74.5	99.3		100	
37.5 MM	% PASSING	100	100	100	100			100	100	100		100	
4.75 MM	% PASSING	89.1	78.5	90.6	93.6			77.7	82.7	99.8		100	
75 MM	% PASSING	100	100	100	100			100	100	100		100	
Density	PCF	75.5376	84.9018	99.2602	97.3874			69.2949	104.879				
<b>Polychlorinated Biphenyls - TICs</b>													
1,1'-Biphenyl, 2,3-dichloro-	mg/kg												
Unknown Biphenyl	mg/kg												
<b>Polychlorinated Biphenyls</b>													
Heptachlorobiphenyl	mg/kg												
Hexachlorobiphenyl	mg/kg												
Octachlorobiphenyl	mg/kg												
PCB 1	mg/kg									0.00137		0.001	
PCB 10	mg/kg									0.0000535		0.0000103	
PCB 100	mg/kg												
PCB 101	mg/kg												
PCB 102	mg/kg									0.000681		0.0000471	
PCB 103	mg/kg									0.000199		0.0000339	
PCB 104	mg/kg									0.00000454		0.00000297	
PCB 105	mg/kg									0.00409		0.000421	
PCB 106	mg/kg									0.0000136 U		0.00000902 U	
PCB 107	mg/kg												
PCB 107/123	mg/kg												
PCB 108	mg/kg												
PCB 109	mg/kg									0.000957		0.000101	
PCB 11	mg/kg									0.000831		0.000294	
PCB 110	mg/kg									0.0154		0.00162	
PCB 111	mg/kg									0.0000131 U		0.00000827 U	
PCB 112	mg/kg									0.000014 U		0.00000826 U	
PCB 113	mg/kg												
PCB 114	mg/kg									0.000265		0.0000209	
PCB 115	mg/kg									0.000014 U		0.00000769 U	
PCB 116	mg/kg												
PCB 117	mg/kg									0.000406		0.0000302	
PCB 118	mg/kg									0.00974		0.000947	
PCB 119	mg/kg												
PCB 12	mg/kg												
PCB 120	mg/kg									0.0000134 U		0.0000183	
PCB 121	mg/kg									0.0000136 U		0.000008 U	
PCB 121/95/88	mg/kg												
PCB 122	mg/kg									0.000199		0.0000179	
PCB 123	mg/kg									0.000223		0.0000203	
PCB 124	mg/kg												
PCB 125	mg/kg												
PCB 126	mg/kg									0.0000314		0.0000108	
PCB 127	mg/kg									0.0000152 U		0.00000954 U	
PCB 128	mg/kg												
PCB 129	mg/kg												
PCB 129/158	mg/kg												
PCB 13	mg/kg												
PCB 130	mg/kg									0.000757		0.000146	
PCB 130/164	mg/kg												
PCB 131	mg/kg									0.00015		0.0000208	
PCB 132	mg/kg									0.0038		0.000596	
PCB 133	mg/kg									0.000257		0.0000625	
PCB 134	mg/kg									0.000716		0.0001	
PCB 135	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	Chemical	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
			D16-BOR-06(6-6.5) D16-BOR-06 6.00-6.50 FS 10/26/2016	D16-BOR-06(9-9.5) D16-BOR-06 9.00-9.50 FS 10/26/2016	D16-BOR-07(0.5-1.0) D16-BOR-07 0.50-1.00 FS 10/25/2016	D16-BOR-07(0-0.5) D16-BOR-07 0.00-0.50 FS 10/25/2016	D16-BOR-07(0-0.5)-D D16-BOR-07 0.00-0.50 DUP 10/25/2016	D16-BOR-08(0.5-1.0) D16-BOR-08 0.50-1.00 FS 10/25/2016	D16-BOR-08(0-0.5) D16-BOR-08 0.00-0.50 FS 10/25/2016	D16-BOR-09-(0.5-1.0) D16-BOR-09 0.50-1.00 FS 11/6/2017	D16-BOR-09-(0-0.5) D16-BOR-09 0.00-0.50 FS 11/6/2017	D16-BOR-09-(10.6-11.4) D16-BOR-09 10.60-11.40 FS 11/6/2017	D16-BOR-09-(5.4-5.9) D16-BOR-09 5.40-5.90 FS 11/6/2017
Units	Units												
	PCB 136	mg/kg						0.00158	0.000288				
	PCB 137	mg/kg						0.000357	0.000055				
	PCB 138	mg/kg											
	PCB 139	mg/kg											
	PCB 14	mg/kg						0.000417	0.0000835				
	PCB 140	mg/kg											
	PCB 141	mg/kg						0.00176	0.000265				
	PCB 142	mg/kg						0.0000086 U	0.0000103				
	PCB 143	mg/kg						0.00000771 U	0.0000123 U				
	PCB 143/139	mg/kg											
	PCB 144	mg/kg						0.000509	0.0000689				
	PCB 145	mg/kg						0.00000876	0.0000113				
	PCB 146	mg/kg						0.00204	0.000448				
	PCB 147	mg/kg											
	PCB 148	mg/kg						0.0000424	0.0000161				
	PCB 149	mg/kg											
	PCB 15	mg/kg						0.00135	0.000442				
	PCB 150	mg/kg						0.0000344	0.0000136				
	PCB 151	mg/kg											
	PCB 152	mg/kg						0.0000128	0.00000264				
	PCB 153	mg/kg											
	PCB 154	mg/kg						0.000236	0.0000879				
	PCB 155	mg/kg						0.0000537	0.0000116				
	PCB 156	mg/kg											
	PCB 157	mg/kg											
	PCB 158	mg/kg						0.000818	0.000124				
	PCB 159	mg/kg						0.000162	0.0000023				
	PCB 16	mg/kg						0.00713	0.00184				
	PCB 160	mg/kg						0.0000379	0.0000258				
	PCB 161	mg/kg						0.0000057 U	0.00000185				
	PCB 162	mg/kg						0.0000639	0.0000202				
	PCB 163	mg/kg											
	PCB 163/160	mg/kg											
	PCB 164	mg/kg						0.000737	0.000146				
	PCB 165	mg/kg						0.0000343	0.00000331				
	PCB 166	mg/kg											
	PCB 167	mg/kg						0.000389	0.0000783				
	PCB 168	mg/kg											
	PCB 169	mg/kg						0.0000589 U	0.00000271				
	PCB 17	mg/kg						0.00463	0.000157				
	PCB 170	mg/kg						0.00247	0.000504				
	PCB 171	mg/kg											
	PCB 172	mg/kg						0.000467	0.000102				
	PCB 173	mg/kg											
	PCB 174	mg/kg						0.00325	0.000582				
	PCB 175	mg/kg						0.000148	0.0000293				
	PCB 176	mg/kg						0.000363	0.0000705				
	PCB 177	mg/kg						0.00181	0.00037				
	PCB 178	mg/kg						0.00064	0.000155				
	PCB 179	mg/kg						0.00147	0.000283				
	PCB 18	mg/kg											
	PCB 180	mg/kg											
	PCB 181	mg/kg						0.0000238	0.0000086				
	PCB 182	mg/kg						0.0000376	0.0000137				
	PCB 182/175	mg/kg											
	PCB 183	mg/kg						0.00175	0.000309				
	PCB 184	mg/kg						0.000016	0.0000114				
	PCB 185	mg/kg						0.000257	0.0000526				
	PCB 186	mg/kg						0.00000206	0.000000935				
	PCB 187	mg/kg						0.00394	0.000857				
	PCB 188	mg/kg						0.0000211	0.0000158				
	PCB 189	mg/kg						0.0000859	0.0000248				
	PCB 19	mg/kg						0.000726	0.0000515				
	PCB 190	mg/kg						0.000443	0.000096				
	PCB 191	mg/kg						0.0000941	0.0000158				
	PCB 192	mg/kg						0.0000025 U	0.00000911				
	PCB 193	mg/kg											
	PCB 194	mg/kg						0.00165	0.000377				
	PCB 195	mg/kg						0.000603	0.00012				
	PCB 196	mg/kg						0.000829	0.000278				
	PCB 197	mg/kg						0.0000786	0.0000358				
	PCB 198	mg/kg											
	PCB 199	mg/kg											
	PCB 2	mg/kg						0.000979	0.000395				
	PCB 20	mg/kg											
	PCB 200	mg/kg						0.000188	0.0000483				

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	Field Sample ID	MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA	
			D16-BOR-06(6-6.5)	D16-BOR-06(9-9.5)	D16-BOR-07(0.5-1.0)	D16-BOR-07(0-0.5)	D16-BOR-07(0-0.5)-D	D16-BOR-08(0.5-1.0)	D16-BOR-08(0-0.5)	D16-BOR-09(0.5-1.0)	D16-BOR-09(0-0.5)	D16-BOR-09-(10.6-11.4)	D16-BOR-09-(5.4-5.9)	D16-BOR-09-(6.6-6.8)
Chemical	Location ID	Depth Interval (ft)	D16-BOR-06 6.00-6.50 FS 10/26/2016	D16-BOR-06 9.00-9.50 FS 10/26/2016	D16-BOR-07 0.50-1.00 FS 10/25/2016	D16-BOR-07 0.00-0.50 FS 10/25/2016	D16-BOR-07 0.00-0.50 DUP 10/25/2016	D16-BOR-08 0.50-1.00 FS 10/25/2016	D16-BOR-08 0.00-0.50 FS 10/25/2016	D16-BOR-09 0.50-1.00 FS 11/6/2017	D16-BOR-09 0.00-0.50 FS 11/6/2017	D16-BOR-09 10.60-11.40 FS 11/6/2017	D16-BOR-09 5.40-5.90 FS 11/6/2017	D16-BOR-09 6.60-6.80 FS 11/6/2017
Units	Sample Purpose	Date												
PCB 201										0.000307	0.000115			
PCB 202										0.000801	0.000293			
PCB 203										0.00119	0.000362			
PCB 204										0.00000632	0.000064			
PCB 204/200														
PCB 205										0.0000785	0.000024			
PCB 206										0.0068	0.00306			
PCB 207										0.000592	0.000268			
PCB 208										0.00313	0.00153			
PCB 209										0.013	0.00466			
PCB 21														
PCB 21/20														
PCB 22										0.00438	0.00111			
PCB 23										0.0000525	0.0000116			
PCB 24										0.000266	0.000037			
PCB 25										0.00195	0.000118			
PCB 26														
PCB 27										0.000735	0.0000583			
PCB 28														
PCB 29														
PCB 3										0.000897	0.0006			
PCB 30														
PCB 31										0.0104	0.000491			
PCB 32										0.00288	0.000127			
PCB 33														
PCB 34										0.000202	0.0000318			
PCB 35										0.00118	0.000837			
PCB 36										0.0000807	0.0000254			
PCB 37										0.00363	0.00103			
PCB 38										0.0000369	0.0000332			
PCB 39										0.000239	0.0000479			
PCB 4										0.00263	0.000747			
PCB 4/10														
PCB 40														
PCB 41										0.00129	0.0000346			
PCB 42										0.00567	0.000232			
PCB 43										0.000786	0.0000255			
PCB 44														
PCB 45										0.00325	0.000118			
PCB 46										0.00134	0.0000519			
PCB 47														
PCB 48										0.00399	0.0000878			
PCB 49														
PCB 5										0.000883	0.000962			
PCB 50														
PCB 51										0.000797	0.000119			
PCB 52										0.0208	0.000958			
PCB 53														
PCB 54										0.0000405	0.0000966			
PCB 55										0.000193	0.0000749			
PCB 56										0.0121	0.00398			
PCB 57										0.0000906	0.0000818			
PCB 58										0.0000796	0.0000108			
PCB 59														
PCB 6										0.00266	0.000664			
PCB 60										0.00258	0.000087			
PCB 61														
PCB 62														
PCB 63										0.000612	0.0000353			
PCB 64										0.00743	0.000271			
PCB 65														
PCB 65/75/62														
PCB 66										0.0155	0.000624			
PCB 67										0.000537	0.0000252			
PCB 67/58														
PCB 68										0.000111	0.000077			
PCB 68/64														
PCB 69														
PCB 7										0.000203	0.0000461			
PCB 70														
PCB 71														
PCB 72										0.0002	0.000025			
PCB 73										0.0000577	0.0000153			
PCB 73/46														
PCB 74														
PCB 75														

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	
	Field Sample ID	D16-BOR-06(6-6.5)	D16-BOR-06(9-9.5)	D16-BOR-07(0.5-1.0)	D16-BOR-07(0-0.5)	D16-BOR-07(0-0.5)-D	D16-BOR-08(0.5-1.0)	D16-BOR-08(0-0.5)	D16-BOR-09(0.5-1.0)	D16-BOR-09(0-0.5)	D16-BOR-09(10.6-11.4)	D16-BOR-09(5.4-5.9)	D16-BOR-09(6.6-6.8)
Chemical	Location ID Depth Interval (ft) Sample Purpose Date	D16-BOR-06 6.00-6.50 FS 10/26/2016	D16-BOR-06 9.00-9.50 FS 10/26/2016	D16-BOR-07 0.50-1.00 FS 10/25/2016	D16-BOR-07 0.00-0.50 FS 10/25/2016	D16-BOR-07 0.00-0.50 DUP 10/25/2016	D16-BOR-08 0.50-1.00 FS 10/25/2016	D16-BOR-08 0.00-0.50 FS 10/25/2016	D16-BOR-09 0.50-1.00 FS 11/6/2017	D16-BOR-09 0.00-0.50 FS 11/6/2017	D16-BOR-09 10.60-11.40 FS 11/6/2017	D16-BOR-09 5.40-5.90 FS 11/6/2017	D16-BOR-09 6.60-6.80 FS 11/6/2017
Units													
PCB 76	mg/kg												
PCB 77	mg/kg												
PCB 78	mg/kg								0.00257	0.00165			
PCB 79	mg/kg								0.000222 U	0.0000229 U			
PCB 8	mg/kg								0.000216	0.000025			
PCB 80	mg/kg								0.00333	0.000781			
PCB 81	mg/kg								0.000101	0.0000188 U			
PCB 82	mg/kg								0.0000435	0.0000446			
PCB 83	mg/kg								0.00224	0.000139			
PCB 83/125/112	mg/kg								0.000934	0.0000825			
PCB 84	mg/kg												
PCB 85	mg/kg								0.0048	0.000364			
PCB 86	mg/kg												
PCB 86/109	mg/kg												
PCB 87	mg/kg												
PCB 87/111	mg/kg												
PCB 88	mg/kg								0.00332	0.0000127 U			
PCB 89	mg/kg								0.000379	0.0000197			
PCB 89/84	mg/kg												
PCB 9	mg/kg								0.000697	0.000185			
PCB 90	mg/kg												
PCB 91	mg/kg								0.0000152 U	0.000206			
PCB 92	mg/kg								0.00283	0.000297			
PCB 93	mg/kg												
PCB 94	mg/kg								0.000142	0.0000118 U			
PCB 95	mg/kg								0.0112	0.000981			
PCB 96	mg/kg								0.000237	0.0000159			
PCB 97	mg/kg												
PCB 98	mg/kg								0.000515	0.0000186			
PCB 99	mg/kg								0.00757	0.000666			
PCB-100/93	mg/kg								0.000236	0.0000387			
PCB-107/124	mg/kg								0.000397	0.0000376			
PCB-108/119/86/97/125/87	mg/kg								0.00979	0.000783			
PCB-113/90/101	mg/kg								0.0134	0.00124			
PCB-116/85	mg/kg								0.0025	0.00024			
PCB-128/166	mg/kg								0.0016	0.000292			
PCB-13/12	mg/kg								0.00218	0.00127			
PCB-139/140	mg/kg								0.000214	0.0000358			
PCB-147/149	mg/kg								0.00928	0.00169			
PCB-151/135	mg/kg								0.00431	0.000746			
PCB-153/168	mg/kg								0.00861	0.00162			
PCB-156/157	mg/kg								0.00102	0.000195			
PCB-163/138/129	mg/kg								0.0104	0.00186			
PCB-171/173	mg/kg								0.000828	0.000163			
PCB-180/193	mg/kg								0.00538	0.00117			
PCB-198/199	mg/kg								0.00256	0.000978			
PCB-21/33	mg/kg								0.0073	0.00183			
PCB-26/29	mg/kg								0.0026	0.000204			
PCB-28/20	mg/kg								0.0129	0.00121			
PCB-30/18	mg/kg								0.0089	0.00038			
PCB-44/47/65	mg/kg								0.0191	0.000967			
PCB-50/53	mg/kg								0.00275	0.000139			
PCB-59/62/75	mg/kg								0.00171	0.0000807			
PCB-61/70/74/76	mg/kg								0.0264	0.00112			
PCB-69/49	mg/kg								0.011	0.00054			
PCB-71/40	mg/kg								0.00935	0.0012			
PCB-90/101	mg/kg												
Pentachlorobiphenyl	mg/kg												
Tetrachlorobiphenyl	mg/kg												
Total Decachlorobiphenyls (congeners)	mg/kg												
Total Dichlorobiphenyls (congeners)	mg/kg								0.0152	0.00549			
Total Heptachlorobiphenyls (congeners)	mg/kg								0.0235	0.00484			
Total Hexachlorobiphenyls (congeners)	mg/kg								0.05	0.00906			
Total Monochlorobiphenyls (congeners)	mg/kg								0.00325	0.00199			
Total Nonachlorobiphenyls (congeners)	mg/kg								0.0105	0.00487			
Total Octachlorobiphenyls (congeners)	mg/kg								0.00829	0.00264			
Total PCB (congeners)	mg/kg								0.43764	0.06409			
Total Pentachlorobiphenyls (congeners)	mg/kg								0.0927	0.00843			
Total Tetrachlorobiphenyls (congeners)	mg/kg								0.151	0.0125			
Total Trichlorobiphenyls (congeners)	mg/kg								0.0702	0.00961			
Trichlorobiphenyl (total)	mg/kg												
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>													
Benzo[e]pyrene	mg/kg												
Chrysene, 1-methyl-	mg/kg												
Naphthalene, 1-methyl-	mg/kg												
Pyrene, 1-methyl-	mg/kg												

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	D16-BOR-06(6-6.5)	D16-BOR-06(9-9.5)	D16-BOR-07(0.5-1.0)	D16-BOR-07(0-0.5)	D16-BOR-07(0-0.5)-D	D16-BOR-08(0.5-1.0)	D16-BOR-08(0-0.5)	D16-BOR-09(0.5-1.0)	D16-BOR-09(0-0.5)	D16-BOR-09-(10.6-11.4)	D16-BOR-09-(5.4-5.9)	D16-BOR-09-(6.6-6.8)	
Location ID	D16-BOR-06	D16-BOR-06	D16-BOR-07	D16-BOR-07	D16-BOR-07	D16-BOR-08	D16-BOR-08	D16-BOR-09	D16-BOR-09	D16-BOR-09	D16-BOR-09	D16-BOR-09	
Depth Interval (ft)	6.00-6.50	9.00-9.50	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	10.60-11.40	5.40-5.90	6.60-6.80	
Sample Purpose	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	FS	FS	
Chemical Class	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	Date	
Chemical	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	
<b>Polycyclic Aromatic Hydrocarbons</b>													
Acenaphthene	mg/kg	0.004 U	0.004 U					0.051	0.59	0.004 U	0.004 U	0.004 U	
Acenaphthylene	mg/kg	0.004 U	0.004 U					0.024	0.031	0.004 U	0.004 U	0.004 U	
Anthracene	mg/kg	0.004 U	0.004 U					0.064	0.068	0.004 U	0.004 U	0.004 U	
Benzo(A)Anthracene	mg/kg	0.004 U	0.004 U					0.072	0.13	0.004 U	0.004 U	0.004 U	
Benzo(B)Fluoranthene	mg/kg	0.004 U	0.004 U					0.09	0.14	0.004 U	0.004 U	0.004 U	
Benzo(G,H,I)Perylene	mg/kg	0.004 U	0.004 U					0.054	0.068	0.004 U	0.004 U	0.004 U	
Benzo(K)Fluoranthene	mg/kg	0.004 U	0.004 U					0.033	0.05	0.004 U	0.004 U	0.004 U	
Benzo(A)Pyrene	mg/kg	0.004 U	0.004 U					0.066	0.11	0.004 U	0.004 U	0.004 U	
Chrysene	mg/kg	0.004 U	0.004 U					0.13	0.24	0.004 U	0.004 U	0.004 U	
Dibenz(A,H)Anthracene	mg/kg	0.004 U	0.004 U					0.014	0.02	0.004 U	0.004 U	0.004 U	
Fluoranthene	mg/kg	0.004 U	0.004 U					0.11	0.24	0.004 U	0.004 U	0.004 U	
Fluorene	mg/kg	0.004 U	0.004 U					0.048	0.34	0.004 U	0.004 U	0.004 U	
Indeno (1,2,3-CD) Pyrene	mg/kg	0.004 U	0.004 U					0.042	0.056	0.004 U	0.004 U	0.004 U	
Naphthalene	mg/kg	0.004 U	0.004 U					0.19	0.33	0.004 U	0.004 U	0.004 U	
Phenanthrene	mg/kg	0.004 U	0.004 U					0.14	0.15	0.004 U	0.004 U	0.004 U	
Pyrene	mg/kg	0.004 U	0.004 U					0.14	0.24	0.004 U	0.004 U	0.004 U	
Total PAHs (Detections + 1/2 MDL)	mg/kg	0.032 U	0.032 U					1.268	2.803	0.032 U	0.032 U	0.032 U	
Total PAHs (Detections Only)	mg/kg	0.032 U	0.032 U					1.268	2.803	0.032 U	0.032 U	0.032 U	
<b>Semivolatile Organic Compounds - TICs</b>													
1,2,4-Trithiolane	mg/kg												
1,4-Benzenediol, 2-chloro-	mg/kg												
11H-Benzo[b]fluorene	mg/kg												
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg												
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg												
3-PENTEN-2-ONE, 4-METHYL-	mg/kg												
7H-Benz[de]anthracen-7-one	mg/kg												
9,10-Anthracenedione	mg/kg												
9-Octadecanamide, (Z)-	mg/kg												
Acetamide, 2-chloro-N-(ethox	mg/kg								0.82				
Alachlor	mg/kg								3.1				
Benzenamine, 3-methyl-	mg/kg												
Benzenamine, 4,4',4"-methy	mg/kg												
Benzenamine, 4,4'-methyleneb	mg/kg												
Benzene, 1,2,3,4-tetrachloro	mg/kg												
Benzene, 1,2,3,5-tetrachloro	mg/kg												
Benzene, 1,2,3-trichloro-	mg/kg												
Benzene, 1,3,5-trichloro-	mg/kg												
Benzene, 1,3-bis(1-methyleth	mg/kg												
Benzene, 1,4-bis(1-methyleth	mg/kg												
Benzofuran, 2,3-dihydro-	mg/kg												
CYCLIC OCTAATOMIC SULFUR	mg/kg												
Diphenyl Ether	mg/kg												
Docosane	mg/kg												
Heneicosane	mg/kg												
Hexacosane	mg/kg												
Hexadecane	mg/kg												
Hexatriacontane	mg/kg												
m-Chloroaniline	mg/kg							0.86					
N,N-Diethylaniline	mg/kg												
n-Hexadecanoic acid	mg/kg							0.33	0.47			0.28	
Nonadecane	mg/kg												
o-Chloroaniline	mg/kg												
Octacosane	mg/kg												
Octadecane	mg/kg												
Octadecane, 1-chloro-	mg/kg												
Octadecanoic acid	mg/kg												
Parachlorophenol	mg/kg												
Pentadecane	mg/kg												
Perylene	mg/kg												
Phenol, 2,5-dichloro-	mg/kg												
Phenol, 3-chloro-	mg/kg												
Phenol, 4,4'-(1-methylethyl)	mg/kg	0.98	0.46							0.43		0.24	
Tetracosane	mg/kg												
Tetradecane	mg/kg												
Tetraethylene glycol	mg/kg												
Total SVOC TICs	mg/kg	2.3	1.7					13	22	0.87	0.79	1.1	
Triacotane	mg/kg												
Tributyl phosphate	mg/kg												
Tridecanoic acid	mg/kg												
Triphenyl phosphate	mg/kg												
UNKNOWN	mg/kg							0.56	0.784				
Unknown acid	mg/kg												
Unknown Alcohol	mg/kg												
Unknown Aldol Condensate	mg/kg	0.65	0.61					1.2	1.4	0.55	0.41	0.62	
UNKNOWN ALKANE	mg/kg	0.29	0.26										

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D16-BOR-06(6-6.5) D16-BOR-06 6.00-6.50 FS 10/26/2016	D16-BOR-06(9-9.5) D16-BOR-06 9.00-9.50 FS 10/26/2016	D16-BOR-07(0.5-1.0) D16-BOR-07 0.50-1.00 FS 10/25/2016	D16-BOR-07(0-0.5) D16-BOR-07 0.00-0.50 FS 10/25/2016	D16-BOR-07(0-0.5)-D D16-BOR-07 0.00-0.50 DUP FS 10/25/2016	D16-BOR-08(0.5-1.0) D16-BOR-08 0.50-1.00 FS 10/25/2016	D16-BOR-08(0-0.5) D16-BOR-08 0.00-0.50 FS 10/25/2016	D16-BOR-09(0.5-1.0) D16-BOR-09 0.50-1.00 FS 11/6/2017	D16-BOR-09(0-0.5) D16-BOR-09 0.00-0.50 FS 11/6/2017	D16-BOR-09(10.6-11.4) D16-BOR-09 10.60-11.40 FS 11/6/2017	D16-BOR-09(5.4-5.9) D16-BOR-09 5.40-5.90 FS 11/6/2017	D16-BOR-09(6.6-6.8) D16-BOR-09 6.60-6.80 FS 11/6/2017
Unknown Alkene	mg/kg												
Unknown Amide	mg/kg												
Unknown Amine	mg/kg												
UNKNOWN AROMATIC	mg/kg												
Unknown Carboxylic Acid	mg/kg												
Unknown Cycloalkane	mg/kg												
Unknown Hydrocarbon	mg/kg												
Unknown Ketone	mg/kg												
Unknown PAH	mg/kg												
UNKNOWN SILOXANE	mg/kg												
<b>Semivolatile Organic Compounds</b>													
1,2,4-Trichlorobenzene	mg/kg	0.02 U	0.019 U					0.093	0.08	0.019 U	0.018 U	0.021 U	
1,2-Diphenylhydrazine	mg/kg	0.02 U	0.019 U					0.032 U	0.028 U	0.019 U	0.018 U	0.021 U	
1,4-Dioxane	mg/kg	0.12 U	0.11 U					0.19 U	0.17 U	0.11 U	0.11 U	0.12 U	
1-Naphthylamine	mg/kg	0.2 U	0.19 U					0.32 U	0.28 U	0.19 U	0.18 U	0.21 U	
2,3,4,6-Tetrachlorophenol	mg/kg	0.079 U	0.075 U					0.13 U	0.11 U	0.076 U	0.072 U	0.082 U	
2,4,5-Trichlorophenol	mg/kg	0.02 U	0.019 U					0.032 U	0.028 U	0.019 U	0.018 U	0.021 U	
2,4,6-Trichlorophenol	mg/kg	0.02 U	0.019 U					0.032 U	0.028 U	0.019 U	0.018 U	0.021 U	
2,4-Dichlorophenol	mg/kg	0.02 U	0.019 U					0.032 U	0.028 U	0.019 U	0.018 U	0.021 U	
2,4-Dimethylphenol	mg/kg	0.02 U	0.019 U					0.032 U	0.028 U	0.019 U	0.018 U	0.021 U	
2,4-Dinitrophenol	mg/kg	0.35 U	0.34 U					0.58 U	0.51 U	0.34 U	0.32 U	0.37 U	
2,4-Dinitrotoluene	mg/kg	0.079 U	0.075 U					0.13 U	0.11 U	0.076 U	0.072 U	0.082 U	
2,6-Dinitrotoluene	mg/kg	0.02 U	0.019 U					0.032 U	0.028 U	0.019 U	0.018 U	0.021 U	
2-Chloronaphthalene	mg/kg	0.008 U	0.007 U					0.013 U	0.011 U	0.008 U	0.007 U	0.008 U	
2-Chlorophenol	mg/kg	0.02 U	0.019 U					0.032 U	0.028 U	0.019 U	0.018 U	0.021 U	
2-Methylnaphthalene	mg/kg	0.004 U	0.004 U					0.087	0.14	0.004 U	0.004 U	0.004 U	
2-Methylphenol (O-Cresol)	mg/kg	0.02 U	0.019 U					0.032 U	0.028 U	0.019 U	0.018 U	0.021 U	
2-Naphthylamine	mg/kg	0.2 U	0.19 U					0.32 U	0.28 U	0.19 U	0.18 U	0.21 U	
2-Nitroaniline	mg/kg	0.02 U	0.019 U					0.032 U	0.028 U	0.019 U	0.018 U	0.021 U	
2-Nitrophenol	mg/kg	0.02 U	0.019 U					0.032 U	0.028 U	0.019 U	0.018 U	0.021 U	
3,3'-Dichlorobenzidine	mg/kg	0.12 U	0.11 U					0.19 U	0.17 U	0.11 U	0.11 U	0.12 U	
3,3'-Dimethylbenzidine	mg/kg												
3-Nitroaniline	mg/kg	0.079 U	0.075 U					0.13 U	0.11 U	0.076 U	0.072 U	0.082 U	
4,6-Dinitro-2-Methylphenol	mg/kg	0.2 U	0.19 U					0.32 U	0.28 U	0.19 U	0.18 U	0.21 U	
4-Aminobiphenyl	mg/kg	0.2 U	0.19 U					0.32 U	0.28 U	0.19 U	0.18 U	0.21 U	
4-Bromophenyl Phenyl Ether	mg/kg	0.02 U	0.019 U					0.032 U	0.028 U	0.019 U	0.018 U	0.021 U	
4-Chloro-3-Methylphenol	mg/kg	0.02 U	0.019 U					0.032 U	0.028 U	0.019 U	0.018 U	0.021 U	
4-Chloroaniline	mg/kg	0.039 U	0.037 U					2	0.86	0.038 U	0.036 U	0.041 U	
4-Chlorophenyl Phenyl Ether	mg/kg	0.02 U	0.019 U					0.032 U	0.028 U	0.019 U	0.018 U	0.021 U	
4-Methylphenol (P-Cresol)	mg/kg	0.02 U	0.019 U					0.12	0.061	0.019 U	0.018 U	0.021 U	
4-Nitroaniline	mg/kg	0.079 U	0.075 U					0.13 U	0.11 U	0.076 U	0.072 U	0.082 U	
4-Nitrophenol	mg/kg	0.2 U	0.19 U					0.32 U	0.28 U	0.19 U	0.18 U	0.21 U	
Acetophenone	mg/kg	0.02 U	0.019 U					0.032 U	0.028 U	0.019 U	0.018 U	0.021 U	
Aniline	mg/kg	0.2 U	0.19 U					0.32 U	0.28 U	0.19 U	0.18 U	0.21 U	
Benzidine	mg/kg	0.29 U	0.28 U					0.49 U	0.42 U	0.29 U	0.27 U	0.31 U	
Biphenyl	mg/kg	0.02 U	0.019 U					0.072	0.11	0.019 U	0.018 U	0.021 U	
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg	0.02 U	0.019 U					0.032 U	0.028 U	0.019 U	0.018 U	0.021 U	
Bis(2-Chloroethoxy)Methane	mg/kg	0.02 U	0.019 U					0.032 U	0.028 U	0.019 U	0.018 U	0.021 U	
Bis(2-Chloroethyl)Ether	mg/kg	0.02 U	0.019 U					0.032 U	0.028 U	0.019 U	0.018 U	0.021 U	
Bis(2-Chloroisopropyl)Ether	mg/kg												
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.079 U	0.075 U					0.26	0.11	0.076 U	0.072 U	0.082 U	
Butyl Benzyl Phthalate	mg/kg	0.079 U	0.075 U					0.13 U	0.11 U	0.076 U	0.072 U	0.082 U	
Carbazole	mg/kg	0.02 U	0.019 U					0.032 U	0.028 U	0.019 U	0.018 U	0.021 U	
Dibenzofuran	mg/kg	0.02 U	0.019 U					0.032 U	0.028 U	0.019 U	0.018 U	0.021 U	
Diethyl Phthalate	mg/kg	0.079 U	0.075 U					0.13 U	0.11 U	0.076 U	0.072 U	0.082 U	
Dimethyl Phthalate	mg/kg	0.079 U	0.075 U					0.13 U	0.11 U	0.076 U	0.072 U	0.082 U	
Di-N-Butyl Phthalate	mg/kg	0.079 U	0.075 U					0.13 U	0.11 U	0.076 U	0.072 U	0.082 U	
Diphenyl Ether	mg/kg	0.02 U	0.019 U					0.083	0.067	0.019 U	0.018 U	0.021 U	
Hexachlorobenzene	mg/kg	0.004 U	0.004 U					0.036 U	0.036 U	0.004 U	0.004 U	0.004 U	
Hexachlorobutadiene	mg/kg	0.02 U	0.019 U					0.032 U	0.028 U	0.019 U	0.018 U	0.021 U	
Hexachlorocyclopentadiene	mg/kg	0.2 U	0.19 U					0.32 U	0.28 U	0.19 U	0.18 U	0.21 U	
Hexachloroethane	mg/kg	0.039 U	0.037 U					0.065 U	0.056 U	0.038 U	0.036 U	0.041 U	
Hexachloropropylene	mg/kg												
Isophorone	mg/kg	0.02 U	0.019 U					0.032 U	0.028 U	0.019 U	0.018 U	0.021 U	
N-Dioctyl Phthalate	mg/kg	0.079 U	0.075 U					0.13 U	0.11 U	0.076 U	0.072 U	0.082 U	
Nitrobenzene	mg/kg	0.02 U	0.019 U					0.032 U	0.028 U	0.019 U	0.018 U	0.021 U	
N-Nitrosodimethylamine	mg/kg	0.079 U	0.075 U					0.13 U	0.11 U	0.076 U	0.072 U	0.082 U	
N-Nitrosodi-N-Propylamine	mg/kg	0.02 U	0.019 U					0.032 U	0.028 U	0.019 U	0.018 U	0.021 U	
N-Nitrosodiphenylamine	mg/kg	0.02 U	0.019 U					0.058	0.051	0.019 U	0.018 U	0.021 U	
O-Toluidine	mg/kg	0.24 U	0.22 U					0.39 U	0.34 U	0.23 U	0.22 U	0.25 U	
Parathion	mg/kg	0.2 U	0.19 U					0.32 U	0.28 U	0.19 U	0.18 U	0.21 U	
Pentachlorobenzene	mg/kg	0.02 U	0.019 U					0.032 U	0.028 U	0.019 U	0.018 U	0.021 U	
Pentachlorophenol	mg/kg	0.039 U	0.037 U					0.065 U	0.056 U	0.038 U	0.036 U	0.041 U	
Phenol	mg/kg	0.02 U	0.019 U					0.032 U	0.028 U	0.019 U	0.018 U	0.021 U	
<b>Volatile Organic Compounds - TICs</b>													
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA				
		D16-BOR-06(6-6.5) D16-BOR-06 6.00-6.50 FS 10/26/2016	D16-BOR-06(9-9.5) D16-BOR-06 9.00-9.50 FS 10/26/2016	D16-BOR-07(0.5-1.0) D16-BOR-07 0.50-1.00 FS 10/25/2016	D16-BOR-07(0-0.5) D16-BOR-07 0.00-0.50 FS 10/25/2016	D16-BOR-07(0-0.5)-D D16-BOR-07 0.00-0.50 DUP 10/25/2016	D16-BOR-08(0.5-1.0) D16-BOR-08 0.50-1.00 FS 10/25/2016	D16-BOR-08(0-0.5) D16-BOR-08 0.00-0.50 FS 10/25/2016	D16-BOR-09(0.5-1.0) D16-BOR-09 0.50-1.00 FS 11/6/2017	D16-BOR-09(0-0.5) D16-BOR-09 0.00-0.50 FS 11/6/2017	D16-BOR-09-(10.6-11.4) D16-BOR-09 10.60-11.40 FS 11/6/2017	D16-BOR-09-(5.4-5.9) D16-BOR-09 5.40-5.90 FS 11/6/2017	D16-BOR-09-(6.6-6.8) D16-BOR-09 6.60-6.80 FS 11/6/2017				
1-Butene	mg/kg												0.016				
1-Heptene	mg/kg																
1-Propene, 2-methyl-	mg/kg																
Azulene	mg/kg																
BENZENE, 1,2,4-TRICHLORO-	mg/kg																
BENZENE, 1,2-DICHLORO-	mg/kg																
BENZENE, 1,4-DICHLORO-	mg/kg																
Camphene	mg/kg																
CYCLOHEXANE	mg/kg																
Cyclohexane, methyl-	mg/kg																
Cyclotrisiloxane, hexamethyl	mg/kg									0.009							
Diphenyl Ether	mg/kg																
Ethane, 1,1,2,2-tetrachloro-	mg/kg																
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg																
Ethane, 1,2-dichloro-1,1-dif	mg/kg																
Ethene, 1,1-dichloro-2,2-dif	mg/kg																
Hexane, 2-methyl-	mg/kg																
Hexane, 3-methyl-	mg/kg																
METHANE, CHLOROFLUORO-	mg/kg																
Naphthalene	mg/kg																
NAPHTHALENE, 2-METHYL-	mg/kg																
Nonanal	mg/kg																
Norflurane	mg/kg																
Pentane, 2,3-dimethyl-	mg/kg																
Phenol, 4-(1,1,3,3-tetrameth	mg/kg																
Propene	mg/kg												0.026				
Sulfur dioxide	mg/kg																
Tridecane	mg/kg																
UNKNOWN	mg/kg												0.006				
UNKNOWN ALICYCLIC	mg/kg																
UNKNOWN ALIPHATIC	mg/kg																
UNKNOWN ALKANE	mg/kg																
UNKNOWN AROMATIC	mg/kg																
UNKNOWN SILOXANE	mg/kg																
<b>Volatile Organic Compounds</b>																	
1,1,1,2-Tetrachloroethane	mg/kg	0.001	U	0.001	U					0.11	U	0.001	U	0.001	U	0.001	U
1,1,1-Trichloroethane	mg/kg	0.001	U	0.001	U					0.11	U	0.001	U	0.001	U	0.001	U
1,1,1-Trichlorotrifluoroethane	mg/kg	0.006	U	0.006	U					0.011	U	0.009	U	0.006	U	0.005	U
1,1,2,2-Tetrachloroethane	mg/kg	0.001	U	0.001	U					0.11	U	0.001	U	0.001	U	0.001	U
1,1,2-Trichloroethane	mg/kg	0.001	U	0.001	U					0.11	U	0.001	U	0.001	U	0.001	U
1,1,2-Trichlorotrifluoroethane	mg/kg	0.005	U	0.002	U					0.23	U	0.003	U	0.002	U	0.002	U
1,1,2-Trifluoroethane	mg/kg	0.003	U	0.002	U					0.004	U	0.003	U	0.002	U	0.002	U
1,1-Dichloro-1-Fluoroethane	mg/kg	0.001	U	0.001	U					0.002	U	0.002	U	0.001	U	0.001	U
1,1-Dichloroethane	mg/kg	0.001	U	0.001	U					0.11	U	0.001	U	0.001	U	0.001	U
1,1-Dichloroethene	mg/kg	0.001	U	0.001	U					0.11	U	0.001	U	0.001	U	0.001	U
1,1-Dichloropropene	mg/kg	0.001	U	0.001	U					0.11	U	0.001	U	0.001	U	0.001	U
1,2,4-Trimethylbenzene	mg/kg	0.001	U	0.001	U					0.11	U	0.001	U	0.001	U	0.001	U
1,2-Dibromoethane (EDB)	mg/kg	0.001	U	0.001	U					0.11	U	0.001	U	0.001	U	0.001	U
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg	0.001	U	0.001	U					0.002	U	0.002	U	0.001	U	0.001	U
1,2-Dichloro-1-Fluoroethane	mg/kg	0.001	U	0.001	U					0.002	U	0.002	U	0.001	U	0.001	U
1,2-Dichlorobenzene	mg/kg	0.004	U	0.001	U					0.21	U	0.002	U	0.001	U	0.001	U
1,2-Dichloroethane	mg/kg	0.001	U	0.001	U					0.11	U	0.001	U	0.001	U	0.001	U
1,2-Dichloroethene	mg/kg	0.001	U	0.001	U					0.11	U	0.001	U	0.001	U	0.001	U
1,2-Dichloropropane	mg/kg	0.001	U	0.001	U					0.11	U	0.001	U	0.001	U	0.001	U
1,2-Dichlorotetrafluoroethane	mg/kg	0.003	U	0.002	U					0.004	U	0.003	U	0.002	U	0.002	U
1,3,5-Trimethylbenzene	mg/kg	0.001	U	0.001	U					0.11	U	0.001	U	0.001	U	0.001	U
1,3-Dichlorobenzene	mg/kg	0.001	U	0.001	U					0.11	U	0.001	U	0.001	U	0.001	U
1,4-Dichlorobenzene	mg/kg	0.001	U	0.001	U					0.46	U	0.003	U	0.001	U	0.001	U
1-Chloro-1,1-Difluoroethane	mg/kg	0.001	U	0.001	U					0.002	U	0.002	U	0.001	U	0.001	U
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg	0.001	U	0.001	U					0.002	U	0.002	U	0.001	U	0.001	U
2-Chloro-1,1,1-Trifluoroethane	mg/kg	0.003	U	0.002	U					0.23	U	0.003	U	0.002	U	0.002	U
2-Chloroethyl Vinyl Ether	mg/kg																
2-Chlorotoluene	mg/kg	0.001	U	0.001	U					0.11	U	0.001	U	0.001	U	0.001	U
2-Hexanone	mg/kg	0.004	U	0.003	U					0.34	U	0.004	U	0.003	U	0.003	U
4-Chlorotoluene	mg/kg	0.001	U	0.001	U					0.11	U	0.001	U	0.001	U	0.001	U
4-Isopropyltoluene	mg/kg	0.001	U	0.001	U					0.11	U	0.001	U	0.001	U	0.001	U
Acetone	mg/kg	0.054	U	0.008	U					0.79	U	0.067	U	0.018	U	0.044	U
Acrolein	mg/kg																
Acrylonitrile	mg/kg																
Benzene	mg/kg	0.0006	U	0.0006	U					0.057	U	0.0007	U	0.0006	U	0.0005	U
Bromodichloromethane	mg/kg	0.001	U	0.001	U					0.11	U	0.001	U	0.001	U	0.001	U
Bromoform	mg/kg																
Carbon Disulfide	mg/kg	0.001	U	0.001	U					0.11	U	0.002	U	0.001	U	0.002	U
Carbon Tetrachloride	mg/kg	0.001	U	0.001	U					0.11	U	0.001	U	0.001	U	0.001	U
CFC-1113	mg/kg	0.003	U	0.002	U					0.23	U	0.003	U	0.002	U	0.002	U
Chlorobenzene	mg/kg	0.003	U	0.001	U					3.2	U	0.002	U	0.003	U	0.002	U

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D16-BOR-06(6-6.5) D16-BOR-06 6.00-6.50 FS 10/26/2016	D16-BOR-06(9-9.5) D16-BOR-06 9.00-9.50 FS 10/26/2016	D16-BOR-07(0.5-1.0) D16-BOR-07 0.50-1.00 FS 10/25/2016	D16-BOR-07(0-0.5) D16-BOR-07 0.00-0.50 FS 10/25/2016	D16-BOR-07(0-0.5)-D D16-BOR-07 0.00-0.50 DUP 10/25/2016	D16-BOR-08(0.5-1.0) D16-BOR-08 0.50-1.00 FS 10/25/2016	D16-BOR-08(0-0.5) D16-BOR-08 0.00-0.50 FS 10/25/2016	D16-BOR-09(0.5-1.0) D16-BOR-09 0.50-1.00 FS 11/6/2017	D16-BOR-09-(0-0.5) D16-BOR-09 0.00-0.50 FS 11/6/2017	D16-BOR-09-(10.6-11.4) D16-BOR-09 10.60-11.40 FS 11/6/2017	D16-BOR-09-(5.4-5.9) D16-BOR-09 5.40-5.90 FS 11/6/2017	D16-BOR-09-(6.6-6.8) D16-BOR-09 6.60-6.80 FS 11/6/2017
Chemical	Units												
Chlorodibromomethane	mg/kg	0.001 U	0.001 U					0.11 U	0.001 U	0.001 U	0.001 U	0.001 U	
Chlorodifluoromethane	mg/kg	0.003 U	0.002 U					0.004 U	0.003 U	0.002 U	0.002 U	0.002 U	
Chlorofluoromethane	mg/kg	0.001 U	0.001 U					0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	
Chloroform	mg/kg	0.001 U	0.001 U					0.11 U	0.001 U	0.001 U	0.001 U	0.001 U	
Chloropentafluoroethane	mg/kg	0.019 U	0.017 U					0.033 U	0.026 U	0.017 U	0.016 U	0.018 U	
cis-1,2-Dichloroethene	mg/kg	0.001 U	0.001 U					0.11 U	0.001 U	0.001 U	0.001 U	0.001 U	
cis-1,3-Dichloropropene	mg/kg	0.001 U	0.001 U					0.11 U	0.001 U	0.001 U	0.001 U	0.001 U	
Cumene	mg/kg	0.001 U	0.001 U					0.18 U	0.001 U	0.001 U	0.001 U	0.001 U	
Dichlorodifluoromethane	mg/kg	0.003 U	0.002 U					0.23 U	0.003 U	0.002 U	0.002 U	0.002 U	
Dichlorofluoromethane	mg/kg	0.003 U	0.002 U					0.23 U	0.003 U	0.002 U	0.002 U	0.002 U	
Ethane	ug/L												
Ethyl Chloride	mg/kg	0.003 U	0.002 U					0.23 U	0.003 U	0.002 U	0.002 U	0.002 U	
Ethylbenzene	mg/kg	0.001 U	0.001 U					0.11 U	0.001 U	0.001 U	0.001 U	0.001 U	
Fluoromethane	mg/kg	0.004 U	0.003 U					0.007 U	0.005 U	0.003 U	0.003 U	0.004 U	
Hexane	mg/kg	0.001 U	0.001 U					0.11 U	0.001 U	0.001 U	0.001 U	0.001 U	
Isobutyl Alcohol	mg/kg	0.13 U	0.11 U					11 U	0.15 U	0.12 U	0.11 U	0.12 U	
Meta- And Para-Xylene	mg/kg	0.001 U	0.001 U					0.11 U	0.001 U	0.001 U	0.001 U	0.001 U	
Methacrylonitrile	mg/kg	0.006 U	0.006 U					0.57 U	0.007 U	0.006 U	0.005 U	0.006 U	
Methane	ug/L												
Methyl Bromide	mg/kg												
Methyl Chloride	mg/kg	0.003 U	0.002 U					0.23 U	0.003 U	0.002 U	0.002 U	0.002 U	
Methyl Ethyl Ketone	mg/kg	0.005 U	0.004 U					0.45 U	0.007 U	0.005 U	0.004 U	0.005 U	
Methyl Isobutyl Ketone	mg/kg	0.004 U	0.003 U					0.34 U	0.004 U	0.003 U	0.003 U	0.003 U	
Methyl Methacrylate	mg/kg	0.001 U	0.001 U					0.11 U	0.001 U	0.001 U	0.001 U	0.001 U	
Methyl Tertiary Butyl Ether	mg/kg	0.0006 U	0.0006 U					0.057 U	0.0007 U	0.0006 U	0.0005 U	0.0006 U	
Methylene Chloride	mg/kg	0.005 U	0.002 U					0.23 U	0.003 U	0.002 U	0.003 U	0.003 U	
N-Butylbenzene	mg/kg	0.001 U	0.001 U					0.11 U	0.001 U	0.001 U	0.001 U	0.001 U	
N-Propylbenzene	mg/kg	0.001 U	0.001 U					0.11 U	0.001 U	0.001 U	0.001 U	0.001 U	
Ortho-Xylene	mg/kg	0.001 U	0.001 U					0.11 U	0.001 U	0.001 U	0.001 U	0.001 U	
Propionitrile	mg/kg	0.038 U	0.034 U					3.4 U	0.044 U	0.035 U	0.032 U	0.035 U	
sec-Butylbenzene	mg/kg	0.001 U	0.001 U					0.11 U	0.001 U	0.001 U	0.001 U	0.001 U	
Styrene	mg/kg	0.001 U	0.001 U					0.11 U	0.001 U	0.001 U	0.001 U	0.001 U	
tert-Butylbenzene	mg/kg	0.001 U	0.001 U					0.11 U	0.001 U	0.001 U	0.001 U	0.001 U	
Tetrachloroethene	mg/kg	0.001 U	0.001 U					0.11 U	0.001 U	0.001 U	0.001 U	0.001 U	
Tetrahydrofuran	mg/kg	0.005 U	0.004 U					0.45 U	0.006 U	0.005 U	0.004 U	0.005 U	
Toluene	mg/kg	0.001 U	0.001 U					0.11 U	0.001 U	0.001 U	0.001 U	0.001 U	
trans-1,2-Dichloroethene	mg/kg	0.001 U	0.001 U					0.11 U	0.001 U	0.001 U	0.001 U	0.001 U	
trans-1,3-Dichloropropene	mg/kg												
Trichloroethene	mg/kg	0.001 U	0.001 U					0.11 U	0.001 U	0.001 U	0.001 U	0.001 U	
Trichlorofluoromethane	mg/kg	0.003 U	0.002 U					0.23 U	0.003 U	0.002 U	0.002 U	0.002 U	
Vinyl Chloride	mg/kg	0.001 U	0.001 U					0.11 U	0.001 U	0.001 U	0.001 U	0.001 U	
Vinyl Fluoride	mg/kg	0.008 U	0.007 U					0.013 U	0.01 U	0.007 U	0.007 U	0.007 U	
Xylenes	mg/kg	0.001 U	0.001 U					0.11 U	0.001 U	0.001 U	0.001 U	0.001 U	

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	D16-BOR-09-(6.8-7.4)	D16-BOR-10-(0.5-1.0)	D16-BOR-10-(0-0.5)	D16-BOR-10-(11.0-11.3)	D16-BOR-10-(5.0-5.5)	D16-BOR-10-(6.0-6.5)	D16-BOR-10-(7.0-7.3)	D16-BOR-11-(0.5-1.0)	D16-BOR-11-(0-0.5)	D16-BOR-11-(10.0-10.3)	D16-BOR-11-(10.3-10.5)	D16-BOR-11-(5.5-6.0)
Location ID	D16-BOR-09	D16-BOR-10	D16-BOR-10	D16-BOR-10	D16-BOR-10	D16-BOR-10	D16-BOR-10	D16-BOR-11	D16-BOR-11	D16-BOR-11	D16-BOR-11	D16-BOR-11
Depth Interval (ft)	6.80-7.40	0.50-1.00	0.00-0.50	11.00-11.30	5.00-5.50	6.00-6.50	7.00-7.30	0.50-1.00	0.00-0.50	10.00-10.30	10.30-10.50	5.50-6.00
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Date	11/6/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017
Chemical Class												
Chemical												
Units												
<b>General Chemistry</b>												
Black Carbon	mg/kg											
Percent Moisture	%	15.2	54.6	44.1	14.7	7.6	8.5	18.8	55.3	41.3	8	18.2
Percent Solids	%											
Total Organic Carbon	mg/kg	616	45900	31000	383	190	230	1280	84400	22000	342	1320
<b>Metals</b>												
Aluminum	mg/kg		25000	19100					18700	13800		
Antimony	mg/kg		1.07	0.511					2.17	0.453		
Arsenic	mg/kg		19	12.3					19	8.07		
Barium	mg/kg		142	112					132	77.2		
Beryllium	mg/kg		1.26	0.945					0.927	0.662		
Cadmium	mg/kg		2.02	0.681					1.3	0.427		
Calcium	mg/kg		4290	3960					4820	4160		
Chromium	mg/kg		75.8	49					65.1	42.1		
Cobalt	mg/kg		17.6	13.7					16.7	10.2		
Copper	mg/kg		72.6	40.2					165	37		
Iron	mg/kg		35900	27700					31100	21000		
Lead	mg/kg		106	50.4					129	50.3		
Magnesium	mg/kg		6290	5180					5070	3760		
Manganese	mg/kg		1040	949					1220	618		
Mercury	mg/kg		0.4	0.263					0.455	0.517		
Nickel	mg/kg		42.5	30.6					48.3	20.9		
Potassium	mg/kg		3860	3170					2850	2400		
Selenium	mg/kg		1.01	0.823					1.2	0.494		
Silver	mg/kg		1.16	1.44					0.709	0.246		
Sodium	mg/kg		944	825					955	630		
Thallium	mg/kg		0.276	0.205					0.254	0.13		
Tin	mg/kg											
Titanium	mg/kg											
Vanadium	mg/kg		66	48.8					77.1	34.7		
Zinc	mg/kg		339	193					255	129		
<b>Metals - AVS/SEM</b>												
Acid Volatile Sulfide	umol/g											
Arsenic	umol/g											
Cadmium	umol/g											
Copper	umol/g											
Lead	umol/g											
Zinc	umol/g											
<b>Metals - Leachate</b>												
Lead	ug/L											
<b>Per and Polyfluorinated Organic Substances</b>												
Perfluorobutane Sulfonic Acid	mg/kg											
Perfluorobutanoic Acid	mg/kg											
Perfluorodecane Sulfonic Acid	mg/kg											
Perfluorodecanoic Acid	mg/kg											
Perfluorododecanoic Acid	mg/kg											
Perfluoroheptanoic Acid	mg/kg											
Perfluorohexane Sulfonic Acid	mg/kg											
Perfluorohexanoic Acid	mg/kg											
Perfluorononanoic Acid	mg/kg											
Perfluorooctane Sulfonamide	mg/kg											
Perfluoropentanoic Acid	mg/kg											
Perfluorotetradecanoic Acid	mg/kg											
Perfluorotridecanoic Acid	mg/kg											
Perfluoroundecanoic Acid	mg/kg											
PFOA	mg/kg											
PFOA(trial)	mg/kg											
PFOS	mg/kg											
PFOS (trial)	mg/kg											
<b>Pesticides and Herbicides</b>												
4,4'-DDD	mg/kg											
4,4'-DDE	mg/kg											
4,4'-DDT	mg/kg											
Aldrin	mg/kg											
Alpha Chlordane	mg/kg											
Alpha-BHC	mg/kg											
beta-BHC	mg/kg											
delta-BHC	mg/kg											
Dieldrin	mg/kg											
Endosulfan I	mg/kg											
Endosulfan II	mg/kg											
Endosulfan Sulfate	mg/kg											
Endrin	mg/kg											
Endrin Aldehyde	mg/kg											
Endrin Ketone	mg/kg											
Gamma Chlordane	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D16-BOR-09-(6.8-7.4)	D16-BOR-10-(0.5-1.0)	D16-BOR-10-(0-0.5)	D16-BOR-10-(11.0-11.3)	D16-BOR-10-(5.0-5.5)	D16-BOR-10-(6.0-6.5)	D16-BOR-10-(7.0-7.3)	D16-BOR-11-(0.5-1.0)	D16-BOR-11-(0-0.5)	D16-BOR-11-(10.0-10.3)	D16-BOR-11-(10.3-10.5)	D16-BOR-11-(5.5-6.0)
Location ID	Depth Interval (ft)	D16-BOR-09	D16-BOR-10	D16-BOR-10	D16-BOR-10	D16-BOR-10	D16-BOR-10	D16-BOR-10	D16-BOR-11	D16-BOR-11	D16-BOR-11	D16-BOR-11	D16-BOR-11
Sample Purpose	Date	6.80-7.40	0.50-1.00	0.00-0.50	11.00-11.30	5.00-5.50	6.00-6.50	7.00-7.30	0.50-1.00	0.00-0.50	10.00-10.30	10.30-10.50	5.50-6.00
Chemical Class	Units	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Chemical	Units	11/6/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017
Heptachlor	mg/kg												
Heptachlor Epoxide	mg/kg												
Lindane	mg/kg												
Methoxychlor	mg/kg												
Toxaphene	mg/kg												
<b>Physical Properties</b>													
0.001 MM	% PASSING		2	4					4	1			
0.002 MM	% PASSING		9.5	11.5					8.5	4.5			
0.005 MM	% PASSING		20.5	22					15	10.5			
0.02 MM	% PASSING		50	49					42	27.5			
0.05 MM	% PASSING		69	72					65	44			
0.064 MM	% PASSING		74	81					72.5	53			
0.075 MM	% PASSING		76.4	84.7					76.1	57.1			
0.15 MM	% PASSING		81	89					82.4	72.1			
0.3 MM	% PASSING		93	96.1					90.2	94.2			
0.6 MM	% PASSING		98.1	97.6					96	96.9			
1.18 MM	% PASSING		99.6	98.4					98.5	98.3			
19 MM	% PASSING		100	100					100	100			
2.36 MM	% PASSING		99.8	99.2					99.6	99.1			
3.35 MM	% PASSING		99.9	100					100	99.6			
37.5 MM	% PASSING		100	100					100	100			
4.75 MM	% PASSING		99.9	100					100	99.8			
75 MM	% PASSING		100	100					100	100			
Density	PCF												
<b>Polychlorinated Biphenyls - TICs</b>													
1,1'-Biphenyl, 2,3-dichloro-	mg/kg												
Unknown Biphenyl	mg/kg												
<b>Polychlorinated Biphenyls</b>													
Heptachlorobiphenyl	mg/kg												
Hexachlorobiphenyl	mg/kg												
Octachlorobiphenyl	mg/kg												
PCB 1	mg/kg		0.000468	0.000243					0.00633	0.00277			
PCB 10	mg/kg		0.0000094	0.0000151					0.000112	0.0000354			
PCB 100	mg/kg												
PCB 101	mg/kg												
PCB 102	mg/kg		0.0000491	0.0000334					0.000165	0.0000577			
PCB 103	mg/kg		0.0000445	0.0000258					0.000304	0.0000433			
PCB 104	mg/kg		0.0000017	0.00000272					0.000019	0.00000423			
PCB 105	mg/kg		0.000278	0.000202					0.0013	0.000476			
PCB 106	mg/kg		0.00000437 U	0.00000431 U					0.0000367 U	0.0000572			
PCB 107	mg/kg												
PCB 107/123	mg/kg												
PCB 108	mg/kg												
PCB 109	mg/kg		0.0000905	0.0000576					0.000359	0.000144			
PCB 11	mg/kg		0.000209	0.000286					0.00176	0.00103			
PCB 110	mg/kg		0.00135	0.0000477 U					0.00472	0.0000197 U			
PCB 111	mg/kg		0.0000422 U	0.0000181					0.0000341 U	0.0000241			
PCB 112	mg/kg		0.0000452 U	0.0000446 U					0.0000362 U	0.000026			
PCB 113	mg/kg												
PCB 114	mg/kg		0.0000172	0.0000124					0.0000868	0.0000465			
PCB 115	mg/kg		0.0000045 U	0.0000427					0.0000371 U	0.0000207 U			
PCB 116	mg/kg												
PCB 117	mg/kg		0.0000523 U	0.000128					0.0000926	0.000791			
PCB 118	mg/kg		0.000726	0.000491					0.00289	0.00125			
PCB 119	mg/kg												
PCB 12	mg/kg												
PCB 120	mg/kg		0.0000127	0.0000426 U					0.0000348 U	0.0000383			
PCB 121	mg/kg		0.00000444 U	0.00000437 U					0.0000343 U	0.0000191 U			
PCB 121/95/88	mg/kg												
PCB 122	mg/kg		0.0000135	0.0000096					0.0000641	0.0000381			
PCB 123	mg/kg		0.0000133	0.0000102					0.000111	0.0000318			
PCB 124	mg/kg												
PCB 125	mg/kg												
PCB 126	mg/kg		0.00000438	0.00000402					0.0000473	0.0000243			
PCB 127	mg/kg		0.00000511 U	0.00000517 U					0.0000422 U	0.000021 U			
PCB 128	mg/kg												
PCB 129	mg/kg												
PCB 129/158	mg/kg												
PCB 13	mg/kg												
PCB 130	mg/kg		0.000124	0.0000994					0.000432	0.000188			
PCB 130/164	mg/kg												
PCB 131	mg/kg		0.000018	0.0000122					0.000107	0.0000284			
PCB 132	mg/kg		0.000531	0.000374					0.00169	0.000719			
PCB 133	mg/kg		0.0000551	0.0000507					0.000242	0.0000833			
PCB 134	mg/kg		0.000111	0.0000696					0.000275	0.000121			
PCB 135	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	Field Sample ID	MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA	
			D16-BOR-09-(6.8-7.4)	D16-BOR-10-(0.5-1.0)	D16-BOR-10-(0-0.5)	D16-BOR-10-(11.0-11.3)	D16-BOR-10-(5.0-5.5)	D16-BOR-10-(6.0-6.5)	D16-BOR-10-(7.0-7.3)	D16-BOR-11-(0.5-1.0)	D16-BOR-11-(0-0.5)	D16-BOR-11-(10.0-10.3)	D16-BOR-11-(10.3-10.5)	D16-BOR-11-(5.5-6.0)
Chemical	Location ID	Depth Interval (ft)	D16-BOR-09 6.80-7.40 FS 11/6/2017	D16-BOR-10 0.50-1.00 FS 11/7/2017	D16-BOR-10 0.00-0.50 FS 11/7/2017	D16-BOR-10 11.00-11.30 FS 11/7/2017	D16-BOR-10 5.00-5.50 FS 11/7/2017	D16-BOR-10 6.00-6.50 FS 11/7/2017	D16-BOR-10 7.00-7.30 FS 11/7/2017	D16-BOR-11 0.50-1.00 FS 11/7/2017	D16-BOR-11 0.00-0.50 FS 11/7/2017	D16-BOR-11 10.00-10.30 FS 11/7/2017	D16-BOR-11 10.30-10.50 FS 11/7/2017	D16-BOR-11 5.50-6.00 FS 11/7/2017
Units	Sample Purpose	Date												
PCB 136				0.00027	0.000219					0.000893	0.000377			
PCB 137				0.0000368	0.0000287					0.000177	0.000109			
PCB 138														
PCB 139														
PCB 14				0.0000466	0.000643					0.00123	0.00141			
PCB 140														
PCB 141				0.000201	0.000132					0.000825	0.000411			
PCB 142				0.00000232	0.0000419					0.0000397	0.0000901			
PCB 143				0.000000558 U	0.00000206					0.0000112	0.0000247			
PCB 143/139														
PCB 144				0.0000661	0.0000427					0.000222	0.0000964			
PCB 145				0.000000369 U	0.000000759 U					0.00000525	0.00000461			
PCB 146				0.000403	0.000337					0.00125	0.00055			
PCB 147														
PCB 148				0.0000147	0.0000115					0.0000669	0.000026			
PCB 149														
PCB 15				0.000222	0.000296					0.00436	0.00109			
PCB 150				0.0000137	0.0000146					0.0000714	0.0000217			
PCB 151														
PCB 152				0.00000173	0.00000177					0.00000702	0.00000414			
PCB 153														
PCB 154				0.0000943	0.0000744					0.000202	0.000112			
PCB 155				0.000026	0.0000841					0.0000486	0.0000141			
PCB 156														
PCB 157														
PCB 158				0.0000966	0.0000679					0.000409	0.000164			
PCB 159				0.0000378	0.0000248					0.000151	0.0000661			
PCB 16				0.000872	0.00024					0.00584	0.000691			
PCB 160				0.000000416 U	0.0000145					0.0000979	0.000308			
PCB 161				0.000000413 U	0.000000647 U					0.00000525	0.000022			
PCB 162				0.0000102	0.0000114					0.000167	0.0000388			
PCB 163														
PCB 163/160														
PCB 164				0.000103	0.0000891					0.000483	0.000233			
PCB 165				0.0000208	0.0000281					0.0000946	0.0000146			
PCB 166														
PCB 167				0.0000497	0.0000401					0.000249	0.000105			
PCB 168														
PCB 169				0.0000281 U	0.0000286 U					0.0000803	0.0000396 U			
PCB 17				0.000183	0.000115					0.000129	0.000334			
PCB 170				0.000462	0.000309					0.00122	0.000557			
PCB 171														
PCB 172				0.000101	0.0000759					0.000338	0.000178			
PCB 173														
PCB 174				0.000689	0.00047					0.00173	0.000828			
PCB 175				0.0000346	0.0000255					0.0000969	0.0000574			
PCB 176				0.0000856	0.0000559					0.000202	0.0000966			
PCB 177				0.000434	0.000301					0.000979	0.000477			
PCB 178				0.000164	0.000127					0.000397	0.000199			
PCB 179				0.000362	0.000235					0.000768	0.000343			
PCB 18														
PCB 180														
PCB 181				0.0000469	0.0000462					0.0000283	0.0000566			
PCB 182				0.0000171	0.0000132					0.0000391	0.0000485			
PCB 182/175														
PCB 183				0.000398	0.000257					0.00096	0.000443			
PCB 184				0.0000111	0.0000786					0.000121	0.000025			
PCB 185				0.0000406	0.000035					0.000281	0.000125			
PCB 186				0.000000374 U	0.000000538 U					0.00000338	0.0000121			
PCB 187				0.00103	0.000777					0.00271	0.00122			
PCB 188				0.0000169	0.0000169					0.0000277	0.0000271			
PCB 189				0.0000203	0.0000134					0.000282	0.0000369			
PCB 19				0.0000472	0.0000256					0.00026	0.0000676			
PCB 190				0.0000804	0.0000609					0.000371	0.000184			
PCB 191				0.0000175	0.0000128					0.0000592	0.0000433			
PCB 192				0.00000171	0.000005					0.0000341	0.000132			
PCB 193														
PCB 194				0.000457	0.000311					0.00182	0.00063			
PCB 195				0.000164	0.000106					0.00039	0.000161			
PCB 196				0.000264	0.000227					0.000775	0.000414			
PCB 197				0.0000381	0.0000336					0.0000767	0.0000647			
PCB 198														
PCB 199														
PCB 2				0.000193	0.000174					0.00492	0.00329			
PCB 20														
PCB 200				0.0000561	0.0000358					0.000214	0.0000865			

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D16-BOR-09-(6.8-7.4) D16-BOR-09 6.80-7.40 FS 11/6/2017	D16-BOR-10-(0.5-1.0) D16-BOR-10 0.50-1.00 FS 11/7/2017	D16-BOR-10-(0-0.5) D16-BOR-10 0.00-0.50 FS 11/7/2017	D16-BOR-10-(11.0-11.3) D16-BOR-10 11.00-11.30 FS 11/7/2017	D16-BOR-10-(5.0-5.5) D16-BOR-10 5.00-5.50 FS 11/7/2017	D16-BOR-10-(6.0-6.5) D16-BOR-10 6.00-6.50 FS 11/7/2017	D16-BOR-10-(7.0-7.3) D16-BOR-10 7.00-7.30 FS 11/7/2017	D16-BOR-11-(0.5-1.0) D16-BOR-11 0.50-1.00 FS 11/7/2017	D16-BOR-11-(0-0.5) D16-BOR-11 0.00-0.50 FS 11/7/2017	D16-BOR-11-(10.0-10.3) D16-BOR-11 10.00-10.30 FS 11/7/2017	D16-BOR-11-(10.3-10.5) D16-BOR-11 10.30-10.50 FS 11/7/2017
Chemical	Units											
PCB 201	mg/kg		0.000122	0.000108				0.000299	0.000161			
PCB 202	mg/kg		0.000315	0.000278				0.000775	0.000378			
PCB 203	mg/kg		0.000336	0.000296				0.0015	0.000581			
PCB 204	mg/kg		0.0000397	0.0000539				0.00002	0.0000391			
PCB 204/200	mg/kg											
PCB 205	mg/kg		0.0000216	0.0000176				0.000104	0.000065			
PCB 206	mg/kg		0.00335	0.00279				0.00604	0.00394			
PCB 207	mg/kg		0.000324	0.000268				0.000578	0.000446			
PCB 208	mg/kg		0.00165	0.00136				0.00253	0.00172			
PCB 209	mg/kg		0.00649	0.00432				0.00694	0.00596			
PCB 21	mg/kg											
PCB 21/20	mg/kg											
PCB 22	mg/kg		0.000381	0.000238				0.00425	0.00068			
PCB 23	mg/kg		0.000109	0.000112				0.000148	0.000159			
PCB 24	mg/kg		0.000368	0.000238				0.000489	0.000419			
PCB 25	mg/kg		0.000151	0.0000681				0.000814	0.000279			
PCB 26	mg/kg											
PCB 27	mg/kg		0.000532	0.0000277				0.000278	0.0000971			
PCB 28	mg/kg											
PCB 29	mg/kg											
PCB 3	mg/kg		0.000415	0.000203				0.00936	0.00233			
PCB 30	mg/kg											
PCB 31	mg/kg		0.000395	0.000346				0.00277	0.00138			
PCB 32	mg/kg		0.000132	0.0000603				0.000672	0.000183			
PCB 33	mg/kg											
PCB 34	mg/kg		0.0000187	0.0000223				0.000285	0.000295			
PCB 35	mg/kg		0.000221	0.000322				0.00262	0.000954			
PCB 36	mg/kg		0.0000151	0.0000855				0.000172	0.000275			
PCB 37	mg/kg		0.000363	0.000806				0.00425	0.00332			
PCB 38	mg/kg		0.0000166	0.0000266				0.000115	0.0000239			
PCB 39	mg/kg		0.0000247	0.0000211				0.000374	0.000565			
PCB 4	mg/kg		0.000435	0.000374				0.00322	0.00182			
PCB 4/10	mg/kg											
PCB 40	mg/kg											
PCB 41	mg/kg		0.0000395	0.000014				0.000271	0.000038			
PCB 42	mg/kg		0.000321	0.000139				0.00182	0.000249			
PCB 43	mg/kg		0.000043	0.0000195				0.000184	0.0000598			
PCB 44	mg/kg											
PCB 45	mg/kg		0.00019	0.0000546				0.000612	0.000108			
PCB 46	mg/kg		0.0000739	0.0000299				0.000321	0.0000535			
PCB 47	mg/kg											
PCB 48	mg/kg		0.000166	0.0000509				0.000684	0.000125			
PCB 49	mg/kg											
PCB 5	mg/kg		0.000357	0.00021				0.00689	0.000539			
PCB 50	mg/kg											
PCB 51	mg/kg		0.000058	0.0000715				0.000271	0.0000803			
PCB 52	mg/kg		0.00118	0.000549				0.00473	0.00112			
PCB 53	mg/kg											
PCB 54	mg/kg		0.0000054	0.00000692				0.0000259	0.00000937			
PCB 55	mg/kg		0.0000199	0.0000621				0.000064	0.0000215			
PCB 56	mg/kg		0.00149	0.000478				0.0181	0.000534			
PCB 57	mg/kg		0.0000173	0.0000632				0.0000459	0.0000318			
PCB 58	mg/kg		0.0000082	0.00000996				0.0000605	0.0000196			
PCB 59	mg/kg											
PCB 6	mg/kg		0.000326	0.00036				0.00436	0.00178			
PCB 60	mg/kg		0.0000993	0.0000514				0.000592	0.000123			
PCB 61	mg/kg											
PCB 62	mg/kg											
PCB 63	mg/kg		0.0000333	0.000026				0.000244	0.000074			
PCB 64	mg/kg		0.000361	0.000166				0.00153	0.000368			
PCB 65	mg/kg											
PCB 65/75/62	mg/kg											
PCB 66	mg/kg		0.000669	0.000407				0.00336	0.000798			
PCB 67	mg/kg		0.000041	0.0000174				0.000137	0.0000511			
PCB 67/58	mg/kg											
PCB 68	mg/kg		0.0000129	0.0000349				0.000138	0.0000328			
PCB 68/64	mg/kg											
PCB 69	mg/kg											
PCB 7	mg/kg		0.0000279	0.0000892				0.00086	0.000273			
PCB 70	mg/kg											
PCB 71	mg/kg											
PCB 72	mg/kg		0.0000199	0.0000268				0.0000946	0.0000587			
PCB 73	mg/kg		0.00000432	0.00000628				0.0000161	0.00000924			
PCB 73/46	mg/kg											
PCB 74	mg/kg											
PCB 75	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	Field Sample ID	MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA	
			D16-BOR-09-(6.8-7.4)	D16-BOR-10-(0.5-1.0)	D16-BOR-10-(0-0.5)	D16-BOR-10-(11.0-11.3)	D16-BOR-10-(5.0-5.5)	D16-BOR-10-(6.0-6.5)	D16-BOR-10-(7.0-7.3)	D16-BOR-11-(0.5-1.0)	D16-BOR-11-(0-0.5)	D16-BOR-11-(10.0-10.3)	D16-BOR-11-(10.3-10.5)	D16-BOR-11-(5.5-6.0)		
Chemical	Location ID	Depth Interval (ft)	D16-BOR-09	D16-BOR-10	D16-BOR-10	D16-BOR-10	D16-BOR-10	D16-BOR-10	D16-BOR-10	D16-BOR-10	D16-BOR-11	D16-BOR-11	D16-BOR-11	D16-BOR-11	D16-BOR-11	D16-BOR-11
Units	Sample Purpose	Date	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
			11/6/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017
PCB 76																
PCB 77				0.000371	0.00024						0.00461	0.000361				
PCB 78				0.0000456 U	0.0000394 U						0.000119 U	0.000184				
PCB 79				0.000221	0.0000458						0.000179	0.0000981				
PCB 8				0.000379	0.000418						0.00663	0.00329				
PCB 80				0.0000036 U	0.0000667						0.0000381	0.000011				
PCB 81				0.0000395	0.0000034 U						0.0000309	0.0000187				
PCB 82				0.000143	0.0000737 U						0.000551	0.000183				
PCB 83				0.0000832	0.000626						0.000336	0.0000946				
PCB 83/125/112																
PCB 84				0.000413	0.0000725 U						0.0013	0.000457				
PCB 85																
PCB 86																
PCB 86/109																
PCB 87																
PCB 87/111																
PCB 88				0.0000797 U	0.000231						0.0000564 U	0.000384				
PCB 89				0.0000219	0.0000101						0.0000534 U	0.0000298 U				
PCB 89/84																
PCB 9				0.0000975	0.000618						0.00195	0.00143				
PCB 90																
PCB 91				0.000211	0.00015						0.00068	0.0000222 U				
PCB 92				0.000301	0.000193						0.000944	0.000387				
PCB 93																
PCB 94				0.0000132	0.0000967						0.0000518 U	0.0000289 U				
PCB 95				0.00106	0.000616						0.00346	0.00126				
PCB 96				0.0000177	0.0000107						0.0000645	0.0000212				
PCB 97																
PCB 98				0.000039	0.0000106						0.00108	0.0000328 U				
PCB 99				0.000812	0.0000586 U						0.00224	0.000933				
PCB-100/93				0.0000372	0.0000309						0.000145	0.0000614				
PCB-107/124				0.0000274	0.0000202						0.000142	0.000079				
PCB-108/119/86/97/125/87				0.00075	0.000408						0.00365	0.00123				
PCB-113/90/101				0.00127	0.000753						0.00432	0.00176				
PCB-116/85				0.000208	0.00091						0.00084	0.00233				
PCB-128/166				0.000193	0.000184						0.000775	0.000481				
PCB-13/12				0.000426	0.000757						0.00763	0.00379				
PCB-139/140				0.0000414	0.0000253						0.000142	0.0000573				
PCB-147/149				0.00163	0.00121						0.00466	0.00209				
PCB-151/135				0.000768	0.000532						0.00218	0.000914				
PCB-153/168				0.00139	0.00107						0.00418	0.00209				
PCB-156/157				0.000116	0.0000932						0.000561	0.000254				
PCB-163/138/129				0.00145	0.0011						0.00497	0.00236				
PCB-171/173				0.000181	0.000119						0.000597	0.000232				
PCB-180/193				0.00109	0.000768						0.00342	0.0016				
PCB-198/199				0.000779	0.000762						0.00289	0.00147				
PCB-21/33				0.000604	0.000649						0.00581	0.00163				
PCB-26/29				0.000157	0.000253						0.000933	0.000565				
PCB-28/20				0.000752	0.00041						0.0069	0.00107				
PCB-30/18				0.000362	0.000307						0.00243	0.00106				
PCB-44/47/65				0.00108	0.000513						0.00466	0.00105				
PCB-50/53				0.000166	0.0000832						0.000792	0.000149				
PCB-59/62/75				0.000122	0.000046						0.00103	0.000122				
PCB-61/70/74/76				0.00112	0.000635						0.00566	0.0015				
PCB-69/49				0.000678	0.000343						0.00276	0.000626				
PCB-71/40				0.000802	0.000325						0.00819	0.000497				
PCB-90/101																
Pentachlorobiphenyl																
Tetrachlorobiphenyl																
Total Decachlorobiphenyls (congeners)																
Total Dichlorobiphenyls (congeners)				0.00254	0.00407						0.039	0.0165				
Total Heptachlorobiphenyls (congeners)				0.00525	0.00369						0.0147	0.00693				
Total Hexachlorobiphenyls (congeners)				0.00785	0.00595						0.0257	0.0122				
Total Monochlorobiphenyls (congeners)				0.00108	0.000621						0.0206	0.00839				
Total Nonachlorobiphenyls (congeners)				0.00533	0.00441						0.00914	0.00611				
Total Octachlorobiphenyls (congeners)				0.00256	0.00218						0.00886	0.00405				
Total PCB (congeners)				0.05312	0.039431						0.25684	0.09476				
Total Pentachlorobiphenyls (congeners)				0.00801	0.00502						0.0299	0.0122				
Total Tetrachlorobiphenyls (congeners)				0.00921	0.00441						0.0613	0.00842				
Total Trichlorobiphenyls (congeners)				0.0048	0.00476						0.0407	0.014				
Trichlorobiphenyl (total)																
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>																
Benzo[e]pyrene																
Chrysene, 1-methyl-																
Naphthalene, 1-methyl-											3.5					
Pyrene, 1-methyl-																

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA			
		D16-BOR-09-(6.8-7.4)	D16-BOR-10-(0.5-1.0)	D16-BOR-10-(0-0.5)	D16-BOR-10-(11.0-11.3)	D16-BOR-10-(5.0-5.5)	D16-BOR-10-(6.0-6.5)	D16-BOR-10-(7.0-7.3)	D16-BOR-11-(0.5-1.0)	D16-BOR-11-(0-0.5)	D16-BOR-11-(10.0-10.3)	D16-BOR-11-(10.3-10.5)	D16-BOR-11-(5.5-6.0)				
Location ID	D16-BOR-09	D16-BOR-10	D16-BOR-10	D16-BOR-10	D16-BOR-10	D16-BOR-10	D16-BOR-10	D16-BOR-11	D16-BOR-11	D16-BOR-11	D16-BOR-11	D16-BOR-11					
Depth Interval (ft)	6.80-7.40	0.50-1.00	0.00-0.50	11.00-11.30	5.00-5.50	6.00-6.50	7.00-7.30	0.50-1.00	0.00-0.50	10.00-10.30	10.30-10.50	5.50-6.00					
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS					
Date	11/6/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017					
Chemical Class	Chemical	Units		Units		Units		Units		Units		Units					
<b>Polycyclic Aromatic Hydrocarbons</b>																	
Acenaphthene	mg/kg	0.004	U	0.2	0.018	0.004	U	0.004	U	2.3	0.054	0.025	0.024	0.046			
Acenaphthylene	mg/kg	0.004	U	0.085	0.014	0.004	U	0.004	U	0.45	0.049	0.014	0.013	0.017			
Anthracene	mg/kg	0.004	U	0.15	0.043	0.004	U	0.004	U	1.1	0.091	0.019	0.026	0.027			
Benzo(A)Anthracene	mg/kg	0.004	U	0.15	0.05	0.004	U	0.004	U	0.67	0.18	0.004	0.004	0.004			
Benzo(B)Fluoranthene	mg/kg	0.004	U	0.16	0.065	0.004	U	0.004	U	0.41	0.18	0.004	0.004	0.004			
Benzo(G,H,I)Perylene	mg/kg	0.004	U	0.071	0.035	0.004	U	0.004	U	0.13	0.096	0.004	0.004	0.004			
Benzo(K)Fluoranthene	mg/kg	0.004	U	0.086	0.03	0.004	U	0.004	U	0.13	0.11	0.004	0.004	0.004			
Benzo(A)Pyrene	mg/kg	0.004	U	0.12	0.044	0.004	U	0.004	U	0.29	0.14	0.004	0.004	0.004			
Chrysene	mg/kg	0.004	U	0.22	0.069	0.004	U	0.004	U	1.2	0.36	0.004	0.004	0.004			
Dibenz(A,H)Anthracene	mg/kg	0.004	U	0.036	0.009	0.004	U	0.004	U	0.037	0.028	0.004	0.004	0.004			
Fluoranthene	mg/kg	0.004	U	0.33	0.13	0.004	U	0.004	U	1.7	0.29	0.016	0.021	0.015			
Fluorene	mg/kg	0.004	U	0.2	0.037	0.004	U	0.004	U	1.6	0.059	0.03	0.034	0.041			
Indeno (1,2,3-CD) Pyrene	mg/kg	0.004	U	0.057	0.026	0.004	U	0.004	U	0.11	0.068	0.004	0.004	0.004			
Naphthalene	mg/kg	0.004	U	1.1	0.14	0.004	U	0.004	U	2.1	0.25	0.004	0.004	0.004			
Phenanthrene	mg/kg	0.004	U	0.46	0.12	0.007	U	0.004	U	3.7	0.18	0.082	0.092	0.091			
Pyrene	mg/kg	0.004	U	0.37	0.14	0.004	U	0.004	U	1.6	0.3	0.013	0.018	0.012			
Total PAHs (Detections + 1/2 MDL)	mg/kg	0.032	U	3.777	0.97	0.039	U	0.032	U	17.5085	2.421	0.217	0.246	0.267			
Total PAHs (Detections Only)	mg/kg	0.032	U	3.759	0.97	0.011	U	0.032	U	17.49	2.407	0.199	0.228	0.249			
<b>Semivolatile Organic Compounds - TICs</b>																	
1,2,4-Trithiolane	mg/kg																
1,4-Benzenediol, 2-chloro-	mg/kg																
11H-Benzo[b]fluorene	mg/kg																
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg																
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg																
3-PENTEN-2-ONE, 4-METHYL-	mg/kg																
7H-Benz[de]anthracen-7-one	mg/kg																
9,10-Anthracenedione	mg/kg									1.9							
9-Octadecenamido, (Z)-	mg/kg																
Acetamide, 2-chloro-N-(ethox	mg/kg																
Alachlor	mg/kg				0.75												
Benzenamine, 3-methyl-	mg/kg																
Benzenamine, 4,4',4"-methy	mg/kg																
Benzenamine, 4,4'-methyleneb	mg/kg																
Benzene, 1,2,3,4-tetrachloro	mg/kg																
Benzene, 1,2,3,5-tetrachloro	mg/kg																
Benzene, 1,2,3-trichloro-	mg/kg																
Benzene, 1,3,5-trichloro-	mg/kg																
Benzene, 1,3-bis(1-methyleth	mg/kg									6.1							
Benzene, 1,4-bis(1-methyleth	mg/kg									3.9							
Benzofuran, 2,3-dihydro-	mg/kg																
CYCLIC OCTAATOMIC SULFUR	mg/kg		10		4.6					3.6		8.8					
Diphenyl Ether	mg/kg																
Docosane	mg/kg																
Heneicosane	mg/kg																
Hexacosane	mg/kg																
Hexadecane	mg/kg																
Hexatriacontane	mg/kg																
m-Chloroaniline	mg/kg																
N,N-Diethylaniline	mg/kg																
n-Hexadecanoic acid	mg/kg				0.45				0.57				0.45				
Nonadecane	mg/kg																
o-Chloroaniline	mg/kg			2.9	0.62												
Octacosane	mg/kg		1.5														
Octadecane	mg/kg																
Octadecane, 1-chloro-	mg/kg																
Octadecanoic acid	mg/kg																
Parachlorophenol	mg/kg																
Pentadecane	mg/kg																
Perylene	mg/kg																
Phenol, 2,5-dichloro-	mg/kg																
Phenol, 3-chloro-	mg/kg																
Phenol, 4,4'-(1-methylethyl)	mg/kg	0.34		5.7	4.3		0.15		0.17			5.2					
Tetracosane	mg/kg																
Tetradecane	mg/kg																
Tetraethylene glycol	mg/kg																
Total SVOC TICs	mg/kg	0.77		62	26	0.83		0.82		0.92		1.7	240	170	0.69	1.9	2.2
Triacotane	mg/kg																
Tributyl phosphate	mg/kg												8.3				
Tridecanoic acid	mg/kg																
Triphenyl phosphate	mg/kg																
UNKNOWN	mg/kg			2.583333333	0.728461538					0.18		4.316666667	2.8		0.18	0.2	
Unknown acid	mg/kg																
Unknown Alcohol	mg/kg																
Unknown Aldol Condensate	mg/kg	0.43		6.1	2.5	0.64		0.53		0.55		0.97	23	5.1	0.54	1.2	0.55
UNKNOWN ALKANE	mg/kg																

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	Field Sample ID	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D16-BOR-09-(6.8-7.4)	D16-BOR-10-(0.5-1.0)	D16-BOR-10-(0-0.5)	D16-BOR-10-(11.0-11.3)	D16-BOR-10-(5.0-5.5)	D16-BOR-10-(6.0-6.5)	D16-BOR-10-(7.0-7.3)	D16-BOR-11-(0.5-1.0)	D16-BOR-11-(0-0.5)	D16-BOR-11-(10.0-10.3)	D16-BOR-11-(10.3-10.5)	D16-BOR-11-(5.5-6.0)
Location ID	D16-BOR-09	D16-BOR-10	D16-BOR-10	D16-BOR-10	D16-BOR-10	D16-BOR-10	D16-BOR-10	D16-BOR-10	D16-BOR-11	D16-BOR-11	D16-BOR-11	D16-BOR-11	
Depth Interval (ft)	6.80-7.40	0.50-1.00	0.00-0.50	11.00-11.30	5.00-5.50	6.00-6.50	7.00-7.30	0.50-1.00	0.00-0.50	10.00-10.30	10.30-10.50	5.50-6.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Date	11/6/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	
Chemical Class	Units												
Unknown Alkene	mg/kg												
Unknown Amide	mg/kg												
Unknown Amine	mg/kg												
UNKNOWN AROMATIC	mg/kg												
Unknown Carboxylic Acid	mg/kg												
Unknown Cycloalkane	mg/kg												
Unknown Hydrocarbon	mg/kg												
Unknown Ketone	mg/kg												
Unknown PAH	mg/kg												
UNKNOWN SILOXANE	mg/kg												
<b>Semivolatile Organic Compounds</b>													
1,2,4-Trichlorobenzene	mg/kg	0.02 U	1.4 U	0.17 U	0.019 U	0.018 U	0.018 U	0.021 U	0.18 U	0.14 U	0.018 U	0.02 U	
1,2-Diphenylhydrazine	mg/kg	0.02 U	0.18 U	0.03 U	0.019 U	0.018 U	0.018 U	0.021 U	0.18 U	0.14 U	0.018 U	0.02 U	
1,4-Dioxane	mg/kg	0.12 U	1.1 U	0.18 U	0.12 U	0.11 U	0.11 U	0.12 U	1.1 U	0.84 U	0.11 U	0.12 U	
1-Naphthylamine	mg/kg	0.2 U	1.8 U	0.3 U	0.19 U	0.18 U	0.18 U	0.21 U	1.8 U	1.4 U	0.18 U	0.2 U	
2,3,4,6-Tetrachlorophenol	mg/kg	0.078 U	0.73 U	0.12 U	0.077 U	0.071 U	0.073 U	0.082 U	0.74 U	0.56 U	0.072 U	0.081 U	
2,4,5-Trichlorophenol	mg/kg	0.02 U	0.18 U	0.03 U	0.019 U	0.018 U	0.018 U	0.021 U	0.18 U	0.14 U	0.018 U	0.02 U	
2,4,6-Trichlorophenol	mg/kg	0.02 U	0.18 U	0.03 U	0.019 U	0.018 U	0.018 U	0.021 U	0.18 U	0.14 U	0.018 U	0.02 U	
2,4-Dichlorophenol	mg/kg	0.02 U	0.18 U	0.03 U	0.019 U	0.018 U	0.018 U	0.021 U	0.18 U	0.14 U	0.018 U	0.02 U	
2,4-Dimethylphenol	mg/kg	0.02 U	0.18 U	0.03 U	0.019 U	0.018 U	0.018 U	0.021 U	0.18 U	0.14 U	0.018 U	0.02 U	
2,4-Dinitrophenol	mg/kg	0.35 U	3.3 U	0.53 U	0.35 U	0.32 U	0.33 U	0.37 U	3.3 U	2.5 U	0.32 U	0.37 U	
2,4-Dinitrotoluene	mg/kg	0.078 U	0.73 U	0.12 U	0.077 U	0.071 U	0.073 U	0.082 U	0.74 U	0.56 U	0.072 U	0.081 U	
2,6-Dinitrotoluene	mg/kg	0.02 U	0.18 U	0.03 U	0.019 U	0.018 U	0.018 U	0.021 U	0.18 U	0.14 U	0.018 U	0.02 U	
2-Chloronaphthalene	mg/kg	0.008 U	0.073 U	0.012 U	0.008 U	0.007 U	0.007 U	0.008 U	0.074 U	0.056 U	0.007 U	0.008 U	
2-Chlorophenol	mg/kg	0.02 U	0.18 U	0.03 U	0.019 U	0.018 U	0.018 U	0.021 U	0.18 U	0.14 U	0.018 U	0.02 U	
2-Methylnaphthalene	mg/kg	0.004 U	0.6 U	0.19 U	0.004 U	0.004 U	0.004 U	0.004 U	2.8 U	0.086 U	0.011 U	0.005 U	
2-Methylphenol (O-Cresol)	mg/kg	0.02 U	0.18 U	0.03 U	0.019 U	0.018 U	0.018 U	0.021 U	0.18 U	0.14 U	0.018 U	0.02 U	
2-Naphthylamine	mg/kg	0.2 U	1.8 U	0.3 U	0.19 U	0.18 U	0.18 U	0.21 U	1.8 U	1.4 U	0.18 U	0.2 U	
2-Nitroaniline	mg/kg	0.02 U	0.18 U	0.03 U	0.019 U	0.018 U	0.018 U	0.021 U	0.18 U	0.14 U	0.018 U	0.02 U	
2-Nitrophenol	mg/kg	0.02 U	0.18 U	0.03 U	0.019 U	0.018 U	0.018 U	0.021 U	0.18 U	0.14 U	0.018 U	0.02 U	
3,3'-Dichlorobenzidine	mg/kg	0.12 U	1.1 U	0.18 U	0.12 U	0.11 U	0.11 U	0.12 U	1.1 U	0.84 U	0.11 U	0.12 U	
3,3'-Dimethylbenzidine	mg/kg												
3-Nitroaniline	mg/kg	0.078 U	0.73 U	0.12 U	0.077 U	0.071 U	0.073 U	0.082 U	0.74 U	0.56 U	0.072 U	0.081 U	
4,6-Dinitro-2-Methylphenol	mg/kg	0.2 U	1.8 U	0.3 U	0.19 U	0.18 U	0.18 U	0.21 U	1.8 U	1.4 U	0.18 U	0.2 U	
4-Aminobiphenyl	mg/kg	0.2 U	1.8 U	0.3 U	0.19 U	0.18 U	0.18 U	0.21 U	1.8 U	1.4 U	0.18 U	0.2 U	
4-Bromophenyl Phenyl Ether	mg/kg	0.02 U	0.18 U	0.03 U	0.019 U	0.018 U	0.018 U	0.021 U	0.18 U	0.14 U	0.018 U	0.02 U	
4-Chloro-3-Methylphenol	mg/kg	0.02 U	0.18 U	0.03 U	0.019 U	0.018 U	0.018 U	0.021 U	0.18 U	0.14 U	0.018 U	0.02 U	
4-Chloroaniline	mg/kg	0.039 U	4 U	0.72 U	0.038 U	0.036 U	0.036 U	0.041 U	18 U	0.28 U	0.036 U	0.041 U	
4-Chlorophenyl Phenyl Ether	mg/kg	0.02 U	0.18 U	0.03 U	0.019 U	0.018 U	0.018 U	0.021 U	0.18 U	0.14 U	0.018 U	0.02 U	
4-Methylphenol (P-Cresol)	mg/kg	0.02 U	0.22 U	0.11 U	0.019 U	0.018 U	0.018 U	0.021 U	0.43 U	0.14 U	0.018 U	0.02 U	
4-Nitroaniline	mg/kg	0.078 U	0.73 U	0.12 U	0.077 U	0.071 U	0.073 U	0.082 U	0.74 U	0.56 U	0.072 U	0.081 U	
4-Nitrophenol	mg/kg	0.2 U	1.8 U	0.3 U	0.19 U	0.18 U	0.18 U	0.21 U	1.8 U	1.4 U	0.18 U	0.2 U	
Acetophenone	mg/kg	0.02 U	0.18 U	0.03 U	0.019 U	0.018 U	0.018 U	0.021 U	0.18 U	0.14 U	0.018 U	0.02 U	
Aniline	mg/kg	0.2 U	1.8 U	0.3 U	0.19 U	0.18 U	0.18 U	0.21 U	1.8 U	1.4 U	0.18 U	0.2 U	
Benzidine	mg/kg	0.29 U	2.7 U	0.45 U	0.29 U	0.27 U	0.27 U	0.31 U	2.6 U	2.1 U	0.27 U	0.31 U	
Biphenyl	mg/kg	0.02 U	0.69 U	0.046 U	0.019 U	0.018 U	0.018 U	0.021 U	0.62 U	0.14 U	0.018 U	0.02 U	
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg	0.02 U	0.18 U	0.03 U	0.019 U	0.018 U	0.018 U	0.021 U	0.18 U	0.14 U	0.018 U	0.02 U	
Bis(2-Chloroethoxy)Methane	mg/kg	0.02 U	0.18 U	0.03 U	0.019 U	0.018 U	0.018 U	0.021 U	0.18 U	0.14 U	0.018 U	0.02 U	
Bis(2-Chloroethyl)Ether	mg/kg	0.02 U	0.18 U	0.03 U	0.019 U	0.018 U	0.018 U	0.021 U	0.18 U	0.14 U	0.018 U	0.02 U	
Bis(2-Chloroisopropyl)Ether	mg/kg												
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.078 U	1.2 U	0.12 U	0.077 U	0.071 U	0.073 U	0.082 U	2.4 U	0.56 U	0.072 U	0.081 U	
Butyl Benzyl Phthalate	mg/kg	0.078 U	0.73 U	0.12 U	0.077 U	0.071 U	0.073 U	0.082 U	6 U	0.56 U	0.072 U	0.081 U	
Carbazole	mg/kg	0.02 U	0.18 U	0.03 U	0.019 U	0.018 U	0.018 U	0.021 U	0.18 U	0.14 U	0.018 U	0.02 U	
Dibenzofuran	mg/kg	0.02 U	0.18 U	0.03 U	0.019 U	0.018 U	0.018 U	0.021 U	1.1 U	0.14 U	0.018 U	0.02 U	
Diethyl Phthalate	mg/kg	0.078 U	0.73 U	0.12 U	0.077 U	0.071 U	0.073 U	0.082 U	0.74 U	0.56 U	0.072 U	0.081 U	
Dimethyl Phthalate	mg/kg	0.078 U	0.73 U	0.12 U	0.077 U	0.071 U	0.073 U	0.082 U	0.74 U	0.56 U	0.072 U	0.081 U	
Di-N-Butyl Phthalate	mg/kg	0.078 U	0.73 U	0.12 U	0.077 U	0.071 U	0.073 U	0.082 U	0.74 U	0.56 U	0.072 U	0.081 U	
Diphenyl Ether	mg/kg	0.02 U	0.63 U	0.036 U	0.019 U	0.018 U	0.018 U	0.021 U	0.86 U	0.14 U	0.018 U	0.02 U	
Hexachlorobenzene	mg/kg	0.004 U	0.036 U	0.008 U	0.004 U	0.004 U	0.004 U	0.004 U	0.037 U	0.028 U	0.004 U	0.004 U	
Hexachlorobutadiene	mg/kg	0.02 U	0.18 U	0.03 U	0.019 U	0.018 U	0.018 U	0.021 U	0.18 U	0.14 U	0.018 U	0.02 U	
Hexachlorocyclopentadiene	mg/kg	0.2 U	1.8 U	0.3 U	0.19 U	0.18 U	0.18 U	0.21 U	1.8 U	1.4 U	0.18 U	0.2 U	
Hexachloroethane	mg/kg	0.039 U	0.36 U	0.059 U	0.038 U	0.036 U	0.036 U	0.041 U	0.37 U	0.28 U	0.036 U	0.041 U	
Hexachloropropylene	mg/kg												
Isophorone	mg/kg	0.02 U	0.18 U	0.03 U	0.019 U	0.018 U	0.018 U	0.021 U	0.18 U	0.14 U	0.018 U	0.02 U	
N-Dioctyl Phthalate	mg/kg	0.078 U	0.73 U	0.12 U	0.077 U	0.071 U	0.073 U	0.082 U	0.74 U	0.56 U	0.072 U	0.081 U	
Nitrobenzene	mg/kg	0.02 U	0.18 U	0.03 U	0.019 U	0.018 U	0.018 U	0.021 U	0.18 U	0.14 U	0.018 U	0.02 U	
N-Nitrosodimethylamine	mg/kg	0.078 U	0.73 U	0.12 U	0.077 U	0.071 U	0.073 U	0.082 U	0.74 U	0.56 U	0.072 U	0.081 U	
N-Nitrosodi-N-Propylamine	mg/kg	0.02 U	0.18 U	0.03 U	0.019 U	0.018 U	0.018 U	0.021 U	0.18 U	0.14 U	0.018 U	0.02 U	
N-Nitrosodiphenylamine	mg/kg	0.02 U	0.18 U	0.03 U	0.019 U	0.018 U	0.018 U	0.021 U	0.98 U	0.14 U	0.018 U	0.02 U	
O-Toluidine	mg/kg	0.23 U	2.2 U	0.36 U	0.23 U	0.21 U	0.22 U	0.25 U	2.2 U	1.7 U	0.22 U	0.24 U	
Parathion	mg/kg	0.2 U	1.8 U	0.3 U	0.19 U	0.18 U	0.18 U	0.21 U	1.8 U	1.4 U	0.18 U	0.2 U	
Pentachlorobenzene	mg/kg	0.02 U	0.18 U	0.03 U	0.019 U	0.018 U	0.018 U	0.021 U	0.18 U	0.14 U	0.018 U	0.02 U	
Pentachlorophenol	mg/kg	0.039 U	0.36 U	0.059 U	0.038 U	0.036 U	0.036 U	0.041 U	0.37 U	0.28 U	0.036 U	0.041 U	
Phenol	mg/kg	0.02 U	0.2 U	0.12 U	0.019 U	0.018 U	0.018 U	0.021 U	0.47 U	0.14 U	0.018 U	0.02 U	
<b>Volatile Organic Compounds - TICs</b>													
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA									
		D16-BOR-09-(6.8-7.4)	D16-BOR-10-(0.5-1.0)	D16-BOR-10-(0-0.5)	D16-BOR-10-(11.0-11.3)	D16-BOR-10-(5.0-5.5)	D16-BOR-10-(6.0-6.5)	D16-BOR-10-(7.0-7.3)	D16-BOR-11-(0.5-1.0)	D16-BOR-11-(0-0.5)	D16-BOR-11-(10.0-10.3)	D16-BOR-11-(10.3-10.5)	D16-BOR-11-(5.5-6.0)										
Location ID	Depth Interval (ft)	D16-BOR-09	D16-BOR-10	D16-BOR-10	D16-BOR-10	D16-BOR-10	D16-BOR-10	D16-BOR-10	D16-BOR-11	D16-BOR-11	D16-BOR-11	D16-BOR-11	D16-BOR-11	D16-BOR-11	D16-BOR-11								
Sample Purpose	Date	6.80-7.40	0.50-1.00	0.00-0.50	11.00-11.30	5.00-5.50	6.00-6.50	7.00-7.30	0.50-1.00	0.00-0.50	10.00-10.30	10.30-10.50	5.50-6.00										
Chemical Class	Units	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS										
Chemical	Units	11/6/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017	11/7/2017										
1-Butene	mg/kg																						
1-Heptene	mg/kg																						
1-Propene, 2-methyl-	mg/kg																						
Azulene	mg/kg																						
BENZENE, 1,2,4-TRICHLORO-	mg/kg																						
BENZENE, 1,2-DICHLORO-	mg/kg																						
BENZENE, 1,4-DICHLORO-	mg/kg																						
Camphene	mg/kg																						
CYCLOHEXANE	mg/kg																						
Cyclohexane, methyl-	mg/kg																						
Cyclotrisiloxane, hexamethyl	mg/kg							0.006			0.006												
Diphenyl Ether	mg/kg																						
Ethane, 1,1,2,2-tetrachloro-	mg/kg																						
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg																						
Ethane, 1,2-dichloro-1,1-dif	mg/kg																						
Ethene, 1,1-dichloro-2,2-dif	mg/kg																						
Hexane, 2-methyl-	mg/kg																						
Hexane, 3-methyl-	mg/kg																						
METHANE, CHLOROFLUORO-	mg/kg																						
Naphthalene	mg/kg																						
NAPHTHALENE, 2-METHYL-	mg/kg																						
Nonanal	mg/kg																						
Norflurane	mg/kg																						
Pentane, 2,3-dimethyl-	mg/kg																						
Phenol, 4-(1,1,3,3-tetrameth	mg/kg																						
Propene	mg/kg																						
Sulfur dioxide	mg/kg																						
Tridecane	mg/kg																						
UNKNOWN	mg/kg										0.237333333												
UNKNOWN ALICYCLIC	mg/kg																						
UNKNOWN ALIPHATIC	mg/kg																						
UNKNOWN ALKANE	mg/kg																						
UNKNOWN AROMATIC	mg/kg																						
UNKNOWN SILOXANE	mg/kg	0.008																					
<b>Volatile Organic Compounds</b>																							
1,1,1,2-Tetrachloroethane	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.001	U		
1,1,1-Trichloroethane	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.001	U		
1,1,1-Trichlorotrifluoroethane	mg/kg	0.006	U	0.013	U	0.009	U	0.005	U	0.005	U	0.012	U	0.012	U	0.006	U	0.006	U	0.005	U		
1,1,2,2-Tetrachloroethane	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.001	U		
1,1,2-Trichloroethane	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.001	U		
1,1,2-Trichlorotrifluoroethane	mg/kg	0.002	U	0.26	U	0.004	U	0.002	U	0.002	U	0.31	U	0.004	U	0.002	U	0.002	U	0.034	U		
1,1,2-Trifluoroethane	mg/kg	0.002	U	0.005	U	0.004	U	0.002	U	0.002	U	0.005	U	0.005	U	0.002	U	0.002	U	0.002	U		
1,1-Dichloro-1-Fluoroethane	mg/kg	0.001	U	0.003	U	0.002	U	0.001	U	0.001	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U		
1,1-Dichloroethane	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.001	U		
1,1-Dichloroethene	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.001	U		
1,1-Dichloropropene	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.001	U		
1,2,4-Trimethylbenzene	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.66	U	0.002	U	0.001	U	0.001	U	0.001	U		
1,2-Dibromoethane (EDB)	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.001	U		
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg	0.001	U	0.003	U	0.002	U	0.001	U	0.001	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U		
1,2-Dichloro-1-Fluoroethane	mg/kg	0.001	U	0.003	U	0.002	U	0.001	U	0.001	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U		
1,2-Dichlorobenzene	mg/kg	0.006	U	1.2	U	0.004	U	0.001	U	0.001	U	0.3	U	0.007	U	0.001	U	0.002	U	0.001	U		
1,2-Dichloroethane	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.001	U		
1,2-Dichloroethene	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.001	U		
1,2-Dichloropropane	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.001	U		
1,2-Dichlorotetrafluoroethane	mg/kg	0.002	U	0.005	U	0.004	U	0.002	U	0.002	U	0.005	U	0.005	U	0.002	U	0.002	U	0.002	U		
1,3,5-Trimethylbenzene	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.31	U	0.002	U	0.001	U	0.001	U	0.001	U		
1,3-Dichlorobenzene	mg/kg	0.001	U	1.3	U	0.002	U	0.001	U	0.001	U	0.33	U	0.002	U	0.001	U	0.001	U	0.001	U		
1,4-Dichlorobenzene	mg/kg	0.012	U	6.5	U	0.002	U	0.001	U	0.001	U	0.77	U	0.003	U	0.001	U	0.002	U	0.001	U		
1-Chloro-1,1-Difluoroethane	mg/kg	0.001	U	0.003	U	0.002	U	0.001	U	0.001	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U		
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg	0.001	U	0.003	U	0.002	U	0.001	U	0.001	U	0.002	U	0.002	U	0.001	U	0.001	U	0.009	U		
2-Chloro-1,1,1-Trifluoroethane	mg/kg	0.002	U	0.26	U	0.004	U	0.002	U	0.002	U	0.31	U	0.004	U	0.002	U	0.002	U	0.002	U		
2-Chloroethyl Vinyl Ether	mg/kg																						
2-Chlorotoluene	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.6	U	0.002	U	0.001	U	0.001	U	0.001	U		
2-Hexanone	mg/kg	0.003	U	0.4	U	0.006	U	0.004	U	0.003	U	0.46	U	0.006	U	0.003	U	0.003	U	0.003	U		
4-Chlorotoluene	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.3	U	0.002	U	0.001	U	0.001	U	0.001	U		
4-Isopropyltoluene	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.61	U	0.002	U	0.001	U	0.001	U	0.001	U		
Acetone	mg/kg	0.027	U	0.92	U	0.12	U	0.043	U	0.044	U	0.094	U	0.043	U	1.1	U	0.15	U	0.026	U	0.025	U
Acrolein	mg/kg																						
Acrylonitrile	mg/kg																						
Benzene	mg/kg	0.0006	U	0.068	U	0.001	U	0.0006	U	0.0005	U	0.002	U	0.077	U	0.001	U	0.0006	U	0.015	U	0.0005	U
Bromodichloromethane	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U
Bromoform	mg/kg																						
Carbon Disulfide	mg/kg	0.001	U	0.13	U	0.005	U	0.001	U	0.001	U	0.15	U	0.007	U	0.001	U	0.001	U	0.001	U	0.002	U
Carbon Tetrachloride	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U
CFC-1113	mg/kg	0.002	U	0.26	U	0.004	U	0.002	U	0.002	U	0.31	U	0.004	U	0.002	U	0.002	U	0.002	U	0.002	U
Chlorobenzene	mg/kg	0.073	U	14	U	0.043	U	0.001	U	0.001	U	0.024	U	6	U	0.057	U	0.001	U	0.08	U	0.001	U

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA D16-BOR-09-(6.8-7.4)		MZ-FPA D16-BOR-10-(0.5-1.0)		MZ-FPA D16-BOR-10-(0-0.5)		MZ-FPA D16-BOR-10-(11.0-11.3)		MZ-FPA D16-BOR-10-(5.0-5.5)		MZ-FPA D16-BOR-10-(6.0-6.5)		MZ-FPA D16-BOR-10-(7.0-7.3)		MZ-FPA D16-BOR-11-(0.5-1.0)		MZ-FPA D16-BOR-11-(0-0.5)		MZ-FPA D16-BOR-11-(10.0-10.3)		MZ-FPA D16-BOR-11-(10.3-10.5)		MZ-FPA D16-BOR-11-(5.5-6.0)			
		Units	D16-BOR-09 6.80-7.40 FS 11/6/2017	D16-BOR-10 0.50-1.00 FS 11/7/2017	D16-BOR-10 0.00-0.50 FS 11/7/2017	D16-BOR-10 11.00-11.30 FS 11/7/2017	D16-BOR-10 5.00-5.50 FS 11/7/2017	D16-BOR-10 6.00-6.50 FS 11/7/2017	D16-BOR-10 7.00-7.30 FS 11/7/2017	D16-BOR-11 0.50-1.00 FS 11/7/2017	D16-BOR-11 0.00-0.50 FS 11/7/2017	D16-BOR-11 10.00-10.30 FS 11/7/2017	D16-BOR-11 10.30-10.50 FS 11/7/2017	D16-BOR-11 5.50-6.00 FS 11/7/2017													
Chlorodibromomethane	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U
Chlorodifluoromethane	mg/kg	0.002	U	0.005	U	0.004	U	0.002	U	0.002	U	0.002	U	0.002	U	0.005	U	0.005	U	0.002	U	0.002	U	0.002	U	0.002	U
Chlorofluoromethane	mg/kg	0.001	U	0.003	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U
Chloroform	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.004	U	0.001	U
Chloropentafluoroethane	mg/kg	0.018	U	0.039	U	0.026	U	0.015	U	0.016	U	0.015	U	0.016	U	0.035	U	0.037	U	0.017	U	0.017	U	0.017	U	0.016	U
cis-1,2-Dichloroethene	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U
cis-1,3-Dichloropropene	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U
Cumene	mg/kg	0.001	U	0.76	U	0.003	U	0.001	U	0.001	U	0.001	U	0.001	U	39	U	0.068	U	0.001	U	0.001	U	0.001	U	0.001	U
Dichlorodifluoromethane	mg/kg	0.002	U	0.26	U	0.004	U	0.002	U	0.002	U	0.002	U	0.004	U	0.31	U	0.004	U	0.002	U	0.002	U	0.002	U	0.002	U
Dichlorofluoromethane	mg/kg	0.002	U	0.26	U	0.004	U	0.002	U	0.002	U	0.002	U	0.003	U	0.31	U	0.004	U	0.002	U	0.002	U	0.002	U	0.002	U
Ethane	ug/L																										
Ethyl Chloride	mg/kg	0.002	U	0.26	U	0.004	U	0.002	U	0.002	U	0.002	U	0.002	U	0.31	U	0.004	U	0.002	U	0.002	U	0.002	U	0.002	U
Ethylbenzene	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U
Fluoromethane	mg/kg	0.004	U	0.008	U	0.005	U	0.003	U	0.003	U	0.003	U	0.003	U	0.007	U	0.007	U	0.003	U	0.003	U	0.003	U	0.003	U
Hexane	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U
Isobutyl Alcohol	mg/kg	0.11	U	13	U	0.2	U	0.12	U	0.11	U	0.11	U	0.11	U	15	U	0.21	U	0.11	U	0.11	U	0.11	U	0.11	U
Meta- And Para-Xylene	mg/kg	0.001	U	0.26	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.26	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U
Methacrylonitrile	mg/kg	0.006	U	0.66	U	0.01	U	0.006	U	0.005	U	0.005	U	0.005	U	0.77	U	0.011	U	0.006	U	0.006	U	0.006	U	0.005	U
Methane	ug/L																										
Methyl Bromide	mg/kg																										
Methyl Chloride	mg/kg	0.002	U	0.26	U	0.004	U	0.002	U	0.002	U	0.002	U	0.002	U	0.31	U	0.004	U	0.002	U	0.002	U	0.002	U	0.002	U
Methyl Ethyl Ketone	mg/kg	0.004	U	0.4	U	0.011	U	0.005	U	0.004	U	0.004	U	0.004	U	0.62	U	0.015	U	0.004	U	0.005	U	0.004	U	0.004	U
Methyl Isobutyl Ketone	mg/kg	0.003	U	0.3	U	0.006	U	0.004	U	0.003	U	0.003	U	0.003	U	0.46	U	0.006	U	0.003	U	0.003	U	0.003	U	0.003	U
Methyl Methacrylate	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U
Methyl Tertiary Butyl Ether	mg/kg	0.0006	U	0.066	U	0.001	U	0.0006	U	0.0005	U	0.0005	U	0.0005	U	0.077	U	0.001	U	0.0006	U	0.0006	U	0.0007	U	0.0005	U
Methylene Chloride	mg/kg	0.002	U	0.26	U	0.004	U	0.004	U	0.002	U	0.003	U	0.002	U	0.31	U	0.004	U	0.002	U	0.002	U	0.002	U	0.003	U
N-Butylbenzene	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.28	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U
N-Propylbenzene	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U
Ortho-Xylene	mg/kg	0.001	U	0.21	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.65	U	0.005	U	0.001	U	0.001	U	0.001	U	0.001	U
Propionitrile	mg/kg	0.033	U	4	U	0.061	U	0.036	U	0.032	U	0.032	U	0.032	U	4.6	U	0.063	U	0.033	U	0.034	U	0.034	U	0.032	U
sec-Butylbenzene	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.23	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U
Styrene	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U
tert-Butylbenzene	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U
Tetrachloroethene	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U
Tetrahydrofuran	mg/kg	0.004	U	0.53	U	0.008	U	0.005	U	0.004	U	0.004	U	0.004	U	0.62	U	0.008	U	0.004	U	0.004	U	0.005	U	0.004	U
Toluene	mg/kg	0.001	U	0.13	U	0.003	U	0.001	U	0.001	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U
trans-1,2-Dichloroethene	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U
trans-1,3-Dichloropropene	mg/kg																										
Trichloroethene	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U
Trichlorofluoromethane	mg/kg	0.002	U	0.26	U	0.004	U	0.002	U	0.002	U	0.002	U	0.002	U	0.31	U	0.004	U	0.002	U	0.002	U	0.014	U	0.002	U
Vinyl Chloride	mg/kg	0.001	U	0.13	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.15	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U
Vinyl Fluoride	mg/kg	0.007	U	0.016	U	0.011	U	0.006	U	0.006	U	0.006	U	0.006	U	0.014	U	0.015	U	0.007	U	0.007	U	0.007	U	0.006	U
Xylenes	mg/kg	0.001	U	0.47	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.91	U	0.005	U	0.001	U	0.001	U	0.001	U	0.001	U

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	MZ-FPA										
		Field Sample ID	D16-BOR-11-(7.0-7.5)	D16-BOR-11-(7.0-7.5)-D	D16-BOR-12-(0.5-1.0)	D16-BOR-12-(0-0.5)	D16-BOR-12-(3.2-3.7)	D16-BOR-12-(3.2-3.7)-D	D16-BOR-12-(6.3-6.8)	D16-BOR-12-(8.6-9.1)	D16-BOR-12-(9.1-9.3)	D16-BOR-13-(0.5-1.0)
Chemical	Location ID	D16-BOR-11	D16-BOR-11	D16-BOR-12	D16-BOR-12	D16-BOR-12	D16-BOR-12	D16-BOR-12	D16-BOR-12	D16-BOR-12	D16-BOR-13	D16-BOR-13
	Depth Interval (ft)	7.00-7.50	7.00-7.50	0.50-1.00	0.00-0.50	3.20-3.70	3.20-3.70	6.30-6.80	8.60-9.10	9.10-9.30	0.50-1.00	0.00-0.50
	Sample Purpose	FS	DUP	FS	FS	FS	DUP	FS	FS	FS	FS	FS
	Date	11/7/2017	11/7/2017	11/6/2017	11/6/2017	11/6/2017	11/6/2017	11/6/2017	11/6/2017	11/6/2017	11/6/2017	11/6/2017
	Units											
<b>General Chemistry</b>												
Black Carbon	mg/kg											
Percent Moisture	%	8.6	8.3	49.6	45.4	7.5	8.2	10.1	6.6	13.4	49.8	46.4
Percent Solids	%											
Total Organic Carbon	mg/kg	222	243	38100	26300	342	281	245	268	765	33600	29600
<b>Metals</b>												
Aluminum	mg/kg		5430	25900	17200						20400	17900
Antimony	mg/kg		0.11	2.21	1.53						0.484	0.344
Arsenic	mg/kg		0.7	32.7	11.7						13.1	10.7
Barium	mg/kg		13.4	131	100						109	93.9
Beryllium	mg/kg		0.204	1.46	0.924						1.05	0.908
Cadmium	mg/kg		0.03	1.32	0.573						0.892	0.57
Calcium	mg/kg		70.9	3680	3860						3860	4030
Chromium	mg/kg		17.4	142	46.6						56.4	49.1
Cobalt	mg/kg		5.03	19.1	12.9						15.5	13.3
Copper	mg/kg		7.85	109	33.1						48.3	35.2
Iron	mg/kg		8620	41900	26100						31700	28500
Lead	mg/kg		3.82	563	48.4						58.7	48.4
Magnesium	mg/kg		1320	6400	5100						5880	5180
Manganese	mg/kg		76.9	717	699						1160	807
Mercury	mg/kg		0.0102	1.36	0.202						0.236	0.239
Nickel	mg/kg		12.1	45.8	26.2						35	28.1
Potassium	mg/kg		576	3990	2940						3180	2950
Selenium	mg/kg		0.0872	3.17	0.668						0.895	0.679
Silver	mg/kg		0.0255	1.04	0.414						0.872	0.58
Sodium	mg/kg		72	909	968						895	868
Thallium	mg/kg		0.0314	0.257	0.21						0.258	0.178
Tin	mg/kg											
Titanium	mg/kg											
Vanadium	mg/kg		14.5	95.6	46.4						56.2	46.9
Zinc	mg/kg		18.3	339	169						215	187
<b>Metals - AVS/SEM</b>												
Acid Volatile Sulfide	umol/g											
Arsenic	umol/g											
Cadmium	umol/g											
Copper	umol/g											
Lead	umol/g											
Zinc	umol/g											
<b>Metals - Leachate</b>												
Lead	ug/L											
<b>Per and Polyfluorinated Organic Substances</b>												
Perfluorobutane Sulfonic Acid	mg/kg											
Perfluorobutanoic Acid	mg/kg											
Perfluorodecane Sulfonic Acid	mg/kg											
Perfluorodecanoic Acid	mg/kg											
Perfluorododecanoic Acid	mg/kg											
Perfluoroheptanoic Acid	mg/kg											
Perfluorohexane Sulfonic Acid	mg/kg											
Perfluorohexanoic Acid	mg/kg											
Perfluorononanoic Acid	mg/kg											
Perfluorooctane Sulfonamide	mg/kg											
Perfluoropentanoic Acid	mg/kg											
Perfluorotetradecanoic Acid	mg/kg											
Perfluorotridecanoic Acid	mg/kg											
Perfluoroundecanoic Acid	mg/kg											
PFOA	mg/kg											
PFOA(trial)	mg/kg											
PFOS	mg/kg											
PFOS (trial)	mg/kg											
<b>Pesticides and Herbicides</b>												
4,4'-DDD	mg/kg											
4,4'-DDE	mg/kg											
4,4'-DDT	mg/kg											
Aldrin	mg/kg											
Alpha Chlordane	mg/kg											
Alpha-BHC	mg/kg											
beta-BHC	mg/kg											
delta-BHC	mg/kg											
Dieldrin	mg/kg											
Endosulfan I	mg/kg											
Endosulfan II	mg/kg											
Endosulfan Sulfate	mg/kg											
Endrin	mg/kg											
Endrin Aldehyde	mg/kg											
Endrin Ketone	mg/kg											
Gamma Chlordane	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
	Field Sample ID	D16-BOR-11-(7.0-7.5)	D16-BOR-11-(7.0-7.5)-D	D16-BOR-12-(0.5-1.0)	D16-BOR-12-(0-0.5)	D16-BOR-12-(3.2-3.7)	D16-BOR-12-(3.2-3.7)-D	D16-BOR-12-(6.3-6.8)	D16-BOR-12-(8.6-9.1)	D16-BOR-12-(9.1-9.3)	D16-BOR-13-(0.5-1.0)	D16-BOR-13-(0-0.5)
Chemical	Location ID Depth Interval (ft) Sample Purpose Date	D16-BOR-11 7.00-7.50 FS 11/7/2017	D16-BOR-11 7.00-7.50 DUP 11/7/2017	D16-BOR-12 0.50-1.00 FS 11/6/2017	D16-BOR-12 0.00-0.50 FS 11/6/2017	D16-BOR-12 3.20-3.70 FS 11/6/2017	D16-BOR-12 3.20-3.70 DUP 11/6/2017	D16-BOR-12 6.30-6.80 FS 11/6/2017	D16-BOR-12 8.60-9.10 FS 11/6/2017	D16-BOR-12 9.10-9.30 FS 11/6/2017	D16-BOR-13 0.50-1.00 FS 11/6/2017	D16-BOR-13 0.00-0.50 FS 11/6/2017
Units												
Heptachlor	mg/kg											
Heptachlor Epoxide	mg/kg											
Lindane	mg/kg											
Methoxychlor	mg/kg											
Toxaphene	mg/kg											
<b>Physical Properties</b>												
0.001 MM	% PASSING			3	2.5						6	2.5
0.002 MM	% PASSING			12	6						13	6.5
0.005 MM	% PASSING			25	12.5						23.5	13.5
0.02 MM	% PASSING			53.5	31.5						56.5	38
0.05 MM	% PASSING			74	60.5						81	65
0.064 MM	% PASSING			81	72						88	75.5
0.075 MM	% PASSING			83.3	76.2						91.1	79.8
0.15 MM	% PASSING			86.1	86.9						93.8	89.8
0.3 MM	% PASSING			89.5	92.4						96.3	98
0.6 MM	% PASSING			94	94.3						97.5	98.8
1.18 MM	% PASSING			97.6	95.4						98.3	99.3
19 MM	% PASSING			100	100						100	100
2.36 MM	% PASSING			99.3	95.7						98.6	99.4
3.35 MM	% PASSING			99.7	97.8						99.9	100
37.5 MM	% PASSING			100	100						100	100
4.75 MM	% PASSING			99.9	98.5						100	100
75 MM	% PASSING			100	100						100	100
Density	PCF											
<b>Polychlorinated Biphenyls - TICs</b>												
1,1'-Biphenyl, 2,3-dichloro-	mg/kg											
Unknown Biphenyl	mg/kg											
<b>Polychlorinated Biphenyls</b>												
Heptachlorobiphenyl	mg/kg											
Hexachlorobiphenyl	mg/kg											
Octachlorobiphenyl	mg/kg											
PCB 1	mg/kg			0.00201	0.00093						0.000294	0.000831
PCB 10	mg/kg			0.0000964	0.0000176						0.00000579	0.0000165
PCB 100	mg/kg											
PCB 101	mg/kg											
PCB 102	mg/kg			0.00191	0.0000506						0.0000467	0.0000808
PCB 103	mg/kg			0.000231	0.000038						0.0000308	0.0000492
PCB 104	mg/kg			0.00000744	0.00000302						0.00000282	0.00000513
PCB 105	mg/kg			0.00516	0.00038						0.000218	0.000435
PCB 106	mg/kg			0.0000264	0.00000537						0.00000506	0.0000124
PCB 107	mg/kg											
PCB 107/123	mg/kg											
PCB 108	mg/kg											
PCB 109	mg/kg			0.00108	0.000104						0.0000613	0.000123
PCB 11	mg/kg			0.00072	0.000683						0.000141	0.000443
PCB 110	mg/kg			0.0168	0.00000835						0.00000486	0.00177
PCB 111	mg/kg			0.0000245	0.00000808						0.0000215	0.0000115
PCB 112	mg/kg			0.0000261	0.0000061						0.000005	0.0000122
PCB 113	mg/kg											
PCB 114	mg/kg			0.000309	0.0000242						0.0000116	0.0000236
PCB 115	mg/kg			0.0000267	0.00000879						0.0000544	0.0000196
PCB 116	mg/kg											
PCB 117	mg/kg			0.00306	0.000258						0.00014	0.0000343
PCB 118	mg/kg			0.0114	0.000944						0.000534	0.00106
PCB 119	mg/kg											
PCB 12	mg/kg											
PCB 120	mg/kg			0.0000657	0.0000168						0.00000481	0.0000259
PCB 121	mg/kg			0.0000247	0.00000812						0.00000473	0.0000116
PCB 121/95/88	mg/kg											
PCB 122	mg/kg			0.000243	0.0000204						0.0000109	0.0000214
PCB 123	mg/kg			0.000254	0.0000191						0.0000109	0.0000208
PCB 124	mg/kg											
PCB 125	mg/kg											
PCB 126	mg/kg			0.0000438	0.00000646						0.00000338	0.0000101
PCB 127	mg/kg			0.0000298	0.00000856						0.00000598	0.0000142
PCB 128	mg/kg											
PCB 129	mg/kg											
PCB 129/158	mg/kg											
PCB 13	mg/kg											
PCB 130	mg/kg			0.000889	0.000144						0.000105	0.000188
PCB 130/164	mg/kg											
PCB 131	mg/kg			0.000194	0.00000729						0.0000135	0.0000261
PCB 132	mg/kg			0.00452	0.000569						0.000424	0.000739
PCB 133	mg/kg			0.000277	0.0000662						0.0000505	0.0000872
PCB 134	mg/kg			0.000855	0.000102						0.0000817	0.000144
PCB 135	mg/kg											



Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D16-BOR-11-(7.0-7.5)	D16-BOR-11-(7.0-7.5)-D	D16-BOR-12-(0.5-1.0)	D16-BOR-12-(0-0.5)	D16-BOR-12-(3.2-3.7)	D16-BOR-12-(3.2-3.7)-D	D16-BOR-12-(6.3-6.8)	D16-BOR-12-(8.6-9.1)	D16-BOR-12-(9.1-9.3)	D16-BOR-13-(0.5-1.0)	D16-BOR-13-(0-0.5)
Chemical	Units	D16-BOR-11 7.00-7.50 FS 11/7/2017	D16-BOR-11 7.00-7.50 DUP 11/7/2017	D16-BOR-12 0.50-1.00 FS 11/6/2017	D16-BOR-12 0.00-0.50 FS 11/6/2017	D16-BOR-12 3.20-3.70 FS 11/6/2017	D16-BOR-12 3.20-3.70 DUP 11/6/2017	D16-BOR-12 6.30-6.80 FS 11/6/2017	D16-BOR-12 8.60-9.10 FS 11/6/2017	D16-BOR-12 9.10-9.30 FS 11/6/2017	D16-BOR-13 0.50-1.00 FS 11/6/2017	D16-BOR-13 0.00-0.50 FS 11/6/2017
PCB 201	mg/kg			0.000439	0.000115						0.000106	0.000151
PCB 202	mg/kg			0.0012	0.00031						0.000311	0.000427
PCB 203	mg/kg			0.00228	0.000406						0.000313	0.000477
PCB 204	mg/kg			0.00000775	0.00000654						0.0000038	0.0000079
PCB 204/200	mg/kg											
PCB 205	mg/kg			0.000108	0.000023						0.0000189	0.0000291
PCB 206	mg/kg			0.0104	0.00316						0.00392	0.0049
PCB 207	mg/kg			0.000873	0.000277						0.0003	0.000409
PCB 208	mg/kg			0.00438	0.00145						0.00186	0.00222
PCB 209	mg/kg			0.0156	0.00462						0.00779	0.00765
PCB 21	mg/kg											
PCB 21/20	mg/kg											
PCB 22	mg/kg			0.00521	0.000379						0.000239	0.000311
PCB 23	mg/kg			0.0000724	0.0000363						0.00000507	0.0000283
PCB 24	mg/kg			0.000408	0.00013						0.000018	0.0000923
PCB 25	mg/kg			0.00159	0.000399						0.0000671	0.000195
PCB 26	mg/kg											
PCB 27	mg/kg			0.001	0.000167						0.0000327	0.0000813
PCB 28	mg/kg											
PCB 29	mg/kg											
PCB 3	mg/kg			0.00115	0.000825						0.000194	0.001
PCB 30	mg/kg											
PCB 31	mg/kg			0.0127	0.000908						0.000237	0.000734
PCB 32	mg/kg			0.00421	0.000204						0.0000689	0.000163
PCB 33	mg/kg											
PCB 34	mg/kg			0.000195	0.0000862						0.0000158	0.0000768
PCB 35	mg/kg			0.00213	0.000246						0.000176	0.000258
PCB 36	mg/kg			0.0000536	0.0000772						0.0000143	0.0000664
PCB 37	mg/kg			0.00532	0.00101						0.000329	0.00103
PCB 38	mg/kg			0.0000533	0.00000938						0.0000017 U	0.00000273 U
PCB 39	mg/kg			0.000243	0.000145						0.0000281	0.000157
PCB 4	mg/kg			0.00388	0.000592						0.000228	0.000488
PCB 4/10	mg/kg											
PCB 40	mg/kg											
PCB 41	mg/kg			0.00135	0.000057						0.00000165 U	0.0000369
PCB 42	mg/kg			0.0059	0.000305						0.000147	0.000293
PCB 43	mg/kg			0.000953	0.0000485						0.0000143	0.0000374
PCB 44	mg/kg											
PCB 45	mg/kg			0.00339	0.000154						0.0000585	0.00012
PCB 46	mg/kg			0.00147	0.0000738						0.0000365	0.0000645
PCB 47	mg/kg											
PCB 48	mg/kg			0.00435	0.000175						0.0000514	0.000116
PCB 49	mg/kg											
PCB 5	mg/kg			0.00142	0.000198						0.000182	0.000211
PCB 50	mg/kg											
PCB 51	mg/kg			0.00111	0.000101						0.0000931	0.000157
PCB 52	mg/kg			0.0236	0.00122						0.00062	0.00123
PCB 53	mg/kg											
PCB 54	mg/kg			0.0000533	0.0000103						0.00000923	0.0000138
PCB 55	mg/kg			0.0000277 U	0.000018						0.00000364 U	0.0000158
PCB 56	mg/kg			0.0156	0.000535						0.000918	0.000528
PCB 57	mg/kg			0.000107	0.0000103						0.0000032	0.00000966
PCB 58	mg/kg			0.0000857	0.0000102						0.00000515	0.0000113
PCB 59	mg/kg											
PCB 6	mg/kg			0.0034	0.000575						0.000183	0.00054
PCB 60	mg/kg			0.00306	0.000148						0.000047	0.000114
PCB 61	mg/kg											
PCB 62	mg/kg											
PCB 63	mg/kg			0.00068	0.000042						0.0000164	0.0000423
PCB 64	mg/kg			0.00815	0.000416						0.000174	0.000376
PCB 65	mg/kg											
PCB 65/75/62	mg/kg											
PCB 66	mg/kg			0.0172	0.000875						0.00039	0.000867
PCB 67	mg/kg			0.000646	0.0000407						0.0000149	0.0000363
PCB 67/58	mg/kg											
PCB 68	mg/kg			0.000123	0.0000341						0.0000415	0.0000786
PCB 68/64	mg/kg											
PCB 69	mg/kg											
PCB 7	mg/kg			0.000253	0.0000867						0.0000193	0.0000909
PCB 70	mg/kg											
PCB 71	mg/kg											
PCB 72	mg/kg			0.000195	0.000031						0.0000161	0.0000369
PCB 73	mg/kg			0.00000159 U	0.00000987						0.0000105	0.0000141
PCB 73/46	mg/kg											
PCB 74	mg/kg											
PCB 75	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D16-BOR-11-(7.0-7.5)	D16-BOR-11-(7.0-7.5)-D	D16-BOR-12-(0.5-1.0)	D16-BOR-12-(0-0.5)	D16-BOR-12-(3.2-3.7)	D16-BOR-12-(3.2-3.7)-D	D16-BOR-12-(6.3-6.8)	D16-BOR-12-(8.6-9.1)	D16-BOR-12-(9.1-9.3)	D16-BOR-13-(0.5-1.0)	D16-BOR-13-(0-0.5)
Chemical	Units	D16-BOR-11 7.00-7.50 FS 11/7/2017	D16-BOR-11 7.00-7.50 DUP 11/7/2017	D16-BOR-12 0.50-1.00 FS 11/6/2017	D16-BOR-12 0.00-0.50 FS 11/6/2017	D16-BOR-12 3.20-3.70 FS 11/6/2017	D16-BOR-12 3.20-3.70 DUP 11/6/2017	D16-BOR-12 6.30-6.80 FS 11/6/2017	D16-BOR-12 8.60-9.10 FS 11/6/2017	D16-BOR-12 9.10-9.30 FS 11/6/2017	D16-BOR-13 0.50-1.00 FS 11/6/2017	D16-BOR-13 0.00-0.50 FS 11/6/2017
PCB 76	mg/kg			0.00407	0.000188						0.000301	0.000225
PCB 77	mg/kg											
PCB 78	mg/kg			0.0000303 U	0.0000408 U						0.0000399 U	0.0000516 U
PCB 79	mg/kg			0.000232	0.0000333						0.0000135	0.000035
PCB 8	mg/kg			0.0052	0.000973						0.000261	0.00094
PCB 80	mg/kg			0.000119	0.0000107						0.00000784	0.0000133
PCB 81	mg/kg			0.0000504	0.00000705						0.00000352 U	0.00000446
PCB 82	mg/kg			0.00274	0.000168						0.00000814 U	0.000166
PCB 83	mg/kg			0.0012	0.0000848						0.000819	0.000104
PCB 83/125/112	mg/kg											
PCB 84	mg/kg			0.00563	0.000396						0.000269	0.000467
PCB 85	mg/kg											
PCB 86	mg/kg											
PCB 86/109	mg/kg											
PCB 87	mg/kg											
PCB 87/111	mg/kg											
PCB 88	mg/kg			0.00348	0.00032						0.000255	0.000403
PCB 89	mg/kg			0.000451	0.0000215						0.0000136	0.000018 U
PCB 89/84	mg/kg											
PCB 9	mg/kg			0.000769	0.000409						0.0000701	0.000397
PCB 90	mg/kg											
PCB 91	mg/kg			0.0000286 U	0.0000943 U						0.00000549 U	0.0000134 U
PCB 92	mg/kg			0.00325	0.000315						0.000221	0.000403
PCB 93	mg/kg											
PCB 94	mg/kg			0.000164	0.0000157						0.0000116	0.0000206
PCB 95	mg/kg			0.0133	0.00108						0.000768	0.00133
PCB 96	mg/kg			0.000258	0.00002						0.0000121	0.0000196
PCB 97	mg/kg											
PCB 98	mg/kg			0.0000423 U	0.0000414						0.00000812 U	0.0000198 U
PCB 99	mg/kg			0.00795	0.00076						0.00000589 U	0.00089
PCB-100/93	mg/kg			0.000223	0.0000408						0.0000339	0.0000616
PCB-107/124	mg/kg			0.000483	0.0000411						0.0000201	0.0000431
PCB-108/119/86/97/125/87	mg/kg			0.0127	0.000884						0.000502	0.000958
PCB-113/90/101	mg/kg			0.0156	0.0014						0.000916	0.00166
PCB-116/85	mg/kg			0.0000314 U	0.0019						0.00116	0.000281
PCB-128/166	mg/kg			0.00198	0.000289						0.000211	0.000357
PCB-13/12	mg/kg			0.00269	0.00116						0.000312	0.00125
PCB-139/140	mg/kg			0.000248	0.0000329						0.0000271	0.0000474
PCB-147/149	mg/kg			0.0112	0.00169						0.00139	0.00227
PCB-151/135	mg/kg			0.00517	0.000714						0.000588	0.000979
PCB-153/168	mg/kg			0.0103	0.00156						0.00122	0.00206
PCB-156/157	mg/kg			0.00128	0.000163						0.0000992	0.00018
PCB-163/138/129	mg/kg			0.0125	0.00177						0.00123	0.00219
PCB-171/173	mg/kg			0.00104	0.000164						0.000134	0.000199
PCB-180/193	mg/kg			0.00696	0.00112						0.000908	0.00135
PCB-198/199	mg/kg			0.00439	0.000997						0.000885	0.00131
PCB-21/33	mg/kg			0.0109	0.000659						0.000417	0.000551
PCB-26/29	mg/kg			0.0038	0.000335						0.0000912	0.000258
PCB-28/20	mg/kg			0.0153	0.000953						0.000388	0.00079
PCB-30/18	mg/kg			0.0152	0.00069						0.000173	0.000476
PCB-44/47/65	mg/kg			0.0214	0.00113						0.000596	0.00115
PCB-50/53	mg/kg			0.00349	0.000183						0.0000947	0.000173
PCB-59/62/75	mg/kg			0.00195	0.000108						0.0000453	0.0000977
PCB-61/70/74/76	mg/kg			0.0298	0.00141						0.000621	0.00137
PCB-69/49	mg/kg			0.0118	0.000698						0.000381	0.000744
PCB-71/40	mg/kg			0.0104	0.000569						0.00048	0.000644
PCB-90/101	mg/kg											
Pentachlorobiphenyl	mg/kg											
Tetrachlorobiphenyl	mg/kg											
Total Decachlorobiphenyls (congeners)	mg/kg											
Total Dichlorobiphenyls (congeners)	mg/kg			0.0207	0.00551						0.0016	0.00522
Total Heptachlorobiphenyls (congeners)	mg/kg			0.0289	0.00492						0.00412	0.0061
Total Hexachlorobiphenyls (congeners)	mg/kg			0.0602	0.00873						0.00666	0.0114
Total Monochlorobiphenyls (congeners)	mg/kg			0.00417	0.00257						0.000666	0.00282
Total Nonachlorobiphenyls (congeners)	mg/kg			0.0157	0.00488						0.00608	0.00754
Total Octachlorobiphenyls (congeners)	mg/kg			0.0139	0.00277						0.00241	0.00353
Total PCB (congeners)	mg/kg			0.53437	0.05921						0.043476	0.06927
Total Pentachlorobiphenyls (congeners)	mg/kg			0.108	0.00935						0.00614	0.0105
Total Tetrachlorobiphenyls (congeners)	mg/kg			0.171	0.00866						0.00521	0.00865
Total Trichlorobiphenyls (congeners)	mg/kg			0.0962	0.0072						0.0028	0.00586
Trichlorobiphenyl (total)	mg/kg											
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>												
Benzo[e]pyrene	mg/kg											
Chrysene, 1-methyl-	mg/kg											
Naphthalene, 1-methyl-	mg/kg											
Pyrene, 1-methyl-	mg/kg											0.32

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	Field Sample ID	MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA	
		D16-BOR-11-(7.0-7.5)	D16-BOR-11-(7.0-7.5)-D	D16-BOR-12-(0.5-1.0)	D16-BOR-12-(0-0.5)	D16-BOR-12-(3.2-3.7)	D16-BOR-12-(3.2-3.7)-D	D16-BOR-12-(6.3-6.8)	D16-BOR-12-(8.6-9.1)	D16-BOR-12-(9.1-9.3)	D16-BOR-13-(0.5-1.0)	D16-BOR-13-(0-0.5)			
Location ID	D16-BOR-11	D16-BOR-11	D16-BOR-12	D16-BOR-12	D16-BOR-12	D16-BOR-12	D16-BOR-12	D16-BOR-12	D16-BOR-12	D16-BOR-12	D16-BOR-13	D16-BOR-13			
Depth Interval (ft)	7.00-7.50	7.00-7.50	0.50-1.00	0.00-0.50	3.20-3.70	3.20-3.70	6.30-6.80	8.60-9.10	9.10-9.30	0.50-1.00	0.00-0.50				
Sample Purpose	FS	DUP	FS	FS	FS	FS	FS	FS	FS	FS	FS				
Date	11/7/2017	11/7/2017	11/6/2017	11/6/2017	11/6/2017	11/6/2017	11/6/2017	11/6/2017	11/6/2017	11/6/2017	11/6/2017				
Chemical Class	Chemical	Units													
<b>Polycyclic Aromatic Hydrocarbons</b>															
Acenaphthene	mg/kg	0.034	0.017	0.038	0.29	0.004	U	0.004	U	0.004	U	0.004	U	0.044	0.028
Acenaphthylene	mg/kg	0.017	0.009	0.033	U	0.03		0.004	U	0.004	U	0.004	U	0.024	0.013
Anthracene	mg/kg	0.019	0.019	0.065	0.088	0.004	U	0.004	U	0.004	U	0.004	U	0.051	0.058
Benzo(A)Anthracene	mg/kg	0.004	U	0.004	U	0.096	0.14	0.004	U	0.004	U	0.004	U	0.054	0.13
Benzo(B)Fluoranthene	mg/kg	0.004	U	0.004	U	0.12	0.18	0.004	U	0.004	U	0.004	U	0.098	0.13
Benzo(G,H,I)Perylene	mg/kg	0.004	U	0.004	U	0.072	0.097	0.004	U	0.004	U	0.004	U	0.058	0.063
Benzo(K)Fluoranthene	mg/kg	0.004	U	0.004	U	0.059	0.083	0.004	U	0.004	U	0.004	U	0.043	0.065
Benzo(A)Pyrene	mg/kg	0.004	U	0.004	U	0.1	0.15	0.004	U	0.004	U	0.004	U	0.071	0.096
Chrysene	mg/kg	0.004	U	0.004	U	0.17	0.22	0.004	U	0.004	U	0.004	U	0.085	0.26
Dibenz(A,H)Anthracene	mg/kg	0.004	U	0.004	U	0.033	U	0.029		0.004	U	0.004	U	0.014	0.02
Fluoranthene	mg/kg	0.018	0.019	0.17	0.31	0.004	U	0.004	U	0.004	U	0.004	U	0.13	0.24
Fluorene	mg/kg	0.037	0.024	0.057	0.29	0.004	U	0.004	U	0.004	U	0.004	U	0.044	0.03
Indeno (1,2,3-CD) Pyrene	mg/kg	0.004	U	0.004	U	0.063	0.08	0.004	U	0.004	U	0.004	U	0.041	0.051
Naphthalene	mg/kg	0.004	0.021	0.51	0.004	0.004	U	0.004	U	0.004	U	0.01	0.007	0.31	0.072
Phenanthrene	mg/kg	0.09	0.072	0.14	0.27	0.004	U	0.004	U	0.004	U	0.004	U	0.11	0.18
Pyrene	mg/kg	0.011	0.014	0.18	0.31	0.004	U	0.004	U	0.004	U	0.004	U	0.13	0.2
Total PAHs (Detections + 1/2 MDL)	mg/kg	0.246	0.211	1.573	3.077	0.034		0.032	U	0.032	U	0.04	0.037	1.307	1.636
Total PAHs (Detections Only)	mg/kg	0.23	0.195	1.54	3.077	0.004		0.032	U	0.032	U	0.01	0.007	1.307	1.636
<b>Semivolatile Organic Compounds - TICs</b>															
1,2,4-Trithiolane	mg/kg														
1,4-Benzenediol, 2-chloro-	mg/kg														
11H-Benzo[b]fluorene	mg/kg														
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg														
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg														
3-PENTEN-2-ONE, 4-METHYL-	mg/kg														
7H-Benz[de]anthracen-7-one	mg/kg														
9,10-Anthracenedione	mg/kg														
9-Octadecanamide, (Z)-	mg/kg														
Acetamide, 2-chloro-N-(ethox	mg/kg													0.62	
Alachlor	mg/kg							1						1.6	
Benzenamine, 3-methyl-	mg/kg														
Benzenamine, 4,4',4"-methy	mg/kg			2.4											
Benzenamine, 4,4'-methyleneb	mg/kg			2.3											
Benzene, 1,2,3,4-tetrachloro	mg/kg														
Benzene, 1,2,3,5-tetrachloro	mg/kg														
Benzene, 1,2,3-trichloro-	mg/kg														
Benzene, 1,3,5-trichloro-	mg/kg														
Benzene, 1,3-bis(1-methyleth	mg/kg														
Benzene, 1,4-bis(1-methyleth	mg/kg														
Benzofuran, 2,3-dihydro-	mg/kg														
CYCLIC OCTAATOMIC SULFUR	mg/kg			11	5									0.78	5.2
Diphenyl Ether	mg/kg														
Docosane	mg/kg														
Heneicosane	mg/kg														
Hexacosane	mg/kg														
Hexadecane	mg/kg														
Hexatriacontane	mg/kg														
m-Chloroaniline	mg/kg														
N,N-Diethylaniline	mg/kg														
n-Hexadecanoic acid	mg/kg			1.8	1.4							0.56		0.44	
Nonadecane	mg/kg														
o-Chloroaniline	mg/kg														
Octacosane	mg/kg													0.35	0.66
Octadecane	mg/kg														
Octadecane, 1-chloro-	mg/kg														
Octadecanoic acid	mg/kg														
Parachlorophenol	mg/kg														
Pentadecane	mg/kg														
Perylene	mg/kg														
Phenol, 2,5-dichloro-	mg/kg														
Phenol, 3-chloro-	mg/kg														
Phenol, 4,4'-(1-methylethyl)	mg/kg			6.9	1.4	0.21		0.15					0.7	0.88	
Tetracosane	mg/kg														
Tetradecane	mg/kg														
Tetraethylene glycol	mg/kg														
Total SVOC TICs	mg/kg	1.9	0.7	44	52	0.91		0.85		0.8		0.65	1.4	42	16
Triacontane	mg/kg														
Tributyl phosphate	mg/kg														
Tridecanoic acid	mg/kg														
Triphenyl phosphate	mg/kg														
UNKNOWN	mg/kg	0.18666667		1.6375	1.971538462									2.248181818	0.62875
Unknown acid	mg/kg														
Unknown Alcohol	mg/kg														
Unknown Aldol Condensate	mg/kg	0.56	0.55	2.5	3.9	0.46		0.46		0.51		0.39	0.57	3.9	1.4
UNKNOWN ALKANE	mg/kg														

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA D16-BOR-11-(7.0-7.5)		MZ-FPA D16-BOR-11-(7.0-7.5)-D		MZ-FPA D16-BOR-12-(0.5-1.0)		MZ-FPA D16-BOR-12-(0-0.5)		MZ-FPA D16-BOR-12-(3.2-3.7)		MZ-FPA D16-BOR-12-(3.2-3.7)-D		MZ-FPA D16-BOR-12-(6.3-6.8)		MZ-FPA D16-BOR-12-(8.6-9.1)		MZ-FPA D16-BOR-12-(9.1-9.3)		MZ-FPA D16-BOR-13-(0.5-1.0)		MZ-FPA D16-BOR-13-(0-0.5)		
		D16-BOR-11 7.00-7.50 FS 11/7/2017	D16-BOR-11 7.00-7.50 DUP 11/7/2017	D16-BOR-12 0.50-1.00 FS 11/6/2017	D16-BOR-12 0.00-0.50 FS 11/6/2017	D16-BOR-12 3.20-3.70 FS 11/6/2017	D16-BOR-12 3.20-3.70 DUP 11/6/2017	D16-BOR-12 6.30-6.80 FS 11/6/2017	D16-BOR-12 8.60-9.10 FS 11/6/2017	D16-BOR-12 9.10-9.30 FS 11/6/2017	D16-BOR-13 0.50-1.00 FS 11/6/2017	D16-BOR-13 0.00-0.50 FS 11/6/2017												
Unknown Alkene	mg/kg																							
Unknown Amide	mg/kg																							
Unknown Amine	mg/kg																							
UNKNOWN AROMATIC	mg/kg																							
Unknown Carboxylic Acid	mg/kg																							
Unknown Cycloalkane	mg/kg																							
Unknown Hydrocarbon	mg/kg																							
Unknown Ketone	mg/kg																							
Unknown PAH	mg/kg																							
UNKNOWN SILOXANE	mg/kg																							
<b>Semivolatile Organic Compounds</b>																								
1,2,4-Trichlorobenzene	mg/kg	0.018	U	0.018	U	0.17	U	0.12	U	0.018	U	0.018	U	0.018	U	0.018	U	0.019	U	0.14	U	0.047	U	
1,2-Diphenylhydrazine	mg/kg	0.018	U	0.018	U	0.17	U	0.03	U	0.018	U	0.018	U	0.018	U	0.018	U	0.019	U	0.033	U	0.031	U	
1,4-Dioxane	mg/kg	0.11	U	0.11	U	0.99	U	0.18	U	0.11	U	0.11	U	0.11	U	0.11	U	0.12	U	0.2	U	0.18	U	
1-Naphthylamine	mg/kg	0.18	U	0.18	U	1.7	U	0.3	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U	0.33	U	0.31	U	
2,3,4,6-Tetrachlorophenol	mg/kg	0.072	U	0.073	U	0.66	U	0.12	U	0.072	U	0.072	U	0.073	U	0.071	U	0.077	U	0.13	U	0.12	U	
2,4,5-Trichlorophenol	mg/kg	0.018	U	0.018	U	0.17	U	0.03	U	0.018	U	0.018	U	0.018	U	0.018	U	0.019	U	0.033	U	0.031	U	
2,4,6-Trichlorophenol	mg/kg	0.018	U	0.018	U	0.17	U	0.03	U	0.018	U	0.018	U	0.018	U	0.018	U	0.019	U	0.033	U	0.031	U	
2,4-Dichlorophenol	mg/kg	0.018	U	0.018	U	0.17	U	0.03	U	0.018	U	0.018	U	0.018	U	0.018	U	0.019	U	0.033	U	0.031	U	
2,4-Dimethylphenol	mg/kg	0.018	U	0.018	U	0.17	U	0.03	U	0.018	U	0.018	U	0.018	U	0.018	U	0.019	U	0.033	U	0.031	U	
2,4-Dinitrophenol	mg/kg	0.32	U	0.33	U	3	U	0.55	U	0.32	U	0.33	U	0.33	U	0.32	U	0.35	U	0.59	U	0.55	U	
2,4-Dinitrotoluene	mg/kg	0.072	U	0.073	U	0.66	U	0.12	U	0.072	U	0.072	U	0.073	U	0.071	U	0.077	U	0.13	U	0.12	U	
2,6-Dinitrotoluene	mg/kg	0.018	U	0.018	U	0.17	U	0.03	U	0.018	U	0.018	U	0.018	U	0.018	U	0.019	U	0.033	U	0.031	U	
2-Chloronaphthalene	mg/kg	0.007	U	0.007	U	0.066	U	0.012	U	0.007	U	0.007	U	0.007	U	0.007	U	0.008	U	0.013	U	0.012	U	
2-Chlorophenol	mg/kg	0.018	U	0.018	U	0.17	U	0.03	U	0.018	U	0.018	U	0.018	U	0.018	U	0.019	U	0.033	U	0.031	U	
2-Methylnaphthalene	mg/kg	0.018	U	0.008	U	0.11	U	0.38	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.2	U	0.046	U	
2-Methylphenol (O-Cresol)	mg/kg	0.018	U	0.018	U	0.17	U	0.03	U	0.018	U	0.018	U	0.018	U	0.018	U	0.019	U	0.033	U	0.031	U	
2-Naphthylamine	mg/kg	0.18	U	0.18	U	1.7	U	0.3	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U	0.33	U	0.31	U	
2-Nitroaniline	mg/kg	0.018	U	0.018	U	0.17	U	0.03	U	0.018	U	0.018	U	0.018	U	0.018	U	0.019	U	0.033	U	0.031	U	
2-Nitrophenol	mg/kg	0.018	U	0.018	U	0.17	U	0.03	U	0.018	U	0.018	U	0.018	U	0.018	U	0.019	U	0.033	U	0.031	U	
3,3'-Dichlorobenzidine	mg/kg	0.11	U	0.11	U	0.99	U	0.18	U	0.11	U	0.11	U	0.11	U	0.11	U	0.12	U	0.2	U	0.18	U	
3,3'-Dimethylbenzidine	mg/kg																							
3-Nitroaniline	mg/kg	0.072	U	0.073	U	0.66	U	0.12	U	0.072	U	0.072	U	0.073	U	0.071	U	0.077	U	0.13	U	0.12	U	
4,6-Dinitro-2-Methylphenol	mg/kg	0.18	U	0.18	U	1.7	U	0.3	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U	0.33	U	0.31	U	
4-Aminobiphenyl	mg/kg	0.18	U	0.18	U	1.7	U	0.3	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U	0.33	U	0.31	U	
4-Bromophenyl Phenyl Ether	mg/kg	0.018	U	0.018	U	0.17	U	0.03	U	0.018	U	0.018	U	0.018	U	0.018	U	0.019	U	0.033	U	0.031	U	
4-Chloro-3-Methylphenol	mg/kg	0.018	U	0.018	U	0.17	U	0.03	U	0.018	U	0.018	U	0.018	U	0.018	U	0.019	U	0.033	U	0.031	U	
4-Chloroaniline	mg/kg	0.036	U	0.036	U	1.5	U	0.061	U	0.036	U	0.036	U	0.037	U	0.035	U	0.038	U	0.066	U	0.062	U	
4-Chlorophenyl Phenyl Ether	mg/kg	0.018	U	0.018	U	0.17	U	0.03	U	0.018	U	0.018	U	0.018	U	0.018	U	0.019	U	0.033	U	0.031	U	
4-Methylphenol (P-Cresol)	mg/kg	0.018	U	0.018	U	0.17	U	0.12	U	0.018	U	0.018	U	0.018	U	0.018	U	0.019	U	0.15	U	0.055	U	
4-Nitroaniline	mg/kg	0.072	U	0.073	U	0.66	U	0.12	U	0.072	U	0.072	U	0.073	U	0.071	U	0.077	U	0.13	U	0.12	U	
4-Nitrophenol	mg/kg	0.18	U	0.18	U	1.7	U	0.3	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U	0.33	U	0.31	U	
Acetophenone	mg/kg	0.018	U	0.018	U	0.17	U	0.03	U	0.018	U	0.018	U	0.018	U	0.018	U	0.019	U	0.04	U	0.031	U	
Aniline	mg/kg	0.18	U	0.18	U	1.7	U	0.3	U	0.18	U	0.18	U	0.18	U	0.18	U	0.19	U	0.33	U	0.31	U	
Benzidine	mg/kg	0.27	U	0.27	U	2.5	U	0.46	U	0.27	U	0.27	U	0.27	U	0.26	U	0.26	U	0.49	U	0.46	U	
Biphenyl	mg/kg	0.018	U	0.018	U	0.17	U	0.1	U	0.018	U	0.018	U	0.018	U	0.018	U	0.019	U	0.082	U	0.031	U	
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg	0.018	U	0.018	U	0.17	U	0.03	U	0.018	U	0.018	U	0.018	U	0.018	U	0.019	U	0.033	U	0.031	U	
Bis(2-Chloroethoxy)Methane	mg/kg	0.018	U	0.018	U	0.17	U	0.03	U	0.018	U	0.018	U	0.018	U	0.018	U	0.019	U	0.033	U	0.031	U	
Bis(2-Chloroethyl)Ether	mg/kg	0.018	U	0.018	U	0.17	U	0.03	U	0.018	U	0.018	U	0.018	U	0.018	U	0.019	U	0.033	U	0.031	U	
Bis(2-Chloroisopropyl)Ether	mg/kg																							
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.072	U	0.073	U	0.66	U	0.12	U	0.072	U	0.072	U	0.073	U	0.071	U	0.077	U	0.13	U	0.12	U	
Butyl Benzyl Phthalate	mg/kg	0.072	U	0.073	U	0.66	U	0.12	U	0.072	U	0.072	U	0.073	U	0.071	U	0.077	U	0.13	U	0.12	U	
Carbazole	mg/kg	0.018	U	0.018	U	0.17	U	0.036	U	0.018	U	0.018	U	0.018	U	0.018	U	0.019	U	0.033	U	0.031	U	
Dibenzofuran	mg/kg	0.026	U	0.018	U	0.17	U	0.26	U	0.018	U	0.018	U	0.018	U	0.018	U	0.019	U	0.042	U	0.031	U	
Diethyl Phthalate	mg/kg	0.072	U	0.073	U	0.66	U	0.12	U	0.072	U	0.072	U	0.073	U	0.071	U	0.077	U	0.13	U	0.12	U	
Dimethyl Phthalate	mg/kg	0.072	U	0.073	U	0.66	U	0.12	U	0.072	U	0.072	U	0.073	U	0.071	U	0.077	U	0.13	U	0.12	U	
Di-N-Butyl Phthalate	mg/kg	0.072	U	0.073	U	0.66	U	0.12	U	0.072	U	0.072	U	0.073	U	0.071	U	0.077	U	0.13	U	0.12	U	
Diphenyl Ether	mg/kg	0.018	U	0.018	U	0.17	U	0.03	U	0.018	U	0.018	U	0.018	U	0.018	U	0.019	U	0.081	U	0.031	U	
Hexachlorobenzene	mg/kg	0.004	U	0.004	U	0.033	U	0.006	U	0.004	U	0.004	U	0.004	U	0.004	U	0.004	U	0.007	U	0.008	U	
Hexachlorobutadiene	mg/kg	0.018	U	0.018	U	0.17	U	0.0																

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA	
		D16-BOR-11-(7.0-7.5)	D16-BOR-11-(7.0-7.5)-D	D16-BOR-12-(0.5-1.0)	D16-BOR-12-(0-0.5)	D16-BOR-12-(3.2-3.7)	D16-BOR-12-(3.2-3.7)-D	D16-BOR-12-(6.3-6.8)	D16-BOR-12-(8.6-9.1)	D16-BOR-12-(9.1-9.3)	D16-BOR-13-(0.5-1.0)	D16-BOR-13-(0-0.5)	Units				
1-Butene																	
1-Heptene																	
1-Propene, 2-methyl-																	
Azulene																	
BENZENE, 1,2,4-TRICHLORO-																	
BENZENE, 1,2-DICHLORO-																	
BENZENE, 1,4-DICHLORO-																	
Camphene																	
CYCLOHEXANE																	
Cyclohexane, methyl-																	
Cyclotrisiloxane, hexamethyl																	
Diphenyl Ether																	
Ethane, 1,1,2,2-tetrachloro-																	
ETHANE, 1,2-DICHLORO-1,1,2-																	
Ethane, 1,2-dichloro-1,1-dif																	
Ethene, 1,1-dichloro-2,2-dif																	
Hexane, 2-methyl-																	
Hexane, 3-methyl-																	
METHANE, CHLOROFLUORO-																	
Naphthalene																	
NAPHTHALENE, 2-METHYL-																	
Nonanal																	
Norflurane																	
Pentane, 2,3-dimethyl-																	
Phenol, 4-(1,1,3,3-tetrameth																	
Propene																	
Sulfur dioxide					0.065												
Tridecane																	
UNKNOWN			0.007	0.052636364	0.29										0.16	0.33	
UNKNOWN ALICYCLIC																	
UNKNOWN ALIPHATIC																	
UNKNOWN ALKANE																	
UNKNOWN AROMATIC																	
UNKNOWN SILOXANE																	
<b>Volatile Organic Compounds</b>																	
1,1,1,2-Tetrachloroethane	mg/kg	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.003 U	0.002 U	0.002 U
1,1,1-Trichloroethane	mg/kg	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.003 U	0.002 U	0.002 U
1,1,1-Trichlorotrifluoroethane	mg/kg	0.006 U	0.005 U	0.012 U	0.011 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.005 U	0.012 U	0.011 U	0.011 U
1,1,2,2-Tetrachloroethane	mg/kg	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.003 U	0.002 U	0.002 U
1,1,2-Trichloroethane	mg/kg	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.003 U	0.002 U	0.002 U
1,1,2-Trichlorotrifluoroethane	mg/kg	0.002 U	0.002 U	0.51	0.3	0.32	0.046	0.003	0.003	0.005	1.1	0.005 U	0.005 U	0.005 U	0.004 U	0.004 U	0.004 U
1,1,2-Trifluoroethane	mg/kg	0.002 U	0.002 U	0.005 U	0.005 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.005 U	0.004 U	0.004 U
1,1-Dichloro-1-Fluoroethane	mg/kg	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U
1,1-Dichloroethane	mg/kg	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U
1,1-Dichloroethene	mg/kg	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U
1,1-Dichloropropene	mg/kg	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U
1,2,4-Trimethylbenzene	mg/kg	0.001 U	0.001 U	0.004	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.003 U	0.002 U	0.002 U
1,2-Dibromoethane (EDB)	mg/kg	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.003 U	0.002 U	0.002 U
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg	0.001 U	0.001 U	0.015	0.014	0.004	0.004	0.004	0.004	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U
1,2-Dichloro-1-Fluoroethane	mg/kg	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U
1,2-Dichlorobenzene	mg/kg	0.001 U	0.001 U	0.038	0.013	0.011	0.011	0.014	0.003	0.004	0.15	0.009	0.009	0.009	0.005	0.005	0.005
1,2-Dichloroethane	mg/kg	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.003 U	0.002 U	0.002 U
1,2-Dichloroethene	mg/kg	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U
1,2-Dichloropropane	mg/kg	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U
1,2-Dichlorotetrafluoroethane	mg/kg	0.002 U	0.002 U	0.005 U	0.009	0.002 U	0.003	0.002 U	0.002 U	0.002 U	0.028	0.005 U	0.005 U	0.005 U	0.004 U	0.004 U	0.004 U
1,3,5-Trimethylbenzene	mg/kg	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U
1,3-Dichlorobenzene	mg/kg	0.001 U	0.001 U	0.003	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.003 U	0.002 U	0.002 U
1,4-Dichlorobenzene	mg/kg	0.001 U	0.001 U	0.008	0.006	0.005	0.007	0.007	0.006	0.006	0.24	0.004	0.004	0.004	0.003 U	0.003 U	0.003 U
1-Chloro-1,1-Difluoroethane	mg/kg	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002	0.002	0.002	0.002	0.002 U	0.002 U	0.002 U
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg	0.001 U	0.001 U	0.078	0.065	0.03	0.027	0.027	0.001 U	0.001 U	0.49	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U
2-Chloro-1,1,1-Trifluoroethane	mg/kg	0.002 U	0.002 U	0.053	0.009	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.1	0.005 U	0.005 U	0.005 U	0.004 U	0.004 U	0.004 U
2-Chloroethyl Vinyl Ether	mg/kg																
2-Chlorotoluene	mg/kg	0.001 U	0.001 U	0.004	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.008	0.002 U	0.002 U
2-Hexanone	mg/kg	0.003 U	0.003 U	0.007 U	0.007 U	0.003 U	0.003 U	0.003 U	0.003 U	0.003 U	0.15	0.003 U	0.003 U	0.003 U	0.007 U	0.007 U	0.007 U
4-Chlorotoluene	mg/kg	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.003 U	0.002 U	0.002 U
4-Isopropyltoluene	mg/kg	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.003 U	0.002 U	0.002 U
Acetone	mg/kg	0.053	0.05	0.25	0.14	0.032	0.034	0.035	0.035	0.035	0.35	0.39	0.39	0.39	0.14	0.14	0.14
Acrolein	mg/kg																
Acrylonitrile	mg/kg																
Benzene	mg/kg	0.0005 U	0.0005 U	0.032	0.007	0.019	0.002	0.0007	0.001	0.001	0.82	0.001	0.001	0.001	0.001 U	0.001 U	0.001 U
Bromodichloromethane	mg/kg	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U
Bromoform	mg/kg																
Carbon Disulfide	mg/kg	0.001 U	0.001 U	0.01	0.009	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.05	0.01	0.01	0.01	0.006	0.006	0.006
Carbon Tetrachloride	mg/kg	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	0.001 U	0.064	0.003 U	0.003 U	0.003 U	0.002 U	0.002 U	0.002 U
CFC-1113	mg/kg	0.002 U	0.002 U	0.028	0.005 U	0.005	0.002 U	0.002 U	0.002 U	0.002 U	0.1	0.005 U	0.005 U	0.005 U	0.004 U	0.004 U	0.004 U
Chlorobenzene	mg/kg	0.001 U	0.001 U	0.15	0.028	0.089	0.053	0.013	0.025	0.025	4.3	0.11	0.11	0.11	0.006	0.006	0.006

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA D16-BOR-11-(7.0-7.5)		MZ-FPA D16-BOR-11-(7.0-7.5)-D		MZ-FPA D16-BOR-12-(0.5-1.0)		MZ-FPA D16-BOR-12-(0-0.5)		MZ-FPA D16-BOR-12-(3.2-3.7)		MZ-FPA D16-BOR-12-(3.2-3.7)-D		MZ-FPA D16-BOR-12-(6.3-6.8)		MZ-FPA D16-BOR-12-(8.6-9.1)		MZ-FPA D16-BOR-12-(9.1-9.3)		MZ-FPA D16-BOR-13-(0.5-1.0)		MZ-FPA D16-BOR-13-(0-0.5)	
		Units	D16-BOR-11 7.00-7.50 FS 11/7/2017	D16-BOR-11 7.00-7.50 DUP 11/7/2017	D16-BOR-12 0.50-1.00 FS 11/6/2017	D16-BOR-12 0.00-0.50 FS 11/6/2017	D16-BOR-12 3.20-3.70 FS 11/6/2017	D16-BOR-12 3.20-3.70 DUP 11/6/2017	D16-BOR-12 6.30-6.80 FS 11/6/2017	D16-BOR-12 8.60-9.10 FS 11/6/2017	D16-BOR-12 9.10-9.30 FS 11/6/2017	D16-BOR-13 0.50-1.00 FS 11/6/2017	D16-BOR-13 0.00-0.50 FS 11/6/2017										
Chlorodibromomethane	mg/kg	0.001	U	0.001	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.05	U	0.003	U	0.002	U
Chlorodifluoromethane	mg/kg	0.002	U	0.002	U	0.005	U	0.005	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.004	U
Chlorofluoromethane	mg/kg	0.001	U	0.001	U	0.045	U	0.007	U	0.001	U	0.001	U	0.001	U	0.001	U	0.004	U	0.002	U	0.002	U
Chloroform	mg/kg	0.001	U	0.001	U	0.009	U	0.002	U	0.008	U	0.001	U	0.001	U	0.001	U	0.059	U	0.003	U	0.002	U
Chloropentafluoroethane	mg/kg	0.017	U	0.016	U	0.036	U	0.034	U	0.016	U	0.016	U	0.016	U	0.016	U	0.016	U	0.035	U	0.033	U
cis-1,2-Dichloroethene	mg/kg	0.001	U	0.001	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.05	U	0.003	U	0.002	U
cis-1,3-Dichloropropene	mg/kg	0.001	U	0.001	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.05	U	0.003	U	0.002	U
Cumene	mg/kg	0.001	U	0.001	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.05	U	0.003	U	0.002	U
Dichlorodifluoromethane	mg/kg	0.002	U	0.002	U	0.007	U	0.005	U	0.002	U	0.002	U	0.002	U	0.002	U	0.1	U	0.005	U	0.004	U
Dichlorofluoromethane	mg/kg	0.002	U	0.002	U	0.067	U	0.042	U	0.014	U	0.002	U	0.002	U	0.002	U	0.1	U	0.005	U	0.004	U
Ethane	ug/L																						
Ethyl Chloride	mg/kg	0.002	U	0.002	U	0.005	U	0.005	U	0.002	U	0.002	U	0.002	U	0.002	U	0.1	U	0.005	U	0.004	U
Ethylbenzene	mg/kg	0.001	U	0.001	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.05	U	0.003	U	0.002	U
Fluoromethane	mg/kg	0.003	U	0.003	U	0.007	U	0.007	U	0.003	U	0.003	U	0.003	U	0.003	U	0.003	U	0.007	U	0.007	U
Hexane	mg/kg	0.001	U	0.001	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.05	U	0.003	U	0.002	U
Isobutyl Alcohol	mg/kg	0.11	U	0.11	U	0.25	U	0.23	U	0.11	U	0.11	U	0.1	U	0.1	U	0.1	U	0.27	U	0.22	U
Meta- And Para-Xylene	mg/kg	0.001	U	0.001	U	0.014	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.05	U	0.003	U	0.002	U
Methacrylonitrile	mg/kg	0.005	U	0.005	U	0.012	U	0.012	U	0.005	U	0.006	U	0.005	U	0.005	U	0.25	U	0.014	U	0.011	U
Methane	ug/L																						
Methyl Bromide	mg/kg																						
Methyl Chloride	mg/kg	0.002	U	0.002	U	0.005	U	0.005	U	0.002	U	0.002	U	0.002	U	0.002	U	0.1	U	0.005	U	0.004	U
Methyl Ethyl Ketone	mg/kg	0.004	U	0.004	U	0.03	U	0.013	U	0.004	U	0.005	U	0.004	U	0.004	U	0.2	U	0.047	U	0.012	U
Methyl Isobutyl Ketone	mg/kg	0.003	U	0.003	U	0.007	U	0.007	U	0.003	U	0.003	U	0.003	U	0.003	U	0.15	U	0.008	U	0.007	U
Methyl Methacrylate	mg/kg	0.001	U	0.001	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.05	U	0.003	U	0.002	U
Methyl Tertiary Butyl Ether	mg/kg	0.0005	U	0.0005	U	0.001	U	0.001	U	0.0005	U	0.0005	U	0.0005	U	0.0005	U	0.025	U	0.001	U	0.001	U
Methylene Chloride	mg/kg	0.002	U	0.002	U	0.008	U	0.005	U	0.009	U	0.003	U	0.002	U	0.002	U	0.1	U	0.03	U	0.004	U
N-Butylbenzene	mg/kg	0.001	U	0.001	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.05	U	0.003	U	0.002	U
N-Propylbenzene	mg/kg	0.001	U	0.001	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.05	U	0.003	U	0.002	U
Ortho-Xylene	mg/kg	0.001	U	0.001	U	0.012	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.05	U	0.004	U	0.002	U
Propionitrile	mg/kg	0.032	U	0.033	U	0.075	U	0.07	U	0.032	U	0.034	U	0.031	U	0.03	U	1.5	U	0.081	U	0.066	U
sec-Butylbenzene	mg/kg	0.001	U	0.001	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.05	U	0.003	U	0.002	U
Styrene	mg/kg	0.001	U	0.001	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.05	U	0.003	U	0.002	U
tert-Butylbenzene	mg/kg	0.001	U	0.001	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.05	U	0.003	U	0.002	U
Tetrachloroethene	mg/kg	0.001	U	0.001	U	0.007	U	0.004	U	0.006	U	0.004	U	0.001	U	0.001	U	0.052	U	0.003	U	0.002	U
Tetrahydrofuran	mg/kg	0.004	U	0.004	U	0.01	U	0.009	U	0.004	U	0.005	U	0.004	U	0.004	U	0.2	U	0.011	U	0.009	U
Toluene	mg/kg	0.001	U	0.001	U	0.013	U	0.005	U	0.001	U	0.002	U	0.001	U	0.002	U	0.05	U	0.004	U	0.002	U
trans-1,2-Dichloroethene	mg/kg	0.001	U	0.001	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.05	U	0.003	U	0.002	U
trans-1,3-Dichloropropene	mg/kg																						
Trichloroethene	mg/kg	0.001	U	0.001	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.05	U	0.003	U	0.002	U
Trichlorofluoromethane	mg/kg	0.002	U	0.002	U	0.29	U	0.21	U	0.15	U	0.023	U	0.002	U	0.015	U	2.5	U	0.005	U	0.004	U
Vinyl Chloride	mg/kg	0.001	U	0.001	U	0.002	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.05	U	0.003	U	0.002	U
Vinyl Fluoride	mg/kg	0.007	U	0.006	U	0.015	U	0.014	U	0.007	U	0.006	U	0.007	U	0.006	U	0.007	U	0.014	U	0.013	U
Xylenes	mg/kg	0.001	U	0.001	U	0.026	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U	0.05	U	0.004	U	0.002	U

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	D16-BOR-13-(4.3-4.8)	D16-BOR-13-(6.3-6.8)	D16-BOR-13-(7.8-8.9)	D16-BOR-13-(8.9-9.1)	D16-BOR-14-(0.5-1.0)	D16-BOR-14-(0-0.5)	D16-BOR-14-(4.5-5.0)	D16-BOR-14-(5.5-6.0)	D16-BOR-14-(8.5-9.0)	D16-BOR-14-(9.0-9.5)	E16-BOR-03(0.5-1.0)	
Location ID	D16-BOR-13	D16-BOR-13	D16-BOR-13	D16-BOR-13	D16-BOR-14	D16-BOR-14	D16-BOR-14	D16-BOR-14	D16-BOR-14	D16-BOR-14	D16-BOR-14	E16-BOR-03
Depth Interval (ft)	4.30-4.80	6.30-6.80	7.80-8.90	8.90-9.10	0.50-1.00	0.00-0.50	4.50-5.00	5.50-6.00	8.50-9.00	9.00-9.50	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Date	11/6/2017	11/6/2017	11/6/2017	11/6/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/2/2016
Chemical Class												
Chemical												
Units												
<b>General Chemistry</b>												
Black Carbon	mg/kg											
Percent Moisture	%	15.4	10.3	9.3	15.9	32.3	46	17.1	13.5	7	20.4	23
Percent Solids	%											
Total Organic Carbon	mg/kg	419	214	529	1020	16200	26200	270	614	342	1530	2600
<b>Metals</b>												
Aluminum	mg/kg					10800	18500					7410
Antimony	mg/kg					0.756	0.404					0.29
Arsenic	mg/kg					8.12	9.45					4.75
Barium	mg/kg					50.5	86.3					37.6
Beryllium	mg/kg					0.586	0.861					0.358
Cadmium	mg/kg					0.536	0.465					0.165
Calcium	mg/kg					3690	4360					3700
Chromium	mg/kg					31.4	46.7					22.1
Cobalt	mg/kg					10.2	12.9					5.34
Copper	mg/kg					22.8	33					10.4
Iron	mg/kg					16500	28900					12200
Lead	mg/kg					59.9	48.2					19.5
Magnesium	mg/kg					2960	5060					2270
Manganese	mg/kg					316	685					237
Mercury	mg/kg					0.259	0.313					0.16
Nickel	mg/kg					17.6	24.8					10.9
Potassium	mg/kg					1840	3180					1360
Selenium	mg/kg					0.524	0.69					0.234
Silver	mg/kg					0.319	0.265					0.0683
Sodium	mg/kg					305	690					377
Thallium	mg/kg					0.116	0.2					0.084
Tin	mg/kg											
Titanium	mg/kg											
Vanadium	mg/kg					31.2	42.3					21.8
Zinc	mg/kg					123	151					55.9
<b>Metals - AVS/SEM</b>												
Acid Volatile Sulfide	umol/g											
Arsenic	umol/g											
Cadmium	umol/g											
Copper	umol/g											
Lead	umol/g											
Zinc	umol/g											
<b>Metals - Leachate</b>												
Lead	ug/L											
<b>Per and Polyfluorinated Organic Substances</b>												
Perfluorobutane Sulfonic Acid	mg/kg											
Perfluorobutanoic Acid	mg/kg											
Perfluorodecane Sulfonic Acid	mg/kg											
Perfluorodecanoic Acid	mg/kg											
Perfluorododecanoic Acid	mg/kg											
Perfluoroheptanoic Acid	mg/kg											
Perfluorohexane Sulfonic Acid	mg/kg											
Perfluorohexanoic Acid	mg/kg											
Perfluorononanoic Acid	mg/kg											
Perfluorooctane Sulfonamide	mg/kg											
Perfluoropentanoic Acid	mg/kg											
Perfluorotetradecanoic Acid	mg/kg											
Perfluorotridecanoic Acid	mg/kg											
Perfluoroundecanoic Acid	mg/kg											
PFOA	mg/kg											
PFOA(trial)	mg/kg											
PFOS	mg/kg											
PFOS (trial)	mg/kg											
<b>Pesticides and Herbicides</b>												
4,4'-DDD	mg/kg											
4,4'-DDE	mg/kg											
4,4'-DDT	mg/kg											
Aldrin	mg/kg											
Alpha Chlordane	mg/kg											
Alpha-BHC	mg/kg											
beta-BHC	mg/kg											
delta-BHC	mg/kg											
Dieldrin	mg/kg											
Endosulfan I	mg/kg											
Endosulfan II	mg/kg											
Endosulfan Sulfate	mg/kg											
Endrin	mg/kg											
Endrin Aldehyde	mg/kg											
Endrin Ketone	mg/kg											
Gamma Chlordane	mg/kg											

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	
	Field Sample ID	D16-BOR-13-(4.3-4.8)	D16-BOR-13-(6.3-6.8)	D16-BOR-13-(7.8-8.9)	D16-BOR-13-(8.9-9.1)	D16-BOR-14-(0.5-1.0)	D16-BOR-14-(0-0.5)	D16-BOR-14-(4.5-5.0)	D16-BOR-14-(5.5-6.0)	D16-BOR-14-(8.5-9.0)	D16-BOR-14-(9.0-9.5)	E16-BOR-03(0.5-1.0)	
Chemical	Location ID	D16-BOR-13	D16-BOR-13	D16-BOR-13	D16-BOR-13	D16-BOR-14	D16-BOR-14	D16-BOR-14	D16-BOR-14	D16-BOR-14	D16-BOR-14	E16-BOR-03	
Units	Depth Interval (ft)	4.30-4.80	6.30-6.80	7.80-8.90	8.90-9.10	0.50-1.00	0.00-0.50	4.50-5.00	5.50-6.00	8.50-9.00	9.00-9.50	0.50-1.00	
	Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
	Date	11/6/2017	11/6/2017	11/6/2017	11/6/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/2/2016	
Heptachlor													
Heptachlor Epoxide													
Lindane													
Methoxychlor													
Toxaphene													
<b>Physical Properties</b>													
0.001 MM	% PASSING					0.5	U	1			14	0.5	U
0.002 MM	% PASSING					0.5	U	6.5			21	0.5	U
0.005 MM	% PASSING					1		13			30.5	1	
0.02 MM	% PASSING					7.5		27.5			48.5	10	
0.05 MM	% PASSING					38.5		48			61	40	
0.064 MM	% PASSING					58		59			63.5	54	
0.075 MM	% PASSING					66.1		63.9			64.7	60.5	
0.15 MM	% PASSING					79		80.4			72.6	73.2	
0.3 MM	% PASSING					87		95.5			78	90.8	
0.6 MM	% PASSING					93.1		97.8			81.8	96.1	
1.18 MM	% PASSING					96.4		98.8			87.7	97.8	
19 MM	% PASSING					100		100			100	100	
2.36 MM	% PASSING					97.6		99.6			96.1	98	
3.35 MM	% PASSING					98.8		99.7			97.6	99.1	
37.5 MM	% PASSING					100		100			100	100	
4.75 MM	% PASSING					99.4		100			98.5	99.8	
75 MM	% PASSING					100		100			100	100	
Density	PCF												
<b>Polychlorinated Biphenyls - TICs</b>													
1,1'-Biphenyl, 2,3-dichloro-	mg/kg												
Unknown Biphenyl	mg/kg					0.84							
<b>Polychlorinated Biphenyls</b>													
Heptachlorobiphenyl	mg/kg												
Hexachlorobiphenyl	mg/kg												
Octachlorobiphenyl	mg/kg												
PCB 1	mg/kg					0.00352		0.00456				0.0318	
PCB 10	mg/kg					0.0000286		0.0000487				0.00145	
PCB 100	mg/kg												
PCB 101	mg/kg												
PCB 102	mg/kg					0.0000309		0.0000388				0.0000358	
PCB 103	mg/kg					0.000015		0.0000284				0.0000198	
PCB 104	mg/kg					0.00000118		0.0000028				0.00000794	U
PCB 105	mg/kg					0.000374		0.000387				0.000437	
PCB 106	mg/kg					0.00000408	U	0.0000219				0.0000121	
PCB 107	mg/kg												
PCB 107/123	mg/kg												
PCB 108	mg/kg												
PCB 109	mg/kg					0.0000834		0.0000978				0.0000925	
PCB 11	mg/kg					0.000383		0.00137				0.00215	
PCB 110	mg/kg					0.00118		0.00138				0.00116	
PCB 111	mg/kg					0.00000374	U	0.0000112				0.00000693	U
PCB 112	mg/kg					0.00000374	U	0.0000207				0.0000147	
PCB 113	mg/kg												
PCB 114	mg/kg					0.0000215		0.0000347				0.0000275	
PCB 115	mg/kg					0.00000348	U	0.00000579	U			0.0000251	
PCB 116	mg/kg												
PCB 117	mg/kg					0.0000262		0.0000375				0.0000316	
PCB 118	mg/kg					0.000784		0.000906				0.000811	
PCB 119	mg/kg												
PCB 12	mg/kg												
PCB 120	mg/kg					0.00000374	U	0.0000197				0.0000112	
PCB 121	mg/kg					0.00000362	U	0.00000602	U			0.00000727	U
PCB 121/95/88	mg/kg												
PCB 122	mg/kg					0.0000126		0.0000173				0.00000799	U
PCB 123	mg/kg					0.0000198		0.0000223				0.0000222	
PCB 124	mg/kg												
PCB 125	mg/kg												
PCB 126	mg/kg					0.00000967		0.0000172				0.0000139	
PCB 127	mg/kg					0.00000416	U	0.0000065	U			0.00000957	U
PCB 128	mg/kg												
PCB 129	mg/kg												
PCB 129/158	mg/kg												
PCB 13	mg/kg												
PCB 130	mg/kg												
PCB 130/164	mg/kg					0.0000653		0.000116				0.0000894	
PCB 131	mg/kg												
PCB 131	mg/kg					0.000014		0.0000163				0.0000152	
PCB 132	mg/kg					0.000313		0.000421				0.000335	
PCB 133	mg/kg					0.0000251		0.0000657				0.0000475	
PCB 134	mg/kg					0.0000503		0.000066				0.0000688	
PCB 135	mg/kg												

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		D16-BOR-13-(4.3-4.8) D16-BOR-13 4.30-4.80 FS 11/6/2017	D16-BOR-13-(6.3-6.8) D16-BOR-13 6.30-6.80 FS 11/6/2017	D16-BOR-13-(7.8-8.9) D16-BOR-13 7.80-8.90 FS 11/6/2017	D16-BOR-13-(8.9-9.1) D16-BOR-13 8.90-9.10 FS 11/6/2017	D16-BOR-14-(0.5-1.0) D16-BOR-14 0.50-1.00 FS 11/1/2017	D16-BOR-14-(0-0.5) D16-BOR-14 0.00-0.50 FS 11/1/2017	D16-BOR-14-(4.5-5.0) D16-BOR-14 4.50-5.00 FS 11/1/2017	D16-BOR-14-(5.5-6.0) D16-BOR-14 5.50-6.00 FS 11/1/2017	D16-BOR-14-(8.5-9.0) D16-BOR-14 8.50-9.00 FS 11/1/2017	D16-BOR-14-(9.0-9.5) D16-BOR-14 9.00-9.50 FS 11/1/2017	E16-BOR-03(0.5-1.0) E16-BOR-03 0.50-1.00 FS 11/2/2016
Chemical	Units											
PCB 136	mg/kg				0.00013	0.000206						0.000155
PCB 137	mg/kg				0.0000337	0.0000584						0.0000408
PCB 138	mg/kg											
PCB 139	mg/kg											
PCB 14	mg/kg				0.000199	0.00195						0.00195
PCB 140	mg/kg											
PCB 141	mg/kg				0.000167	0.000238						0.000173
PCB 142	mg/kg				0.00000292	0.0000302						0.0000144
PCB 143	mg/kg				0.00000508	0.000007						0.00000124
PCB 143/139	mg/kg											
PCB 144	mg/kg				0.000044	0.0000557						0.000044
PCB 145	mg/kg				0.0000035	0.0000221						0.00000888
PCB 146	mg/kg				0.000167	0.000343						0.000201
PCB 147	mg/kg											
PCB 148	mg/kg				0.00000549	0.0000144						0.00000726
PCB 149	mg/kg											
PCB 15	mg/kg				0.000585	0.0021						0.00569
PCB 150	mg/kg				0.00000519	0.0000128						0.0000074
PCB 151	mg/kg											
PCB 152	mg/kg				0.00000118	0.00000222						0.00000804
PCB 153	mg/kg											
PCB 154	mg/kg				0.0000246	0.0000605						0.0000319
PCB 155	mg/kg				0.00000951	0.00000906						0.0000087
PCB 156	mg/kg											
PCB 157	mg/kg											
PCB 158	mg/kg				0.0000887	0.000107						0.0000843
PCB 159	mg/kg				0.0000124	0.0000309						0.0000165
PCB 16	mg/kg				0.00071	0.000894						0.00939
PCB 160	mg/kg				0.00000622	0.0000925						0.00000953
PCB 161	mg/kg				0.00000854	0.00000508						0.00000939
PCB 162	mg/kg				0.0000106	0.0000317						0.0000211
PCB 163	mg/kg											
PCB 163/160	mg/kg											
PCB 164	mg/kg				0.0000757	0.000138						0.000105
PCB 165	mg/kg				0.00000805	0.00000639						0.00000109
PCB 166	mg/kg											
PCB 167	mg/kg				0.000044	0.0000838						0.0000548
PCB 168	mg/kg											
PCB 169	mg/kg				0.00000299	0.00000501						0.00000367
PCB 17	mg/kg				0.000328	0.000396						0.00535
PCB 170	mg/kg				0.000234	0.000341						0.000235
PCB 171	mg/kg											
PCB 172	mg/kg				0.000049	0.0000966						0.000056
PCB 173	mg/kg											
PCB 174	mg/kg				0.000274	0.00043						0.000288
PCB 175	mg/kg				0.0000136	0.0000264						0.000013
PCB 176	mg/kg				0.0000342	0.0000506						0.0000303
PCB 177	mg/kg				0.000152	0.000246						0.000156
PCB 178	mg/kg				0.0000646	0.000129						0.0000665
PCB 179	mg/kg				0.000127	0.000201						0.000115
PCB 18	mg/kg											
PCB 180	mg/kg											
PCB 181	mg/kg				0.00000301	0.0000156						0.0000054
PCB 182	mg/kg				0.00000249	0.0000138						0.00000519
PCB 182/175	mg/kg											
PCB 183	mg/kg				0.000153	0.000222						0.000151
PCB 184	mg/kg				0.00000384	0.0000108						0.00000561
PCB 185	mg/kg				0.0000333	0.000062						0.0000383
PCB 186	mg/kg				0.00000367	0.00000267						0.00000788
PCB 187	mg/kg				0.000368	0.000631						0.000408
PCB 188	mg/kg				0.00000387	0.000016						0.00000865
PCB 189	mg/kg				0.0000156	0.0000307						0.0000153
PCB 19	mg/kg				0.000076	0.000108						0.00381
PCB 190	mg/kg				0.0000477	0.0000839						0.000064
PCB 191	mg/kg				0.00000997	0.0000207						0.0000126
PCB 192	mg/kg				0.00000197	0.0000322						0.0000109
PCB 193	mg/kg											
PCB 194	mg/kg				0.000199	0.000442						0.000245
PCB 195	mg/kg				0.0000573	0.0000975						0.0000612
PCB 196	mg/kg				0.000121	0.000245						0.000166
PCB 197	mg/kg				0.0000111	0.0000286						0.0000206
PCB 198	mg/kg											
PCB 199	mg/kg											
PCB 2	mg/kg				0.00229	0.00491						0.0133
PCB 20	mg/kg											
PCB 200	mg/kg				0.0000255	0.0000462						0.0000303

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone	Field Sample ID	MZ-FPA		MZ-FPA									
			D16-BOR-13-(4.3-4.8)	D16-BOR-13-(6.3-6.8)	D16-BOR-13-(7.8-8.9)	D16-BOR-13-(8.9-9.1)	D16-BOR-14-(0.5-1.0)	D16-BOR-14-(0-0.5)	D16-BOR-14-(4.5-5.0)	D16-BOR-14-(5.5-6.0)	D16-BOR-14-(8.5-9.0)	D16-BOR-14-(9.0-9.5)	E16-BOR-03(0.5-1.0)	
Chemical	Location ID	Depth Interval (ft)	D16-BOR-13 4.30-4.80 FS 11/6/2017	D16-BOR-13 6.30-6.80 FS 11/6/2017	D16-BOR-13 7.80-8.90 FS 11/6/2017	D16-BOR-13 8.90-9.10 FS 11/6/2017	D16-BOR-14 0.50-1.00 FS 11/1/2017	D16-BOR-14 0.00-0.50 FS 11/1/2017	D16-BOR-14 4.50-5.00 FS 11/1/2017	D16-BOR-14 5.50-6.00 FS 11/1/2017	D16-BOR-14 8.50-9.00 FS 11/1/2017	D16-BOR-14 9.00-9.50 FS 11/1/2017	E16-BOR-03 0.50-1.00 FS 11/2/2016	
Units	Sample Purpose	Date												
PCB 201							0.0000418	0.0000935					0.0000579	
PCB 202							0.000102	0.00025					0.000165	
PCB 203							0.000194	0.000382					0.00028	
PCB 204							0.00000184	0.0000138					0.0000051	
PCB 204/200														
PCB 205							0.0000102	0.0000338					0.0000155	
PCB 206							0.000866	0.00248					0.00144	
PCB 207							0.0000735	0.000232					0.000116	
PCB 208							0.00038	0.00109					0.000642	
PCB 209							0.00115	0.00339					0.00182	
PCB 21														
PCB 21/20														
PCB 22							0.000561	0.00117					0.00279	
PCB 23							0.0000307	0.000245					0.000195	
PCB 24							0.000106	0.000525					0.000485	
PCB 25							0.000187	0.000523					0.000527	
PCB 26														
PCB 27							0.0000896	0.000183					0.000883	
PCB 28														
PCB 29														
PCB 3							0.00296	0.00531					0.0211	
PCB 30														
PCB 31							0.0011	0.0025					0.00729	
PCB 32							0.000223	0.00022					0.00339	
PCB 33														
PCB 34							0.0000554	0.000519					0.000382	
PCB 35							0.000506	0.00118					0.00208	
PCB 36							0.0000503	0.00042					0.000317	
PCB 37							0.000911	0.00412					0.00457	
PCB 38							0.00000803	0.0000227					0.0000261	
PCB 39							0.000079	0.000856					0.000612	
PCB 4							0.00151	0.0022					0.0353	
PCB 4/10														
PCB 40														
PCB 41							0.000119	0.0000601					0.0000673	
PCB 42							0.000293	0.000243					0.000267	
PCB 43							0.0000532	0.0000766					0.0000658	
PCB 44														
PCB 45							0.000227	0.000154					0.00067	
PCB 46							0.0000673	0.000054					0.000234	
PCB 47														
PCB 48							0.000236	0.000159					0.00021	
PCB 49														
PCB 5							0.000367	0.000881					0.00251	
PCB 50														
PCB 51							0.0000376	0.0000473					0.0000642	
PCB 52							0.00112	0.00113					0.00141	
PCB 53														
PCB 54							0.00000325	0.0000059					0.0000296	
PCB 55							0.000023	0.0000157					0.0000222	
PCB 56							0.00117	0.000557					0.00267	
PCB 57							0.0000222	0.0000287					0.0000241	
PCB 58							0.000005	0.0000193					0.0000152	
PCB 59														
PCB 6							0.000991	0.00265					0.0137	
PCB 60							0.000224	0.000163					0.000219	
PCB 61														
PCB 62														
PCB 63							0.0000454	0.0000817					0.0000711	
PCB 64							0.000419	0.000404					0.000362	
PCB 65														
PCB 65/75/62														
PCB 66							0.000884	0.000737					0.000936	
PCB 67							0.0000485	0.0000527					0.0000401	
PCB 67/58														
PCB 68							0.00000804	0.0000201					0.0000135	
PCB 68/64														
PCB 69														
PCB 7							0.0000942	0.000394					0.00207	
PCB 70														
PCB 71														
PCB 72							0.0000126	0.0000562					0.0000387	
PCB 73							0.00000342	0.00000612					0.00000562	
PCB 73/46														
PCB 74														
PCB 75														

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA										
		D16-BOR-13-(4.3-4.8)	D16-BOR-13-(6.3-6.8)	D16-BOR-13-(7.8-8.9)	D16-BOR-13-(8.9-9.1)	D16-BOR-14-(0.5-1.0)	D16-BOR-14-(0-0.5)	D16-BOR-14-(4.5-5.0)	D16-BOR-14-(5.5-6.0)	D16-BOR-14-(8.5-9.0)	D16-BOR-14-(9.0-9.5)	E16-BOR-03(0.5-1.0)
Chemical	Units	D16-BOR-13 4.30-4.80 FS 11/6/2017	D16-BOR-13 6.30-6.80 FS 11/6/2017	D16-BOR-13 7.80-8.90 FS 11/6/2017	D16-BOR-13 8.90-9.10 FS 11/6/2017	D16-BOR-14 0.50-1.00 FS 11/1/2017	D16-BOR-14 0.00-0.50 FS 11/1/2017	D16-BOR-14 4.50-5.00 FS 11/1/2017	D16-BOR-14 5.50-6.00 FS 11/1/2017	D16-BOR-14 8.50-9.00 FS 11/1/2017	D16-BOR-14 9.00-9.50 FS 11/1/2017	E16-BOR-03 0.50-1.00 FS 11/2/2016
PCB 76	mg/kg											
PCB 77	mg/kg					0.000449	0.000384					0.00136
PCB 78	mg/kg					0.0000298	0.0000734					0.0000649
PCB 79	mg/kg					0.0000128	0.0000587					0.0000611
PCB 8	mg/kg					0.00171	0.0049					0.0406
PCB 80	mg/kg					0.0000014 U	0.0000841					0.0000363 U
PCB 81	mg/kg					0.0000696	0.000164					0.0000131
PCB 82	mg/kg					0.000144	0.000134					0.000141
PCB 83	mg/kg					0.0000472	0.0000654					0.0000711
PCB 83/125/112	mg/kg											
PCB 84	mg/kg					0.000272	0.00029					0.000303
PCB 85	mg/kg											
PCB 86	mg/kg											
PCB 86/109	mg/kg											
PCB 87	mg/kg											
PCB 87/111	mg/kg											
PCB 88	mg/kg					0.00000576 U	0.0000857 U					0.0000129
PCB 89	mg/kg					0.0000191	0.0000202					0.0000229
PCB 89/84	mg/kg											
PCB 9	mg/kg					0.000573	0.00203					0.0068
PCB 90	mg/kg											
PCB 91	mg/kg					0.00013	0.000163					0.000145
PCB 92	mg/kg					0.00017	0.000243					0.000198
PCB 93	mg/kg											
PCB 94	mg/kg					0.00000937	0.0000132					0.0000118
PCB 95	mg/kg					0.000668	0.000818					0.000759
PCB 96	mg/kg					0.000015	0.0000156					0.0000144
PCB 97	mg/kg											
PCB 98	mg/kg					0.0000187	0.0000295					0.0000337
PCB 99	mg/kg					0.000433	0.000526					0.000478
PCB-100/93	mg/kg					0.0000189	0.0000383					0.000024
PCB-107/124	mg/kg					0.0000315	0.0000459					0.0000404
PCB-108/119/86/97/125/87	mg/kg					0.000627	0.000763					0.000732
PCB-113/90/101	mg/kg					0.000843	0.00104					0.000943
PCB-116/85	mg/kg					0.000172	0.000371					0.000278
PCB-128/166	mg/kg					0.000137	0.000232					0.000156
PCB-13/12	mg/kg					0.00108	0.00608					0.0118
PCB-139/140	mg/kg					0.0000177	0.0000294					0.0000175
PCB-147/149	mg/kg					0.000809	0.00121					0.000971
PCB-151/135	mg/kg					0.000358	0.000566					0.00041
PCB-153/168	mg/kg					0.000786	0.00122					0.000824
PCB-156/157	mg/kg					0.000114	0.000186					0.000124
PCB-163/138/129	mg/kg					0.000976	0.00137					0.00105
PCB-171/173	mg/kg					0.0000762	0.000108					0.0000866
PCB-180/193	mg/kg					0.000594	0.00095					0.000577
PCB-198/199	mg/kg					0.0004	0.00102					0.000634
PCB-21/33	mg/kg					0.00133	0.00258					0.00597
PCB-26/29	mg/kg					0.000363	0.000901					0.00167
PCB-28/20	mg/kg					0.00123	0.00168					0.00436
PCB-30/18	mg/kg					0.000901	0.00138					0.0215
PCB-44/47/65	mg/kg					0.00104	0.00106					0.0012
PCB-50/53	mg/kg					0.000153	0.000135					0.000647
PCB-59/62/75	mg/kg					0.000131	0.000131					0.000122
PCB-61/70/74/76	mg/kg					0.00169	0.00153					0.00266
PCB-69/49	mg/kg					0.000596	0.000548					0.000615
PCB-71/40	mg/kg					0.000605	0.000424					0.000799
PCB-90/101	mg/kg											
Pentachlorobiphenyl	mg/kg											
Tetrachlorobiphenyl	mg/kg											
Total Decachlorobiphenyls (congeners)	mg/kg											
Total Dichlorobiphenyls (congeners)	mg/kg					0.00753	0.0246					0.124
Total Heptachlorobiphenyls (congeners)	mg/kg					0.00226	0.00372					0.00235
Total Hexachlorobiphenyls (congeners)	mg/kg					0.0045	0.00704					0.00508
Total Monochlorobiphenyls (congeners)	mg/kg					0.00878	0.0148					0.0662
Total Nonachlorobiphenyls (congeners)	mg/kg					0.00132	0.0038					0.0022
Total Octachlorobiphenyls (congeners)	mg/kg					0.00116	0.00266					0.00168
Total PCB (congeners)	mg/kg					0.05142	0.0964					0.30075
Total Pentachlorobiphenyls (congeners)	mg/kg					0.00617	0.00762					0.00692
Total Tetrachlorobiphenyls (congeners)	mg/kg					0.00971	0.00837					0.0149
Total Trichlorobiphenyls (congeners)	mg/kg					0.00884	0.0204					0.0756
Trichlorobiphenyl (total)	mg/kg											
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>												
Benzo[e]pyrene	mg/kg											
Chrysene, 1-methyl-	mg/kg											
Naphthalene, 1-methyl-	mg/kg											
Pyrene, 1-methyl-	mg/kg											

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	D16-BOR-13-(4.3-4.8)	D16-BOR-13-(6.3-6.8)	D16-BOR-13-(7.8-8.9)	D16-BOR-13-(8.9-9.1)	D16-BOR-14-(0.5-1.0)	D16-BOR-14-(0-0.5)	D16-BOR-14-(4.5-5.0)	D16-BOR-14-(5.5-6.0)	D16-BOR-14-(8.5-9.0)	D16-BOR-14-(9.0-9.5)	E16-BOR-03(0.5-1.0)	
Location ID	D16-BOR-13	D16-BOR-13	D16-BOR-13	D16-BOR-13	D16-BOR-14	D16-BOR-14	D16-BOR-14	D16-BOR-14	D16-BOR-14	D16-BOR-14	E16-BOR-03	
Depth Interval (ft)	4.30-4.80	6.30-6.80	7.80-8.90	8.90-9.10	0.50-1.00	0.00-0.50	4.50-5.00	5.50-6.00	8.50-9.00	9.00-9.50	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Chemical Class	11/6/2017	11/6/2017	11/6/2017	11/6/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/2/2016	
Chemical	Units											
<b>Polycyclic Aromatic Hydrocarbons</b>												
Acenaphthene	mg/kg	0.004 U	0.004 U	0.004 U	0.004 U	0.23	0.038	0.004 U	0.004 U	0.004 U	0.048	
Acenaphthylene	mg/kg	0.004 U	0.004 U	0.004 U	0.004 U	0.021	0.016	0.004 U	0.004 U	0.004 U	0.015	
Anthracene	mg/kg	0.004 U	0.004 U	0.004 U	0.004 U	0.098	0.067	0.004 U	0.004 U	0.004 U	0.048	
Benzo(A)Anthracene	mg/kg	0.004 U	0.004 U	0.004 U	0.004 U	0.098	0.12	0.004 U	0.004 U	0.004 U	0.11	
Benzo(B)Fluoranthene	mg/kg	0.004 U	0.004 U	0.004 U	0.004 U	0.12	0.17	0.004 U	0.004 U	0.004 U	0.12	
Benzo(G,H,I)Perylene	mg/kg	0.004 U	0.004 U	0.004 U	0.004 U	0.055	0.074	0.004 U	0.004 U	0.004 U	0.055	
Benzo(K)Fluoranthene	mg/kg	0.004 U	0.004 U	0.004 U	0.004 U	0.051	0.073	0.004 U	0.004 U	0.004 U	0.069	
Benzo(A)Pyrene	mg/kg	0.004 U	0.004 U	0.004 U	0.004 U	0.078	0.13	0.004 U	0.004 U	0.004 U	0.096	
Chrysene	mg/kg	0.004 U	0.004 U	0.004 U	0.004 U	0.16	0.19	0.004 U	0.004 U	0.004 U	0.18	
Dibenz(A,H)Anthracene	mg/kg	0.004 U	0.004 U	0.004 U	0.004 U	0.017	0.019	0.004 U	0.004 U	0.004 U	0.017	
Fluoranthene	mg/kg	0.004 U	0.004 U	0.004 U	0.004 U	0.28	0.28	0.004 U	0.004 U	0.004 U	0.2	
Fluorene	mg/kg	0.004 U	0.004 U	0.004 U	0.004 U	0.42	0.043	0.004 U	0.004 U	0.004 U	0.049	
Indeno (1,2,3-CD) Pyrene	mg/kg	0.004 U	0.004 U	0.004 U	0.004 U	0.043	0.059	0.004 U	0.004 U	0.004 U	0.048	
Naphthalene	mg/kg	0.004 U	0.004 U	0.004 U	0.007	0.52	0.14	0.004 U	0.004 U	0.004 U	0.23	
Phenanthrene	mg/kg	0.004 U	0.004 U	0.004 U	0.004 U	0.84	0.19	0.004 U	0.004	0.005	0.19	
Pyrene	mg/kg	0.004 U	0.004 U	0.004 U	0.004 U	0.27	0.26	0.004 U	0.004 U	0.004 U	0.18	
Total PAHs (Detections + 1/2 MDL)	mg/kg	0.032 U	0.032 U	0.032 U	0.037	3.301	1.869	0.032 U	0.034	0.035	1.655	
Total PAHs (Detections Only)	mg/kg	0.032 U	0.032 U	0.032 U	0.007	3.301	1.869	0.032 U	0.004	0.005	1.655	
<b>Semivolatile Organic Compounds - TICs</b>												
1,2,4-Trithiolane	mg/kg											
1,4-Benzenediol, 2-chloro-	mg/kg											
11H-Benzo[b]fluorene	mg/kg											
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg											
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg											
3-PENTEN-2-ONE, 4-METHYL-	mg/kg											
7H-Benz[de]anthracen-7-one	mg/kg											
9,10-Anthracenedione	mg/kg											
9-Octadecenamide, (Z)-	mg/kg											
Acetamide, 2-chloro-N-(ethox	mg/kg											
Alachlor	mg/kg											
Benzenamine, 3-methyl-	mg/kg											
Benzenamine, 4,4',4"-methy	mg/kg											
Benzenamine, 4,4'-methyleneb	mg/kg											
Benzene, 1,2,3,4-tetrachloro	mg/kg											
Benzene, 1,2,3,5-tetrachloro	mg/kg											
Benzene, 1,2,3-trichloro-	mg/kg											
Benzene, 1,3,5-trichloro-	mg/kg											
Benzene, 1,3-bis(1-methyleth	mg/kg											
Benzene, 1,4-bis(1-methyleth	mg/kg											
Benzofuran, 2,3-dihydro-	mg/kg											
CYCLIC OCTAATOMIC SULFUR	mg/kg											
Diphenyl Ether	mg/kg											
Docosane	mg/kg											
Heneicosane	mg/kg											
Hexacosane	mg/kg											
Hexadecane	mg/kg											
Hexatriacontane	mg/kg											
m-Chloroaniline	mg/kg											
N,N-Diethylaniline	mg/kg											
n-Hexadecanoic acid	mg/kg	0.17			0.3	0.73	1.2			0.2	0.22	
Nonadecane	mg/kg											
o-Chloroaniline	mg/kg											
Octacosane	mg/kg											
Octadecane	mg/kg											
Octadecane, 1-chloro-	mg/kg											
Octadecanoic acid	mg/kg											
Parachlorophenol	mg/kg											
Pentadecane	mg/kg											
Perylene	mg/kg											
Phenol, 2,5-dichloro-	mg/kg											
Phenol, 3-chloro-	mg/kg											
Phenol, 4,4'-(1-methylethyl)	mg/kg						0.3					
Tetracosane	mg/kg											
Tetradecane	mg/kg											
Tetraethylene glycol	mg/kg											
Total SVOC TICs	mg/kg	1	0.83	0.68	0.76	16	22	0.8	0.64	1.6	1	0.51
Triacotane	mg/kg											
Tributyl phosphate	mg/kg											
Tridecanoic acid	mg/kg											
Triphenyl phosphate	mg/kg											
UNKNOWN	mg/kg					0.698333333	0.902105263			0.16		
Unknown acid	mg/kg											
Unknown Alcohol	mg/kg											
Unknown Aldol Condensate	mg/kg	0.59	0.57	0.44	0.46		1.6	0.58	0.43	0.39	0.65	
UNKNOWN ALKANE	mg/kg						0.7					

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	Field Sample ID	MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA					
		D16-BOR-13-(4.3-4.8)	D16-BOR-13-(6.3-6.8)	D16-BOR-13-(7.8-8.9)	D16-BOR-13-(8.9-9.1)	D16-BOR-14-(0.5-1.0)	D16-BOR-14-(0-0.5)	D16-BOR-14-(4.5-5.0)	D16-BOR-14-(5.5-6.0)	D16-BOR-14-(8.5-9.0)	D16-BOR-14-(9.0-9.5)	E16-BOR-03(0.5-1.0)									
Location ID	D16-BOR-13	D16-BOR-13	D16-BOR-13	D16-BOR-13	D16-BOR-14	D16-BOR-14	D16-BOR-14	D16-BOR-14	D16-BOR-14	D16-BOR-14	D16-BOR-14	D16-BOR-14	D16-BOR-14	D16-BOR-14	D16-BOR-14	D16-BOR-14	E16-BOR-03				
Depth Interval (ft)	4.30-4.80	6.30-6.80	7.80-8.90	8.90-9.10	0.50-1.00	0.00-0.50	4.50-5.00	5.50-6.00	8.50-9.00	9.00-9.50	0.50-1.00										
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS											
Date	11/6/2017	11/6/2017	11/6/2017	11/6/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017	11/1/2017											
Chemical Class	Units																				
Unknown Alkene	mg/kg																				
Unknown Amide	mg/kg																				
Unknown Amine	mg/kg																				
UNKNOWN AROMATIC	mg/kg																				
Unknown Carboxylic Acid	mg/kg																				
Unknown Cycloalkane	mg/kg																				
Unknown Hydrocarbon	mg/kg																				
Unknown Ketone	mg/kg																				
Unknown PAH	mg/kg							0.82													
UNKNOWN SILOXANE	mg/kg																				
<b>Semivolatile Organic Compounds</b>																					
1,2,4-Trichlorobenzene	mg/kg	0.019	U	0.018	U	0.018	U	0.02	U	0.44	0.11	0.02	U	0.019	U	0.018	U	0.021	U	0.11	
1,2-Diphenylhydrazine	mg/kg	0.019	U	0.018	U	0.018	U	0.02	U	0.024	0.031	0.02	U	0.019	U	0.018	U	0.021	U	0.021	U
1,4-Dioxane	mg/kg	0.12	U	0.11	U	0.11	U	0.12	U	0.15	0.18	0.12	U	0.11	U	0.13	U	0.13	U	0.13	U
1-Naphthylamine	mg/kg	0.19	U	0.18	U	0.18	U	0.19	U	0.24	0.31	0.2	U	0.19	U	0.18	U	0.21	U	0.21	U
2,3,4,6-Tetrachlorophenol	mg/kg	0.078	U	0.074	U	0.073	U	0.078	U	0.097	0.12	0.08	U	0.076	U	0.072	U	0.083	U	0.085	U
2,4,5-Trichlorophenol	mg/kg	0.019	U	0.018	U	0.018	U	0.02	U	0.024	0.031	0.02	U	0.019	U	0.018	U	0.021	U	0.021	U
2,4,6-Trichlorophenol	mg/kg	0.019	U	0.018	U	0.018	U	0.02	U	0.024	0.031	0.02	U	0.019	U	0.018	U	0.021	U	0.021	U
2,4-Dichlorophenol	mg/kg	0.019	U	0.018	U	0.018	U	0.02	U	0.024	0.031	0.02	U	0.019	U	0.018	U	0.021	U	0.021	U
2,4-Dimethylphenol	mg/kg	0.019	U	0.018	U	0.018	U	0.02	U	0.024	0.031	0.02	U	0.019	U	0.018	U	0.021	U	0.021	U
2,4-Dinitrophenol	mg/kg	0.35	U	0.33	U	0.33	U	0.35	U	0.44	0.55	0.36	U	0.34	U	0.32	U	1.3	0.38	0.38	U
2,4-Dinitrotoluene	mg/kg	0.078	U	0.074	U	0.073	U	0.078	U	0.097	0.12	0.08	U	0.076	U	0.072	U	0.11	0.085	0.085	U
2,6-Dinitrotoluene	mg/kg	0.019	U	0.018	U	0.018	U	0.02	U	0.024	0.031	0.02	U	0.019	U	0.018	U	0.021	U	0.021	U
2-Chloronaphthalene	mg/kg	0.008	U	0.007	U	0.007	U	0.008	U	0.01	0.012	0.008	U	0.008	U	0.007	U	0.008	U	0.009	U
2-Chlorophenol	mg/kg	0.019	U	0.018	U	0.018	U	0.02	U	0.024	0.031	0.02	U	0.019	U	0.018	U	0.021	U	0.021	U
2-Methylnaphthalene	mg/kg	0.004	U	0.004	U	0.004	U	0.004	U	0.034	0.037	0.004	U	0.004	U	0.004	U	0.004	U	0.052	U
2-Methylphenol (O-Cresol)	mg/kg	0.019	U	0.018	U	0.018	U	0.02	U	0.024	0.031	0.02	U	0.019	U	0.018	U	0.021	U	0.021	U
2-Naphthylamine	mg/kg	0.19	U	0.18	U	0.18	U	0.19	U	0.24	0.31	0.2	U	0.19	U	0.18	U	0.21	U	0.21	U
2-Nitroaniline	mg/kg	0.019	U	0.018	U	0.018	U	0.02	U	0.024	0.031	0.02	U	0.019	U	0.018	U	0.021	U	0.021	U
2-Nitrophenol	mg/kg	0.019	U	0.018	U	0.018	U	0.02	U	0.024	0.031	0.02	U	0.019	U	0.018	U	0.021	U	0.021	U
3,3'-Dichlorobenzidine	mg/kg	0.12	U	0.11	U	0.11	U	0.12	U	0.15	0.18	0.12	U	0.11	U	0.13	U	0.13	U	0.13	U
3,3'-Dimethylbenzidine	mg/kg	0.078	U	0.074	U	0.073	U	0.078	U	0.097	0.12	0.08	U	0.076	U	0.072	U	0.083	U	0.085	U
3-Nitroaniline	mg/kg	0.019	U	0.018	U	0.018	U	0.02	U	0.024	0.031	0.02	U	0.019	U	0.018	U	0.021	U	0.021	U
4,6-Dinitro-2-Methylphenol	mg/kg	0.19	U	0.18	U	0.18	U	0.19	U	0.24	0.31	0.2	U	0.19	U	0.18	U	0.21	U	0.21	U
4-Aminobiphenyl	mg/kg	0.19	U	0.18	U	0.18	U	0.19	U	0.24	0.31	0.2	U	0.19	U	0.18	U	0.21	U	0.21	U
4-Bromophenyl Phenyl Ether	mg/kg	0.019	U	0.018	U	0.018	U	0.02	U	0.024	0.031	0.02	U	0.019	U	0.018	U	0.021	U	0.021	U
4-Chloro-3-Methylphenol	mg/kg	0.019	U	0.018	U	0.018	U	0.02	U	0.024	0.031	0.02	U	0.019	U	0.018	U	0.021	U	0.021	U
4-Chloroaniline	mg/kg	0.039	U	0.037	U	0.036	U	0.039	U	0.049	0.061	0.04	U	0.038	U	0.036	U	0.042	U	0.043	U
4-Chlorophenyl Phenyl Ether	mg/kg	0.019	U	0.018	U	0.018	U	0.02	U	0.024	0.031	0.02	U	0.019	U	0.018	U	0.021	U	0.021	U
4-Methylphenol (P-Cresol)	mg/kg	0.019	U	0.018	U	0.018	U	0.02	U	0.024	0.031	0.02	U	0.019	U	0.018	U	0.021	U	0.021	U
4-Nitroaniline	mg/kg	0.078	U	0.074	U	0.073	U	0.078	U	0.097	0.12	0.08	U	0.076	U	0.072	U	0.083	U	0.085	U
4-Nitrophenol	mg/kg	0.19	U	0.18	U	0.18	U	0.19	U	0.24	0.31	0.2	U	0.19	U	0.18	U	0.21	U	0.21	U
Acetophenone	mg/kg	0.019	U	0.018	U	0.018	U	0.02	U	0.024	0.031	0.02	U	0.019	U	0.018	U	0.021	U	0.021	U
Aniline	mg/kg	0.19	U	0.18	U	0.18	U	0.19	U	0.24	0.31	0.2	U	0.19	U	0.18	U	0.21	U	0.21	U
Benzidine	mg/kg	0.29	U	0.28	U	0.27	U	0.29	U	0.37	0.46	0.3	U	0.29	U	0.27	U	0.31	U	0.32	U
Biphenyl	mg/kg	0.019	U	0.018	U	0.018	U	0.02	U	0.024	0.031	0.02	U	0.019	U	0.018	U	0.021	U	0.021	U
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg	0.019	U	0.018	U	0.018	U	0.02	U	0.024	0.031	0.02	U	0.019	U	0.018	U	0.021	U	0.021	U
Bis(2-Chloroethoxy)Methane	mg/kg	0.019	U	0.018	U	0.018	U	0.02	U	0.024	0.031	0.02	U	0.019	U	0.018	U	0.021	U	0.021	U
Bis(2-Chloroethyl)Ether	mg/kg	0.019	U	0.018	U	0.018	U	0.02	U	0.024	0.031	0.02	U	0.019	U	0.018	U	0.021	U	0.021	U
Bis(2-Chloroisopropyl)Ether	mg/kg																				
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.078	U	0.074	U	0.073	U	0.078	U	0.13	0.12	0.08	U	0.076	U	0.072	U	0.083	U	0.085	U
Butyl Benzyl Phthalate	mg/kg	0.078	U	0.074	U	0.073	U	0.078	U	0.097	0.12	0.08	U	0.076	U	0.072	U	0.083	U	0.085	U
Carbazole	mg/kg	0.019	U	0.018	U	0.018	U	0.02	U	0.024	0.031	0.02	U	0.019	U	0.018	U	0.021	U	0.021	U
Dibenzofuran	mg/kg	0.019	U	0.018	U	0.018	U	0.02	U	0.024	0.031	0.02	U	0.019	U	0.018	U	0.021	U	0.021	U
Diethyl Phthalate	mg/kg	0.078	U	0.074	U	0.073	U	0.078	U	0.097	0.12	0.08	U	0.076	U	0.072	U	0.083	U	0.085	U
Dimethyl Phthalate	mg/kg	0.078	U	0.074	U	0.073	U	0.078	U	0.097	0.12	0.08	U	0.076	U	0.072	U	0.083	U	0.085	U
Di-N-Butyl Phthalate	mg/kg	0.078	U	0.074	U	0.073	U	0.078	U	0.097	0.12	0.08	U	0.076	U	0.072	U	0.083	U	0.085	U
Diphenyl Ether	mg/kg	0.019	U	0.018	U	0.018	U	0.02	U	0.024	0.031	0.02	U	0.019	U	0.018	U	0.021	U	0.021	U
Hexachlorobenzene	mg/kg	0.004	U	0.004	U	0.004	U	0.004	U	0.004	0.005	0.004	U	0.004	U	0.004	U	0.004	U	0.008	U
Hexachlorobutadiene	mg/kg	0.019	U	0.018	U	0.018	U	0.02	U	0.024	0.031	0.02	U	0.019	U	0.018	U	0.021	U	0.021	U
Hexachlorocyclopentadiene	mg/kg	0.19	U	0.18	U	0.18	U	0.19	U	0.24	0.31	0.2	U	0.19	U	0.18	U	0.21	U	0.21	U
Hexachloroethane	mg/kg	0.039	U	0.037	U	0.036	U	0.039	U	0.049	0.061	0.04	U	0.038	U	0.036	U	0.042	U	0.043	U
Hexachloropropylene	mg/kg																				
Isophorone	mg/kg	0.019	U	0.018	U	0.018	U	0.02	U	0.024											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA										
		D16-BOR-13-(4.3-4.8)	D16-BOR-13-(6.3-6.8)	D16-BOR-13-(7.8-8.9)	D16-BOR-13-(8.9-9.1)	D16-BOR-14-(0.5-1.0)	D16-BOR-14-(0-0.5)	D16-BOR-14-(4.5-5.0)	D16-BOR-14-(5.5-6.0)	D16-BOR-14-(8.5-9.0)	D16-BOR-14-(9.0-9.5)	E16-BOR-03(0.5-1.0)
Chemical	Units	D16-BOR-13 4.30-4.80 FS 11/6/2017	D16-BOR-13 6.30-6.80 FS 11/6/2017	D16-BOR-13 7.80-8.90 FS 11/6/2017	D16-BOR-13 8.90-9.10 FS 11/6/2017	D16-BOR-14 0.50-1.00 FS 11/1/2017	D16-BOR-14 0.00-0.50 FS 11/1/2017	D16-BOR-14 4.50-5.00 FS 11/1/2017	D16-BOR-14 5.50-6.00 FS 11/1/2017	D16-BOR-14 8.50-9.00 FS 11/1/2017	D16-BOR-14 9.00-9.50 FS 11/1/2017	E16-BOR-03 0.50-1.00 FS 11/2/2016
1-Butene	mg/kg											
1-Heptene	mg/kg											
1-Propene, 2-methyl-	mg/kg											
Azulene	mg/kg											
BENZENE, 1,2,4-TRICHLORO-	mg/kg											
BENZENE, 1,2-DICHLORO-	mg/kg											
BENZENE, 1,4-DICHLORO-	mg/kg											
Camphene	mg/kg											
CYCLOHEXANE	mg/kg											
Cyclohexane, methyl-	mg/kg											
Cyclotrisiloxane, hexamethyl	mg/kg											
Diphenyl Ether	mg/kg											
Ethane, 1,1,2,2-tetrachloro-	mg/kg											
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg											
Ethane, 1,2-dichloro-1,1-dif	mg/kg											
Ethene, 1,1-dichloro-2,2-dif	mg/kg											
Hexane, 2-methyl-	mg/kg											
Hexane, 3-methyl-	mg/kg											
METHANE, CHLOROFLUORO-	mg/kg											
Naphthalene	mg/kg											
NAPHTHALENE, 2-METHYL-	mg/kg											
Nonanal	mg/kg											
Norflurane	mg/kg											
Pentane, 2,3-dimethyl-	mg/kg											
Phenol, 4-(1,1,3,3-tetrameth	mg/kg											
Propene	mg/kg											
Sulfur dioxide	mg/kg											
Tridecane	mg/kg											
UNKNOWN	mg/kg											
UNKNOWN ALICYCLIC	mg/kg											
UNKNOWN ALIPHATIC	mg/kg											
UNKNOWN ALKANE	mg/kg											
UNKNOWN AROMATIC	mg/kg											
UNKNOWN SILOXANE	mg/kg											
<b>Volatile Organic Compounds</b>												
1,1,1,2-Tetrachloroethane	mg/kg	0.001 U	0.001 U	0.001 U	0.048 U	0.075 U	0.15 U	0.001 U	0.001 U	0.055 U	0.061 U	
1,1,1-Trichloroethane	mg/kg	0.001 U	0.001 U	0.001 U	0.048 U	0.075 U	0.15 U	0.001 U	0.001 U	0.055 U	0.061 U	
1,1,1-Trichlorotrifluoroethane	mg/kg	0.006 U	0.006 U	0.005 U	0.005 U	0.008 U	0.011 U	0.006 U	0.005 U	0.006 U	0.024 U	
1,1,2,2-Tetrachloroethane	mg/kg	0.001 U	0.001 U	0.001 U	0.048 U	0.075 U	0.15 U	0.005 U	0.001 U	0.055 U	0.061 U	
1,1,2-Trichloroethane	mg/kg	0.001 U	0.001 U	0.001 U	0.048 U	0.075 U	0.15 U	0.001 U	0.001 U	0.055 U	0.061 U	
1,1,2-Trichlorotrifluoroethane	mg/kg	0.015 U	0.002 U	0.002 U	0.61 U	0.15 U	0.32 U	0.044 U	0.072 U	0.017 U	0.19 U	
1,1,2-Trifluoroethane	mg/kg	0.002 U	0.004 U	0.002 U	0.002 U	0.002 U	0.002 U					
1,1-Dichloro-1-Fluoroethane	mg/kg	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,1-Dichloroethane	mg/kg	0.001 U	0.001 U	0.001 U	0.048 U	0.075 U	0.15 U	0.001 U	0.001 U	0.055 U	0.061 U	
1,1-Dichloroethene	mg/kg	0.001 U	0.001 U	0.001 U	0.048 U	0.075 U	0.15 U	0.001 U	0.001 U	0.055 U	0.061 U	
1,1-Dichloropropene	mg/kg	0.001 U	0.001 U	0.001 U	0.048 U	0.075 U	0.15 U	0.001 U	0.001 U	0.055 U	0.061 U	
1,2,4-Trimethylbenzene	mg/kg	0.001 U	0.001 U	0.001 U	0.048 U	0.075 U	0.15 U	0.001 U	0.001 U	0.055 U	0.061 U	
1,2-Dibromoethane (EDB)	mg/kg	0.001 U	0.001 U	0.001 U	0.048 U	0.075 U	0.15 U	0.001 U	0.001 U	0.055 U	0.061 U	
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg	0.001 U	0.001 U	0.001 U	0.003 U	0.079 U	1.2 U	0.012 U	0.001 U	0.037 U	0.003 U	
1,2-Dichloro-1-Fluoroethane	mg/kg	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	
1,2-Dichlorobenzene	mg/kg	0.001 U	0.001 U	0.001 U	0.048 U	5.2 U	2.4 U	0.024 U	0.004 U	0.001 U	2.7 U	
1,2-Dichloroethane	mg/kg	0.001 U	0.001 U	0.001 U	0.048 U	0.075 U	0.15 U	0.001 U	0.001 U	0.055 U	0.061 U	
1,2-Dichloroethene	mg/kg	0.001 U	0.001 U	0.001 U	0.048 U	0.075 U	0.15 U	0.001 U	0.001 U	0.055 U	0.061 U	
1,2-Dichloropropane	mg/kg	0.001 U	0.001 U	0.001 U	0.048 U	0.075 U	0.15 U	0.001 U	0.001 U	0.055 U	0.061 U	
1,2-Dichlorotetrafluoroethane	mg/kg	0.002 U	0.002 U	0.002 U	0.009 U	0.28 U	0.13 U	0.02 U	0.014 U	0.003 U	0.008 U	
1,3,5-Trimethylbenzene	mg/kg	0.001 U	0.001 U	0.001 U	0.048 U	0.075 U	0.15 U	0.001 U	0.001 U	0.055 U	0.061 U	
1,3-Dichlorobenzene	mg/kg	0.001 U	0.001 U	0.001 U	0.048 U	0.26 U	0.15 U	0.001 U	0.001 U	0.055 U	0.12 U	
1,4-Dichlorobenzene	mg/kg	0.001 U	0.001 U	0.001 U	0.061 U	9.6 U	3.6 U	0.036 U	0.006 U	0.002 U	0.63 U	
1-Chloro-1,1-Difluoroethane	mg/kg	0.001 U	0.001 U	0.001 U	0.001 U	0.002 U	0.002 U	0.001 U	0.001 U	0.001 U	0.001 U	
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg	0.001 U	0.001 U	0.003 U	0.082 U	0.44 U	0.3 U	0.21 U	0.005 U	0.001 U	0.003 U	
2-Chloro-1,1,1-Trifluoroethane	mg/kg	0.002 U	0.002 U	0.002 U	0.097 U	0.15 U	0.3 U	0.002 U	0.002 U	0.003 U	0.12 U	
2-Chloroethyl Vinyl Ether	mg/kg											
2-Chlorotoluene	mg/kg	0.001 U	0.001 U	0.001 U	0.048 U	0.075 U	0.15 U	0.001 U	0.001 U	0.055 U	0.061 U	
2-Hexanone	mg/kg	0.004 U	0.003 U	0.003 U	0.15 U	0.22 U	0.45 U	0.003 U	0.003 U	0.004 U	0.18 U	
4-Chlorotoluene	mg/kg	0.001 U	0.001 U	0.001 U	0.048 U	0.075 U	0.15 U	0.001 U	0.001 U	0.055 U	0.061 U	
4-Isopropyltoluene	mg/kg	0.001 U	0.001 U	0.001 U	0.048 U	0.075 U	0.15 U	0.001 U	0.001 U	0.055 U	0.061 U	
Acetone	mg/kg	0.097 U	0.035 U	0.035 U	0.34 U	0.52 U	1.1 U	0.01 U	0.038 U	0.019 U	0.43 U	
Acrolein	mg/kg											
Acrylonitrile	mg/kg											
Benzene	mg/kg	0.008 U	0.0006 U	0.0008 U	0.28 U	0.25 U	0.46 U	0.21 U	0.006 U	0.002 U	2.2 U	
Bromodichloromethane	mg/kg	0.001 U	0.001 U	0.001 U	0.048 U	0.075 U	0.15 U	0.001 U	0.001 U	0.055 U	0.061 U	
Bromoform	mg/kg											
Carbon Disulfide	mg/kg	0.004 U	0.001 U	0.001 U	0.048 U	0.075 U	0.15 U	0.001 U	0.001 U	0.055 U	0.061 U	
Carbon Tetrachloride	mg/kg	0.001 U	0.001 U	0.001 U	0.048 U	0.075 U	0.15 U	0.001 U	0.001 U	0.055 U	0.061 U	
CFC-1113	mg/kg	0.002 U	0.002 U	0.002 U	0.097 U	0.15 U	0.3 U	0.002 U	0.002 U	0.003 U	0.12 U	
Chlorobenzene	mg/kg	0.032 U	0.001 U	0.007 U	1.4 U	16 U	21 U	0.076 U	0.053 U	0.017 U	6.5 U	

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA D16-BOR-13-(4.3-4.8)		MZ-FPA D16-BOR-13-(6.3-6.8)		MZ-FPA D16-BOR-13-(7.8-8.9)		MZ-FPA D16-BOR-13-(8.9-9.1)		MZ-FPA D16-BOR-14-(0.5-1.0)		MZ-FPA D16-BOR-14-(0-0.5)		MZ-FPA D16-BOR-14-(4.5-5.0)		MZ-FPA D16-BOR-14-(5.5-6.0)		MZ-FPA D16-BOR-14-(8.5-9.0)		MZ-FPA D16-BOR-14-(9.0-9.5)		MZ-FPA E16-BOR-03(0.5-1.0)	
		D16-BOR-13 4.30-4.80 FS 11/6/2017	U	D16-BOR-13 6.30-6.80 FS 11/6/2017	U	D16-BOR-13 7.80-8.90 FS 11/6/2017	U	D16-BOR-13 8.90-9.10 FS 11/6/2017	U	D16-BOR-14 0.50-1.00 FS 11/1/2017	U	D16-BOR-14 0.00-0.50 FS 11/1/2017	U	D16-BOR-14 4.50-5.00 FS 11/1/2017	U	D16-BOR-14 5.50-6.00 FS 11/1/2017	U	D16-BOR-14 8.50-9.00 FS 11/1/2017	U	D16-BOR-14 9.00-9.50 FS 11/1/2017	U	E16-BOR-03 0.50-1.00 FS 11/2/2016	U
Chemical	Units																						
Chlorodibromomethane	mg/kg	0.001	U	0.001	U	0.001	U	0.048	U	0.075	U	0.15	U	0.001	U	0.001	U	0.001	U	0.055	U	0.061	U
Chlorodifluoromethane	mg/kg	0.002	U	0.002	U	0.002	U	0.002	U	0.005	U	0.006	U	0.002	U	0.002	U	0.003	U	0.007	U	0.002	U
Chlorofluoromethane	mg/kg	0.001	U	0.001	U	0.001	U	0.001	U	0.007	U	0.093	U	0.001	U	0.001	U	0.001	U	0.004	U	0.001	U
Chloroform	mg/kg	0.001	U	0.001	U	0.001	U	0.048	U	0.075	U	0.15	U	0.03	U	0.001	U	0.001	U	0.16	U	0.061	U
Chloropentafluoroethane	mg/kg	0.018	U	0.017	U	0.016	U	0.016	U	0.024	U	0.034	U	0.018	U	0.015	U	0.019	U	0.019	U	0.017	U
cis-1,2-Dichloroethene	mg/kg	0.001	U	0.001	U	0.001	U	0.048	U	0.075	U	0.15	U	0.001	U	0.001	U	0.001	U	0.055	U	0.061	U
cis-1,3-Dichloropropene	mg/kg	0.001	U	0.001	U	0.001	U	0.048	U	0.075	U	0.15	U	0.001	U	0.001	U	0.001	U	0.055	U	0.061	U
Cumene	mg/kg	0.001	U	0.048	U	0.001	U	0.048	U	0.075	U	0.15	U	0.001	U	0.001	U	0.001	U	0.055	U	0.23	U
Dichlorodifluoromethane	mg/kg	0.002	U	0.002	U	0.002	U	0.097	U	0.15	U	0.3	U	0.002	U	0.002	U	0.003	U	0.11	U	0.12	U
Dichlorofluoromethane	mg/kg	0.004	U	0.002	U	0.002	U	0.097	U	0.15	U	0.52	U	0.002	U	0.002	U	0.003	U	0.51	U	0.12	U
Ethane	ug/L																						
Ethyl Chloride	mg/kg	0.002	U	0.002	U	0.002	U	0.097	U	0.15	U	0.3	U	0.002	U	0.002	U	0.003	U	0.11	U	0.12	U
Ethylbenzene	mg/kg	0.001	U	0.001	U	0.001	U	0.048	U	0.075	U	0.15	U	0.001	U	0.001	U	0.001	U	0.055	U	0.061	U
Fluoromethane	mg/kg	0.004	U	0.003	U	0.003	U	0.003	U	0.005	U	0.007	U	0.004	U	0.003	U	0.004	U	0.004	U	0.003	U
Hexane	mg/kg	0.001	U	0.001	U	0.001	U	0.048	U	0.075	U	0.15	U	0.001	U	0.001	U	0.001	U	0.055	U	0.061	U
Isobutyl Alcohol	mg/kg	0.12	U	0.11	U	0.11	U	4.8	U	7.5	U	15	U	0.12	U	0.1	U	0.15	U	5.5	U	6.1	U
Meta- And Para-Xylene	mg/kg	0.001	U	0.001	U	0.001	U	0.048	U	0.075	U	0.15	U	0.001	U	0.001	U	0.001	U	0.055	U	0.061	U
Methacrylonitrile	mg/kg	0.006	U	0.006	U	0.006	U	0.24	U	0.37	U	0.75	U	0.006	U	0.005	U	0.007	U	0.27	U	0.3	U
Methane	ug/L																						
Methyl Bromide	mg/kg																						
Methyl Chloride	mg/kg	0.002	U	0.002	U	0.002	U	0.097	U	0.15	U	0.3	U	0.002	U	0.002	U	0.003	U	0.11	U	0.12	U
Methyl Ethyl Ketone	mg/kg	0.006	U	0.004	U	0.005	U	0.19	U	0.3	U	0.6	U	0.005	U	0.004	U	0.006	U	0.22	U	0.24	U
Methyl Isobutyl Ketone	mg/kg	0.004	U	0.003	U	0.003	U	0.15	U	0.22	U	0.45	U	0.003	U	0.003	U	0.004	U	0.16	U	0.18	U
Methyl Methacrylate	mg/kg	0.001	U	0.001	U	0.001	U	0.048	U	0.075	U	0.15	U	0.001	U	0.001	U	0.001	U	0.055	U	0.061	U
Methyl Tertiary Butyl Ether	mg/kg	0.0006	U	0.0006	U	0.0006	U	0.024	U	0.037	U	0.075	U	0.0006	U	0.0005	U	0.0007	U	0.027	U	0.03	U
Methylene Chloride	mg/kg	0.002	U	0.002	U	0.002	U	0.097	U	0.15	U	0.3	U	0.035	U	0.003	U	0.003	U	0.3	U	0.12	U
N-Butylbenzene	mg/kg	0.001	U	0.001	U	0.001	U	0.048	U	0.075	U	0.15	U	0.001	U	0.001	U	0.001	U	0.055	U	0.061	U
N-Propylbenzene	mg/kg	0.001	U	0.001	U	0.001	U	0.048	U	0.075	U	0.15	U	0.001	U	0.001	U	0.001	U	0.055	U	0.061	U
Ortho-Xylene	mg/kg	0.001	U	0.001	U	0.001	U	0.048	U	0.075	U	0.15	U	0.001	U	0.001	U	0.001	U	0.055	U	0.061	U
Propionitrile	mg/kg	0.036	U	1.5	U	0.034	U	1.5	U	2.2	U	4.5	U	0.035	U	0.03	U	0.044	U	1.6	U	1.8	U
sec-Butylbenzene	mg/kg	0.001	U	0.001	U	0.001	U	0.048	U	0.075	U	0.15	U	0.001	U	0.001	U	0.001	U	0.074	U	0.061	U
Styrene	mg/kg	0.001	U	0.001	U	0.001	U	0.048	U	0.075	U	0.15	U	0.001	U	0.001	U	0.001	U	0.055	U	0.061	U
tert-Butylbenzene	mg/kg	0.001	U	0.001	U	0.001	U	0.048	U	0.075	U	0.15	U	0.001	U	0.001	U	0.001	U	0.055	U	0.061	U
Tetrachloroethene	mg/kg	0.001	U	0.001	U	0.001	U	0.048	U	0.78	U	1.1	U	0.009	U	0.001	U	0.001	U	0.15	U	0.27	U
Tetrahydrofuran	mg/kg	0.005	U	0.004	U	0.005	U	0.19	U	0.3	U	0.6	U	0.005	U	0.004	U	0.006	U	0.22	U	0.24	U
Toluene	mg/kg	0.003	U	0.001	U	0.002	U	0.048	U	0.075	U	0.15	U	0.001	U	0.001	U	0.001	U	0.055	U	0.061	U
trans-1,2-Dichloroethene	mg/kg	0.001	U	0.001	U	0.001	U	0.048	U	0.075	U	0.15	U	0.001	U	0.001	U	0.001	U	0.055	U	0.061	U
trans-1,3-Dichloropropene	mg/kg																						
Trichloroethene	mg/kg	0.001	U	0.001	U	0.001	U	0.048	U	0.075	U	0.15	U	0.001	U	0.001	U	0.001	U	0.055	U	0.061	U
Trichlorofluoromethane	mg/kg	0.073	U	0.002	U	0.003	U	2.1	U	0.15	U	0.3	U	0.11	U	0.13	U	0.022	U	15	U	0.12	U
Vinyl Chloride	mg/kg	0.001	U	0.001	U	0.001	U	0.048	U	0.075	U	0.15	U	0.001	U	0.001	U	0.001	U	0.055	U	0.061	U
Vinyl Fluoride	mg/kg	0.007	U	0.007	U	0.006	U	0.006	U	0.009	U	0.013	U	0.007	U	0.006	U	0.008	U	0.008	U	0.007	U
Xylenes	mg/kg	0.001	U	0.001	U	0.001	U	0.048	U	0.075	U	0.15	U	0.001	U	0.001	U	0.001	U	0.055	U	0.061	U

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	Field Sample ID	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		E16-BOR-03(0-0.5)	E16-BOR-03(4.0-4.5)	E16-BOR-03(5.5-6.0)	E16-BOR-03(7.5-8.0)	E16-BOR-03(8.9-9.2)	E16-BOR-04(0.5-1.0)	E16-BOR-04(0-0.5)	E16-BOR-04(3.5-4.0)	E16-BOR-04(6.0-6.5)	E16-BOR-04(7.0-7.5)	E16-BOR-04(8.4-8.6)
Location ID	Location ID	E16-BOR-03	E16-BOR-03	E16-BOR-03	E16-BOR-03	E16-BOR-03	E16-BOR-04	E16-BOR-04	E16-BOR-04	E16-BOR-04	E16-BOR-04	E16-BOR-04
Depth Interval (ft)	Depth Interval (ft)	0.00-0.50	4.00-4.50	5.50-6.00	7.50-8.00	8.90-9.20	0.50-1.00	0.00-0.50	3.50-4.00	6.00-6.50	7.00-7.50	8.40-8.60
Sample Purpose	Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Date	Date	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016
Chemical Class	Units											
<b>General Chemistry</b>												
Black Carbon	mg/kg											
Percent Moisture	%	30.7	21.2	8.1	7.3	24.5	27	23.7	8.9	7.9	9.9	25.4
Percent Solids	%											
Total Organic Carbon	mg/kg	3000	241 U	214 U	194 U		55800	5090	235 U	208 U	255 U	
<b>Metals</b>												
Aluminum	mg/kg	8910					3760	7450				
Antimony	mg/kg	1.73					4.05	0.341				
Arsenic	mg/kg	5.72					4.17	4.97				
Barium	mg/kg	55.2					66.5	37.1				
Beryllium	mg/kg	0.415					0.212	0.37				
Cadmium	mg/kg	0.21					0.899	0.186				
Calcium	mg/kg	3460					648	2180				
Chromium	mg/kg	28.7					40.7	22.5				
Cobalt	mg/kg	7.19					4.93	5.5				
Copper	mg/kg	15.5					124	10.3				
Iron	mg/kg	14800					6840	13400				
Lead	mg/kg	27.9					281	19.9				
Magnesium	mg/kg	2520					538	2440				
Manganese	mg/kg	274					41.3	241				
Mercury	mg/kg	0.312					2.88	0.217				
Nickel	mg/kg	14.4					24.1	11.7				
Potassium	mg/kg	1580					487	1330				
Selenium	mg/kg	0.29					0.891	0.26				
Silver	mg/kg	0.111					0.219	0.0851				
Sodium	mg/kg	460					219	543				
Thallium	mg/kg	0.111					0.39	0.0655				
Tin	mg/kg											
Titanium	mg/kg											
Vanadium	mg/kg	27.2					21	22.5				
Zinc	mg/kg	68.4					85.6	59				
<b>Metals - AVS/SEM</b>												
Acid Volatile Sulfide	umol/g											
Arsenic	umol/g											
Cadmium	umol/g											
Copper	umol/g											
Lead	umol/g											
Zinc	umol/g											
<b>Metals - Leachate</b>												
Lead	ug/L											
<b>Per and Polyfluorinated Organic Substances</b>												
Perfluorobutane Sulfonic Acid	mg/kg											
Perfluorobutanoic Acid	mg/kg											
Perfluorodecane Sulfonic Acid	mg/kg											
Perfluorodecanoic Acid	mg/kg											
Perfluorododecanoic Acid	mg/kg											
Perfluoroheptanoic Acid	mg/kg											
Perfluorohexane Sulfonic Acid	mg/kg											
Perfluorohexanoic Acid	mg/kg											
Perfluorononanoic Acid	mg/kg											
Perfluorooctane Sulfonamide	mg/kg											
Perfluoropentanoic Acid	mg/kg											
Perfluorotetradecanoic Acid	mg/kg											
Perfluorotridecanoic Acid	mg/kg											
Perfluoroundecanoic Acid	mg/kg											
PFOA	mg/kg											
PFOA(trial)	mg/kg											
PFOS	mg/kg											
PFOS (trial)	mg/kg											
<b>Pesticides and Herbicides</b>												
4,4'-DDD	mg/kg											
4,4'-DDE	mg/kg											
4,4'-DDT	mg/kg											
Aldrin	mg/kg											
Alpha Chlordane	mg/kg											
Alpha-BHC	mg/kg											
beta-BHC	mg/kg											
delta-BHC	mg/kg											
Dieldrin	mg/kg											
Endosulfan I	mg/kg											
Endosulfan II	mg/kg											
Endosulfan Sulfate	mg/kg											
Endrin	mg/kg											
Endrin Aldehyde	mg/kg											
Endrin Ketone	mg/kg											
Gamma Chlordane	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		E16-BOR-03(0-0.5)	E16-BOR-03(4.0-4.5)	E16-BOR-03(5.5-6.0)	E16-BOR-03(7.5-8.0)	E16-BOR-03(8.9-9.2)	E16-BOR-04(0.5-1.0)	E16-BOR-04(0-0.5)	E16-BOR-04(3.5-4.0)	E16-BOR-04(6.0-6.5)	E16-BOR-04(7.0-7.5)	E16-BOR-04(8.4-8.6)
Location ID	Depth Interval (ft)	E16-BOR-03	E16-BOR-03	E16-BOR-03	E16-BOR-03	E16-BOR-03	E16-BOR-04	E16-BOR-04	E16-BOR-04	E16-BOR-04	E16-BOR-04	E16-BOR-04
Sample Purpose	Date	0.00-0.50	4.00-4.50	5.50-6.00	7.50-8.00	8.90-9.20	0.50-1.00	0.00-0.50	3.50-4.00	6.00-6.50	7.00-7.50	8.40-8.60
Chemical Class	Units	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Chemical	Units	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016
Heptachlor	mg/kg											
Heptachlor Epoxide	mg/kg											
Lindane	mg/kg											
Methoxychlor	mg/kg											
Toxaphene	mg/kg											
<b>Physical Properties</b>												
0.001 MM	% PASSING	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
0.002 MM	% PASSING	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
0.005 MM	% PASSING	3	1	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
0.02 MM	% PASSING	14	3	1	1	1	1	1.5	0.5	1	1	1.5
0.05 MM	% PASSING	50	9	3.5	2.5	1.5	5	2	3	3	3	3
0.064 MM	% PASSING	65	17	6	3	2	7.5	3	4	4	6	6
0.075 MM	% PASSING	71.7	21.4	6.5	3.6	2	9.2	3.3	4.3	4.3	6.8	6.8
0.15 MM	% PASSING	83.8	29.5	8.3	4.5	3.2	10.6	4.7	6	6	8.9	8.9
0.3 MM	% PASSING	92.9	65.7	12	6.7	10.3	15.6	8.3	9.2	9.2	18.7	18.7
0.6 MM	% PASSING	96.2	81.6	23.8	10.8	23.5	24.1	19.6	15.8	15.8	29.3	29.3
1.18 MM	% PASSING	97.3	89.5	42.7	25.9	32	30.3	36.1	24	24	50.3	50.3
19 MM	% PASSING	100	100	100	93.4	88.3	83.4	100	92.3	92.3	100	100
2.36 MM	% PASSING	97.7	96.4	56.5	47.4	39	37.5	53.6	37.3	37.3	68.9	68.9
3.35 MM	% PASSING	99.1	98.6	67.6	58.5	43.4	42.4	62.6	49.4	49.4	80.7	80.7
37.5 MM	% PASSING	100	100	100	100	100	100	100	100	100	100	100
4.75 MM	% PASSING	99.8	99.3	78.4	68.8	49	48	72.4	64.4	64.4	90.2	90.2
75 MM	% PASSING	100	100	100	100	100	100	100	100	100	100	100
Density	PCF											
<b>Polychlorinated Biphenyls - TICs</b>												
1,1'-Biphenyl, 2,3-dichloro-	mg/kg											
Unknown Biphenyl	mg/kg											
<b>Polychlorinated Biphenyls</b>												
Heptachlorobiphenyl	mg/kg											
Hexachlorobiphenyl	mg/kg											
Octachlorobiphenyl	mg/kg											
PCB 1	mg/kg	0.00929					0.136	0.0139				
PCB 10	mg/kg	0.000397					0.00812	0.000597				
PCB 100	mg/kg											
PCB 101	mg/kg											
PCB 102	mg/kg	0.0000242					0.00112	0.0000781				
PCB 103	mg/kg	0.000011					0.000272	0.0000193				
PCB 104	mg/kg	0.0000168	U				0.0000137	0.0000146	U			
PCB 105	mg/kg	0.000181					0.0138	0.000722				
PCB 106	mg/kg	0.0000625					0.0000824	0.0000679	U			
PCB 107	mg/kg											
PCB 107/123	mg/kg											
PCB 108	mg/kg											
PCB 109	mg/kg	0.0000433					0.0019	0.000129				
PCB 11	mg/kg	0.000657					0.0494	0.00116				
PCB 110	mg/kg	0.000549					0.0338	0.00192				
PCB 111	mg/kg	0.0000309	U				0.0000333	0.0000627	U			
PCB 112	mg/kg	0.0000061					0.000086	0.0000996				
PCB 113	mg/kg											
PCB 114	mg/kg	0.0000125					0.000972	0.0000473				
PCB 115	mg/kg	0.0000307	U				0.0000331	0.0000624	U			
PCB 116	mg/kg											
PCB 117	mg/kg	0.0000143					0.000725	0.0000751	U			
PCB 118	mg/kg	0.000361					0.0238	0.00131				
PCB 119	mg/kg											
PCB 12	mg/kg											
PCB 120	mg/kg	0.0000051					0.0000495	0.0000639	U			
PCB 121	mg/kg	0.0000324	U				0.0000349	0.0000657	U			
PCB 121/95/88	mg/kg											
PCB 122	mg/kg	0.0000349	U				0.000526	0.0000339				
PCB 123	mg/kg	0.0000078					0.000676	0.0000395				
PCB 124	mg/kg											
PCB 125	mg/kg											
PCB 126	mg/kg	0.0000688					0.00012	0.000012				
PCB 127	mg/kg	0.0000315	U				0.0000458	0.0000765	U			
PCB 128	mg/kg											
PCB 129	mg/kg											
PCB 129/158	mg/kg											
PCB 13	mg/kg											
PCB 130	mg/kg	0.000038					0.00164	0.0000924				
PCB 130/164	mg/kg											
PCB 131	mg/kg	0.0000077					0.000337	0.0000153				
PCB 132	mg/kg	0.000157					0.00714	0.000339				
PCB 133	mg/kg	0.0000233					0.000874	0.0000464				
PCB 134	mg/kg	0.0000335					0.00137	0.0000935				
PCB 135	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		E16-BOR-03(0-0.5) E16-BOR-03 0.00-0.50 FS 11/2/2016	E16-BOR-03(4.0-4.5) E16-BOR-03 4.00-4.50 FS 11/2/2016	E16-BOR-03(5.5-6.0) E16-BOR-03 5.50-6.00 FS 11/2/2016	E16-BOR-03(7.5-8.0) E16-BOR-03 7.50-8.00 FS 11/2/2016	E16-BOR-03(8.9-9.2) E16-BOR-03 8.90-9.20 FS 11/2/2016	E16-BOR-04(0.5-1.0) E16-BOR-04 0.50-1.00 FS 11/2/2016	E16-BOR-04(0-0.5) E16-BOR-04 0.00-0.50 FS 11/2/2016	E16-BOR-04(3.5-4.0) E16-BOR-04 3.50-4.00 FS 11/2/2016	E16-BOR-04(6.0-6.5) E16-BOR-04 6.00-6.50 FS 11/2/2016	E16-BOR-04(7.0-7.5) E16-BOR-04 7.00-7.50 FS 11/2/2016	E16-BOR-04(8.4-8.6) E16-BOR-04 8.40-8.60 FS 11/2/2016
Chemical	Units											
PCB 136	mg/kg	0.0000841					0.00341	0.00017				
PCB 137	mg/kg	0.0000133					0.000654	0.0000434				
PCB 138	mg/kg											
PCB 139	mg/kg											
PCB 14	mg/kg	0.000569					0.00932	0.000299				
PCB 140	mg/kg											
PCB 141	mg/kg	0.0000853					0.00297	0.000168				
PCB 142	mg/kg	0.00000784					0.0000676	0.00000219	U			
PCB 143	mg/kg	0.00000293	U				0.0000954	0.00000184	U			
PCB 143/139	mg/kg											
PCB 144	mg/kg	0.0000225					0.000805	0.0000413				
PCB 145	mg/kg	0.00000247	U				0.0000166	0.00000137	U			
PCB 146	mg/kg	0.000117					0.00364	0.000227				
PCB 147	mg/kg											
PCB 148	mg/kg	0.00000556					0.0000385	0.00000604				
PCB 149	mg/kg											
PCB 15	mg/kg	0.00162					0.0101	0.000632				
PCB 150	mg/kg	0.00000451					0.0000505	0.00000615				
PCB 151	mg/kg											
PCB 152	mg/kg	0.00000224	U				0.0000237	0.00000124	U			
PCB 153	mg/kg											
PCB 154	mg/kg	0.0000198					0.000133	0.0000321				
PCB 155	mg/kg	0.00000436					0.0000224	0.00000591				
PCB 156	mg/kg											
PCB 157	mg/kg											
PCB 158	mg/kg	0.0000395					0.00186	0.0000904				
PCB 159	mg/kg	0.0000134					0.00015	0.0000127				
PCB 16	mg/kg	0.00237					0.0295	0.00068				
PCB 160	mg/kg	0.0000177					0.000147	0.0000176				
PCB 161	mg/kg	0.00000222	U				0.0000154	0.00000014	U			
PCB 162	mg/kg	0.0000114					0.000528	0.0000243				
PCB 163	mg/kg											
PCB 163/160	mg/kg											
PCB 164	mg/kg	0.0000527					0.00182	0.0000986				
PCB 165	mg/kg	0.00000258	U				0.000012	0.00000162	U			
PCB 166	mg/kg											
PCB 167	mg/kg	0.0000292					0.00109	0.000054				
PCB 168	mg/kg											
PCB 169	mg/kg	0.00000399	U				0.0000903	0.00000665				
PCB 17	mg/kg	0.00137					0.0143	0.000365				
PCB 170	mg/kg	0.000139					0.00238	0.000176				
PCB 171	mg/kg											
PCB 172	mg/kg	0.0000431					0.000597	0.0000476				
PCB 173	mg/kg											
PCB 174	mg/kg	0.000239					0.00245	0.000248				
PCB 175	mg/kg	0.0000132					0.000145	0.000014				
PCB 176	mg/kg	0.000016					0.000317	0.0000274				
PCB 177	mg/kg	0.000127					0.00149	0.000144				
PCB 178	mg/kg	0.0000396					0.000488	0.0000546				
PCB 179	mg/kg	0.0000712					0.00112	0.0000898				
PCB 18	mg/kg											
PCB 180	mg/kg											
PCB 181	mg/kg	0.00000487	U				0.0000376	0.00000322	U			
PCB 182	mg/kg	0.00000441	U				0.0000227	0.00000292	U			
PCB 182/175	mg/kg											
PCB 183	mg/kg	0.000108					0.0013	0.000122				
PCB 184	mg/kg	0.00000206	U				0.0000296	0.00000403				
PCB 185	mg/kg	0.0000242					0.000271	0.00000321	U			
PCB 186	mg/kg	0.00000204	U				0.00000115	0.00000157	U			
PCB 187	mg/kg	0.000273					0.0028	0.000331				
PCB 188	mg/kg	0.00000839					0.0000176	0.00000763				
PCB 189	mg/kg	0.00000963					0.000196	0.0000107				
PCB 19	mg/kg	0.0000975					0.0207	0.000819				
PCB 190	mg/kg	0.0000346					0.000407	0.0000468				
PCB 191	mg/kg	0.00000958					0.000124	0.0000095				
PCB 192	mg/kg	0.00000993					0.0000333	0.0000028	U			
PCB 193	mg/kg											
PCB 194	mg/kg	0.00014					0.00138	0.000174				
PCB 195	mg/kg	0.0000359					0.000384	0.0000563				
PCB 196	mg/kg	0.0000887					0.000744	0.000118				
PCB 197	mg/kg	0.00000974					0.0000526	0.0000126				
PCB 198	mg/kg											
PCB 199	mg/kg											
PCB 2	mg/kg	0.00538					0.0165	0.00116				
PCB 20	mg/kg											
PCB 200	mg/kg	0.0000153					0.00017	0.0000211				

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA										
		E16-BOR-03(0-0.5)	E16-BOR-03(4.0-4.5)	E16-BOR-03(5.5-6.0)	E16-BOR-03(7.5-8.0)	E16-BOR-03(8.9-9.2)	E16-BOR-04(0.5-1.0)	E16-BOR-04(0-0.5)	E16-BOR-04(3.5-4.0)	E16-BOR-04(6.0-6.5)	E16-BOR-04(7.0-7.5)	E16-BOR-04(8.4-8.6)
Chemical	Units	E16-BOR-03 0.00-0.50 FS 11/2/2016	E16-BOR-03 4.00-4.50 FS 11/2/2016	E16-BOR-03 5.50-6.00 FS 11/2/2016	E16-BOR-03 7.50-8.00 FS 11/2/2016	E16-BOR-03 8.90-9.20 FS 11/2/2016	E16-BOR-04 0.50-1.00 FS 11/2/2016	E16-BOR-04 0.00-0.50 FS 11/2/2016	E16-BOR-04 3.50-4.00 FS 11/2/2016	E16-BOR-04 6.00-6.50 FS 11/2/2016	E16-BOR-04 7.00-7.50 FS 11/2/2016	E16-BOR-04 8.40-8.60 FS 11/2/2016
PCB 201	mg/kg	0.0000374					0.000237	0.0000415				
PCB 202	mg/kg	0.0000875					0.000503	0.0000989				
PCB 203	mg/kg	0.00015					0.00114	0.000196				
PCB 204	mg/kg	0.0000279 U					0.0000132	0.0000223 U				
PCB 204/200	mg/kg											
PCB 205	mg/kg	0.0000819					0.0000672	0.0000886				
PCB 206	mg/kg	0.000878					0.00239	0.000897				
PCB 207	mg/kg	0.0000719					0.000194	0.0000939				
PCB 208	mg/kg	0.000403					0.000844	0.000412				
PCB 209	mg/kg	0.00122					0.00353	0.00117				
PCB 21	mg/kg											
PCB 21/20	mg/kg											
PCB 22	mg/kg	0.000759					0.00872	0.0004				
PCB 23	mg/kg	0.0000577					0.001	0.0000391				
PCB 24	mg/kg	0.00013					0.00214	0.0000737				
PCB 25	mg/kg	0.000181					0.0505	0.00116				
PCB 26	mg/kg											
PCB 27	mg/kg	0.000235					0.0212	0.00036				
PCB 28	mg/kg											
PCB 29	mg/kg											
PCB 3	mg/kg	0.00631					0.0394	0.00266				
PCB 30	mg/kg											
PCB 31	mg/kg	0.00196					0.0254	0.00108				
PCB 32	mg/kg	0.000974					0.015	0.0004				
PCB 33	mg/kg											
PCB 34	mg/kg	0.000116					0.00178	0.0000937				
PCB 35	mg/kg	0.000519					0.00619	0.000314				
PCB 36	mg/kg	0.000103					0.00628	0.000186				
PCB 37	mg/kg	0.00128					0.0138	0.000897				
PCB 38	mg/kg	0.0000776 U					0.00065	0.0000144				
PCB 39	mg/kg	0.000178					0.00232	0.000145				
PCB 4	mg/kg	0.00981					0.178	0.015				
PCB 4/10	mg/kg											
PCB 40	mg/kg											
PCB 41	mg/kg	0.0000257					0.00271	0.000116				
PCB 42	mg/kg	0.0001					0.0077	0.00039				
PCB 43	mg/kg	0.0000217					0.00134	0.0000571				
PCB 44	mg/kg											
PCB 45	mg/kg	0.000178					0.00504	0.0002				
PCB 46	mg/kg	0.0000729					0.00179	0.0000895				
PCB 47	mg/kg											
PCB 48	mg/kg	0.0000677					0.00632	0.000279				
PCB 49	mg/kg											
PCB 5	mg/kg	0.000694					0.00657	0.000273				
PCB 50	mg/kg											
PCB 51	mg/kg	0.0000304					0.00106	0.000059				
PCB 52	mg/kg	0.000493					0.0401	0.00154				
PCB 53	mg/kg											
PCB 54	mg/kg	0.0000879					0.000138	0.00000474				
PCB 55	mg/kg	0.0000453 U					0.000536	0.0000277				
PCB 56	mg/kg	0.000664					0.0198	0.00117				
PCB 57	mg/kg	0.0000449 U					0.000218	0.0000123				
PCB 58	mg/kg	0.0000441 U					0.000112	0.00000584				
PCB 59	mg/kg											
PCB 6	mg/kg	0.00367					0.0216	0.000952				
PCB 60	mg/kg	0.000075					0.0088	0.00041				
PCB 61	mg/kg											
PCB 62	mg/kg											
PCB 63	mg/kg	0.0000246					0.0013	0.000063				
PCB 64	mg/kg	0.000138					0.0121	0.000565				
PCB 65	mg/kg											
PCB 65/75/62	mg/kg											
PCB 66	mg/kg	0.000388					0.0342	0.00188				
PCB 67	mg/kg	0.0000153					0.000782	0.0000411				
PCB 67/58	mg/kg											
PCB 68	mg/kg	0.00000755					0.0000794	0.00000889				
PCB 68/64	mg/kg											
PCB 69	mg/kg											
PCB 7	mg/kg	0.000529					0.00382	0.000149				
PCB 70	mg/kg											
PCB 71	mg/kg											
PCB 72	mg/kg	0.0000147					0.000402	0.0000273				
PCB 73	mg/kg	0.0000026					0.0000455	0.00000511				
PCB 73/46	mg/kg											
PCB 74	mg/kg											
PCB 75	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		E16-BOR-03(0-0.5) E16-BOR-03 0.00-0.50 FS 11/2/2016	E16-BOR-03(4.0-4.5) E16-BOR-03 4.00-4.50 FS 11/2/2016	E16-BOR-03(5.5-6.0) E16-BOR-03 5.50-6.00 FS 11/2/2016	E16-BOR-03(7.5-8.0) E16-BOR-03 7.50-8.00 FS 11/2/2016	E16-BOR-03(8.9-9.2) E16-BOR-03 8.90-9.20 FS 11/2/2016	E16-BOR-04(0.5-1.0) E16-BOR-04 0.50-1.00 FS 11/2/2016	E16-BOR-04(0-0.5) E16-BOR-04 0.00-0.50 FS 11/2/2016	E16-BOR-04(3.5-4.0) E16-BOR-04 3.50-4.00 FS 11/2/2016	E16-BOR-04(6.0-6.5) E16-BOR-04 6.00-6.50 FS 11/2/2016	E16-BOR-04(7.0-7.5) E16-BOR-04 7.00-7.50 FS 11/2/2016	E16-BOR-04(8.4-8.6) E16-BOR-04 8.40-8.60 FS 11/2/2016
Chemical	Units											
PCB 76	mg/kg											
PCB 77	mg/kg	0.000299					0.00611		0.000346			
PCB 78	mg/kg	0.0000485 U					0.000235 U		0.0000456 U			
PCB 79	mg/kg	0.0000192					0.000488		0.0000374			
PCB 8	mg/kg	0.0106					0.0508		0.00242			
PCB 80	mg/kg	0.0000393 U					0.0000488		0.0000037 U			
PCB 81	mg/kg	0.00000487 U					0.000237		0.000012			
PCB 82	mg/kg	0.0000598					0.00518		0.000321			
PCB 83	mg/kg	0.0000211					0.00159		0.000126			
PCB 83/125/112	mg/kg											
PCB 84	mg/kg	0.000124					0.0116		0.000608			
PCB 85	mg/kg											
PCB 86	mg/kg											
PCB 86/109	mg/kg											
PCB 87	mg/kg											
PCB 87/111	mg/kg											
PCB 88	mg/kg	0.0000802 U					0.0000541 U		0.0000102 U			
PCB 89	mg/kg	0.0000542					0.000598		0.0000538			
PCB 89/84	mg/kg											
PCB 9	mg/kg	0.00195					0.0145		0.000554			
PCB 90	mg/kg											
PCB 91	mg/kg	0.0000643					0.00409		0.000329			
PCB 92	mg/kg	0.000089					0.00432		0.000295			
PCB 93	mg/kg											
PCB 94	mg/kg	0.0000481 U					0.000225		0.0000158			
PCB 95	mg/kg	0.00033					0.0221		0.00115			
PCB 96	mg/kg	0.0000527					0.000546		0.0000287			
PCB 97	mg/kg											
PCB 98	mg/kg	0.0000483 U					0.000451		0.0000196			
PCB 99	mg/kg	0.000221					0.0124		0.000782			
PCB-100/93	mg/kg	0.0000131					0.000366		0.0000346			
PCB-107/124	mg/kg	0.0000159					0.00115		0.0000705			
PCB-108/119/86/97/125/87	mg/kg	0.000294					0.0223		0.00144			
PCB-113/90/101	mg/kg	0.000415					0.0255		0.0014			
PCB-116/85	mg/kg	0.000123					0.00641		0.000458			
PCB-128/166	mg/kg	0.0000699					0.00261		0.000148			
PCB-13/12	mg/kg	0.00304					0.0283		0.00115			
PCB-139/140	mg/kg	0.000011					0.000364		0.0000222			
PCB-147/149	mg/kg	0.000451					0.0135		0.00081			
PCB-151/135	mg/kg	0.000196					0.00635		0.000359			
PCB-153/168	mg/kg	0.000446					0.012		0.000789			
PCB-156/157	mg/kg	0.0000637					0.00237		0.000118			
PCB-163/138/129	mg/kg	0.000468					0.0165		0.00103			
PCB-171/173	mg/kg	0.0000544					0.000763		0.0000592			
PCB-180/193	mg/kg	0.000413					0.00529		0.000461			
PCB-198/199	mg/kg	0.000388					0.00207		0.00045			
PCB-21/33	mg/kg	0.00149					0.0178		0.00067			
PCB-26/29	mg/kg	0.000468					0.00728		0.000308			
PCB-28/20	mg/kg	0.00123					0.0227		0.000986			
PCB-30/18	mg/kg	0.00554					0.0601		0.0016			
PCB-44/47/65	mg/kg	0.00042					0.028		0.00145			
PCB-50/53	mg/kg	0.000172					0.00458		0.000201			
PCB-59/62/75	mg/kg	0.0000455					0.0023		0.000117			
PCB-61/70/74/76	mg/kg	0.000863					0.0577		0.00309			
PCB-69/49	mg/kg	0.000233					0.0154		0.000835			
PCB-71/40	mg/kg	0.000236					0.0135		0.000695			
PCB-90/101	mg/kg											
Pentachlorobiphenyl	mg/kg											
Tetrachlorobiphenyl	mg/kg											
Total Decachlorobiphenyls (congeners)	mg/kg											
Total Dichlorobiphenyls (congeners)	mg/kg	0.0335					0.38		0.0232			
Total Heptachlorobiphenyls (congeners)	mg/kg	0.00163					0.0203		0.00185			
Total Hexachlorobiphenyls (congeners)	mg/kg	0.00249					0.0827		0.00487			
Total Monochlorobiphenyls (congeners)	mg/kg	0.021					0.192		0.0177			
Total Nonachlorobiphenyls (congeners)	mg/kg	0.00135					0.00343		0.0014			
Total Octachlorobiphenyls (congeners)	mg/kg	0.000961					0.00677		0.00118			
Total PCB (congeners)	mg/kg	0.089681					1.48573		0.08717			
Total Pentachlorobiphenyls (congeners)	mg/kg	0.00301					0.197		0.0115			
Total Tetrachlorobiphenyls (congeners)	mg/kg	0.00462					0.273		0.0137			
Total Trichlorobiphenyls (congeners)	mg/kg	0.0199					0.327		0.0106			
Trichlorobiphenyl (total)	mg/kg											
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>												
Benzo[e]pyrene	mg/kg						6.2					
Chrysene, 1-methyl-	mg/kg						9.6					
Naphthalene, 1-methyl-	mg/kg						16					
Pyrene, 1-methyl-	mg/kg	0.23					2.3					

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	Field Sample ID	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		E16-BOR-03(0-0.5)	E16-BOR-03(4.0-4.5)	E16-BOR-03(5.5-6.0)	E16-BOR-03(7.5-8.0)	E16-BOR-03(8.9-9.2)	E16-BOR-04(0.5-1.0)	E16-BOR-04(0-0.5)	E16-BOR-04(3.5-4.0)	E16-BOR-04(6.0-6.5)	E16-BOR-04(7.0-7.5)	E16-BOR-04(8.4-8.6)
Location ID	Location ID	E16-BOR-03	E16-BOR-03	E16-BOR-03	E16-BOR-03	E16-BOR-03	E16-BOR-04	E16-BOR-04	E16-BOR-04	E16-BOR-04	E16-BOR-04	E16-BOR-04
Depth Interval (ft)	Depth Interval (ft)	0.00-0.50	4.00-4.50	5.50-6.00	7.50-8.00	8.90-9.20	0.50-1.00	0.00-0.50	3.50-4.00	6.00-6.50	7.00-7.50	8.40-8.60
Sample Purpose	Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS
Date	Date	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016
Chemical Class	Chemical Class											
Chemical	Chemical											
Units	Units											
<b>Polycyclic Aromatic Hydrocarbons</b>												
Acenaphthene	mg/kg	0.057	0.004 U	0.004 U	0.004 U	0.008	3.7	0.066	0.004 U	0.004 U	0.004 U	0.004 U
Acenaphthylene	mg/kg	0.011	0.004 U	0.004 U	0.004 U	0.004 U	0.89	0.005	0.004 U	0.004 U	0.004 U	0.004 U
Anthracene	mg/kg	0.021	0.004 U	0.004 U	0.004 U	0.004 U	4.4	0.015	0.004 U	0.004 U	0.004 U	0.004 U
Benzo(A)Anthracene	mg/kg	0.04	0.004 U	0.004 U	0.004 U	0.004 U	25	0.045	0.007	0.009	0.004 U	0.004 U
Benzo(B)Fluoranthene	mg/kg	0.072	0.004 U	0.004 U	0.004 U	0.004 U	16	0.049	0.007	0.01	0.004 U	0.004 U
Benzo(G,H,I)Perylene	mg/kg	0.033	0.004 U	0.004 U	0.004 U	0.004 U	5.2	0.018	0.004	0.005	0.004 U	0.004 U
Benzo(K)Fluoranthene	mg/kg	0.026	0.004 U	0.004 U	0.004 U	0.004 U	8.3	0.017	0.004	0.006	0.004 U	0.004 U
Benzo(A)Pyrene	mg/kg	0.046	0.004 U	0.004 U	0.004 U	0.004 U	15	0.031	0.007	0.009	0.004 U	0.004 U
Chrysene	mg/kg	0.077	0.004 U	0.004 U	0.004 U	0.004 U	84	0.13	0.017	0.022	0.004 U	0.004 U
Dibenz(A,H)Anthracene	mg/kg	0.012	0.004 U	0.004 U	0.004 U	0.004 U	2.8	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U
Fluoranthene	mg/kg	0.079	0.004 U	0.004 U	0.004 U	0.004 U	22	0.086	0.008	0.012	0.004 U	0.004 U
Fluorene	mg/kg	0.052	0.004 U	0.004 U	0.004 U	0.011	4.3	0.045	0.004 U	0.004 U	0.004 U	0.004 U
Indeno (1,2,3-CD) Pyrene	mg/kg	0.031	0.004 U	0.004 U	0.004 U	0.013	4.7	0.013	0.004 U	0.004	0.004 U	0.004 U
Naphthalene	mg/kg	0.26	0.004 U	0.004 U	0.004 U	0.022	6.1	0.13	0.004 U	0.004 U	0.012	0.012
Phenanthrene	mg/kg	0.12	0.009	0.004 U	0.004 U	0.023	22	0.084	0.009	0.013	0.004 U	0.008
Pyrene	mg/kg	0.077	0.004 U	0.004 U	0.004 U	0.004 U	29	0.083	0.011	0.015	0.004 U	0.004 U
Total PAHs (Detections + 1/2 MDL)	mg/kg	1.014	0.039	0.032 U	0.032 U	0.088	253.39	0.819	0.088	0.117	0.032 U	0.048
Total PAHs (Detections Only)	mg/kg	1.014	0.009	0.032 U	0.032 U	0.064	253.39	0.817	0.074	0.105	0.032 U	0.02
<b>Semivolatile Organic Compounds - TICs</b>												
1,2,4-Trithiolane	mg/kg											
1,4-Benzenediol, 2-chloro-	mg/kg											
11H-Benzo[b]fluorene	mg/kg						3.6					
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg											
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg											
3-PENTEN-2-ONE, 4-METHYL-	mg/kg											
7H-Benz[de]anthracen-7-one	mg/kg	0.25										
9,10-Anthracenedione	mg/kg											
9-Octadecenamamide, (Z)-	mg/kg											
Acetamide, 2-chloro-N-(ethox	mg/kg											
Alachlor	mg/kg											
Benzenamine, 3-methyl-	mg/kg											
Benzenamine, 4,4',4"-methy	mg/kg											
Benzenamine, 4,4'-methyleneb	mg/kg											
Benzene, 1,2,3,4-tetrachloro	mg/kg											
Benzene, 1,2,3,5-tetrachloro	mg/kg											
Benzene, 1,2,3-trichloro-	mg/kg											
Benzene, 1,3,5-trichloro-	mg/kg											
Benzene, 1,3-bis(1-methyleth	mg/kg											
Benzene, 1,4-bis(1-methyleth	mg/kg											
Benzofuran, 2,3-dihydro-	mg/kg											
CYCLIC OCTAATOMIC SULFUR	mg/kg											
Diphenyl Ether	mg/kg											
Docosane	mg/kg						5					
Heneicosane	mg/kg											
Hexacosane	mg/kg	0.23				0.18						
Hexadecane	mg/kg						4.7					
Hexatriacontane	mg/kg											
m-Chloroaniline	mg/kg											
N,N-Diethylaniline	mg/kg											
n-Hexadecanoic acid	mg/kg											
Nonadecane	mg/kg											
o-Chloroaniline	mg/kg											
Octacosane	mg/kg											
Octadecane	mg/kg							0.23				
Octadecane, 1-chloro-	mg/kg											
Octadecanoic acid	mg/kg											
Parachlorophenol	mg/kg											
Pentadecane	mg/kg											
Perylene	mg/kg											
Phenol, 2,5-dichloro-	mg/kg											
Phenol, 3-chloro-	mg/kg											
Phenol, 4,4'-(1-methylethyl)	mg/kg	0.66				0.38		0.34				0.31
Tetracosane	mg/kg							0.19				
Tetradecane	mg/kg											
Tetraethylene glycol	mg/kg											
Total SVOC TICs	mg/kg	7	1.4	1.3	1.2	1.5	200	5.8	1.2	1.2	1.2	1.8
Triacontane	mg/kg											
Tributyl phosphate	mg/kg											
Tridecanoic acid	mg/kg											
Triphenyl phosphate	mg/kg											
UNKNOWN	mg/kg	0.3475						0.19666667				
Unknown acid	mg/kg											
Unknown Alcohol	mg/kg	0.39										
Unknown Aldol Condensate	mg/kg	0.19	0.6	0.52	0.51	0.45		1.3	0.5	0.5	0.51	0.71
UNKNOWN ALKANE	mg/kg	0.262						0.19				

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		E16-BOR-03(0-0.5) E16-BOR-03 0.00-0.50 FS 11/2/2016	E16-BOR-03(4.0-4.5) E16-BOR-03 4.00-4.50 FS 11/2/2016	E16-BOR-03(5.5-6.0) E16-BOR-03 5.50-6.00 FS 11/2/2016	E16-BOR-03(7.5-8.0) E16-BOR-03 7.50-8.00 FS 11/2/2016	E16-BOR-03(8.9-9.2) E16-BOR-03 8.90-9.20 FS 11/2/2016	E16-BOR-04(0.5-1.0) E16-BOR-04 0.50-1.00 FS 11/2/2016	E16-BOR-04(0-0.5) E16-BOR-04 0.00-0.50 FS 11/2/2016	E16-BOR-04(3.5-4.0) E16-BOR-04 3.50-4.00 FS 11/2/2016	E16-BOR-04(6.0-6.5) E16-BOR-04 6.00-6.50 FS 11/2/2016	E16-BOR-04(7.0-7.5) E16-BOR-04 7.00-7.50 FS 11/2/2016	E16-BOR-04(8.4-8.6) E16-BOR-04 8.40-8.60 FS 11/2/2016
Chemical	Units											
Unknown Alkene	mg/kg											
Unknown Amide	mg/kg	0.24										
Unknown Amine	mg/kg	0.27										
UNKNOWN AROMATIC	mg/kg											
Unknown Carboxylic Acid	mg/kg											
Unknown Cycloalkane	mg/kg											
Unknown Hydrocarbon	mg/kg						14.24					
Unknown Ketone	mg/kg											
Unknown PAH	mg/kg											
UNKNOWN SILOXANE	mg/kg											
<b>Semivolatile Organic Compounds</b>												
1,2,4-Trichlorobenzene	mg/kg	0.1	0.021	0.018	0.018	0.022	2.2	0.036	0.018	0.018	0.018	0.022
1,2-Diphenylhydrazine	mg/kg	0.024	0.021	0.018	0.018	0.022	0.23	0.022	0.018	0.018	0.018	0.022
1,4-Dioxane	mg/kg	0.14	0.13	0.11	0.11	0.13	1.4	0.13	0.11	0.11	0.11	0.13
1-Naphthylamine	mg/kg	0.24	0.21	0.18	0.18	0.22	2.3	0.21	0.18	0.18	0.18	0.22
2,3,4,6-Tetrachlorophenol	mg/kg	0.095	0.084	0.072	0.071	0.087	0.9	0.086	0.072	0.071	0.071	0.089
2,4,5-Trichlorophenol	mg/kg	0.024	0.021	0.018	0.018	0.022	0.23	0.022	0.018	0.018	0.018	0.022
2,4,6-Trichlorophenol	mg/kg	0.024	0.021	0.018	0.018	0.022	0.23	0.022	0.018	0.018	0.018	0.022
2,4-Dichlorophenol	mg/kg	0.024	0.021	0.018	0.018	0.022	0.23	0.022	0.018	0.018	0.018	0.022
2,4-Dimethylphenol	mg/kg	0.024	0.021	0.018	0.018	0.022	0.23	0.022	0.018	0.018	0.018	0.022
2,4-Dinitrophenol	mg/kg	0.43	0.36	0.32	0.32	0.39	4.1	0.39	0.32	0.32	0.33	0.67
2,4-Dinitrotoluene	mg/kg	0.095	0.084	0.072	0.071	0.087	1	0.47	0.072	0.071	0.071	0.089
2,6-Dinitrotoluene	mg/kg	0.024	0.021	0.018	0.018	0.022	0.23	0.022	0.018	0.018	0.018	0.022
2-Chloronaphthalene	mg/kg	0.01	0.008	0.007	0.007	0.009	0.09	0.009	0.007	0.007	0.007	0.009
2-Chlorophenol	mg/kg	0.024	0.021	0.018	0.018	0.022	0.23	0.022	0.018	0.018	0.018	0.022
2-Methylnaphthalene	mg/kg	0.074	0.064	0.054	0.054	0.068	3.3	0.069	0.054	0.054	0.054	0.069
2-Methylphenol (O-Cresol)	mg/kg	0.024	0.021	0.018	0.018	0.022	0.23	0.022	0.018	0.018	0.018	0.022
2-Naphthylamine	mg/kg	0.24	0.21	0.18	0.18	0.22	2.3	0.21	0.18	0.18	0.18	0.22
2-Nitroaniline	mg/kg	0.024	0.021	0.018	0.018	0.022	0.23	0.022	0.018	0.018	0.018	0.022
2-Nitrophenol	mg/kg	0.024	0.021	0.018	0.018	0.022	0.23	0.022	0.018	0.018	0.018	0.022
3,3'-Dichlorobenzidine	mg/kg	0.14	0.13	0.11	0.11	0.13	1.4	0.13	0.11	0.11	0.11	0.13
3,3'-Dimethylbenzidine	mg/kg											
3-Nitroaniline	mg/kg	0.095	0.084	0.072	0.071	0.087	0.9	0.086	0.072	0.071	0.071	0.089
4,6-Dinitro-2-Methylphenol	mg/kg	0.24	0.21	0.18	0.18	0.22	2.3	0.21	0.18	0.18	0.18	0.22
4-Aminobiphenyl	mg/kg	0.24	0.21	0.18	0.18	0.22	2.3	0.21	0.18	0.18	0.18	0.22
4-Bromophenyl Phenyl Ether	mg/kg	0.024	0.021	0.018	0.018	0.022	0.23	0.022	0.018	0.018	0.018	0.022
4-Chloro-3-Methylphenol	mg/kg	0.024	0.021	0.018	0.018	0.022	0.23	0.022	0.018	0.018	0.018	0.022
4-Chloroaniline	mg/kg	0.048	0.042	0.036	0.036	0.044	0.45	0.043	0.036	0.036	0.037	0.045
4-Chlorophenyl Phenyl Ether	mg/kg	0.024	0.021	0.018	0.018	0.022	0.23	0.022	0.018	0.018	0.018	0.022
4-Methylphenol (P-Cresol)	mg/kg	0.024	0.021	0.018	0.018	0.022	0.23	0.022	0.018	0.018	0.018	0.022
4-Nitroaniline	mg/kg	0.095	0.084	0.072	0.071	0.087	0.9	0.086	0.072	0.071	0.071	0.089
4-Nitrophenol	mg/kg	0.24	0.21	0.18	0.18	0.22	2.3	0.21	0.18	0.18	0.18	0.22
Acetophenone	mg/kg	0.045	0.021	0.018	0.018	0.022	0.24	0.029	0.018	0.018	0.018	0.022
Aniline	mg/kg	0.24	0.21	0.18	0.18	0.22	2.3	0.21	0.18	0.18	0.18	0.22
Benzidine	mg/kg	0.36	0.32	0.27	0.27	0.33	3.4	0.32	0.27	0.27	0.27	0.33
Biphenyl	mg/kg	0.036	0.021	0.018	0.018	0.022	1.4	0.022	0.018	0.018	0.018	0.022
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg	0.024	0.021	0.018	0.018	0.022	0.23	0.022	0.018	0.018	0.018	0.022
Bis(2-Chloroethoxy)Methane	mg/kg	0.024	0.021	0.018	0.018	0.022	0.23	0.022	0.018	0.018	0.018	0.022
Bis(2-Chloroethyl)Ether	mg/kg	0.024	0.021	0.018	0.018	0.022	0.23	0.022	0.018	0.018	0.018	0.022
Bis(2-Chloroisopropyl)Ether	mg/kg											
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.095	0.084	0.072	0.071	0.087	0.9	0.086	0.072	0.071	0.071	0.089
Butyl Benzyl Phthalate	mg/kg	0.095	0.084	0.072	0.071	0.087	0.9	0.086	0.072	0.071	0.071	0.089
Carbazole	mg/kg	0.027	0.021	0.018	0.018	0.022	0.93	0.022	0.018	0.018	0.018	0.022
Dibenzofuran	mg/kg	0.053	0.021	0.018	0.018	0.022	3.2	0.051	0.018	0.018	0.018	0.022
Diethyl Phthalate	mg/kg	0.095	0.084	0.072	0.071	0.087	0.9	0.086	0.072	0.071	0.071	0.089
Dimethyl Phthalate	mg/kg	0.095	0.084	0.072	0.071	0.087	0.9	0.086	0.072	0.071	0.071	0.089
Di-N-Butyl Phthalate	mg/kg	0.095	0.084	0.072	0.071	0.087	6.2	0.59	0.072	0.071	0.071	0.089
Diphenyl Ether	mg/kg	0.024	0.021	0.018	0.018	0.022	0.36	0.022	0.018	0.018	0.018	0.022
Hexachlorobenzene	mg/kg	0.007	0.004	0.004	0.004	0.004	2	0.007	0.004	0.004	0.004	0.004
Hexachlorobutadiene	mg/kg	0.024	0.021	0.018	0.018	0.022	0.23	0.022	0.018	0.018	0.018	0.022
Hexachlorocyclopentadiene	mg/kg	0.24	0.21	0.18	0.18	0.22	2.3	0.21	0.18	0.18	0.18	0.22
Hexachloroethane	mg/kg	0.048	0.042	0.036	0.036	0.044	0.45	0.043	0.036	0.036	0.037	0.045
Hexachloropropylene	mg/kg											
Isophorone	mg/kg	0.024	0.021	0.018	0.018	0.022	0.23	0.022	0.018	0.018	0.018	0.022
N-Dioctyl Phthalate	mg/kg	0.095	0.084	0.072	0.071	0.087	0.9	0.086	0.072	0.071	0.071	0.089
Nitrobenzene	mg/kg	0.024	0.021	0.018	0.018	0.022	5.3	0.022	0.018	0.018	0.018	0.022
N-Nitrosodimethylamine	mg/kg	0.095	0.084	0.072	0.071	0.087	0.9	0.086	0.072	0.071	0.071	0.089
N-Nitrosodi-N-Propylamine	mg/kg	0.024	0.021	0.018	0.018	0.022	0.23	0.022	0.018	0.018	0.018	0.022
N-Nitrosodiphenylamine	mg/kg	0.024	0.021	0.018	0.018	0.022	1.2	0.085	0.018	0.018	0.018	0.022
O-Toluidine	mg/kg	0.29	0.25	0.22	0.21	0.26	2.7	0.26	0.22	0.21	0.21	0.27
Parathion	mg/kg	0.24	0.21	0.18	0.18	0.22	2.3	0.21	0.18	0.18	0.18	0.22
Pentachlorobenzene	mg/kg	0.024	0.021	0.018	0.018	0.022	0.25	0.022	0.018	0.018	0.018	0.022
Pentachlorophenol	mg/kg	0.048	0.042	0.036	0.036	0.044	0.45	0.043	0.036	0.036	0.037	0.045
Phenol	mg/kg	0.024	0.021	0.018	0.018	0.022	0.23	0.022	0.018	0.018	0.018	0.022
<b>Volatile Organic Compounds - TICs</b>												
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA	
		E16-BOR-03(0-0.5)	E16-BOR-03(4.0-4.5)	E16-BOR-03(5.5-6.0)	E16-BOR-03(7.5-8.0)	E16-BOR-03(8.9-9.2)	E16-BOR-04(0.5-1.0)	E16-BOR-04(0-0.5)	E16-BOR-04(3.5-4.0)	E16-BOR-04(6.0-6.5)	E16-BOR-04(7.0-7.5)	E16-BOR-04(8.4-8.6)							
Location ID	Depth Interval (ft)	E16-BOR-03	E16-BOR-03	E16-BOR-03	E16-BOR-03	E16-BOR-03	E16-BOR-04	E16-BOR-04	E16-BOR-04	E16-BOR-04	E16-BOR-04	E16-BOR-04	E16-BOR-04	E16-BOR-04	E16-BOR-04	E16-BOR-04	E16-BOR-04	E16-BOR-04	E16-BOR-04
Sample Purpose	Date	0.00-0.50	4.00-4.50	5.50-6.00	7.50-8.00	8.90-9.20	0.50-1.00	0.00-0.50	3.50-4.00	6.00-6.50	7.00-7.50	8.40-8.60							
Chemical Class	Units	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS							
Chemical	Units	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016	11/2/2016							
1-Butene	mg/kg																		
1-Heptene	mg/kg																		
1-Propene, 2-methyl-	mg/kg																		
Azulene	mg/kg																		
BENZENE, 1,2,4-TRICHLORO-	mg/kg																		
BENZENE, 1,2-DICHLORO-	mg/kg																		
BENZENE, 1,4-DICHLORO-	mg/kg																		
Camphene	mg/kg																		
CYCLOHEXANE	mg/kg																		
Cyclohexane, methyl-	mg/kg																		
Cyclotrisiloxane, hexamethyl	mg/kg																		
Diphenyl Ether	mg/kg																		
Ethane, 1,1,2,2-tetrachloro-	mg/kg						24					0.032							
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg																		
Ethane, 1,2-dichloro-1,1-dif	mg/kg											0.085							
Ethene, 1,1-dichloro-2,2-dif	mg/kg																		
Hexane, 2-methyl-	mg/kg																		
Hexane, 3-methyl-	mg/kg																		
METHANE, CHLOROFLUORO-	mg/kg																		
Naphthalene	mg/kg																		
NAPHTHALENE, 2-METHYL-	mg/kg																		
Nonanal	mg/kg																		
Norflurane	mg/kg								0.078										
Pentane, 2,3-dimethyl-	mg/kg																		
Phenol, 4-(1,1,3,3-tetrameth	mg/kg																		
Propene	mg/kg																		
Sulfur dioxide	mg/kg																		
Tridecane	mg/kg																		
UNKNOWN	mg/kg											0.0135							
UNKNOWN ALICYCLIC	mg/kg																		
UNKNOWN ALIPHATIC	mg/kg																		
UNKNOWN ALKANE	mg/kg																		
UNKNOWN AROMATIC	mg/kg																		
UNKNOWN SILOXANE	mg/kg																		
<b>Volatile Organic Compounds</b>																			
1,1,1,2-Tetrachloroethane	mg/kg	0.065	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U
1,1,1-Trichloroethane	mg/kg	0.065	U	0.005	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U
1,1,1-Trichlorotrifluoroethane	mg/kg	0.16	U	0.006	U	0.005	U	0.32	U	1.3	U	0.38	U	0.005	U	0.005	U	0.008	U
1,1,2,2-Tetrachloroethane	mg/kg	0.065	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U
1,1,2-Trichloroethane	mg/kg	0.065	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U
1,1,2-Trichlorotrifluoroethane	mg/kg	3.4	U	0.7	U	0.004	U	0.016	U	2.9	U	1.3	U	0.1	U	0.013	U	0.011	U
1,1,2-Trifluoroethane	mg/kg	0.004	U	0.002	U	0.002	U	0.002	U	0.004	U	0.002	U	0.002	U	0.002	U	0.002	U
1,1-Dichloro-1-Fluoroethane	mg/kg	0.002	U	0.001	U	0.001	U	0.001	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U
1,1-Dichloroethane	mg/kg	0.065	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U
1,1-Dichloroethene	mg/kg	0.065	U	0.001	U	0.001	U	0.068	U	1.9	U	0.071	U	0.001	U	0.001	U	0.001	U
1,1-Dichloropropene	mg/kg	0.065	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U
1,2,4-Trimethylbenzene	mg/kg	0.065	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U
1,2-Dibromoethane (EDB)	mg/kg	0.065	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg	0.076	U	0.001	U	0.001	U	0.05	U	0.032	U	0.029	U	0.001	U	0.001	U	0.001	U
1,2-Dichloro-1-Fluoroethane	mg/kg	0.002	U	0.001	U	0.001	U	0.001	U	0.002	U	0.001	U	0.001	U	0.001	U	0.001	U
1,2-Dichlorobenzene	mg/kg	5	U	0.051	U	0.001	U	0.007	U	1	U	290	U	2.9	U	0.004	U	0.002	U
1,2-Dichloroethane	mg/kg	0.065	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U
1,2-Dichloroethene	mg/kg	0.065	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U
1,2-Dichloropropane	mg/kg	0.065	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U
1,2-Dichlorotetrafluoroethane	mg/kg	0.064	U	0.002	U	0.002	U	0.17	U	0.39	U	0.12	U	0.002	U	0.002	U	0.009	U
1,3,5-Trimethylbenzene	mg/kg	0.065	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U
1,3-Dichlorobenzene	mg/kg	0.23	U	0.002	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U
1,4-Dichlorobenzene	mg/kg	7.5	U	0.091	U	0.002	U	0.014	U	1.4	U	40	U	0.95	U	0.002	U	0.001	U
1-Chloro-1,1-Difluoroethane	mg/kg	0.002	U	0.001	U	0.001	U	0.001	U	0.003	U	0.002	U	0.001	U	0.001	U	0.001	U
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg	0.041	U	0.001	U	0.001	U	0.001	U	0.79	U	0.21	U	0.11	U	0.001	U	0.001	U
2-Chloro-1,1,1-Trifluoroethane	mg/kg	0.13	U	0.003	U	0.002	U	0.002	U	0.14	U	2.8	U	0.14	U	0.002	U	0.002	U
2-Chloroethyl Vinyl Ether	mg/kg																		
2-Chlorotoluene	mg/kg	0.065	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U
2-Hexanone	mg/kg	0.2	U	0.004	U	0.003	U	0.2	U	4.1	U	0.21	U	0.003	U	0.003	U	0.003	U
4-Chlorotoluene	mg/kg	0.065	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U
4-Isopropyltoluene	mg/kg	0.065	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U
Acetone	mg/kg	0.46	U	0.066	U	0.019	U	0.014	U	10	U	0.5	U	0.022	U	0.024	U	0.02	U
Acrolein	mg/kg																		
Acrylonitrile	mg/kg																		
Benzene	mg/kg	0.033	U	0.022	U	0.0005	U	0.001	U	1.2	U	1.9	U	0.036	U	0.0006	U	0.0005	U
Bromodichloromethane	mg/kg	0.065	U	0.001	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U
Bromoform	mg/kg																		
Carbon Disulfide	mg/kg	0.065	U	0.001	U	0.001	U	0.001	U	0.14	U	1.4	U	0.071	U	0.001	U	0.001	U
Carbon Tetrachloride	mg/kg	0.065	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U
CFC-1113	mg/kg	0.13	U	0.009	U	0.002	U	0.002	U	0.14	U	2.8	U	0.14	U	0.002	U	0.002	U
Chlorobenzene	mg/kg	3.7	U	0.32	U	0.003	U	0.037	U	12	U	89	U	1.5	U	0.005	U	0.002	U

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA E16-BOR-03(0-0.5)		MZ-FPA E16-BOR-03(4.0-4.5)		MZ-FPA E16-BOR-03(5.5-6.0)		MZ-FPA E16-BOR-03(7.5-8.0)		MZ-FPA E16-BOR-03(8.9-9.2)		MZ-FPA E16-BOR-04(0.5-1.0)		MZ-FPA E16-BOR-04(0-0.5)		MZ-FPA E16-BOR-04(3.5-4.0)		MZ-FPA E16-BOR-04(6.0-6.5)		MZ-FPA E16-BOR-04(7.0-7.5)		MZ-FPA E16-BOR-04(8.4-8.6)			
		Units	Value	Units	Value	Units	Value	Units	Value	Units	Value	Units	Value	Units	Value	Units	Value	Units	Value	Units	Value	Units	Value	Units	Value
Chlorodibromomethane	mg/kg	0.065	U	0.001	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Chlorodifluoromethane	mg/kg	0.004	U	0.002	U	0.002	U	0.002	U	0.007	U	0.004	U	0.003	U	0.002	U	0.002	U	0.002	U	0.002	U	0.015	U
Chlorofluoromethane	mg/kg	0.006	U	0.001	U	0.001	U	0.001	U	0.009	U	0.009	U	0.013	U	0.001	U	0.001	U	0.001	U	0.001	U	0.008	U
Chloroform	mg/kg	0.065	U	0.038	U	0.001	U	0.002	U	0.28	U	2.4	U	0.071	U	0.001	U	0.001	U	0.001	U	0.001	U	0.09	U
Chloropentafluoroethane	mg/kg	0.029	U	0.018	U	0.015	U	0.015	U	0.02	U	0.027	U	0.02	U	0.016	U	0.016	U	0.016	U	0.016	U	0.019	U
cis-1,2-Dichloroethene	mg/kg	0.065	U	0.001	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U	0.001	U	0.006	U
cis-1,3-Dichloropropene	mg/kg	0.065	U	0.001	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Cumene	mg/kg	0.62	U	0.002	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Dichlorodifluoromethane	mg/kg	0.13	U	0.003	U	0.002	U	0.002	U	0.14	U	2.8	U	0.14	U	0.002	U	0.002	U	0.002	U	0.002	U	0.003	U
Dichlorofluoromethane	mg/kg	0.55	U	0.08	U	0.002	U	0.007	U	1.8	U	4.2	U	0.25	U	0.002	U	0.002	U	0.002	U	0.002	U	0.8	U
Ethane	ug/L																								
Ethyl Chloride	mg/kg	0.13	U	0.003	U	0.002	U	0.002	U	0.14	U	2.8	U	0.14	U	0.002	U	0.002	U	0.002	U	0.002	U	0.003	U
Ethylbenzene	mg/kg	0.065	U	0.001	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Fluoromethane	mg/kg	0.006	U	0.004	U	0.003	U	0.003	U	0.004	U	0.005	U	0.004	U	0.003	U	0.003	U	0.003	U	0.003	U	0.004	U
Hexane	mg/kg	0.065	U	0.001	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Isobutyl Alcohol	mg/kg	6.5	U	0.13	U	0.11	U	0.11	U	6.8	U	140	U	7.1	U	0.11	U	0.11	U	0.11	U	0.11	U	0.13	U
Meta- And Para-Xylene	mg/kg	0.065	U	0.001	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Methacrylonitrile	mg/kg	0.33	U	0.007	U	0.005	U	0.005	U	0.34	U	6.9	U	0.36	U	0.006	U	0.006	U	0.006	U	0.006	U	0.007	U
Methane	ug/L																								
Methyl Bromide	mg/kg																								
Methyl Chloride	mg/kg	0.13	U	0.003	U	0.002	U	0.002	U	0.14	U	2.8	U	0.14	U	0.002	U	0.002	U	0.002	U	0.002	U	0.003	U
Methyl Ethyl Ketone	mg/kg	0.26	U	0.005	U	0.004	U	0.004	U	0.27	U	5.5	U	0.28	U	0.005	U	0.004	U	0.004	U	0.004	U	0.005	U
Methyl Isobutyl Ketone	mg/kg	0.2	U	0.004	U	0.003	U	0.003	U	0.2	U	4.1	U	0.21	U	0.003	U	0.003	U	0.003	U	0.003	U	0.004	U
Methyl Methacrylate	mg/kg	0.065	U	0.001	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Methyl Tertiary Butyl Ether	mg/kg	0.033	U	0.0007	U	0.0005	U	0.0005	U	0.034	U	0.69	U	0.036	U	0.0006	U	0.0006	U	0.0006	U	0.0006	U	0.0007	U
Methylene Chloride	mg/kg	0.13	U	0.003	U	0.002	U	0.002	U	0.61	U	2.8	U	0.14	U	0.002	U	0.002	U	0.002	U	0.002	U	1.3	U
N-Butylbenzene	mg/kg	0.065	U	0.001	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
N-Propylbenzene	mg/kg	0.065	U	0.001	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Ortho-Xylene	mg/kg	0.065	U	0.001	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Propionitrile	mg/kg	2	U	0.04	U	0.032	U	0.032	U	2	U	41	U	2.1	U	0.034	U	0.034	U	0.034	U	0.034	U	0.04	U
sec-Butylbenzene	mg/kg	0.065	U	0.001	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Styrene	mg/kg	0.065	U	0.001	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
tert-Butylbenzene	mg/kg	0.065	U	0.001	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Tetrachloroethene	mg/kg	0.85	U	0.023	U	0.001	U	0.002	U	0.41	U	230	U	1.7	U	0.002	U	0.001	U	0.001	U	0.001	U	0.3	U
Tetrahydrofuran	mg/kg	0.26	U	0.005	U	0.004	U	0.004	U	0.27	U	5.5	U	0.28	U	0.005	U	0.004	U	0.004	U	0.004	U	0.005	U
Toluene	mg/kg	0.065	U	0.001	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
trans-1,2-Dichloroethene	mg/kg	0.065	U	0.001	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
trans-1,3-Dichloropropene	mg/kg																								
Trichloroethene	mg/kg	0.065	U	0.001	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Trichlorofluoromethane	mg/kg	4	U	2.3	U	0.008	U	0.047	U	5.6	U	390	U	1.1	U	0.073	U	0.014	U	0.035	U	0.035	U	1.8	U
Vinyl Chloride	mg/kg	0.065	U	0.001	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U
Vinyl Fluoride	mg/kg	0.012	U	0.007	U	0.006	U	0.006	U	0.008	U	0.011	U	0.008	U	0.006	U	0.006	U	0.006	U	0.006	U	0.007	U
Xylenes	mg/kg	0.065	U	0.001	U	0.001	U	0.001	U	0.068	U	1.4	U	0.071	U	0.001	U	0.001	U	0.001	U	0.001	U	0.001	U

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	MZ-FPA												
		Field Sample ID	E16-BOR-05(0.5-1.0)	E16-BOR-05(0.5-1.0) DUP	E16-BOR-05(0-0.5)	E16-BOR-05(4.5-5.5)	E16-BOR-05(4.5-5.5)-D	E16-BOR-05(6.5-6.8)	E16-BOR-05(6.8-7.0)	E16-BOR-05(8.0-8.5)	E16-BOR-06(0.5-1.0)	E16-BOR-06(0-0.5)	E16-BOR-06(1.5-2.0)	E16-BOR-07-(0.5-1.0)
Chemical	Location ID	E16-BOR-05	E16-BOR-05	E16-BOR-05	E16-BOR-05	E16-BOR-05	E16-BOR-05	E16-BOR-05	E16-BOR-05	E16-BOR-05	E16-BOR-06	E16-BOR-06	E16-BOR-06	E16-BOR-07
	Depth Interval (ft)	0.50-1.00	0.50-1.00	0.00-0.50	4.50-5.50	4.50-5.50	6.50-6.80	6.80-7.00	8.00-8.50	0.50-1.00	0.00-0.50	1.50-2.00	0.50-1.00	
	Sample Purpose	FS	DUP	FS	FS	DUP	FS	FS	FS	FS	FS	FS	FS	
	Date	11/3/2016	11/3/2016	11/3/2016	11/3/2016	11/3/2016	11/3/2016	11/3/2016	11/3/2016	11/3/2016	10/26/2016	10/26/2016	10/26/2016	11/3/2017
	Units													
<b>General Chemistry</b>														
Black Carbon	mg/kg													
Percent Moisture	%	43.6		33.3	6.7	9	10.9	22.7	21.1	9.45	54.25	14.7	16.3	
Percent Solids	%													
Total Organic Carbon	mg/kg	22300		3420	232 U	196 U	173 U		217 U	234 U	15500	183 U	9140	
<b>Metals</b>														
Aluminum	mg/kg	20300		10900						5440	15200		8960	
Antimony	mg/kg	2.74		0.368						0.0925 U	0.595		2.49	
Arsenic	mg/kg	29.6		4.86						2.89	16.8		1.98	
Barium	mg/kg	129		49.9						26.8	114		43.3	
Beryllium	mg/kg	1.64		0.491						0.286	1.16		0.228	
Cadmium	mg/kg	1.38		0.199						0.0366 U	0.546		0.0291	
Calcium	mg/kg	3190		1140						241	3130		270	
Chromium	mg/kg	149		28.1						13	73.6		29.8	
Cobalt	mg/kg	15.2		10.2						3.33	19.4		6.29	
Copper	mg/kg	101		14.9						6.59	51.6		296	
Iron	mg/kg	35100		18300						5240	25100		11500	
Lead	mg/kg	483		37.2						6.67	58.7		12.3	
Magnesium	mg/kg	4700		3490						759	4950		2160	
Manganese	mg/kg	694		405						82	600		71.7	
Mercury	mg/kg	1.05		0.136						0.0103 U	0.611		1.31	
Nickel	mg/kg	39.8		13.8						8.22	38.8		12.9	
Potassium	mg/kg	2910		1560						640	2760		2070	
Selenium	mg/kg	2.55		0.284						0.0824 U	0.713		0.221	
Silver	mg/kg	1.19		0.107						0.0222 U	0.23		1.95	
Sodium	mg/kg	625		661						122	1790		138	
Thallium	mg/kg	0.261		0.114						0.0852	0.218		0.0883	
Tin	mg/kg													
Titanium	mg/kg													
Vanadium	mg/kg	109		32.6						29.5	64.6		21.7	
Zinc	mg/kg	290		76.9						22.1	135		33.9	
<b>Metals - AVS/SEM</b>														
Acid Volatile Sulfide	umol/g													
Arsenic	umol/g													
Cadmium	umol/g													
Copper	umol/g													
Lead	umol/g													
Zinc	umol/g													
<b>Metals - Leachate</b>														
Lead	ug/L													
<b>Per and Polyfluorinated Organic Substances</b>														
Perfluorobutane Sulfonic Acid	mg/kg									0.0008 U	0.0008 U			
Perfluorobutanoic Acid	mg/kg									0.0008 U	0.0008 U			
Perfluorodecane Sulfonic Acid	mg/kg									0.0008 U	0.0008 U			
Perfluorodecanoic Acid	mg/kg									0.0008 U	0.0008 U			
Perfluorododecanoic Acid	mg/kg									0.002 U	0.002 U			
Perfluoroheptanoic Acid	mg/kg									0.0008 U	0.0008 U			
Perfluorohexane Sulfonic Acid	mg/kg									0.0008 U	0.0008 U			
Perfluorohexanoic Acid	mg/kg									0.0008 U	0.00085 U			
Perfluorononanoic Acid	mg/kg									0.0008 U	0.0008 U			
Perfluorooctane Sulfonamide	mg/kg									0.0008 U	0.0008 U			
Perfluoropentanoic Acid	mg/kg									0.0008 U	0.0008 U			
Perfluorotetradecanoic Acid	mg/kg									0.002 U	0.002 U			
Perfluorotridecanoic Acid	mg/kg									0.0008 U	0.0008 U			
Perfluoroundecanoic Acid	mg/kg									0.0008 U	0.0008 U			
PFOA	mg/kg									0.0008 U	0.0008 U			
PFOA(trial)	mg/kg													
PFOS	mg/kg									0.0008 U	0.0008 U			
PFOS (trial)	mg/kg													
<b>Pesticides and Herbicides</b>														
4,4'-DDD	mg/kg													
4,4'-DDE	mg/kg													
4,4'-DDT	mg/kg													
Aldrin	mg/kg													
Alpha Chlordane	mg/kg													
Alpha-BHC	mg/kg													
beta-BHC	mg/kg													
delta-BHC	mg/kg													
Dieldrin	mg/kg													
Endosulfan I	mg/kg													
Endosulfan II	mg/kg													
Endosulfan Sulfate	mg/kg													
Endrin	mg/kg													
Endrin Aldehyde	mg/kg													
Endrin Ketone	mg/kg													
Gamma Chlordane	mg/kg													

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA			
		E16-BOR-05(0.5-1.0)	E16-BOR-05(0.5-1.0) DUP	E16-BOR-05(0-0.5)	E16-BOR-05(4.5-5.5)	E16-BOR-05(4.5-5.5)-D	E16-BOR-05(6.5-6.8)	E16-BOR-05(6.8-7.0)	E16-BOR-05(8.0-8.5)	E16-BOR-06(0.5-1.0)	E16-BOR-06(0-0.5)	E16-BOR-06(1.5-2.0)	E16-BOR-07(0.5-1.0)			
Chemical	Units	E16-BOR-05 0.50-1.00 FS 11/3/2016	E16-BOR-05 0.50-1.00 DUP 11/3/2016	E16-BOR-05 0.00-0.50 FS 11/3/2016	E16-BOR-05 4.50-5.50 FS 11/3/2016	E16-BOR-05 4.50-5.50 DUP 11/3/2016	E16-BOR-05 6.50-6.80 FS 11/3/2016	E16-BOR-05 6.80-7.00 FS 11/3/2016	E16-BOR-05 8.00-8.50 FS 11/3/2016	E16-BOR-06 0.50-1.00 FS 10/26/2016	E16-BOR-06 0.00-0.50 FS 10/26/2016	E16-BOR-06 1.50-2.00 FS 10/26/2016	E16-BOR-07 0.50-1.00 FS 11/3/2017			
Heptachlor	mg/kg															
Heptachlor Epoxide	mg/kg															
Lindane	mg/kg															
Methoxychlor	mg/kg															
Toxaphene	mg/kg															
<b>Physical Properties</b>																
0.001 MM	% PASSING	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	2	9	0.5	U	0.5
0.002 MM	% PASSING	6		0.5	U	0.5	U	0.5	U	0.5	U	3	12	2		0.5
0.005 MM	% PASSING	13		1		1		1		1		7	17	6		0.5
0.02 MM	% PASSING	32		2		1		2		1		10.5	38	9.5		0.5
0.05 MM	% PASSING	45		6		2		4		2		21	63	12		0.5
0.064 MM	% PASSING	50		6.5		3		5		3		20.5	78	15		1
0.075 MM	% PASSING	52.3		6.7		3.4		5.4		4.3		20.2	82.1	15.2		1.4
0.15 MM	% PASSING	56.3		9.2		4.3		6.7		5.8		25.2	92.3	19		2.3
0.3 MM	% PASSING	67.2		21.5		6.5		9.6		27		31	95.6	23.8		11.9
0.6 MM	% PASSING	80.3		53.7		12.7		14.3		84		39.5	97.4	31.4		24
1.18 MM	% PASSING	88.6		72.9		33		28.8		92.6		47.3	98.2	39.1		33.4
19 MM	% PASSING	100		100		96.1		86.7		100		90.7	100	100		89.4
2.36 MM	% PASSING	93.5		80		47		44.5		95.8		55.7	98.7	48.4		50.8
3.35 MM	% PASSING	97.8		84.5		59.8		51.5		97.8		62.5	99.6	58.5		56.8
37.5 MM	% PASSING	100		100		100		100		100		100	100	100		100
4.75 MM	% PASSING	99.3		89.1		74.4		57.6		99.1		69.3	99.8	67.8		63.7
75 MM	% PASSING	100		100		100		100		100		100	100	100		100
Density	PCF											78.659	88.0232			
<b>Polychlorinated Biphenyls - TICs</b>																
1,1'-Biphenyl, 2,3-dichloro-	mg/kg															
Unknown Biphenyl	mg/kg															
<b>Polychlorinated Biphenyls</b>																
Heptachlorobiphenyl	mg/kg															
Hexachlorobiphenyl	mg/kg															
Octachlorobiphenyl	mg/kg															
PCB 1	mg/kg	0.00546	0.00911	0.00125						0.00286	0.00301				0.234	
PCB 10	mg/kg	0.000203	0.000159	0.0000242						0.000102	0.000038				0.0134	
PCB 100	mg/kg															
PCB 101	mg/kg															
PCB 102	mg/kg	0.00178	0.00121	0.000135						0.00145	0.000103				0.000187	
PCB 103	mg/kg	0.000392	0.000303	0.0000447						0.000421	0.0000624				0.000102	
PCB 104	mg/kg	0.0000144	0.00000787	0.00000378						0.0000137	0.00000621				0.00000891	
PCB 105	mg/kg	0.0111	0.00833	0.00104						0.0103	0.000611				0.00354	
PCB 106	mg/kg	0.0000397	0.0000394	0.00000997						0.00000294	0.0000124				0.000528	
PCB 107	mg/kg															
PCB 107/123	mg/kg															
PCB 108	mg/kg															
PCB 109	mg/kg	0.00219	0.00164	0.000213						0.00182	0.000165				0.000813	
PCB 11	mg/kg	0.00442	0.00388	0.000781						0.00207	0.00187				0.0538	
PCB 110	mg/kg	0.0343	0.0253	0.00304						0.0317	0.0022				0.0106	
PCB 111	mg/kg	0.0000374	0.0000372	0.00000941						0.0000371	0.0000116				0.0000813	
PCB 112	mg/kg	0.000107	0.0000745	0.0000145						0.0000299	0.0000125				0.00012	
PCB 113	mg/kg															
PCB 114	mg/kg	0.000671	0.000549	0.0000771						0.000677	0.0000353				0.000533	
PCB 115	mg/kg	0.0000414	0.0000411	0.0000104						0.00000331	0.0000139				0.000081	
PCB 116	mg/kg															
PCB 117	mg/kg	0.000801	0.000648	0.000072						0.000732	0.0000559				0.0000988	
PCB 118	mg/kg	0.0229	0.0163	0.00214						0.0222	0.00158				0.00774	
PCB 119	mg/kg															
PCB 12	mg/kg															
PCB 120	mg/kg	0.000123	0.000096	0.0000232						0.00012	0.0000263				0.000184	
PCB 121	mg/kg	0.0000371	0.0000369	0.00000932						0.00000298	0.0000125				0.0000798	
PCB 121/95/88	mg/kg															
PCB 122	mg/kg	0.000454	0.000382	0.00005						0.000402	0.0000256				0.000304	
PCB 123	mg/kg	0.000577	0.000406	0.0000525						0.000502	0.0000302				0.000218	
PCB 124	mg/kg															
PCB 125	mg/kg															
PCB 126	mg/kg	0.000165	0.00014	0.0000197						0.000104	0.0000151				0.000256	
PCB 127	mg/kg	0.0000447	0.0000451	0.0000119						0.00000389	0.0000146				0.000117	
PCB 128	mg/kg															
PCB 129	mg/kg															
PCB 129/158	mg/kg															
PCB 13	mg/kg															
PCB 130	mg/kg	0.0019	0.0013	0.00019						0.00145	0.000199				0.00225	
PCB 130/164	mg/kg															
PCB 131	mg/kg	0.0004	0.000269	0.0000337						0.000346	0.0000268				0.000125	
PCB 132	mg/kg	0.00998	0.00607	0.000828						0.0078	0.000792				0.00452	
PCB 133	mg/kg	0.000582	0.000403	0.0000799						0.000501	0.000104				0.00155	
PCB 134	mg/kg	0.00166	0.00115	0.000147						0.00137	0.000135				0.000487	
PCB 135	mg/kg															

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		E16-BOR-05(0.5-1.0) E16-BOR-05 0.50-1.00 FS 11/3/2016	E16-BOR-05(0.5-1.0) DUP E16-BOR-05 0.50-1.00 DUP 11/3/2016	E16-BOR-05(0-0.5) E16-BOR-05 0.00-0.50 FS 11/3/2016	E16-BOR-05(4.5-5.5) E16-BOR-05 4.50-5.50 FS 11/3/2016	E16-BOR-05(4.5-5.5)-D E16-BOR-05 4.50-5.50 DUP 11/3/2016	E16-BOR-05(6.5-6.8) E16-BOR-05 6.50-6.80 FS 11/3/2016	E16-BOR-05(6.8-7.0) E16-BOR-05 6.80-7.00 FS 11/3/2016	E16-BOR-05(8.0-8.5) E16-BOR-05 8.00-8.50 FS 11/3/2016	E16-BOR-06(0.5-1.0) E16-BOR-06 0.50-1.00 FS 10/26/2016	E16-BOR-06(0-0.5) E16-BOR-06 0.00-0.50 FS 10/26/2016	E16-BOR-06(1.5-2.0) E16-BOR-06 1.50-2.00 FS 10/26/2016	E16-BOR-07(0.5-1.0) E16-BOR-07 0.50-1.00 FS 11/3/2017
PCB 136	mg/kg	0.00434	0.00318	0.000404					0.00316	0.000399		0.00303	
PCB 137	mg/kg	0.000974	0.000677	0.0000974					0.000663	0.0000728		0.000387	
PCB 138	mg/kg												
PCB 139	mg/kg												
PCB 14	mg/kg	0.00127	0.00117	0.000391					0.00081	0.00117		0.0954	
PCB 140	mg/kg												
PCB 141	mg/kg	0.00588	0.00365	0.000497					0.00376	0.000355		0.00203	
PCB 142	mg/kg	0.0000208	0.0000412 U	0.0000113					0.0000274 U	0.0000107		0.00043	
PCB 143	mg/kg	0.0000913	0.0000378 U	0.0000101					0.0000819	0.0000118 U		0.0000981	
PCB 143/139	mg/kg												
PCB 144	mg/kg	0.00144	0.000902	0.000119					0.00103	0.0000947		0.000413	
PCB 145	mg/kg	0.0000197	0.0000201	0.00000337					0.0000133	0.00000781 U		0.0000217	
PCB 146	mg/kg	0.0042	0.00291	0.000462					0.00297	0.000533		0.00493	
PCB 147	mg/kg												
PCB 148	mg/kg	0.0001	0.0000635	0.0000192					0.000078	0.0000226		0.000047	
PCB 149	mg/kg												
PCB 15	mg/kg	0.00879	0.00702	0.00115					0.0053	0.00203		0.0734	
PCB 150	mg/kg	0.0000977	0.0000738	0.0000192					0.0000607	0.000021		0.0000399	
PCB 151	mg/kg												
PCB 152	mg/kg	0.0000331	0.000027	0.00000444					0.0000248	0.00000357		0.0000129	
PCB 153	mg/kg												
PCB 154	mg/kg	0.00047	0.000326	0.0000819					0.000413	0.000125		0.00009	
PCB 155	mg/kg	0.000154	0.0000751	0.000015					0.0000293	0.0000126		0.0000177	
PCB 156	mg/kg												
PCB 157	mg/kg												
PCB 158	mg/kg	0.00268	0.00164	0.00023					0.00178	0.000171		0.000761	
PCB 159	mg/kg	0.00034	0.000236	0.0000359					0.000279	0.0000424		0.000456	
PCB 16	mg/kg	0.019	0.021	0.00122					0.0219	0.000766		0.0273	
PCB 160	mg/kg	0.0000592	0.00000294 U	0.00000403					0.00000182 U	0.00000304		0.00105	
PCB 161	mg/kg	0.00000113 U	0.00000286 U	0.00000447					0.00000182 U	0.000000817 U		0.0000525	
PCB 162	mg/kg	0.000149	0.000134	0.0000257					0.000112	0.0000372		0.0014	
PCB 163	mg/kg												
PCB 163/160	mg/kg												
PCB 164	mg/kg	0.00206	0.00134	0.000214					0.00142	0.000218		0.00273	
PCB 165	mg/kg	0.0000179	0.00000314 U	0.00000461					0.00000203 U	0.000000908 U		0.0000389	
PCB 166	mg/kg												
PCB 167	mg/kg	0.00102	0.000703	0.000113					0.000832	0.000112		0.00206	
PCB 168	mg/kg												
PCB 169	mg/kg	0.0000117 U	0.0000103 U	0.00000289 U					0.0000111 U	0.00000303 U		0.000166	
PCB 17	mg/kg	0.0105	0.00697	0.000719					0.0165	0.000438		0.00992	
PCB 170	mg/kg	0.0076	0.00475	0.000604					0.00473	0.000575		0.00246	
PCB 171	mg/kg												
PCB 172	mg/kg	0.00136	0.000867	0.00013					0.000937	0.000137		0.00137	
PCB 173	mg/kg												
PCB 174	mg/kg	0.00919	0.00604	0.000762					0.0063	0.000753		0.00437	
PCB 175	mg/kg	0.000406	0.000257	0.0000459					0.000279	0.0000392		0.000338	
PCB 176	mg/kg	0.00104	0.000741	0.000109					0.000646	0.0000843		0.000418	
PCB 177	mg/kg	0.0052	0.00334	0.000471					0.00377	0.000481		0.00161	
PCB 178	mg/kg	0.00178	0.0012	0.000198					0.00113	0.000181		0.00125	
PCB 179	mg/kg	0.00397	0.00253	0.000397					0.00269	0.000362		0.00154	
PCB 18	mg/kg												
PCB 180	mg/kg												
PCB 181	mg/kg	0.0000555	0.0000413	0.0000093					0.0000485	0.00000909		0.000179	
PCB 182	mg/kg	0.0000598	0.0000432	0.0000145					0.0000618	0.000018		0.000106	
PCB 182/175	mg/kg												
PCB 183	mg/kg	0.00491	0.0034	0.000435					0.00337	0.000439		0.00182	
PCB 184	mg/kg	0.0000397	0.0000307	0.0000136					0.0000165	0.0000113		0.0000534	
PCB 185	mg/kg	0.000848	0.000546	0.0000737					0.000699	0.0000751		0.000445	
PCB 186	mg/kg	0.00000343	0.00000313 U	0.00000102 U					0.00000187 U	0.000000823 U		0.0000253	
PCB 187	mg/kg	0.0106	0.00665	0.00102					0.00831	0.00118		0.00617	
PCB 188	mg/kg	0.0000325	0.000028	0.0000167					0.0000443	0.0000305		0.0000222	
PCB 189	mg/kg	0.000298	0.000192	0.0000303					0.000218	0.0000334		0.000426	
PCB 19	mg/kg	0.00193	0.00134	0.000147					0.00185	0.000113		0.0094	
PCB 190	mg/kg	0.00134	0.000966	0.000112					0.000794	0.00011		0.000695	
PCB 191	mg/kg	0.000298	0.000181	0.0000312					0.000195	0.000027		0.000274	
PCB 192	mg/kg	0.00000829 U	0.0000061 U	0.0000102					0.00000578 U	0.00000973		0.000391	
PCB 193	mg/kg												
PCB 194	mg/kg	0.00432	0.00293	0.000443					0.00373	0.000486		0.00502	
PCB 195	mg/kg	0.00172	0.00102	0.000144					0.0012	0.000163		0.000584	
PCB 196	mg/kg	0.00231	0.00162	0.000268					0.0016	0.000333		0.00155	
PCB 197	mg/kg	0.000169	0.000125	0.0000292					0.000138	0.0000511		0.000155	
PCB 198	mg/kg												
PCB 199	mg/kg												
PCB 2	mg/kg	0.00438	0.00498	0.00125					0.0024	0.00299		0.0771	
PCB 20	mg/kg												
PCB 200	mg/kg	0.000564	0.000371	0.0000595					0.000477	0.0000598		0.000443	

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Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	
		E16-BOR-05(0.5-1.0)	E16-BOR-05(0.5-1.0) DUP	E16-BOR-05(0-0.5)	E16-BOR-05(4.5-5.5)	E16-BOR-05(4.5-5.5)-D	E16-BOR-05(6.5-6.8)	E16-BOR-05(6.8-7.0)	E16-BOR-05(8.0-8.5)	E16-BOR-06(0.5-1.0)	E16-BOR-06(0-0.5)	E16-BOR-06(1.5-2.0)	E16-BOR-07-(0.5-1.0)
Chemical	Units	E16-BOR-05 0.50-1.00 FS 11/3/2016	E16-BOR-05 0.50-1.00 DUP 11/3/2016	E16-BOR-05 0.00-0.50 FS 11/3/2016	E16-BOR-05 4.50-5.50 FS 11/3/2016	E16-BOR-05 4.50-5.50 DUP 11/3/2016	E16-BOR-05 6.50-6.80 FS 11/3/2016	E16-BOR-05 6.80-7.00 FS 11/3/2016	E16-BOR-05 8.00-8.50 FS 11/3/2016	E16-BOR-06 0.50-1.00 FS 10/26/2016	E16-BOR-06 0.00-0.50 FS 10/26/2016	E16-BOR-06 1.50-2.00 FS 10/26/2016	E16-BOR-07 0.50-1.00 FS 11/3/2017
PCB 201	mg/kg	0.000724	0.000533	0.000106						0.000748	0.000144		0.000537
PCB 202	mg/kg	0.00152	0.00122	0.000233						0.00225	0.000364		0.00166
PCB 203	mg/kg	0.00323	0.00229	0.000388						0.00384	0.000437		0.00337
PCB 204	mg/kg	0.0000977	0.0000888	0.0000572						0.0000739	0.0000612		0.000143
PCB 204/200	mg/kg												
PCB 205	mg/kg	0.000212	0.000143	0.0000255						0.000157	0.0000336		0.000397
PCB 206	mg/kg	0.0109	0.00861	0.00196						0.0131	0.00342		0.0157
PCB 207	mg/kg	0.000846	0.000656	0.000177						0.000949	0.000274		0.00132
PCB 208	mg/kg	0.00519	0.00428	0.000933						0.00588	0.00166		0.00402
PCB 209	mg/kg	0.0228	0.0179	0.00286						0.0219	0.0049		0.0209
PCB 21	mg/kg												
PCB 21/20	mg/kg												
PCB 22	mg/kg	0.0108	0.0141	0.00109						0.0101	0.000883		0.0349
PCB 23	mg/kg	0.00021	0.000203	0.0000548						0.00013	0.000119		0.0107
PCB 24	mg/kg	0.0008	0.000581	0.000135						0.000865	0.000363		0.0189
PCB 25	mg/kg	0.00598	0.00418	0.000782						0.00475	0.000518		0.00544
PCB 26	mg/kg												
PCB 27	mg/kg	0.00239	0.00164	0.000208						0.00262	0.000201		0.00186
PCB 28	mg/kg												
PCB 29	mg/kg												
PCB 3	mg/kg	0.00555	0.00589	0.00142						0.0028	0.00367		0.121
PCB 30	mg/kg												
PCB 31	mg/kg	0.0272	0.0201	0.00285						0.0274	0.00194		0.0677
PCB 32	mg/kg	0.00603	0.00403	0.000517						0.00786	0.000288		0.00359
PCB 33	mg/kg												
PCB 34	mg/kg	0.000454	0.000428	0.00013						0.000476	0.000278		0.0205
PCB 35	mg/kg	0.00557	0.00839	0.000548						0.00281	0.000803		0.0446
PCB 36	mg/kg	0.000305	0.000289	0.000125						0.00016	0.000224		0.0151
PCB 37	mg/kg	0.0123	0.013	0.00164						0.00815	0.00257		0.162
PCB 38	mg/kg	0.0000644	0.0000592	0.0000118						0.0000613	0.0000386		0.00221
PCB 39	mg/kg	0.00056	0.000552	0.000212						0.000568	0.00044		0.0304
PCB 4	mg/kg	0.00802	0.00763	0.00085						0.00449	0.00139		0.398
PCB 4/10	mg/kg												
PCB 40	mg/kg												
PCB 41	mg/kg	0.00348	0.00255	0.000277						0.0025	0.0000703		0.000508
PCB 42	mg/kg	0.00981	0.008	0.000832						0.0106	0.000411		0.000921
PCB 43	mg/kg	0.00173	0.00141	0.000166						0.00159	0.0000689		0.000529
PCB 44	mg/kg												
PCB 45	mg/kg	0.0083	0.00667	0.000645						0.00733	0.000218		0.000727
PCB 46	mg/kg	0.00264	0.00226	0.000207						0.00262	0.0000911		0.000184
PCB 47	mg/kg												
PCB 48	mg/kg	0.00807	0.00669	0.000683						0.00894	0.000212		0.00113
PCB 49	mg/kg												
PCB 5	mg/kg	0.00338	0.0116	0.000357						0.00129	0.000664		0.0339
PCB 50	mg/kg												
PCB 51	mg/kg	0.00151	0.00129	0.000155						0.00177	0.000122		0.0000917
PCB 52	mg/kg	0.0454	0.0369	0.00421						0.0453	0.00177		0.0115
PCB 53	mg/kg												
PCB 54	mg/kg	0.0000905	0.0000686	0.000015						0.0000889	0.0000189		0.0000118
PCB 55	mg/kg	0.000571	0.000446	0.0000738						0.000365	0.0000272		0.000335
PCB 56	mg/kg	0.0269	0.0471	0.00201						0.0218	0.000847		0.00555
PCB 57	mg/kg	0.000254	0.000223	0.0000376						0.000195	0.0000269		0.000468
PCB 58	mg/kg	0.000174	0.000162	0.0000136						0.000121	0.0000156		0.000398
PCB 59	mg/kg												
PCB 6	mg/kg	0.00908	0.00971	0.00101						0.00527	0.00156		0.12
PCB 60	mg/kg	0.00629	0.00486	0.000573						0.00543	0.000184		0.00288
PCB 61	mg/kg												
PCB 62	mg/kg												
PCB 63	mg/kg	0.00135	0.0011	0.000134						0.00138	0.0000775		0.00193
PCB 64	mg/kg	0.014	0.0117	0.00122						0.0132	0.000558		0.00419
PCB 65	mg/kg												
PCB 65/75/62	mg/kg												
PCB 66	mg/kg	0.0321	0.0244	0.00275						0.0333	0.00138		0.00465
PCB 67	mg/kg	0.00121	0.000907	0.000133						0.00102	0.000072		0.000676
PCB 67/58	mg/kg												
PCB 68	mg/kg	0.000194	0.000151	0.0000249						0.000219	0.0000345		0.000181
PCB 68/64	mg/kg												
PCB 69	mg/kg												
PCB 7	mg/kg	0.000698	0.000541	0.000118						0.000504	0.000252		0.0211
PCB 70	mg/kg												
PCB 71	mg/kg												
PCB 72	mg/kg	0.000332	0.000268	0.000044						0.000357	0.0000587		0.00137
PCB 73	mg/kg	0.00000277	U	0.00000405	U	0.0000153				0.00000328	U	0.0000144	0.0000648
PCB 73/46	mg/kg												
PCB 74	mg/kg												
PCB 75	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		E16-BOR-05(0.5-1.0)	E16-BOR-05(0.5-1.0) DUP	E16-BOR-05(0-0.5)	E16-BOR-05(4.5-5.5)	E16-BOR-05(4.5-5.5)-D	E16-BOR-05(6.5-6.8)	E16-BOR-05(6.8-7.0)	E16-BOR-05(8.0-8.5)	E16-BOR-06(0.5-1.0)	E16-BOR-06(0-0.5)	E16-BOR-06(1.5-2.0)	E16-BOR-07(0.5-1.0)
Chemical	Units	E16-BOR-05 0.50-1.00 FS 11/3/2016	E16-BOR-05 0.50-1.00 DUP 11/3/2016	E16-BOR-05 0.00-0.50 FS 11/3/2016	E16-BOR-05 4.50-5.50 FS 11/3/2016	E16-BOR-05 4.50-5.50 DUP 11/3/2016	E16-BOR-05 6.50-6.80 FS 11/3/2016	E16-BOR-05 6.80-7.00 FS 11/3/2016	E16-BOR-05 8.00-8.50 FS 11/3/2016	E16-BOR-06 0.50-1.00 FS 10/26/2016	E16-BOR-06 0.00-0.50 FS 10/26/2016	E16-BOR-06 1.50-2.00 FS 10/26/2016	E16-BOR-07 0.50-1.00 FS 11/3/2017
PCB 76	mg/kg			0.000766									
PCB 77	mg/kg	0.0111	0.0195	0.000766									0.00815
PCB 78	mg/kg	0.000362 U	0.000336 U	0.0000559 U					0.000416 U	0.0000457 U			0.000219
PCB 79	mg/kg	0.000381	0.000395	0.0000513					0.000417	0.0000515			0.00162
PCB 8	mg/kg	0.0121	0.0106	0.00162					0.00801	0.00267			0.258
PCB 80	mg/kg	0.000188	0.000268 U	0.0000445 U					0.0000339 U	0.0000372 U			0.000141
PCB 81	mg/kg	0.000137	0.000086	0.0000135					0.000112	0.0000121			0.000434
PCB 82	mg/kg	0.00527	0.00397	0.000431					0.00504	0.000215			0.00105
PCB 83	mg/kg	0.0018	0.00171	0.000175					0.00209	0.000101			0.000611
PCB 83/125/112	mg/kg												
PCB 84	mg/kg	0.0111	0.00835	0.00088					0.0119	0.000561			0.00277
PCB 85	mg/kg												
PCB 86	mg/kg												
PCB 86/109	mg/kg												
PCB 87	mg/kg												
PCB 87/111	mg/kg												
PCB 88	mg/kg	0.0000566 U	0.0000563 U	0.0000142 U					0.00000451 U	0.0000189 U			0.000116
PCB 89	mg/kg	0.000928	0.00069	0.0000726					0.00102	0.0000267			0.000128
PCB 89/84	mg/kg												
PCB 9	mg/kg	0.00228	0.00205	0.00051					0.00147	0.00121			0.0876
PCB 90	mg/kg												
PCB 91	mg/kg	0.00535	0.00406	0.000491					0.00528	0.000357			0.0012
PCB 92	mg/kg	0.00625	0.0045	0.000564					0.00671	0.000488			0.00228
PCB 93	mg/kg												
PCB 94	mg/kg	0.00039	0.000288	0.0000429					0.000414	0.0000296			0.000117
PCB 95	mg/kg	0.0269	0.0198	0.00229					0.0282	0.0016			0.00828
PCB 96	mg/kg	0.000557	0.000378	0.0000504					0.000522	0.0000227			0.0000834
PCB 97	mg/kg												
PCB 98	mg/kg	0.000556	0.000427	0.0000577					0.000313	0.0000205 U			0.00012
PCB 99	mg/kg	0.0157	0.0118	0.00151					0.0163	0.00113			0.00316
PCB-100/93	mg/kg	0.000468	0.000363	0.0000654					0.000495	0.0000732			0.000111
PCB-107/124	mg/kg	0.00107	0.000783	0.000103					0.000954	0.0000603			0.000593
PCB-108/119/86/97/125/87	mg/kg	0.0232	0.0171	0.00201					0.0227	0.00124			0.00769
PCB-113/90/101	mg/kg	0.0303	0.0219	0.00272					0.032	0.00206			0.00979
PCB-116/85	mg/kg	0.00604	0.00456	0.00061					0.00608	0.000329			0.0061
PCB-128/166	mg/kg	0.00396	0.00258	0.000373					0.00353	0.000382			0.0025
PCB-13/12	mg/kg	0.00952	0.0156	0.00191					0.00491	0.00455			0.341
PCB-139/140	mg/kg	0.000466	0.00032	0.0000468					0.000374	0.0000442			0.00015
PCB-147/149	mg/kg	0.025	0.0154	0.00224					0.0192	0.00236			0.0105
PCB-151/135	mg/kg	0.0115	0.00719	0.00102					0.00852	0.00105			0.00619
PCB-153/168	mg/kg	0.024	0.0158	0.00225					0.0168	0.00224			0.00801
PCB-156/157	mg/kg	0.003	0.00197	0.000276					0.00242	0.000242			0.00268
PCB-163/138/129	mg/kg	0.0284	0.0179	0.00259					0.02	0.00243			0.00989
PCB-171/173	mg/kg	0.0024	0.00168	0.000213					0.00176	0.000205			0.000734
PCB-180/193	mg/kg	0.0171	0.0104	0.00154					0.012	0.00149			0.00877
PCB-198/199	mg/kg	0.00623	0.00458	0.00081					0.00639	0.00105			0.0114
PCB-21/33	mg/kg	0.0212	0.0239	0.0019					0.0149	0.00151			0.0905
PCB-26/29	mg/kg	0.0064	0.00481	0.000763					0.00568	0.000703			0.027
PCB-28/20	mg/kg	0.0338	0.0289	0.00317					0.0313	0.0018			0.0327
PCB-30/18	mg/kg	0.0247	0.0165	0.00184					0.0345	0.00126			0.0507
PCB-44/47/65	mg/kg	0.0336	0.0296	0.00324					0.0343	0.00158			0.00611
PCB-50/53	mg/kg	0.00664	0.00538	0.000572					0.00591	0.000242			0.000511
PCB-59/62/75	mg/kg	0.0032	0.00264	0.00029					0.00308	0.000161			0.00162
PCB-61/70/74/76	mg/kg	0.0554	0.0442	0.00508					0.0549	0.0022			0.0205
PCB-69/49	mg/kg	0.0221	0.0187	0.00208					0.0219	0.00107			0.00252
PCB-71/40	mg/kg	0.0175	0.0221	0.00149					0.0177	0.000758			0.00195
PCB-90/101	mg/kg												
Pentachlorobiphenyl	mg/kg												
Tetrachlorobiphenyl	mg/kg												
Total Decachlorobiphenyls (congeners)	mg/kg												
Total Dichlorobiphenyls (congeners)	mg/kg	0.0597	0.0701	0.00872					0.0342	0.0174			1.5
Total Heptachlorobiphenyls (congeners)	mg/kg	0.0686	0.0438	0.00624					0.048	0.00624			0.0335
Total Hexachlorobiphenyls (congeners)	mg/kg	0.135	0.0863	0.0125					0.099	0.0123			0.0691
Total Monochlorobiphenyls (congeners)	mg/kg	0.0154	0.02	0.00392					0.00806	0.00967			0.432
Total Nonachlorobiphenyls (congeners)	mg/kg	0.017	0.0135	0.00307					0.0199	0.00536			0.0211
Total Octachlorobiphenyls (congeners)	mg/kg	0.021	0.0148	0.00251					0.0205	0.00313			0.0252
Total PCB (congeners)	mg/kg	1.0555	0.8934	0.10472					0.95756	0.1003			2.9175
Total Pentachlorobiphenyls (congeners)	mg/kg	0.211	0.156	0.019					0.211	0.0132			0.0687
Total Tetrachlorobiphenyls (congeners)	mg/kg	0.315	0.3	0.0278					0.303	0.0128			0.082
Total Trichlorobiphenyls (congeners)	mg/kg	0.19	0.171	0.0181					0.192	0.0153			0.665
Trichlorobiphenyl (total)	mg/kg												
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>													
Benzo[e]pyrene	mg/kg												
Chrysene, 1-methyl-	mg/kg												
Naphthalene, 1-methyl-	mg/kg												
Pyrene, 1-methyl-	mg/kg												

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	Field Sample ID	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		E16-BOR-05(0.5-1.0)	E16-BOR-05(0.5-1.0) DUP	E16-BOR-05(0-0.5)	E16-BOR-05(4.5-5.5)	E16-BOR-05(4.5-5.5)-D	E16-BOR-05(6.5-6.8)	E16-BOR-05(6.8-7.0)	E16-BOR-05(8.0-8.5)	E16-BOR-06(0.5-1.0)	E16-BOR-06(0-0.5)	E16-BOR-06(1.5-2.0)	E16-BOR-07-(0.5-1.0)
Location ID	Depth Interval (ft)	E16-BOR-05	E16-BOR-05	E16-BOR-05	E16-BOR-05	E16-BOR-05	E16-BOR-05	E16-BOR-05	E16-BOR-05	E16-BOR-05	E16-BOR-06	E16-BOR-06	E16-BOR-06
Sample Purpose	Date	0.50-1.00 FS	0.50-1.00 DUP	0.00-0.50 FS	4.50-5.50 FS	4.50-5.50 DUP	6.50-6.80 FS	6.80-7.00 FS	8.00-8.50 FS	0.50-1.00 FS	0.00-0.50 FS	1.50-2.00 FS	0.50-1.00 FS
Chemical Class	Units	11/3/2016	11/3/2016	11/3/2016	11/3/2016	11/3/2016	11/3/2016	11/3/2016	11/3/2016	10/26/2016	10/26/2016	10/26/2016	11/3/2017
<b>Polycyclic Aromatic Hydrocarbons</b>													
Acenaphthene	mg/kg	0.25		0.027	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.016	0.041	0.01	0.93
Acenaphthylene	mg/kg	0.09		0.016	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.02	0.004 U	0.13
Anthracene	mg/kg	0.41		0.051	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.014	0.042	0.01	0.12
Benzo(A)Anthracene	mg/kg	0.36		0.086	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.03	0.11	0.019	0.49
Benzo(B)Fluoranthene	mg/kg	0.38		0.11	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.025	0.15	0.016	0.86
Benzo(G,H,I)Perylene	mg/kg	0.17		0.051	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.011	0.074	0.01	0.25
Benzo(K)Fluoranthene	mg/kg	0.19		0.046	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.011	0.062	0.007	0.29
Benzo(A)Pyrene	mg/kg	0.33		0.076	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.023	0.11	0.014	0.25
Chrysene	mg/kg	0.71		0.14	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.1	0.17	0.051	1.8
Dibenz(A,H)Anthracene	mg/kg	0.059 U		0.014	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.007	0.032	0.006	0.087
Fluoranthene	mg/kg	0.67		0.16	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.025	0.16	0.019	0.47
Fluorene	mg/kg	0.37		0.039	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.02	0.037	0.014	0.99
Indeno (1,2,3-CD) Pyrene	mg/kg	0.14		0.041	0.004 U	0.004 U	0.004 U	0.004 U	0.004 U	0.011	0.062	0.009	0.18
Naphthalene	mg/kg	0.82		0.065	0.004 U	0.004 U	0.004 U	0.03	0.004 U	0.036	0.52	0.033	2
Phenanthrene	mg/kg	0.93		0.14	0.004 U	0.005	0.004 U	0.011	0.004 U	0.054	0.11	0.044	2.6
Pyrene	mg/kg	0.81		0.15	0.004 U	0.004	0.004 U	0.004 U	0.004 U	0.026	0.18	0.019	0.52
Total PAHs (Detections + 1/2 MDL)	mg/kg	6.6595		1.212	0.032 U	0.037	0.032 U	0.069	0.032 U	0.411	1.88	0.283	11.967
Total PAHs (Detections Only)	mg/kg	6.63		1.212	0.032 U	0.009	0.032 U	0.041	0.032 U	0.409	1.88	0.281	11.967
<b>Semivolatile Organic Compounds - TICs</b>													
1,2,4-Trithiolane	mg/kg												
1,4-Benzenediol, 2-chloro-	mg/kg												
11H-Benzo[b]fluorene	mg/kg												
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg												
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg	5.2			0.48	0.58	0.51	0.64	0.99				
3-PENTEN-2-ONE, 4-METHYL-	mg/kg												
7H-Benz[de]anthracen-7-one	mg/kg												
9,10-Anthracenedione	mg/kg												
9-Octadecenamamide, (Z)-	mg/kg												
Acetamide, 2-chloro-N-(ethox	mg/kg												
Alachlor	mg/kg												
Benzenamine, 3-methyl-	mg/kg												
Benzenamine, 4,4',4"-methy	mg/kg												
Benzenamine, 4,4'-methyleneb	mg/kg	2.4		0.21									
Benzene, 1,2,3,4-tetrachloro	mg/kg												
Benzene, 1,2,3,5-tetrachloro	mg/kg												
Benzene, 1,2,3-trichloro-	mg/kg												
Benzene, 1,3,5-trichloro-	mg/kg												
Benzene, 1,3-bis(1-methyleth	mg/kg												
Benzene, 1,4-bis(1-methyleth	mg/kg												
Benzo[ghi]perylene	mg/kg												
CYCLIC OCTAATOMIC SULFUR	mg/kg	2.4									0.69		
Diphenyl Ether	mg/kg												
Docosane	mg/kg												
Heneicosane	mg/kg												
Hexacosane	mg/kg												
Hexadecane	mg/kg												
Hexatriacontane	mg/kg												
m-Chloroaniline	mg/kg												
N,N-Diethylaniline	mg/kg												
n-Hexadecanoic acid	mg/kg							0.55					
Nonadecane	mg/kg												
o-Chloroaniline	mg/kg												
Octacosane	mg/kg												
Octadecane	mg/kg			0.43									
Octadecane, 1-chloro-	mg/kg												
Octadecanoic acid	mg/kg												
Parachlorophenol	mg/kg												
Pentadecane	mg/kg												
Perylene	mg/kg												
Phenol, 2,5-dichloro-	mg/kg												
Phenol, 3-chloro-	mg/kg												
Phenol, 4,4'-(1-methylethyl)	mg/kg	7.6		2.2				0.32		1.7	3.5	1.1	2.8
Tetracosane	mg/kg												
Tetradecane	mg/kg												
Tetraethylene glycol	mg/kg												
Total SVOC TICs	mg/kg	96		9.6	1.2	1.4	1.3	2.8	2.4	2.9	13	2.4	28
Triacotane	mg/kg												
Tributyl phosphate	mg/kg												
Tridecanoic acid	mg/kg												
Triphenyl phosphate	mg/kg												
UNKNOWN	mg/kg	2.55		0.4							0.492307692		1.32
Unknown acid	mg/kg												
Unknown Alcohol	mg/kg												
Unknown Aldol Condensate	mg/kg			3.6						0.59	2.1	0.63	
UNKNOWN ALKANE	mg/kg			0.27						0.22		0.27	

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		E16-BOR-05(0.5-1.0) E16-BOR-05 0.50-1.00 FS 11/3/2016	E16-BOR-05(0.5-1.0) DUP E16-BOR-05 0.50-1.00 DUP 11/3/2016	E16-BOR-05(0-0.5) E16-BOR-05 0.00-0.50 FS 11/3/2016	E16-BOR-05(4.5-5.5) E16-BOR-05 4.50-5.50 FS 11/3/2016	E16-BOR-05(4.5-5.5)-D E16-BOR-05 4.50-5.50 DUP 11/3/2016	E16-BOR-05(6.5-6.8) E16-BOR-05 6.50-6.80 FS 11/3/2016	E16-BOR-05(6.8-7.0) E16-BOR-05 6.80-7.00 FS 11/3/2016	E16-BOR-05(8.0-8.5) E16-BOR-05 8.00-8.50 FS 11/3/2016	E16-BOR-06(0.5-1.0) E16-BOR-06 0.50-1.00 FS 10/26/2016	E16-BOR-06(0-0.5) E16-BOR-06 0.00-0.50 FS 10/26/2016	E16-BOR-06(1.5-2.0) E16-BOR-06 1.50-2.00 FS 10/26/2016	E16-BOR-07(0.5-1.0) E16-BOR-07 0.50-1.00 FS 11/3/2017
<b>Chemical</b>	<b>Units</b>												
Unknown Alkene	mg/kg												
Unknown Amide	mg/kg												
Unknown Amine	mg/kg												
UNKNOWN AROMATIC	mg/kg	2.92											
Unknown Carboxylic Acid	mg/kg												
Unknown Cycloalkane	mg/kg												
Unknown Hydrocarbon	mg/kg			0.35									
Unknown Ketone	mg/kg												
Unknown PAH	mg/kg												2.5
UNKNOWN SILOXANE	mg/kg												
<b>Semivolatile Organic Compounds</b>													
1,2,4-Trichlorobenzene	mg/kg	0.3		0.068	0.018	0.018	0.019	0.021	0.021	0.018	0.072	0.019	0.59
1,2-Diphenylhydrazine	mg/kg	0.29	U	0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.099
1,4-Dioxane	mg/kg	1.8	U	0.15	0.11	0.11	0.11	0.13	0.13	0.11	0.22	0.12	0.59
1-Naphthylamine	mg/kg	2.9	U	0.25	0.18	0.18	0.19	0.21	0.21	0.18	0.37	0.19	0.99
2,3,4,6-Tetrachlorophenol	mg/kg	1.2	U	0.1	0.071	0.072	0.074	0.085	0.084	0.073	0.15	0.077	0.4
2,4,5-Trichlorophenol	mg/kg	0.29	U	0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.099
2,4,6-Trichlorophenol	mg/kg	0.29	U	0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.099
2,4-Dichlorophenol	mg/kg	0.29	U	0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.099
2,4-Dimethylphenol	mg/kg	0.29	U	0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.099
2,4-Dinitrophenol	mg/kg	5.3	U	0.45	0.32	0.33	0.33	0.89	0.38	0.33	0.67	0.35	1.8
2,4-Dinitrotoluene	mg/kg	1.2	U	0.1	0.071	0.072	0.074	0.085	0.084	0.073	0.15	0.077	0.4
2,6-Dinitrotoluene	mg/kg	0.29	U	0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.099
2-Chloronaphthalene	mg/kg	0.12	U	0.01	0.007	0.007	0.007	0.009	0.008	0.007	0.015	0.008	0.04
2-Chlorophenol	mg/kg	0.29	U	0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.099
2-Methylnaphthalene	mg/kg	0.42		0.03	0.004	0.004	0.004	0.009	0.004	0.015	0.06	0.011	0.9
2-Methylphenol (O-Cresol)	mg/kg	0.29	U	0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.099
2-Naphthylamine	mg/kg	2.9	U	0.25	0.18	0.18	0.19	0.21	0.21	0.18	0.37	0.19	0.99
2-Nitroaniline	mg/kg	0.29	U	0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.099
2-Nitrophenol	mg/kg	0.29	U	0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.099
3,3'-Dichlorobenzidine	mg/kg	1.8	U	0.15	0.11	0.11	0.11	0.13	0.13	0.11	0.22	0.12	0.59
3,3'-Dimethylbenzidine	mg/kg												
3-Nitroaniline	mg/kg	1.2	U	0.1	0.071	0.072	0.074	0.085	0.084	0.073	0.15	0.077	0.4
4,6-Dinitro-2-Methylphenol	mg/kg	2.9	U	0.25	0.18	0.18	0.19	0.21	0.21	0.18	0.37	0.19	0.99
4-Aminobiphenyl	mg/kg	2.9	U	0.25	0.18	0.18	0.19	0.21	0.21	0.18	0.37	0.19	0.99
4-Bromophenyl Phenyl Ether	mg/kg	0.29	U	0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.099
4-Chloro-3-Methylphenol	mg/kg	0.29	U	0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.099
4-Chloroaniline	mg/kg	0.62		0.098	0.035	0.036	0.037	0.042	0.042	0.036	0.075	0.039	0.2
4-Chlorophenyl Phenyl Ether	mg/kg	0.29	U	0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.099
4-Methylphenol (P-Cresol)	mg/kg	0.48		0.028	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.099
4-Nitroaniline	mg/kg	1.2	U	0.1	0.071	0.072	0.074	0.085	0.084	0.073	0.15	0.077	0.4
4-Nitrophenol	mg/kg	2.9	U	0.25	0.18	0.18	0.19	0.21	0.21	0.18	0.37	0.19	0.99
Acetophenone	mg/kg	0.29	U	0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.12
Aniline	mg/kg	2.9	U	0.25	0.18	0.18	0.19	0.21	0.21	0.18	0.37	0.19	0.99
Benzidine	mg/kg	4.4	U	0.37	0.27	0.27	0.28	0.32	0.31	0.28	0.56	0.29	1.5
Biphenyl	mg/kg	0.29	U	0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.36
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg	0.29	U	0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.099
Bis(2-Chloroethoxy)Methane	mg/kg	0.29	U	0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.099
Bis(2-Chloroethyl)Ether	mg/kg	0.29	U	0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.099
Bis(2-Chloroisopropyl)Ether	mg/kg												
Bis(2-Ethylhexyl)Phthalate	mg/kg	1.5		0.1	0.071	0.072	0.074	0.085	0.084	0.073	0.15	0.077	0.4
Butyl Benzyl Phthalate	mg/kg	1.2	U	0.1	0.071	0.072	0.074	0.085	0.084	0.073	0.15	0.077	0.4
Carbazole	mg/kg	0.29	U	0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.35
Dibenzofuran	mg/kg	0.29	U	0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	1
Diethyl Phthalate	mg/kg	1.2	U	0.1	0.071	0.072	0.074	0.085	0.084	0.073	0.15	0.077	0.4
Dimethyl Phthalate	mg/kg	1.2	U	0.1	0.071	0.072	0.074	0.085	0.084	0.073	0.15	0.077	0.4
Di-N-Butyl Phthalate	mg/kg	1.2	U	0.1	0.071	0.072	0.074	0.085	0.084	0.073	0.15	0.077	0.4
Diphenyl Ether	mg/kg	0.29	U	0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.099
Hexachlorobenzene	mg/kg	0.059	U	0.005	0.004	0.004	0.004	0.004	0.004	0.004	0.007	0.004	0.4
Hexachlorobutadiene	mg/kg	0.29	U	0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.099
Hexachlorocyclopentadiene	mg/kg	2.9	U	0.25	0.18	0.18	0.19	0.21	0.21	0.18	0.37	0.19	0.99
Hexachloroethane	mg/kg	0.59	U	0.05	0.035	0.036	0.037	0.042	0.042	0.036	0.075	0.039	0.2
Hexachloropropylene	mg/kg												
Isophorone	mg/kg	0.29	U	0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.099
N-Dioctyl Phthalate	mg/kg	1.2	U	0.1	0.071	0.072	0.074	0.085	0.084	0.073	0.15	0.077	0.4
Nitrobenzene	mg/kg	0.88		0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.099
N-Nitrosodimethylamine	mg/kg	1.2	U	0.1	0.071	0.072	0.074	0.085	0.084	0.073	0.15	0.077	0.4
N-Nitrosodi-N-Propylamine	mg/kg	0.29	U	0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.099
N-Nitrosodiphenylamine	mg/kg	0.31		0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.39
O-Toluidine	mg/kg	3.5	U	0.3	0.21	0.22	0.22	0.25	0.25	0.22	0.45	0.23	1.2
Parathion	mg/kg	2.9	U	0.25	0.18	0.18	0.19	0.21	0.21	0.18	0.37	0.19	0.99
Pentachlorobenzene	mg/kg	0.29	U	0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.099
Pentachlorophenol	mg/kg	0.59	U	0.05	0.035	0.036	0.037	0.042	0.042	0.036	0.075	0.039	0.2
Phenol	mg/kg	0.29	U	0.025	0.018	0.018	0.019	0.021	0.021	0.018	0.037	0.019	0.099
<b>Volatile Organic Compounds - TICs</b>													
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg												

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Chemical Class	River Zone	MZ-FPA																					
		Field Sample ID	E16-BOR-05(0.5-1.0)	E16-BOR-05(0.5-1.0) DUP	E16-BOR-05(0-0.5)	E16-BOR-05(4.5-5.5)	E16-BOR-05(4.5-5.5)-D	E16-BOR-05(6.5-6.8)	E16-BOR-05(6.8-7.0)	E16-BOR-05(8.0-8.5)	E16-BOR-06(0.5-1.0)	E16-BOR-06(0-0.5)	E16-BOR-06(1.5-2.0)	E16-BOR-07(0.5-1.0)									
Chemical	Location ID	E16-BOR-05	E16-BOR-05	E16-BOR-05	E16-BOR-05	E16-BOR-05	E16-BOR-05	E16-BOR-05	E16-BOR-05	E16-BOR-05	E16-BOR-06	E16-BOR-06	E16-BOR-06	E16-BOR-07									
Units	Depth Interval (ft)	0.50-1.00	0.50-1.00	0.00-0.50	4.50-5.50	4.50-5.50	6.50-6.80	6.80-7.00	8.00-8.50	0.50-1.00	0.00-0.50	1.50-2.00	0.50-1.00										
	Sample Purpose	FS	DUP	FS	FS	DUP	FS	FS	FS	FS	FS	FS	FS										
	Date	11/3/2016	11/3/2016	11/3/2016	11/3/2016	11/3/2016	11/3/2016	11/3/2016	11/3/2016	11/3/2016	10/26/2016	10/26/2016	10/26/2016	11/3/2017									
1-Butene	mg/kg																						
1-Heptene	mg/kg																						
1-Propene, 2-methyl-	mg/kg																						
Azulene	mg/kg									0.014													
BENZENE, 1,2,4-TRICHLORO-	mg/kg																						
BENZENE, 1,2-DICHLORO-	mg/kg																						
BENZENE, 1,4-DICHLORO-	mg/kg																						
Camphene	mg/kg																						
CYCLOHEXANE	mg/kg																						
Cyclohexane, methyl-	mg/kg																						
Cyclotrisiloxane, hexamethyl	mg/kg																						
Diphenyl Ether	mg/kg																						
Ethane, 1,1,2,2-tetrachloro-	mg/kg									0.078		0.01											
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg																						
Ethane, 1,2-dichloro-1,1-dif	mg/kg																						
Ethene, 1,1-dichloro-2,2-dif	mg/kg									0.007													
Hexane, 2-methyl-	mg/kg																						
Hexane, 3-methyl-	mg/kg																						
METHANE, CHLOROFLUORO-	mg/kg																						
Naphthalene	mg/kg																						
NAPHTHALENE, 2-METHYL-	mg/kg																						
Nonanal	mg/kg																						
Norflurane	mg/kg																						
Pentane, 2,3-dimethyl-	mg/kg																						
Phenol, 4-(1,1,3,3-tetrameth	mg/kg																						
Propene	mg/kg																						
Sulfur dioxide	mg/kg																						
Tridecane	mg/kg	0.017																					
UNKNOWN	mg/kg	0.0155			0.013444444																		
UNKNOWN ALICYCLIC	mg/kg	0.016666667			0.014																		
UNKNOWN ALIPHATIC	mg/kg																						
UNKNOWN ALKANE	mg/kg	0.018833333																					
UNKNOWN AROMATIC	mg/kg				0.01																		
UNKNOWN SILOXANE	mg/kg																						
<b>Volatile Organic Compounds</b>																							
1,1,1,2-Tetrachloroethane	mg/kg	0.002	U		0.002	U	0.001	U	0.001	U	0.058	U	0.001	U	0.0009	U	0.16	U	0.001	U	0.058		
1,1,1-Trichloroethane	mg/kg	0.002	U		0.002	U	0.001	U	0.001	U	0.058	U	0.001	U	0.0009	U	0.16	U	0.001	U	0.058		
1,1,1-Trichlorotrifluoroethane	mg/kg	0.011			0.025		0.043		0.006	U	0.064		0.086		0.21		0.026	U	0.013		0.006		
1,1,2,2-Tetrachloroethane	mg/kg	0.002	U		0.002	U	0.001	U	0.001	U	0.058	U	0.004		0.0009	U	0.16	U	0.001		0.058		
1,1,2-Trichloroethane	mg/kg	0.002	U		0.002	U	0.001	U	0.001	U	0.058	U	0.001	U	0.0009	U	0.16	U	0.001	U	0.058		
1,1,2-Trichlorotrifluoroethane	mg/kg	0.074			1.5		0.14		0.023		5.2		7.9		0.067		0.32	U	0.79		5.6		
1,1,2-Trifluoroethane	mg/kg	0.004	U		0.004	U	0.002	U	0.002	U	0.002	U	0.002	U	0.002	U	0.01	U	0.002	U	0.002		
1,1-Dichloro-1-Fluoroethane	mg/kg	0.002	U		0.002	U	0.001	U	0.001	U	0.0009	U	0.001	U	0.001	U	0.005	U	0.001	U	0.001		
1,1-Dichloroethane	mg/kg	0.002	U		0.002	U	0.001	U	0.001	U	0.058	U	0.001	U	0.0009	U	0.16	U	0.001	U	0.058		
1,1-Dichloroethene	mg/kg	0.002	U		0.002	U	0.001	U	0.001	U	0.058	U	0.001	U	0.0009	U	0.16	U	0.001	U	0.058		
1,1-Dichloropropene	mg/kg	0.002	U		0.002	U	0.001	U	0.001	U	0.058	U	0.001	U	0.0009	U	0.16	U	0.001	U	0.058		
1,2,4-Trimethylbenzene	mg/kg	0.005			0.002		0.001		0.001		0.058		0.001		0.0009		0.16		0.001		0.058		
1,2-Dibromoethane (EDB)	mg/kg	0.002	U		0.002	U	0.001	U	0.001	U	0.058	U	0.001	U	0.0009	U	0.16	U	0.001	U	0.058		
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg	0.002	U		0.012		0.003		0.001		0.003		0.14		0.002		0.061		0.49		0.004		
1,2-Dichloro-1-Fluoroethane	mg/kg	0.002	U		0.002	U	0.001	U	0.001	U	0.0009	U	0.001	U	0.001	U	0.005	U	0.001	U	0.001		
1,2-Dichlorobenzene	mg/kg	0.051			0.044		0.005		0.002		0.26		0.8		0.017		0.88		11		2.9		
1,2-Dichloroethane	mg/kg	0.002	U		0.002	U	0.001	U	0.001	U	0.058	U	0.001	U	0.0009	U	0.16	U	0.001	U	0.058		
1,2-Dichloroethene	mg/kg	0.002	U		0.003		0.001		0.001		0.058		0.001		0.001		0.035		0.36		0.009		
1,2-Dichloropropane	mg/kg	0.002	U		0.002	U	0.001	U	0.001	U	0.058	U	0.001	U	0.0009	U	0.16	U	0.001	U	0.058		
1,2-Dichlorotetrafluoroethane	mg/kg	0.005			0.008		0.01		0.002		0.016		0.2		0.039		0.28		0.96		0.044		
1,3,5-Trimethylbenzene	mg/kg	0.003			0.002		0.001		0.001		0.058		0.001		0.0009		0.16		0.001		0.058		
1,3-Dichlorobenzene	mg/kg	0.003			0.002		0.001		0.001		0.058		0.001		0.0009		0.16		0.001		0.058		
1,4-Dichlorobenzene	mg/kg	0.01			0.01		0.001		0.001		0.058		0.001		0.0009		0.16		0.001		0.058		
1-Chloro-1,1-Difluoroethane	mg/kg	0.002	U		0.002	U	0.001	U	0.001	U	0.0009	U	0.004		0.001	U	0.005	U	0.001	U	0.001		
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg	0.002	U		0.006		0.015		0.001		0.012		0.51		0.013		1.3		1.3		0.014		
2-Chloro-1,1,1-Trifluoroethane	mg/kg	0.05			0.014		0.002		0.002		0.099		0.12		0.002		0.3		1		0.12		
2-Chloroethyl Vinyl Ether	mg/kg																						
2-Chlorotoluene	mg/kg	0.004			0.002		0.001		0.001		0.058		0.001		0.0009		0.16		0.001		0.058		
2-Hexanone	mg/kg	0.006	U		0.005	U	0.003	U	0.003	U	0.15	U	0.004	U	0.003	U	0.48	U	0.004	U	0.17		
4-Chlorotoluene	mg/kg	0.002	U		0.002	U	0.001	U	0.001	U	0.058	U	0.001	U	0.0009	U	0.16	U	0.001	U	0.058		
4-Isopropyltoluene	mg/kg	0.002	U		0.002	U	0.001	U	0.001	U	0.058	U	0.001	U	0.0009	U	0.16	U	0.001	U	0.058		
Acetone	mg/kg	0.12			0.071		0.009		0.008		0.35		0.41		0.009		1.1		0.019		0.4		
Acrolein	mg/kg																						
Acrylonitrile	mg/kg																						
Benzene	mg/kg	0.006			0.002		0.0005	U	0.0006	U	0.025	U	0.029	U	0.0006	U	0.001	U	0.079	U	0.0006	U	0.029
Bromodichloromethane	mg/kg	0.002	U		0.002	U	0.001	U	0.001	U	0.058	U	0.001	U	0.0009	U	0.16	U	0.001	U	0.058		
Bromoform	mg/kg																						
Carbon Disulfide	mg/kg	0.004			0.006		0.001	U	0.001	U	0.058	U	0.001	U	0.001	U	0.16	U	0.001	U	0.058		
Carbon Tetrachloride	mg/kg	0.002	U		0.002	U	0.001	U	0.001	U	0.058	U	0.001	U	0.0009	U	0.16	U	0.001	U	0.058		
CFC-1113	mg/kg	0.072			0.051		0.002	U	0.002	U	0.999	U	0.12	U	0.002	U	0.33	U	0.32	U	0.008	U	0.12
Chlorobenzene	mg/kg	0.088			0.033		0.001	U	0.001	U	0.058	U	0.002	U	0.002	U	0.036	U	0.45	U	0.016	U	0.85

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		E16-BOR-05(0.5-1.0) E16-BOR-05 0.50-1.00 FS 11/3/2016	E16-BOR-05(0.5-1.0) DUP E16-BOR-05 0.50-1.00 DUP 11/3/2016	E16-BOR-05(0-0.5) E16-BOR-05 0.00-0.50 FS 11/3/2016	E16-BOR-05(4.5-5.5) E16-BOR-05 4.50-5.50 FS 11/3/2016	E16-BOR-05(4.5-5.5)-D E16-BOR-05 4.50-5.50 DUP 11/3/2016	E16-BOR-05(6.5-6.8) E16-BOR-05 6.50-6.80 FS 11/3/2016	E16-BOR-05(6.8-7.0) E16-BOR-05 6.80-7.00 FS 11/3/2016	E16-BOR-05(8.0-8.5) E16-BOR-05 8.00-8.50 FS 11/3/2016	E16-BOR-06(0.5-1.0) E16-BOR-06 0.50-1.00 FS 10/26/2016	E16-BOR-06(0-0.5) E16-BOR-06 0.00-0.50 FS 10/26/2016	E16-BOR-06(1.5-2.0) E16-BOR-06 1.50-2.00 FS 10/26/2016	E16-BOR-07(0.5-1.0) E16-BOR-07 0.50-1.00 FS 11/3/2017
Chlorodibromomethane	mg/kg	0.002 U		0.002 U	0.001 U	0.001 U	0.05 U	0.058 U	0.001 U	0.0009 U	0.16 U	0.001 U	0.058
Chlorodifluoromethane	mg/kg	0.004 U		0.004 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.002 U	0.01 U	0.002 U	0.002
Chlorofluoromethane	mg/kg	0.032 U		0.009 U	0.001 U	0.001 U	0.0009 U	0.012 U	0.001 U	0.034 U	0.77 U	0.001 U	0.001
Chloroform	mg/kg	0.002 U		0.02 U	0.006 U	0.002 U	0.24 U	0.33 U	0.008 U	0.082 U	0.16 U	0.098 U	0.058
Chloropentafluoroethane	mg/kg	0.029 U		0.027 U	0.016 U	0.017 U	0.014 U	0.018 U	0.019 U	0.017 U	0.079 U	0.015 U	0.018
cis-1,2-Dichloroethene	mg/kg	0.002 U		0.003 U	0.001 U	0.001 U	0.05 U	0.058 U	0.001 U	0.035 U	0.36 U	0.009 U	0.058
cis-1,3-Dichloropropene	mg/kg	0.002 U		0.002 U	0.001 U	0.001 U	0.05 U	0.058 U	0.001 U	0.0009 U	0.16 U	0.001 U	0.058
Cumene	mg/kg	0.003 U		0.002 U	0.001 U	0.001 U	0.05 U	0.058 U	0.001 U	0.0009 U	0.16 U	0.001 U	0.058
Dichlorodifluoromethane	mg/kg	0.004 U		0.003 U	0.002 U	0.002 U	0.099 U	0.12 U	0.002 U	0.002 U	0.32 U	0.002 U	0.12
Dichlorofluoromethane	mg/kg	0.005 U		0.035 U	0.002 U	0.002 U	0.12 U	0.12 U	0.004 U	0.14 U	1 U	0.023 U	0.12
Ethane	ug/L												
Ethyl Chloride	mg/kg	0.004 U		0.003 U	0.002 U	0.002 U	0.099 U	0.12 U	0.002 U	0.002 U	0.32 U	0.002 U	0.12
Ethylbenzene	mg/kg	0.002 U		0.002 U	0.001 U	0.001 U	0.05 U	0.058 U	0.001 U	0.0009 U	0.16 U	0.001 U	0.058
Fluoromethane	mg/kg	0.006 U		0.005 U	0.003 U	0.003 U	0.003 U	0.004 U	0.004 U	0.003 U	0.016 U	0.003 U	0.004
Hexane	mg/kg	0.002 U		0.002 U	0.001 U	0.001 U	0.05 U	0.058 U	0.001 U	0.0009 U	0.16 U	0.001 U	0.058
Isobutyl Alcohol	mg/kg	0.15 U		0.15 U	0.11 U	0.11 U	5 U	5.8 U	0.12 U	0.095 U	16 U	0.12 U	5.8
Meta- And Para-Xylene	mg/kg	0.022 U		0.002 U	0.001 U	0.001 U	0.05 U	0.058 U	0.001 U	0.002 U	0.16 U	0.001 U	0.058
Methacrylonitrile	mg/kg	0.01 U		0.008 U	0.005 U	0.006 U	0.25 U	0.29 U	0.006 U	0.005 U	0.79 U	0.006 U	0.29
Methane	ug/L												
Methyl Bromide	mg/kg												
Methyl Chloride	mg/kg	0.004 U		0.003 U	0.002 U	0.002 U	0.099 U	0.12 U	0.002 U	0.002 U	0.32 U	0.002 U	0.12
Methyl Ethyl Ketone	mg/kg	0.017 U		0.007 U	0.004 U	0.004 U	0.2 U	0.23 U	0.005 U	0.004 U	0.63 U	0.005 U	0.23
Methyl Isobutyl Ketone	mg/kg	0.006 U		0.005 U	0.003 U	0.003 U	0.15 U	0.17 U	0.004 U	0.003 U	0.48 U	0.004 U	0.17
Methyl Methacrylate	mg/kg	0.002 U		0.002 U	0.001 U	0.001 U	0.05 U	0.058 U	0.001 U	0.0009 U	0.16 U	0.001 U	0.058
Methyl Tertiary Butyl Ether	mg/kg	0.001 U		0.0008 U	0.0005 U	0.0006 U	0.025 U	0.029 U	0.0006 U	0.0005 U	0.079 U	0.0006 U	0.029
Methylene Chloride	mg/kg	0.004 U		0.005 U	0.004 U	0.002 U	0.15 U	0.36 U	0.068 U	0.01 U	0.32 U	0.014 U	0.12
N-Butylbenzene	mg/kg	0.002 U		0.002 U	0.001 U	0.001 U	0.05 U	0.058 U	0.001 U	0.0009 U	0.16 U	0.001 U	0.058
N-Propylbenzene	mg/kg	0.002 U		0.002 U	0.001 U	0.001 U	0.05 U	0.058 U	0.001 U	0.0009 U	0.16 U	0.001 U	0.058
Ortho-Xylene	mg/kg	0.009 U		0.002 U	0.001 U	0.001 U	0.05 U	0.058 U	0.001 U	0.001 U	0.16 U	0.001 U	0.058
Propionitrile	mg/kg	0.058 U		0.047 U	0.033 U	0.033 U	1.5 U	1.7 U	0.037 U	0.028 U	4.8 U	0.035 U	1.7
sec-Butylbenzene	mg/kg	0.002 U		0.002 U	0.001 U	0.001 U	0.05 U	0.058 U	0.001 U	0.0009 U	0.16 U	0.001 U	0.058
Styrene	mg/kg	0.002 U		0.002 U	0.001 U	0.001 U	0.05 U	0.058 U	0.001 U	0.0009 U	0.16 U	0.001 U	0.058
tert-Butylbenzene	mg/kg	0.002 U		0.002 U	0.001 U	0.001 U	0.05 U	0.058 U	0.001 U	0.0009 U	0.16 U	0.001 U	0.058
Tetrachloroethene	mg/kg	0.002 U		0.021 U	0.003 U	0.001 U	0.16 U	0.72 U	0.001 U	0.34 U	0.18 U	0.22 U	1.6
Tetrahydrofuran	mg/kg	0.008 U		0.006 U	0.004 U	0.004 U	0.2 U	0.23 U	0.005 U	0.004 U	0.63 U	0.005 U	0.23
Toluene	mg/kg	0.016 U		0.004 U	0.001 U	0.001 U	0.05 U	0.058 U	0.001 U	0.002 U	0.16 U	0.001 U	0.058
trans-1,2-Dichloroethene	mg/kg	0.002 U		0.002 U	0.001 U	0.001 U	0.05 U	0.058 U	0.001 U	0.0009 U	0.16 U	0.001 U	0.058
trans-1,3-Dichloropropene	mg/kg												
Trichloroethene	mg/kg	0.002 U		0.002 U	0.001 U	0.001 U	0.05 U	0.058 U	0.001 U	0.046 U	0.45 U	0.011 U	0.058
Trichlorofluoromethane	mg/kg	0.02 U		0.26 U	0.03 U	0.005 U	1.3 U	1.4 U	0.008 U	1.1 U	0.32 U	0.27 U	1.6
Vinyl Chloride	mg/kg	0.009 U		0.002 U	0.001 U	0.001 U	0.05 U	0.058 U	0.001 U	0.034 U	0.16 U	0.001 U	0.058
Vinyl Fluoride	mg/kg	0.011 U		0.011 U	0.007 U	0.007 U	0.006 U	0.007 U	0.007 U	0.007 U	0.031 U	0.006 U	0.007
Xylenes	mg/kg	0.031 U		0.004 U	0.001 U	0.001 U	0.05 U	0.058 U	0.001 U	0.003 U	0.16 U	0.001 U	0.058

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	Field Sample ID	MZ-FPA E16-BOR-07-(0-0.5)	MZ-FPA E16-BOR-08-(0.5-1.0)	MZ-FPA E16-BOR-08-(0.5-1.0)-D	MZ-FPA E16-BOR-08-(0-0.5)	MZ-SWMU5/HC 10884393	MZ-SWMU5/HC 10884498	MZ-SWMU5/HC 10884580	MZ-SWMU5/HC 10884621	MZ-SWMU5/HC 10893451	MZ-SWMU5/HC 10893482	MZ-SWMU5/HC 10893513
Location ID	Depth Interval (ft)	E16-BOR-07 0.00-0.50	E16-BOR-08 0.50-1.00	E16-BOR-08 0.50-1.00	E16-BOR-08 0.00-0.50	SS-14 1.00-1.50	SS-16 1.00-1.50	SS-18 0.50-1.00	SS-18 2.50-3.00	SS-40 0.00-0.50	SS-40 0.00-0.50	SS-40 1.50-2.00
Sample Purpose	Date	FS 11/3/2017	FS 10/31/2017	DUP 10/31/2017	FS 10/31/2017	FS 11/6/1997	FS 11/6/1997	FS 11/6/1997	FS 1/8/1998	FS 1/25/1999	DUP 1/25/1999	FS 1/25/1999
Chemical Class	Units											
<b>General Chemistry</b>												
Black Carbon	mg/kg											
Percent Moisture	%	50	56.7		51.9	22.5	19.8	21.8	56.1	19.7	19.7	21.5
Percent Solids	%											
Total Organic Carbon	mg/kg	25800	39400		32600	3900	1800	970	10400	830	800	550
<b>Metals</b>												
Aluminum	mg/kg	14300	23400		19900							
Antimony	mg/kg	0.22	0.303		0.314							
Arsenic	mg/kg	9.62	16.8		13.1							
Barium	mg/kg	79.7	115		101							
Beryllium	mg/kg	0.761	1.19		0.967							
Cadmium	mg/kg	0.383	0.794		0.571							
Calcium	mg/kg	3370	4540		3910							
Chromium	mg/kg	38.4	56.1		49.8							
Cobalt	mg/kg	11.5	17.2		13.4							
Copper	mg/kg	24.9	36.9		30.6							
Iron	mg/kg	24200	41100		34000							
Lead	mg/kg	36.3	55.7		46.7	101	7.9	141	709			
Magnesium	mg/kg	4650	7140		6050							
Manganese	mg/kg	743	2470		1040							
Mercury	mg/kg	0.213	0.221		0.19							
Nickel	mg/kg	22.5	34.4		26.6							
Potassium	mg/kg	2350	3750		3210							
Selenium	mg/kg	0.518	0.969		0.751							
Silver	mg/kg	0.166	0.334		0.29							
Sodium	mg/kg	980	763		624							
Thallium	mg/kg	0.12	0.219		0.216							
Tin	mg/kg											
Titanium	mg/kg											
Vanadium	mg/kg	34.7	53		45.1							
Zinc	mg/kg	131	225		184							
<b>Metals - AVS/SEM</b>												
Acid Volatile Sulfide	umol/g											
Arsenic	umol/g											
Cadmium	umol/g											
Copper	umol/g											
Lead	umol/g											
Zinc	umol/g											
<b>Metals - Leachate</b>												
Lead	ug/L					0.021 U	0.021 U	0.036	0.027			
<b>Per and Polyfluorinated Organic Substances</b>												
Perfluorobutane Sulfonic Acid	mg/kg											
Perfluorobutanoic Acid	mg/kg											
Perfluorodecane Sulfonic Acid	mg/kg											
Perfluorodecanoic Acid	mg/kg											
Perfluorododecanoic Acid	mg/kg											
Perfluoroheptanoic Acid	mg/kg											
Perfluorohexane Sulfonic Acid	mg/kg											
Perfluorohexanoic Acid	mg/kg											
Perfluorononanoic Acid	mg/kg											
Perfluorooctane Sulfonamide	mg/kg											
Perfluoropentanoic Acid	mg/kg											
Perfluorotetradecanoic Acid	mg/kg											
Perfluorotridecanoic Acid	mg/kg											
Perfluoroundecanoic Acid	mg/kg											
PFOA	mg/kg											
PFOA(trial)	mg/kg											
PFOS	mg/kg											
PFOS (trial)	mg/kg											
<b>Pesticides and Herbicides</b>												
4,4'-DDD	mg/kg											
4,4'-DDE	mg/kg											
4,4'-DDT	mg/kg											
Aldrin	mg/kg											
Alpha-Chlordane	mg/kg											
Alpha-BHC	mg/kg											
beta-BHC	mg/kg											
delta-BHC	mg/kg											
Dieldrin	mg/kg											
Endosulfan I	mg/kg											
Endosulfan II	mg/kg											
Endosulfan Sulfate	mg/kg											
Endrin	mg/kg											
Endrin Aldehyde	mg/kg											
Endrin Ketone	mg/kg											
Gamma-Chlordane	mg/kg											



Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Depth Interval (ft) Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC
		E16-BOR-07-(0-0.5) E16-BOR-07 0.00-0.50 FS 11/3/2017	E16-BOR-08-(0.5-1.0) E16-BOR-08 0.50-1.00 FS 10/31/2017	E16-BOR-08-(0.5-1.0)-D E16-BOR-08 0.50-1.00 DUP 10/31/2017	E16-BOR-08-(0-0.5) E16-BOR-08 0.00-0.50 FS 10/31/2017	10884393 SS-14 1.00-1.50 FS 11/6/1997	10884498 SS-16 1.00-1.50 FS 11/6/1997	10884580 SS-18 0.50-1.00 FS 11/6/1997	10884621 SS-18 2.50-3.00 FS 1/8/1998	10893451 SS-40 0.00-0.50 FS 1/25/1999	10893482 SS-40 0.00-0.50 DUP 1/25/1999	10893513 SS-40 1.50-2.00 FS 1/25/1999
Chemical	Units											
PCB 136	mg/kg	0.000197	0.000376	0.000422	0.000222							
PCB 137	mg/kg	0.0000403	0.0000641	0.0000475	0.0000318							
PCB 138	mg/kg											
PCB 139	mg/kg											
PCB 14	mg/kg	0.000622	0.000168	0.000321	0.0000621							
PCB 140	mg/kg											
PCB 141	mg/kg	0.00018	0.000348	0.000271	0.000211							
PCB 142	mg/kg	0.0000217	0.00000381	0.00000443	0.00000747							
PCB 143	mg/kg	0.00000296	0.000000819 U	0.000000885 U	0.000000885 U							
PCB 143/139	mg/kg											
PCB 144	mg/kg	0.0000437	0.0000919	0.0000628	0.0000482							
PCB 145	mg/kg	0.0000012	0.000000626 U	0.000000611 U	0.000000621 U							
PCB 146	mg/kg	0.000306	0.000516	0.000618	0.00032							
PCB 147	mg/kg											
PCB 148	mg/kg	0.0000128	0.0000162	0.0000116	0.0000125							
PCB 149	mg/kg											
PCB 15	mg/kg	0.000538	0.000449	0.000324	0.000165							
PCB 150	mg/kg	0.0000108	0.0000169	0.0000124	0.0000141							
PCB 151	mg/kg											
PCB 152	mg/kg	0.00000211	0.0000029	0.0000019	0.000000596 U							
PCB 153	mg/kg											
PCB 154	mg/kg	0.0000577	0.0000912	0.0000613	0.0000784							
PCB 155	mg/kg	0.00000807	0.0000107	0.00000801	0.00000865							
PCB 156	mg/kg											
PCB 157	mg/kg											
PCB 158	mg/kg	0.0000753	0.000153	0.000118	0.000088							
PCB 159	mg/kg	0.000034	0.0000376	0.000031	0.0000241							
PCB 16	mg/kg	0.00033	0.000454	0.000312	0.000112							
PCB 160	mg/kg	0.000073	0.0000143	0.0000119	0.0000185							
PCB 161	mg/kg	0.00000535	0.000000573 U	0.000000618 U	0.000000618 U							
PCB 162	mg/kg	0.0000284	0.0000208	0.0000771	0.0000126							
PCB 163	mg/kg											
PCB 163/160	mg/kg											
PCB 164	mg/kg	0.000126	0.000177	0.000266	0.000119							
PCB 165	mg/kg	0.00000632	0.00000307	0.00000265	0.000000671 U							
PCB 166	mg/kg											
PCB 167	mg/kg	0.0000647	0.000089	0.000144	0.0000534							
PCB 168	mg/kg											
PCB 169	mg/kg	0.00000451 U	0.0000117	0.00000315 U	0.00000283 U							
PCB 17	mg/kg	0.000173	0.000365	0.000176	0.0000916							
PCB 170	mg/kg	0.000281	0.000549	0.000425	0.000348							
PCB 171	mg/kg											
PCB 172	mg/kg	0.000085	0.000116	0.000121	0.0000845							
PCB 173	mg/kg											
PCB 174	mg/kg	0.000383	0.000716	0.00058	0.000457							
PCB 175	mg/kg	0.0000251	0.0000346	0.0000337	0.0000238							
PCB 176	mg/kg	0.0000412	0.0000814	0.0000723	0.0000474							
PCB 177	mg/kg	0.000213	0.000442	0.000335	0.000291							
PCB 178	mg/kg	0.000102	0.000172	0.000151	0.000106							
PCB 179	mg/kg	0.000164	0.00032	0.000271	0.000193							
PCB 18	mg/kg											
PCB 180	mg/kg											
PCB 181	mg/kg	0.0000161	0.00000619	0.00000413	0.00000497							
PCB 182	mg/kg	0.0000163	0.0000132	0.0000102	0.0000117							
PCB 182/175	mg/kg											
PCB 183	mg/kg	0.000196	0.000395	0.000301	0.000257							
PCB 184	mg/kg	0.00000945	0.00000747	0.00000521	0.00000735							
PCB 185	mg/kg	0.0000463	0.0000671	0.0000501	0.0000426							
PCB 186	mg/kg	0.00000283	0.000000838 U	0.000000823 U	0.000000857 U							
PCB 187	mg/kg	0.000623	0.00112	0.000873	0.000761							
PCB 188	mg/kg	0.000016	0.0000195	0.0000152	0.0000191							
PCB 189	mg/kg	0.0000198	0.0000243	0.0000283	0.000017							
PCB 19	mg/kg	0.000137	0.000191	0.0000909	0.0000668							
PCB 190	mg/kg	0.0000755	0.000104	0.0000801	0.0000661							
PCB 191	mg/kg	0.0000169	0.0000217	0.0000199	0.0000155							
PCB 192	mg/kg	0.0000329	0.0000136 U	0.0000176 U	0.0000175 U							
PCB 193	mg/kg											
PCB 194	mg/kg	0.0004	0.00048	0.000364	0.000366							
PCB 195	mg/kg	0.0000879	0.000159	0.000119	0.000099							
PCB 196	mg/kg	0.000198	0.000301	0.000212	0.000233							
PCB 197	mg/kg	0.0000227	0.0000347	0.0000224	0.0000328							
PCB 198	mg/kg											
PCB 199	mg/kg											
PCB 2	mg/kg	0.00133	0.000811	0.00056	0.00037							
PCB 20	mg/kg											
PCB 200	mg/kg	0.0000376	0.0000653	0.0000502	0.0000384							

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	Field Sample ID	Location ID	Depth Interval (ft)	Sample Purpose	Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	
							E16-BOR-07-(0-0.5)	E16-BOR-08-(0.5-1.0)	E16-BOR-08-(0.5-1.0)-D	E16-BOR-08-(0-0.5)	10884393	10884498	10884580	10884621	10893451	10893482	10893513
Chemical	Units						E16-BOR-07 0.00-0.50 FS 11/3/2017	E16-BOR-08 0.50-1.00 FS 10/31/2017	E16-BOR-08 0.50-1.00 DUP 10/31/2017	E16-BOR-08 0.00-0.50 FS 10/31/2017	SS-14 1.00-1.50 FS 11/6/1997	SS-16 1.00-1.50 FS 11/6/1997	SS-18 0.50-1.00 FS 11/6/1997	SS-18 2.50-3.00 FS 1/8/1998	SS-40 0.00-0.50 FS 1/25/1999	SS-40 0.00-0.50 DUP 1/25/1999	SS-40 1.50-2.00 FS 1/25/1999
PCB 201	mg/kg						0.0000849	0.000128	0.0000922	0.000109							
PCB 202	mg/kg						0.00023	0.000341	0.000234	0.000272							
PCB 203	mg/kg						0.000312	0.000464	0.000356	0.000317							
PCB 204	mg/kg						0.0000154	0.00000568	0.00000338	0.00000455							
PCB 204/200	mg/kg																
PCB 205	mg/kg						0.0000282	0.0000251	0.0000184	0.0000193							
PCB 206	mg/kg						0.00268	0.00342	0.00215	0.00298							
PCB 207	mg/kg						0.000243	0.000297	0.000196	0.000278							
PCB 208	mg/kg						0.00116	0.00159	0.001	0.00139							
PCB 209	mg/kg						0.00404	0.00444	0.00303	0.00418							
PCB 21	mg/kg																
PCB 21/20	mg/kg																
PCB 22	mg/kg						0.000392	0.000371	0.000281	0.0000975							
PCB 23	mg/kg						0.0000634	0.0000164	0.0000353	0.0000732							
PCB 24	mg/kg						0.000168	0.0000853	0.000101	0.0000222							
PCB 25	mg/kg						0.000154	0.000216	0.00088	0.0000652							
PCB 26	mg/kg																
PCB 27	mg/kg						0.0000721	0.000158	0.000378	0.0000332							
PCB 28	mg/kg																
PCB 29	mg/kg																
PCB 3	mg/kg						0.00116	0.000754	0.000566	0.000378							
PCB 30	mg/kg																
PCB 31	mg/kg						0.000797	0.000823	0.00066	0.000265							
PCB 32	mg/kg						0.000127	0.000408	0.000135	0.0000824							
PCB 33	mg/kg																
PCB 34	mg/kg						0.000163	0.0000419	0.0000715	0.000018							
PCB 35	mg/kg						0.000435	0.000453	0.000248	0.0000771							
PCB 36	mg/kg						0.000158	0.0000359	0.000113	0.0000221							
PCB 37	mg/kg						0.00166	0.000674	0.000711	0.000344							
PCB 38	mg/kg						0.00000824	0.0000055	0.00000823	0.00000244							
PCB 39	mg/kg						0.000345	0.0000641	0.000132	0.0000488							
PCB 4	mg/kg						0.00306	0.00119	0.000901	0.000624							
PCB 4/10	mg/kg																
PCB 40	mg/kg																
PCB 41	mg/kg						0.0000289	0.0001	0.0000372	0.0000171							
PCB 42	mg/kg						0.000148	0.000383	0.00019	0.000145							
PCB 43	mg/kg						0.0000343	0.0000545	0.0000308	0.0000176							
PCB 44	mg/kg																
PCB 45	mg/kg						0.0000803	0.000241	0.0000953	0.0000639							
PCB 46	mg/kg						0.0000397	0.000117	0.000049	0.0000339							
PCB 47	mg/kg																
PCB 48	mg/kg						0.0000814	0.000225	0.0000972	0.0000601							
PCB 49	mg/kg																
PCB 5	mg/kg						0.000271	0.000179	0.000202	0.0000649							
PCB 50	mg/kg																
PCB 51	mg/kg						0.0000371	0.000121	0.0000637	0.0000521							
PCB 52	mg/kg						0.000663	0.00153	0.000916	0.000653							
PCB 53	mg/kg																
PCB 54	mg/kg						0.00000523	0.0000147	0.00000805	0.00000671							
PCB 55	mg/kg						0.0000104	0.0000202	0.00000952	0.0000084							
PCB 56	mg/kg						0.000307	0.000706	0.000367	0.000223							
PCB 57	mg/kg						0.0000128	0.0000103	0.00000923	0.00000456							
PCB 58	mg/kg						0.0000108	0.00000738	0.00000803	0.00000618							
PCB 59	mg/kg																
PCB 6	mg/kg						0.00084	0.000488	0.000604	0.00018							
PCB 60	mg/kg						0.0000828	0.000201	0.0000934	0.0000758							
PCB 61	mg/kg																
PCB 62	mg/kg																
PCB 63	mg/kg						0.0000424	0.0000425	0.0000298	0.0000259							
PCB 64	mg/kg						0.000241	0.000538	0.000279	0.000205							
PCB 65	mg/kg																
PCB 65/75/62	mg/kg																
PCB 66	mg/kg						0.000458	0.00108	0.000534	0.000447							
PCB 67	mg/kg						0.0000256	0.0000418	0.0000257	0.000019							
PCB 67/58	mg/kg																
PCB 68	mg/kg						0.0000109	0.000016	0.0000137	0.00000932							
PCB 68/64	mg/kg																
PCB 69	mg/kg																
PCB 7	mg/kg						0.000122	0.0000716	0.0000798	0.0000247							
PCB 70	mg/kg																
PCB 71	mg/kg																
PCB 72	mg/kg						0.0000325	0.0000226	0.0000247	0.0000197							
PCB 73	mg/kg						0.00000368	0.00001	0.00000646	0.00000284							
PCB 73/46	mg/kg																
PCB 74	mg/kg																
PCB 75	mg/kg																

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	Field Sample ID	Location ID	Depth Interval (ft)	Sample Purpose	Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	
							E16-BOR-07-(0-0.5)	E16-BOR-08-(0.5-1.0)	E16-BOR-08-(0.5-1.0)-D	E16-BOR-08-(0-0.5)	10884393	10884498	10884580	10884621	10893451	10893482	10893513
Chemical	Units						E16-BOR-07	E16-BOR-08	E16-BOR-08	E16-BOR-08	SS-14	SS-16	SS-18	SS-18	SS-40	SS-40	SS-40
							0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	1.00-1.50	1.00-1.50	0.50-1.00	2.50-3.00	0.00-0.50	0.00-0.50	1.50-2.00
							FS	FS	DUP	FS	FS	FS	FS	FS	FS	DUP	FS
							11/3/2017	10/31/2017	10/31/2017	10/31/2017	11/6/1997	11/6/1997	11/6/1997	1/8/1998	1/25/1999	1/25/1999	1/25/1999
PCB 76	mg/kg																
PCB 77	mg/kg						0.000193	0.000337	0.000192	0.0000941							
PCB 78	mg/kg						0.0000441 U	0.0000605 U	0.0000427 U	0.0000382 U							
PCB 79	mg/kg						0.0000465	0.0000233	0.0000238	0.0000329							
PCB 8	mg/kg						0.00165	0.000846	0.00102	0.000374							
PCB 80	mg/kg						0.00000425	0.00000476 U	0.00000336 U	0.00000301 U							
PCB 81	mg/kg						0.00000656	0.00000532 U	0.00000338	0.00000445							
PCB 82	mg/kg						0.0000959	0.000215	0.000128	0.0000914							
PCB 83	mg/kg						0.0000423	0.0000997	0.0000713	0.0000554							
PCB 83/125/112	mg/kg																
PCB 84	mg/kg						0.000237	0.000488	0.000323	0.000243							
PCB 85	mg/kg																
PCB 86	mg/kg																
PCB 86/109	mg/kg																
PCB 87	mg/kg																
PCB 87/111	mg/kg																
PCB 88	mg/kg						0.0000147 U	0.0000141 U	0.0000166 U	0.00000816 U							
PCB 89	mg/kg						0.0000139 U	0.0000259 U	0.0000157 U	0.00000883							
PCB 89/84	mg/kg																
PCB 9	mg/kg						0.00065	0.000322	0.000407	0.00012							
PCB 90	mg/kg																
PCB 91	mg/kg						0.000122	0.000263	0.000175	0.000153							
PCB 92	mg/kg						0.000175	0.000359	0.000255	0.000202							
PCB 93	mg/kg																
PCB 94	mg/kg						0.0000135 U	0.000019	0.0000153 U	0.00000771							
PCB 95	mg/kg						0.000643	0.00139	0.000944	0.000733							
PCB 96	mg/kg						0.00000974	0.0000226	0.0000142	0.0000092							
PCB 97	mg/kg																
PCB 98	mg/kg						0.0000153 U	0.0000147 U	0.0000173 U	0.0000085 U							
PCB 99	mg/kg						0.000433	0.000906	0.000611	0.000547							
PCB-100/93	mg/kg						0.0000255	0.0000503	0.0000345	0.0000289							
PCB-107/124	mg/kg						0.0000328	0.0000499	0.0000368	0.0000265							
PCB-108/119/86/97/125/87	mg/kg						0.000539	0.00107	0.000711	0.000549							
PCB-113/90/101	mg/kg						0.000806	0.00167	0.00116	0.000925							
PCB-116/85	mg/kg						0.000252	0.000326	0.000246	0.000177							
PCB-128/166	mg/kg						0.00021	0.000352	0.000269	0.000212							
PCB-13/12	mg/kg						0.00177	0.000613	0.000859	0.000268							
PCB-139/140	mg/kg						0.000022	0.0000391	0.0000275	0.0000249							
PCB-147/149	mg/kg						0.00102	0.00211	0.00181	0.00129							
PCB-151/135	mg/kg						0.000468	0.000919	0.00063	0.000525							
PCB-153/168	mg/kg						0.000983	0.002	0.0016	0.00129							
PCB-156/157	mg/kg						0.000132	0.0002	0.000188	0.000131							
PCB-163/138/129	mg/kg						0.00105	0.00223	0.00176	0.00137							
PCB-171/173	mg/kg						0.0000903	0.000188	0.000143	0.000122							
PCB-180/193	mg/kg						0.000736	0.00136	0.00109	0.000897							
PCB-198/199	mg/kg						0.000922	0.00113	0.000802	0.000905							
PCB-21/33	mg/kg						0.000752	0.000422	0.000456	0.000151							
PCB-26/29	mg/kg						0.000284	0.00027	0.00025	0.0000916							
PCB-28/20	mg/kg						0.000603	0.00114	0.000579	0.000332							
PCB-30/18	mg/kg						0.000553	0.000753	0.000503	0.000219							
PCB-44/47/65	mg/kg						0.000609	0.00141	0.000744	0.000555							
PCB-50/53	mg/kg						0.0000971	0.000269	0.000121	0.0000927							
PCB-59/62/75	mg/kg						0.0000662	0.00014	0.0000746	0.0000491							
PCB-61/70/74/76	mg/kg						0.00087	0.00167	0.000903	0.000701							
PCB-69/49	mg/kg						0.000345	0.000845	0.000494	0.000384							
PCB-71/40	mg/kg						0.000285	0.000727	0.000354	0.000281							
PCB-90/101	mg/kg																
Pentachlorobiphenyl	mg/kg																
Tetrachlorobiphenyl	mg/kg																
Total Decachlorobiphenyls (congeners)	mg/kg																
Total Dichlorobiphenyls (congeners)	mg/kg						0.0101	0.00502	0.0064	0.00213							
Total Heptachlorobiphenyls (congeners)	mg/kg						0.00319	0.00576	0.00461	0.00377							
Total Hexachlorobiphenyls (congeners)	mg/kg						0.00575	0.011	0.00983	0.00675							
Total Monochlorobiphenyls (congeners)	mg/kg						0.00659	0.00306	0.00212	0.00137							
Total Nonachlorobiphenyls (congeners)	mg/kg						0.00408	0.00531	0.00334	0.00465							
Total Octachlorobiphenyls (congeners)	mg/kg						0.00234	0.00313	0.00227	0.0024							
Total PCB (congeners)	mg/kg						0.05377	0.06647	0.05093	0.03765							
Total Pentachlorobiphenyls (congeners)	mg/kg						0.00542	0.0109	0.00741	0.00596							
Total Tetrachlorobiphenyls (congeners)	mg/kg						0.00488	0.0109	0.0058	0.00429							
Total Trichlorobiphenyls (congeners)	mg/kg						0.00738	0.00695	0.00612	0.00215							
Trichlorobiphenyl (total)	mg/kg																
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>																	
Benzo[e]pyrene	mg/kg																
Chrysene, 1-methyl-	mg/kg																
Naphthalene, 1-methyl-	mg/kg																
Pyrene, 1-methyl-	mg/kg																

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	Field Sample ID	MZ-FPA E16-BOR-07-(0-0.5)	MZ-FPA E16-BOR-08-(0.5-1.0)	MZ-FPA E16-BOR-08-(0.5-1.0)-D	MZ-FPA E16-BOR-08-(0-0.5)	MZ-SWMU5/HC 10884393	MZ-SWMU5/HC 10884498	MZ-SWMU5/HC 10884580	MZ-SWMU5/HC 10884621	MZ-SWMU5/HC 10893451	MZ-SWMU5/HC 10893482	MZ-SWMU5/HC 10893513
Location ID	Depth Interval (ft)	E16-BOR-07	E16-BOR-08	E16-BOR-08	E16-BOR-08	SS-14	SS-16	SS-18	SS-18	SS-40	SS-40	SS-40
Sample Purpose	Sample Purpose	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	1.00-1.50	1.00-1.50	0.50-1.00	2.50-3.00	0.00-0.50	0.00-0.50	1.50-2.00
Chemical Class	Date	FS	FS	DUP	FS	FS	FS	FS	FS	FS	DUP	FS
Chemical	Units	11/3/2017	10/31/2017	10/31/2017	10/31/2017	11/6/1997	11/6/1997	11/6/1997	1/8/1998	1/25/1999	1/25/1999	1/25/1999
<b>Polycyclic Aromatic Hydrocarbons</b>												
Acenaphthene	mg/kg	0.044	0.021		0.011							
Acenaphthylene	mg/kg	0.02	0.021		0.014							
Anthracene	mg/kg	0.035	0.039		0.022							
Benzo(A)Anthracene	mg/kg	0.094	0.085		0.043							
Benzo(B)Fluoranthene	mg/kg	0.12	0.094		0.069							
Benzo(G,H,I)Perylene	mg/kg	0.05	0.058		0.039							
Benzo(K)Fluoranthene	mg/kg	0.043	0.062		0.038							
Benzo(A)Pyrene	mg/kg	0.084	0.082		0.044							
Chrysene	mg/kg	0.18	0.12		0.055							
Dibenz(A,H)Anthracene	mg/kg	0.013	0.014		0.007							
Fluoranthene	mg/kg	0.14	0.14		0.083							
Fluorene	mg/kg	0.034	0.025		0.015							
Indeno (1,2,3-CD) Pyrene	mg/kg	0.038	0.041		0.029							
Naphthalene	mg/kg	0.33	0.13		0.066	0.043 U	0.042 U	1.9	2.4	0.042 U	0.042 U	0.042 U
Phenanthrene	mg/kg	0.085	0.11		0.057							
Pyrene	mg/kg	0.14	0.14		0.083							
Total PAHs (Detections + 1/2 MDL)	mg/kg	1.45	1.182		0.675							
Total PAHs (Detections Only)	mg/kg	1.45	1.182		0.675							
<b>Semivolatile Organic Compounds - TICs</b>												
1,2,4-Trithiolane	mg/kg											
1,4-Benzenediol, 2-chloro-	mg/kg											
11H-Benzo[b]fluorene	mg/kg											
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg											
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg											
3-PENTEN-2-ONE, 4-METHYL-	mg/kg											
7H-Benz[de]anthracen-7-one	mg/kg											
9,10-Anthracenedione	mg/kg											
9-Octadecenamide, (Z)-	mg/kg											
Acetamide, 2-chloro-N-(ethox	mg/kg											
Alachlor	mg/kg											
Benzenamine, 3-methyl-	mg/kg											
Benzenamine, 4,4',4"-methy	mg/kg											
Benzenamine, 4,4'-methyleneb	mg/kg											
Benzene, 1,2,3,4-tetrachloro	mg/kg											
Benzene, 1,2,3,5-tetrachloro	mg/kg											
Benzene, 1,2,3-trichloro-	mg/kg											
Benzene, 1,3,5-trichloro-	mg/kg											
Benzene, 1,3-bis(1-methyleth	mg/kg											
Benzene, 1,4-bis(1-methyleth	mg/kg											
Benzofuran, 2,3-dihydro-	mg/kg											
CYCLIC OCTAATOMIC SULFUR	mg/kg	3.4										
Diphenyl Ether	mg/kg											
Docosane	mg/kg											
Heneicosane	mg/kg				0.28							
Hexacosane	mg/kg											
Hexadecane	mg/kg											
Hexatriacontane	mg/kg											
m-Chloroaniline	mg/kg											
N,N-Diethylaniline	mg/kg											
n-Hexadecanoic acid	mg/kg		0.33									
Nonadecane	mg/kg											
o-Chloroaniline	mg/kg											
Octacosane	mg/kg											
Octadecane	mg/kg											
Octadecane, 1-chloro-	mg/kg											
Octadecanoic acid	mg/kg											
Parachlorophenol	mg/kg											
Pentadecane	mg/kg											
Perylene	mg/kg											
Phenol, 2,5-dichloro-	mg/kg											
Phenol, 3-chloro-	mg/kg											
Phenol, 4,4'-(1-methylethyl)	mg/kg	1.5			7.2							
Tetracosane	mg/kg											
Tetradecane	mg/kg											
Tetraethylene glycol	mg/kg											
Total SVOC TICs	mg/kg	12	6.3		14							
Triacontane	mg/kg											
Tributyl phosphate	mg/kg											
Tridecanoic acid	mg/kg											
Triphenyl phosphate	mg/kg											
UNKNOWN	mg/kg	0.389	0.39		0.53							
Unknown acid	mg/kg		0.37		0.29							
Unknown Alcohol	mg/kg											
Unknown Aldol Condensate	mg/kg	0.67	2.6		1.8							
UNKNOWN ALKANE	mg/kg											

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Chemical Class	Chemical	Units	MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-SWMU5/HC		MZ-SWMU5/HC		MZ-SWMU5/HC		MZ-SWMU5/HC		MZ-SWMU5/HC			
			Field Sample ID	Location ID	Depth Interval (ft)	Sample Purpose	Date	E16-BOR-07-(0-0.5)	E16-BOR-08-(0.5-1.0)	E16-BOR-08-(0.5-1.0)-D	E16-BOR-08-(0-0.5)	10884393	10884498	10884580	10884621	10893451	10893482	10893513				
	Unknown Alkene	mg/kg																				
	Unknown Amide	mg/kg																				
	Unknown Amine	mg/kg																				
	UNKNOWN AROMATIC	mg/kg																				
	Unknown Carboxylic Acid	mg/kg																				
	Unknown Cycloalkane	mg/kg																				
	Unknown Hydrocarbon	mg/kg																				
	Unknown Ketone	mg/kg																				
	Unknown PAH	mg/kg					0.66															
	UNKNOWN SILOXANE	mg/kg																				
<b>Semivolatile Organic Compounds</b>																						
	1,2,4-Trichlorobenzene	mg/kg		0.056	U	0.046			0.035	U	0.043	U	0.042	U	0.21	U	0.38	U				
	1,2-Diphenylhydrazine	mg/kg	U	0.033	U	0.038	U		0.035	U												
	1,4-Dioxane	mg/kg	U	0.2	U	0.23	U		0.21	U												
	1-Naphthylamine	mg/kg	U	0.33	U	0.38	U		0.35	U	0.34		0.042	U	2		0.38	U	0.083	U	0.083	U
	2,3,4,6-Tetrachlorophenol	mg/kg	U	0.13	U	0.15	U		0.14	U												
	2,4,5-Trichlorophenol	mg/kg	U	0.033	U	0.038	U		0.035	U												
	2,4,6-Trichlorophenol	mg/kg	U	0.033	U	0.038	U		0.035	U												
	2,4-Dichlorophenol	mg/kg	U	0.033	U	0.038	U		0.035	U												
	2,4-Dimethylphenol	mg/kg	U	0.033	U	0.038	U		0.035	U												
	2,4-Dinitrophenol	mg/kg	U	0.5	U	0.69	U		0.62	U												
	2,4-Dinitrotoluene	mg/kg	U	0.13	U	0.15	U		0.14	U												
	2,6-Dinitrotoluene	mg/kg	U	0.033	U	0.038	U		0.035	U												
	2-Chloronaphthalene	mg/kg	U	0.013	U	0.015	U		0.014	U												
	2-Chlorophenol	mg/kg	U	0.033	U	0.038	U		0.035	U												
	2-Methylnaphthalene	mg/kg		0.085		0.055			0.027													
	2-Methylphenol (O-Cresol)	mg/kg	U	0.033	U	0.038	U		0.035	U												
	2-Naphthylamine	mg/kg	U	0.33	U	0.38	U		0.35	U	0.043	U	0.042	U	0.21	U	0.38	U	0.21	U	0.21	U
	2-Nitroaniline	mg/kg	U	0.033	U	0.038	U		0.035	U												
	2-Nitrophenol	mg/kg	U	0.033	U	0.038	U		0.035	U												
	3,3'-Dichlorobenzidine	mg/kg	U	0.2	U	0.23	U		0.21	U												
	3,3'-Dimethylbenzidine	mg/kg	U								0.13	U	0.12	U	0.64	U	1.1	U	0.21	U	0.21	U
	3-Nitroaniline	mg/kg	U	0.13	U	0.15	U		0.14	U												
	4,6-Dinitro-2-Methylphenol	mg/kg	U	0.33	U	0.38	U		0.35	U												
	4-Aminobiphenyl	mg/kg	U	0.33	U	0.38	U		0.35	U												
	4-Bromophenyl Phenyl Ether	mg/kg	U	0.033	U	0.038	U		0.035	U												
	4-Chloro-3-Methylphenol	mg/kg	U	0.033	U	0.038	U		0.035	U												
	4-Chloroaniline	mg/kg	U	0.066	U	0.077	U		0.069	U	0.043	U	0.091		0.21	U	0.38	U	0.15		0.056	0.46
	4-Chlorophenyl Phenyl Ether	mg/kg	U	0.033	U	0.038	U		0.035	U												
	4-Methylphenol (P-Cresol)	mg/kg	U	0.047		0.32			0.038													
	4-Nitroaniline	mg/kg	U	0.13	U	0.15	U		0.14	U												
	4-Nitrophenol	mg/kg	U	0.33	U	0.38	U		0.35	U												
	Acetophenone	mg/kg	U	0.034		0.038			0.035													
	Aniline	mg/kg	U	0.33	U	0.38	U		0.35	U	0.043	U	0.042	U	0.21	U	0.38	U	0.042	U	0.042	U
	Benzidine	mg/kg	U	0.5	U	0.58	U		0.52	U												
	Biphenyl	mg/kg	U	0.033	U	0.038	U		0.035	U												
	Bis(2-Chloro-1-Methylethyl) Ether	mg/kg	U	0.033	U	0.038	U		0.035	U												
	Bis(2-Chloroethoxy)Methane	mg/kg	U	0.033	U	0.038	U		0.035	U												
	Bis(2-Chloroethyl)Ether	mg/kg	U	0.033	U	0.038	U		0.035	U												
	Bis(2-Chloroisopropyl)Ether	mg/kg	U																			
	Bis(2-Ethylhexyl)Phthalate	mg/kg	U	0.13	U	0.15	U		0.14	U												
	Butyl Benzyl Phthalate	mg/kg	U	0.13	U	0.15	U		0.14	U												
	Carbazole	mg/kg	U	0.033	U	0.038	U		0.035	U												
	Dibenzofuran	mg/kg	U	0.033	U	0.038	U		0.035	U												
	Diethyl Phthalate	mg/kg	U	0.13	U	0.15	U		0.14	U												
	Dimethyl Phthalate	mg/kg	U	0.13	U	0.15	U		0.14	U												
	Di-N-Butyl Phthalate	mg/kg	U	0.13	U	0.15	U		0.14	U												
	Diphenyl Ether	mg/kg	U	0.033	U	0.038	U		0.035	U												
	Hexachlorobenzene	mg/kg	U	0.007	U	0.008	U		0.007	U												
	Hexachlorobutadiene	mg/kg	U	0.033	U	0.038	U		0.035	U												
	Hexachlorocyclopentadiene	mg/kg	U	0.33	U	0.38	U		0.35	U												
	Hexachloroethane	mg/kg	U	0.066	U	0.077	U		0.069	U												
	Hexachloropropylene	mg/kg	U								0											
	Isophorone	mg/kg	U	0.033	U	0.038	U		0.035	U												
	N-Dioctyl Phthalate	mg/kg	U	0.13	U	0.15	U		0.14	U												
	Nitrobenzene	mg/kg	U	0.033	U	0.038	U		0.035	U	0.13		0.042	U	0.36		0.38	U	0.042	U	0.042	U
	N-Nitrosodimethylamine	mg/kg	U	0.13	U	0.15	U		0.14	U												
	N-Nitrosodi-N-Propylamine	mg/kg	U	0.033	U	0.038	U		0.035	U												
	N-Nitrosodiphenylamine	mg/kg	U	0.033	U	0.038	U		0.035	U												
	O-Toluidine	mg/kg	U	0.4	U	0.46	U		0.41	U												
	Parathion	mg/kg	U	0.33	U	0.38	U		0.35	U												
	Pentachlorobenzene	mg/kg	U	0.033	U	0.038	U		0.035	U												
	Pentachlorophenol	mg/kg	U	0.066	U	0.077	U		0.069	U												
	Phenol	mg/kg	U	0.033	U	0.038	U		0.035	U												
<b>Volatile Organic Compounds - TICs</b>																						
	1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg																				

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	Field Sample ID	Location ID	Depth Interval (ft)	Sample Purpose	Date	MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-SWMU5/HC		MZ-SWMU5/HC		MZ-SWMU5/HC		MZ-SWMU5/HC		MZ-SWMU5/HC			
							E16-BOR-07-(0-0.5)	E16-BOR-08-(0.5-1.0)	E16-BOR-08-(0.5-1.0)-D	E16-BOR-08-(0-0.5)	10884393	10884498	10884580	10884621	10893451	10893482	10893513									
1-Butene																										
1-Heptene																										
1-Propene, 2-methyl-																										
Azulene																										
BENZENE, 1,2,4-TRICHLORO-																										
BENZENE, 1,2-DICHLORO-																										
BENZENE, 1,4-DICHLORO-																										
Camphene																										
CYCLOHEXANE																										
Cyclohexane, methyl-																										
Cyclotrisiloxane, hexamethyl																										
Diphenyl Ether																										
Ethane, 1,1,2,2-tetrachloro-																										
ETHANE, 1,2-DICHLORO-1,1,2-																										
Ethane, 1,2-dichloro-1,1-dif																										
Ethene, 1,1-dichloro-2,2-dif																										
Hexane, 2-methyl-																										
Hexane, 3-methyl-																										
METHANE, CHLOROFLUORO-																										
Naphthalene																										
NAPHTHALENE, 2-METHYL-																										
Nonanal																										
Norflurane																										
Pentane, 2,3-dimethyl-																										
Phenol, 4-(1,1,3,3-tetrameth																										
Propene																										
Sulfur dioxide																										
Tridecane																										
UNKNOWN																										
UNKNOWN ALICYCLIC																										
UNKNOWN ALIPHATIC																										
UNKNOWN ALKANE																										
UNKNOWN AROMATIC																										
UNKNOWN SILOXANE																										
<b>Volatile Organic Compounds</b>																										
1,1,1,2-Tetrachloroethane							0.14	U	0.003	U			0.003	U												
1,1,1-Trichloroethane							0.14	U	0.003	U			0.003	U												
1,1,1-Trichlorotrifluoroethane							0.012	U	0.014	U			0.012	U												
1,1,2,2-Tetrachloroethane							0.14	U	0.003	U			0.003	U												
1,1,2-Trichloroethane							0.14	U	0.003	U			0.003	U												
1,1,2-Trichlorotrifluoroethane							3.1	U	0.006	U			0.005	U												
1,1,2-Trifluoroethane							0.005	U	0.005	U			0.005	U												
1,1-Dichloro-1-Fluoroethane							0.002	U	0.003	U			0.002	U												
1,1-Dichloroethane							0.14	U	0.003	U			0.003	U												
1,1-Dichloroethene							0.14	U	0.003	U			0.003	U												
1,1-Dichloropropene							0.14	U	0.003	U			0.003	U												
1,2,4-Trimethylbenzene							0.14	U	0.003	U			0.003	U												
1,2-Dibromoethane (EDB)							0.14	U	0.003	U			0.003	U												
1,2-Dichloro-1,1,2-Trifluoroethane							1.6	U	0.003	U			0.002	U												
1,2-Dichloro-1-Fluoroethane							0.002	U	0.003	U			0.002	U												
1,2-Dichlorobenzene							11	U	0.012	U			0.029	U	0.57	0.23	1.9	0.56								
1,2-Dichloroethane							0.14	U	0.003	U			0.003	U												
1,2-Dichloroethene							0.23	U	0.003	U			0.003	U												
1,2-Dichloropropane							0.14	U	0.003	U			0.003	U												
1,2-Dichlorotetrafluoroethane							0.21	U	0.006	U			0.005	U												
1,3,5-Trimethylbenzene							0.14	U	0.003	U			0.003	U												
1,3-Dichlorobenzene							0.22	U	0.003	U			0.003	U												
1,4-Dichlorobenzene							6	U	0.006	U			0.012	U	0.043	0.042	0.49	5.2								
1-Chloro-1,1-Difluoroethane							0.002	U	0.003	U			0.002	U												
2,2-Dichloro-1,1,1-Trifluoroethane							0.11	U	0.003	U			0.002	U												
2-Chloro-1,1,1-Trifluoroethane							0.28	U	0.052	U			0.036	U												
2-Chloroethyl Vinyl Ether																										
2-Chlorotoluene							0.14	U	0.003	U			0.003	U												
2-Hexanone							0.42	U	0.01	U			0.008	U												
4-Chlorotoluene							0.14	U	0.003	U			0.003	U												
4-Isopropyltoluene							0.14	U	0.003	U			0.003	U												
Acetone							0.97	U	0.19	U			0.13	U												
Acrolein																										
Acrylonitrile																										
Benzene							0.075	U	0.006	U			0.007	U												
Bromodichloromethane							0.14	U	0.003	U			0.003	U												
Bromoform																										
Carbon Disulfide							0.14	U	0.003	U			0.003	U												
Carbon Tetrachloride							0.14	U	0.003	U			0.003	U												
CFC-1113							0.28	U	0.01	U			0.005	U												
Chlorobenzene							3.8	U	0.021	U			0.017	U	0.2	0.33	0.5	25								

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone		MZ-FPA		MZ-FPA		MZ-FPA		MZ-FPA		MZ-SWMU5/HC		MZ-SWMU5/HC		MZ-SWMU5/HC		MZ-SWMU5/HC		MZ-SWMU5/HC		MZ-SWMU5/HC		
	Field Sample ID	Location ID	E16-BOR-07-(0-0.5)	E16-BOR-08-(0.5-1.0)	E16-BOR-08-(0.5-1.0)-D	E16-BOR-08-(0-0.5)	10884393	10884498	10884580	10884621	10893451	10893482	10893513	10893451	10893482	10893451	10893482	10893451	10893482	10893451	10893482	10893451	10893482
Chemical	Depth Interval (ft)	Sample Purpose	E16-BOR-07 0.00-0.50 FS	E16-BOR-08 0.50-1.00 FS	E16-BOR-08 0.50-1.00 DUP	E16-BOR-08 0.00-0.50 FS	SS-14 1.00-1.50 FS	SS-16 1.00-1.50 FS	SS-18 0.50-1.00 FS	SS-18 2.50-3.00 FS	SS-40 0.00-0.50 FS	SS-40 0.00-0.50 DUP	SS-40 1.50-2.00 FS	SS-40 0.00-0.50 FS	SS-40 0.00-0.50 DUP	SS-40 0.00-0.50 FS	SS-40 0.00-0.50 DUP	SS-40 0.00-0.50 FS	SS-40 0.00-0.50 DUP	SS-40 0.00-0.50 FS	SS-40 0.00-0.50 DUP	SS-40 0.00-0.50 FS	
Units	Date		11/3/2017	10/31/2017	10/31/2017	10/31/2017	11/6/1997	11/6/1997	11/6/1997	1/8/1998	1/25/1999	1/25/1999	1/25/1999	1/25/1999	1/25/1999	1/25/1999	1/25/1999	1/25/1999	1/25/1999	1/25/1999	1/25/1999	1/25/1999	
Chlorodibromomethane	mg/kg	U	0.14	U	0.003	U	0.003	U															
Chlorodifluoromethane	mg/kg	U	0.008		0.017		0.01																
Chlorofluoromethane	mg/kg	U	0.7		0.028		0.017																
Chloroform	mg/kg	U	0.14	U	0.003	U	0.003	U															
Chloropentafluoroethane	mg/kg	U	0.036	U	0.041	U	0.035	U															
cis-1,2-Dichloroethene	mg/kg	U	0.23		0.003	U	0.003	U															
cis-1,3-Dichloropropene	mg/kg	U	0.14	U	0.003	U	0.003	U															
Cumene	mg/kg	U	0.71		0.003	U	0.003	U															
Dichlorodifluoromethane	mg/kg	U	0.28	U	0.006	U	0.005	U															
Dichlorofluoromethane	mg/kg	U	5.3		0.006	U	0.005	U															
Ethane	ug/L																						
Ethyl Chloride	mg/kg	U	0.28	U	0.006	U	0.005	U															
Ethylbenzene	mg/kg	U	0.14	U	0.003	U	0.003	U															
Fluoromethane	mg/kg	U	0.007	U	0.008	U	0.007	U															
Hexane	mg/kg	U	0.14	U	0.003	U	0.003	U															
Isobutyl Alcohol	mg/kg	U	14	U	0.32	U	0.27	U															
Meta- And Para-Xylene	mg/kg	U	0.14	U	0.003	U	0.003	U															
Methacrylonitrile	mg/kg	U	0.69	U	0.016	U	0.013	U															
Methane	ug/L																						
Methyl Bromide	mg/kg																						
Methyl Chloride	mg/kg	U	0.28	U	0.006	U	0.005	U															
Methyl Ethyl Ketone	mg/kg	U	0.55	U	0.02		0.012																
Methyl Isobutyl Ketone	mg/kg	U	0.42	U	0.01	U	0.008	U															
Methyl Methacrylate	mg/kg	U	0.14	U	0.003	U	0.003	U															
Methyl Tertiary Butyl Ether	mg/kg	U	0.069	U	0.002	U	0.001	U															
Methylene Chloride	mg/kg	U	0.28	U	0.006	U	0.005	U															
N-Butylbenzene	mg/kg	U	0.14	U	0.003	U	0.003	U															
N-Propylbenzene	mg/kg	U	0.14	U	0.003	U	0.003	U															
Ortho-Xylene	mg/kg	U	0.14	U	0.003	U	0.003	U															
Propionitrile	mg/kg	U	4.2	U	0.097	U	0.081	U															
sec-Butylbenzene	mg/kg	U	0.14	U	0.003	U	0.003	U															
Styrene	mg/kg	U	0.14	U	0.003	U	0.003	U															
tert-Butylbenzene	mg/kg	U	0.14	U	0.003	U	0.003	U															
Tetrachloroethene	mg/kg	U	3.9		0.003	U	0.003	U															
Tetrahydrofuran	mg/kg	U	0.55	U	0.013	U	0.011	U															
Toluene	mg/kg	U	0.14	U	0.009		0.01																
trans-1,2-Dichloroethene	mg/kg	U	0.14	U	0.003	U	0.003	U															
trans-1,3-Dichloropropene	mg/kg																						
Trichloroethene	mg/kg	U	0.19		0.003	U	0.003	U															
Trichlorofluoromethane	mg/kg	U	1.5		0.006	U	0.005	U															
Vinyl Chloride	mg/kg	U	0.14	U	0.006		0.004																
Vinyl Fluoride	mg/kg	U	0.014	U	0.017	U	0.014	U															
Xylenes	mg/kg	U	0.14	U	0.003	U	0.003	U															

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-SWMU5/HC												
Field Sample ID	10893544	10893639	10894145	10894178	10894414	10894669	10894702	10902292	10902298	10902305	10902311	10902318	
Location ID	SS-40	SS-42	SS-21	SS-21	SS-26	SS-32	SS-32	5B-P3-10	5B-P3-10	5B-P3-11	5B-P3-11	5B-P3-8	
Depth Interval (ft)	1.50-2.00	0.00-0.50	0.00-0.50	1.50-2.00	0.00-0.50	0.00-0.50	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	
Sample Purpose	DUP	FS											
Date	1/25/1999	1/25/1999	9/14/1998	9/14/1998	9/17/1998	9/17/1998	9/17/1998	4/24/2000	4/24/2000	4/24/2000	4/24/2000	4/24/2000	
Chemical Class	Units												
<b>General Chemistry</b>													
Black Carbon	mg/kg												
Percent Moisture	%	22.2	32.7	17.3	18.4	16.5	19.1	19.3	44.1	47.6	48.4	50.4	76.4
Percent Solids	%												
Total Organic Carbon	mg/kg	660	850	570	359	540	360	450					
<b>Metals</b>													
Aluminum	mg/kg												
Antimony	mg/kg												
Arsenic	mg/kg												
Barium	mg/kg												
Beryllium	mg/kg												
Cadmium	mg/kg												
Calcium	mg/kg												
Chromium	mg/kg												
Cobalt	mg/kg												
Copper	mg/kg												
Iron	mg/kg												
Lead	mg/kg			28	18	38	24	18					
Magnesium	mg/kg												
Manganese	mg/kg												
Mercury	mg/kg												
Nickel	mg/kg												
Potassium	mg/kg												
Selenium	mg/kg												
Silver	mg/kg												
Sodium	mg/kg												
Thallium	mg/kg												
Tin	mg/kg												
Titanium	mg/kg												
Vanadium	mg/kg												
Zinc	mg/kg												
<b>Metals - AVS/SEM</b>													
Acid Volatile Sulfide	umol/g												
Arsenic	umol/g												
Cadmium	umol/g												
Copper	umol/g												
Lead	umol/g												
Zinc	umol/g												
<b>Metals - Leachate</b>													
Lead	ug/L												
<b>Per and Polyfluorinated Organic Substances</b>													
Perfluorobutane Sulfonic Acid	mg/kg												
Perfluorobutanoic Acid	mg/kg												
Perfluorodecane Sulfonic Acid	mg/kg												
Perfluorodecanoic Acid	mg/kg												
Perfluorododecanoic Acid	mg/kg												
Perfluoroheptanoic Acid	mg/kg												
Perfluorohexane Sulfonic Acid	mg/kg												
Perfluorohexanoic Acid	mg/kg												
Perfluorononanoic Acid	mg/kg												
Perfluorooctane Sulfonamide	mg/kg												
Perfluoropentanoic Acid	mg/kg												
Perfluorotetradecanoic Acid	mg/kg												
Perfluorotridecanoic Acid	mg/kg												
Perfluoroundecanoic Acid	mg/kg												
PFOA	mg/kg												
PFOA(trial)	mg/kg												
PFOS	mg/kg												
PFOS (trial)	mg/kg												
<b>Pesticides and Herbicides</b>													
4,4'-DDD	mg/kg												
4,4'-DDE	mg/kg												
4,4'-DDT	mg/kg												
Aldrin	mg/kg												
Alpha Chlordane	mg/kg												
Alpha-BHC	mg/kg												
beta-BHC	mg/kg												
delta-BHC	mg/kg												
Dieldrin	mg/kg												
Endosulfan I	mg/kg												
Endosulfan II	mg/kg												
Endosulfan Sulfate	mg/kg												
Endrin	mg/kg												
Endrin Aldehyde	mg/kg												
Endrin Ketone	mg/kg												
Gamma Chlordane	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-SWMU5/HC												
Field Sample ID	10893544	10893639	10894145	10894178	10894414	10894669	10894702	10902292	10902298	10902305	10902311	10902318	
Location ID	SS-40	SS-42	SS-21	SS-21	SS-26	SS-32	SS-32	5B-P3-10	5B-P3-10	5B-P3-11	5B-P3-11	5B-P3-8	
Depth Interval (ft)	1.50-2.00	0.00-0.50	0.00-0.50	1.50-2.00	0.00-0.50	0.00-0.50	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	
Sample Purpose	DUP	FS											
Date	1/25/1999	1/25/1999	9/14/1998	9/14/1998	9/17/1998	9/17/1998	9/17/1998	4/24/2000	4/24/2000	4/24/2000	4/24/2000	4/24/2000	
Chemical Class	Units												
Heptachlor	mg/kg												
Heptachlor Epoxide	mg/kg												
Lindane	mg/kg												
Methoxychlor	mg/kg												
Toxaphene	mg/kg												
<b>Physical Properties</b>													
0.001 MM	% PASSING	17	21	17.5		19		19					
0.002 MM	% PASSING	22	29	21		21		23					
0.005 MM	% PASSING	30	40	29		26		30					
0.02 MM	% PASSING	55	72	45		41		48					
0.05 MM	% PASSING	69.5	86.5	61		60		64.5					
0.064 MM	% PASSING	71.5	88	66		66		70					
0.075 MM	% PASSING	73	89.3	70		69.4		73.5					
0.15 MM	% PASSING	77	90.7	86.7		90.1		83.7					
0.3 MM	% PASSING	79.3	93.1	89.2		93.5		86.5					
0.6 MM	% PASSING	82.1	94.7	91.6		95.8		88.2					
1.18 MM	% PASSING	84	96.1	92.9		97.2		88.8					
19 MM	% PASSING	100	100	100		100		100					
2.36 MM	% PASSING	84.9	97.2	93.4		97.7		89.1					
3.35 MM	% PASSING	92.7	99.6	98.5		99.9		98.5					
37.5 MM	% PASSING	100	100	100		100		100					
4.75 MM	% PASSING	98.7	99.8	99.8		100		99.4					
75 MM	% PASSING	100	100	100		100		100					
Density	PCF												
<b>Polychlorinated Biphenyls - TICs</b>													
1,1'-Biphenyl, 2,3-dichloro-	mg/kg												
Unknown Biphenyl	mg/kg												
<b>Polychlorinated Biphenyls</b>													
Heptachlorobiphenyl	mg/kg												
Hexachlorobiphenyl	mg/kg												
Octachlorobiphenyl	mg/kg												
PCB 1	mg/kg												
PCB 10	mg/kg												
PCB 100	mg/kg												
PCB 101	mg/kg												
PCB 102	mg/kg												
PCB 103	mg/kg												
PCB 104	mg/kg												
PCB 105	mg/kg												
PCB 106	mg/kg												
PCB 107	mg/kg												
PCB 107/123	mg/kg												
PCB 108	mg/kg												
PCB 109	mg/kg												
PCB 11	mg/kg												
PCB 110	mg/kg												
PCB 111	mg/kg												
PCB 112	mg/kg												
PCB 113	mg/kg												
PCB 114	mg/kg												
PCB 115	mg/kg												
PCB 116	mg/kg												
PCB 117	mg/kg												
PCB 118	mg/kg												
PCB 119	mg/kg												
PCB 12	mg/kg												
PCB 120	mg/kg												
PCB 121	mg/kg												
PCB 121/95/88	mg/kg												
PCB 122	mg/kg												
PCB 123	mg/kg												
PCB 124	mg/kg												
PCB 125	mg/kg												
PCB 126	mg/kg												
PCB 127	mg/kg												
PCB 128	mg/kg												
PCB 129	mg/kg												
PCB 129/158	mg/kg												
PCB 13	mg/kg												
PCB 130	mg/kg												
PCB 130/164	mg/kg												
PCB 131	mg/kg												
PCB 132	mg/kg												
PCB 133	mg/kg												
PCB 134	mg/kg												
PCB 135	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-SWMU5/HC												
Field Sample ID	10893544	10893639	10894145	10894178	10894414	10894669	10894702	10902292	10902298	10902305	10902311	10902318	
Location ID	SS-40	SS-42	SS-21	SS-21	SS-26	SS-32	SS-32	5B-P3-10	5B-P3-10	5B-P3-11	5B-P3-11	5B-P3-8	
Depth Interval (ft)	1.50-2.00	0.00-0.50	0.00-0.50	1.50-2.00	0.00-0.50	0.00-0.50	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	
Sample Purpose	DUP	FS											
Date	1/25/1999	1/25/1999	9/14/1998	9/14/1998	9/17/1998	9/17/1998	9/17/1998	4/24/2000	4/24/2000	4/24/2000	4/24/2000	4/24/2000	
Chemical Class													
Chemical	Units												
PCB 136	mg/kg												
PCB 137	mg/kg												
PCB 138	mg/kg												
PCB 139	mg/kg												
PCB 14	mg/kg												
PCB 140	mg/kg												
PCB 141	mg/kg												
PCB 142	mg/kg												
PCB 143	mg/kg												
PCB 143/139	mg/kg												
PCB 144	mg/kg												
PCB 145	mg/kg												
PCB 146	mg/kg												
PCB 147	mg/kg												
PCB 148	mg/kg												
PCB 149	mg/kg												
PCB 15	mg/kg												
PCB 150	mg/kg												
PCB 151	mg/kg												
PCB 152	mg/kg												
PCB 153	mg/kg												
PCB 154	mg/kg												
PCB 155	mg/kg												
PCB 156	mg/kg												
PCB 157	mg/kg												
PCB 158	mg/kg												
PCB 159	mg/kg												
PCB 16	mg/kg												
PCB 160	mg/kg												
PCB 161	mg/kg												
PCB 162	mg/kg												
PCB 163	mg/kg												
PCB 163/160	mg/kg												
PCB 164	mg/kg												
PCB 165	mg/kg												
PCB 166	mg/kg												
PCB 167	mg/kg												
PCB 168	mg/kg												
PCB 169	mg/kg												
PCB 17	mg/kg												
PCB 170	mg/kg												
PCB 171	mg/kg												
PCB 172	mg/kg												
PCB 173	mg/kg												
PCB 174	mg/kg												
PCB 175	mg/kg												
PCB 176	mg/kg												
PCB 177	mg/kg												
PCB 178	mg/kg												
PCB 179	mg/kg												
PCB 18	mg/kg												
PCB 180	mg/kg												
PCB 181	mg/kg												
PCB 182	mg/kg												
PCB 182/175	mg/kg												
PCB 183	mg/kg												
PCB 184	mg/kg												
PCB 185	mg/kg												
PCB 186	mg/kg												
PCB 187	mg/kg												
PCB 188	mg/kg												
PCB 189	mg/kg												
PCB 19	mg/kg												
PCB 190	mg/kg												
PCB 191	mg/kg												
PCB 192	mg/kg												
PCB 193	mg/kg												
PCB 194	mg/kg												
PCB 195	mg/kg												
PCB 196	mg/kg												
PCB 197	mg/kg												
PCB 198	mg/kg												
PCB 199	mg/kg												
PCB 2	mg/kg												
PCB 20	mg/kg												
PCB 200	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-SWMU5/HC												
Field Sample ID	10893544	10893639	10894145	10894178	10894414	10894669	10894702	10902292	10902298	10902305	10902311	10902318	
Location ID	SS-40	SS-42	SS-21	SS-21	SS-26	SS-32	SS-32	5B-P3-10	5B-P3-10	5B-P3-11	5B-P3-11	5B-P3-8	
Depth Interval (ft)	1.50-2.00	0.00-0.50	0.00-0.50	1.50-2.00	0.00-0.50	0.00-0.50	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	
Sample Purpose	DUP	FS											
Date	1/25/1999	1/25/1999	9/14/1998	9/14/1998	9/17/1998	9/17/1998	9/17/1998	4/24/2000	4/24/2000	4/24/2000	4/24/2000	4/24/2000	
Chemical Class	Units												
PCB 201	mg/kg												
PCB 202	mg/kg												
PCB 203	mg/kg												
PCB 204	mg/kg												
PCB 204/200	mg/kg												
PCB 205	mg/kg												
PCB 206	mg/kg												
PCB 207	mg/kg												
PCB 208	mg/kg												
PCB 209	mg/kg												
PCB 21	mg/kg												
PCB 21/20	mg/kg												
PCB 22	mg/kg												
PCB 23	mg/kg												
PCB 24	mg/kg												
PCB 25	mg/kg												
PCB 26	mg/kg												
PCB 27	mg/kg												
PCB 28	mg/kg												
PCB 29	mg/kg												
PCB 3	mg/kg												
PCB 30	mg/kg												
PCB 31	mg/kg												
PCB 32	mg/kg												
PCB 33	mg/kg												
PCB 34	mg/kg												
PCB 35	mg/kg												
PCB 36	mg/kg												
PCB 37	mg/kg												
PCB 38	mg/kg												
PCB 39	mg/kg												
PCB 4	mg/kg												
PCB 4/10	mg/kg												
PCB 40	mg/kg												
PCB 41	mg/kg												
PCB 42	mg/kg												
PCB 43	mg/kg												
PCB 44	mg/kg												
PCB 45	mg/kg												
PCB 46	mg/kg												
PCB 47	mg/kg												
PCB 48	mg/kg												
PCB 49	mg/kg												
PCB 5	mg/kg												
PCB 50	mg/kg												
PCB 51	mg/kg												
PCB 52	mg/kg												
PCB 53	mg/kg												
PCB 54	mg/kg												
PCB 55	mg/kg												
PCB 56	mg/kg												
PCB 57	mg/kg												
PCB 58	mg/kg												
PCB 59	mg/kg												
PCB 6	mg/kg												
PCB 60	mg/kg												
PCB 61	mg/kg												
PCB 62	mg/kg												
PCB 63	mg/kg												
PCB 64	mg/kg												
PCB 65	mg/kg												
PCB 65/75/62	mg/kg												
PCB 66	mg/kg												
PCB 67	mg/kg												
PCB 67/58	mg/kg												
PCB 68	mg/kg												
PCB 68/64	mg/kg												
PCB 69	mg/kg												
PCB 7	mg/kg												
PCB 70	mg/kg												
PCB 71	mg/kg												
PCB 72	mg/kg												
PCB 73	mg/kg												
PCB 73/46	mg/kg												
PCB 74	mg/kg												
PCB 75	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-SWMU5/HC												
Field Sample ID	10893544	10893639	10894145	10894178	10894414	10894669	10894702	10902292	10902298	10902305	10902311	10902318	
Location ID	SS-40	SS-42	SS-21	SS-21	SS-26	SS-32	SS-32	5B-P3-10	5B-P3-10	5B-P3-11	5B-P3-11	5B-P3-8	
Depth Interval (ft)	1.50-2.00	0.00-0.50	0.00-0.50	1.50-2.00	0.00-0.50	0.00-0.50	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	
Sample Purpose	DUP	FS											
Date	1/25/1999	1/25/1999	9/14/1998	9/14/1998	9/17/1998	9/17/1998	9/17/1998	4/24/2000	4/24/2000	4/24/2000	4/24/2000	4/24/2000	
Chemical Class	Units												
PCB 76	mg/kg												
PCB 77	mg/kg												
PCB 78	mg/kg												
PCB 79	mg/kg												
PCB 8	mg/kg												
PCB 80	mg/kg												
PCB 81	mg/kg												
PCB 82	mg/kg												
PCB 83	mg/kg												
PCB 83/125/112	mg/kg												
PCB 84	mg/kg												
PCB 85	mg/kg												
PCB 86	mg/kg												
PCB 86/109	mg/kg												
PCB 87	mg/kg												
PCB 87/111	mg/kg												
PCB 88	mg/kg												
PCB 89	mg/kg												
PCB 89/84	mg/kg												
PCB 9	mg/kg												
PCB 90	mg/kg												
PCB 91	mg/kg												
PCB 92	mg/kg												
PCB 93	mg/kg												
PCB 94	mg/kg												
PCB 95	mg/kg												
PCB 96	mg/kg												
PCB 97	mg/kg												
PCB 98	mg/kg												
PCB 99	mg/kg												
PCB-100/93	mg/kg												
PCB-107/124	mg/kg												
PCB-108/119/86/97/125/87	mg/kg												
PCB-113/90/101	mg/kg												
PCB-116/85	mg/kg												
PCB-128/166	mg/kg												
PCB-13/12	mg/kg												
PCB-139/140	mg/kg												
PCB-147/149	mg/kg												
PCB-151/135	mg/kg												
PCB-153/168	mg/kg												
PCB-156/157	mg/kg												
PCB-163/138/129	mg/kg												
PCB-171/173	mg/kg												
PCB-180/193	mg/kg												
PCB-198/199	mg/kg												
PCB-21/33	mg/kg												
PCB-26/29	mg/kg												
PCB-28/20	mg/kg												
PCB-30/18	mg/kg												
PCB-44/47/65	mg/kg												
PCB-50/53	mg/kg												
PCB-59/62/75	mg/kg												
PCB-61/70/74/76	mg/kg												
PCB-69/49	mg/kg												
PCB-71/40	mg/kg												
PCB-90/101	mg/kg												
Pentachlorobiphenyl	mg/kg												
Tetrachlorobiphenyl	mg/kg												
Total Decachlorobiphenyls (congeners)	mg/kg												
Total Dichlorobiphenyls (congeners)	mg/kg												
Total Heptachlorobiphenyls (congeners)	mg/kg												
Total Hexachlorobiphenyls (congeners)	mg/kg												
Total Monochlorobiphenyls (congeners)	mg/kg												
Total Nonachlorobiphenyls (congeners)	mg/kg												
Total Octachlorobiphenyls (congeners)	mg/kg												
Total PCB (congeners)	mg/kg												
Total Pentachlorobiphenyls (congeners)	mg/kg												
Total Tetrachlorobiphenyls (congeners)	mg/kg												
Total Trichlorobiphenyls (congeners)	mg/kg												
Trichlorobiphenyl (total)	mg/kg												
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>													
Benzo[e]pyrene	mg/kg												
Chrysene, 1-methyl-	mg/kg												
Naphthalene, 1-methyl-	mg/kg												
Pyrene, 1-methyl-	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-SWMU5/HC												
Field Sample ID	10893544	10893639	10894145	10894178	10894414	10894669	10894702	10902292	10902298	10902305	10902311	10902318	
Location ID	SS-40	SS-42	SS-21	SS-21	SS-26	SS-32	SS-32	5B-P3-10	5B-P3-10	5B-P3-11	5B-P3-11	5B-P3-8	
Depth Interval (ft)	1.50-2.00	0.00-0.50	0.00-0.50	1.50-2.00	0.00-0.50	0.00-0.50	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	
Sample Purpose	DUP	FS											
Date	1/25/1999	1/25/1999	9/14/1998	9/14/1998	9/17/1998	9/17/1998	9/17/1998	4/24/2000	4/24/2000	4/24/2000	4/24/2000	4/24/2000	
Chemical Class	Units												
<b>Polycyclic Aromatic Hydrocarbons</b>													
Acenaphthene	mg/kg												
Acenaphthylene	mg/kg												
Anthracene	mg/kg												
Benzo(A)Anthracene	mg/kg												
Benzo(B)Fluoranthene	mg/kg												
Benzo(G,H,I)Perylene	mg/kg												
Benzo(K)Fluoranthene	mg/kg												
Benzo(A)Pyrene	mg/kg												
Chrysene	mg/kg												
Dibenz(A,H)Anthracene	mg/kg												
Fluoranthene	mg/kg												
Fluorene	mg/kg												
Indeno (1,2,3-CD) Pyrene	mg/kg												
Naphthalene	mg/kg	0.043 U	0.05	0.04 U	0.041 U	0.04 U	0.041 U	0.041 U	0.041 U				
Phenanthrene	mg/kg												
Pyrene	mg/kg												
Total PAHs (Detections + 1/2 MDL)	mg/kg												
Total PAHs (Detections Only)	mg/kg												
<b>Semivolatile Organic Compounds - TICs</b>													
1,2,4-Trithiolane	mg/kg												
1,4-Benzenediol, 2-chloro-	mg/kg												
11H-Benzo[b]fluorene	mg/kg												
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg												
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg												
3-PENTEN-2-ONE, 4-METHYL-	mg/kg												
7H-Benz[de]anthracen-7-one	mg/kg												
9,10-Anthracenedione	mg/kg												
9-Octadecenamamide, (Z)-	mg/kg												
Acetamide, 2-chloro-N-(ethox	mg/kg												
Alachlor	mg/kg												
Benzenamine, 3-methyl-	mg/kg												
Benzenamine, 4,4',4"-methy	mg/kg												
Benzenamine, 4,4'-methyleneb	mg/kg												
Benzene, 1,2,3,4-tetrachloro	mg/kg												
Benzene, 1,2,3,5-tetrachloro	mg/kg												
Benzene, 1,2,3-trichloro-	mg/kg												
Benzene, 1,3,5-trichloro-	mg/kg												
Benzene, 1,3-bis(1-methyleth	mg/kg												
Benzene, 1,4-bis(1-methyleth	mg/kg												
Benzofuran, 2,3-dihydro-	mg/kg												
CYCLIC OCTAATOMIC SULFUR	mg/kg												
Diphenyl Ether	mg/kg												
Docosane	mg/kg												
Heneicosane	mg/kg												
Hexacosane	mg/kg												
Hexadecane	mg/kg												
Hexatriacontane	mg/kg												
m-Chloroaniline	mg/kg												
N,N-Diethylaniline	mg/kg												
n-Hexadecanoic acid	mg/kg												
Nonadecane	mg/kg												
o-Chloroaniline	mg/kg												
Octacosane	mg/kg												
Octadecane	mg/kg												
Octadecane, 1-chloro-	mg/kg												
Octadecanoic acid	mg/kg												
Parachlorophenol	mg/kg												
Pentadecane	mg/kg												
Perylene	mg/kg												
Phenol, 2,5-dichloro-	mg/kg												
Phenol, 3-chloro-	mg/kg												
Phenol, 4,4'-(1-methylethyl)	mg/kg												
Tetracosane	mg/kg												
Tetradecane	mg/kg												
Tetraethylene glycol	mg/kg												
Total SVOIC TICs	mg/kg												
Triacontane	mg/kg												
Tributyl phosphate	mg/kg												
Tridecanoic acid	mg/kg												
Triphenyl phosphate	mg/kg												
UNKNOWN	mg/kg												
Unknown acid	mg/kg												
Unknown Alcohol	mg/kg												
Unknown Aldol Condensate	mg/kg												
UNKNOWN ALKANE	mg/kg												

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-SWMU5/HC												
Field Sample ID	10893544	10893639	10894145	10894178	10894414	10894669	10894702	10902292	10902298	10902305	10902311	10902318	
Location ID	SS-40	SS-42	SS-21	SS-21	SS-26	SS-32	SS-32	5B-P3-10	5B-P3-10	5B-P3-11	5B-P3-11	5B-P3-8	
Depth Interval (ft)	1.50-2.00	0.00-0.50	0.00-0.50	1.50-2.00	0.00-0.50	0.00-0.50	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	
Sample Purpose	DUP	FS											
Date	1/25/1999	1/25/1999	9/14/1998	9/14/1998	9/17/1998	9/17/1998	9/17/1998	4/24/2000	4/24/2000	4/24/2000	4/24/2000	4/24/2000	
Chemical Class	Units												
Unknown Alkene	mg/kg												
Unknown Amide	mg/kg												
Unknown Amine	mg/kg												
UNKNOWN AROMATIC	mg/kg												
Unknown Carboxylic Acid	mg/kg												
Unknown Cycloalkane	mg/kg												
Unknown Hydrocarbon	mg/kg												
Unknown Ketone	mg/kg												
Unknown PAH	mg/kg												
UNKNOWN SILOXANE	mg/kg												
<b>Semivolatile Organic Compounds</b>													
1,2,4-Trichlorobenzene	mg/kg												
1,2-Diphenylhydrazine	mg/kg												
1,4-Dioxane	mg/kg												
1-Naphthylamine	mg/kg	0.086 U	0.099 U	0.081 U	0.082 U	0.08 U	0.082 U	0.083 U					
2,3,4,6-Tetrachlorophenol	mg/kg												
2,4,5-Trichlorophenol	mg/kg												
2,4,6-Trichlorophenol	mg/kg												
2,4-Dichlorophenol	mg/kg												
2,4-Dimethylphenol	mg/kg												
2,4-Dinitrophenol	mg/kg												
2,4-Dinitrotoluene	mg/kg												
2,6-Dinitrotoluene	mg/kg												
2-Chloronaphthalene	mg/kg												
2-Chlorophenol	mg/kg												
2-Methylnaphthalene	mg/kg												
2-Methylphenol (O-Cresol)	mg/kg												
2-Naphthylamine	mg/kg	0.21 U	0.25 U	0.2 U	0.2 U	0.2 U	0.21 U	0.21 U					
2-Nitroaniline	mg/kg												
2-Nitrophenol	mg/kg												
3,3'-Dichlorobenzidine	mg/kg												
3,3'-Dimethylbenzidine	mg/kg	0.21 U	0.25 U	0.2 U	0.2 U	0.2 U	0.21 U	0.21 U					
3-Nitroaniline	mg/kg												
4,6-Dinitro-2-Methylphenol	mg/kg												
4-Aminobiphenyl	mg/kg												
4-Bromophenyl Phenyl Ether	mg/kg												
4-Chloro-3-Methylphenol	mg/kg												
4-Chloroaniline	mg/kg	0.58	0.068	0.04 U	0.38	0.04 U	0.041 U	0.043	0.12 U	0.13 U	0.13 U	0.14 U	0.28
4-Chlorophenyl Phenyl Ether	mg/kg												
4-Methylphenol (P-Cresol)	mg/kg												
4-Nitroaniline	mg/kg												
4-Nitrophenol	mg/kg												
Acetophenone	mg/kg												
Aniline	mg/kg	0.83	0.05 U	0.04 U	0.041 U	0.04 U	0.041 U	0.041 U	0.12 U	0.13 U	0.13 U	0.14 U	0.28
Benzidine	mg/kg												
Biphenyl	mg/kg												
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg												
Bis(2-Chloroethoxy)Methane	mg/kg												
Bis(2-Chloroethyl)Ether	mg/kg												
Bis(2-Chloroisopropyl)Ether	mg/kg												
Bis(2-Ethylhexyl)Phthalate	mg/kg												
Butyl Benzyl Phthalate	mg/kg												
Carbazole	mg/kg												
Dibenzofuran	mg/kg												
Diethyl Phthalate	mg/kg												
Dimethyl Phthalate	mg/kg												
Di-N-Butyl Phthalate	mg/kg												
Diphenyl Ether	mg/kg												
Hexachlorobenzene	mg/kg												
Hexachlorobutadiene	mg/kg												
Hexachlorocyclopentadiene	mg/kg												
Hexachloroethane	mg/kg												
Hexachloropropylene	mg/kg												
Isophorone	mg/kg												
N-Dioctyl Phthalate	mg/kg												
Nitrobenzene	mg/kg	0.043 U	0.05 U	0.04 U	0.041 U	0.04 U	0.041 U	0.041 U					
N-Nitrosodimethylamine	mg/kg												
N-Nitrosodi-N-Propylamine	mg/kg												
N-Nitrosodiphenylamine	mg/kg												
O-Toluidine	mg/kg												
Parathion	mg/kg												
Pentachlorobenzene	mg/kg												
Pentachlorophenol	mg/kg												
Phenol	mg/kg												
<b>Volatile Organic Compounds - TICs</b>													
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-SWMU5/HC												
Field Sample ID	10893544	10893639	10894145	10894178	10894414	10894669	10894702	10902292	10902298	10902305	10902311	10902318	
Location ID	SS-40	SS-42	SS-21	SS-21	SS-26	SS-32	SS-32	5B-P3-10	5B-P3-10	5B-P3-11	5B-P3-11	5B-P3-8	
Depth Interval (ft)	1.50-2.00	0.00-0.50	0.00-0.50	1.50-2.00	0.00-0.50	0.00-0.50	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	
Sample Purpose	DUP	FS											
Date	1/25/1999	1/25/1999	9/14/1998	9/14/1998	9/17/1998	9/17/1998	9/17/1998	4/24/2000	4/24/2000	4/24/2000	4/24/2000	4/24/2000	
Chemical Class	Units												
1-Butene	mg/kg												
1-Heptene	mg/kg												
1-Propene, 2-methyl-	mg/kg												
Azulene	mg/kg												
BENZENE, 1,2,4-TRICHLORO-	mg/kg												
BENZENE, 1,2-DICHLORO-	mg/kg												
BENZENE, 1,4-DICHLORO-	mg/kg												
Camphene	mg/kg												
CYCLOHEXANE	mg/kg												
Cyclohexane, methyl-	mg/kg												
Cyclotrisiloxane, hexamethyl	mg/kg												
Diphenyl Ether	mg/kg												
Ethane, 1,1,2,2-tetrachloro-	mg/kg												
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg												
Ethane, 1,2-dichloro-1,1-dif	mg/kg												
Ethene, 1,1-dichloro-2,2-dif	mg/kg												
Hexane, 2-methyl-	mg/kg												
Hexane, 3-methyl-	mg/kg												
METHANE, CHLOROFLUORO-	mg/kg												
Naphthalene	mg/kg												
NAPHTHALENE, 2-METHYL-	mg/kg												
Nonanal	mg/kg												
Norflurane	mg/kg												
Pentane, 2,3-dimethyl-	mg/kg												
Phenol, 4-(1,1,3,3-tetrameth	mg/kg												
Propene	mg/kg												
Sulfur dioxide	mg/kg												
Tridecane	mg/kg												
UNKNOWN	mg/kg												
UNKNOWN ALICYCLIC	mg/kg												
UNKNOWN ALIPHATIC	mg/kg												
UNKNOWN ALKANE	mg/kg												
UNKNOWN AROMATIC	mg/kg												
UNKNOWN SILOXANE	mg/kg												
<b>Volatile Organic Compounds</b>													
1,1,1,2-Tetrachloroethane	mg/kg												
1,1,1-Trichloroethane	mg/kg												
1,1,1-Trichlorotrifluoroethane	mg/kg												
1,1,2,2-Tetrachloroethane	mg/kg												
1,1,2-Trichloroethane	mg/kg												
1,1,2-Trichlorotrifluoroethane	mg/kg												
1,1,2-Trifluoroethane	mg/kg												
1,1-Dichloro-1-Fluoroethane	mg/kg												
1,1-Dichloroethane	mg/kg												
1,1-Dichloroethene	mg/kg												
1,1-Dichloropropene	mg/kg												
1,2,4-Trimethylbenzene	mg/kg												
1,2-Dibromoethane (EDB)	mg/kg												
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg												
1,2-Dichloro-1-Fluoroethane	mg/kg												
1,2-Dichlorobenzene	mg/kg												
1,2-Dichloroethane	mg/kg												
1,2-Dichloroethene	mg/kg												
1,2-Dichloropropane	mg/kg												
1,2-Dichlorotetrafluoroethane	mg/kg												
1,3,5-Trimethylbenzene	mg/kg												
1,3-Dichlorobenzene	mg/kg												
1,4-Dichlorobenzene	mg/kg												
1-Chloro-1,1-Difluoroethane	mg/kg												
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg												
2-Chloro-1,1,1-Trifluoroethane	mg/kg												
2-Chloroethyl Vinyl Ether	mg/kg												
2-Chlorotoluene	mg/kg												
2-Hexanone	mg/kg												
4-Chlorotoluene	mg/kg												
4-Isopropyltoluene	mg/kg												
Acetone	mg/kg												
Acrolein	mg/kg												
Acrylonitrile	mg/kg												
Benzene	mg/kg												
Bromodichloromethane	mg/kg												
Bromoform	mg/kg												
Carbon Disulfide	mg/kg												
Carbon Tetrachloride	mg/kg												
CFC-1113	mg/kg												
Chlorobenzene	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-SWMU5/HC												
Field Sample ID	10893544	10893639	10894145	10894178	10894414	10894669	10894702	10902292	10902298	10902305	10902311	10902318	
Location ID	SS-40	SS-42	SS-21	SS-21	SS-26	SS-32	SS-32	5B-P3-10	5B-P3-10	5B-P3-11	5B-P3-11	5B-P3-8	
Depth Interval (ft)	1.50-2.00	0.00-0.50	0.00-0.50	1.50-2.00	0.00-0.50	0.00-0.50	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	
Sample Purpose	DUP	FS											
Date	1/25/1999	1/25/1999	9/14/1998	9/14/1998	9/17/1998	9/17/1998	9/17/1998	4/24/2000	4/24/2000	4/24/2000	4/24/2000	4/24/2000	
Chemical Class	Units												
Chlorodibromomethane	mg/kg												
Chlorodifluoromethane	mg/kg												
Chlorofluoromethane	mg/kg												
Chloroform	mg/kg												
Chloropentafluoroethane	mg/kg												
cis-1,2-Dichloroethene	mg/kg												
cis-1,3-Dichloropropene	mg/kg												
Cumene	mg/kg												
Dichlorodifluoromethane	mg/kg												
Dichlorofluoromethane	mg/kg												
Ethane	ug/L												
Ethyl Chloride	mg/kg												
Ethylbenzene	mg/kg												
Fluoromethane	mg/kg												
Hexane	mg/kg												
Isobutyl Alcohol	mg/kg												
Meta- And Para-Xylene	mg/kg												
Methacrylonitrile	mg/kg												
Methane	ug/L												
Methyl Bromide	mg/kg												
Methyl Chloride	mg/kg												
Methyl Ethyl Ketone	mg/kg												
Methyl Isobutyl Ketone	mg/kg												
Methyl Methacrylate	mg/kg												
Methyl Tertiary Butyl Ether	mg/kg												
Methylene Chloride	mg/kg												
N-Butylbenzene	mg/kg												
N-Propylbenzene	mg/kg												
Ortho-Xylene	mg/kg												
Propionitrile	mg/kg												
sec-Butylbenzene	mg/kg												
Styrene	mg/kg												
tert-Butylbenzene	mg/kg												
Tetrachloroethene	mg/kg												
Tetrahydrofuran	mg/kg												
Toluene	mg/kg												
trans-1,2-Dichloroethene	mg/kg												
trans-1,3-Dichloropropene	mg/kg												
Trichloroethene	mg/kg												
Trichlorofluoromethane	mg/kg												
Vinyl Chloride	mg/kg												
Vinyl Fluoride	mg/kg												
Xylenes	mg/kg												

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-SWMU5/HC											
Field Sample ID	10902324	10902331	10902337	10902377	10902383	10902425	22423792	22423800	22465051	22465052	22469290	22469290
Location ID	5B-P3-8	5B-P3-9	5B-P3-9	5B-P3-14	5B-P3-14	5B-P3-17	DER1-18	DER1-18	DER1-16	DER1-16	DER1-17	DER1-17
Depth Interval (ft)	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50
Sample Purpose	FS											
Date	4/24/2000	4/24/2000	4/24/2000	5/26/2000	5/26/2000	5/31/2000	9/22/2009	9/22/2009	9/24/2009	9/24/2009	9/25/2009	9/25/2009
Chemical Class	Units											
<b>General Chemistry</b>												
Black Carbon	mg/kg							195	540	660	100 U	600
Percent Moisture	%	77.8	61.5	72	24	22.9	16.6	19.5	17.9	33.5	13.6	29.7
Percent Solids	%											
Total Organic Carbon	mg/kg							1025	705	5370	535	2710
<b>Metals</b>												
Aluminum	mg/kg							1450		9620		6560
Antimony	mg/kg							1.22 U		2.07		2.44
Arsenic	mg/kg							1.99		2.83		4.09
Barium	mg/kg							13.9		58.4		62.6
Beryllium	mg/kg							0.124		0.138		0.107
Cadmium	mg/kg							0.276		0.211 U		0.205
Calcium	mg/kg							379		5740		4620
Chromium	mg/kg							15.1		28		38
Cobalt	mg/kg							1.43		4.52		3.47
Copper	mg/kg							19.8		12.6		20.2
Iron	mg/kg							9480		12100		12800
Lead	mg/kg							68.3		37.6		81.3
Magnesium	mg/kg							351		2070		1300
Manganese	mg/kg							72.8		249		180
Mercury	mg/kg							0.405		0.474		0.91
Nickel	mg/kg							6.02		14		11
Potassium	mg/kg							223		2040		1280
Selenium	mg/kg							1.19 U		1.47 U		1.39 U
Silver	mg/kg							0.219 U		0.271 U		0.256 U
Sodium	mg/kg							45.4 U		301		219
Thallium	mg/kg							1.77 U		2.18 U		2.06 U
Tin	mg/kg							7.61		8.64		19.5
Titanium	mg/kg											
Vanadium	mg/kg							8.34		21.8		24.6
Zinc	mg/kg							112		84.9		106
<b>Metals - AVS/SEM</b>												
Acid Volatile Sulfide	umol/g											
Arsenic	umol/g											
Cadmium	umol/g											
Copper	umol/g											
Lead	umol/g											
Zinc	umol/g											
<b>Metals - Leachate</b>												
Lead	ug/L											
<b>Per and Polyfluorinated Organic Substances</b>												
Perfluorobutane Sulfonic Acid	mg/kg											
Perfluorobutanoic Acid	mg/kg											
Perfluorodecane Sulfonic Acid	mg/kg											
Perfluorodecanoic Acid	mg/kg											
Perfluorododecanoic Acid	mg/kg											
Perfluoroheptanoic Acid	mg/kg											
Perfluorohexane Sulfonic Acid	mg/kg											
Perfluorohexanoic Acid	mg/kg											
Perfluorononanoic Acid	mg/kg											
Perfluorooctane Sulfonamide	mg/kg											
Perfluoropentanoic Acid	mg/kg											
Perfluorotetradecanoic Acid	mg/kg											
Perfluorotridecanoic Acid	mg/kg											
Perfluoroundecanoic Acid	mg/kg											
PFOA	mg/kg											
PFOA(trial)	mg/kg											
PFOS	mg/kg											
PFOS (trial)	mg/kg											
<b>Pesticides and Herbicides</b>												
4,4'-DDD	mg/kg											
4,4'-DDE	mg/kg											
4,4'-DDT	mg/kg											
Aldrin	mg/kg											
Alpha-Chlordane	mg/kg											
Alpha-BHC	mg/kg											
beta-BHC	mg/kg											
delta-BHC	mg/kg											
Dieldrin	mg/kg											
Endosulfan I	mg/kg											
Endosulfan II	mg/kg											
Endosulfan Sulfate	mg/kg											
Endrin	mg/kg											
Endrin Aldehyde	mg/kg											
Endrin Ketone	mg/kg											
Gamma-Chlordane	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-SWMU5/HC											
Field Sample ID	10902324	10902331	10902337	10902377	10902383	10902425	22423792	22423800	22465051	22465052	22469290	
Location ID	5B-P3-8	5B-P3-9	5B-P3-9	5B-P3-14	5B-P3-14	5B-P3-17	DER1-18	DER1-18	DER1-16	DER1-16	DER1-17	
Depth Interval (ft)	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	
Sample Purpose	FS											
Date	4/24/2000	4/24/2000	4/24/2000	5/26/2000	5/26/2000	5/31/2000	9/22/2009	9/22/2009	9/24/2009	9/24/2009	9/25/2009	
Chemical Class												
Chemical												
Units												
Heptachlor	mg/kg											
Heptachlor Epoxide	mg/kg											
Lindane	mg/kg											
Methoxychlor	mg/kg											
Toxaphene	mg/kg											
<b>Physical Properties</b>												
0.001 MM	% PASSING						0.5	U		0.5	U	1
0.002 MM	% PASSING						0.5	U		1		1
0.005 MM	% PASSING						0.5	U		4		1
0.02 MM	% PASSING						1			8		1
0.05 MM	% PASSING						1			12.5		3
0.064 MM	% PASSING						1			14.5		4.5
0.075 MM	% PASSING						1.3			16.1		5.5
0.15 MM	% PASSING						2.2			25.4		12.4
0.3 MM	% PASSING						13.6			86.2		59.1
0.6 MM	% PASSING						60.1			93.3		85.6
1.18 MM	% PASSING						90.6			94.8		90.3
19 MM	% PASSING						100			100		100
2.36 MM	% PASSING						97.4			96.3		92.9
3.35 MM	% PASSING						98.7			96.7		94.3
37.5 MM	% PASSING						100			100		100
4.75 MM	% PASSING						99			96.9		96.2
75 MM	% PASSING						100			100		100
Density	PCF											
<b>Polychlorinated Biphenyls - TICs</b>												
1,1'-Biphenyl, 2,3-dichloro-	mg/kg											
Unknown Biphenyl	mg/kg											
<b>Polychlorinated Biphenyls</b>												
Heptachlorobiphenyl	mg/kg											
Hexachlorobiphenyl	mg/kg											
Octachlorobiphenyl	mg/kg											
PCB 1	mg/kg											
PCB 10	mg/kg											
PCB 100	mg/kg											
PCB 101	mg/kg											
PCB 102	mg/kg											
PCB 103	mg/kg											
PCB 104	mg/kg											
PCB 105	mg/kg											
PCB 106	mg/kg											
PCB 107	mg/kg											
PCB 107/123	mg/kg											
PCB 108	mg/kg											
PCB 109	mg/kg											
PCB 11	mg/kg											
PCB 110	mg/kg											
PCB 111	mg/kg											
PCB 112	mg/kg											
PCB 113	mg/kg											
PCB 114	mg/kg											
PCB 115	mg/kg											
PCB 116	mg/kg											
PCB 117	mg/kg											
PCB 118	mg/kg											
PCB 119	mg/kg											
PCB 12	mg/kg											
PCB 120	mg/kg											
PCB 121	mg/kg											
PCB 121/95/88	mg/kg											
PCB 122	mg/kg											
PCB 123	mg/kg											
PCB 124	mg/kg											
PCB 125	mg/kg											
PCB 126	mg/kg											
PCB 127	mg/kg											
PCB 128	mg/kg											
PCB 129	mg/kg											
PCB 129/158	mg/kg											
PCB 13	mg/kg											
PCB 130	mg/kg											
PCB 130/164	mg/kg											
PCB 131	mg/kg											
PCB 132	mg/kg											
PCB 133	mg/kg											
PCB 134	mg/kg											
PCB 135	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-SWMU5/HC											
Field Sample ID	10902324	10902331	10902337	10902377	10902383	10902425	22423792	22423800	22465051	22465052	22469290	
Location ID	5B-P3-8	5B-P3-9	5B-P3-9	5B-P3-14	5B-P3-14	5B-P3-17	DER1-18	DER1-18	DER1-16	DER1-16	DER1-17	
Depth Interval (ft)	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	
Sample Purpose	FS											
Date	4/24/2000	4/24/2000	4/24/2000	5/26/2000	5/26/2000	5/31/2000	9/22/2009	9/22/2009	9/24/2009	9/24/2009	9/25/2009	
Chemical Class												
Chemical	Units											
PCB 136	mg/kg											
PCB 137	mg/kg											
PCB 138	mg/kg											
PCB 139	mg/kg											
PCB 14	mg/kg											
PCB 140	mg/kg											
PCB 141	mg/kg											
PCB 142	mg/kg											
PCB 143	mg/kg											
PCB 143/139	mg/kg											
PCB 144	mg/kg											
PCB 145	mg/kg											
PCB 146	mg/kg											
PCB 147	mg/kg											
PCB 148	mg/kg											
PCB 149	mg/kg											
PCB 15	mg/kg											
PCB 150	mg/kg											
PCB 151	mg/kg											
PCB 152	mg/kg											
PCB 153	mg/kg											
PCB 154	mg/kg											
PCB 155	mg/kg											
PCB 156	mg/kg											
PCB 157	mg/kg											
PCB 158	mg/kg											
PCB 159	mg/kg											
PCB 16	mg/kg											
PCB 160	mg/kg											
PCB 161	mg/kg											
PCB 162	mg/kg											
PCB 163	mg/kg											
PCB 163/160	mg/kg											
PCB 164	mg/kg											
PCB 165	mg/kg											
PCB 166	mg/kg											
PCB 167	mg/kg											
PCB 168	mg/kg											
PCB 169	mg/kg											
PCB 17	mg/kg											
PCB 170	mg/kg											
PCB 171	mg/kg											
PCB 172	mg/kg											
PCB 173	mg/kg											
PCB 174	mg/kg											
PCB 175	mg/kg											
PCB 176	mg/kg											
PCB 177	mg/kg											
PCB 178	mg/kg											
PCB 179	mg/kg											
PCB 18	mg/kg											
PCB 180	mg/kg											
PCB 181	mg/kg											
PCB 182	mg/kg											
PCB 182/175	mg/kg											
PCB 183	mg/kg											
PCB 184	mg/kg											
PCB 185	mg/kg											
PCB 186	mg/kg											
PCB 187	mg/kg											
PCB 188	mg/kg											
PCB 189	mg/kg											
PCB 19	mg/kg											
PCB 190	mg/kg											
PCB 191	mg/kg											
PCB 192	mg/kg											
PCB 193	mg/kg											
PCB 194	mg/kg											
PCB 195	mg/kg											
PCB 196	mg/kg											
PCB 197	mg/kg											
PCB 198	mg/kg											
PCB 199	mg/kg											
PCB 2	mg/kg											
PCB 20	mg/kg											
PCB 200	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	MZ-SWMU5/HC										
Chemical	Field Sample ID	10902324	10902331	10902337	10902377	10902383	10902425	22423792	22423800	22465051	22465052	22469290
Units	Location ID	5B-P3-8	5B-P3-9	5B-P3-9	5B-P3-14	5B-P3-14	5B-P3-17	DER1-18	DER1-18	DER1-16	DER1-16	DER1-17
	Depth Interval (ft)	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50
	Sample Purpose	FS										
	Date	4/24/2000	4/24/2000	4/24/2000	5/26/2000	5/26/2000	5/31/2000	9/22/2009	9/22/2009	9/24/2009	9/24/2009	9/25/2009
PCB 201												
PCB 202												
PCB 203												
PCB 204												
PCB 204/200												
PCB 205												
PCB 206												
PCB 207												
PCB 208												
PCB 209												
PCB 21												
PCB 21/20												
PCB 22												
PCB 23												
PCB 24												
PCB 25												
PCB 26												
PCB 27												
PCB 28												
PCB 29												
PCB 3												
PCB 30												
PCB 31												
PCB 32												
PCB 33												
PCB 34												
PCB 35												
PCB 36												
PCB 37												
PCB 38												
PCB 39												
PCB 4												
PCB 4/10												
PCB 40												
PCB 41												
PCB 42												
PCB 43												
PCB 44												
PCB 45												
PCB 46												
PCB 47												
PCB 48												
PCB 49												
PCB 5												
PCB 50												
PCB 51												
PCB 52												
PCB 53												
PCB 54												
PCB 55												
PCB 56												
PCB 57												
PCB 58												
PCB 59												
PCB 6												
PCB 60												
PCB 61												
PCB 62												
PCB 63												
PCB 64												
PCB 65												
PCB 65/75/62												
PCB 66												
PCB 67												
PCB 67/58												
PCB 68												
PCB 68/64												
PCB 69												
PCB 7												
PCB 70												
PCB 71												
PCB 72												
PCB 73												
PCB 73/46												
PCB 74												
PCB 75												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-SWMU5/HC											
Field Sample ID	10902324	10902331	10902337	10902377	10902383	10902425	22423792	22423800	22465051	22465052	22469290	
Location ID	5B-P3-8	5B-P3-9	5B-P3-9	5B-P3-14	5B-P3-14	5B-P3-17	DER1-18	DER1-18	DER1-16	DER1-16	DER1-17	
Depth Interval (ft)	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	
Sample Purpose	FS											
Date	4/24/2000	4/24/2000	4/24/2000	5/26/2000	5/26/2000	5/31/2000	9/22/2009	9/22/2009	9/24/2009	9/24/2009	9/25/2009	
Chemical Class	Units											
PCB 76	mg/kg											
PCB 77	mg/kg											
PCB 78	mg/kg											
PCB 79	mg/kg											
PCB 8	mg/kg											
PCB 80	mg/kg											
PCB 81	mg/kg											
PCB 82	mg/kg											
PCB 83	mg/kg											
PCB 83/125/112	mg/kg											
PCB 84	mg/kg											
PCB 85	mg/kg											
PCB 86	mg/kg											
PCB 86/109	mg/kg											
PCB 87	mg/kg											
PCB 87/111	mg/kg											
PCB 88	mg/kg											
PCB 89	mg/kg											
PCB 89/84	mg/kg											
PCB 9	mg/kg											
PCB 90	mg/kg											
PCB 91	mg/kg											
PCB 92	mg/kg											
PCB 93	mg/kg											
PCB 94	mg/kg											
PCB 95	mg/kg											
PCB 96	mg/kg											
PCB 97	mg/kg											
PCB 98	mg/kg											
PCB 99	mg/kg											
PCB-100/93	mg/kg											
PCB-107/124	mg/kg											
PCB-108/119/86/97/125/87	mg/kg											
PCB-113/90/101	mg/kg											
PCB-116/85	mg/kg											
PCB-128/166	mg/kg											
PCB-13/12	mg/kg											
PCB-139/140	mg/kg											
PCB-147/149	mg/kg											
PCB-151/135	mg/kg											
PCB-153/168	mg/kg											
PCB-156/157	mg/kg											
PCB-163/138/129	mg/kg											
PCB-171/173	mg/kg											
PCB-180/193	mg/kg											
PCB-198/199	mg/kg											
PCB-21/33	mg/kg											
PCB-26/29	mg/kg											
PCB-28/20	mg/kg											
PCB-30/18	mg/kg											
PCB-44/47/65	mg/kg											
PCB-50/53	mg/kg											
PCB-59/62/75	mg/kg											
PCB-61/70/74/76	mg/kg											
PCB-69/49	mg/kg											
PCB-71/40	mg/kg											
PCB-90/101	mg/kg											
Pentachlorobiphenyl	mg/kg											
Tetrachlorobiphenyl	mg/kg											
Total Decachlorobiphenyls (congeners)	mg/kg											
Total Dichlorobiphenyls (congeners)	mg/kg											
Total Heptachlorobiphenyls (congeners)	mg/kg											
Total Hexachlorobiphenyls (congeners)	mg/kg											
Total Monochlorobiphenyls (congeners)	mg/kg											
Total Nonachlorobiphenyls (congeners)	mg/kg											
Total Octachlorobiphenyls (congeners)	mg/kg											
Total PCB (congeners)	mg/kg											
Total Pentachlorobiphenyls (congeners)	mg/kg											
Total Tetrachlorobiphenyls (congeners)	mg/kg											
Total Trichlorobiphenyls (congeners)	mg/kg											
Trichlorobiphenyl (total)	mg/kg											
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>												
Benzo[e]pyrene	mg/kg											
Chrysene, 1-methyl-	mg/kg											
Naphthalene, 1-methyl-	mg/kg											
Pyrene, 1-methyl-	mg/kg											

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-SWMU5/HC											
Field Sample ID	10902324	10902331	10902337	10902377	10902383	10902425	22423792	22423800	22465051	22465052	22469290	
Location ID	5B-P3-8	5B-P3-9	5B-P3-9	5B-P3-14	5B-P3-14	5B-P3-17	DER1-18	DER1-18	DER1-16	DER1-16	DER1-17	
Depth Interval (ft)	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	
Sample Purpose	FS											
Date	4/24/2000	4/24/2000	4/24/2000	5/26/2000	5/26/2000	5/31/2000	9/22/2009	9/22/2009	9/24/2009	9/24/2009	9/25/2009	
Chemical Class												
Chemical												
Units												
<b>Polycyclic Aromatic Hydrocarbons</b>												
Acenaphthene	mg/kg						0.041	U	0.05	U	0.047	U
Acenaphthylene	mg/kg						0.041	U	0.05	U	0.047	U
Anthracene	mg/kg						0.041	U	0.05	U	0.047	U
Benzo(A)Anthracene	mg/kg						0.087		0.077		0.15	
Benzo(B)Fluoranthene	mg/kg						0.093		0.066		0.17	
Benzo(G,H,I)Perylene	mg/kg						0.047		0.05	U	0.093	
Benzo(K)Fluoranthene	mg/kg						0.042	U	0.05	U	0.057	
Benzo(A)Pyrene	mg/kg						0.076		0.064		0.15	
Chrysene	mg/kg						0.14		0.2		0.2	
Dibenz(A,H)Anthracene	mg/kg						0.041	U	0.05	U	0.047	U
Fluoranthene	mg/kg						0.1		0.075		0.15	
Fluorene	mg/kg						0.041	U	0.05	U	0.047	U
Indeno (1,2,3-CD) Pyrene	mg/kg						0.043		0.05	U	0.075	
Naphthalene	mg/kg						0.041	U	0.05	U	0.047	U
Phenanthrene	mg/kg						0.057		0.053		0.11	
Pyrene	mg/kg						0.13		0.099		0.27	
Total PAHs (Detections + 1/2 MDL)	mg/kg						0.938		0.859		1.566	
Total PAHs (Detections Only)	mg/kg						0.815		0.634		1.425	
<b>Semivolatile Organic Compounds - TICs</b>												
1,2,4-Trithiolane	mg/kg											
1,4-Benzenediol, 2-chloro-	mg/kg											
11H-Benzo[b]fluorene	mg/kg											
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg											
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg						25		22		17	
3-PENTEN-2-ONE, 4-METHYL-	mg/kg						0.23		0.27			
7H-Benz[de]anthracen-7-one	mg/kg											
9,10-Anthracenedione	mg/kg											
9-Octadecenamamide, (Z)-	mg/kg											
Acetamide, 2-chloro-N-(ethox	mg/kg											
Alachlor	mg/kg											
Benzenamine, 3-methyl-	mg/kg											
Benzenamine, 4,4',4"-methy	mg/kg											
Benzenamine, 4,4'-methyleneb	mg/kg											
Benzene, 1,2,3,4-tetrachloro	mg/kg											
Benzene, 1,2,3,5-tetrachloro	mg/kg											
Benzene, 1,2,3-trichloro-	mg/kg											
Benzene, 1,3,5-trichloro-	mg/kg											
Benzene, 1,3-bis(1-methyleth	mg/kg											
Benzene, 1,4-bis(1-methyleth	mg/kg											
Benzofuran, 2,3-dihydro-	mg/kg											
CYCLIC OCTAATOMIC SULFUR	mg/kg											
Diphenyl Ether	mg/kg											
Docosane	mg/kg											
Heneicosane	mg/kg											
Hexacosane	mg/kg											
Hexadecane	mg/kg											
Hexatriacontane	mg/kg											
m-Chloroaniline	mg/kg											
N,N-Diethylaniline	mg/kg											
n-Hexadecanoic acid	mg/kg											
Nonadecane	mg/kg											
o-Chloroaniline	mg/kg											
Octacosane	mg/kg											
Octadecane	mg/kg											
Octadecane, 1-chloro-	mg/kg											
Octadecanoic acid	mg/kg											
Parachlorophenol	mg/kg											
Pentadecane	mg/kg											
Perylene	mg/kg											
Phenol, 2,5-dichloro-	mg/kg											
Phenol, 3-chloro-	mg/kg											
Phenol, 4,4'-(1-methylethyl)	mg/kg											
Tetracosane	mg/kg											
Tetradecane	mg/kg											
Tetraethylene glycol	mg/kg											
Total SVOC TICs	mg/kg											
Triacotane	mg/kg											
Tributyl phosphate	mg/kg											
Tridecanoic acid	mg/kg											
Triphenyl phosphate	mg/kg											
UNKNOWN	mg/kg						0.6975		0.755		0.455625	
Unknown acid	mg/kg											
Unknown Alcohol	mg/kg											
Unknown Aldol Condensate	mg/kg											
UNKNOWN ALKANE	mg/kg						0.18		0.27			

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-SWMU5/HC													
Field Sample ID	10902324	10902331	10902337	10902377	10902383	10902425	22423792	22423800	22465051	22465052	22469290			
Location ID	5B-P3-8	5B-P3-9	5B-P3-9	5B-P3-14	5B-P3-14	5B-P3-17	DER1-18	DER1-18	DER1-16	DER1-16	DER1-17			
Depth Interval (ft)	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50			
Sample Purpose	FS													
Date	4/24/2000	4/24/2000	4/24/2000	5/26/2000	5/26/2000	5/31/2000	9/22/2009	9/22/2009	9/24/2009	9/24/2009	9/25/2009			
Chemical Class	Units													
Unknown Alkene	mg/kg													
Unknown Amide	mg/kg													
Unknown Amine	mg/kg													
UNKNOWN AROMATIC	mg/kg													
Unknown Carboxylic Acid	mg/kg													
Unknown Cycloalkane	mg/kg													
Unknown Hydrocarbon	mg/kg													
Unknown Ketone	mg/kg													
Unknown PAH	mg/kg													
UNKNOWN SILOXANE	mg/kg													
<b>Semivolatile Organic Compounds</b>														
1,2,4-Trichlorobenzene	mg/kg								0.041	U		0.047	U	
1,2-Diphenylhydrazine	mg/kg								0.041	U		0.047	U	
1,4-Dioxane	mg/kg													
1-Naphthylamine	mg/kg								0.21	U		0.24	U	
2,3,4,6-Tetrachlorophenol	mg/kg													
2,4,5-Trichlorophenol	mg/kg													
2,4,6-Trichlorophenol	mg/kg								0.041	U		0.047	U	
2,4-Dichlorophenol	mg/kg								0.041	U		0.047	U	
2,4-Dimethylphenol	mg/kg								0.083	U		0.095	U	
2,4-Dinitrophenol	mg/kg								0.83	U		0.95	U	
2,4-Dinitrotoluene	mg/kg								0.45	U		0.095	U	
2,6-Dinitrotoluene	mg/kg								0.042	U		0.047	U	
2-Chloronaphthalene	mg/kg								0.041	U		0.047	U	
2-Chlorophenol	mg/kg								0.041	U		0.047	U	
2-Methylnaphthalene	mg/kg													
2-Methylphenol (O-Cresol)	mg/kg													
2-Naphthylamine	mg/kg								0.21	U		0.24	U	
2-Nitroaniline	mg/kg													
2-Nitrophenol	mg/kg								0.041	U		0.047	U	
3,3'-Dichlorobenzidine	mg/kg								0.12	U		0.14	U	
3,3'-Dimethylbenzidine	mg/kg													
3-Nitroaniline	mg/kg													
4,6-Dinitro-2-Methylphenol	mg/kg								0.21	U		0.24	U	
4-Aminobiphenyl	mg/kg								0.21	U		0.24	U	
4-Bromophenyl Phenyl Ether	mg/kg								0.041	U		0.047	U	
4-Chloro-3-Methylphenol	mg/kg								0.083	U		0.095	U	
4-Chloroaniline	mg/kg	U	0.3	U	0.17	U	0.24	U	0.088	U	0.24	0.21	0.083	U
4-Chlorophenyl Phenyl Ether	mg/kg								0.041	U		0.047	U	
4-Methylphenol (P-Cresol)	mg/kg													
4-Nitroaniline	mg/kg													
4-Nitrophenol	mg/kg								0.21	U		0.24	U	
Acetophenone	mg/kg													
Aniline	mg/kg	U	0.3	U	0.17	U	0.24	U	0.088	U	1.9	0.08	U	
Benzidine	mg/kg								0.21	U		0.24	U	
Biphenyl	mg/kg								1.4	U		1.7	U	
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg													
Bis(2-Chloroethoxy)Methane	mg/kg								0.041	U		0.047	U	
Bis(2-Chloroethyl)Ether	mg/kg								0.041	U		0.047	U	
Bis(2-Chloroisopropyl)Ether	mg/kg								0.041	U		0.047	U	
Bis(2-Ethylhexyl)Phthalate	mg/kg								0.083	U		0.095	U	
Butyl Benzyl Phthalate	mg/kg								0.083	U		0.095	U	
Carbazole	mg/kg								0.041	U		0.047	U	
Dibenzofuran	mg/kg													
Diethyl Phthalate	mg/kg								0.083	U		0.095	U	
Dimethyl Phthalate	mg/kg								0.083	U		0.095	U	
Di-N-Butyl Phthalate	mg/kg								0.25	U		0.29	U	
Diphenyl Ether	mg/kg													
Hexachlorobenzene	mg/kg								0.041	U		0.047	U	
Hexachlorobutadiene	mg/kg								0.083	U		0.095	U	
Hexachlorocyclopentadiene	mg/kg								0.21	U		0.24	U	
Hexachloroethane	mg/kg								0.041	U		0.047	U	
Hexachloropropylene	mg/kg													
Isophorone	mg/kg								0.041	U		0.047	U	
N-Dioctyl Phthalate	mg/kg								0.083	U		0.095	U	
Nitrobenzene	mg/kg								0.041	U		0.047	U	
N-Nitrosodimethylamine	mg/kg								0.083	U		0.095	U	
N-Nitrosodi-N-Propylamine	mg/kg								0.041	U		0.047	U	
N-Nitrosodiphenylamine	mg/kg								0.097	U		0.12	U	
O-Toluidine	mg/kg								0.25	U		0.28	U	
Parathion	mg/kg													
Pentachlorobenzene	mg/kg													
Pentachlorophenol	mg/kg								0.21	U		0.24	U	
Phenol	mg/kg								0.041	U		0.047	U	
<b>Volatile Organic Compounds - TICs</b>														
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg													

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-SWMU5/HC											
Field Sample ID	10902324	10902331	10902337	10902377	10902383	10902425	22423792	22423800	22465051	22465052	22469290	
Location ID	5B-P3-8	5B-P3-9	5B-P3-9	5B-P3-14	5B-P3-14	5B-P3-17	DER1-18	DER1-18	DER1-16	DER1-16	DER1-17	
Depth Interval (ft)	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	
Sample Purpose	FS											
Date	4/24/2000	4/24/2000	4/24/2000	5/26/2000	5/26/2000	5/31/2000	9/22/2009	9/22/2009	9/24/2009	9/24/2009	9/25/2009	
Chemical Class												
Chemical	Units											
1-Butene	mg/kg											
1-Heptene	mg/kg											
1-Propene, 2-methyl-	mg/kg											
Azulene	mg/kg											
BENZENE, 1,2,4-TRICHLORO-	mg/kg											
BENZENE, 1,2-DICHLORO-	mg/kg											
BENZENE, 1,4-DICHLORO-	mg/kg											
Camphene	mg/kg											
CYCLOHEXANE	mg/kg											
Cyclohexane, methyl-	mg/kg											
Cyclotrisiloxane, hexamethyl	mg/kg											
Diphenyl Ether	mg/kg											
Ethane, 1,1,2,2-tetrachloro-	mg/kg											
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg											
Ethane, 1,2-dichloro-1,1-dif	mg/kg											
Ethene, 1,1-dichloro-2,2-dif	mg/kg											
Hexane, 2-methyl-	mg/kg											
Hexane, 3-methyl-	mg/kg											
METHANE, CHLOROFLUORO-	mg/kg											
Naphthalene	mg/kg											
NAPHTHALENE, 2-METHYL-	mg/kg											
Nonanal	mg/kg											
Norflurane	mg/kg											
Pentane, 2,3-dimethyl-	mg/kg											
Phenol, 4-(1,1,3,3-tetrameth	mg/kg											
Propene	mg/kg											
Sulfur dioxide	mg/kg											
Tridecane	mg/kg											
UNKNOWN	mg/kg											
UNKNOWN ALICYCLIC	mg/kg											
UNKNOWN ALIPHATIC	mg/kg											
UNKNOWN ALKANE	mg/kg											
UNKNOWN AROMATIC	mg/kg											
UNKNOWN SILOXANE	mg/kg							0.007		0.006		
<b>Volatile Organic Compounds</b>												
1,1,1,2-Tetrachloroethane	mg/kg											
1,1,1-Trichloroethane	mg/kg											
1,1,1-Trichlorotrifluoroethane	mg/kg								0.001	U		0.001
1,1,2,2-Tetrachloroethane	mg/kg								0.001	U		0.001
1,1,2-Trichloroethane	mg/kg								0.001	U		0.001
1,1,2-Trichlorotrifluoroethane	mg/kg								0.002	U		0.002
1,1,2-Trifluoroethane	mg/kg											
1,1-Dichloro-1-Fluoroethane	mg/kg											
1,1-Dichloroethane	mg/kg								0.001	U		0.001
1,1-Dichloroethene	mg/kg								0.001	U		0.001
1,1-Dichloropropene	mg/kg											
1,2,4-Trimethylbenzene	mg/kg											
1,2-Dibromoethane (EDB)	mg/kg											
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg											
1,2-Dichloro-1-Fluoroethane	mg/kg											
1,2-Dichlorobenzene	mg/kg							0.041	U	0.073		0.06
1,2-Dichloroethane	mg/kg								0.001	U		0.001
1,2-Dichloroethene	mg/kg											
1,2-Dichloropropane	mg/kg								0.001	U		0.001
1,2-Dichlorotetrafluoroethane	mg/kg											
1,3,5-Trimethylbenzene	mg/kg											
1,3-Dichlorobenzene	mg/kg							0.041	U	0.05	U	0.047
1,4-Dichlorobenzene	mg/kg							0.041	U	0.05	U	0.047
1-Chloro-1,1-Difluoroethane	mg/kg											
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg											
2-Chloro-1,1,1-Trifluoroethane	mg/kg											
2-Chloroethyl Vinyl Ether	mg/kg											
2-Chlorotoluene	mg/kg											
2-Hexanone	mg/kg											
4-Chlorotoluene	mg/kg											
4-Isopropyltoluene	mg/kg											
Acetone	mg/kg								0.009			0.01
Acrolein	mg/kg								0.023	U		0.021
Acrylonitrile	mg/kg								0.005	U		0.004
Benzene	mg/kg								0.0006	U		0.0005
Bromodichloromethane	mg/kg								0.001	U		0.001
Bromoform	mg/kg								0.001	U		0.001
Carbon Disulfide	mg/kg								0.001			0.001
Carbon Tetrachloride	mg/kg								0.001	U		0.001
CFC-1113	mg/kg											
Chlorobenzene	mg/kg								0.001	U		0.001

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-SWMU5/HC											
Field Sample ID	10902324	10902331	10902337	10902377	10902383	10902425	22423792	22423800	22465051	22465052	22469290	
Location ID	5B-P3-8	5B-P3-9	5B-P3-9	5B-P3-14	5B-P3-14	5B-P3-17	DER1-18	DER1-18	DER1-16	DER1-16	DER1-17	
Depth Interval (ft)	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	1.50-2.00	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	
Sample Purpose	FS											
Date	4/24/2000	4/24/2000	4/24/2000	5/26/2000	5/26/2000	5/31/2000	9/22/2009	9/22/2009	9/24/2009	9/24/2009	9/25/2009	
Chemical Class	Units											
Chlorodibromomethane	mg/kg							0.001	U		0.001	U
Chlorodifluoromethane	mg/kg											
Chlorofluoromethane	mg/kg											
Chloroform	mg/kg							0.001	U		0.001	U
Chloropentafluoroethane	mg/kg											
cis-1,2-Dichloroethene	mg/kg							0.001	U		0.001	U
cis-1,3-Dichloropropene	mg/kg							0.001	U		0.001	U
Cumene	mg/kg											
Dichlorodifluoromethane	mg/kg							0.002	U		0.002	U
Dichlorofluoromethane	mg/kg							0.002	U		0.002	U
Ethane	ug/L											
Ethyl Chloride	mg/kg							0.002	U		0.002	U
Ethylbenzene	mg/kg							0.001	U		0.001	U
Fluoromethane	mg/kg											
Hexane	mg/kg											
Isobutyl Alcohol	mg/kg											
Meta- And Para-Xylene	mg/kg											
Methacrylonitrile	mg/kg											
Methane	ug/L											
Methyl Bromide	mg/kg							0.002	U		0.002	U
Methyl Chloride	mg/kg							0.002	U		0.002	U
Methyl Ethyl Ketone	mg/kg											
Methyl Isobutyl Ketone	mg/kg											
Methyl Methacrylate	mg/kg											
Methyl Tertiary Butyl Ether	mg/kg											
Methylene Chloride	mg/kg							0.002	U		0.003	
N-Butylbenzene	mg/kg											
N-Propylbenzene	mg/kg											
Ortho-Xylene	mg/kg											
Propionitrile	mg/kg											
sec-Butylbenzene	mg/kg											
Styrene	mg/kg											
tert-Butylbenzene	mg/kg											
Tetrachloroethene	mg/kg							0.001	U		0.001	U
Tetrahydrofuran	mg/kg											
Toluene	mg/kg							0.001			0.001	U
trans-1,2-Dichloroethene	mg/kg							0.001	U		0.001	U
trans-1,3-Dichloropropene	mg/kg							0.001	U		0.001	U
Trichloroethene	mg/kg							0.001	U		0.001	U
Trichlorofluoromethane	mg/kg							0.002	U		0.002	U
Vinyl Chloride	mg/kg							0.001	U		0.001	U
Vinyl Fluoride	mg/kg											
Xylenes	mg/kg							0.001	U		0.001	U

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-SWMU5/HC											
Field Sample ID	22469292	22469293	22469298	22469299	22469300	22499342	22522915	23624156	23624158	23681948	23681949	
Location ID	DER1-19	DER1-19	DER1-17	DER1-19	DER1-19	DER1-18	DER1-17	DER2-23-SD	DER2-24-SD	DER2-23-SD	DER2-24-SD	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	
Sample Purpose	FS	DUP	FS	FS	DUP	FS	DUP	FS	FS	FS	FS	
Date	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/22/2009	9/25/2009	4/22/2010	4/22/2010	4/22/2010	4/22/2010	
Chemical Class	Units											
<b>General Chemistry</b>												
Black Carbon	mg/kg	125	250	1400	835		685	3200	1325			
Percent Moisture	%	22.7	23.9	45.8	17.4	16		45.3	22	47	17.7	
Percent Solids	%											
Total Organic Carbon	mg/kg	890	1595	27250	785		3000	21000	2335	24500	5820	
<b>Metals</b>												
Aluminum	mg/kg	1620	1890					24300	2480			
Antimony	mg/kg	1.61	5.52					1.76 U	1.61			
Arsenic	mg/kg	2.83	2.93					13.5	3.3			
Barium	mg/kg	36.5	20.5					97.7	19.7			
Beryllium	mg/kg	0.0846 U	0.0885 U					1.12	0.312			
Cadmium	mg/kg	0.174 U	0.183					0.508	0.177			
Calcium	mg/kg	507	836					5740	1710			
Chromium	mg/kg	11.3	14					49.6	16.4			
Cobalt	mg/kg	1.79	1.78					10.1	1.48			
Copper	mg/kg	15.8	21.8					12	13			
Iron	mg/kg	10400	13600					31100	7710			
Lead	mg/kg	92.6	94.6					17.8	59.5			
Magnesium	mg/kg	468	441					6670	469			
Manganese	mg/kg	66.6	83.8					330	99.3			
Mercury	mg/kg	0.694	0.539					0.322	0.641			
Nickel	mg/kg	5.06	5.4					24.8	5.1			
Potassium	mg/kg	232	313					4670	486			
Selenium	mg/kg	1.22 U	1.28 U					1.74	1.23 U			
Silver	mg/kg	0.224 U	0.234 U					0.316 U	0.226 U			
Sodium	mg/kg	86.7	86					421	48.9 U			
Thallium	mg/kg	1.9 U	1.89 U					2.55 U	1.82 U			
Tin	mg/kg	10.3	49.1					6.45	15.8			
Titanium	mg/kg											
Vanadium	mg/kg	8.39	9.63					51.1	10.5			
Zinc	mg/kg	96.6	102					75.3	59.5			
<b>Metals - AVS/SEM</b>												
Acid Volatile Sulfide	umol/g											
Arsenic	umol/g											
Cadmium	umol/g											
Copper	umol/g											
Lead	umol/g											
Zinc	umol/g											
<b>Metals - Leachate</b>												
Lead	ug/L											
<b>Per and Polyfluorinated Organic Substances</b>												
Perfluorobutane Sulfonic Acid	mg/kg											
Perfluorobutanoic Acid	mg/kg											
Perfluorodecane Sulfonic Acid	mg/kg											
Perfluorodecanoic Acid	mg/kg											
Perfluorododecanoic Acid	mg/kg											
Perfluoroheptanoic Acid	mg/kg											
Perfluorohexane Sulfonic Acid	mg/kg											
Perfluorohexanoic Acid	mg/kg											
Perfluorononanoic Acid	mg/kg											
Perfluorooctane Sulfonamide	mg/kg											
Perfluoropentanoic Acid	mg/kg											
Perfluorotetradecanoic Acid	mg/kg											
Perfluorotridecanoic Acid	mg/kg											
Perfluoroundecanoic Acid	mg/kg											
PFOA	mg/kg											
PFOA(trial)	mg/kg											
PFOS	mg/kg											
PFOS (trial)	mg/kg											
<b>Pesticides and Herbicides</b>												
4,4'-DDD	mg/kg											
4,4'-DDE	mg/kg											
4,4'-DDT	mg/kg											
Aldrin	mg/kg											
Alpha Chlordane	mg/kg											
Alpha-BHC	mg/kg											
beta-BHC	mg/kg											
delta-BHC	mg/kg											
Dieldrin	mg/kg											
Endosulfan I	mg/kg											
Endosulfan II	mg/kg											
Endosulfan Sulfate	mg/kg											
Endrin	mg/kg											
Endrin Aldehyde	mg/kg											
Endrin Ketone	mg/kg											
Gamma Chlordane	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-SWMU5/HC											
Field Sample ID	22469292	22469293	22469298	22469299	22469300	22499342	22522915	23624156	23624158	23681948	23681949	
Location ID	DER1-19	DER1-19	DER1-17	DER1-19	DER1-19	DER1-18	DER1-17	DER2-23-SD	DER2-24-SD	DER2-23-SD	DER2-24-SD	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	
Sample Purpose	FS	DUP	FS	FS	DUP	FS	DUP	FS	FS	FS	FS	
Date	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/22/2009	9/25/2009	4/22/2010	4/22/2010	4/22/2010	4/22/2010	
Chemical Class												
Chemical												
Units												
Heptachlor	mg/kg											
Heptachlor Epoxide	mg/kg											
Lindane	mg/kg											
Methoxychlor	mg/kg											
Toxaphene	mg/kg											
<b>Physical Properties</b>												
0.001 MM	% PASSING	0.5	U	0.5	U				7	0.5	U	
0.002 MM	% PASSING	0.5	U	0.5	U				12.5	0.5	U	
0.005 MM	% PASSING	0.5	U	0.5	U				24	1		
0.02 MM	% PASSING	0.5	U	0.5	U				34	1.5		
0.05 MM	% PASSING	1		0.5	U				40.5	1.5		
0.064 MM	% PASSING	1		1					43	1		
0.075 MM	% PASSING	1.2		1.6					44.5	0.97		
0.15 MM	% PASSING	1.9		2					54.8	1.4		
0.3 MM	% PASSING	17.5		17.2					85.3	20.3		
0.6 MM	% PASSING	62.7		62.1					88.9	60.4		
1.18 MM	% PASSING	77.4		78.9					90.2	80.3		
19 MM	% PASSING	100		100					96.3	98.6		
2.36 MM	% PASSING	84.4		88.4					92	89.6		
3.35 MM	% PASSING	87		91.3					93.7	91.3		
37.5 MM	% PASSING	100		100					100	100		
4.75 MM	% PASSING	90		93.7					95	92.7		
75 MM	% PASSING	100		100					100	100		
Density	PCF											
<b>Polychlorinated Biphenyls - TICs</b>												
1,1'-Biphenyl, 2,3-dichloro-	mg/kg											
Unknown Biphenyl	mg/kg											
<b>Polychlorinated Biphenyls</b>												
Heptachlorobiphenyl	mg/kg											
Hexachlorobiphenyl	mg/kg											
Octachlorobiphenyl	mg/kg											
PCB 1	mg/kg						0.0000902		0.0000476			
PCB 10	mg/kg						0.00000173		0.00000175			
PCB 100	mg/kg											
PCB 101	mg/kg											
PCB 102	mg/kg											
PCB 103	mg/kg						0.0000165		0.0000207			
PCB 104	mg/kg						0.00000736		0.00000957			
PCB 105	mg/kg						0.00000497		0.00000826			
PCB 106	mg/kg						0.000172		0.000138			
PCB 107	mg/kg						0.00000201	U	0.00000213	U		
PCB 107/123	mg/kg											
PCB 108	mg/kg											
PCB 109	mg/kg						0.0000368		0.000031			
PCB 11	mg/kg						0.000493		0.000098			
PCB 110	mg/kg						0.000484		0.000515			
PCB 111	mg/kg						0.0000107		0.0000126			
PCB 112	mg/kg						0.0000011		0.00000211	U		
PCB 113	mg/kg											
PCB 114	mg/kg						0.0000098		0.00000666			
PCB 115	mg/kg						0.0000035		0.00000179	U		
PCB 116	mg/kg											
PCB 117	mg/kg						0.0000124		0.00000929			
PCB 118	mg/kg						0.000419		0.000372			
PCB 119	mg/kg											
PCB 12	mg/kg											
PCB 120	mg/kg						0.00000353		0.0000038			
PCB 121	mg/kg						0.00000284		0.00000237	U		
PCB 121/95/88	mg/kg											
PCB 122	mg/kg						0.00000803		0.00000558			
PCB 123	mg/kg						0.0000105		0.00000694			
PCB 124	mg/kg											
PCB 125	mg/kg											
PCB 126	mg/kg						0.00000369		0.00000334			
PCB 127	mg/kg						0.00000191	U	0.00000246	U		
PCB 128	mg/kg											
PCB 129	mg/kg											
PCB 129/158	mg/kg											
PCB 13	mg/kg											
PCB 130	mg/kg						0.0000911		0.0000456			
PCB 130/164	mg/kg											
PCB 131	mg/kg						0.00000842		0.00000536			
PCB 132	mg/kg						0.00025		0.000165			
PCB 133	mg/kg						0.0000466		0.0000193			
PCB 134	mg/kg						0.000039		0.0000326			
PCB 135	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC
Field Sample ID	22469292	22469293	22469298	22469299	22469300	22499342	22522915	23624156	23624158	23681948	23681949	
Location ID	DER1-19	DER1-19	DER1-17	DER1-19	DER1-19	DER1-18	DER1-17	DER2-23-SD	DER2-24-SD	DER2-23-SD	DER2-24-SD	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	
Sample Purpose	FS	DUP	FS	FS	DUP	FS	DUP	FS	FS	FS	FS	
Date	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/22/2009	9/25/2009	4/22/2010	4/22/2010	4/22/2010	4/22/2010	
Chemical Class												
Chemical	Units											
PCB 136	mg/kg					0.000115		0.0000836				
PCB 137	mg/kg					0.0000248		0.0000225				
PCB 138	mg/kg											
PCB 139	mg/kg											
PCB 14	mg/kg					0.0000483		0.00000742				
PCB 140	mg/kg											
PCB 141	mg/kg					0.000103		0.000083				
PCB 142	mg/kg					0.00000479		0.00000263 U				
PCB 143	mg/kg					0.00000129		0.00000238 U				
PCB 143/139	mg/kg											
PCB 144	mg/kg					0.0000276		0.0000224				
PCB 145	mg/kg					0.00000032		0.00000177 U				
PCB 146	mg/kg					0.000161		0.000114				
PCB 147	mg/kg											
PCB 148	mg/kg					0.00000349		0.00000425				
PCB 149	mg/kg											
PCB 15	mg/kg					0.000131		0.000172				
PCB 150	mg/kg					0.00000282		0.00000453				
PCB 151	mg/kg											
PCB 152	mg/kg					0.00000857		0.00000101				
PCB 153	mg/kg											
PCB 154	mg/kg					0.0000192		0.0000212				
PCB 155	mg/kg					0.0000017		0.00000243				
PCB 156	mg/kg											
PCB 157	mg/kg											
PCB 158	mg/kg					0.0000606		0.0000441				
PCB 159	mg/kg					0.00000868		0.00000397 U				
PCB 16	mg/kg					0.0000362		0.0000422				
PCB 160	mg/kg					0.00000113 U		0.00000202 U				
PCB 161	mg/kg					0.00000128 U		0.00000172 U				
PCB 162	mg/kg					0.0000226		0.00000632				
PCB 163	mg/kg											
PCB 163/160	mg/kg											
PCB 164	mg/kg					0.0000841		0.0000415				
PCB 165	mg/kg					0.00000575		0.00000689				
PCB 166	mg/kg											
PCB 167	mg/kg					0.0000562		0.0000283				
PCB 168	mg/kg											
PCB 169	mg/kg					0.00000489		0.00000559 U				
PCB 17	mg/kg					0.0000306		0.0000419				
PCB 170	mg/kg					0.000116		0.00013				
PCB 171	mg/kg											
PCB 172	mg/kg					0.000038		0.0000272				
PCB 173	mg/kg											
PCB 174	mg/kg					0.000144		0.000159				
PCB 175	mg/kg					0.0000147		0.00000849				
PCB 176	mg/kg					0.0000211		0.0000232				
PCB 177	mg/kg					0.0000815		0.000103				
PCB 178	mg/kg					0.0000476		0.0000415				
PCB 179	mg/kg					0.0000759		0.0000718				
PCB 18	mg/kg											
PCB 180	mg/kg											
PCB 181	mg/kg					0.00000186		0.0000015				
PCB 182	mg/kg					0.00000221		0.0000026				
PCB 182/175	mg/kg											
PCB 183	mg/kg					0.000104		0.0000939				
PCB 184	mg/kg					0.00000148		0.00000156				
PCB 185	mg/kg					0.000002		0.00000039 U				
PCB 186	mg/kg					0.00000126 U		0.00000149 U				
PCB 187	mg/kg					0.000243		0.000241				
PCB 188	mg/kg					0.00000287		0.00000456				
PCB 189	mg/kg					0.0000109		0.00000726				
PCB 19	mg/kg					0.00000947		0.0000162				
PCB 190	mg/kg					0.0000289		0.0000286				
PCB 191	mg/kg					0.0000697		0.00000545				
PCB 192	mg/kg					0.00000573		0.00000286 U				
PCB 193	mg/kg											
PCB 194	mg/kg					0.000114		0.0000977				
PCB 195	mg/kg					0.0000307		0.0000334				
PCB 196	mg/kg					0.000068		0.0000755				
PCB 197	mg/kg					0.00000737		0.00000882				
PCB 198	mg/kg											
PCB 199	mg/kg											
PCB 2	mg/kg					0.0000988		0.0000378				
PCB 20	mg/kg											
PCB 200	mg/kg					0.0000216		0.0000136				

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-SWMU5/HC											
Field Sample ID	22469292	22469293	22469298	22469299	22469300	22499342	22522915	23624156	23624158	23681948	23681949	
Location ID	DER1-19	DER1-19	DER1-17	DER1-19	DER1-19	DER1-18	DER1-17	DER2-23-SD	DER2-24-SD	DER2-23-SD	DER2-24-SD	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	
Sample Purpose	FS	DUP	FS	FS	DUP	FS	DUP	FS	FS	FS	FS	
Date	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/22/2009	9/25/2009	4/22/2010	4/22/2010	4/22/2010	4/22/2010	
Chemical Class												
Chemical	Units											
PCB 201	mg/kg					0.0000378		0.0000372				
PCB 202	mg/kg					0.0000855		0.000101				
PCB 203	mg/kg					0.000118		0.000113				
PCB 204	mg/kg					0.000000884		0.00000123				
PCB 204/200	mg/kg											
PCB 205	mg/kg					0.00000649		0.00000616				
PCB 206	mg/kg					0.000611		0.00101				
PCB 207	mg/kg					0.0000608		0.0000797				
PCB 208	mg/kg					0.00029		0.000482				
PCB 209	mg/kg					0.00075		0.00182				
PCB 21	mg/kg											
PCB 21/20	mg/kg											
PCB 22	mg/kg					0.0000458		0.0000519				
PCB 23	mg/kg					0.00000379		0.00000118				
PCB 24	mg/kg					0.0000134		0.00000307				
PCB 25	mg/kg					0.0000834		0.0000274				
PCB 26	mg/kg											
PCB 27	mg/kg					0.0000467		0.0000197				
PCB 28	mg/kg											
PCB 29	mg/kg											
PCB 3	mg/kg					0.000177		0.0000823				
PCB 30	mg/kg											
PCB 31	mg/kg					0.0000959		0.000134				
PCB 32	mg/kg					0.0000302		0.0000442				
PCB 33	mg/kg											
PCB 34	mg/kg					0.00000696		0.00000283				
PCB 35	mg/kg					0.000107		0.0000378				
PCB 36	mg/kg					0.0000144		0.00000264				
PCB 37	mg/kg					0.000118		0.000113				
PCB 38	mg/kg					0.00000226		0.00000766				
PCB 39	mg/kg					0.00001		0.00000519				
PCB 4	mg/kg					0.000033		0.000034				
PCB 4/10	mg/kg											
PCB 40	mg/kg											
PCB 41	mg/kg					0.0000082		0.00000985				
PCB 42	mg/kg					0.0000546		0.0000789				
PCB 43	mg/kg					0.00000685		0.00000897				
PCB 44	mg/kg											
PCB 45	mg/kg					0.000021		0.0000337				
PCB 46	mg/kg					0.0000105		0.0000152				
PCB 47	mg/kg											
PCB 48	mg/kg					0.0000227		0.0000305				
PCB 49	mg/kg											
PCB 5	mg/kg					0.0000335		0.0000166				
PCB 50	mg/kg											
PCB 51	mg/kg					0.0000154		0.0000207				
PCB 52	mg/kg					0.000218		0.000286				
PCB 53	mg/kg											
PCB 54	mg/kg					0.00000144		0.00000313				
PCB 55	mg/kg					0.00000147		0.00000333				
PCB 56	mg/kg					0.000101		0.000166				
PCB 57	mg/kg					0.00000167		0.00000271				
PCB 58	mg/kg					0.00000124		0.00000216				
PCB 59	mg/kg											
PCB 6	mg/kg					0.000042		0.0000267				
PCB 60	mg/kg					0.0000224		0.0000332				
PCB 61	mg/kg											
PCB 62	mg/kg											
PCB 63	mg/kg					0.00000853		0.0000104				
PCB 64	mg/kg					0.0000676		0.000119				
PCB 65	mg/kg											
PCB 65/75/62	mg/kg											
PCB 66	mg/kg					0.000139		0.000237				
PCB 67	mg/kg					0.00000488		0.00000876				
PCB 67/58	mg/kg											
PCB 68	mg/kg					0.00000317		0.00000597				
PCB 68/64	mg/kg											
PCB 69	mg/kg											
PCB 7	mg/kg					0.0000118		0.00000477				
PCB 70	mg/kg											
PCB 71	mg/kg											
PCB 72	mg/kg					0.00000433		0.00000597				
PCB 73	mg/kg					0.000000194	U	0.00000165				
PCB 73/46	mg/kg											
PCB 74	mg/kg											
PCB 75	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-SWMU5/HC											
Field Sample ID	22469292	22469293	22469298	22469299	22469300	22499342	22522915	23624156	23624158	23681948	23681949	
Location ID	DER1-19	DER1-19	DER1-17	DER1-19	DER1-19	DER1-18	DER1-17	DER2-23-SD	DER2-24-SD	DER2-23-SD	DER2-24-SD	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	
Sample Purpose	FS	DUP	FS	FS	DUP	FS	DUP	FS	FS	FS	FS	
Date	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/22/2009	9/25/2009	4/22/2010	4/22/2010	4/22/2010	4/22/2010	
Chemical Class	Units											
PCB 76	mg/kg						0.000155		0.0000945			
PCB 77	mg/kg						0.00000408	U	0.00000433	U		
PCB 78	mg/kg						0.00000711		0.00000598			
PCB 79	mg/kg						0.0000727		0.0000537			
PCB 8	mg/kg						0.00000315	U	0.00000431	U		
PCB 80	mg/kg						0.0000125		0.00000498	U		
PCB 81	mg/kg						0.0000497		0.000048			
PCB 82	mg/kg						0.0000387		0.0000212			
PCB 83	mg/kg											
PCB 83/125/112	mg/kg						0.000127		0.000103			
PCB 84	mg/kg											
PCB 85	mg/kg											
PCB 86	mg/kg											
PCB 86/109	mg/kg											
PCB 87	mg/kg											
PCB 87/111	mg/kg											
PCB 88	mg/kg						0.00000229	U	0.00000323	U		
PCB 89	mg/kg						0.0000561		0.0000597			
PCB 89/84	mg/kg											
PCB 9	mg/kg						0.0000333		0.0000088			
PCB 90	mg/kg											
PCB 91	mg/kg						0.0000714		0.0000842			
PCB 92	mg/kg						0.000101		0.0000902			
PCB 93	mg/kg											
PCB 94	mg/kg						0.00000514		0.00000594			
PCB 95	mg/kg						0.00035		0.000287			
PCB 96	mg/kg						0.0000523		0.00000484			
PCB 97	mg/kg											
PCB 98	mg/kg						0.0000632		0.00000299	U		
PCB 99	mg/kg						0.000189		0.000213			
PCB-100/93	mg/kg						0.0000825		0.0000128			
PCB-107/124	mg/kg						0.0000191		0.0000137			
PCB-108/119/86/97/125/87	mg/kg						0.000295		0.000277			
PCB-113/90/101	mg/kg						0.000497		0.000437			
PCB-116/85	mg/kg						0.0000651		0.0000768			
PCB-128/166	mg/kg						0.000126		0.0000777			
PCB-13/12	mg/kg						0.000182		0.0000756			
PCB-139/140	mg/kg						0.0000115		0.0000113			
PCB-147/149	mg/kg						0.000535		0.000452			
PCB-151/135	mg/kg						0.000294		0.000212			
PCB-153/168	mg/kg						0.000613		0.000571			
PCB-156/157	mg/kg						0.0000919		0.0000596			
PCB-163/138/129	mg/kg						0.000673		0.000592			
PCB-171/173	mg/kg						0.0000416		0.0000415			
PCB-180/193	mg/kg						0.000466		0.000315			
PCB-198/199	mg/kg						0.000242		0.000269			
PCB-21/33	mg/kg						0.0000636		0.0000863			
PCB-26/29	mg/kg						0.0000341		0.0000413			
PCB-28/20	mg/kg						0.00011		0.000216			
PCB-30/18	mg/kg						0.0000754		0.0000819			
PCB-44/47/65	mg/kg						0.000192		0.000286			
PCB-50/53	mg/kg						0.0000308		0.0000473			
PCB-59/62/75	mg/kg						0.0000172		0.0000305			
PCB-61/70/74/76	mg/kg						0.000244		0.000358			
PCB-69/49	mg/kg						0.000118		0.000198			
PCB-71/40	mg/kg						0.0000774		0.000144			
PCB-90/101	mg/kg											
Pentachlorobiphenyl	mg/kg											
Tetrachlorobiphenyl	mg/kg											
Total Decachlorobiphenyls (congeners)	mg/kg											
Total Dichlorobiphenyls (congeners)	mg/kg						0.00108		0.0005			
Total Heptachlorobiphenyls (congeners)	mg/kg						0.00147		0.00131			
Total Hexachlorobiphenyls (congeners)	mg/kg						0.00348		0.00272			
Total Monochlorobiphenyls (congeners)	mg/kg						0.000366		0.000168			
Total Nonachlorobiphenyls (congeners)	mg/kg						0.000962		0.00157			
Total Octachlorobiphenyls (congeners)	mg/kg						0.000732		0.000756			
Total PCB (congeners)	mg/kg						0.014357		0.014873			
Total Pentachlorobiphenyls (congeners)	mg/kg						0.00302		0.00281			
Total Tetrachlorobiphenyls (congeners)	mg/kg						0.00156		0.00225			
Total Trichlorobiphenyls (congeners)	mg/kg						0.000937		0.000969			
Trichlorobiphenyl (total)	mg/kg											
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>												
Benzo[e]pyrene	mg/kg											
Chrysene, 1-methyl-	mg/kg											
Naphthalene, 1-methyl-	mg/kg											
Pyrene, 1-methyl-	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-SWMU5/HC											
Field Sample ID	22469292	22469293	22469298	22469299	22469300	22499342	22522915	23624156	23624158	23681948	23681949	
Location ID	DER1-19	DER1-19	DER1-17	DER1-19	DER1-19	DER1-18	DER1-17	DER2-23-SD	DER2-24-SD	DER2-23-SD	DER2-24-SD	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	
Sample Purpose	FS	DUP	FS	FS	DUP	FS	DUP	FS	FS	FS	FS	
Date	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/22/2009	9/25/2009	4/22/2010	4/22/2010	4/22/2010	4/22/2010	
Chemical Class	Units											
<b>Polycyclic Aromatic Hydrocarbons</b>												
Acenaphthene	mg/kg	0.043	U	0.044	U			0.46	0.043	U		
Acenaphthylene	mg/kg	0.043	U	0.044	U			0.18	0.043	U		
Anthracene	mg/kg	0.043	U	0.044	U			2.7	0.043	U		
Benzo(A)Anthracene	mg/kg	0.11		0.044	U			4.6	0.043	U		
Benzo(B)Fluoranthene	mg/kg	0.093		0.044	U			2.4	0.054			
Benzo(G,H,I)Perylene	mg/kg	0.055		0.044	U			1.2	0.043	U		
Benzo(K)Fluoranthene	mg/kg	0.052		0.044	U			1.1	0.043	U		
Benzo(A)Pyrene	mg/kg	0.096		0.044	U			3.1	0.043	U		
Chrysene	mg/kg	0.11		0.044	U			7.4	0.057			
Dibenz(A,H)Anthracene	mg/kg	0.043	U	0.044	U			0.18	0.043	U		
Fluoranthene	mg/kg	0.18		0.044	U			4	0.043	U		
Fluorene	mg/kg	0.043	U	0.044	U			1	0.043	U		
Indeno (1,2,3-CD) Pyrene	mg/kg	0.052		0.044	U			0.94	0.043	U		
Naphthalene	mg/kg	0.043	U	0.044	U			1.9	0.043	U		
Phenanthrene	mg/kg	0.12		0.044	U			7.6	0.043	U		
Pyrene	mg/kg	0.2		0.044	U			7.3	0.054			
Total PAHs (Detections + 1/2 MDL)	mg/kg	1.197		0.352	U			45.88	0.4445			
Total PAHs (Detections Only)	mg/kg	1.068		0.352	U			45.7	0.165			
<b>Semivolatile Organic Compounds - TICs</b>												
1,2,4-Trithiolane	mg/kg											
1,4-Benzenediol, 2-chloro-	mg/kg											
11H-Benzo[b]fluorene	mg/kg											
2-METHYLTIANAPHTHENE-1,1 DI	mg/kg											
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg	17		21				3.8				
3-PENTEN-2-ONE, 4-METHYL-	mg/kg	0.2										
7H-Benz[de]anthracen-7-one	mg/kg											
9,10-Anthracenedione	mg/kg											
9-Octadecenamamide, (Z)-	mg/kg											
Acetamide, 2-chloro-N-(ethox	mg/kg											
Alachlor	mg/kg											
Benzenamine, 3-methyl-	mg/kg											
Benzenamine, 4,4',4"-methy	mg/kg											
Benzenamine, 4,4'-methyleneb	mg/kg											
Benzene, 1,2,3,4-tetrachloro	mg/kg											
Benzene, 1,2,3,5-tetrachloro	mg/kg											
Benzene, 1,2,3-trichloro-	mg/kg											
Benzene, 1,3,5-trichloro-	mg/kg											
Benzene, 1,3-bis(1-methyleth	mg/kg											
Benzene, 1,4-bis(1-methyleth	mg/kg											
Benzofuran, 2,3-dihydro-	mg/kg											
CYCLIC OCTAATOMIC SULFUR	mg/kg											
Diphenyl Ether	mg/kg											
Docosane	mg/kg											
Heneicosane	mg/kg											
Hexacosane	mg/kg											
Hexadecane	mg/kg											
Hexatriacontane	mg/kg											
m-Chloroaniline	mg/kg											
N,N-Diethylaniline	mg/kg											
n-Hexadecanoic acid	mg/kg											
Nonadecane	mg/kg											
o-Chloroaniline	mg/kg											
Octacosane	mg/kg											
Octadecane	mg/kg											
Octadecane, 1-chloro-	mg/kg											
Octadecanoic acid	mg/kg											
Parachlorophenol	mg/kg											
Pentadecane	mg/kg											
Perylene	mg/kg											
Phenol, 2,5-dichloro-	mg/kg											
Phenol, 3-chloro-	mg/kg											
Phenol, 4,4'-(1-methylethyl)	mg/kg											
Tetracosane	mg/kg											
Tetradecane	mg/kg											
Tetraethylene glycol	mg/kg											
Total SVOC TICs	mg/kg											
Triacotane	mg/kg											
Tributyl phosphate	mg/kg											
Tridecanoic acid	mg/kg											
Triphenyl phosphate	mg/kg											
UNKNOWN	mg/kg	0.39666667		0.411				1.61055556	0.392			
Unknown acid	mg/kg											
Unknown Alcohol	mg/kg											
Unknown Aldol Condensate	mg/kg											
UNKNOWN ALKANE	mg/kg			0.7625								

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	MZ-SWMU5/HC											
Field Sample ID	22469292	22469293	22469298	22469299	22469300	22499342	22522915	23624156	23624158	23681948	23681949	
Location ID	DER1-19	DER1-19	DER1-17	DER1-19	DER1-19	DER1-18	DER1-17	DER2-23-SD	DER2-24-SD	DER2-23-SD	DER2-24-SD	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	
Sample Purpose	FS	DUP	FS	FS	DUP	FS	DUP	FS	FS	FS	FS	
Date	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/22/2009	9/25/2009	4/22/2010	4/22/2010	4/22/2010	4/22/2010	
Chemical Class	Units											
Unknown Alkene	mg/kg											
Unknown Amide	mg/kg											
Unknown Amine	mg/kg											
UNKNOWN AROMATIC	mg/kg											
Unknown Carboxylic Acid	mg/kg											
Unknown Cycloalkane	mg/kg											
Unknown Hydrocarbon	mg/kg											
Unknown Ketone	mg/kg											
Unknown PAH	mg/kg											
UNKNOWN SILOXANE	mg/kg											
<b>Semivolatile Organic Compounds</b>												
1,2,4-Trichlorobenzene	mg/kg	0.043	U	0.044	U			1.4	0.043	U		
1,2-Diphenylhydrazine	mg/kg	0.043	U	0.044	U			0.18	U	0.043	U	
1,4-Dioxane	mg/kg											
1-Naphthylamine	mg/kg	0.22	U	0.22	U			0.91	U	0.21	U	
2,3,4,6-Tetrachlorophenol	mg/kg											
2,4,5-Trichlorophenol	mg/kg											
2,4,6-Trichlorophenol	mg/kg	0.043	U	0.044	U			0.18	U	0.043	U	
2,4-Dichlorophenol	mg/kg	0.043	U	0.044	U			0.18	U	0.043	U	
2,4-Dimethylphenol	mg/kg	0.086	U	0.088	U			0.37	U	0.085	U	
2,4-Dinitrophenol	mg/kg	0.85	U	0.85	U			3.7	U	0.85	U	
2,4-Dinitrotoluene	mg/kg	0.22	U	1.3	U			0.37	U	0.085	U	
2,6-Dinitrotoluene	mg/kg	0.043	U	0.094	U			0.18	U	0.043	U	
2-Chloronaphthalene	mg/kg	0.043	U	0.044	U			0.37	U	0.043	U	
2-Chlorophenol	mg/kg	0.043	U	0.044	U			0.18	U	0.043	U	
2-Methylnaphthalene	mg/kg											
2-Methylphenol (O-Cresol)	mg/kg											
2-Naphthylamine	mg/kg	0.22	U	0.22	U			0.91	U	0.21	U	
2-Nitroaniline	mg/kg											
2-Nitrophenol	mg/kg	0.043	U	0.044	U			0.18	U	0.043	U	
3,3'-Dichlorobenzidine	mg/kg	0.13	U	0.13	U			0.55	U	0.13	U	
3,3'-Dimethylbenzidine	mg/kg											
3-Nitroaniline	mg/kg											
4,6-Dinitro-2-Methylphenol	mg/kg	0.22	U	0.22	U			0.91	U	0.21	U	
4-Aminobiphenyl	mg/kg	0.22	U	0.22	U			0.91	U	0.21	U	
4-Bromophenyl Phenyl Ether	mg/kg	0.043	U	0.044	U			0.18	U	0.043	U	
4-Chloro-3-Methylphenol	mg/kg	0.086	U	0.088	U			0.37	U	0.085	U	
4-Chloroaniline	mg/kg	0.086	U	0.088	U			0.37	U	0.085	U	
4-Chlorophenyl Phenyl Ether	mg/kg	0.043	U	0.044	U			0.18	U	0.043	U	
4-Methylphenol (P-Cresol)	mg/kg											
4-Nitroaniline	mg/kg											
4-Nitrophenol	mg/kg	0.22	U	0.22	U			0.91	U	0.21	U	
Acetophenone	mg/kg											
Aniline	mg/kg	0.22	U	0.22	U			0.91	U	0.21	U	
Benzidine	mg/kg	1.5	U	1.5	U			6.4	U	1.5	U	
Biphenyl	mg/kg											
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg											
Bis(2-Chloroethoxy)Methane	mg/kg	0.043	U	0.044	U			0.18	U	0.043	U	
Bis(2-Chloroethyl)Ether	mg/kg	0.043	U	0.044	U			0.18	U	0.043	U	
Bis(2-Chloroisopropyl)Ether	mg/kg	0.043	U	0.044	U			0.18	U	0.043	U	
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.086	U	0.088	U			0.37	U	0.085	U	
Butyl Benzyl Phthalate	mg/kg	0.086	U	0.088	U			0.37	U	0.085	U	
Carbazole	mg/kg	0.043	U	0.044	U			0.18	U	0.043	U	
Dibenzofuran	mg/kg											
Diethyl Phthalate	mg/kg	0.086	U	0.088	U			0.37	U	0.085	U	
Dimethyl Phthalate	mg/kg	0.086	U	0.088	U			0.37	U	0.085	U	
Di-N-Butyl Phthalate	mg/kg	0.45	U	0.91	U			1	U	1.8	U	
Diphenyl Ether	mg/kg											
Hexachlorobenzene	mg/kg	0.043	U	0.044	U			0.18	U	0.043	U	
Hexachlorobutadiene	mg/kg	0.086	U	0.088	U			0.37	U	0.085	U	
Hexachlorocyclopentadiene	mg/kg	0.22	U	0.22	U			0.91	U	0.21	U	
Hexachloroethane	mg/kg	0.043	U	0.044	U			0.18	U	0.043	U	
Hexachloropropylene	mg/kg											
Isophorone	mg/kg	0.043	U	0.044	U			0.18	U	0.043	U	
N-Dioctyl Phthalate	mg/kg	0.086	U	0.088	U			0.37	U	0.085	U	
Nitrobenzene	mg/kg	0.043	U	0.044	U			0.18	U	0.064	U	
N-Nitrosodimethylamine	mg/kg	0.086	U	0.088	U			0.37	U	0.085	U	
N-Nitrosodi-N-Propylamine	mg/kg	0.043	U	0.044	U			0.18	U	0.043	U	
N-Nitrosodiphenylamine	mg/kg	0.16	U	0.044	U			0.54	U	0.047	U	
O-Toluidine	mg/kg	0.26	U	0.26	U			1.1	U	0.26	U	
Parathion	mg/kg											
Pentachlorobenzene	mg/kg											
Pentachlorophenol	mg/kg	0.22	U	0.22	U			0.91	U	0.21	U	
Phenol	mg/kg	0.043	U	0.044	U			0.18	U	0.043	U	
<b>Volatile Organic Compounds - TICs</b>												
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg											

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-SWMU5/HC														
Field Sample ID	22469292	22469293	22469298	22469299	22469300	22499342	22522915	23624156	23624158	23681948	23681949				
Location ID	DER1-19	DER1-19	DER1-17	DER1-19	DER1-19	DER1-18	DER1-17	DER2-23-SD	DER2-24-SD	DER2-23-SD	DER2-24-SD				
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00				
Sample Purpose	FS	DUP	FS	FS	DUP	FS	DUP	FS	FS	FS	FS				
Date	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/22/2009	9/25/2009	4/22/2010	4/22/2010	4/22/2010	4/22/2010				
Chemical Class	Units														
1-Butene	mg/kg														
1-Heptene	mg/kg														
1-Propene, 2-methyl-	mg/kg														
Azulene	mg/kg														
BENZENE, 1,2,4-TRICHLORO-	mg/kg														
BENZENE, 1,2-DICHLORO-	mg/kg														
BENZENE, 1,4-DICHLORO-	mg/kg											0.27			
Camphene	mg/kg														
CYCLOHEXANE	mg/kg														
Cyclohexane, methyl-	mg/kg														
Cyclotrisiloxane, hexamethyl	mg/kg														
Diphenyl Ether	mg/kg														
Ethane, 1,1,2,2-tetrachloro-	mg/kg														
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg														
Ethane, 1,2-dichloro-1,1-dif	mg/kg														
Ethene, 1,1-dichloro-2,2-dif	mg/kg														
Hexane, 2-methyl-	mg/kg														
Hexane, 3-methyl-	mg/kg														
METHANE, CHLOROFLUORO-	mg/kg														
Naphthalene	mg/kg														
NAPHTHALENE, 2-METHYL-	mg/kg														
Nonanal	mg/kg														
Norflurane	mg/kg														
Pentane, 2,3-dimethyl-	mg/kg														
Phenol, 4-(1,1,3,3-tetrameth	mg/kg														
Propene	mg/kg														
Sulfur dioxide	mg/kg														
Tridecane	mg/kg														
UNKNOWN	mg/kg											0.048			
UNKNOWN ALICYCLIC	mg/kg											0.006			
UNKNOWN ALIPHATIC	mg/kg														
UNKNOWN ALKANE	mg/kg														
UNKNOWN AROMATIC	mg/kg											0.12			
UNKNOWN SILOXANE	mg/kg			0.012	0.006	0.006				0.021					
<b>Volatile Organic Compounds</b>															
1,1,1,2-Tetrachloroethane	mg/kg														
1,1,1-Trichloroethane	mg/kg			0.002	U	0.001	U	0.001	U		0.002	U			
1,1,1-Trichlorotrifluoroethane	mg/kg											0.001	U		
1,1,2,2-Tetrachloroethane	mg/kg			0.002	U	0.001	U	0.001	U		0.002	U	0.001	U	
1,1,2-Trichloroethane	mg/kg			0.002	U	0.001	U	0.001	U		0.002	U	0.001	U	
1,1,2-Trichlorotrifluoroethane	mg/kg			0.005	U	0.002	U	0.002	U		0.005	U	0.002	U	
1,1,2-Trifluoroethane	mg/kg														
1,1-Dichloro-1-Fluoroethane	mg/kg														
1,1-Dichloroethane	mg/kg			0.002	U	0.001	U	0.001	U		0.002	U	0.001	U	
1,1-Dichloroethene	mg/kg			0.002	U	0.001	U	0.001	U		0.002	U	0.001	U	
1,1-Dichloropropene	mg/kg														
1,2,4-Trimethylbenzene	mg/kg														
1,2-Dibromoethane (EDB)	mg/kg														
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg														
1,2-Dichloro-1-Fluoroethane	mg/kg														
1,2-Dichlorobenzene	mg/kg	0.043	U	0.044	U				2.2	0.053					
1,2-Dichloroethane	mg/kg			0.002	U	0.001	U	0.001	U		0.002	U	0.001	U	
1,2-Dichloroethene	mg/kg														
1,2-Dichloropropane	mg/kg			0.002	U	0.001	U	0.001	U		0.002	U	0.001	U	
1,2-Dichlorotetrafluoroethane	mg/kg														
1,3,5-Trimethylbenzene	mg/kg														
1,3-Dichlorobenzene	mg/kg	0.043	U	0.044	U				0.18	U	0.043	U			
1,4-Dichlorobenzene	mg/kg	0.043	U	0.044	U				1		0.043	U			
1-Chloro-1,1-Difluoroethane	mg/kg														
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg														
2-Chloro-1,1,1-Trifluoroethane	mg/kg														
2-Chloroethyl Vinyl Ether	mg/kg														
2-Chlorotoluene	mg/kg														
2-Hexanone	mg/kg														
4-Chlorotoluene	mg/kg														
4-Isopropyltoluene	mg/kg														
Acetone	mg/kg			0.053		0.012		0.01				0.029		0.014	
Acrolein	mg/kg			0.047	U	0.023	U	0.021	U			0.046	U	0.022	U
Acrylonitrile	mg/kg			0.009	U	0.005	U	0.004	U			0.009	U	0.004	U
Benzene	mg/kg			0.001	U	0.0006	U	0.0005	U			0.001	U	0.0006	U
Bromodichloromethane	mg/kg			0.002	U	0.001	U	0.001	U			0.002	U	0.001	U
Bromoform	mg/kg			0.002	U	0.001	U	0.001	U			0.002	U	0.001	U
Carbon Disulfide	mg/kg			0.008		0.005		0.004				0.003		0.004	
Carbon Tetrachloride	mg/kg			0.002	U	0.001	U	0.001	U			0.002	U	0.001	U
CFC-1113	mg/kg														
Chlorobenzene	mg/kg			0.002	U	0.001	U	0.001				0.002	U	0.002	

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Chemical Class	River Zone	MZ-SWMU5/HC													
	Field Sample ID	22469292	22469293	22469298	22469299	22469300	22499342	22522915	23624156	23624158	23681948	23681949			
Chemical	Location ID	DER1-19	DER1-19	DER1-17	DER1-19	DER1-19	DER1-18	DER1-17	DER2-23-SD	DER2-24-SD	DER2-23-SD	DER2-24-SD			
Units	Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00			
	Sample Purpose	FS	DUP	FS	FS	DUP	FS	DUP	FS	FS	FS	FS			
	Date	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/22/2009	9/25/2009	4/22/2010	4/22/2010	4/22/2010	4/22/2010			
Chlorodibromomethane	mg/kg			0.002	U	0.001	U	0.001	U			0.002	U	0.001	U
Chlorodifluoromethane	mg/kg														
Chlorofluoromethane	mg/kg														
Chloroform	mg/kg			0.002	U	0.001	U	0.001	U			0.002	U	0.001	U
Chloropentafluoroethane	mg/kg														
cis-1,2-Dichloroethene	mg/kg			0.002	U	0.001	U	0.001	U			0.002	U	0.001	U
cis-1,3-Dichloropropene	mg/kg			0.002	U	0.001	U	0.001	U			0.002	U	0.001	U
Cumene	mg/kg														
Dichlorodifluoromethane	mg/kg			0.005	U	0.002	U	0.002	U			0.005	U	0.002	U
Dichlorofluoromethane	mg/kg			0.005	U	0.002	U	0.002	U			0.005	U	0.002	U
Ethane	ug/L														
Ethyl Chloride	mg/kg			0.005	U	0.002	U	0.002	U			0.005	U	0.002	U
Ethylbenzene	mg/kg			0.002	U	0.001	U	0.001	U			0.002	U	0.001	U
Fluoromethane	mg/kg														
Hexane	mg/kg														
Isobutyl Alcohol	mg/kg														
Meta- And Para-Xylene	mg/kg														
Methacrylonitrile	mg/kg														
Methane	ug/L														
Methyl Bromide	mg/kg			0.005	U	0.002	U	0.002	U			0.005	U	0.002	U
Methyl Chloride	mg/kg			0.005	U	0.002	U	0.002	U			0.005	U	0.002	U
Methyl Ethyl Ketone	mg/kg														
Methyl Isobutyl Ketone	mg/kg														
Methyl Methacrylate	mg/kg														
Methyl Tertiary Butyl Ether	mg/kg														
Methylene Chloride	mg/kg			0.005	U	0.002	U	0.002	U			0.005	U	0.002	U
N-Butylbenzene	mg/kg														
N-Propylbenzene	mg/kg														
Ortho-Xylene	mg/kg														
Propionitrile	mg/kg														
sec-Butylbenzene	mg/kg														
Styrene	mg/kg														
tert-Butylbenzene	mg/kg														
Tetrachloroethene	mg/kg			0.002	U	0.001	U	0.001	U			0.002	U	0.001	U
Tetrahydrofuran	mg/kg														
Toluene	mg/kg			0.002	U	0.001	U	0.001	U			0.002	U	0.001	U
trans-1,2-Dichloroethene	mg/kg			0.002	U	0.001	U	0.001	U			0.002	U	0.001	U
trans-1,3-Dichloropropene	mg/kg			0.002	U	0.001	U	0.001	U			0.002	U	0.001	U
Trichloroethene	mg/kg			0.002	U	0.001	U	0.001	U			0.002	U	0.001	U
Trichlorofluoromethane	mg/kg			0.005	U	0.002	U	0.002	U			0.005	U	0.002	U
Vinyl Chloride	mg/kg			0.002	U	0.001	U	0.001	U			0.002	U	0.001	U
Vinyl Fluoride	mg/kg														
Xylenes	mg/kg			0.002	U	0.001	U	0.001	U			0.002	U	0.002	U

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-SWMU5/HC											
Field Sample ID	23716454	23716455	23716456	23716457	23716459	23716460	23716462	23716463	23716464	23716465	23948641	
Location ID	DER2-21-SD	DER2-21-SD	DER2-21-SD	DER2-21-SD	DER2-22-SD	DER2-22-SD	DER2-25-SD	DER2-25-SD	DER2-25-SD	DER2-25-SD	DER1-18	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	
Sample Purpose	FS	DUP	FS	DUP	FS	FS	FS	DUP	FS	DUP	FS	
Date	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	4/22/2010	
Chemical Class	Units											
<b>General Chemistry</b>												
Black Carbon	mg/kg		815			5820		365		785		
Percent Moisture	%	24.5	25.8	23.1	16.1	74.1	70.5	28.2	26.1	20.5	21	23
Percent Solids	%											
Total Organic Carbon	mg/kg	1800	5995		2205	44850	95350	2505	3430	7455	6555	
<b>Metals</b>												
Aluminum	mg/kg	8210	7850			16700		5650		5780		
Antimony	mg/kg	1.27 U	3.8			3.86 U		2.75		1.94		
Arsenic	mg/kg	2.96	3.31			12.3		2.76		2.63		
Barium	mg/kg	52.8	44.7			91.8		80.5		68.1		
Beryllium	mg/kg	0.33	0.345			0.676		0.249		0.226		
Cadmium	mg/kg	0.34	0.43			0.691		0.25		0.213		
Calcium	mg/kg	8190	6840			17400		6810		7020		
Chromium	mg/kg	20.4	28.6			33.3		37.7		34.9		
Cobalt	mg/kg	3.1	3.35			6.64		2.28		2.04		
Copper	mg/kg	20.6	43.2			17.5		71.4		66.9		
Iron	mg/kg	8510	15900			36900		7390		6610		
Lead	mg/kg	39.9	88			33		79.1		170		
Magnesium	mg/kg	1530	1520			3300		983		934		
Manganese	mg/kg	162	182			357		121		114		
Mercury	mg/kg	2.67	0.375			0.479		2.28		3.82		
Nickel	mg/kg	7.18	13.6			21.9		6.4		5.21		
Potassium	mg/kg	1990	1650			3680		1410		1510		
Selenium	mg/kg	1.25 U	1.28 U			3.78 U		1.34 U		1.31 U		
Silver	mg/kg	0.229 U	0.238 U			0.695 U		0.246 U		0.241 U		
Sodium	mg/kg	524	337			867		263		338		
Thallium	mg/kg	1.85 U	1.9 U			5.6 U		1.98 U		1.94 U		
Tin	mg/kg	11.9	8.24			26.3		16.6		9.21		
Titanium	mg/kg											
Vanadium	mg/kg	17.5	19.6			33.4		13.4		11.6		
Zinc	mg/kg	78.1	113			75		59.9		49.5		
<b>Metals - AVS/SEM</b>												
Acid Volatile Sulfide	umol/g											
Arsenic	umol/g											
Cadmium	umol/g											
Copper	umol/g											
Lead	umol/g											
Zinc	umol/g											
<b>Metals - Leachate</b>												
Lead	ug/L											
<b>Per and Polyfluorinated Organic Substances</b>												
Perfluorobutane Sulfonic Acid	mg/kg											
Perfluorobutanoic Acid	mg/kg											
Perfluorodecane Sulfonic Acid	mg/kg											
Perfluorodecanoic Acid	mg/kg											
Perfluorododecanoic Acid	mg/kg											
Perfluoroheptanoic Acid	mg/kg											
Perfluorohexane Sulfonic Acid	mg/kg											
Perfluorohexanoic Acid	mg/kg											
Perfluorononanoic Acid	mg/kg											
Perfluorooctane Sulfonamide	mg/kg											
Perfluoropentanoic Acid	mg/kg											
Perfluorotetradecanoic Acid	mg/kg											
Perfluorotridecanoic Acid	mg/kg											
Perfluoroundecanoic Acid	mg/kg											
PFOA	mg/kg										0.00064	U
PFOA(trial)	mg/kg										0.00064	U
PFOS	mg/kg										0.00015	U
PFOS (trial)	mg/kg										0.00015	U
<b>Pesticides and Herbicides</b>												
4,4'-DDD	mg/kg											
4,4'-DDE	mg/kg											
4,4'-DDT	mg/kg											
Aldrin	mg/kg											
Alpha Chlordane	mg/kg											
Alpha-BHC	mg/kg											
beta-BHC	mg/kg											
delta-BHC	mg/kg											
Dieldrin	mg/kg											
Endosulfan I	mg/kg											
Endosulfan II	mg/kg											
Endosulfan Sulfate	mg/kg											
Endrin	mg/kg											
Endrin Aldehyde	mg/kg											
Endrin Ketone	mg/kg											
Gamma Chlordane	mg/kg											

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Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-SWMU5/HC											
Field Sample ID	23716454	23716455	23716456	23716457	23716459	23716460	23716462	23716463	23716464	23716465	23948641	
Location ID	DER2-21-SD	DER2-21-SD	DER2-21-SD	DER2-21-SD	DER2-22-SD	DER2-22-SD	DER2-25-SD	DER2-25-SD	DER2-25-SD	DER2-25-SD	DER2-25-SD	DER1-18
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50
Sample Purpose	FS	DUP	FS	DUP	FS	FS	FS	DUP	FS	DUP	FS	FS
Date	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	4/22/2010
Chemical Class												
Chemical	Units											
Heptachlor	mg/kg											
Heptachlor Epoxide	mg/kg											
Lindane	mg/kg											
Methoxychlor	mg/kg											
Toxaphene	mg/kg											
<b>Physical Properties</b>												
0.001 MM	% PASSING	0.5	0.5			0.5	U		0.5	U	0.5	U
0.002 MM	% PASSING	0.5	0.5			2			0.5	U	0.5	U
0.005 MM	% PASSING	1	1.5			5			1		1	
0.02 MM	% PASSING	3.5	4			11			2.5		2.5	
0.05 MM	% PASSING	5	5			16.5			4		3	
0.064 MM	% PASSING	5.5	6			21			4		4	
0.075 MM	% PASSING	5.9	6.7			22.9			3.8		4.5	
0.15 MM	% PASSING	9	10.4			34.6			7.7		8.6	
0.3 MM	% PASSING	20.7	23.6			66			42.5		34.5	
0.6 MM	% PASSING	33.6	35.8			77.1			84		80.1	
1.18 MM	% PASSING	45.6	44.6			81.8			94.6		94.2	
19 MM	% PASSING	98.3	93.6			100			100		100	
2.36 MM	% PASSING	60.3	53.4			89.6			97.5		98.3	
3.35 MM	% PASSING	65.7	57.8			93.6			98.2		99.1	
37.5 MM	% PASSING	100	100			100			100		100	
4.75 MM	% PASSING	73.6	63.1			97.4			98.8		99.5	
75 MM	% PASSING	100	100			100			100		100	
Density	PCF											
<b>Polychlorinated Biphenyls - TICs</b>												
1,1'-Biphenyl, 2,3-dichloro-	mg/kg											
Unknown Biphenyl	mg/kg											
<b>Polychlorinated Biphenyls</b>												
Heptachlorobiphenyl	mg/kg											
Hexachlorobiphenyl	mg/kg											
Octachlorobiphenyl	mg/kg											
PCB 1	mg/kg											
PCB 10	mg/kg											
PCB 100	mg/kg											
PCB 101	mg/kg											
PCB 102	mg/kg											
PCB 103	mg/kg											
PCB 104	mg/kg											
PCB 105	mg/kg											
PCB 106	mg/kg											
PCB 107	mg/kg											
PCB 107/123	mg/kg											
PCB 108	mg/kg											
PCB 109	mg/kg											
PCB 11	mg/kg											
PCB 110	mg/kg											
PCB 111	mg/kg											
PCB 112	mg/kg											
PCB 113	mg/kg											
PCB 114	mg/kg											
PCB 115	mg/kg											
PCB 116	mg/kg											
PCB 117	mg/kg											
PCB 118	mg/kg											
PCB 119	mg/kg											
PCB 12	mg/kg											
PCB 120	mg/kg											
PCB 121	mg/kg											
PCB 121/95/88	mg/kg											
PCB 122	mg/kg											
PCB 123	mg/kg											
PCB 124	mg/kg											
PCB 125	mg/kg											
PCB 126	mg/kg											
PCB 127	mg/kg											
PCB 128	mg/kg											
PCB 129	mg/kg											
PCB 129/158	mg/kg											
PCB 13	mg/kg											
PCB 130	mg/kg											
PCB 130/164	mg/kg											
PCB 131	mg/kg											
PCB 132	mg/kg											
PCB 133	mg/kg											
PCB 134	mg/kg											
PCB 135	mg/kg											

Table A-1  
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Deepwater, New Jersey

River Zone	MZ-SWMU5/HC											
Field Sample ID	23716454	23716455	23716456	23716457	23716459	23716460	23716462	23716463	23716464	23716465	23948641	
Location ID	DER2-21-SD	DER2-21-SD	DER2-21-SD	DER2-21-SD	DER2-22-SD	DER2-22-SD	DER2-25-SD	DER2-25-SD	DER2-25-SD	DER2-25-SD	DER2-25-SD	DER1-18
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50
Sample Purpose	FS	DUP	FS	DUP	FS	FS	FS	DUP	FS	DUP	FS	FS
Date	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	4/22/2010
Chemical Class												
Chemical	Units											
PCB 136	mg/kg											
PCB 137	mg/kg											
PCB 138	mg/kg											
PCB 139	mg/kg											
PCB 14	mg/kg											
PCB 140	mg/kg											
PCB 141	mg/kg											
PCB 142	mg/kg											
PCB 143	mg/kg											
PCB 143/139	mg/kg											
PCB 144	mg/kg											
PCB 145	mg/kg											
PCB 146	mg/kg											
PCB 147	mg/kg											
PCB 148	mg/kg											
PCB 149	mg/kg											
PCB 15	mg/kg											
PCB 150	mg/kg											
PCB 151	mg/kg											
PCB 152	mg/kg											
PCB 153	mg/kg											
PCB 154	mg/kg											
PCB 155	mg/kg											
PCB 156	mg/kg											
PCB 157	mg/kg											
PCB 158	mg/kg											
PCB 159	mg/kg											
PCB 16	mg/kg											
PCB 160	mg/kg											
PCB 161	mg/kg											
PCB 162	mg/kg											
PCB 163	mg/kg											
PCB 163/160	mg/kg											
PCB 164	mg/kg											
PCB 165	mg/kg											
PCB 166	mg/kg											
PCB 167	mg/kg											
PCB 168	mg/kg											
PCB 169	mg/kg											
PCB 17	mg/kg											
PCB 170	mg/kg											
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PCB 175	mg/kg											
PCB 176	mg/kg											
PCB 177	mg/kg											
PCB 178	mg/kg											
PCB 179	mg/kg											
PCB 18	mg/kg											
PCB 180	mg/kg											
PCB 181	mg/kg											
PCB 182	mg/kg											
PCB 182/175	mg/kg											
PCB 183	mg/kg											
PCB 184	mg/kg											
PCB 185	mg/kg											
PCB 186	mg/kg											
PCB 187	mg/kg											
PCB 188	mg/kg											
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PCB 192	mg/kg											
PCB 193	mg/kg											
PCB 194	mg/kg											
PCB 195	mg/kg											
PCB 196	mg/kg											
PCB 197	mg/kg											
PCB 198	mg/kg											
PCB 199	mg/kg											
PCB 2	mg/kg											
PCB 20	mg/kg											
PCB 200	mg/kg											

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Field Sample ID	23716454	23716455	23716456	23716457	23716459	23716460	23716462	23716463	23716464	23716465	23948641	
Location ID	DER2-21-SD	DER2-21-SD	DER2-21-SD	DER2-21-SD	DER2-22-SD	DER2-22-SD	DER2-25-SD	DER2-25-SD	DER2-25-SD	DER2-25-SD	DER2-25-SD	DER1-18
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50
Sample Purpose	FS	DUP	FS	DUP	FS	FS	FS	DUP	FS	DUP	FS	FS
Date	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	4/22/2010
Chemical Class	Units											
PCB 201	mg/kg											
PCB 202	mg/kg											
PCB 203	mg/kg											
PCB 204	mg/kg											
PCB 204/200	mg/kg											
PCB 205	mg/kg											
PCB 206	mg/kg											
PCB 207	mg/kg											
PCB 208	mg/kg											
PCB 209	mg/kg											
PCB 21	mg/kg											
PCB 21/20	mg/kg											
PCB 22	mg/kg											
PCB 23	mg/kg											
PCB 24	mg/kg											
PCB 25	mg/kg											
PCB 26	mg/kg											
PCB 27	mg/kg											
PCB 28	mg/kg											
PCB 29	mg/kg											
PCB 3	mg/kg											
PCB 30	mg/kg											
PCB 31	mg/kg											
PCB 32	mg/kg											
PCB 33	mg/kg											
PCB 34	mg/kg											
PCB 35	mg/kg											
PCB 36	mg/kg											
PCB 37	mg/kg											
PCB 38	mg/kg											
PCB 39	mg/kg											
PCB 4	mg/kg											
PCB 4/10	mg/kg											
PCB 40	mg/kg											
PCB 41	mg/kg											
PCB 42	mg/kg											
PCB 43	mg/kg											
PCB 44	mg/kg											
PCB 45	mg/kg											
PCB 46	mg/kg											
PCB 47	mg/kg											
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PCB 56	mg/kg											
PCB 57	mg/kg											
PCB 58	mg/kg											
PCB 59	mg/kg											
PCB 6	mg/kg											
PCB 60	mg/kg											
PCB 61	mg/kg											
PCB 62	mg/kg											
PCB 63	mg/kg											
PCB 64	mg/kg											
PCB 65	mg/kg											
PCB 65/75/62	mg/kg											
PCB 66	mg/kg											
PCB 67	mg/kg											
PCB 67/58	mg/kg											
PCB 68	mg/kg											
PCB 68/64	mg/kg											
PCB 69	mg/kg											
PCB 7	mg/kg											
PCB 70	mg/kg											
PCB 71	mg/kg											
PCB 72	mg/kg											
PCB 73	mg/kg											
PCB 73/46	mg/kg											
PCB 74	mg/kg											
PCB 75	mg/kg											

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Deepwater, New Jersey

Chemical Class	River Zone	MZ-SWMU5/HC										
Chemical	Field Sample ID	23716454	23716455	23716456	23716457	23716459	23716460	23716462	23716463	23716464	23716465	23948641
Units	Location ID	DER2-21-SD	DER2-21-SD	DER2-21-SD	DER2-21-SD	DER2-22-SD	DER2-22-SD	DER2-25-SD	DER2-25-SD	DER2-25-SD	DER2-25-SD	DER1-18
	Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50
	Sample Purpose	FS	DUP	FS	DUP	FS	FS	FS	DUP	FS	DUP	FS
	Date	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	4/22/2010
PCB 76	mg/kg											
PCB 77	mg/kg											
PCB 78	mg/kg											
PCB 79	mg/kg											
PCB 8	mg/kg											
PCB 80	mg/kg											
PCB 81	mg/kg											
PCB 82	mg/kg											
PCB 83	mg/kg											
PCB 83/125/112	mg/kg											
PCB 84	mg/kg											
PCB 85	mg/kg											
PCB 86	mg/kg											
PCB 86/109	mg/kg											
PCB 87	mg/kg											
PCB 87/111	mg/kg											
PCB 88	mg/kg											
PCB 89	mg/kg											
PCB 89/84	mg/kg											
PCB 9	mg/kg											
PCB 90	mg/kg											
PCB 91	mg/kg											
PCB 92	mg/kg											
PCB 93	mg/kg											
PCB 94	mg/kg											
PCB 95	mg/kg											
PCB 96	mg/kg											
PCB 97	mg/kg											
PCB 98	mg/kg											
PCB 99	mg/kg											
PCB-100/93	mg/kg											
PCB-107/124	mg/kg											
PCB-108/119/86/97/125/87	mg/kg											
PCB-113/90/101	mg/kg											
PCB-116/85	mg/kg											
PCB-128/166	mg/kg											
PCB-13/12	mg/kg											
PCB-139/140	mg/kg											
PCB-147/149	mg/kg											
PCB-151/135	mg/kg											
PCB-153/168	mg/kg											
PCB-156/157	mg/kg											
PCB-163/138/129	mg/kg											
PCB-171/173	mg/kg											
PCB-180/193	mg/kg											
PCB-198/199	mg/kg											
PCB-21/33	mg/kg											
PCB-26/29	mg/kg											
PCB-28/20	mg/kg											
PCB-30/18	mg/kg											
PCB-44/47/65	mg/kg											
PCB-50/53	mg/kg											
PCB-59/62/75	mg/kg											
PCB-61/70/74/76	mg/kg											
PCB-69/49	mg/kg											
PCB-71/40	mg/kg											
PCB-90/101	mg/kg											
Pentachlorobiphenyl	mg/kg											
Tetrachlorobiphenyl	mg/kg											
Total Decachlorobiphenyls (congeners)	mg/kg											
Total Dichlorobiphenyls (congeners)	mg/kg											
Total Heptachlorobiphenyls (congeners)	mg/kg											
Total Hexachlorobiphenyls (congeners)	mg/kg											
Total Monochlorobiphenyls (congeners)	mg/kg											
Total Nonachlorobiphenyls (congeners)	mg/kg											
Total Octachlorobiphenyls (congeners)	mg/kg											
Total PCB (congeners)	mg/kg											
Total Pentachlorobiphenyls (congeners)	mg/kg											
Total Tetrachlorobiphenyls (congeners)	mg/kg											
Total Trichlorobiphenyls (congeners)	mg/kg											
Trichlorobiphenyl (total)	mg/kg											
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>												
Benzo[e]pyrene	mg/kg											
Chrysene, 1-methyl-	mg/kg											
Naphthalene, 1-methyl-	mg/kg											
Pyrene, 1-methyl-	mg/kg											

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	MZ-SWMU5/HC											
Field Sample ID	23716454	23716455	23716456	23716457	23716459	23716460	23716462	23716463	23716464	23716465	23948641	
Location ID	DER2-21-SD	DER2-21-SD	DER2-21-SD	DER2-21-SD	DER2-22-SD	DER2-22-SD	DER2-25-SD	DER2-25-SD	DER2-25-SD	DER2-25-SD	DER1-18	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	
Sample Purpose	FS	DUP	FS	DUP	FS	FS	FS	DUP	FS	DUP	FS	
Date	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	4/22/2010	
Chemical Class												
Chemical												
Units												
<b>Polycyclic Aromatic Hydrocarbons</b>												
Acenaphthene	mg/kg	0.053	0.073			0.13	U		0.046	U	0.045	U
Acenaphthylene	mg/kg	0.044	0.051			0.13	U		0.046	U	0.045	U
Anthracene	mg/kg	0.15	0.15			0.13	U		0.15	U	0.097	U
Benzo(A)Anthracene	mg/kg	0.51	0.54			0.13	U		0.17	U	0.085	U
Benzo(B)Fluoranthene	mg/kg	0.34	0.44			0.13	U		0.16	U	0.11	U
Benzo(G,H,I)Perylene	mg/kg	0.17	0.16			0.13	U		0.063	U	0.045	U
Benzo(K)Fluoranthene	mg/kg	0.13	0.12			0.13	U		0.049	U	0.045	U
Benzo(A)Pyrene	mg/kg	0.39	0.39			0.13	U		0.13	U	0.076	U
Chrysene	mg/kg	0.74	1.1			0.13	U		0.24	U	0.13	U
Dibenz(A,H)Anthracene	mg/kg	0.05	0.064			0.13	U		0.046	U	0.045	U
Fluoranthene	mg/kg	0.47	0.47			0.13	U		0.42	U	0.098	U
Fluorene	mg/kg	0.052	0.081			0.13	U		0.046	U	0.045	U
Indeno (1,2,3-CD) Pyrene	mg/kg	0.12	0.14			0.13	U		0.056	U	0.045	U
Naphthalene	mg/kg	0.11	0.15			0.13	U		0.15	U	0.094	U
Phenanthrene	mg/kg	0.21	0.29			0.13	U		0.089	U	0.059	U
Pyrene	mg/kg	1	0.95			0.14	U		0.5	U	0.14	U
Total PAHs (Detections + 1/2 MDL)	mg/kg	4.517	5.169			1.115	U		2.269	U	1.0465	U
Total PAHs (Detections Only)	mg/kg	4.495	5.169			0.14	U		2.177	U	0.889	U
<b>Semivolatile Organic Compounds - TICs</b>												
1,2,4-Trithiolane	mg/kg											
1,4-Benzenediol, 2-chloro-	mg/kg											
11H-Benzo[b]fluorene	mg/kg											
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg											
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg											
3-PENTEN-2-ONE, 4-METHYL-	mg/kg											
7H-Benz[de]anthracen-7-one	mg/kg											
9,10-Anthracenedione	mg/kg											
9-Octadecenamamide, (Z)-	mg/kg											
Acetamide, 2-chloro-N-(ethox	mg/kg											
Alachlor	mg/kg											
Benzenamine, 3-methyl-	mg/kg											
Benzenamine, 4,4',4"-methy	mg/kg											
Benzenamine, 4,4'-methyleneb	mg/kg											
Benzene, 1,2,3,4-tetrachloro	mg/kg											
Benzene, 1,2,3,5-tetrachloro	mg/kg											
Benzene, 1,2,3-trichloro-	mg/kg											
Benzene, 1,3,5-trichloro-	mg/kg											
Benzene, 1,3-bis(1-methyleth	mg/kg											
Benzene, 1,4-bis(1-methyleth	mg/kg											
Benzofuran, 2,3-dihydro-	mg/kg											
CYCLIC OCTAATOMIC SULFUR	mg/kg											
Diphenyl Ether	mg/kg											
Docosane	mg/kg											
Heneicosane	mg/kg											
Hexacosane	mg/kg											
Hexadecane	mg/kg											
Hexatriacontane	mg/kg											
m-Chloroaniline	mg/kg											
N,N-Diethylaniline	mg/kg											
n-Hexadecanoic acid	mg/kg											
Nonadecane	mg/kg											
o-Chloroaniline	mg/kg											
Octacosane	mg/kg											
Octadecane	mg/kg											
Octadecane, 1-chloro-	mg/kg											
Octadecanoic acid	mg/kg											
Parachlorophenol	mg/kg											
Pentadecane	mg/kg											
Perylene	mg/kg											
Phenol, 2,5-dichloro-	mg/kg											
Phenol, 3-chloro-	mg/kg											
Phenol, 4,4'-(1-methylethyl)	mg/kg											
Tetracosane	mg/kg											
Tetradecane	mg/kg											
Tetraethylene glycol	mg/kg											
Total SVOC TICs	mg/kg											
Triacotane	mg/kg											
Tributyl phosphate	mg/kg											
Tridecanoic acid	mg/kg											
Triphenyl phosphate	mg/kg											
UNKNOWN	mg/kg	1.8432	1.0824			3.32			4.004	0.9868		
Unknown acid	mg/kg											
Unknown Alcohol	mg/kg											
Unknown Aldol Condensate	mg/kg											
UNKNOWN ALKANE	mg/kg											

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	MZ-SWMU5/HC											
Field Sample ID	23716454	23716455	23716456	23716457	23716459	23716460	23716462	23716463	23716464	23716465	23948641	
Location ID	DER2-21-SD	DER2-21-SD	DER2-21-SD	DER2-21-SD	DER2-22-SD	DER2-22-SD	DER2-25-SD	DER2-25-SD	DER2-25-SD	DER2-25-SD	DER1-18	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	
Sample Purpose	FS	DUP	FS	DUP	FS	FS	FS	DUP	FS	DUP	FS	
Date	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	4/22/2010	
Chemical Class												
Chemical												
Units												
Unknown Alkene	mg/kg											
Unknown Amide	mg/kg											
Unknown Amine	mg/kg											
UNKNOWN AROMATIC	mg/kg											
Unknown Carboxylic Acid	mg/kg											
Unknown Cycloalkane	mg/kg											
Unknown Hydrocarbon	mg/kg											
Unknown Ketone	mg/kg											
Unknown PAH	mg/kg											
UNKNOWN SILOXANE	mg/kg											
<b>Semivolatile Organic Compounds</b>												
1,2,4-Trichlorobenzene	mg/kg	0.094	0.13			0.13	U		0.12	0.11		
1,2-Diphenylhydrazine	mg/kg	0.044	U	0.045	U				0.046	U	0.045	U
1,4-Dioxane	mg/kg											
1-Naphthylamine	mg/kg	0.22	U	0.27		0.64	U		0.23	U	0.23	U
2,3,4,6-Tetrachlorophenol	mg/kg											
2,4,5-Trichlorophenol	mg/kg											
2,4,6-Trichlorophenol	mg/kg	0.044	U	0.045	U	0.13	U		0.046	U	0.045	U
2,4-Dichlorophenol	mg/kg	0.044	U	0.045	U	0.13	U		0.046	U	0.045	U
2,4-Dimethylphenol	mg/kg	0.088	U	0.09	U	0.26	U		0.093	U	0.09	U
2,4-Dinitrophenol	mg/kg	0.88	U	0.9	U	2.6	U		0.93	U	0.9	U
2,4-Dinitrotoluene	mg/kg	0.088	U	0.09	U	0.26	U		0.093	U	5.2	
2,6-Dinitrotoluene	mg/kg	0.044	U	0.045	U	0.13	U		0.046	U	0.42	
2-Chloronaphthalene	mg/kg	0.044	U	0.068		0.13	U		0.046	U	0.045	U
2-Chlorophenol	mg/kg	0.044	U	0.045	U	0.13	U		0.046	U	0.045	U
2-Methylnaphthalene	mg/kg											
2-Methylphenol (O-Cresol)	mg/kg											
2-Naphthylamine	mg/kg	0.22	U	0.22	U	0.64	U		0.23	U	0.23	U
2-Nitroaniline	mg/kg											
2-Nitrophenol	mg/kg	0.044	U	0.045	U	0.13	U		0.046	U	0.045	U
3,3'-Dichlorobenzidine	mg/kg	0.13	U	0.13	U	0.39	U		0.14	U	0.14	U
3,3'-Dimethylbenzidine	mg/kg											
3-Nitroaniline	mg/kg											
4,6-Dinitro-2-Methylphenol	mg/kg	0.22	U	0.22	U	0.64	U		0.23	U	0.23	U
4-Aminobiphenyl	mg/kg	0.22	U	0.22	U	0.64	U		0.23	U	0.23	U
4-Bromophenyl Phenyl Ether	mg/kg	0.044	U	0.045	U	0.13	U		0.046	U	0.045	U
4-Chloro-3-Methylphenol	mg/kg	0.088	U	0.09	U	0.26	U		0.093	U	0.09	U
4-Chloroaniline	mg/kg	0.16		0.32		0.26	U		0.093	U	0.09	U
4-Chlorophenyl Phenyl Ether	mg/kg	0.044	U	0.045	U	0.13	U		0.046	U	0.045	U
4-Methylphenol (P-Cresol)	mg/kg											
4-Nitroaniline	mg/kg											
4-Nitrophenol	mg/kg	0.22	U	0.22	U	0.64	U		0.23	U	0.23	U
Acetophenone	mg/kg											
Aniline	mg/kg	0.22	U	0.3		0.64	U		0.23	U	0.23	U
Benzidine	mg/kg	1.5	U	1.6	U	4.5	U		1.6	U	1.6	U
Biphenyl	mg/kg											
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg											
Bis(2-Chloroethoxy)Methane	mg/kg	0.044	U	0.045	U	0.13	U		0.046	U	0.045	U
Bis(2-Chloroethyl)Ether	mg/kg	0.044	U	0.045	U	0.13	U		0.046	U	0.045	U
Bis(2-Chloroisopropyl)Ether	mg/kg	0.044	U	0.045	U	0.13	U		0.046	U	0.045	U
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.1		0.13		0.26	U		0.13		0.12	
Butyl Benzyl Phthalate	mg/kg	0.088	U	0.09	U	0.26	U		0.093	U	0.09	U
Carbazole	mg/kg	0.044	U	0.045	U	0.13	U		0.046	U	0.045	U
Dibenzofuran	mg/kg											
Diethyl Phthalate	mg/kg	0.088	U	0.09	U	0.26	U		0.093	U	0.09	U
Dimethyl Phthalate	mg/kg	0.088	U	0.09	U	0.26	U		0.093	U	0.09	U
Di-N-Butyl Phthalate	mg/kg	0.088	U	0.09	U	0.26	U		0.093	U	6.4	
Diphenyl Ether	mg/kg											
Hexachlorobenzene	mg/kg	0.044	U	0.045	U	0.13	U		0.046	U	0.045	U
Hexachlorobutadiene	mg/kg	0.088	U	0.09	U	0.26	U		0.093	U	0.09	U
Hexachlorocyclopentadiene	mg/kg	0.22	U	0.22	U	0.64	U		0.23	U	0.23	U
Hexachloroethane	mg/kg	0.044	U	0.045	U	0.13	U		0.046	U	0.045	U
Hexachloropropylene	mg/kg											
Isophorone	mg/kg	0.044	U	0.045	U	0.13	U		0.046	U	0.045	U
N-Dioctyl Phthalate	mg/kg	0.088	U	0.09	U	0.26	U		0.093	U	0.09	U
Nitrobenzene	mg/kg	0.044	U	0.48		0.21			0.046	U	0.045	U
N-Nitrosodimethylamine	mg/kg	0.088	U	0.09	U	0.26	U		0.093	U	0.09	U
N-Nitrosodi-N-Propylamine	mg/kg	0.044	U	0.045	U	0.13	U		0.046	U	0.045	U
N-Nitrosodiphenylamine	mg/kg	0.05		0.074		0.13	U		0.44		0.78	
O-Toluidine	mg/kg	0.26	U	0.27	U	0.77	U		0.26	U	0.27	U
Parathion	mg/kg											
Pentachlorobenzene	mg/kg											
Pentachlorophenol	mg/kg	0.22	U	0.22	U	0.64	U		0.23	U	0.23	U
Phenol	mg/kg	0.044	U	0.058		0.13	U		0.046	U	0.045	U
<b>Volatile Organic Compounds - TICs</b>												
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg											

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-SWMU5/HC												
Field Sample ID	23716454	23716455	23716456	23716457	23716459	23716460	23716462	23716463	23716464	23716465	23948641		
Location ID	DER2-21-SD	DER2-21-SD	DER2-21-SD	DER2-21-SD	DER2-22-SD	DER2-22-SD	DER2-25-SD	DER2-25-SD	DER2-25-SD	DER2-25-SD	DER1-18		
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50		
Sample Purpose	FS	DUP	FS	DUP	FS	FS	FS	DUP	FS	DUP	FS		
Date	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	4/22/2010		
Chemical Class	Units												
1-Butene	mg/kg												
1-Heptene	mg/kg												
1-Propene, 2-methyl-	mg/kg												
Azulene	mg/kg												
BENZENE, 1,2,4-TRICHLORO-	mg/kg												
BENZENE, 1,2-DICHLORO-	mg/kg												
BENZENE, 1,4-DICHLORO-	mg/kg												
Camphene	mg/kg												
CYCLOHEXANE	mg/kg												
Cyclohexane, methyl-	mg/kg												
Cyclotrisiloxane, hexamethyl	mg/kg												
Diphenyl Ether	mg/kg												
Ethane, 1,1,2,2-tetrachloro-	mg/kg												
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg												
Ethane, 1,2-dichloro-1,1-dif	mg/kg												
Ethene, 1,1-dichloro-2,2-dif	mg/kg												
Hexane, 2-methyl-	mg/kg												
Hexane, 3-methyl-	mg/kg												
METHANE, CHLOROFLUORO-	mg/kg												
Naphthalene	mg/kg												
NAPHTHALENE, 2-METHYL-	mg/kg												
Nonanal	mg/kg												
Norflurane	mg/kg												
Pentane, 2,3-dimethyl-	mg/kg												
Phenol, 4-(1,1,3,3-tetrameth	mg/kg												
Propene	mg/kg												
Sulfur dioxide	mg/kg												
Tridecane	mg/kg												
UNKNOWN	mg/kg			0.037	0.041				0.055533333	0.053866667			
UNKNOWN ALICYCLIC	mg/kg												
UNKNOWN ALIPHATIC	mg/kg												
UNKNOWN ALKANE	mg/kg												
UNKNOWN AROMATIC	mg/kg												
UNKNOWN SILOXANE	mg/kg			0.012	0.018		0.0375						
<b>Volatile Organic Compounds</b>													
1,1,1,2-Tetrachloroethane	mg/kg												
1,1,1-Trichloroethane	mg/kg			0.001	U	0.001	U		0.005	U			
1,1,1-Trichlorotrifluoroethane	mg/kg										0.001	U	
1,1,2,2-Tetrachloroethane	mg/kg			0.001	U	0.001	U		0.005	U		0.001	U
1,1,2-Trichloroethane	mg/kg			0.001	U	0.001	U		0.005	U		0.001	U
1,1,2-Trichlorotrifluoroethane	mg/kg			0.002	U	0.002	U		0.011	U		0.003	U
1,1,2-Trifluoroethane	mg/kg											0.002	U
1,1-Dichloro-1-Fluoroethane	mg/kg												
1,1-Dichloroethane	mg/kg			0.001	U	0.001	U		0.005	U		0.001	U
1,1-Dichloroethene	mg/kg			0.001	U	0.001	U		0.005	U		0.001	U
1,1-Dichloropropene	mg/kg												
1,2,4-Trimethylbenzene	mg/kg												
1,2-Dibromoethane (EDB)	mg/kg												
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg												
1,2-Dichloro-1-Fluoroethane	mg/kg												
1,2-Dichlorobenzene	mg/kg	0.7	0.87			0.44		0.26	0.24				
1,2-Dichloroethane	mg/kg			0.001	U	0.001	U		0.005	U		0.001	U
1,2-Dichloroethene	mg/kg												
1,2-Dichloropropane	mg/kg			0.001	U	0.001	U		0.005	U		0.001	U
1,2-Dichlorotetrafluoroethane	mg/kg												
1,3,5-Trimethylbenzene	mg/kg												
1,3-Dichlorobenzene	mg/kg	0.044	U	0.05		0.13	U	0.046	U	0.045	U		
1,4-Dichlorobenzene	mg/kg	0.26		0.25		0.24		0.34	0.36				
1-Chloro-1,1-Difluoroethane	mg/kg												
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg												
2-Chloro-1,1,1-Trifluoroethane	mg/kg												
2-Chloroethyl Vinyl Ether	mg/kg												
2-Chlorotoluene	mg/kg												
2-Hexanone	mg/kg												
4-Chlorotoluene	mg/kg												
4-Isopropyltoluene	mg/kg												
Acetone	mg/kg			0.008	U	0.007	U	0.072		0.02		0.018	
Acrolein	mg/kg			0.023	U	0.021	U	0.11	U	0.025	U	0.024	U
Acrylonitrile	mg/kg			0.005	U	0.004	U	0.021	U	0.005	U	0.005	U
Benzene	mg/kg			0.005		0.004		0.003	U	0.003		0.003	
Bromodichloromethane	mg/kg			0.001	U	0.001	U	0.005	U	0.001	U	0.001	U
Bromoform	mg/kg			0.001	U	0.001	U	0.005	U	0.001	U	0.001	U
Carbon Disulfide	mg/kg			0.001	U	0.001	U	0.005	U	0.011		0.01	
Carbon Tetrachloride	mg/kg			0.001	U	0.001	U	0.005	U	0.001	U	0.001	U
CFC-1113	mg/kg												
Chlorobenzene	mg/kg			0.032		0.028		0.005	U	0.11		0.1	

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	MZ-SWMU5/HC												
Field Sample ID	23716454	23716455	23716456	23716457	23716459	23716460	23716462	23716463	23716464	23716465	23948641		
Location ID	DER2-21-SD	DER2-21-SD	DER2-21-SD	DER2-21-SD	DER2-22-SD	DER2-22-SD	DER2-25-SD	DER2-25-SD	DER2-25-SD	DER2-25-SD	DER1-18		
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50		
Sample Purpose	FS	DUP	FS	DUP	FS	FS	FS	DUP	FS	DUP	FS		
Date	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	4/22/2010		
Chemical Class	Units												
Chlorodibromomethane	mg/kg			0.001	U	0.001	U			0.001	U	0.001	U
Chlorodifluoromethane	mg/kg												
Chlorofluoromethane	mg/kg												
Chloroform	mg/kg			0.001		0.001	U			0.001	U	0.001	U
Chloropentafluoroethane	mg/kg												
cis-1,2-Dichloroethene	mg/kg			0.003		0.003				0.001	U	0.001	U
cis-1,3-Dichloropropene	mg/kg			0.001	U	0.001	U			0.001	U	0.001	U
Cumene	mg/kg												
Dichlorodifluoromethane	mg/kg			0.002	U	0.002	U			0.003	U	0.002	U
Dichlorofluoromethane	mg/kg			0.003		0.003				0.003	U	0.002	U
Ethane	ug/L												
Ethyl Chloride	mg/kg			0.002	U	0.002	U			0.003	U	0.002	U
Ethylbenzene	mg/kg			0.001	U	0.001	U			0.001	U	0.001	U
Fluoromethane	mg/kg												
Hexane	mg/kg												
Isobutyl Alcohol	mg/kg												
Meta- And Para-Xylene	mg/kg												
Methacrylonitrile	mg/kg												
Methane	ug/L												
Methyl Bromide	mg/kg			0.002	U	0.002	U			0.003	U	0.002	U
Methyl Chloride	mg/kg			0.002	U	0.002	U			0.003	U	0.002	U
Methyl Ethyl Ketone	mg/kg												
Methyl Isobutyl Ketone	mg/kg												
Methyl Methacrylate	mg/kg												
Methyl Tertiary Butyl Ether	mg/kg												
Methylene Chloride	mg/kg			0.006		0.002	U			0.003	U	0.002	U
N-Butylbenzene	mg/kg												
N-Propylbenzene	mg/kg												
Ortho-Xylene	mg/kg												
Propionitrile	mg/kg												
sec-Butylbenzene	mg/kg												
Styrene	mg/kg												
tert-Butylbenzene	mg/kg												
Tetrachloroethene	mg/kg			0.001	U	0.001	U			0.001	U	0.001	U
Tetrahydrofuran	mg/kg												
Toluene	mg/kg			0.001	U	0.001	U			0.002		0.002	
trans-1,2-Dichloroethene	mg/kg			0.001	U	0.001	U			0.001	U	0.001	U
trans-1,3-Dichloropropene	mg/kg			0.001	U	0.001	U			0.001	U	0.001	U
Trichloroethene	mg/kg			0.002		0.002				0.001	U	0.001	U
Trichlorofluoromethane	mg/kg			0.002	U	0.002	U			0.003	U	0.002	U
Vinyl Chloride	mg/kg			0.001		0.002				0.001	U	0.001	U
Vinyl Fluoride	mg/kg												
Xylenes	mg/kg			0.001	U	0.001	U			0.006		0.006	

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-SWMU5/HC	CARNEYS PT	CARNEYS PT										
Field Sample ID	24055314	24834718	24847996	24847997	24847999	24848000	24848001	24895128	24911674	10896467	10896541		
Location ID	DER2-23-SD	DER3-15	DER3-13	DER3-13	DER3-14	DER3-14	DER3-15	DER3-16	DER3-16	52-R-1	52-R-2		
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50		
Sample Purpose	DUP	FS											
Date	4/22/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/16/2010	11/16/2010	10/31/2000	10/31/2000		
Chemical Class	Units												
<b>General Chemistry</b>													
Black Carbon	mg/kg			2170		2240		1600		2380			
Percent Moisture	%	80.9		59.6	20.4	36.6	37	50.8	47.2	24.4	18.1	20	
Percent Solids	%												
Total Organic Carbon	mg/kg			11350		7700		12850	12250		860	1440	
<b>Metals</b>													
Aluminum	mg/kg			18100		8070		16300	13600				
Antimony	mg/kg			2.36 U		1.52 U		1.97 U	1.84 U		0.12	0.044 U	
Arsenic	mg/kg			7.4		3.37		6.54	6.4		3.9	4.2	
Barium	mg/kg			77.6		42.1		86.3	74.6				
Beryllium	mg/kg			0.978		0.558		0.888	0.756		0.45	0.46	
Cadmium	mg/kg			0.985		0.637		0.874	0.75		0.012	0.0072 U	
Calcium	mg/kg			5440		1900		5130	2880				
Chromium	mg/kg			42.3		21.7		38.6	33.9		19.1	21.2	
Cobalt	mg/kg			8.66		5.56		8.3	10.2				
Copper	mg/kg			22.9		12.9		20.8	21.2		8.8	8.5	
Iron	mg/kg			22500		13000		20600	21900				
Lead	mg/kg			32.8		18.7		31.3	33.6		4.6	6.4	
Magnesium	mg/kg			4870		2790		4520	4410				
Manganese	mg/kg			768		606		606	579				
Mercury	mg/kg			0.213		0.0787		0.198	0.109		0.053	0.036	
Nickel	mg/kg			22.4		13.1		20.4	20.1		10.7	10	
Potassium	mg/kg			3100		1370		2780	2080				
Selenium	mg/kg			2.31 U		1.49 U		1.93 U	1.8 U		0.16	0.17	
Silver	mg/kg			0.542		0.273 U		0.367 U	0.331 U				
Sodium	mg/kg			705		333		665	562				
Thallium	mg/kg			3.42 U		2.2 U		2.86 U	2.67 U				
Tin	mg/kg			7.61		3.33		6.1	4.06				
Titanium	mg/kg												
Vanadium	mg/kg			41.7		21.3		40.6	32.9				
Zinc	mg/kg			129		88		123	141		29.5	24.8	
<b>Metals - AVS/SEM</b>													
Acid Volatile Sulfide	umol/g												0.3 U
Arsenic	umol/g										0.0041	0.0049	
Cadmium	umol/g										0.0013	0.001	
Copper	umol/g										0.081	0.066	
Lead	umol/g										0.029	0.028	
Zinc	umol/g										0.092	0.09	
<b>Metals - Leachate</b>													
Lead	ug/L												
<b>Per and Polyfluorinated Organic Substances</b>													
Perfluorobutane Sulfonic Acid	mg/kg												
Perfluorobutanoic Acid	mg/kg												
Perfluorodecane Sulfonic Acid	mg/kg												
Perfluorodecanoic Acid	mg/kg												
Perfluorododecanoic Acid	mg/kg												
Perfluoroheptanoic Acid	mg/kg												
Perfluorohexane Sulfonic Acid	mg/kg												
Perfluorohexanoic Acid	mg/kg												
Perfluorononanoic Acid	mg/kg												
Perfluorooctane Sulfonamide	mg/kg												
Perfluoropentanoic Acid	mg/kg												
Perfluorotetradecanoic Acid	mg/kg												
Perfluorotridecanoic Acid	mg/kg												
Perfluoroundecanoic Acid	mg/kg												
PFOA	mg/kg												
PFOA(trial)	mg/kg												
PFOS	mg/kg												
PFOS (trial)	mg/kg												
<b>Pesticides and Herbicides</b>													
4,4'-DDD	mg/kg												
4,4'-DDE	mg/kg												
4,4'-DDT	mg/kg												
Aldrin	mg/kg												
Alpha Chlordane	mg/kg												
Alpha-BHC	mg/kg												
beta-BHC	mg/kg												
delta-BHC	mg/kg												
Dieldrin	mg/kg												
Endosulfan I	mg/kg												
Endosulfan II	mg/kg												
Endosulfan Sulfate	mg/kg												
Endrin	mg/kg												
Endrin Aldehyde	mg/kg												
Endrin Ketone	mg/kg												
Gamma Chlordane	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-SWMU5/HC	CARNEYS PT	CARNEYS PT										
Field Sample ID	24055314	24843718	24847996	24847997	24847999	24848000	24848001	24895128	24911674	10896467	10896541		
Location ID	DER2-23-SD	DER3-15	DER3-13	DER3-13	DER3-14	DER3-14	DER3-15	DER3-16	DER3-16	52-R-1	52-R-2		
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50		
Sample Purpose	DUP	FS											
Date	4/22/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/16/2010	11/16/2010	10/31/2000	10/31/2000		
Chemical Class	Units												
Heptachlor	mg/kg												
Heptachlor Epoxide	mg/kg												
Lindane	mg/kg												
Methoxychlor	mg/kg												
Toxaphene	mg/kg												
<b>Physical Properties</b>													
0.001 MM	% PASSING			4		0.5	U		3	3		10.5	8.5
0.002 MM	% PASSING			7.5		2			11	9		10	11
0.005 MM	% PASSING			11		7.5			19.5	16		11	14
0.02 MM	% PASSING			23		16.5			31	37		20	23
0.05 MM	% PASSING			35		48			60	71		37	40
0.064 MM	% PASSING			39		66.5			75	85		44	47.5
0.075 MM	% PASSING			41.5		74.8			82.5	91.1		47.5	51.8
0.15 MM	% PASSING			46.4		95.1			88.1	96.5		62.2	64
0.3 MM	% PASSING			56.2		97.1			91.7	98.7		84.1	80.2
0.6 MM	% PASSING			62.6		97.7			92.6	99.1		96.8	91.6
1.18 MM	% PASSING			66.2		98.3			93	99.4		98.6	93.5
19 MM	% PASSING			100		100			100	100		100	100
2.36 MM	% PASSING			72.6		99.1			93.2	99.6		98.9	93.7
3.35 MM	% PASSING			77.9		99.4			93.5	99.8		99.6	96.2
37.5 MM	% PASSING			100		100			100	100		100	100
4.75 MM	% PASSING			82.7		99.5			93.7	100		99.9	97.9
75 MM	% PASSING			100		100			100	100		100	100
Density	PCF												
<b>Polychlorinated Biphenyls - TICs</b>													
1,1'-Biphenyl, 2,3-dichloro-	mg/kg												
Unknown Biphenyl	mg/kg												
<b>Polychlorinated Biphenyls</b>													
Heptachlorobiphenyl	mg/kg												
Hexachlorobiphenyl	mg/kg												
Octachlorobiphenyl	mg/kg												
PCB 1	mg/kg	0.000218											
PCB 10	mg/kg	0.00000464											
PCB 100	mg/kg												
PCB 101	mg/kg												
PCB 102	mg/kg	0.0000339											
PCB 103	mg/kg	0.0000157											
PCB 104	mg/kg	0.00000123											
PCB 105	mg/kg	0.000229											
PCB 106	mg/kg	0.000000368	U										
PCB 107	mg/kg												
PCB 107/123	mg/kg												
PCB 108	mg/kg												
PCB 109	mg/kg	0.0000539											
PCB 11	mg/kg	0.00117											
PCB 110	mg/kg	0.000874											
PCB 111	mg/kg	0.0000268											
PCB 112	mg/kg	0.000000363	U										
PCB 113	mg/kg												
PCB 114	mg/kg	0.0000129											
PCB 115	mg/kg	0.000000309	U										
PCB 116	mg/kg												
PCB 117	mg/kg	0.0000186											
PCB 118	mg/kg	0.000598											
PCB 119	mg/kg												
PCB 12	mg/kg												
PCB 120	mg/kg	0.00000608											
PCB 121	mg/kg	0.00000118											
PCB 121/95/88	mg/kg												
PCB 122	mg/kg	0.00000963											
PCB 123	mg/kg	0.0000127											
PCB 124	mg/kg												
PCB 125	mg/kg												
PCB 126	mg/kg	0.0000069											
PCB 127	mg/kg	0.000000452	U										
PCB 128	mg/kg												
PCB 129	mg/kg												
PCB 129/158	mg/kg												
PCB 13	mg/kg												
PCB 130	mg/kg	0.00014											
PCB 130/164	mg/kg												
PCB 131	mg/kg	0.0000109											
PCB 132	mg/kg	0.000344											
PCB 133	mg/kg	0.000105											
PCB 134	mg/kg	0.0000517											
PCB 135	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-SWMU5/HC	CARNEYS PT	CARNEYS PT										
Field Sample ID	24055314	24834718	24847996	24847997	24847999	24848000	24848001	24895128	24911674	10896467	10896541		
Location ID	DER2-23-SD	DER3-15	DER3-13	DER3-13	DER3-14	DER3-14	DER3-15	DER3-16	DER3-16	52-R-1	52-R-2		
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50		
Sample Purpose	DUP	FS											
Date	4/22/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/16/2010	11/16/2010	10/31/2000	10/31/2000		
Chemical Class													
Chemical	Units												
PCB 136	mg/kg	0.000205											
PCB 137	mg/kg	0.000033											
PCB 138	mg/kg												
PCB 139	mg/kg												
PCB 14	mg/kg	0.000107											
PCB 140	mg/kg												
PCB 141	mg/kg	0.000138											
PCB 142	mg/kg	0.0000229											
PCB 143	mg/kg	0.00000237	U										
PCB 143/139	mg/kg												
PCB 144	mg/kg	0.0000407											
PCB 145	mg/kg	0.00000165	U										
PCB 146	mg/kg	0.000232											
PCB 147	mg/kg												
PCB 148	mg/kg	0.0000869											
PCB 149	mg/kg												
PCB 15	mg/kg	0.00026											
PCB 150	mg/kg	0.0000751											
PCB 151	mg/kg												
PCB 152	mg/kg	0.0000015											
PCB 153	mg/kg												
PCB 154	mg/kg	0.0000326											
PCB 155	mg/kg	0.0000381											
PCB 156	mg/kg												
PCB 157	mg/kg												
PCB 158	mg/kg	0.00008											
PCB 159	mg/kg	0.00000408	U										
PCB 16	mg/kg	0.0000838											
PCB 160	mg/kg	0.0000684											
PCB 161	mg/kg	0.00000171	U										
PCB 162	mg/kg	0.0000589											
PCB 163	mg/kg												
PCB 163/160	mg/kg												
PCB 164	mg/kg	0.000134											
PCB 165	mg/kg	0.00000125											
PCB 166	mg/kg												
PCB 167	mg/kg	0.0000966											
PCB 168	mg/kg												
PCB 169	mg/kg	0.00000705											
PCB 17	mg/kg	0.0000636											
PCB 170	mg/kg	0.000201											
PCB 171	mg/kg												
PCB 172	mg/kg	0.0000612											
PCB 173	mg/kg												
PCB 174	mg/kg	0.000261											
PCB 175	mg/kg	0.0000217											
PCB 176	mg/kg	0.0000462											
PCB 177	mg/kg	0.000136											
PCB 178	mg/kg	0.0000701											
PCB 179	mg/kg	0.000133											
PCB 18	mg/kg												
PCB 180	mg/kg												
PCB 181	mg/kg	0.0000028											
PCB 182	mg/kg	0.00000403											
PCB 182/175	mg/kg												
PCB 183	mg/kg	0.000144											
PCB 184	mg/kg	0.0000258											
PCB 185	mg/kg	0.00000528	U										
PCB 186	mg/kg	0.00000174	U										
PCB 187	mg/kg	0.000398											
PCB 188	mg/kg	0.0000589											
PCB 189	mg/kg	0.0000197											
PCB 19	mg/kg	0.0000296											
PCB 190	mg/kg	0.0000462											
PCB 191	mg/kg	0.0000121											
PCB 192	mg/kg	0.00000175											
PCB 193	mg/kg												
PCB 194	mg/kg	0.000188											
PCB 195	mg/kg	0.0000548											
PCB 196	mg/kg	0.000136											
PCB 197	mg/kg	0.0000147											
PCB 198	mg/kg												
PCB 199	mg/kg												
PCB 2	mg/kg	0.000244											
PCB 20	mg/kg												
PCB 200	mg/kg	0.0000187											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-SWMU5/HC	CARNEYS PT	CARNEYS PT										
Field Sample ID	24055314	24834718	24847996	24847997	24847999	24848000	24848001	24895128	24911674	10896467	10896541		
Location ID	DER2-23-SD	DER3-15	DER3-13	DER3-13	DER3-14	DER3-14	DER3-15	DER3-16	DER3-16	52-R-1	52-R-2		
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50		
Sample Purpose	DUP	FS											
Date	4/22/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/16/2010	11/16/2010	10/31/2000	10/31/2000		
Chemical Class	Units												
PCB 201	mg/kg	0.0000661											
PCB 202	mg/kg	0.000147											
PCB 203	mg/kg	0.000263											
PCB 204	mg/kg	0.00000231											
PCB 204/200	mg/kg												
PCB 205	mg/kg	0.000011											
PCB 206	mg/kg	0.00113											
PCB 207	mg/kg	0.0000898											
PCB 208	mg/kg	0.000525											
PCB 209	mg/kg	0.0016											
PCB 21	mg/kg												
PCB 21/20	mg/kg												
PCB 22	mg/kg	0.0000887											
PCB 23	mg/kg	0.0000169											
PCB 24	mg/kg	0.0000382											
PCB 25	mg/kg	0.000151											
PCB 26	mg/kg												
PCB 27	mg/kg	0.000108											
PCB 28	mg/kg												
PCB 29	mg/kg												
PCB 3	mg/kg	0.000456											
PCB 30	mg/kg												
PCB 31	mg/kg	0.000205											
PCB 32	mg/kg	0.0000625											
PCB 33	mg/kg												
PCB 34	mg/kg	0.0000214											
PCB 35	mg/kg	0.000216											
PCB 36	mg/kg	0.0000298											
PCB 37	mg/kg	0.000205											
PCB 38	mg/kg	0.0000437											
PCB 39	mg/kg	0.0000321											
PCB 4	mg/kg	0.0000951											
PCB 4/10	mg/kg												
PCB 40	mg/kg												
PCB 41	mg/kg	0.0000209											
PCB 42	mg/kg	0.000127											
PCB 43	mg/kg	0.0000188											
PCB 44	mg/kg												
PCB 45	mg/kg	0.0000602											
PCB 46	mg/kg	0.0000272											
PCB 47	mg/kg												
PCB 48	mg/kg	0.0000554											
PCB 49	mg/kg												
PCB 5	mg/kg	0.0000698											
PCB 50	mg/kg												
PCB 51	mg/kg	0.0000388											
PCB 52	mg/kg	0.000586											
PCB 53	mg/kg												
PCB 54	mg/kg	0.0000599											
PCB 55	mg/kg	0.00000412											
PCB 56	mg/kg	0.000241											
PCB 57	mg/kg	0.0000563											
PCB 58	mg/kg	0.00000273											
PCB 59	mg/kg												
PCB 6	mg/kg	0.00011											
PCB 60	mg/kg	0.0000522											
PCB 61	mg/kg												
PCB 62	mg/kg												
PCB 63	mg/kg	0.0000209											
PCB 64	mg/kg	0.000206											
PCB 65	mg/kg												
PCB 65/75/62	mg/kg												
PCB 66	mg/kg	0.000304											
PCB 67	mg/kg	0.0000131											
PCB 67/58	mg/kg												
PCB 68	mg/kg	0.00000886											
PCB 68/64	mg/kg												
PCB 69	mg/kg												
PCB 7	mg/kg	0.0000273											
PCB 70	mg/kg												
PCB 71	mg/kg												
PCB 72	mg/kg	0.00000933											
PCB 73	mg/kg	0.00000214											
PCB 73/46	mg/kg												
PCB 74	mg/kg												
PCB 75	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	MZ-SWMU5/HC	CARNEYS PT	CARNEYS PT										
Field Sample ID	24055314	24834718	24847996	24847997	24847999	24848000	24848001	24895128	24911674	10896467	10896541		
Location ID	DER2-23-SD	DER3-15	DER3-13	DER3-13	DER3-14	DER3-14	DER3-15	DER3-16	DER3-16	52-R-1	52-R-2		
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50		
Sample Purpose	DUP	FS											
Date	4/22/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/16/2010	11/16/2010	10/31/2000	10/31/2000		
Chemical Class	Units												
PCB 76	mg/kg												
PCB 77	mg/kg	0.000329											
PCB 78	mg/kg	0.00000119											
PCB 79	mg/kg	0.0000108											
PCB 8	mg/kg	0.000148											
PCB 80	mg/kg	0.00000107											
PCB 81	mg/kg	0.00000234											
PCB 82	mg/kg	0.0000855											
PCB 83	mg/kg	0.0000469											
PCB 83/125/112	mg/kg												
PCB 84	mg/kg	0.000198											
PCB 85	mg/kg												
PCB 86	mg/kg												
PCB 86/109	mg/kg												
PCB 87	mg/kg												
PCB 87/111	mg/kg												
PCB 88	mg/kg	0.000000556	U										
PCB 89	mg/kg	0.000011											
PCB 89/84	mg/kg												
PCB 9	mg/kg	0.0000963											
PCB 90	mg/kg												
PCB 91	mg/kg	0.000151											
PCB 92	mg/kg	0.000165											
PCB 93	mg/kg												
PCB 94	mg/kg	0.000013											
PCB 95	mg/kg	0.00056											
PCB 96	mg/kg	0.0000124											
PCB 97	mg/kg												
PCB 98	mg/kg	0.0000117											
PCB 99	mg/kg	0.000345											
PCB-100/93	mg/kg	0.0000183											
PCB-107/124	mg/kg	0.0000251											
PCB-108/119/86/97/125/87	mg/kg	0.000513											
PCB-113/90/101	mg/kg	0.000788											
PCB-116/85	mg/kg	0.000147											
PCB-128/166	mg/kg	0.000148											
PCB-13/12	mg/kg	0.000416											
PCB-139/140	mg/kg	0.00002											
PCB-147/149	mg/kg	0.000894											
PCB-151/135	mg/kg	0.000506											
PCB-153/168	mg/kg	0.000956											
PCB-156/157	mg/kg	0.00012											
PCB-163/138/129	mg/kg	0.000994											
PCB-171/173	mg/kg	0.0000619											
PCB-180/193	mg/kg	0.000516											
PCB-198/199	mg/kg	0.000524											
PCB-21/33	mg/kg	0.00016											
PCB-26/29	mg/kg	0.0000858											
PCB-28/20	mg/kg	0.000233											
PCB-30/18	mg/kg	0.000194											
PCB-44/47/65	mg/kg	0.000514											
PCB-50/53	mg/kg	0.0000861											
PCB-59/62/75	mg/kg	0.000051											
PCB-61/70/74/76	mg/kg	0.000576											
PCB-69/49	mg/kg	0.000326											
PCB-71/40	mg/kg	0.000214											
PCB-90/101	mg/kg												
Pentachlorobiphenyl	mg/kg												
Tetrachlorobiphenyl	mg/kg												
Total Decachlorobiphenyls (congeners)	mg/kg												
Total Dichlorobiphenyls (congeners)	mg/kg	0.0025											
Total Heptachlorobiphenyls (congeners)	mg/kg	0.00214											
Total Hexachlorobiphenyls (congeners)	mg/kg	0.00538											
Total Monochlorobiphenyls (congeners)	mg/kg	0.000919											
Total Nonachlorobiphenyls (congeners)	mg/kg	0.00175											
Total Octachlorobiphenyls (congeners)	mg/kg	0.00143											
Total PCB (congeners)	mg/kg	0.026639											
Total Pentachlorobiphenyls (congeners)	mg/kg	0.00497											
Total Tetrachlorobiphenyls (congeners)	mg/kg	0.00392											
Total Trichlorobiphenyls (congeners)	mg/kg	0.00203											
Trichlorobiphenyl (total)	mg/kg												
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>													
Benzo[e]pyrene	mg/kg												
Chrysene, 1-methyl-	mg/kg												
Naphthalene, 1-methyl-	mg/kg												
Pyrene, 1-methyl-	mg/kg												

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-SWMU5/HC	CARNEYS PT	CARNEYS PT												
Field Sample ID	24055314	24834718	24847996	24847997	24847999	24848000	24848001	24895128	24911674	10896467	10896541				
Location ID	DER2-23-SD	DER3-15	DER3-13	DER3-13	DER3-14	DER3-14	DER3-15	DER3-16	DER3-16	52-R-1	52-R-2				
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50				
Sample Purpose	DUP	FS													
Date	4/22/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/16/2010	11/16/2010	10/31/2000	10/31/2000				
Chemical Class	Units														
<b>Polycyclic Aromatic Hydrocarbons</b>															
Acenaphthene	mg/kg			0.25	U			0.16	U			0.04	U	0.041	U
Acenaphthylene	mg/kg			0.25	U			0.16	U			0.04	U	0.041	U
Anthracene	mg/kg			0.25	U			0.16	U			0.04	U	0.041	U
Benzo(A)Anthracene	mg/kg			0.36				0.21				0.04	U	0.041	U
Benzo(B)Fluoranthene	mg/kg			0.39				0.36				0.04	U	0.041	U
Benzo(G,H,I)Perylene	mg/kg			0.25	U			0.2				0.04	U	0.041	U
Benzo(K)Fluoranthene	mg/kg			0.25	U			0.16	U			0.04	U	0.041	U
Benzo(A)Pyrene	mg/kg			0.26				0.3				0.04	U	0.041	U
Chrysene	mg/kg			1.5				0.25				0.04	U	0.041	U
Dibenz(A,H)Anthracene	mg/kg			0.25	U			0.16	U			0.04	U	0.041	U
Fluoranthene	mg/kg			0.3				0.27				0.04	U	0.041	U
Fluorene	mg/kg			0.25	U			0.16	U			0.04	U	0.041	U
Indeno (1,2,3-CD) Pyrene	mg/kg			0.25	U			0.18				0.04	U	0.041	U
Naphthalene	mg/kg			0.25	U			0.16	U			0.04	U	0.041	U
Phenanthrene	mg/kg			0.25				0.16	U			0.04	U	0.041	U
Pyrene	mg/kg			0.43				0.31				0.04	U	0.041	U
Total PAHs (Detections + 1/2 MDL)	mg/kg			4.615				2.72				0.3	U	0.3075	U
Total PAHs (Detections Only)	mg/kg			3.49				2.08				0.3	U	0.3075	U
<b>Semivolatile Organic Compounds - TICs</b>															
1,2,4-Trithiolane	mg/kg														
1,4-Benzenediol, 2-chloro-	mg/kg														
11H-Benzo[b]fluorene	mg/kg														
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg											0.67			
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg														
3-PENTEN-2-ONE, 4-METHYL-	mg/kg														
7H-Benz[de]anthracen-7-one	mg/kg														
9,10-Anthracenedione	mg/kg														
9-Octadecenamido, (Z)-	mg/kg														
Acetamide, 2-chloro-N-(ethox	mg/kg														
Alachlor	mg/kg														
Benzenamine, 3-methyl-	mg/kg														
Benzenamine, 4,4',4"-methy	mg/kg														
Benzenamine, 4,4'-methyleneb	mg/kg														
Benzene, 1,2,3,4-tetrachloro	mg/kg														
Benzene, 1,2,3,5-tetrachloro	mg/kg														
Benzene, 1,2,3-trichloro-	mg/kg														
Benzene, 1,3,5-trichloro-	mg/kg														
Benzene, 1,3-bis(1-methyleth	mg/kg														
Benzene, 1,4-bis(1-methyleth	mg/kg														
Benzofuran, 2,3-dihydro-	mg/kg														
CYCLIC OCTAATOMIC SULFUR	mg/kg			12				5.2							
Diphenyl Ether	mg/kg														
Docosane	mg/kg														
Heneicosane	mg/kg														
Hexacosane	mg/kg														
Hexadecane	mg/kg														
Hexatriacontane	mg/kg														
m-Chloroaniline	mg/kg														
N,N-Diethylaniline	mg/kg														
n-Hexadecanoic acid	mg/kg														
Nonadecane	mg/kg														
o-Chloroaniline	mg/kg														
Octacosane	mg/kg														
Octadecane	mg/kg														
Octadecane, 1-chloro-	mg/kg														
Octadecanoic acid	mg/kg														
Parachlorophenol	mg/kg														
Pentadecane	mg/kg														
Perylene	mg/kg														
Phenol, 2,5-dichloro-	mg/kg														
Phenol, 3-chloro-	mg/kg														
Phenol, 4,4'-(1-methylethyl)	mg/kg														
Tetracosane	mg/kg														
Tetradecane	mg/kg														
Tetraethylene glycol	mg/kg														
Total SVOC TICs	mg/kg														
Triacotane	mg/kg														
Tributyl phosphate	mg/kg														
Tridecanoic acid	mg/kg														
Triphenyl phosphate	mg/kg														
UNKNOWN	mg/kg			2.7				1.928				7.55		0.714	
Unknown acid	mg/kg														
Unknown Alcohol	mg/kg														
Unknown Aldol Condensate	mg/kg														
UNKNOWN ALKANE	mg/kg			1.55				1.35				19.5		1.89166667	

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	MZ-SWMU5/HC	CARNEYS PT	CARNEYS PT										
Field Sample ID	24055314	24834718	24847996	24847997	24847999	24848000	24848001	24895128	24911674	10896467	10896541		
Location ID	DER2-23-SD	DER3-15	DER3-13	DER3-13	DER3-14	DER3-14	DER3-15	DER3-16	DER3-16	52-R-1	52-R-2		
Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50		
Sample Purpose	DUP	FS											
Date	4/22/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/16/2010	11/16/2010	10/31/2000	10/31/2000		
Chemical Class	Units												
Unknown Alkene	mg/kg												
Unknown Amide	mg/kg												
Unknown Amine	mg/kg												
UNKNOWN AROMATIC	mg/kg							0.35					
Unknown Carboxylic Acid	mg/kg					3.1							
Unknown Cycloalkane	mg/kg							29					
Unknown Hydrocarbon	mg/kg												
Unknown Ketone	mg/kg												
Unknown PAH	mg/kg												
UNKNOWN SILOXANE	mg/kg												
<b>Semivolatile Organic Compounds</b>													
1,2,4-Trichlorobenzene	mg/kg			0.25	U			0.16	U			0.063	U
1,2-Diphenylhydrazine	mg/kg			0.25	U			0.16	U			0.063	U
1,4-Dioxane	mg/kg												
1-Naphthylamine	mg/kg			1.2	U			0.79	U			0.32	U
2,3,4,6-Tetrachlorophenol	mg/kg												
2,4,5-Trichlorophenol	mg/kg												
2,4,6-Trichlorophenol	mg/kg			0.25	U			0.16	U			0.063	U
2,4-Dichlorophenol	mg/kg			0.25	U			0.16	U			0.063	U
2,4-Dimethylphenol	mg/kg			0.5	U			0.32	U			0.13	U
2,4-Dinitrophenol	mg/kg			5	U			3.2	U			1.3	U
2,4-Dinitrotoluene	mg/kg			0.5	U			0.32	U			0.13	U
2,6-Dinitrotoluene	mg/kg			0.25	U			0.16	U			0.063	U
2-Chloronaphthalene	mg/kg			0.25	U			0.16	U			0.063	U
2-Chlorophenol	mg/kg			0.25	U			0.16	U			0.063	U
2-Methylnaphthalene	mg/kg												
2-Methylphenol (O-Cresol)	mg/kg												
2-Naphthylamine	mg/kg			1.2	U			0.79	U			0.32	U
2-Nitroaniline	mg/kg												
2-Nitrophenol	mg/kg			0.25	U			0.16	U			0.063	U
3,3'-Dichlorobenzidine	mg/kg			0.74	U			0.47	U			0.19	U
3,3'-Dimethylbenzidine	mg/kg												
3-Nitroaniline	mg/kg												
4,6-Dinitro-2-Methylphenol	mg/kg			1.2	U			0.79	U			0.32	U
4-Aminobiphenyl	mg/kg			1.2	U			0.79	U			0.32	U
4-Bromophenyl Phenyl Ether	mg/kg			0.25	U			0.16	U			0.063	U
4-Chloro-3-Methylphenol	mg/kg			0.5	U			0.32	U			0.13	U
4-Chloroaniline	mg/kg			0.5	U			0.32	U			0.13	U
4-Chlorophenyl Phenyl Ether	mg/kg			0.25	U			0.16	U			0.063	U
4-Methylphenol (P-Cresol)	mg/kg												
4-Nitroaniline	mg/kg												
4-Nitrophenol	mg/kg			1.2	U			0.79	U			0.32	U
Acetophenone	mg/kg												
Aniline	mg/kg			1.2	U			0.79	U			0.32	U
Benzidine	mg/kg			8.7	U			5.5	U			2.2	U
Biphenyl	mg/kg												
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg												
Bis(2-Chloroethoxy)Methane	mg/kg			0.25	U			0.16	U			0.063	U
Bis(2-Chloroethyl)Ether	mg/kg			0.25	U			0.16	U			0.063	U
Bis(2-Chloroisopropyl)Ether	mg/kg			0.25	U			0.16	U			0.063	U
Bis(2-Ethylhexyl)Phthalate	mg/kg			0.5	U			0.32	U			0.13	U
Butyl Benzyl Phthalate	mg/kg			0.5	U			0.32	U			0.13	U
Carbazole	mg/kg			0.25	U			0.16	U			0.063	U
Dibenzofuran	mg/kg												
Diethyl Phthalate	mg/kg			0.5	U			0.32	U			0.13	U
Dimethyl Phthalate	mg/kg			0.5	U			0.32	U			0.13	U
Di-N-Butyl Phthalate	mg/kg			0.5	U			0.32	U			0.13	U
Diphenyl Ether	mg/kg												
Hexachlorobenzene	mg/kg			0.25	U			0.16	U			0.063	U
Hexachlorobutadiene	mg/kg			0.5	U			0.32	U			0.13	U
Hexachlorocyclopentadiene	mg/kg			1.2	U			0.79	U			0.32	U
Hexachloroethane	mg/kg			0.25	U			0.16	U			0.063	U
Hexachloropropylene	mg/kg												
Isophorone	mg/kg			0.25	U			0.16	U			0.063	U
N-Dioctyl Phthalate	mg/kg			0.5	U			0.32	U			0.13	U
Nitrobenzene	mg/kg			3	U			1.6	U			2	U
N-Nitrosodimethylamine	mg/kg			0.5	U			0.32	U			0.13	U
N-Nitrosodi-N-Propylamine	mg/kg			0.25	U			0.16	U			0.063	U
N-Nitrosodiphenylamine	mg/kg			0.25	U			0.16	U			0.063	U
O-Toluidine	mg/kg			1.5	U			0.95	U			0.38	U
Parathion	mg/kg												
Pentachlorobenzene	mg/kg												
Pentachlorophenol	mg/kg			1.2	U			0.79	U			0.32	U
Phenol	mg/kg			0.25	U			0.16	U			0.063	U
<b>Volatile Organic Compounds - TICs</b>													
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg												

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River Zone	MZ-SWMU5/HC	CARNEYS PT	CARNEYS PT										
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Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50		
Sample Purpose	DUP	FS											
Date	4/22/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/16/2010	11/16/2010	10/31/2000	10/31/2000		
Chemical Class	Units												
1-Butene	mg/kg												
1-Heptene	mg/kg												
1-Propene, 2-methyl-	mg/kg												
Azulene	mg/kg												
BENZENE, 1,2,4-TRICHLORO-	mg/kg												
BENZENE, 1,2-DICHLORO-	mg/kg		0.027										
BENZENE, 1,4-DICHLORO-	mg/kg												
Camphene	mg/kg												
CYCLOHEXANE	mg/kg												
Cyclohexane, methyl-	mg/kg												
Cyclotrisiloxane, hexamethyl	mg/kg												
Diphenyl Ether	mg/kg												
Ethane, 1,1,2,2-tetrachloro-	mg/kg												
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg												
Ethane, 1,2-dichloro-1,1-dif	mg/kg												
Ethene, 1,1-dichloro-2,2-dif	mg/kg												
Hexane, 2-methyl-	mg/kg												
Hexane, 3-methyl-	mg/kg												
METHANE, CHLOROFLUORO-	mg/kg												
Naphthalene	mg/kg												
NAPHTHALENE, 2-METHYL-	mg/kg												
Nonanal	mg/kg												
Norflurane	mg/kg												
Pentane, 2,3-dimethyl-	mg/kg												
Phenol, 4-(1,1,3,3-tetrameth	mg/kg												
Propene	mg/kg												
Sulfur dioxide	mg/kg												
Tridecane	mg/kg												
UNKNOWN	mg/kg		0.57			0.21	0.12	0.5		0.024			
UNKNOWN ALICYCLIC	mg/kg												
UNKNOWN ALIPHATIC	mg/kg												
UNKNOWN ALKANE	mg/kg												
UNKNOWN AROMATIC	mg/kg				0.015								
UNKNOWN SILOXANE	mg/kg		0.23	0.046	0.0105	0.0115	0.0355	0.036	0.049333333	0.006			
<b>Volatile Organic Compounds</b>													
1,1,1,2-Tetrachloroethane	mg/kg												
1,1,1-Trichloroethane	mg/kg		0.008 U	0.003 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U	0.001 U			
1,1,1-Trichlorotrifluoroethane	mg/kg												
1,1,2,2-Tetrachloroethane	mg/kg		0.008 U	0.003 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U	0.001 U			
1,1,2-Trichloroethane	mg/kg		0.008 U	0.003 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U	0.001 U			
1,1,2-Trichlorotrifluoroethane	mg/kg		0.016 U	0.007 U	0.002 U	0.003 U	0.003 U	0.005 U	0.005 U	0.002 U			
1,1,2-Trifluoroethane	mg/kg												
1,1-Dichloro-1-Fluoroethane	mg/kg												
1,1-Dichloroethane	mg/kg		0.008 U	0.003 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U	0.001 U			
1,1-Dichloroethene	mg/kg		0.008 U	0.003 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U	0.001 U			
1,1-Dichloropropene	mg/kg												
1,2,4-Trimethylbenzene	mg/kg												
1,2-Dibromoethane (EDB)	mg/kg												
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg												
1,2-Dichloro-1-Fluoroethane	mg/kg												
1,2-Dichlorobenzene	mg/kg			0.71		0.16 U		0.2 U	0.063 U				
1,2-Dichloroethane	mg/kg		0.008 U	0.003 U	0.003	0.001 U	0.002 U	0.002 U	0.002 U	0.001 U			
1,2-Dichloroethene	mg/kg												
1,2-Dichloropropane	mg/kg		0.008 U	0.003 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U	0.001 U			
1,2-Dichlorotetrafluoroethane	mg/kg												
1,3,5-Trimethylbenzene	mg/kg												
1,3-Dichlorobenzene	mg/kg			0.25 U		0.16 U		0.2 U	0.063 U				
1,4-Dichlorobenzene	mg/kg			0.37		0.16 U		0.2 U	0.063 U				
1-Chloro-1,1-Difluoroethane	mg/kg												
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg												
2-Chloro-1,1,1-Trifluoroethane	mg/kg												
2-Chloroethyl Vinyl Ether	mg/kg												
2-Chlorotoluene	mg/kg												
2-Hexanone	mg/kg												
4-Chlorotoluene	mg/kg												
4-Isopropyltoluene	mg/kg												
Acetone	mg/kg		0.38	0.024 U	0.009	0.01 U	0.028	0.031	0.023	0.015			
Acrolein	mg/kg		0.16 U	0.067 U	0.02 U	0.03 U	0.034 U	0.049 U	0.047 U	0.022 U			
Acrylonitrile	mg/kg		0.032 U	0.013 U	0.004 U	0.006 U	0.007 U	0.01 U	0.009 U	0.004 U			
Benzene	mg/kg		0.005	0.002 U	0.004	0.0007 U	0.0009 U	0.001 U	0.001 U	0.0006 U			
Bromodichloromethane	mg/kg		0.008	0.003 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U	0.001 U			
Bromoform	mg/kg		0.008	0.003 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U	0.001 U			
Carbon Disulfide	mg/kg		0.028	0.008	0.002	0.002	0.008	0.005	0.007	0.003			
Carbon Tetrachloride	mg/kg		0.008	0.003 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U	0.001 U			
CFC-1113	mg/kg												
Chlorobenzene	mg/kg		0.57	0.024	0.02	0.001 U	0.002 U	0.002 U	0.002 U	0.001 U			

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone	MZ-SWMU5/HC	CARNEYS PT	CARNEYS PT									
	Field Sample ID	24055314	24834718	24847996	24847997	24847999	24848000	24848001	24895128	24911674	10896467	10896541	
Chemical	Location ID	DER2-23-SD	DER3-15	DER3-13	DER3-13	DER3-14	DER3-14	DER3-15	DER3-16	DER3-16	52-R-1	52-R-2	
Units	Depth Interval (ft)	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	
	Sample Purpose	DUP	FS	FS									
	Date	4/22/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/18/2010	11/16/2010	11/16/2010	10/31/2000	10/31/2000	
Chlorodibromomethane	mg/kg		0.008 U	0.003 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U	0.001 U			
Chlorodifluoromethane	mg/kg												
Chlorofluoromethane	mg/kg												
Chloroform	mg/kg		0.008 U	0.003 U	0.01	0.001 U	0.002 U	0.002 U	0.002 U	0.001 U			
Chloropentafluoroethane	mg/kg												
cis-1,2-Dichloroethene	mg/kg		0.008 U	0.003 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U	0.001 U			
cis-1,3-Dichloropropene	mg/kg		0.008 U	0.003 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U	0.001 U			
Cumene	mg/kg												
Dichlorodifluoromethane	mg/kg		0.016 U	0.007 U	0.002 U	0.003 U	0.003 U	0.005 U	0.005 U	0.002 U			
Dichlorofluoromethane	mg/kg		0.016 U	0.008	0.013	0.003 U	0.003 U	0.005 U	0.005 U	0.002 U			
Ethane	ug/L												
Ethyl Chloride	mg/kg		0.016 U	0.007 U	0.002 U	0.003 U	0.003 U	0.005 U	0.005 U	0.002 U			
Ethylbenzene	mg/kg		0.008 U	0.003 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U	0.001 U			
Fluoromethane	mg/kg												
Hexane	mg/kg												
Isobutyl Alcohol	mg/kg												
Meta- And Para-Xylene	mg/kg												
Methacrylonitrile	mg/kg												
Methane	ug/L												
Methyl Bromide	mg/kg		0.016 U	0.007 U	0.002 U	0.003 U	0.003 U	0.005 U	0.005 U	0.002 U			
Methyl Chloride	mg/kg		0.016 U	0.007 U	0.002 U	0.003 U	0.003 U	0.005 U	0.005 U	0.002 U			
Methyl Ethyl Ketone	mg/kg												
Methyl Isobutyl Ketone	mg/kg												
Methyl Methacrylate	mg/kg												
Methyl Tertiary Butyl Ether	mg/kg												
Methylene Chloride	mg/kg		0.016 U	0.007 U	0.002 U	0.003 U	0.003 U	0.005 U	0.005 U	0.002 U			
N-Butylbenzene	mg/kg												
N-Propylbenzene	mg/kg												
Ortho-Xylene	mg/kg												
Propionitrile	mg/kg												
sec-Butylbenzene	mg/kg												
Styrene	mg/kg												
tert-Butylbenzene	mg/kg												
Tetrachloroethene	mg/kg		0.008 U	0.003 U	0.001	0.001 U	0.002 U	0.002 U	0.002 U	0.001 U			
Tetrahydrofuran	mg/kg												
Toluene	mg/kg		0.01	0.005	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U	0.001 U			
trans-1,2-Dichloroethene	mg/kg		0.008 U	0.003 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U	0.001 U			
trans-1,3-Dichloropropene	mg/kg		0.008 U	0.003 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U	0.001 U			
Trichloroethene	mg/kg		0.008 U	0.003 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U	0.001 U			
Trichlorofluoromethane	mg/kg		0.016 U	0.007 U	0.031	0.003 U	0.003 U	0.005 U	0.005 U	0.002 U			
Vinyl Chloride	mg/kg		0.008 U	0.003 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U	0.001 U			
Vinyl Fluoride	mg/kg												
Xylenes	mg/kg		0.016	0.003 U	0.001 U	0.001 U	0.002 U	0.002 U	0.002 U	0.001 U			

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	CARNEYS PT											
Field Sample ID	10896835	10897412	10897478	10897489	11251514	11251519	12421076	22423794	22423796	22423801	22423802	
Location ID	52-R-3	52-R-7	52-R-7	52-R-8	R-9	R-9	R-16	DER1-28	DER1-29	DER1-28	DER1-29	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	
Date	10/31/2000	11/1/2000	11/1/2000	11/1/2000	5/21/2003	5/21/2003	10/16/2003	9/22/2009	9/22/2009	9/22/2009	9/22/2009	
Chemical Class	Units											
<b>General Chemistry</b>												
Black Carbon	mg/kg								4925	475	145	645
Percent Moisture	%	19.8	75		51.9	18.3	16.6	82.9	48.5	28.2	21.5	22.1
Percent Solids	%											
Total Organic Carbon	mg/kg	3290	136000		89500				7115	1960	780	2430
<b>Metals</b>												
Aluminum	mg/kg								13100	3530		
Antimony	mg/kg	0.82	0.14 U		0.075 U			1.94 U	1.37 U			
Arsenic	mg/kg	4.5	5.7		7.8			5.43	2.59			
Barium	mg/kg							64.2	17.3			
Beryllium	mg/kg	0.48	0.95		0.97			0.833	0.199			
Cadmium	mg/kg	0.0073 U	0.083		0.064			0.988	0.202			
Calcium	mg/kg							2350	442			
Chromium	mg/kg	24	43		40.2			34	9.41			
Cobalt	mg/kg							8.66	2.48			
Copper	mg/kg	8	10.4		12			22.3	6			
Iron	mg/kg							19000	5110			
Lead	mg/kg	10.1	11.5		7.2			25.3	36.8	12.8		
Magnesium	mg/kg							3790	926			
Manganese	mg/kg							539	63			
Mercury	mg/kg	0.02	0.013 U		0.0065 U	0.173	0.365	0.0736	0.146	0.0433		
Nickel	mg/kg	10.2	15.3		23.4			19	5.34			
Potassium	mg/kg							2170	602			
Selenium	mg/kg	0.29	0.31		0.27			1.9 U	1.34 U			
Silver	mg/kg							0.35 U	0.248 U			
Sodium	mg/kg							276	87.7			
Thallium	mg/kg							2.82 U	1.86 U			
Tin	mg/kg							5.91	2.81			
Titanium	mg/kg											
Vanadium	mg/kg							33.6	9.12			
Zinc	mg/kg	22.6	49.7		77.3			142	33.1			
<b>Metals - AVS/SEM</b>												
Acid Volatile Sulfide	umol/g			0.3 U	0.3 U							
Arsenic	umol/g	0.014		0.0065	0.025							
Cadmium	umol/g	0.00074		0.00077	0.0021							
Copper	umol/g	0.15		0.032	0.17							
Lead	umol/g	3.5		0.02	0.31							
Zinc	umol/g	0.28		0.074	0.4							
<b>Metals - Leachate</b>												
Lead	ug/L											
<b>Per and Polyfluorinated Organic Substances</b>												
Perfluorobutane Sulfonic Acid	mg/kg											
Perfluorobutanoic Acid	mg/kg											
Perfluorodecane Sulfonic Acid	mg/kg											
Perfluorodecanoic Acid	mg/kg											
Perfluorododecanoic Acid	mg/kg											
Perfluoroheptanoic Acid	mg/kg											
Perfluorohexane Sulfonic Acid	mg/kg											
Perfluorohexanoic Acid	mg/kg											
Perfluorononanoic Acid	mg/kg											
Perfluorooctane Sulfonamide	mg/kg											
Perfluoropentanoic Acid	mg/kg											
Perfluorotetradecanoic Acid	mg/kg											
Perfluorotridecanoic Acid	mg/kg											
Perfluoroundecanoic Acid	mg/kg											
PFOA	mg/kg											
PFOA(trial)	mg/kg											
PFOS	mg/kg											
PFOS (trial)	mg/kg											
<b>Pesticides and Herbicides</b>												
4,4'-DDD	mg/kg											
4,4'-DDE	mg/kg											
4,4'-DDT	mg/kg											
Aldrin	mg/kg											
Alpha-Chlordane	mg/kg											
Alpha-BHC	mg/kg											
beta-BHC	mg/kg											
delta-BHC	mg/kg											
Dieldrin	mg/kg											
Endosulfan I	mg/kg											
Endosulfan II	mg/kg											
Endosulfan Sulfate	mg/kg											
Endrin	mg/kg											
Endrin Aldehyde	mg/kg											
Endrin Ketone	mg/kg											
Gamma-Chlordane	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	CARNEYS PT											
Field Sample ID	10896835	10897412	10897478	10897489	11251514	11251519	12421076	22423794	22423796	22423801	22423802	
Location ID	52-R-3	52-R-7	52-R-7	52-R-8	R-9	R-9	R-16	DER1-28	DER1-29	DER1-28	DER1-29	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	
Date	10/31/2000	11/1/2000	11/1/2000	11/1/2000	5/21/2003	5/21/2003	10/16/2003	9/22/2009	9/22/2009	9/22/2009	9/22/2009	
Chemical Class	Units											
Heptachlor	mg/kg											
Heptachlor Epoxide	mg/kg											
Lindane	mg/kg											
Methoxychlor	mg/kg											
Toxaphene	mg/kg											
<b>Physical Properties</b>												
0.001 MM	% PASSING	12	9		19.5			3	1			
0.002 MM	% PASSING	14	13.5		31.5			5	1			
0.005 MM	% PASSING	17	21		48			10.5	2			
0.02 MM	% PASSING	27.5	42		81.5			25	4			
0.05 MM	% PASSING	44.5	49		86			43	7			
0.064 MM	% PASSING	51.5	48		86			49	8			
0.075 MM	% PASSING	54.8	48		85			53	8.6			
0.15 MM	% PASSING	65.5	54.7		86.3			60.8	11.8			
0.3 MM	% PASSING	80	64.9		88.3			75.9	48.4			
0.6 MM	% PASSING	90.7	74.7		92			90.4	83.7			
1.18 MM	% PASSING	92.8	82.8		93			93.9	93.7			
19 MM	% PASSING	100	100		100			100	100			
2.36 MM	% PASSING	93.5	94.1		93.3			95.7	96.2			
3.35 MM	% PASSING	98.1	99.1		99.4			96.7	98.1			
37.5 MM	% PASSING	100	100		100			100	100			
4.75 MM	% PASSING	99	99.5		99.8			98	99			
75 MM	% PASSING	100	100		100			100	100			
Density	PCF											
<b>Polychlorinated Biphenyls - TICs</b>												
1,1'-Biphenyl, 2,3-dichloro-	mg/kg											
Unknown Biphenyl	mg/kg											
<b>Polychlorinated Biphenyls</b>												
Heptachlorobiphenyl	mg/kg											
Hexachlorobiphenyl	mg/kg											
Octachlorobiphenyl	mg/kg											
PCB 1	mg/kg											
PCB 10	mg/kg											
PCB 100	mg/kg											
PCB 101	mg/kg											
PCB 102	mg/kg											
PCB 103	mg/kg											
PCB 104	mg/kg											
PCB 105	mg/kg											
PCB 106	mg/kg											
PCB 107	mg/kg											
PCB 107/123	mg/kg											
PCB 108	mg/kg											
PCB 109	mg/kg											
PCB 11	mg/kg											
PCB 110	mg/kg											
PCB 111	mg/kg											
PCB 112	mg/kg											
PCB 113	mg/kg											
PCB 114	mg/kg											
PCB 115	mg/kg											
PCB 116	mg/kg											
PCB 117	mg/kg											
PCB 118	mg/kg											
PCB 119	mg/kg											
PCB 12	mg/kg											
PCB 120	mg/kg											
PCB 121	mg/kg											
PCB 121/95/88	mg/kg											
PCB 122	mg/kg											
PCB 123	mg/kg											
PCB 124	mg/kg											
PCB 125	mg/kg											
PCB 126	mg/kg											
PCB 127	mg/kg											
PCB 128	mg/kg											
PCB 129	mg/kg											
PCB 129/158	mg/kg											
PCB 13	mg/kg											
PCB 130	mg/kg											
PCB 130/164	mg/kg											
PCB 131	mg/kg											
PCB 132	mg/kg											
PCB 133	mg/kg											
PCB 134	mg/kg											
PCB 135	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
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Chemours Chambers Works  
Deepwater, New Jersey

River Zone	CARNEYS PT											
Field Sample ID	10896835	10897412	10897478	10897489	11251514	11251519	12421076	22423794	22423796	22423801	22423802	
Location ID	52-R-3	52-R-7	52-R-7	52-R-8	R-9	R-9	R-16	DER1-28	DER1-29	DER1-28	DER1-29	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	
Date	10/31/2000	11/1/2000	11/1/2000	11/1/2000	5/21/2003	5/21/2003	10/16/2003	9/22/2009	9/22/2009	9/22/2009	9/22/2009	
Chemical Class												
Chemical	Units											
PCB 136	mg/kg											
PCB 137	mg/kg											
PCB 138	mg/kg											
PCB 139	mg/kg											
PCB 14	mg/kg											
PCB 140	mg/kg											
PCB 141	mg/kg											
PCB 142	mg/kg											
PCB 143	mg/kg											
PCB 143/139	mg/kg											
PCB 144	mg/kg											
PCB 145	mg/kg											
PCB 146	mg/kg											
PCB 147	mg/kg											
PCB 148	mg/kg											
PCB 149	mg/kg											
PCB 15	mg/kg											
PCB 150	mg/kg											
PCB 151	mg/kg											
PCB 152	mg/kg											
PCB 153	mg/kg											
PCB 154	mg/kg											
PCB 155	mg/kg											
PCB 156	mg/kg											
PCB 157	mg/kg											
PCB 158	mg/kg											
PCB 159	mg/kg											
PCB 16	mg/kg											
PCB 160	mg/kg											
PCB 161	mg/kg											
PCB 162	mg/kg											
PCB 163	mg/kg											
PCB 163/160	mg/kg											
PCB 164	mg/kg											
PCB 165	mg/kg											
PCB 166	mg/kg											
PCB 167	mg/kg											
PCB 168	mg/kg											
PCB 169	mg/kg											
PCB 17	mg/kg											
PCB 170	mg/kg											
PCB 171	mg/kg											
PCB 172	mg/kg											
PCB 173	mg/kg											
PCB 174	mg/kg											
PCB 175	mg/kg											
PCB 176	mg/kg											
PCB 177	mg/kg											
PCB 178	mg/kg											
PCB 179	mg/kg											
PCB 18	mg/kg											
PCB 180	mg/kg											
PCB 181	mg/kg											
PCB 182	mg/kg											
PCB 182/175	mg/kg											
PCB 183	mg/kg											
PCB 184	mg/kg											
PCB 185	mg/kg											
PCB 186	mg/kg											
PCB 187	mg/kg											
PCB 188	mg/kg											
PCB 189	mg/kg											
PCB 19	mg/kg											
PCB 190	mg/kg											
PCB 191	mg/kg											
PCB 192	mg/kg											
PCB 193	mg/kg											
PCB 194	mg/kg											
PCB 195	mg/kg											
PCB 196	mg/kg											
PCB 197	mg/kg											
PCB 198	mg/kg											
PCB 199	mg/kg											
PCB 2	mg/kg											
PCB 20	mg/kg											
PCB 200	mg/kg											

Table A-1  
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Delaware River Screening-Level Ecological Risk Assessment  
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Deepwater, New Jersey

River Zone	CARNEYS PT											
Field Sample ID	10896835	10897412	10897478	10897489	11251514	11251519	12421076	22423794	22423796	22423801	22423802	
Location ID	52-R-3	52-R-7	52-R-7	52-R-8	R-9	R-9	R-16	DER1-28	DER1-29	DER1-28	DER1-29	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	
Date	10/31/2000	11/1/2000	11/1/2000	11/1/2000	5/21/2003	5/21/2003	10/16/2003	9/22/2009	9/22/2009	9/22/2009	9/22/2009	
Chemical Class												
Chemical	Units											
PCB 201	mg/kg											
PCB 202	mg/kg											
PCB 203	mg/kg											
PCB 204	mg/kg											
PCB 204/200	mg/kg											
PCB 205	mg/kg											
PCB 206	mg/kg											
PCB 207	mg/kg											
PCB 208	mg/kg											
PCB 209	mg/kg											
PCB 21	mg/kg											
PCB 21/20	mg/kg											
PCB 22	mg/kg											
PCB 23	mg/kg											
PCB 24	mg/kg											
PCB 25	mg/kg											
PCB 26	mg/kg											
PCB 27	mg/kg											
PCB 28	mg/kg											
PCB 29	mg/kg											
PCB 3	mg/kg											
PCB 30	mg/kg											
PCB 31	mg/kg											
PCB 32	mg/kg											
PCB 33	mg/kg											
PCB 34	mg/kg											
PCB 35	mg/kg											
PCB 36	mg/kg											
PCB 37	mg/kg											
PCB 38	mg/kg											
PCB 39	mg/kg											
PCB 4	mg/kg											
PCB 4/10	mg/kg											
PCB 40	mg/kg											
PCB 41	mg/kg											
PCB 42	mg/kg											
PCB 43	mg/kg											
PCB 44	mg/kg											
PCB 45	mg/kg											
PCB 46	mg/kg											
PCB 47	mg/kg											
PCB 48	mg/kg											
PCB 49	mg/kg											
PCB 5	mg/kg											
PCB 50	mg/kg											
PCB 51	mg/kg											
PCB 52	mg/kg											
PCB 53	mg/kg											
PCB 54	mg/kg											
PCB 55	mg/kg											
PCB 56	mg/kg											
PCB 57	mg/kg											
PCB 58	mg/kg											
PCB 59	mg/kg											
PCB 6	mg/kg											
PCB 60	mg/kg											
PCB 61	mg/kg											
PCB 62	mg/kg											
PCB 63	mg/kg											
PCB 64	mg/kg											
PCB 65	mg/kg											
PCB 65/75/62	mg/kg											
PCB 66	mg/kg											
PCB 67	mg/kg											
PCB 67/58	mg/kg											
PCB 68	mg/kg											
PCB 68/64	mg/kg											
PCB 69	mg/kg											
PCB 7	mg/kg											
PCB 70	mg/kg											
PCB 71	mg/kg											
PCB 72	mg/kg											
PCB 73	mg/kg											
PCB 73/46	mg/kg											
PCB 74	mg/kg											
PCB 75	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	CARNEYS PT											
Field Sample ID	10896835	10897412	10897478	10897489	11251514	11251519	12421076	22423794	22423796	22423801	22423802	
Location ID	52-R-3	52-R-7	52-R-7	52-R-8	R-9	R-9	R-16	DER1-28	DER1-29	DER1-28	DER1-29	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	
Date	10/31/2000	11/1/2000	11/1/2000	11/1/2000	5/21/2003	5/21/2003	10/16/2003	9/22/2009	9/22/2009	9/22/2009	9/22/2009	
Chemical Class	Units											
PCB 76	mg/kg											
PCB 77	mg/kg											
PCB 78	mg/kg											
PCB 79	mg/kg											
PCB 8	mg/kg											
PCB 80	mg/kg											
PCB 81	mg/kg											
PCB 82	mg/kg											
PCB 83	mg/kg											
PCB 83/125/112	mg/kg											
PCB 84	mg/kg											
PCB 85	mg/kg											
PCB 86	mg/kg											
PCB 86/109	mg/kg											
PCB 87	mg/kg											
PCB 87/111	mg/kg											
PCB 88	mg/kg											
PCB 89	mg/kg											
PCB 89/84	mg/kg											
PCB 9	mg/kg											
PCB 90	mg/kg											
PCB 91	mg/kg											
PCB 92	mg/kg											
PCB 93	mg/kg											
PCB 94	mg/kg											
PCB 95	mg/kg											
PCB 96	mg/kg											
PCB 97	mg/kg											
PCB 98	mg/kg											
PCB 99	mg/kg											
PCB-100/93	mg/kg											
PCB-107/124	mg/kg											
PCB-108/119/86/97/125/87	mg/kg											
PCB-113/90/101	mg/kg											
PCB-116/85	mg/kg											
PCB-128/166	mg/kg											
PCB-13/12	mg/kg											
PCB-139/140	mg/kg											
PCB-147/149	mg/kg											
PCB-151/135	mg/kg											
PCB-153/168	mg/kg											
PCB-156/157	mg/kg											
PCB-163/138/129	mg/kg											
PCB-171/173	mg/kg											
PCB-180/193	mg/kg											
PCB-198/199	mg/kg											
PCB-21/33	mg/kg											
PCB-26/29	mg/kg											
PCB-28/20	mg/kg											
PCB-30/18	mg/kg											
PCB-44/47/65	mg/kg											
PCB-50/53	mg/kg											
PCB-59/62/75	mg/kg											
PCB-61/70/74/76	mg/kg											
PCB-69/49	mg/kg											
PCB-71/40	mg/kg											
PCB-90/101	mg/kg											
Pentachlorobiphenyl	mg/kg											
Tetrachlorobiphenyl	mg/kg											
Total Decachlorobiphenyls (congeners)	mg/kg											
Total Dichlorobiphenyls (congeners)	mg/kg											
Total Heptachlorobiphenyls (congeners)	mg/kg											
Total Hexachlorobiphenyls (congeners)	mg/kg											
Total Monochlorobiphenyls (congeners)	mg/kg											
Total Nonachlorobiphenyls (congeners)	mg/kg											
Total Octachlorobiphenyls (congeners)	mg/kg											
Total PCB (congeners)	mg/kg											
Total Pentachlorobiphenyls (congeners)	mg/kg											
Total Tetrachlorobiphenyls (congeners)	mg/kg											
Total Trichlorobiphenyls (congeners)	mg/kg											
Trichlorobiphenyl (total)	mg/kg											
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>												
Benzo[e]pyrene	mg/kg											
Chrysene, 1-methyl-	mg/kg											
Naphthalene, 1-methyl-	mg/kg											
Pyrene, 1-methyl-	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT								
Field Sample ID	10896835	10897412	10897478	10897489	11251514	11251519	12421076	22423794	22423796	22423801	22423802	
Location ID	52-R-3	52-R-7	52-R-7	52-R-8	R-9	R-9	R-16	DER1-28	DER1-29	DER1-28	DER1-29	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	
Date	10/31/2000	11/1/2000	11/1/2000	11/1/2000	5/21/2003	5/21/2003	10/16/2003	9/22/2009	9/22/2009	9/22/2009	9/22/2009	
Chemical Class	Units											
<b>Polycyclic Aromatic Hydrocarbons</b>												
Acenaphthene	mg/kg	0.041	U	0.13	U				0.065	U	0.046	U
Acenaphthylene	mg/kg	0.041	U	0.13	U				0.065	U	0.046	U
Anthracene	mg/kg	0.041	U	0.13	U				0.065	U	0.046	U
Benzo(A)Anthracene	mg/kg	0.041	U	0.13	U				0.12		0.099	
Benzo(B)Fluoranthene	mg/kg	0.041	U	0.13	U				0.19		0.11	
Benzo(G,H,I)Perylene	mg/kg	0.041	U	0.13	U				0.092		0.053	
Benzo(K)Fluoranthene	mg/kg	0.041	U	0.13	U				0.086		0.051	
Benzo(A)Pyrene	mg/kg	0.041	U	0.13	U				0.15		0.096	
Chrysene	mg/kg	0.041	U	0.13	U				0.16		0.097	
Dibenz(A,H)Anthracene	mg/kg	0.041	U	0.13	U				0.065	U	0.046	U
Fluoranthene	mg/kg	0.041	U	0.13	U				0.23		0.11	
Fluorene	mg/kg								0.065	U	0.046	U
Indeno (1,2,3-CD) Pyrene	mg/kg	0.041	U	0.13	U				0.077		0.046	U
Naphthalene	mg/kg	0.041	U	0.13	U				0.065	U	0.046	U
Phenanthrene	mg/kg	0.041	U	0.13	U				0.14		0.061	
Pyrene	mg/kg	0.041	U	0.13	U				0.27		0.12	
Total PAHs (Detections + 1/2 MDL)	mg/kg	0.3075	U	0.975	U				1.71		0.958	
Total PAHs (Detections Only)	mg/kg	0.3075	U	0.975	U				1.515		0.797	
<b>Semivolatile Organic Compounds - TICs</b>												
1,2,4-Trithiolane	mg/kg											
1,4-Benzenediol, 2-chloro-	mg/kg											
11H-Benzo[b]fluorene	mg/kg											
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg											
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg								32		18	
3-PENTEN-2-ONE, 4-METHYL-	mg/kg								0.32		0.26	
7H-Benz[de]anthracen-7-one	mg/kg											
9,10-Anthracenedione	mg/kg											
9-Octadecenamamide, (Z)-	mg/kg											
Acetamide, 2-chloro-N-(ethox	mg/kg											
Alachlor	mg/kg											
Benzenamine, 3-methyl-	mg/kg											
Benzenamine, 4,4',4"-methy	mg/kg											
Benzenamine, 4,4'-methyleneb	mg/kg											
Benzene, 1,2,3,4-tetrachloro	mg/kg											
Benzene, 1,2,3,5-tetrachloro	mg/kg											
Benzene, 1,2,3-trichloro-	mg/kg											
Benzene, 1,3,5-trichloro-	mg/kg											
Benzene, 1,3-bis(1-methyleth	mg/kg											
Benzene, 1,4-bis(1-methyleth	mg/kg											
Benzofuran, 2,3-dihydro-	mg/kg											
CYCLIC OCTAATOMIC SULFUR	mg/kg								11			
Diphenyl Ether	mg/kg											
Docosane	mg/kg											
Heneicosane	mg/kg											
Hexacosane	mg/kg											
Hexadecane	mg/kg											
Hexatriacontane	mg/kg											
m-Chloroaniline	mg/kg											
N,N-Diethylaniline	mg/kg											
n-Hexadecanoic acid	mg/kg											
Nonadecane	mg/kg											
o-Chloroaniline	mg/kg											
Octacosane	mg/kg											
Octadecane	mg/kg											
Octadecane, 1-chloro-	mg/kg											
Octadecanoic acid	mg/kg											
Parachlorophenol	mg/kg											
Pentadecane	mg/kg											
Perylene	mg/kg											
Phenol, 2,5-dichloro-	mg/kg											
Phenol, 3-chloro-	mg/kg											
Phenol, 4,4'-(1-methylethyl)	mg/kg											
Tetracosane	mg/kg											
Tetradecane	mg/kg											
Tetraethylene glycol	mg/kg											
Total SVOIC TICs	mg/kg											
Triacotane	mg/kg											
Tributyl phosphate	mg/kg											
Tridecanoic acid	mg/kg											
Triphenyl phosphate	mg/kg											
UNKNOWN	mg/kg								0.817272727		0.585833333	
Unknown acid	mg/kg											
Unknown Alcohol	mg/kg											
Unknown Aldol Condensate	mg/kg											
UNKNOWN ALKANE	mg/kg								0.508		0.296666667	

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	CARNEYS PT											
Field Sample ID	10896835	10897412	10897478	10897489	11251514	11251519	12421076	22423794	22423796	22423801	22423802	
Location ID	52-R-3	52-R-7	52-R-7	52-R-8	R-9	R-9	R-16	DER1-28	DER1-29	DER1-28	DER1-29	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	
Date	10/31/2000	11/1/2000	11/1/2000	11/1/2000	5/21/2003	5/21/2003	10/16/2003	9/22/2009	9/22/2009	9/22/2009	9/22/2009	
Chemical Class	Units											
Unknown Alkene	mg/kg											
Unknown Amide	mg/kg											
Unknown Amine	mg/kg											
UNKNOWN AROMATIC	mg/kg											
Unknown Carboxylic Acid	mg/kg											
Unknown Cycloalkane	mg/kg											
Unknown Hydrocarbon	mg/kg											
Unknown Ketone	mg/kg											
Unknown PAH	mg/kg											
UNKNOWN SILOXANE	mg/kg											
<b>Semivolatile Organic Compounds</b>												
1,2,4-Trichlorobenzene	mg/kg							0.065	U	0.046	U	
1,2-Diphenylhydrazine	mg/kg							0.065	U	0.046	U	
1,4-Dioxane	mg/kg											
1-Naphthylamine	mg/kg							0.32	U	0.23	U	
2,3,4,6-Tetrachlorophenol	mg/kg											
2,4,5-Trichlorophenol	mg/kg											
2,4,6-Trichlorophenol	mg/kg							0.065	U	0.046	U	
2,4-Dichlorophenol	mg/kg							0.065	U	0.046	U	
2,4-Dimethylphenol	mg/kg							0.13	U	0.093	U	
2,4-Dinitrophenol	mg/kg							1.3	U	0.93	U	
2,4-Dinitrotoluene	mg/kg	0.041	U	0.13	U	0.069	U	0.13	U	0.093	U	
2,6-Dinitrotoluene	mg/kg	0.041	U	0.13	U	0.069	U	0.065	U	0.046	U	
2-Chloronaphthalene	mg/kg							0.065	U	0.046	U	
2-Chlorophenol	mg/kg							0.065	U	0.046	U	
2-Methylnaphthalene	mg/kg											
2-Methylphenol (O-Cresol)	mg/kg											
2-Naphthylamine	mg/kg							0.32	U	0.23	U	
2-Nitroaniline	mg/kg											
2-Nitrophenol	mg/kg							0.065	U	0.046	U	
3,3'-Dichlorobenzidine	mg/kg							0.19	U	0.14	U	
3,3'-Dimethylbenzidine	mg/kg											
3-Nitroaniline	mg/kg											
4,6-Dinitro-2-Methylphenol	mg/kg							0.32	U	0.23	U	
4-Aminobiphenyl	mg/kg							0.32	U	0.23	U	
4-Bromophenyl Phenyl Ether	mg/kg							0.065	U	0.046	U	
4-Chloro-3-Methylphenol	mg/kg							0.13	U	0.093	U	
4-Chloroaniline	mg/kg							0.13	U	0.093	U	
4-Chlorophenyl Phenyl Ether	mg/kg							0.065	U	0.046	U	
4-Methylphenol (P-Cresol)	mg/kg											
4-Nitroaniline	mg/kg											
4-Nitrophenol	mg/kg							0.32	U	0.23	U	
Acetophenone	mg/kg											
Aniline	mg/kg							0.32	U	0.23	U	
Benzidine	mg/kg							2.3	U	1.6	U	
Biphenyl	mg/kg											
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg											
Bis(2-Chloroethoxy)Methane	mg/kg							0.065	U	0.046	U	
Bis(2-Chloroethyl)Ether	mg/kg							0.065	U	0.046	U	
Bis(2-Chloroisopropyl)Ether	mg/kg							0.065	U	0.046	U	
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.084	U	0.27	U	0.14	U	0.13	U	0.093	U	
Butyl Benzyl Phthalate	mg/kg							0.13	U	0.093	U	
Carbazole	mg/kg							0.065	U	0.046	U	
Dibenzofuran	mg/kg											
Diethyl Phthalate	mg/kg							0.13	U	0.093	U	
Dimethyl Phthalate	mg/kg							0.13	U	0.093	U	
Di-N-Butyl Phthalate	mg/kg	0.084	U	0.27	U	0.14	U	0.13	U	0.093	U	
Diphenyl Ether	mg/kg											
Hexachlorobenzene	mg/kg							0.065	U	0.046	U	
Hexachlorobutadiene	mg/kg							0.13	U	0.093	U	
Hexachlorocyclopentadiene	mg/kg							0.32	U	0.23	U	
Hexachloroethane	mg/kg							0.065	U	0.046	U	
Hexachloropropylene	mg/kg											
Isophorone	mg/kg							0.065	U	0.046	U	
N-Dioctyl Phthalate	mg/kg							0.13	U	0.093	U	
Nitrobenzene	mg/kg							0.065	U	0.046	U	
N-Nitrosodimethylamine	mg/kg							0.13	U	0.093	U	
N-Nitrosodi-N-Propylamine	mg/kg							0.065	U	0.046	U	
N-Nitrosodiphenylamine	mg/kg	0.041	U	0.13	U	0.069	U	0.065	U	0.046	U	
O-Toluidine	mg/kg							0.39	U	0.28	U	
Parathion	mg/kg											
Pentachlorobenzene	mg/kg											
Pentachlorophenol	mg/kg							0.32	U	0.23	U	
Phenol	mg/kg							0.065	U	0.046	U	
<b>Volatile Organic Compounds - TICs</b>												
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	CARNEYS PT											
Field Sample ID	10896835	10897412	10897478	10897489	11251514	11251519	12421076	22423794	22423796	22423801	22423802	
Location ID	52-R-3	52-R-7	52-R-7	52-R-8	R-9	R-9	R-16	DER1-28	DER1-29	DER1-28	DER1-29	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS	
Date	10/31/2000	11/1/2000	11/1/2000	11/1/2000	5/21/2003	5/21/2003	10/16/2003	9/22/2009	9/22/2009	9/22/2009	9/22/2009	
Chemical Class	Units											
1-Butene	mg/kg											
1-Heptene	mg/kg											
1-Propene, 2-methyl-	mg/kg											
Azulene	mg/kg											
BENZENE, 1,2,4-TRICHLORO-	mg/kg											
BENZENE, 1,2-DICHLORO-	mg/kg											
BENZENE, 1,4-DICHLORO-	mg/kg											
Camphene	mg/kg											
CYCLOHEXANE	mg/kg											
Cyclohexane, methyl-	mg/kg											
Cyclotrisiloxane, hexamethyl	mg/kg											
Diphenyl Ether	mg/kg											
Ethane, 1,1,2,2-tetrachloro-	mg/kg											
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg											
Ethane, 1,2-dichloro-1,1-dif	mg/kg											
Ethene, 1,1-dichloro-2,2-dif	mg/kg											
Hexane, 2-methyl-	mg/kg											
Hexane, 3-methyl-	mg/kg											
METHANE, CHLOROFLUORO-	mg/kg											
Naphthalene	mg/kg											
NAPHTHALENE, 2-METHYL-	mg/kg											
Nonanal	mg/kg											
Norflurane	mg/kg											
Pentane, 2,3-dimethyl-	mg/kg											
Phenol, 4-(1,1,3,3-tetrameth	mg/kg											
Propene	mg/kg											
Sulfur dioxide	mg/kg											
Tridecane	mg/kg											
UNKNOWN	mg/kg											
UNKNOWN ALICYCLIC	mg/kg											
UNKNOWN ALIPHATIC	mg/kg											
UNKNOWN ALKANE	mg/kg											
UNKNOWN AROMATIC	mg/kg											
UNKNOWN SILOXANE	mg/kg									0.007		
<b>Volatile Organic Compounds</b>												
1,1,1,2-Tetrachloroethane	mg/kg											
1,1,1-Trichloroethane	mg/kg											
1,1,1-Trichlorotrifluoroethane	mg/kg									0.001	U	0.001 U
1,1,2,2-Tetrachloroethane	mg/kg									0.001	U	0.001 U
1,1,2-Trichloroethane	mg/kg									0.001	U	0.001 U
1,1,2-Trichlorotrifluoroethane	mg/kg									0.003	U	0.002 U
1,1,2-Trifluoroethane	mg/kg											
1,1-Dichloro-1-Fluoroethane	mg/kg											
1,1-Dichloroethane	mg/kg									0.001	U	0.001 U
1,1-Dichloroethene	mg/kg									0.001	U	0.001 U
1,1-Dichloropropene	mg/kg											
1,2,4-Trimethylbenzene	mg/kg											
1,2-Dibromoethane (EDB)	mg/kg											
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg											
1,2-Dichloro-1-Fluoroethane	mg/kg											
1,2-Dichlorobenzene	mg/kg								0.065	U	0.046	U
1,2-Dichloroethane	mg/kg											
1,2-Dichloroethene	mg/kg											
1,2-Dichloropropane	mg/kg									0.001	U	0.001 U
1,2-Dichlorotetrafluoroethane	mg/kg											
1,3,5-Trimethylbenzene	mg/kg											
1,3-Dichlorobenzene	mg/kg								0.065	U	0.046	U
1,4-Dichlorobenzene	mg/kg								0.065	U	0.046	U
1-Chloro-1,1-Difluoroethane	mg/kg											
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg											
2-Chloro-1,1,1-Trifluoroethane	mg/kg											
2-Chloroethyl Vinyl Ether	mg/kg											
2-Chlorotoluene	mg/kg											
2-Hexanone	mg/kg											
4-Chlorotoluene	mg/kg											
4-Isopropyltoluene	mg/kg											
Acetone	mg/kg									0.015		0.039
Acrolein	mg/kg									0.025	U	0.025 U
Acrylonitrile	mg/kg									0.005	U	0.005 U
Benzene	mg/kg									0.0006	U	0.0006 U
Bromodichloromethane	mg/kg									0.001	U	0.001 U
Bromoform	mg/kg									0.001	U	0.001 U
Carbon Disulfide	mg/kg									0.001	U	0.003
Carbon Tetrachloride	mg/kg									0.001	U	0.001 U
CFC-1113	mg/kg											
Chlorobenzene	mg/kg									0.001	U	0.001 U

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone	CARNEYS PT												
	Field Sample ID	10896835	10897412	10897478	10897489	11251514	11251519	12421076	22423794	22423796	22423801	22423802		
Chemical	Location ID	52-R-3	52-R-7	52-R-7	52-R-8	R-9	R-9	R-16	DER1-28	DER1-29	DER1-28	DER1-29		
Units	Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00		
	Sample Purpose	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	FS		
	Date	10/31/2000	11/1/2000	11/1/2000	11/1/2000	5/21/2003	5/21/2003	10/16/2003	9/22/2009	9/22/2009	9/22/2009	9/22/2009		
Chlorodibromomethane	mg/kg										0.001	U	0.001	U
Chlorodifluoromethane	mg/kg													
Chlorofluoromethane	mg/kg													
Chloroform	mg/kg										0.001	U	0.001	U
Chloropentafluoroethane	mg/kg													
cis-1,2-Dichloroethene	mg/kg										0.001	U	0.001	U
cis-1,3-Dichloropropene	mg/kg										0.001	U	0.001	U
Cumene	mg/kg													
Dichlorodifluoromethane	mg/kg										0.003	U	0.002	U
Dichlorofluoromethane	mg/kg										0.003	U	0.002	U
Ethane	ug/L													
Ethyl Chloride	mg/kg										0.003	U	0.002	U
Ethylbenzene	mg/kg										0.001	U	0.001	U
Fluoromethane	mg/kg													
Hexane	mg/kg													
Isobutyl Alcohol	mg/kg													
Meta- And Para-Xylene	mg/kg													
Methacrylonitrile	mg/kg													
Methane	ug/L													
Methyl Bromide	mg/kg										0.003	U	0.002	U
Methyl Chloride	mg/kg										0.003	U	0.002	U
Methyl Ethyl Ketone	mg/kg													
Methyl Isobutyl Ketone	mg/kg													
Methyl Methacrylate	mg/kg													
Methyl Tertiary Butyl Ether	mg/kg													
Methylene Chloride	mg/kg										0.003	U	0.002	U
N-Butylbenzene	mg/kg													
N-Propylbenzene	mg/kg													
Ortho-Xylene	mg/kg													
Propionitrile	mg/kg													
sec-Butylbenzene	mg/kg													
Styrene	mg/kg													
tert-Butylbenzene	mg/kg													
Tetrachloroethene	mg/kg										0.001	U	0.001	U
Tetrahydrofuran	mg/kg													
Toluene	mg/kg										0.001	U	0.001	U
trans-1,2-Dichloroethene	mg/kg										0.001	U	0.001	U
trans-1,3-Dichloropropene	mg/kg										0.001	U	0.001	U
Trichloroethene	mg/kg										0.001	U	0.001	U
Trichlorofluoromethane	mg/kg										0.003	U	0.002	U
Vinyl Chloride	mg/kg										0.001	U	0.001	U
Vinyl Fluoride	mg/kg													
Xylenes	mg/kg										0.001	U	0.001	U

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	CARNEYS PT											
Field Sample ID	22461402	22461404	22461406	22461408	22461410	22461412	22461413	22461414	22461415	22461416	22461417	
Location ID	DER1-20	DER1-22	DER1-24	DER1-25	DER1-26	DER1-27	DER1-27	DER1-20	DER1-22	DER1-24	DER1-25	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	
Date	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	
Chemical Class	Units											
<b>General Chemistry</b>												
Black Carbon	mg/kg											
Percent Moisture	%	59.8	41.5	27.4	39	43.9	67.1	63.5	76.4	22.8	16.8	19.9
Percent Solids	%											
Total Organic Carbon	mg/kg	19400	5710	2650	1900	3540	2580	9020	27100	1790	700	590
<b>Metals</b>												
Aluminum	mg/kg	12300	8590	4970	7670	9630	21100	21300				
Antimony	mg/kg	2.49 U	1.66 U	1.35 U	1.59 U	1.71 U	3.04 U	2.71 U				
Arsenic	mg/kg	6.03	3.9	1.76	3.63	4.4	9.63	9.88				
Barium	mg/kg	73.8	50.9	32.5	47.6	62.2	135	134				
Beryllium	mg/kg	0.169 U	0.115	0.0918 U	0.108 U	0.159	0.426	0.467				
Cadmium	mg/kg	0.356	0.285	0.189 U	0.259	0.381	0.809	0.854				
Calcium	mg/kg	2980	1500	921	1520	1880	3910	3860				
Chromium	mg/kg	33.2	25.4	16.3	21.1	25.3	54	54.7				
Cobalt	mg/kg	8.97	5.96	3.57	5.25	6.79	14.1	14.4				
Copper	mg/kg	20.1	12.7	7.7	10.4	15.6	35.1	34				
Iron	mg/kg	27800	15000	9760	13500	15900	33000	33400				
Lead	mg/kg	57.1	26.1	16.8	21.2	26.3	50	51.7				
Magnesium	mg/kg	3270	2470	1390	2270	2850	6190	6250				
Manganese	mg/kg	445	406	194	431	493	1200	1170				
Mercury	mg/kg	1.26	0.239	0.191	0.128	0.173	0.25	0.791				
Nickel	mg/kg	21.7	12.9	7.86	11.2	14	28.9	29.5				
Potassium	mg/kg	2110	1450	855	1340	1640	3490	3470				
Selenium	mg/kg	2.44 U	1.63 U	1.32 U	1.56 U	1.68 U	2.98 U	2.66 U				
Silver	mg/kg	0.448 U	0.299 U	0.243 U	0.286 U	0.309 U	0.547 U	0.458 U				
Sodium	mg/kg	543	269	147	263	288	516	483				
Thallium	mg/kg	3.61 U	2.41 U	1.96 U	2.31 U	2.49 U	4.41 U	3.93 U				
Tin	mg/kg	17.1	3.41	2.34	3.66	3.25	6.64	6.65				
Titanium	mg/kg											
Vanadium	mg/kg	31.6	23	15.2	20	23.9	52.1	51.8				
Zinc	mg/kg	118	93.3	57.6	81	109	223	224				
<b>Metals - AVS/SEM</b>												
Acid Volatile Sulfide	umol/g											
Arsenic	umol/g											
Cadmium	umol/g											
Copper	umol/g											
Lead	umol/g											
Zinc	umol/g											
<b>Metals - Leachate</b>												
Lead	ug/L											
<b>Per and Polyfluorinated Organic Substances</b>												
Perfluorobutane Sulfonic Acid	mg/kg											
Perfluorobutanoic Acid	mg/kg											
Perfluorodecane Sulfonic Acid	mg/kg											
Perfluorodecanoic Acid	mg/kg											
Perfluorododecanoic Acid	mg/kg											
Perfluoroheptanoic Acid	mg/kg											
Perfluorohexane Sulfonic Acid	mg/kg											
Perfluorohexanoic Acid	mg/kg											
Perfluorononanoic Acid	mg/kg											
Perfluorooctane Sulfonamide	mg/kg											
Perfluoropentanoic Acid	mg/kg											
Perfluorotetradecanoic Acid	mg/kg											
Perfluorotridecanoic Acid	mg/kg											
Perfluoroundecanoic Acid	mg/kg											
PFOA	mg/kg											
PFOA(trial)	mg/kg											
PFOS	mg/kg											
PFOS (trial)	mg/kg											
<b>Pesticides and Herbicides</b>												
4,4'-DDD	mg/kg											
4,4'-DDE	mg/kg											
4,4'-DDT	mg/kg											
Aldrin	mg/kg											
Alpha Chlordane	mg/kg											
Alpha-BHC	mg/kg											
beta-BHC	mg/kg											
delta-BHC	mg/kg											
Dieldrin	mg/kg											
Endosulfan I	mg/kg											
Endosulfan II	mg/kg											
Endosulfan Sulfate	mg/kg											
Endrin	mg/kg											
Endrin Aldehyde	mg/kg											
Endrin Ketone	mg/kg											
Gamma Chlordane	mg/kg											

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	CARNEYS PT											
Field Sample ID	22461402	22461404	22461406	22461408	22461410	22461412	22461413	22461414	22461415	22461416	22461417	
Location ID	DER1-20	DER1-22	DER1-24	DER1-25	DER1-26	DER1-27	DER1-27	DER1-20	DER1-22	DER1-24	DER1-25	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	
Date	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	
Chemical Class												
Chemical	Units											
Heptachlor	mg/kg											
Heptachlor Epoxide	mg/kg											
Lindane	mg/kg											
Methoxychlor	mg/kg											
Toxaphene	mg/kg											
Physical Properties												
0.001 MM	% PASSING	2	3.5	1	0.5	U	3.5	5	6			
0.002 MM	% PASSING	5	5	1	2		5	16	15			
0.005 MM	% PASSING	8	7.5	2.5	5		8	31	28			
0.02 MM	% PASSING	16	17	6	12		20.5	63	66			
0.05 MM	% PASSING	24.5	24	9.5	19		28	79	78			
0.064 MM	% PASSING	26.5	27	11.5	22		31	85.5	83.5			
0.075 MM	% PASSING	28.4	29.5	12.6	24.4		33.3	89	85.4			
0.15 MM	% PASSING	44.6	43.2	22.3	35.3		44.3	90.8	88.1			
0.3 MM	% PASSING	71.7	88	72.6	80.4		86.5	95.6	96.2			
0.6 MM	% PASSING	82.1	96.3	87	87.9		93.9	96.8	97.7			
1.18 MM	% PASSING	86.3	97.2	88.4	88.7		94.8	97.5	98.4			
19 MM	% PASSING	100	100	98.5	100		100	100	100			
2.36 MM	% PASSING	91.2	98.1	89.2	89.6		95.8	98.4	98.8			
3.35 MM	% PASSING	94.5	98.8	90.4	91.6		97	99	99.3			
37.5 MM	% PASSING	100	100	100	100		100	100	100			
4.75 MM	% PASSING	98.4	99.2	92.4	93.8		97.9	99.5	99.6			
75 MM	% PASSING	100	100	100	100		100	100	100			
Density	PCF											
Polychlorinated Biphenyls - TICs												
1,1'-Biphenyl, 2,3-dichloro-	mg/kg											
Unknown Biphenyl	mg/kg											
Polychlorinated Biphenyls												
Heptachlorobiphenyl	mg/kg											
Hexachlorobiphenyl	mg/kg											
Octachlorobiphenyl	mg/kg											
PCB 1	mg/kg											
PCB 10	mg/kg											
PCB 100	mg/kg											
PCB 101	mg/kg											
PCB 102	mg/kg											
PCB 103	mg/kg											
PCB 104	mg/kg											
PCB 105	mg/kg											
PCB 106	mg/kg											
PCB 107	mg/kg											
PCB 107/123	mg/kg											
PCB 108	mg/kg											
PCB 109	mg/kg											
PCB 11	mg/kg											
PCB 110	mg/kg											
PCB 111	mg/kg											
PCB 112	mg/kg											
PCB 113	mg/kg											
PCB 114	mg/kg											
PCB 115	mg/kg											
PCB 116	mg/kg											
PCB 117	mg/kg											
PCB 118	mg/kg											
PCB 119	mg/kg											
PCB 12	mg/kg											
PCB 120	mg/kg											
PCB 121	mg/kg											
PCB 121/95/88	mg/kg											
PCB 122	mg/kg											
PCB 123	mg/kg											
PCB 124	mg/kg											
PCB 125	mg/kg											
PCB 126	mg/kg											
PCB 127	mg/kg											
PCB 128	mg/kg											
PCB 129	mg/kg											
PCB 129/158	mg/kg											
PCB 13	mg/kg											
PCB 130	mg/kg											
PCB 130/164	mg/kg											
PCB 131	mg/kg											
PCB 132	mg/kg											
PCB 133	mg/kg											
PCB 134	mg/kg											
PCB 135	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	CARNEYS PT											
Field Sample ID	22461402	22461404	22461406	22461408	22461410	22461412	22461413	22461414	22461415	22461416	22461417	
Location ID	DER1-20	DER1-22	DER1-24	DER1-25	DER1-26	DER1-27	DER1-27	DER1-20	DER1-22	DER1-24	DER1-25	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	
Date	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009
Chemical Class												
Chemical	Units											
PCB 136	mg/kg											
PCB 137	mg/kg											
PCB 138	mg/kg											
PCB 139	mg/kg											
PCB 14	mg/kg											
PCB 140	mg/kg											
PCB 141	mg/kg											
PCB 142	mg/kg											
PCB 143	mg/kg											
PCB 143/139	mg/kg											
PCB 144	mg/kg											
PCB 145	mg/kg											
PCB 146	mg/kg											
PCB 147	mg/kg											
PCB 148	mg/kg											
PCB 149	mg/kg											
PCB 15	mg/kg											
PCB 150	mg/kg											
PCB 151	mg/kg											
PCB 152	mg/kg											
PCB 153	mg/kg											
PCB 154	mg/kg											
PCB 155	mg/kg											
PCB 156	mg/kg											
PCB 157	mg/kg											
PCB 158	mg/kg											
PCB 159	mg/kg											
PCB 16	mg/kg											
PCB 160	mg/kg											
PCB 161	mg/kg											
PCB 162	mg/kg											
PCB 163	mg/kg											
PCB 163/160	mg/kg											
PCB 164	mg/kg											
PCB 165	mg/kg											
PCB 166	mg/kg											
PCB 167	mg/kg											
PCB 168	mg/kg											
PCB 169	mg/kg											
PCB 17	mg/kg											
PCB 170	mg/kg											
PCB 171	mg/kg											
PCB 172	mg/kg											
PCB 173	mg/kg											
PCB 174	mg/kg											
PCB 175	mg/kg											
PCB 176	mg/kg											
PCB 177	mg/kg											
PCB 178	mg/kg											
PCB 179	mg/kg											
PCB 18	mg/kg											
PCB 180	mg/kg											
PCB 181	mg/kg											
PCB 182	mg/kg											
PCB 182/175	mg/kg											
PCB 183	mg/kg											
PCB 184	mg/kg											
PCB 185	mg/kg											
PCB 186	mg/kg											
PCB 187	mg/kg											
PCB 188	mg/kg											
PCB 189	mg/kg											
PCB 19	mg/kg											
PCB 190	mg/kg											
PCB 191	mg/kg											
PCB 192	mg/kg											
PCB 193	mg/kg											
PCB 194	mg/kg											
PCB 195	mg/kg											
PCB 196	mg/kg											
PCB 197	mg/kg											
PCB 198	mg/kg											
PCB 199	mg/kg											
PCB 2	mg/kg											
PCB 20	mg/kg											
PCB 200	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	CARNEYS PT											
Field Sample ID	22461402	22461404	22461406	22461408	22461410	22461412	22461413	22461414	22461415	22461416	22461417	
Location ID	DER1-20	DER1-22	DER1-24	DER1-25	DER1-26	DER1-27	DER1-27	DER1-20	DER1-22	DER1-24	DER1-25	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	
Date	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009
Chemical Class	Units											
PCB 201	mg/kg											
PCB 202	mg/kg											
PCB 203	mg/kg											
PCB 204	mg/kg											
PCB 204/200	mg/kg											
PCB 205	mg/kg											
PCB 206	mg/kg											
PCB 207	mg/kg											
PCB 208	mg/kg											
PCB 209	mg/kg											
PCB 21	mg/kg											
PCB 21/20	mg/kg											
PCB 22	mg/kg											
PCB 23	mg/kg											
PCB 24	mg/kg											
PCB 25	mg/kg											
PCB 26	mg/kg											
PCB 27	mg/kg											
PCB 28	mg/kg											
PCB 29	mg/kg											
PCB 3	mg/kg											
PCB 30	mg/kg											
PCB 31	mg/kg											
PCB 32	mg/kg											
PCB 33	mg/kg											
PCB 34	mg/kg											
PCB 35	mg/kg											
PCB 36	mg/kg											
PCB 37	mg/kg											
PCB 38	mg/kg											
PCB 39	mg/kg											
PCB 4	mg/kg											
PCB 4/10	mg/kg											
PCB 40	mg/kg											
PCB 41	mg/kg											
PCB 42	mg/kg											
PCB 43	mg/kg											
PCB 44	mg/kg											
PCB 45	mg/kg											
PCB 46	mg/kg											
PCB 47	mg/kg											
PCB 48	mg/kg											
PCB 49	mg/kg											
PCB 5	mg/kg											
PCB 50	mg/kg											
PCB 51	mg/kg											
PCB 52	mg/kg											
PCB 53	mg/kg											
PCB 54	mg/kg											
PCB 55	mg/kg											
PCB 56	mg/kg											
PCB 57	mg/kg											
PCB 58	mg/kg											
PCB 59	mg/kg											
PCB 6	mg/kg											
PCB 60	mg/kg											
PCB 61	mg/kg											
PCB 62	mg/kg											
PCB 63	mg/kg											
PCB 64	mg/kg											
PCB 65	mg/kg											
PCB 65/75/62	mg/kg											
PCB 66	mg/kg											
PCB 67	mg/kg											
PCB 67/58	mg/kg											
PCB 68	mg/kg											
PCB 68/64	mg/kg											
PCB 69	mg/kg											
PCB 7	mg/kg											
PCB 70	mg/kg											
PCB 71	mg/kg											
PCB 72	mg/kg											
PCB 73	mg/kg											
PCB 73/46	mg/kg											
PCB 74	mg/kg											
PCB 75	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	CARNEYS PT											
Field Sample ID	22461402	22461404	22461406	22461408	22461410	22461412	22461413	22461414	22461415	22461416	22461417	
Location ID	DER1-20	DER1-22	DER1-24	DER1-25	DER1-26	DER1-27	DER1-27	DER1-20	DER1-22	DER1-24	DER1-25	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	
Date	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	
Chemical Class	Units											
PCB 76	mg/kg											
PCB 77	mg/kg											
PCB 78	mg/kg											
PCB 79	mg/kg											
PCB 8	mg/kg											
PCB 80	mg/kg											
PCB 81	mg/kg											
PCB 82	mg/kg											
PCB 83	mg/kg											
PCB 83/125/112	mg/kg											
PCB 84	mg/kg											
PCB 85	mg/kg											
PCB 86	mg/kg											
PCB 86/109	mg/kg											
PCB 87	mg/kg											
PCB 87/111	mg/kg											
PCB 88	mg/kg											
PCB 89	mg/kg											
PCB 89/84	mg/kg											
PCB 9	mg/kg											
PCB 90	mg/kg											
PCB 91	mg/kg											
PCB 92	mg/kg											
PCB 93	mg/kg											
PCB 94	mg/kg											
PCB 95	mg/kg											
PCB 96	mg/kg											
PCB 97	mg/kg											
PCB 98	mg/kg											
PCB 99	mg/kg											
PCB-100/93	mg/kg											
PCB-107/124	mg/kg											
PCB-108/119/86/97/125/87	mg/kg											
PCB-113/90/101	mg/kg											
PCB-116/85	mg/kg											
PCB-128/166	mg/kg											
PCB-13/12	mg/kg											
PCB-139/140	mg/kg											
PCB-147/149	mg/kg											
PCB-151/135	mg/kg											
PCB-153/168	mg/kg											
PCB-156/157	mg/kg											
PCB-163/138/129	mg/kg											
PCB-171/173	mg/kg											
PCB-180/193	mg/kg											
PCB-198/199	mg/kg											
PCB-21/33	mg/kg											
PCB-26/29	mg/kg											
PCB-28/20	mg/kg											
PCB-30/18	mg/kg											
PCB-44/47/65	mg/kg											
PCB-50/53	mg/kg											
PCB-59/62/75	mg/kg											
PCB-61/70/74/76	mg/kg											
PCB-69/49	mg/kg											
PCB-71/40	mg/kg											
PCB-90/101	mg/kg											
Pentachlorobiphenyl	mg/kg											
Tetrachlorobiphenyl	mg/kg											
Total Decachlorobiphenyls (congeners)	mg/kg											
Total Dichlorobiphenyls (congeners)	mg/kg											
Total Heptachlorobiphenyls (congeners)	mg/kg											
Total Hexachlorobiphenyls (congeners)	mg/kg											
Total Monochlorobiphenyls (congeners)	mg/kg											
Total Nonachlorobiphenyls (congeners)	mg/kg											
Total Octachlorobiphenyls (congeners)	mg/kg											
Total PCB (congeners)	mg/kg											
Total Pentachlorobiphenyls (congeners)	mg/kg											
Total Tetrachlorobiphenyls (congeners)	mg/kg											
Total Trichlorobiphenyls (congeners)	mg/kg											
Trichlorobiphenyl (total)	mg/kg											
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>												
Benzo[e]pyrene	mg/kg											
Chrysene, 1-methyl-	mg/kg											
Naphthalene, 1-methyl-	mg/kg											
Pyrene, 1-methyl-	mg/kg											

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	CARNEYS PT	CARNEYS PT															
Field Sample ID	22461402	22461404	22461406	22461408	22461410	22461412	22461413	22461414	22461415	22461416	22461417						
Location ID	DER1-20	DER1-22	DER1-24	DER1-25	DER1-26	DER1-27	DER1-27	DER1-20	DER1-22	DER1-24	DER1-25						
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00						
Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS						
Date	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009						
Chemical Class	Units																
<b>Polycyclic Aromatic Hydrocarbons</b>																	
Acenaphthene	mg/kg	0.083	U	0.057	U	0.046	U	0.055	U	0.059	U	0.1	U	0.091	U		
Acenaphthylene	mg/kg	0.083	U	0.057	U	0.046	U	0.055	U	0.059	U	0.1	U	0.091	U		
Anthracene	mg/kg	0.083	U	0.082	U	0.046	U	0.055	U	0.059	U	0.1	U	0.091	U		
Benzo(A)Anthracene	mg/kg	0.083	U	0.34	U	0.046	U	0.055	U	0.059	U	0.15	U	0.091	U		
Benzo(B)Fluoranthene	mg/kg	0.083	U	0.35	U	0.046	U	0.055	U	0.066	U	0.21	U	0.12	U		
Benzo(G,H,I)Perylene	mg/kg	0.083	U	0.17	U	0.046	U	0.055	U	0.059	U	0.12	U	0.091	U		
Benzo(K)Fluoranthene	mg/kg	0.083	U	0.14	U	0.046	U	0.055	U	0.059	U	0.1	U	0.091	U		
Benzo(A)Pyrene	mg/kg	0.083	U	0.27	U	0.046	U	0.055	U	0.059	U	0.15	U	0.091	U		
Chrysene	mg/kg	0.083	U	0.37	U	0.046	U	0.055	U	0.059	U	0.17	U	0.1	U		
Dibenz(A,H)Anthracene	mg/kg	0.083	U	0.057	U	0.046	U	0.055	U	0.059	U	0.1	U	0.091	U		
Fluoranthene	mg/kg	0.083	U	0.66	U	0.046	U	0.055	U	0.086	U	0.26	U	0.15	U		
Fluorene	mg/kg	0.083	U	0.057	U	0.046	U	0.055	U	0.059	U	0.1	U	0.091	U		
Indeno (1,2,3-CD) Pyrene	mg/kg	0.083	U	0.16	U	0.046	U	0.055	U	0.059	U	0.1	U	0.091	U		
Naphthalene	mg/kg	0.083	U	0.057	U	0.046	U	0.055	U	0.059	U	0.1	U	0.091	U		
Phenanthrene	mg/kg	0.083	U	0.24	U	0.046	U	0.055	U	0.059	U	0.11	U	0.091	U		
Pyrene	mg/kg	0.083	U	0.53	U	0.046	U	0.055	U	0.081	U	0.26	U	0.15	U		
Total PAHs (Detections + 1/2 MDL)	mg/kg	0.664	U	3.4545	U	0.368	U	0.44	U	0.6165	U	1.83	U	1.066	U		
Total PAHs (Detections Only)	mg/kg	0.664	U	3.312	U	0.368	U	0.44	U	0.233	U	1.43	U	0.52	U		
<b>Semivolatile Organic Compounds - TICs</b>																	
1,2,4-Trithiolane	mg/kg																
1,4-Benzenediol, 2-chloro-	mg/kg																
11H-Benzo[b]fluorene	mg/kg																
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg																
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg	39		19		20		18		28		33		47			
3-PENTEN-2-ONE, 4-METHYL-	mg/kg	0.51				0.23											
7H-Benz[de]anthracen-7-one	mg/kg																
9,10-Anthracenedione	mg/kg																
9-Octadecenamamide, (Z)-	mg/kg																
Acetamide, 2-chloro-N-(ethox	mg/kg																
Alachlor	mg/kg																
Benzenamine, 3-methyl-	mg/kg																
Benzenamine, 4,4',4"-methy	mg/kg																
Benzenamine, 4,4'-methyleneb	mg/kg																
Benzene, 1,2,3,4-tetrachloro	mg/kg																
Benzene, 1,2,3,5-tetrachloro	mg/kg																
Benzene, 1,2,3-trichloro-	mg/kg																
Benzene, 1,3,5-trichloro-	mg/kg																
Benzene, 1,3-bis(1-methyleth	mg/kg																
Benzene, 1,4-bis(1-methyleth	mg/kg																
Benzofuran, 2,3-dihydro-	mg/kg																
CYCLIC OCTAATOMIC SULFUR	mg/kg								2.5		11						
Diphenyl Ether	mg/kg																
Docosane	mg/kg																
Heneicosane	mg/kg																
Hexacosane	mg/kg																
Hexadecane	mg/kg																
Hexatriacontane	mg/kg																
m-Chloroaniline	mg/kg																
N,N-Diethylaniline	mg/kg																
n-Hexadecanoic acid	mg/kg																
Nonadecane	mg/kg																
o-Chloroaniline	mg/kg																
Octacosane	mg/kg																
Octadecane	mg/kg																
Octadecane, 1-chloro-	mg/kg																
Octadecanoic acid	mg/kg																
Parachlorophenol	mg/kg																
Pentadecane	mg/kg																
Perylene	mg/kg																
Phenol, 2,5-dichloro-	mg/kg																
Phenol, 3-chloro-	mg/kg																
Phenol, 4,4'-(1-methylethyl)	mg/kg																
Tetracosane	mg/kg																
Tetradecane	mg/kg																
Tetraethylene glycol	mg/kg																
Total SVOC TICs	mg/kg																
Triacontane	mg/kg																
Tributyl phosphate	mg/kg																
Tridecanoic acid	mg/kg																
Triphenyl phosphate	mg/kg																
UNKNOWN	mg/kg	1.460769231		0.531111111		0.287142857		0.477272727		0.524210526		1.674705882		1.124736842			
Unknown acid	mg/kg																
Unknown Alcohol	mg/kg																
Unknown Aldol Condensate	mg/kg																
UNKNOWN ALKANE	mg/kg			0.25		0.475		0.4475		0.3425		1.056666667		0.648			

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	CARNEYS PT											
Field Sample ID	22461402	22461404	22461406	22461408	22461410	22461412	22461413	22461414	22461415	22461416	22461417	
Location ID	DER1-20	DER1-22	DER1-24	DER1-25	DER1-26	DER1-27	DER1-27	DER1-20	DER1-22	DER1-24	DER1-25	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00	
Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS	
Date	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	
Chemical Class												
Chemical	Units											
Unknown Alkene	mg/kg											
Unknown Amide	mg/kg											
Unknown Amine	mg/kg											
UNKNOWN AROMATIC	mg/kg											
Unknown Carboxylic Acid	mg/kg											
Unknown Cycloalkane	mg/kg											
Unknown Hydrocarbon	mg/kg											
Unknown Ketone	mg/kg											
Unknown PAH	mg/kg											
UNKNOWN SILOXANE	mg/kg											
<b>Semivolatile Organic Compounds</b>												
1,2,4-Trichlorobenzene	mg/kg	0.083 U	0.057 U	0.046 U	0.055 U	0.059 U	0.1 U	0.091 U				
1,2-Diphenylhydrazine	mg/kg	0.083 U	0.057 U	0.046 U	0.055 U	0.059 U	0.1 U	0.091 U				
1,4-Dioxane	mg/kg											
1-Naphthylamine	mg/kg	0.41 U	0.28 U	0.23 U	0.27 U	0.3 U	0.51 U	0.46 U				
2,3,4,6-Tetrachlorophenol	mg/kg											
2,4,5-Trichlorophenol	mg/kg											
2,4,6-Trichlorophenol	mg/kg	0.083 U	0.057 U	0.046 U	0.055 U	0.059 U	0.1 U	0.091 U				
2,4-Dichlorophenol	mg/kg	0.083 U	0.057 U	0.046 U	0.055 U	0.059 U	0.1 U	0.091 U				
2,4-Dimethylphenol	mg/kg	0.17 U	0.11 U	0.092 U	0.11 U	0.12 U	0.2 U	0.18 U				
2,4-Dinitrophenol	mg/kg	1.7 U	1.1 U	0.92 U	1.1 U	1.2 U	2 U	1.8 U				
2,4-Dinitrotoluene	mg/kg	0.17 U	0.11 U	0.092 U	0.11 U	0.12 U	0.2 U	0.18 U				
2,6-Dinitrotoluene	mg/kg	0.083 U	0.057 U	0.046 U	0.055 U	0.059 U	0.1 U	0.091 U				
2-Chloronaphthalene	mg/kg	0.083 U	0.057 U	0.046 U	0.055 U	0.059 U	0.1 U	0.091 U				
2-Chlorophenol	mg/kg	0.083 U	0.057 U	0.046 U	0.055 U	0.059 U	0.1 U	0.091 U				
2-Methylnaphthalene	mg/kg											
2-Methylphenol (O-Cresol)	mg/kg											
2-Naphthylamine	mg/kg	0.41 U	0.28 U	0.23 U	0.27 U	0.3 U	0.51 U	0.46 U				
2-Nitroaniline	mg/kg											
2-Nitrophenol	mg/kg	0.083 U	0.057 U	0.046 U	0.055 U	0.059 U	0.1 U	0.091 U				
3,3'-Dichlorobenzidine	mg/kg	0.25 U	0.17 U	0.14 U	0.18 U	0.18 U	0.3 U	0.27 U				
3,3'-Dimethylbenzidine	mg/kg											
3-Nitroaniline	mg/kg											
4,6-Dinitro-2-Methylphenol	mg/kg	0.41 U	0.28 U	0.23 U	0.27 U	0.3 U	0.51 U	0.46 U				
4-Aminobiphenyl	mg/kg	0.41 U	0.28 U	0.23 U	0.27 U	0.3 U	0.51 U	0.46 U				
4-Bromophenyl Phenyl Ether	mg/kg	0.083 U	0.057 U	0.046 U	0.055 U	0.059 U	0.1 U	0.091 U				
4-Chloro-3-Methylphenol	mg/kg	0.17 U	0.11 U	0.092 U	0.11 U	0.12 U	0.2 U	0.18 U				
4-Chloroaniline	mg/kg	0.17 U	0.11 U	0.092 U	0.11 U	0.12 U	0.2 U	0.18 U				
4-Chlorophenyl Phenyl Ether	mg/kg	0.083 U	0.057 U	0.046 U	0.055 U	0.059 U	0.1 U	0.091 U				
4-Methylphenol (P-Cresol)	mg/kg											
4-Nitroaniline	mg/kg											
4-Nitrophenol	mg/kg	0.41 U	0.28 U	0.23 U	0.27 U	0.3 U	0.51 U	0.46 U				
Acetophenone	mg/kg											
Aniline	mg/kg	0.41 U	0.28 U	0.23 U	0.27 U	0.3 U	0.51 U	0.46 U				
Benzidine	mg/kg	2.9 U	2 U	1.6 U	1.9 U	2.1 U	3.5 U	3.2 U				
Biphenyl	mg/kg											
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg											
Bis(2-Chloroethoxy)Methane	mg/kg	0.083 U	0.057 U	0.046 U	0.055 U	0.059 U	0.1 U	0.091 U				
Bis(2-Chloroethyl)Ether	mg/kg	0.083 U	0.057 U	0.046 U	0.055 U	0.059 U	0.1 U	0.091 U				
Bis(2-Chloroisopropyl)Ether	mg/kg	0.083 U	0.057 U	0.046 U	0.055 U	0.059 U	0.1 U	0.091 U				
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.17 U	0.11 U	0.092 U	0.11 U	0.12 U	0.23 U	0.19 U				
Butyl Benzyl Phthalate	mg/kg	0.17 U	0.11 U	0.092 U	0.11 U	0.12 U	0.2 U	0.18 U				
Carbazole	mg/kg	0.083 U	0.057 U	0.046 U	0.055 U	0.059 U	0.1 U	0.091 U				
Dibenzofuran	mg/kg											
Diethyl Phthalate	mg/kg	0.17 U	0.11 U	0.092 U	0.11 U	0.12 U	0.2 U	0.18 U				
Dimethyl Phthalate	mg/kg	0.17 U	0.11 U	0.092 U	0.11 U	0.12 U	0.2 U	0.18 U				
Di-N-Butyl Phthalate	mg/kg	0.17 U	0.11 U	0.092 U	0.11 U	0.12 U	0.2 U	0.18 U				
Diphenyl Ether	mg/kg											
Hexachlorobenzene	mg/kg	0.083 U	0.057 U	0.046 U	0.055 U	0.059 U	0.1 U	0.091 U				
Hexachlorobutadiene	mg/kg	0.17 U	0.11 U	0.092 U	0.11 U	0.12 U	0.2 U	0.18 U				
Hexachlorocyclopentadiene	mg/kg	0.41 U	0.28 U	0.23 U	0.27 U	0.3 U	0.51 U	0.46 U				
Hexachloroethane	mg/kg	0.083 U	0.057 U	0.046 U	0.055 U	0.059 U	0.1 U	0.091 U				
Hexachloropropylene	mg/kg											
Isophorone	mg/kg	0.083 U	0.057 U	0.046 U	0.055 U	0.059 U	0.1 U	0.091 U				
N-Dioctyl Phthalate	mg/kg	0.17 U	0.11 U	0.092 U	0.11 U	0.12 U	0.2 U	0.18 U				
Nitrobenzene	mg/kg	0.083 U	0.057 U	0.046 U	0.055 U	0.059 U	0.1 U	0.091 U				
N-Nitrosodimethylamine	mg/kg	0.17 U	0.11 U	0.092 U	0.11 U	0.12 U	0.2 U	0.18 U				
N-Nitrosodi-N-Propylamine	mg/kg	0.083 U	0.057 U	0.046 U	0.055 U	0.059 U	0.1 U	0.091 U				
N-Nitrosodiphenylamine	mg/kg	0.083 U	0.057 U	0.046 U	0.055 U	0.059 U	0.1 U	0.091 U				
O-Toluidine	mg/kg	0.5 U	0.34 U	0.28 U	0.33 U	0.36 U	0.61 U	0.55 U				
Parathion	mg/kg											
Pentachlorobenzene	mg/kg											
Pentachlorophenol	mg/kg	0.41 U	0.28 U	0.23 U	0.27 U	0.3 U	0.51 U	0.46 U				
Phenol	mg/kg	0.083 U	0.057 U	0.046 U	0.055 U	0.059 U	0.1 U	0.091 U				
<b>Volatile Organic Compounds - TICs</b>												
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg											

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	CARNEYS PT												
Field Sample ID	22461402	22461404	22461406	22461408	22461410	22461412	22461413	22461414	22461415	22461416	22461417		
Location ID	DER1-20	DER1-22	DER1-24	DER1-25	DER1-26	DER1-27	DER1-27	DER1-20	DER1-22	DER1-24	DER1-25		
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00		
Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS		
Date	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009		
Chemical Class													
Chemical	Units												
1-Butene	mg/kg												
1-Heptene	mg/kg												
1-Propene, 2-methyl-	mg/kg												
Azulene	mg/kg												
BENZENE, 1,2,4-TRICHLORO-	mg/kg												
BENZENE, 1,2-DICHLORO-	mg/kg												
BENZENE, 1,4-DICHLORO-	mg/kg												
Camphene	mg/kg												
CYCLOHEXANE	mg/kg												
Cyclohexane, methyl-	mg/kg												
Cyclotrisiloxane, hexamethyl	mg/kg												
Diphenyl Ether	mg/kg												
Ethane, 1,1,2,2-tetrachloro-	mg/kg												
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg												
Ethane, 1,2-dichloro-1,1-dif	mg/kg												
Ethene, 1,1-dichloro-2,2-dif	mg/kg												
Hexane, 2-methyl-	mg/kg												
Hexane, 3-methyl-	mg/kg												
METHANE, CHLOROFLUORO-	mg/kg												
Naphthalene	mg/kg												
NAPHTHALENE, 2-METHYL-	mg/kg												
Nonanal	mg/kg												
Norflurane	mg/kg												
Pentane, 2,3-dimethyl-	mg/kg												
Phenol, 4-(1,1,3,3-tetrameth	mg/kg												
Propene	mg/kg												
Sulfur dioxide	mg/kg												
Tridecane	mg/kg												
UNKNOWN	mg/kg												
UNKNOWN ALICYCLIC	mg/kg												
UNKNOWN ALIPHATIC	mg/kg												
UNKNOWN ALKANE	mg/kg												
UNKNOWN AROMATIC	mg/kg												
UNKNOWN SILOXANE	mg/kg							0.073			0.006		
<b>Volatile Organic Compounds</b>													
1,1,1,2-Tetrachloroethane	mg/kg												
1,1,1-Trichloroethane	mg/kg												
1,1,1-Trichlorotrifluoroethane	mg/kg												
1,1,2,2-Tetrachloroethane	mg/kg							0.01	U	0.001	U	0.0009	U
1,1,2-Trichloroethane	mg/kg							0.01	U	0.001	U	0.0009	U
1,1,2-Trichlorotrifluoroethane	mg/kg							0.021	U	0.002	U	0.002	U
1,1,2-Trifluoroethane	mg/kg												
1,1-Dichloro-1-Fluoroethane	mg/kg												
1,1-Dichloroethane	mg/kg							0.01	U	0.001	U	0.0009	U
1,1-Dichloroethene	mg/kg							0.01	U	0.001	U	0.0009	U
1,1-Dichloropropene	mg/kg												
1,2,4-Trimethylbenzene	mg/kg												
1,2-Dibromoethane (EDB)	mg/kg												
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg												
1,2-Dichloro-1-Fluoroethane	mg/kg												
1,2-Dichlorobenzene	mg/kg	0.083	U	0.057	U	0.046	U	0.055	U	0.059	U	0.1	U
1,2-Dichloroethane	mg/kg									0.01	U	0.001	U
1,2-Dichloroethene	mg/kg												
1,2-Dichloropropane	mg/kg									0.01	U	0.001	U
1,2-Dichlorotetrafluoroethane	mg/kg												
1,3,5-Trimethylbenzene	mg/kg												
1,3-Dichlorobenzene	mg/kg	0.083	U	0.057	U	0.046	U	0.055	U	0.059	U	0.1	U
1,4-Dichlorobenzene	mg/kg	0.083	U	0.057	U	0.046	U	0.055	U	0.059	U	0.1	U
1-Chloro-1,1-Difluoroethane	mg/kg												
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg												
2-Chloro-1,1,1-Trifluoroethane	mg/kg												
2-Chloroethyl Vinyl Ether	mg/kg												
2-Chlorotoluene	mg/kg												
2-Hexanone	mg/kg												
4-Chlorotoluene	mg/kg												
4-Isopropyltoluene	mg/kg												
Acetone	mg/kg									0.88		0.019	
Acrolein	mg/kg									0.21	U	0.023	U
Acrylonitrile	mg/kg									0.042	U	0.005	U
Benzene	mg/kg									0.005	U	0.0006	U
Bromodichloromethane	mg/kg									0.01	U	0.001	U
Bromoform	mg/kg									0.01	U	0.001	U
Carbon Disulfide	mg/kg									0.018	U	0.001	U
Carbon Tetrachloride	mg/kg									0.01	U	0.001	U
CFC-1113	mg/kg												
Chlorobenzene	mg/kg									0.01	U	0.001	U

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	CARNEYS PT														
Field Sample ID	22461402	22461404	22461406	22461408	22461410	22461412	22461413	22461414	22461415	22461416	22461417				
Location ID	DER1-20	DER1-22	DER1-24	DER1-25	DER1-26	DER1-27	DER1-27	DER1-20	DER1-22	DER1-24	DER1-25				
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.50-1.00	0.50-1.00				
Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	FS	FS	FS				
Date	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009				
Chemical Class	Units														
Chlorodibromomethane	mg/kg							0.01	U	0.001	U	0.0009	U	0.001	U
Chlorodifluoromethane	mg/kg														
Chlorofluoromethane	mg/kg														
Chloroform	mg/kg							0.01	U	0.001	U	0.0009	U	0.001	U
Chloropentafluoroethane	mg/kg														
cis-1,2-Dichloroethene	mg/kg							0.01	U	0.001	U	0.0009	U	0.001	U
cis-1,3-Dichloropropene	mg/kg							0.01	U	0.001	U	0.0009	U	0.001	U
Cumene	mg/kg														
Dichlorodifluoromethane	mg/kg							0.021	U	0.002	U	0.002	U	0.002	U
Dichlorofluoromethane	mg/kg							0.021	U	0.002	U	0.002	U	0.002	U
Ethane	ug/L														
Ethyl Chloride	mg/kg							0.021	U	0.002	U	0.002	U	0.002	U
Ethylbenzene	mg/kg							0.01	U	0.001	U	0.0009	U	0.001	U
Fluoromethane	mg/kg														
Hexane	mg/kg														
Isobutyl Alcohol	mg/kg														
Meta- And Para-Xylene	mg/kg														
Methacrylonitrile	mg/kg														
Methane	ug/L														
Methyl Bromide	mg/kg							0.021	U	0.002	U	0.002	U	0.002	U
Methyl Chloride	mg/kg							0.021	U	0.002	U	0.002	U	0.002	U
Methyl Ethyl Ketone	mg/kg														
Methyl Isobutyl Ketone	mg/kg														
Methyl Methacrylate	mg/kg														
Methyl Tertiary Butyl Ether	mg/kg														
Methylene Chloride	mg/kg							0.021	U	0.002	U	0.003		0.004	
N-Butylbenzene	mg/kg														
N-Propylbenzene	mg/kg														
Ortho-Xylene	mg/kg														
Propionitrile	mg/kg														
sec-Butylbenzene	mg/kg														
Styrene	mg/kg														
tert-Butylbenzene	mg/kg														
Tetrachloroethene	mg/kg							0.01	U	0.001	U	0.0009	U	0.001	U
Tetrahydrofuran	mg/kg														
Toluene	mg/kg							0.019		0.001	U	0.0009	U	0.001	U
trans-1,2-Dichloroethene	mg/kg							0.01	U	0.001	U	0.0009	U	0.001	U
trans-1,3-Dichloropropene	mg/kg							0.01	U	0.001	U	0.0009	U	0.001	U
Trichloroethene	mg/kg							0.01	U	0.001	U	0.0009	U	0.001	U
Trichlorofluoromethane	mg/kg							0.021	U	0.002	U	0.002	U	0.002	U
Vinyl Chloride	mg/kg							0.01	U	0.001	U	0.0009	U	0.001	U
Vinyl Fluoride	mg/kg														
Xylenes	mg/kg							0.01	U	0.001	U	0.0009	U	0.001	U

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	CARNEYS PT											
Field Sample ID	22461418	22461419	22461420	22469295	22469297	22469301	22469302	22499343	22499344	22499345	22499346	
Location ID	DER1-26	DER1-27	DER1-27	DER1-21	DER1-23	DER1-21	DER1-23	DER1-22	DER1-27	DER1-27	DER1-29	
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	
Sample Purpose	FS	FS	DUP	FS	FS	FS	FS	FS	FS	DUP	FS	
Date	9/23/2009	9/23/2009	9/23/2009	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/23/2009	9/23/2009	9/23/2009	9/22/2009	
Units												
<b>General Chemistry</b>												
Black Carbon	mg/kg			1470		910		515		465		
Percent Moisture	%	12.7	38.6	11.7	40	27.2		17.9		20.2		
Percent Solids	%											
Total Organic Carbon	mg/kg	335	3420		4825	4090		1335		715		
<b>Metals</b>												
Aluminum	mg/kg			18100		5060						
Antimony	mg/kg			1.63	U	1.33	U					
Arsenic	mg/kg			5.14		2.3						
Barium	mg/kg			73.8		25						
Beryllium	mg/kg			0.145		0.0907	U					
Cadmium	mg/kg			0.288		0.187	U					
Calcium	mg/kg			1680		766						
Chromium	mg/kg			34.9		18.7						
Cobalt	mg/kg			6.61		3.31						
Copper	mg/kg			13		8.65						
Iron	mg/kg			22600		9290						
Lead	mg/kg			25.2		17.6						
Magnesium	mg/kg			3420		1340						
Manganese	mg/kg			300		147						
Mercury	mg/kg			0.242		0.226						
Nickel	mg/kg			17.4		8.13						
Potassium	mg/kg			2530		868						
Selenium	mg/kg			1.6	U	1.31	U					
Silver	mg/kg			0.294	U	0.24	U					
Sodium	mg/kg			318		152						
Thallium	mg/kg			2.37	U	1.93	U					
Tin	mg/kg			2.7		3.44						
Titanium	mg/kg											
Vanadium	mg/kg			37.3		15.9						
Zinc	mg/kg			99		56.2						
<b>Metals - AVS/SEM</b>												
Acid Volatile Sulfide	umol/g											
Arsenic	umol/g											
Cadmium	umol/g											
Copper	umol/g											
Lead	umol/g											
Zinc	umol/g											
<b>Metals - Leachate</b>												
Lead	ug/L											
<b>Per and Polyfluorinated Organic Substances</b>												
Perfluorobutane Sulfonic Acid	mg/kg											
Perfluorobutanoic Acid	mg/kg											
Perfluorodecane Sulfonic Acid	mg/kg											
Perfluorodecanoic Acid	mg/kg											
Perfluorododecanoic Acid	mg/kg											
Perfluoroheptanoic Acid	mg/kg											
Perfluorohexane Sulfonic Acid	mg/kg											
Perfluorohexanoic Acid	mg/kg											
Perfluorononanoic Acid	mg/kg											
Perfluorooctane Sulfonamide	mg/kg											
Perfluoropentanoic Acid	mg/kg											
Perfluorotetradecanoic Acid	mg/kg											
Perfluorotridecanoic Acid	mg/kg											
Perfluoroundecanoic Acid	mg/kg											
PFOA	mg/kg											
PFOA(trial)	mg/kg											
PFOS	mg/kg											
PFOS (trial)	mg/kg											
<b>Pesticides and Herbicides</b>												
4,4'-DDD	mg/kg											
4,4'-DDE	mg/kg											
4,4'-DDT	mg/kg											
Aldrin	mg/kg											
Alpha Chlordane	mg/kg											
Alpha-BHC	mg/kg											
beta-BHC	mg/kg											
delta-BHC	mg/kg											
Dieldrin	mg/kg											
Endosulfan I	mg/kg											
Endosulfan II	mg/kg											
Endosulfan Sulfate	mg/kg											
Endrin	mg/kg											
Endrin Aldehyde	mg/kg											
Endrin Ketone	mg/kg											
Gamma Chlordane	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT							
Field Sample ID	22461418	22461419	22461420	22469295	22469297	22469301	22469302	22499343	22499344	22499345	22499346	
Location ID	DER1-26	DER1-27	DER1-27	DER1-21	DER1-23	DER1-21	DER1-23	DER1-22	DER1-27	DER1-27	DER1-29	
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	
Sample Purpose	FS	FS	DUP	FS	FS	FS	FS	FS	FS	DUP	FS	
Date	9/23/2009	9/23/2009	9/23/2009	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/23/2009	9/23/2009	9/23/2009	9/22/2009	
Chemical Class	Units											
Heptachlor	mg/kg											
Heptachlor Epoxide	mg/kg											
Lindane	mg/kg											
Methoxychlor	mg/kg											
Toxaphene	mg/kg											
<b>Physical Properties</b>												
0.001 MM	% PASSING				11	1						
0.002 MM	% PASSING				14	1						
0.005 MM	% PASSING				19	1						
0.02 MM	% PASSING				28.5	4						
0.05 MM	% PASSING				38	7						
0.064 MM	% PASSING				42	9.5						
0.075 MM	% PASSING				44.1	11.2						
0.15 MM	% PASSING				49.5	20.1						
0.3 MM	% PASSING				73.9	75.2						
0.6 MM	% PASSING				82.6	91.8						
1.18 MM	% PASSING				84.5	94						
19 MM	% PASSING				100	100						
2.36 MM	% PASSING				86.4	96.2						
3.35 MM	% PASSING				90.1	97.2						
37.5 MM	% PASSING				100	100						
4.75 MM	% PASSING				94.1	98.1						
75 MM	% PASSING				100	100						
Density	PCF											
<b>Polychlorinated Biphenyls - TICs</b>												
1,1'-Biphenyl, 2,3-dichloro-	mg/kg											
Unknown Biphenyl	mg/kg											
<b>Polychlorinated Biphenyls</b>												
Heptachlorobiphenyl	mg/kg											
Hexachlorobiphenyl	mg/kg											
Octachlorobiphenyl	mg/kg											
PCB 1	mg/kg							0.0000461	0.000135	0.000155	0.0000862	
PCB 10	mg/kg							0.0000309	0.0000093	0.0000116	0.00000273	
PCB 100	mg/kg											
PCB 101	mg/kg											
PCB 102	mg/kg							0.0000285	0.0000709	0.0000835	0.0000116	
PCB 103	mg/kg							0.0000166	0.0000381	0.0000483	0.00000733	
PCB 104	mg/kg							0.00000138	0.00000439	0.0000056	0.00000072	
PCB 105	mg/kg							0.000262	0.000607	0.000725	0.0000977	
PCB 106	mg/kg							0.000000254	U 0.000000489	U 0.0000004	U 0.000000223	U
PCB 107	mg/kg											
PCB 107/123	mg/kg											
PCB 108	mg/kg											
PCB 109	mg/kg							0.0000555	0.000134	0.00016	0.000024	
PCB 11	mg/kg							0.000178	0.000434	0.000539	0.000208	
PCB 110	mg/kg							0.000726	0.00166	0.00207	0.000289	
PCB 111	mg/kg							0.0000183	0.0000435	0.0000511	0.0000155	
PCB 112	mg/kg							0.00000884	0.0000053	U 0.00000433	U 0.00000241	U
PCB 113	mg/kg											
PCB 114	mg/kg							0.0000125	0.0000289	0.0000346	0.00000455	
PCB 115	mg/kg							0.00000758	0.0000236	0.0000235	0.00000238	
PCB 116	mg/kg											
PCB 117	mg/kg							0.0000148	0.0000445	0.0000592	0.00000786	
PCB 118	mg/kg							0.000656	0.00155	0.00188	0.00025	
PCB 119	mg/kg											
PCB 12	mg/kg											
PCB 120	mg/kg							0.0000699	0.0000176	0.000021	0.00000446	
PCB 121	mg/kg							0.00000641	0.00000164	0.00000186	0.00000199	U
PCB 121/95/88	mg/kg											
PCB 122	mg/kg							0.0000102	0.0000225	0.0000277	0.00000446	
PCB 123	mg/kg							0.000014	0.0000297	0.0000393	0.00000554	
PCB 124	mg/kg											
PCB 125	mg/kg											
PCB 126	mg/kg							0.00000454	0.0000104	0.0000124	0.00000264	
PCB 127	mg/kg							0.00000234	U 0.00000479	U 0.00000415	U 0.00000216	U
PCB 128	mg/kg											
PCB 129	mg/kg											
PCB 129/158	mg/kg											
PCB 13	mg/kg											
PCB 130	mg/kg							0.0000868	0.000201	0.000247	0.0000538	
PCB 130/164	mg/kg											
PCB 131	mg/kg							0.00000948	0.0000215	0.0000263	0.0000036	
PCB 132	mg/kg							0.000298	0.000677	0.000836	0.000138	
PCB 133	mg/kg							0.0000304	0.0000705	0.0000856	0.0000241	
PCB 134	mg/kg							0.0000564	0.000121	0.000153	0.0000216	
PCB 135	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT							
Chemical	Field Sample ID	22461418	22461419	22461420	22469295	22469297	22469301	22469302	22499343	22499344	22499345	22499346
Units	Location ID	DER1-26	DER1-27	DER1-27	DER1-21	DER1-23	DER1-21	DER1-23	DER1-22	DER1-27	DER1-27	DER1-29
	Depth Interval (ft)	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50
	Sample Purpose	FS	FS	DUP	FS	FS	FS	FS	FS	FS	DUP	FS
	Date	9/23/2009	9/23/2009	9/23/2009	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/23/2009	9/23/2009	9/23/2009	9/22/2009
PCB 136	mg/kg								0.000133	0.000353	0.000428	0.0000781
PCB 137	mg/kg								0.0000257	0.0000539	0.0000792	0.0000119
PCB 138	mg/kg											
PCB 139	mg/kg											
PCB 14	mg/kg								0.0000122	0.0000151	0.0000179	0.0000299
PCB 140	mg/kg											
PCB 141	mg/kg								0.000132	0.000294	0.000363	0.0000543
PCB 142	mg/kg								0.00000199 U	0.00000393 U	0.00000364 U	0.00000209 U
PCB 143	mg/kg								0.00000179 U	0.00000417	0.00000518	0.00000188 U
PCB 143/139	mg/kg											
PCB 144	mg/kg								0.0000366	0.0000832	0.000106	0.0000144
PCB 145	mg/kg								0.00000294	0.00000446 U	0.00000412 U	0.00000201 U
PCB 146	mg/kg								0.000177	0.000428	0.000528	0.0001
PCB 147	mg/kg											
PCB 148	mg/kg								0.0000549	0.0000137	0.0000174	0.00000318
PCB 149	mg/kg											
PCB 15	mg/kg								0.000265	0.000679	0.000775	0.00014
PCB 150	mg/kg								0.0000596	0.0000163	0.0000208	0.00000335
PCB 151	mg/kg											
PCB 152	mg/kg								0.0000114	0.00000292	0.00000413	0.00000539
PCB 153	mg/kg											
PCB 154	mg/kg								0.0000481	0.000113	0.00015	0.0000228
PCB 155	mg/kg								0.00000438	0.0000117	0.0000145	0.00000244
PCB 156	mg/kg											
PCB 157	mg/kg											
PCB 158	mg/kg								0.0000755	0.000166	0.00021	0.0000274
PCB 159	mg/kg								0.0000114	0.0000203	0.000024	0.00000546
PCB 16	mg/kg								0.0000491	0.000126	0.00015	0.0000326
PCB 160	mg/kg								0.00000145 U	0.000000287 U	0.000000266 U	0.00000152 U
PCB 161	mg/kg								0.00000164 U	0.000000325 U	0.000000301 U	0.00000173 U
PCB 162	mg/kg								0.00000914	0.0000167	0.0000209	0.000012
PCB 163	mg/kg											
PCB 163/160	mg/kg											
PCB 164	mg/kg								0.0000794	0.000179	0.000212	0.0000477
PCB 165	mg/kg								0.0000163	0.00000308	0.00000475	0.00000538
PCB 166	mg/kg											
PCB 167	mg/kg								0.0000499	0.000105	0.000129	0.0000311
PCB 168	mg/kg											
PCB 169	mg/kg								0.0000108 U	0.0000199 U	0.00000249 U	0.00000407
PCB 17	mg/kg								0.0000746	0.000218	0.000248	0.0000527
PCB 170	mg/kg								0.000189	0.000441	0.000559	0.0000812
PCB 171	mg/kg											
PCB 172	mg/kg								0.0000494	0.000114	0.00014	0.0000246
PCB 173	mg/kg											
PCB 174	mg/kg								0.000224	0.000522	0.000653	0.000101
PCB 175	mg/kg								0.0000168	0.0000429	0.0000518	0.00000918
PCB 176	mg/kg								0.0000325	0.0000845	0.0000998	0.0000142
PCB 177	mg/kg								0.000155	0.000373	0.000476	0.0000656
PCB 178	mg/kg								0.000079	0.000211	0.000249	0.0000376
PCB 179	mg/kg								0.000125	0.000315	0.000388	0.0000525
PCB 18	mg/kg											
PCB 180	mg/kg											
PCB 181	mg/kg											
PCB 182	mg/kg								0.0000227	0.00000544	0.00000656	0.00000104
PCB 182/175	mg/kg								0.00000466	0.0000122	0.0000142	0.00000217
PCB 183	mg/kg											
PCB 184	mg/kg								0.000162	0.000389	0.000517	0.0000761
PCB 185	mg/kg								0.0000033	0.00000966	0.0000124	0.00000167
PCB 186	mg/kg								0.0000251	0.0000584	0.0000479	0.0000111
PCB 187	mg/kg								0.00000183 U	0.0000032 U	0.00000376 U	0.00000179 U
PCB 188	mg/kg								0.000421	0.001	0.00115	0.000184
PCB 189	mg/kg								0.00000955	0.0000233	0.0000313	0.00000445
PCB 19	mg/kg								0.0000119	0.0000269	0.0000329	0.00000849
PCB 190	mg/kg								0.0000292	0.000094	0.000117	0.0000176
PCB 191	mg/kg								0.0000511	0.00012	0.000153	0.0000206
PCB 192	mg/kg								0.00000842	0.0000204	0.0000244	0.00000401
PCB 193	mg/kg								0.00000596 U	0.00000102 U	0.00000108 U	0.00000385 U
PCB 194	mg/kg											
PCB 195	mg/kg								0.00016	0.000367	0.000457	0.000064
PCB 196	mg/kg								0.0000516	0.00013	0.000155	0.0000212
PCB 197	mg/kg								0.000125	0.00032	0.000365	0.0000518
PCB 198	mg/kg								0.0000167	0.0000444	0.0000451	0.00000837
PCB 199	mg/kg											
PCB 2	mg/kg											
PCB 20	mg/kg								0.0000434	0.00011	0.000138	0.0000817
PCB 200	mg/kg											
PCB 200	mg/kg								0.0000316	0.0000712	0.000087	0.000013

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	CARNEYS PT											
		Field Sample ID	22461418	22461419	22461420	22469295	22469297	22469301	22469302	22499343	22499344	22499345	22499346
Chemical	Location ID	DER1-26	DER1-27	DER1-27	DER1-21	DER1-23	DER1-21	DER1-23	DER1-22	DER1-27	DER1-27	DER1-29	
Units	Depth Interval (ft)	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	
	Sample Purpose	FS	FS	DUP	FS	FS	FS	FS	FS	FS	DUP	FS	
	Date	9/23/2009	9/23/2009	9/23/2009	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/23/2009	9/23/2009	9/23/2009	9/22/2009	
PCB 201	mg/kg								0.0000752	0.000193	0.000225	0.0000341	
PCB 202	mg/kg								0.000182	0.000438	0.00053	0.0000812	
PCB 203	mg/kg								0.000188	0.000418	0.000465	0.000068	
PCB 204	mg/kg								0.0000023	0.0000061	0.00000616	0.0000121	
PCB 204/200	mg/kg												
PCB 205	mg/kg								0.0000107	0.0000279	0.0000329	0.0000521	
PCB 206	mg/kg								0.00172	0.00637	0.00504	0.000821	
PCB 207	mg/kg								0.000154	0.00069	0.000478	0.0000764	
PCB 208	mg/kg								0.000888	0.00335	0.00275	0.000418	
PCB 209	mg/kg								0.0027	0.0178	0.00935	0.00161	
PCB 21	mg/kg												
PCB 21/20	mg/kg												
PCB 22	mg/kg								0.0000698	0.00014	0.000164	0.0000303	
PCB 23	mg/kg								0.0000102	0.0000133	0.0000189	0.0000224	
PCB 24	mg/kg								0.00000447	0.00000985	0.0000138	0.00000962	
PCB 25	mg/kg								0.0000553	0.000106	0.000127	0.0000191	
PCB 26	mg/kg												
PCB 27	mg/kg								0.0000336	0.0000867	0.000103	0.0000216	
PCB 28	mg/kg												
PCB 29	mg/kg												
PCB 3	mg/kg								0.0000829	0.000187	0.000218	0.000136	
PCB 30	mg/kg												
PCB 31	mg/kg								0.000258	0.000529	0.000619	0.000103	
PCB 32	mg/kg								0.0000771	0.000215	0.000247	0.0000515	
PCB 33	mg/kg												
PCB 34	mg/kg								0.00000452	0.00000784	0.00000927	0.0000057	
PCB 35	mg/kg								0.0000482	0.0000921	0.000112	0.0000649	
PCB 36	mg/kg								0.00000422	0.00000902	0.0000111	0.00000442	
PCB 37	mg/kg								0.000221	0.000474	0.000581	0.000122	
PCB 38	mg/kg								0.00000739	0.00000127	0.00000499 U	0.00000617	
PCB 39	mg/kg								0.00000573	0.0000108	0.0000133	0.00000873	
PCB 4	mg/kg								0.0000542	0.000169	0.000203	0.0000474	
PCB 4/10	mg/kg												
PCB 40	mg/kg												
PCB 41	mg/kg								0.0000147	0.0000304	0.0000334	0.00000518	
PCB 42	mg/kg								0.000119	0.000287	0.000324	0.0000494	
PCB 43	mg/kg								0.0000119	0.000027	0.0000317	0.00000501	
PCB 44	mg/kg												
PCB 45	mg/kg								0.000035	0.0000858	0.0000915	0.0000145	
PCB 46	mg/kg								0.0000229	0.0000521	0.0000584	0.00000928	
PCB 47	mg/kg												
PCB 48	mg/kg								0.0000425	0.0000997	0.000109	0.0000164	
PCB 49	mg/kg												
PCB 5	mg/kg								0.000013	0.0000204	0.0000275	0.0000132	
PCB 50	mg/kg												
PCB 51	mg/kg								0.0000575	0.000119	0.000145	0.0000228	
PCB 52	mg/kg								0.000369	0.000859	0.000964	0.000161	
PCB 53	mg/kg												
PCB 54	mg/kg								0.0000609	0.0000199	0.0000253	0.00000335	
PCB 55	mg/kg								0.0000367	0.00000776	0.00000912	0.00000143	
PCB 56	mg/kg								0.000167	0.000393	0.00046	0.0000666	
PCB 57	mg/kg								0.00000323	0.0000074	0.00000956	0.00000157	
PCB 58	mg/kg								0.00000418	0.00000686	0.0000102	0.00000157	
PCB 59	mg/kg												
PCB 6	mg/kg								0.0000366	0.0000784	0.0000955	0.0000238	
PCB 60	mg/kg								0.0000542	0.000134	0.000157	0.0000189	
PCB 61	mg/kg												
PCB 62	mg/kg												
PCB 63	mg/kg								0.0000134	0.000032	0.0000387	0.00000568	
PCB 64	mg/kg								0.000144	0.000333	0.000378	0.0000589	
PCB 65	mg/kg												
PCB 65/75/62	mg/kg												
PCB 66	mg/kg								0.000353	0.000892	0.00107	0.000146	
PCB 67	mg/kg								0.000015	0.0000295	0.0000354	0.0000053	
PCB 67/58	mg/kg												
PCB 68	mg/kg								0.00000874	0.0000177	0.0000218	0.00000573	
PCB 68/64	mg/kg												
PCB 69	mg/kg												
PCB 7	mg/kg								0.0000071	0.0000129	0.0000156	0.00000754	
PCB 70	mg/kg												
PCB 71	mg/kg												
PCB 72	mg/kg								0.0000102	0.0000243	0.0000294	0.00000521	
PCB 73	mg/kg								0.00000377	0.00000813	0.00000815	0.00000153	
PCB 73/46	mg/kg												
PCB 74	mg/kg												
PCB 75	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT							
Field Sample ID	22461418	22461419	22461420	22469295	22469297	22469301	22469302	22499343	22499344	22499345	22499346	
Location ID	DER1-26	DER1-27	DER1-27	DER1-21	DER1-23	DER1-21	DER1-23	DER1-22	DER1-27	DER1-27	DER1-29	
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	
Sample Purpose	FS	FS	DUP	FS	FS	FS	FS	FS	FS	DUP	FS	
Date	9/23/2009	9/23/2009	9/23/2009	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/23/2009	9/23/2009	9/23/2009	9/22/2009	
Chemical Class	Units											
PCB 76	mg/kg											
PCB 77	mg/kg							0.000115	0.000277	0.00034	0.0000707	
PCB 78	mg/kg							0.0000062 U	0.0000079 U	0.0000104	0.00000386 U	
PCB 79	mg/kg							0.00000775	0.0000173	0.0000218	0.00000441	
PCB 8	mg/kg							0.0000906	0.000181	0.000235	0.0000578	
PCB 80	mg/kg							0.00000479 U	0.0000073	0.00000928	0.00000299 U	
PCB 81	mg/kg							0.00000167	0.00000455	0.00000563	0.00000695	
PCB 82	mg/kg							0.0000687	0.000161	0.0002	0.0000269	
PCB 83	mg/kg							0.0000521	0.00138	0.00167	0.0000167	
PCB 83/125/112	mg/kg											
PCB 84	mg/kg							0.000175	0.000428	0.000523	0.0000707	
PCB 85	mg/kg											
PCB 86	mg/kg											
PCB 86/109	mg/kg											
PCB 87	mg/kg											
PCB 87/111	mg/kg											
PCB 88	mg/kg							0.00000029 U	0.00000559 U	0.00000457 U	0.00000255 U	
PCB 89	mg/kg							0.00000736	0.0000208	0.0000234	0.0000302	
PCB 89/84	mg/kg											
PCB 9	mg/kg							0.0000113	0.0000194	0.0000242	0.0000143	
PCB 90	mg/kg											
PCB 91	mg/kg							0.000112	0.000275	0.000345	0.0000492	
PCB 92	mg/kg							0.000146	0.000373	0.000447	0.000064	
PCB 93	mg/kg											
PCB 94	mg/kg											
PCB 95	mg/kg							0.00000698	0.0000174	0.000022	0.00000296	
PCB 96	mg/kg							0.000494	0.00116	0.00141	0.000204	
PCB 97	mg/kg							0.00000636	0.0000207	0.0000231	0.00000409	
PCB 98	mg/kg											
PCB 99	mg/kg							0.00000234	0.00000402	0.00000842	0.0000015	
PCB-100/93	mg/kg							0.000316	0.00000494 U	0.00000403 U	0.000139	
PCB-107/124	mg/kg							0.0000214	0.000054	0.0000676	0.00000852	
PCB-108/119/86/97/125/87	mg/kg							0.0000243	0.0000558	0.0000685	0.0000101	
PCB-113/90/101	mg/kg							0.000403	0.000929	0.00114	0.000161	
PCB-116/85	mg/kg							0.000713	0.00176	0.00211	0.000306	
PCB-128/166	mg/kg							0.0000984	0.000239	0.000282	0.0000377	
PCB-13/12	mg/kg							0.000166	0.000359	0.000411	0.0000719	
PCB-139/140	mg/kg							0.0000958	0.000177	0.000207	0.000126	
PCB-147/149	mg/kg							0.0000157	0.0000366	0.0000445	0.00000673	
PCB-151/135	mg/kg							0.00075	0.00173	0.00215	0.000349	
PCB-153/168	mg/kg							0.000357	0.000836	0.00103	0.000179	
PCB-156/157	mg/kg							0.000966	0.00225	0.00282	0.000423	
PCB-163/138/129	mg/kg							0.000115	0.000238	0.000291	0.0000483	
PCB-171/173	mg/kg							0.000972	0.00218	0.00275	0.000406	
PCB-180/193	mg/kg							0.0000681	0.000169	0.000201	0.0000264	
PCB-198/199	mg/kg							0.000723	0.00162	0.00205	0.000305	
PCB-21/33	mg/kg							0.000457	0.00105	0.00124	0.000193	
PCB-26/29	mg/kg							0.0000938	0.000179	0.000213	0.0000504	
PCB-28/20	mg/kg							0.0000831	0.00017	0.000203	0.0000354	
PCB-30/18	mg/kg							0.000357	0.000768	0.000918	0.000139	
PCB-44/47/65	mg/kg							0.000127	0.000332	0.000379	0.0000903	
PCB-50/53	mg/kg							0.000405	0.00095	0.00106	0.000167	
PCB-59/62/75	mg/kg							0.0000736	0.000163	0.000182	0.0000298	
PCB-61/70/74/76	mg/kg							0.0000364	0.0000827	0.0000934	0.0000154	
PCB-69/49	mg/kg							0.000542	0.00131	0.0016	0.000219	
PCB-71/40	mg/kg							0.000283	0.00066	0.000764	0.000122	
PCB-90/101	mg/kg							0.000175	0.00042	0.000473	0.0000716	
Pentachlorobiphenyl	mg/kg											
Tetrachlorobiphenyl	mg/kg											
Total Decachlorobiphenyls (congeners)	mg/kg											
Total Dichlorobiphenyls (congeners)	mg/kg							0.000767	0.0018	0.00215	0.00067	
Total Heptachlorobiphenyls (congeners)	mg/kg							0.00236	0.00557	0.00685	0.00103	
Total Hexachlorobiphenyls (congeners)	mg/kg							0.00462	0.0106	0.0132	0.00214	
Total Monochlorobiphenyls (congeners)	mg/kg							0.000172	0.000432	0.000511	0.000304	
Total Nonachlorobiphenyls (congeners)	mg/kg							0.00276	0.0104	0.00826	0.00132	
Total Octachlorobiphenyls (congeners)	mg/kg							0.0013	0.00307	0.00361	0.000541	
Total PCB (congeners)	mg/kg							0.023849	0.071702	0.070211	0.011606	
Total Pentachlorobiphenyls (congeners)	mg/kg							0.00447	0.0111	0.0135	0.00182	
Total Tetrachlorobiphenyls (congeners)	mg/kg							0.0031	0.00736	0.00855	0.00131	
Total Trichlorobiphenyls (congeners)	mg/kg							0.0016	0.00357	0.00423	0.000861	
Trichlorobiphenyl (total)	mg/kg											
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>												
Benzo[e]pyrene	mg/kg											
Chrysene, 1-methyl-	mg/kg											
Naphthalene, 1-methyl-	mg/kg											
Pyrene, 1-methyl-	mg/kg											

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	CARNEYS PT											
Field Sample ID	22461418	22461419	22461420	22469295	22469297	22469301	22469302	22499343	22499344	22499345	22499346	
Location ID	DER1-26	DER1-27	DER1-27	DER1-21	DER1-23	DER1-21	DER1-23	DER1-22	DER1-27	DER1-27	DER1-29	
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	
Sample Purpose	FS	FS	DUP	FS	FS	FS	FS	FS	FS	DUP	FS	
Date	9/23/2009	9/23/2009	9/23/2009	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/23/2009	9/23/2009	9/23/2009	9/22/2009	
Chemical Class	Units											
<b>Polycyclic Aromatic Hydrocarbons</b>												
Acenaphthene	mg/kg				0.056	U	0.046	U				
Acenaphthylene	mg/kg				0.056	U	0.046	U				
Anthracene	mg/kg				0.056	U	0.046	U				
Benzo(A)Anthracene	mg/kg				0.056	U	0.046	U				
Benzo(B)Fluoranthene	mg/kg				0.056	U	0.046	U				
Benzo(G,H,I)Perylene	mg/kg				0.056	U	0.046	U				
Benzo(K)Fluoranthene	mg/kg				0.056	U	0.046	U				
Benzo(A)Pyrene	mg/kg				0.056	U	0.046	U				
Chrysene	mg/kg				0.056	U	0.046	U				
Dibenz(A,H)Anthracene	mg/kg				0.056	U	0.046	U				
Fluoranthene	mg/kg				0.056	U	0.046	U				
Fluorene	mg/kg				0.056	U	0.046	U				
Indeno (1,2,3-CD) Pyrene	mg/kg				0.056	U	0.046	U				
Naphthalene	mg/kg				0.056	U	0.046	U				
Phenanthrene	mg/kg				0.056	U	0.046	U				
Pyrene	mg/kg				0.056	U	0.061					
Total PAHs (Detections + 1/2 MDL)	mg/kg				0.448	U	0.406					
Total PAHs (Detections Only)	mg/kg				0.448	U	0.061					
<b>Semivolatile Organic Compounds - TICs</b>												
1,2,4-Trithiolane	mg/kg											
1,4-Benzenediol, 2-chloro-	mg/kg											
11H-Benzo[ <i>b</i> ]fluorene	mg/kg											
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg											
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg				21		23					
3-PENTEN-2-ONE, 4-METHYL-	mg/kg						0.28					
7H-Benz[ <i>de</i> ]anthracen-7-one	mg/kg											
9,10-Anthracenedione	mg/kg											
9-Octadecenamamide, (Z)-	mg/kg											
Acetamide, 2-chloro-N-(ethox	mg/kg											
Alachlor	mg/kg											
Benzenamine, 3-methyl-	mg/kg											
Benzenamine, 4,4',4"-methy	mg/kg											
Benzenamine, 4,4'-methyleneb	mg/kg											
Benzene, 1,2,3,4-tetrachloro	mg/kg											
Benzene, 1,2,3,5-tetrachloro	mg/kg											
Benzene, 1,2,3-trichloro-	mg/kg											
Benzene, 1,3,5-trichloro-	mg/kg											
Benzene, 1,3-bis(1-methyleth	mg/kg											
Benzene, 1,4-bis(1-methyleth	mg/kg											
Benzofuran, 2,3-dihydro-	mg/kg											
CYCLIC OCTAATOMIC SULFUR	mg/kg											
Diphenyl Ether	mg/kg											
Docosane	mg/kg											
Heneicosane	mg/kg											
Hexacosane	mg/kg											
Hexadecane	mg/kg											
Hexatriacontane	mg/kg											
m-Chloroaniline	mg/kg											
N,N-Diethylaniline	mg/kg											
n-Hexadecanoic acid	mg/kg											
Nonadecane	mg/kg											
o-Chloroaniline	mg/kg											
Octacosane	mg/kg											
Octadecane	mg/kg											
Octadecane, 1-chloro-	mg/kg											
Octadecanoic acid	mg/kg											
Parachlorophenol	mg/kg											
Pentadecane	mg/kg											
Perylene	mg/kg											
Phenol, 2,5-dichloro-	mg/kg											
Phenol, 3-chloro-	mg/kg											
Phenol, 4,4'-(1-methylethyl)	mg/kg											
Tetracosane	mg/kg											
Tetradecane	mg/kg											
Tetraethylene glycol	mg/kg											
Total SVOIC TICs	mg/kg											
Triacotane	mg/kg											
Tributyl phosphate	mg/kg											
Tridecanoic acid	mg/kg											
Triphenyl phosphate	mg/kg											
UNKNOWN	mg/kg				1.4225		0.58					
Unknown acid	mg/kg											
Unknown Alcohol	mg/kg											
Unknown Aldol Condensate	mg/kg											
UNKNOWN ALKANE	mg/kg				0.25		0.275					

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	CARNEYS PT											
Field Sample ID	22461418	22461419	22461420	22469295	22469297	22469301	22469302	22499343	22499344	22499345	22499346	
Location ID	DER1-26	DER1-27	DER1-27	DER1-21	DER1-23	DER1-21	DER1-23	DER1-22	DER1-27	DER1-27	DER1-29	
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	
Sample Purpose	FS	FS	DUP	FS	FS	FS	FS	FS	FS	DUP	FS	
Date	9/23/2009	9/23/2009	9/23/2009	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/23/2009	9/23/2009	9/23/2009	9/22/2009	
Chemical Class	Units											
Unknown Alkene	mg/kg											
Unknown Amide	mg/kg											
Unknown Amine	mg/kg											
UNKNOWN AROMATIC	mg/kg											
Unknown Carboxylic Acid	mg/kg											
Unknown Cycloalkane	mg/kg											
Unknown Hydrocarbon	mg/kg											
Unknown Ketone	mg/kg											
Unknown PAH	mg/kg											
UNKNOWN SILOXANE	mg/kg											
<b>Semivolatile Organic Compounds</b>												
1,2,4-Trichlorobenzene	mg/kg				0.056	U	0.046	U				
1,2-Diphenylhydrazine	mg/kg				0.056	U	0.046	U				
1,4-Dioxane	mg/kg											
1-Naphthylamine	mg/kg				0.28	U	0.23	U				
2,3,4,6-Tetrachlorophenol	mg/kg											
2,4,5-Trichlorophenol	mg/kg											
2,4,6-Trichlorophenol	mg/kg				0.056	U	0.046	U				
2,4-Dichlorophenol	mg/kg				0.056	U	0.046	U				
2,4-Dimethylphenol	mg/kg				0.11	U	0.092	U				
2,4-Dinitrophenol	mg/kg				1.1	U	0.92	U				
2,4-Dinitrotoluene	mg/kg				0.11	U	0.092	U				
2,6-Dinitrotoluene	mg/kg				0.056	U	0.046	U				
2-Chloronaphthalene	mg/kg				0.056	U	0.046	U				
2-Chlorophenol	mg/kg				0.056	U	0.046	U				
2-Methylnaphthalene	mg/kg											
2-Methylphenol (O-Cresol)	mg/kg											
2-Naphthylamine	mg/kg				0.28	U	0.23	U				
2-Nitroaniline	mg/kg											
2-Nitrophenol	mg/kg				0.056	U	0.046	U				
3,3'-Dichlorobenzidine	mg/kg				0.17	U	0.14	U				
3,3'-Dimethylbenzidine	mg/kg											
3-Nitroaniline	mg/kg											
4,6-Dinitro-2-Methylphenol	mg/kg				0.28	U	0.23	U				
4-Aminobiphenyl	mg/kg				0.28	U	0.23	U				
4-Bromophenyl Phenyl Ether	mg/kg				0.056	U	0.046	U				
4-Chloro-3-Methylphenol	mg/kg				0.11	U	0.092	U				
4-Chloroaniline	mg/kg				0.11	U	0.092	U				
4-Chlorophenyl Phenyl Ether	mg/kg				0.056	U	0.046	U				
4-Methylphenol (P-Cresol)	mg/kg											
4-Nitroaniline	mg/kg											
4-Nitrophenol	mg/kg				0.28	U	0.23	U				
Acetophenone	mg/kg											
Aniline	mg/kg				0.28	U	0.23	U				
Benzidine	mg/kg				1.9	U	1.6	U				
Biphenyl	mg/kg											
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg											
Bis(2-Chloroethoxy)Methane	mg/kg				0.056	U	0.046	U				
Bis(2-Chloroethyl)Ether	mg/kg				0.056	U	0.046	U				
Bis(2-Chloroisopropyl)Ether	mg/kg				0.056	U	0.046	U				
Bis(2-Ethylhexyl)Phthalate	mg/kg				0.11	U	0.092	U				
Butyl Benzyl Phthalate	mg/kg				0.11	U	0.092	U				
Carbazole	mg/kg				0.056	U	0.046	U				
Dibenzofuran	mg/kg											
Diethyl Phthalate	mg/kg				0.11	U	0.092	U				
Dimethyl Phthalate	mg/kg				0.11	U	0.092	U				
Di-N-Butyl Phthalate	mg/kg				0.11	U	0.092	U				
Diphenyl Ether	mg/kg											
Hexachlorobenzene	mg/kg				0.056	U	0.046	U				
Hexachlorobutadiene	mg/kg				0.11	U	0.092	U				
Hexachlorocyclopentadiene	mg/kg				0.28	U	0.23	U				
Hexachloroethane	mg/kg				0.056	U	0.046	U				
Hexachloropropylene	mg/kg											
Isophorone	mg/kg				0.056	U	0.046	U				
N-Dioctyl Phthalate	mg/kg				0.11	U	0.092	U				
Nitrobenzene	mg/kg				0.056	U	0.046	U				
N-Nitrosodimethylamine	mg/kg				0.11	U	0.092	U				
N-Nitrosodi-N-Propylamine	mg/kg				0.056	U	0.046	U				
N-Nitrosodiphenylamine	mg/kg				0.056	U	0.046	U				
O-Toluidine	mg/kg				0.33	U	0.27	U				
Parathion	mg/kg											
Pentachlorobenzene	mg/kg											
Pentachlorophenol	mg/kg				0.28	U	0.23	U				
Phenol	mg/kg				0.056	U	0.046	U				
<b>Volatile Organic Compounds - TICs</b>												
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	CARNEYS PT											
Field Sample ID	22461418	22461419	22461420	22469295	22469297	22469301	22469302	22499343	22499344	22499345	22499346	
Location ID	DER1-26	DER1-27	DER1-27	DER1-21	DER1-23	DER1-21	DER1-23	DER1-22	DER1-27	DER1-27	DER1-29	
Depth Interval (ft)	0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50	
Sample Purpose	FS	FS	DUP	FS	FS	FS	FS	FS	FS	DUP	FS	
Date	9/23/2009	9/23/2009	9/23/2009	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/23/2009	9/23/2009	9/23/2009	9/22/2009	
Chemical Class	Units											
1-Butene	mg/kg											
1-Heptene	mg/kg											
1-Propene, 2-methyl-	mg/kg											
Azulene	mg/kg											
BENZENE, 1,2,4-TRICHLORO-	mg/kg											
BENZENE, 1,2-DICHLORO-	mg/kg											
BENZENE, 1,4-DICHLORO-	mg/kg											
Camphene	mg/kg											
CYCLOHEXANE	mg/kg											
Cyclohexane, methyl-	mg/kg											
Cyclotrisiloxane, hexamethyl	mg/kg											
Diphenyl Ether	mg/kg											
Ethane, 1,1,2,2-tetrachloro-	mg/kg											
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg											
Ethane, 1,2-dichloro-1,1-dif	mg/kg											
Ethene, 1,1-dichloro-2,2-dif	mg/kg											
Hexane, 2-methyl-	mg/kg											
Hexane, 3-methyl-	mg/kg											
METHANE, CHLOROFLUORO-	mg/kg											
Naphthalene	mg/kg											
NAPHTHALENE, 2-METHYL-	mg/kg											
Nonanal	mg/kg											
Norflurane	mg/kg											
Pentane, 2,3-dimethyl-	mg/kg											
Phenol, 4-(1,1,3,3-tetrameth	mg/kg											
Propene	mg/kg											
Sulfur dioxide	mg/kg											
Tridecane	mg/kg											
UNKNOWN	mg/kg											
UNKNOWN ALICYCLIC	mg/kg											
UNKNOWN ALIPHATIC	mg/kg											
UNKNOWN ALKANE	mg/kg											
UNKNOWN AROMATIC	mg/kg											
UNKNOWN SILOXANE	mg/kg		0.0135				0.008	0.009				
<b>Volatile Organic Compounds</b>												
1,1,1,2-Tetrachloroethane	mg/kg											
1,1,1-Trichloroethane	mg/kg	0.0009	U	0.002	U	0.001	U					
1,1,1-Trichlorotrifluoroethane	mg/kg							0.001	U	0.001	U	
1,1,2,2-Tetrachloroethane	mg/kg	0.0009	U	0.002	U	0.001	U	0.001	U	0.001	U	
1,1,2-Trichloroethane	mg/kg	0.0009	U	0.002	U	0.001	U	0.001	U	0.001	U	
1,1,2-Trichlorotrifluoroethane	mg/kg	0.002	U	0.003	U	0.002	U	0.002	U	0.002	U	
1,1,2-Trifluoroethane	mg/kg											
1,1-Dichloro-1-Fluoroethane	mg/kg											
1,1-Dichloroethane	mg/kg	0.0009	U	0.002	U	0.001	U	0.001	U	0.001	U	
1,1-Dichloroethene	mg/kg	0.0009	U	0.002	U	0.001	U	0.001	U	0.001	U	
1,1-Dichloropropene	mg/kg											
1,2,4-Trimethylbenzene	mg/kg											
1,2-Dibromoethane (EDB)	mg/kg											
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg											
1,2-Dichloro-1-Fluoroethane	mg/kg											
1,2-Dichlorobenzene	mg/kg					0.056	U	0.046	U			
1,2-Dichloroethane	mg/kg	0.0009	U	0.002	U	0.001	U	0.001	U	0.001	U	
1,2-Dichloroethene	mg/kg											
1,2-Dichloropropane	mg/kg	0.0009	U	0.002	U	0.001	U	0.001	U	0.001	U	
1,2-Dichlorotetrafluoroethane	mg/kg											
1,3,5-Trimethylbenzene	mg/kg											
1,3-Dichlorobenzene	mg/kg					0.056	U	0.046	U			
1,4-Dichlorobenzene	mg/kg					0.056	U	0.046	U			
1-Chloro-1,1-Difluoroethane	mg/kg											
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg											
2-Chloro-1,1,1-Trifluoroethane	mg/kg											
2-Chloroethyl Vinyl Ether	mg/kg											
2-Chlorotoluene	mg/kg											
2-Hexanone	mg/kg											
4-Chlorotoluene	mg/kg											
4-Isopropyltoluene	mg/kg											
Acetone	mg/kg	0.019		0.062		0.036		0.009	U	0.013		
Acrolein	mg/kg	0.019	U	0.031	U	0.021	U	0.024	U	0.021	U	
Acrylonitrile	mg/kg	0.004	U	0.006	U	0.004	U	0.005	U	0.004	U	
Benzene	mg/kg	0.0005	U	0.0008	U	0.0005	U	0.0005	U	0.0005	U	
Bromodichloromethane	mg/kg	0.0009	U	0.002	U	0.001	U	0.001	U	0.001	U	
Bromoform	mg/kg	0.0009	U	0.002	U	0.001	U	0.001	U	0.001	U	
Carbon Disulfide	mg/kg	0.0009	U	0.002	U	0.002		0.003		0.002		
Carbon Tetrachloride	mg/kg	0.0009	U	0.002	U	0.001	U	0.001	U	0.001	U	
CFC-1113	mg/kg											
Chlorobenzene	mg/kg	0.0009	U	0.002	U	0.001	U	0.001	U	0.001	U	

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone		CARNEYS PT										
	Field Sample ID	Location ID	22461418	22461419	22461420	22469295	22469297	22469301	22469302	22499343	22499344	22499345	22499346
Chemical	Depth Interval (ft)	Sample Purpose	DER1-26	DER1-27	DER1-27	DER1-21	DER1-23	DER1-21	DER1-23	DER1-22	DER1-27	DER1-27	DER1-29
Units	Date		0.50-1.00	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.50-1.00	0.50-1.00	0.00-0.50	0.00-0.50	0.00-0.50	0.00-0.50
			FS	FS	DUP	FS	FS	FS	FS	FS	FS	DUP	FS
			9/23/2009	9/23/2009	9/23/2009	9/25/2009	9/25/2009	9/25/2009	9/25/2009	9/23/2009	9/23/2009	9/23/2009	9/22/2009
Chlorodibromomethane	mg/kg		0.0009 U	0.002 U	0.001 U			0.001 U	0.001 U				
Chlorodifluoromethane	mg/kg												
Chlorofluoromethane	mg/kg												
Chloroform	mg/kg		0.0009 U	0.002 U	0.001 U			0.001 U	0.001 U				
Chloropentafluoroethane	mg/kg												
cis-1,2-Dichloroethene	mg/kg		0.0009 U	0.002 U	0.001 U			0.001 U	0.001 U				
cis-1,3-Dichloropropene	mg/kg		0.0009 U	0.002 U	0.001 U			0.001 U	0.001 U				
Cumene	mg/kg												
Dichlorodifluoromethane	mg/kg		0.002 U	0.003 U	0.002 U			0.002 U	0.002 U				
Dichlorofluoromethane	mg/kg		0.002 U	0.003 U	0.002 U			0.002 U	0.002 U				
Ethane	ug/L												
Ethyl Chloride	mg/kg		0.002 U	0.003 U	0.002 U			0.002 U	0.002 U				
Ethylbenzene	mg/kg		0.0009 U	0.002 U	0.001 U			0.001 U	0.001 U				
Fluoromethane	mg/kg												
Hexane	mg/kg												
Isobutyl Alcohol	mg/kg												
Meta- And Para-Xylene	mg/kg												
Methacrylonitrile	mg/kg												
Methane	ug/L												
Methyl Bromide	mg/kg		0.002 U	0.003 U	0.002 U			0.002 U	0.002 U				
Methyl Chloride	mg/kg		0.002 U	0.003 U	0.002 U			0.002 U	0.002 U				
Methyl Ethyl Ketone	mg/kg												
Methyl Isobutyl Ketone	mg/kg												
Methyl Methacrylate	mg/kg												
Methyl Tertiary Butyl Ether	mg/kg												
Methylene Chloride	mg/kg		0.002	0.003 U	0.003			0.002 U	0.002 U				
N-Butylbenzene	mg/kg												
N-Propylbenzene	mg/kg												
Ortho-Xylene	mg/kg												
Propionitrile	mg/kg												
sec-Butylbenzene	mg/kg												
Styrene	mg/kg												
tert-Butylbenzene	mg/kg												
Tetrachloroethene	mg/kg		0.0009 U	0.002 U	0.001 U			0.001 U	0.001 U				
Tetrahydrofuran	mg/kg												
Toluene	mg/kg		0.0009 U	0.002 U	0.001 U			0.002	0.001				
trans-1,2-Dichloroethene	mg/kg		0.0009 U	0.002 U	0.001 U			0.001 U	0.001 U				
trans-1,3-Dichloropropene	mg/kg		0.0009 U	0.002 U	0.001 U			0.001 U	0.001 U				
Trichloroethene	mg/kg		0.0009 U	0.002 U	0.001 U			0.001 U	0.001 U				
Trichlorofluoromethane	mg/kg		0.002 U	0.003 U	0.002 U			0.002 U	0.002 U				
Vinyl Chloride	mg/kg		0.0009 U	0.002 U	0.001 U			0.001 U	0.001 U				
Vinyl Fluoride	mg/kg												
Xylenes	mg/kg		0.0009 U	0.002 U	0.001 U			0.001 U	0.001 U				

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	CARNEYS PT												
Field Sample ID	22522249	23615973	23615976	23624160	23681945	23716467	23716468	23716470	23716471	23929897	23929898	23948643	
Location ID	DER1-28	DER2-29-SD	DER2-29-SD	DER2-28-SD	DER2-28-SD	DER2-26-SD	DER2-26-SD	DER2-27-SD	DER2-27-SD	DER2-27-SD	DER2-27-SD	DER2-27-SD	DER1-27
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50
Sample Purpose	DUP	FS	DUP	DUP	FS	FS							
Date	9/22/2009	4/21/2010	4/21/2010	4/22/2010	4/22/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	4/22/2010
Chemical Class	Units												
<b>General Chemistry</b>													
Black Carbon	mg/kg	450	2445										
Percent Moisture	%		48	38.6	52	20.4	52.3	48.6	41.2	59.1			53
Percent Solids	%												
Total Organic Carbon	mg/kg	6120	18550	17450	10750	1965	13600	13900	7500	87950	6510	20100	
<b>Metals</b>													
Aluminum	mg/kg		16200		13900		15000		10700				
Antimony	mg/kg		1.87 U		2.06 U		2.08 U		1.7 U				
Arsenic	mg/kg		7.82		7.09		7.95		5.86				
Barium	mg/kg		86.4		73.8		79.1		50				
Beryllium	mg/kg		0.851		0.941		0.741		0.638				
Cadmium	mg/kg		0.685		0.623		0.641		0.531				
Calcium	mg/kg		3500		2970		3860		2360				
Chromium	mg/kg		42.8		33.7		37.1		25.6				
Cobalt	mg/kg		11.9		8.47		8.25		6.46				
Copper	mg/kg		28.3		17.8		21.9		12.7				
Iron	mg/kg		26400		20400		20700		16000				
Lead	mg/kg		42.4		26.7		33.3		22.3				
Magnesium	mg/kg		4940		4130		4310		3140				
Manganese	mg/kg		635		577		646		328				
Mercury	mg/kg		0.172		0.0717		0.756		0.127				
Nickel	mg/kg		25.4		18.3		17.2		12.7				
Potassium	mg/kg		2530		2350		2630		1850				
Selenium	mg/kg		1.83 U		2.02 U		2.03 U		2.07				
Silver	mg/kg		0.336 U		0.371 U		0.374 U		0.306 U				
Sodium	mg/kg		341		239		344		258				
Thallium	mg/kg		2.71 U		2.99 U		3.01 U		2.47 U				
Tin	mg/kg		6.89		6.19		5.62		3.82				
Titanium	mg/kg												
Vanadium	mg/kg		43.3		33.6		33.3		25.3				
Zinc	mg/kg		182		125		126		95.2				
<b>Metals - AVS/SEM</b>													
Acid Volatile Sulfide	umol/g												
Arsenic	umol/g												
Cadmium	umol/g												
Copper	umol/g												
Lead	umol/g												
Zinc	umol/g												
<b>Metals - Leachate</b>													
Lead	ug/L												
<b>Per and Polyfluorinated Organic Substances</b>													
Perfluorobutane Sulfonic Acid	mg/kg												
Perfluorobutanoic Acid	mg/kg												
Perfluorodecane Sulfonic Acid	mg/kg												
Perfluorodecanoic Acid	mg/kg												
Perfluorododecanoic Acid	mg/kg												
Perfluoroheptanoic Acid	mg/kg												
Perfluorohexane Sulfonic Acid	mg/kg												
Perfluorohexanoic Acid	mg/kg												
Perfluorononanoic Acid	mg/kg												
Perfluorooctane Sulfonamide	mg/kg												
Perfluoropentanoic Acid	mg/kg												
Perfluorotetradecanoic Acid	mg/kg												
Perfluorotridecanoic Acid	mg/kg												
Perfluoroundecanoic Acid	mg/kg												
PFOA	mg/kg												0.001
PFOA(trial)	mg/kg												0.001
PFOS	mg/kg												0.00024
PFOS (trial)	mg/kg												0.00024
<b>Pesticides and Herbicides</b>													
4,4'-DDD	mg/kg												
4,4'-DDE	mg/kg												
4,4'-DDT	mg/kg												
Aldrin	mg/kg												
Alpha Chlordane	mg/kg												
Alpha-BHC	mg/kg												
beta-BHC	mg/kg												
delta-BHC	mg/kg												
Dieldrin	mg/kg												
Endosulfan I	mg/kg												
Endosulfan II	mg/kg												
Endosulfan Sulfate	mg/kg												
Endrin	mg/kg												
Endrin Aldehyde	mg/kg												
Endrin Ketone	mg/kg												
Gamma Chlordane	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT
Field Sample ID	22522249	23615973	23615976	23624160	23681945	23716467	23716468	23716470	23716471	23929897	23929898	23948643	
Location ID	DER1-28	DER2-29-SD	DER2-29-SD	DER2-28-SD	DER2-28-SD	DER2-26-SD	DER2-26-SD	DER2-27-SD	DER2-27-SD	DER2-27-SD	DER2-27-SD	DER1-27	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	
Sample Purpose	DUP	FS	FS	FS	FS	FS	FS	FS	FS	DUP	DUP	FS	
Date	9/22/2009	4/21/2010	4/21/2010	4/22/2010	4/22/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	4/22/2010	
Chemical Class													
Chemical													
Units													
Heptachlor	mg/kg												
Heptachlor Epoxide	mg/kg												
Lindane	mg/kg												
Methoxychlor	mg/kg												
Toxaphene	mg/kg												
<b>Physical Properties</b>													
0.001 MM	% PASSING		4.5		5		2		2				
0.002 MM	% PASSING		9.5		9.5		6		5.5				
0.005 MM	% PASSING		21		14		11.5		9				
0.02 MM	% PASSING		48.5		24		32		19				
0.05 MM	% PASSING		72		33		51.5		36				
0.064 MM	% PASSING		77		37		59		46				
0.075 MM	% PASSING		79.4		39.6		63		51.5				
0.15 MM	% PASSING		82.7		44.1		71.1		59.7				
0.3 MM	% PASSING		88.2		53.4		84.4		81.8				
0.6 MM	% PASSING		95		63.7		89		95.7				
1.18 MM	% PASSING		98		71.9		91.7		97.5				
19 MM	% PASSING		100		100		100		100				
2.36 MM	% PASSING		99.3		80.6		97.6		98.2				
3.35 MM	% PASSING		99.7		84.4		98.8		98.9				
37.5 MM	% PASSING		100		100		100		100				
4.75 MM	% PASSING		99.8		88.8		99.3		99.4				
75 MM	% PASSING		100		100		100		100				
Density	PCF												
<b>Polychlorinated Biphenyls - TICs</b>													
1,1'-Biphenyl, 2,3-dichloro-	mg/kg												
Unknown Biphenyl	mg/kg												
<b>Polychlorinated Biphenyls</b>													
Heptachlorobiphenyl	mg/kg												
Hexachlorobiphenyl	mg/kg												
Octachlorobiphenyl	mg/kg												
PCB 1	mg/kg		0.000136		0.0000986								
PCB 10	mg/kg		0.00000718		0.0000044								
PCB 100	mg/kg												
PCB 101	mg/kg												
PCB 102	mg/kg		0.0000842		0.0000431								
PCB 103	mg/kg		0.0000484		0.0000245								
PCB 104	mg/kg		0.0000431		0.0000254								
PCB 105	mg/kg		0.000616		0.000348								
PCB 106	mg/kg		0.00000434 U		0.00000393 U								
PCB 107	mg/kg												
PCB 107/123	mg/kg												
PCB 108	mg/kg												
PCB 109	mg/kg		0.000146		0.0000778								
PCB 11	mg/kg		0.000478		0.000268								
PCB 110	mg/kg		0.0024		0.0013								
PCB 111	mg/kg		0.0000677		0.0000348								
PCB 112	mg/kg		0.00000428 U		0.00000388 U								
PCB 113	mg/kg												
PCB 114	mg/kg		0.0000291		0.0000164								
PCB 115	mg/kg		0.00000364 U		0.0000033 U								
PCB 116	mg/kg												
PCB 117	mg/kg		0.0000375		0.0000287								
PCB 118	mg/kg		0.00176		0.000979								
PCB 119	mg/kg												
PCB 12	mg/kg												
PCB 120	mg/kg		0.0000198		0.0000106								
PCB 121	mg/kg		0.0000026		0.00000436 U								
PCB 121/95/88	mg/kg												
PCB 122	mg/kg		0.0000216		0.0000123								
PCB 123	mg/kg		0.0000318		0.0000185								
PCB 124	mg/kg												
PCB 125	mg/kg												
PCB 126	mg/kg		0.0000127		0.00000705								
PCB 127	mg/kg		0.00000491 U		0.00000435 U								
PCB 128	mg/kg												
PCB 129	mg/kg												
PCB 129/158	mg/kg												
PCB 13	mg/kg												
PCB 130	mg/kg		0.000235		0.000116								
PCB 130/164	mg/kg												
PCB 131	mg/kg		0.0000256		0.0000132								
PCB 132	mg/kg		0.000819		0.000414								
PCB 133	mg/kg		0.0000966		0.0000483								
PCB 134	mg/kg		0.000159		0.000082								
PCB 135	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT
Chemical	Field Sample ID	22522249	23615973	23615976	23624160	23681945	23716467	23716468	23716470	23716471	23929897	23929898	23948643
Units	Location ID	DER1-28	DER2-29-SD	DER2-29-SD	DER2-28-SD	DER2-28-SD	DER2-26-SD	DER2-26-SD	DER2-27-SD	DER2-27-SD	DER2-27-SD	DER2-27-SD	DER1-27
	Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50
	Sample Purpose	DUP	FS	FS	FS	FS	FS	FS	FS	FS	DUP	DUP	FS
	Date	9/22/2009	4/21/2010	4/21/2010	4/22/2010	4/22/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	4/22/2010
PCB 136	mg/kg		0.000403		0.000217								
PCB 137	mg/kg		0.000101		0.0000551								
PCB 138	mg/kg												
PCB 139	mg/kg												
PCB 14	mg/kg		0.0000264		0.000012								
PCB 140	mg/kg												
PCB 141	mg/kg		0.000343		0.00019								
PCB 142	mg/kg		0.00000081 U		0.000000592 U								
PCB 143	mg/kg		0.000000733 U		0.000000536 U								
PCB 143/139	mg/kg												
PCB 144	mg/kg		0.000107		0.0000571								
PCB 145	mg/kg		0.000000435 U		0.000000312 U								
PCB 146	mg/kg		0.000488		0.000272								
PCB 147	mg/kg												
PCB 148	mg/kg		0.0000237		0.0000129								
PCB 149	mg/kg												
PCB 15	mg/kg		0.000799		0.000462								
PCB 150	mg/kg		0.0000214		0.0000145								
PCB 151	mg/kg												
PCB 152	mg/kg		0.00000401		0.00000199								
PCB 153	mg/kg												
PCB 154	mg/kg		0.000124		0.0000711								
PCB 155	mg/kg		0.0000109		0.0000068								
PCB 156	mg/kg												
PCB 157	mg/kg												
PCB 158	mg/kg		0.000207		0.000115								
PCB 159	mg/kg		0.00000125 U		0.000000846 U								
PCB 16	mg/kg		0.000109		0.0000612								
PCB 160	mg/kg		0.000000623 U		0.000000456 U								
PCB 161	mg/kg		0.000000529 U		0.000000387 U								
PCB 162	mg/kg		0.0000215		0.000012								
PCB 163	mg/kg												
PCB 163/160	mg/kg												
PCB 164	mg/kg		0.000194		0.0000995								
PCB 165	mg/kg		0.00000357		0.0000017								
PCB 166	mg/kg												
PCB 167	mg/kg		0.000117		0.0000678								
PCB 168	mg/kg												
PCB 169	mg/kg		0.00000177 U		0.00000106 U								
PCB 17	mg/kg		0.000179		0.0000904								
PCB 170	mg/kg		0.000553		0.000321								
PCB 171	mg/kg												
PCB 172	mg/kg		0.000118		0.0000686								
PCB 173	mg/kg												
PCB 174	mg/kg		0.000647		0.000379								
PCB 175	mg/kg		0.0000374		0.0000219								
PCB 176	mg/kg		0.000116		0.0000632								
PCB 177	mg/kg		0.000424		0.000262								
PCB 178	mg/kg		0.000218		0.000122								
PCB 179	mg/kg		0.000387		0.000208								
PCB 18	mg/kg												
PCB 180	mg/kg												
PCB 181	mg/kg		0.0000654		0.0000036								
PCB 182	mg/kg		0.0000139		0.00000711								
PCB 182/175	mg/kg												
PCB 183	mg/kg		0.000338		0.000203								
PCB 184	mg/kg		0.0000109		0.00000556								
PCB 185	mg/kg		0.0000542		0.0000328								
PCB 186	mg/kg		0.000000457 U		0.000000391 U								
PCB 187	mg/kg		0.00106		0.000602								
PCB 188	mg/kg		0.0000256		0.0000172								
PCB 189	mg/kg		0.0000287		0.0000171								
PCB 19	mg/kg		0.0000578		0.0000385								
PCB 190	mg/kg		0.000127		0.0000746								
PCB 191	mg/kg		0.0000231		0.0000137								
PCB 192	mg/kg		0.00000103 U		0.000000558 U								
PCB 193	mg/kg												
PCB 194	mg/kg		0.00042		0.000241								
PCB 195	mg/kg		0.000145		0.0000821								
PCB 196	mg/kg		0.000374		0.000207								
PCB 197	mg/kg		0.0000546		0.0000265								
PCB 198	mg/kg												
PCB 199	mg/kg												
PCB 2	mg/kg		0.000171		0.000085								
PCB 20	mg/kg												
PCB 200	mg/kg		0.0000485		0.0000269								

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT				
Field Sample ID	22522249	23615973	23615976	23624160	23681945	23716467	23716468	23716470	23716471	23929897	23929898	23948643	
Location ID	DER1-28	DER2-29-SD	DER2-29-SD	DER2-28-SD	DER2-28-SD	DER2-26-SD	DER2-26-SD	DER2-27-SD	DER2-27-SD	DER2-27-SD	DER2-27-SD	DER2-27-SD	DER1-27
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50
Sample Purpose	DUP	FS	FS	FS	FS	FS	FS	FS	FS	DUP	DUP	FS	FS
Date	9/22/2009	4/21/2010	4/21/2010	4/22/2010	4/22/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	4/22/2010
Chemical Class	Units												
PCB 201	mg/kg		0.0002		0.000102								
PCB 202	mg/kg		0.000455		0.000287								
PCB 203	mg/kg		0.000507		0.000303								
PCB 204	mg/kg		0.00000769		0.0000034								
PCB 204/200	mg/kg												
PCB 205	mg/kg		0.0000262		0.0000159								
PCB 206	mg/kg		0.00422		0.00281								
PCB 207	mg/kg		0.00036		0.000222								
PCB 208	mg/kg		0.00214		0.00137								
PCB 209	mg/kg		0.00762		0.00515								
PCB 21	mg/kg												
PCB 21/20	mg/kg												
PCB 22	mg/kg		0.00016		0.0000946								
PCB 23	mg/kg		0.00000333		0.00000163								
PCB 24	mg/kg		0.0000091		0.00000554								
PCB 25	mg/kg		0.000141		0.0000847								
PCB 26	mg/kg												
PCB 27	mg/kg		0.0000875		0.0000468								
PCB 28	mg/kg												
PCB 29	mg/kg												
PCB 3	mg/kg		0.000235		0.000123								
PCB 30	mg/kg												
PCB 31	mg/kg		0.000602		0.000322								
PCB 32	mg/kg		0.000177		0.0000877								
PCB 33	mg/kg												
PCB 34	mg/kg		0.0000117		0.0000059								
PCB 35	mg/kg		0.000106		0.0000703								
PCB 36	mg/kg		0.00001		0.00000672								
PCB 37	mg/kg		0.000405		0.000258								
PCB 38	mg/kg		0.0000016		0.000000516	U							
PCB 39	mg/kg		0.0000179		0.0000102								
PCB 4	mg/kg		0.000135		0.0000875								
PCB 4/10	mg/kg												
PCB 40	mg/kg												
PCB 41	mg/kg		0.0000312		0.0000164								
PCB 42	mg/kg		0.000319		0.000163								
PCB 43	mg/kg		0.0000335		0.000016								
PCB 44	mg/kg												
PCB 45	mg/kg		0.000104		0.0000587								
PCB 46	mg/kg		0.0000665		0.0000307								
PCB 47	mg/kg												
PCB 48	mg/kg		0.000102		0.0000529								
PCB 49	mg/kg												
PCB 5	mg/kg		0.0000291		0.0000111								
PCB 50	mg/kg												
PCB 51	mg/kg		0.000146		0.0000603								
PCB 52	mg/kg		0.0013		0.000658								
PCB 53	mg/kg												
PCB 54	mg/kg		0.0000135		0.00000978								
PCB 55	mg/kg		0.00000815		0.00000419								
PCB 56	mg/kg		0.000448		0.000223								
PCB 57	mg/kg		0.00000969		0.00000487								
PCB 58	mg/kg		0.0000112		0.00000477								
PCB 59	mg/kg												
PCB 6	mg/kg		0.000115		0.0000599								
PCB 60	mg/kg		0.000108		0.0000633								
PCB 61	mg/kg												
PCB 62	mg/kg												
PCB 63	mg/kg		0.0000439		0.0000226								
PCB 64	mg/kg		0.000474		0.000245								
PCB 65	mg/kg												
PCB 65/75/62	mg/kg												
PCB 66	mg/kg		0.000989		0.00052								
PCB 67	mg/kg		0.0000347		0.000019								
PCB 67/58	mg/kg												
PCB 68	mg/kg		0.0000401		0.000015								
PCB 68/64	mg/kg												
PCB 69	mg/kg												
PCB 7	mg/kg		0.0000181		0.00000875								
PCB 70	mg/kg												
PCB 71	mg/kg												
PCB 72	mg/kg		0.0000325		0.0000156								
PCB 73	mg/kg		0.00000783		0.00000372								
PCB 73/46	mg/kg												
PCB 74	mg/kg												
PCB 75	mg/kg												

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT
Field Sample ID	22522249	23615973	23615976	23624160	23681945	23716467	23716468	23716470	23716471	23929897	23929898	23948643	
Location ID	DER1-28	DER2-29-SD	DER2-29-SD	DER2-28-SD	DER2-28-SD	DER2-26-SD	DER2-26-SD	DER2-27-SD	DER2-27-SD	DER2-27-SD	DER2-27-SD	DER1-27	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	
Sample Purpose	DUP	FS	FS	FS	FS	FS	FS	FS	FS	DUP	DUP	FS	
Date	9/22/2009	4/21/2010	4/21/2010	4/22/2010	4/22/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	4/22/2010	
Chemical Class	Units												
PCB 76	mg/kg												
PCB 77	mg/kg		0.000302			0.000197							
PCB 78	mg/kg		0.000015 U			0.0000077 U							
PCB 79	mg/kg		0.0000199			0.0000103							
PCB 8	mg/kg		0.000219			0.00013							
PCB 80	mg/kg		0.0000149 U			0.0000065							
PCB 81	mg/kg		0.0000172 U			0.00000321							
PCB 82	mg/kg		0.000198			0.000104							
PCB 83	mg/kg		0.000111			0.0000471							
PCB 83/125/112	mg/kg												
PCB 84	mg/kg		0.000469			0.000238							
PCB 85	mg/kg												
PCB 86	mg/kg												
PCB 86/109	mg/kg												
PCB 87	mg/kg												
PCB 87/111	mg/kg												
PCB 88	mg/kg		0.00000656 U			0.00000594 U							
PCB 89	mg/kg		0.0000238			0.0000107							
PCB 89/84	mg/kg												
PCB 9	mg/kg		0.0000354			0.0000167							
PCB 90	mg/kg												
PCB 91	mg/kg		0.000389			0.000202							
PCB 92	mg/kg		0.000458			0.000225							
PCB 93	mg/kg												
PCB 94	mg/kg		0.0000286			0.0000134							
PCB 95	mg/kg		0.00134			0.000694							
PCB 96	mg/kg		0.0000225			0.0000118							
PCB 97	mg/kg												
PCB 98	mg/kg		0.00000607 U			0.0000055 U							
PCB 99	mg/kg		0.00102			0.000555							
PCB-100/93	mg/kg		0.000064			0.000034							
PCB-107/124	mg/kg		0.0000569			0.0000324							
PCB-108/119/86/97/125/87	mg/kg		0.00121			0.000663							
PCB-113/90/101	mg/kg		0.00204			0.00108							
PCB-116/85	mg/kg		0.000351			0.000171							
PCB-128/166	mg/kg		0.000366			0.000204							
PCB-13/12	mg/kg		0.000264			0.000125							
PCB-139/140	mg/kg		0.0000587			0.0000293							
PCB-147/149	mg/kg		0.00225			0.00119							
PCB-151/135	mg/kg		0.00107			0.000549							
PCB-153/168	mg/kg		0.00267			0.00145							
PCB-156/157	mg/kg		0.00026			0.000151							
PCB-163/138/129	mg/kg		0.00294			0.00155							
PCB-171/173	mg/kg		0.000183			0.000111							
PCB-180/193	mg/kg		0.0013			0.000762							
PCB-198/199	mg/kg		0.00124			0.000728							
PCB-21/33	mg/kg		0.000247			0.000139							
PCB-26/29	mg/kg		0.000209			0.000106							
PCB-28/20	mg/kg		0.000869			0.000519							
PCB-30/18	mg/kg		0.000312			0.000164							
PCB-44/47/65	mg/kg		0.00123			0.000636							
PCB-50/53	mg/kg		0.000214			0.000104							
PCB-59/62/75	mg/kg		0.000118			0.0000593							
PCB-61/70/74/76	mg/kg		0.00146			0.000782							
PCB-69/49	mg/kg		0.000933			0.000456							
PCB-71/40	mg/kg		0.000544			0.000269							
PCB-90/101	mg/kg												
Pentachlorobiphenyl	mg/kg												
Tetrachlorobiphenyl	mg/kg												
Total Decachlorobiphenyls (congeners)	mg/kg												
Total Dichlorobiphenyls (congeners)	mg/kg		0.00213			0.00119							
Total Heptachlorobiphenyls (congeners)	mg/kg		0.00567			0.0033							
Total Hexachlorobiphenyls (congeners)	mg/kg		0.0131			0.007							
Total Monochlorobiphenyls (congeners)	mg/kg		0.000542			0.000306							
Total Nonachlorobiphenyls (congeners)	mg/kg		0.00671			0.0044							
Total Octachlorobiphenyls (congeners)	mg/kg		0.00347			0.00202							
Total PCB (congeners)	mg/kg		0.065102			0.037166							
Total Pentachlorobiphenyls (congeners)	mg/kg		0.013			0.00696							
Total Tetrachlorobiphenyls (congeners)	mg/kg		0.00915			0.00473							
Total Trichlorobiphenyls (congeners)	mg/kg		0.00371			0.00211							
Trichlorobiphenyl (total)	mg/kg												
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>													
Benzo[e]pyrene	mg/kg												
Chrysene, 1-methyl-	mg/kg												
Naphthalene, 1-methyl-	mg/kg												
Pyrene, 1-methyl-	mg/kg												

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

River Zone	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT				
Field Sample ID	22522249	23615973	23615976	23624160	23681945	23716467	23716468	23716470	23716471	23929897	23929898	23948643	
Location ID	DER1-28	DER2-29-SD	DER2-29-SD	DER2-28-SD	DER2-28-SD	DER2-26-SD	DER2-26-SD	DER2-27-SD	DER2-27-SD	DER2-27-SD	DER2-27-SD	DER1-27	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	
Sample Purpose	DUP	FS	FS	FS	FS	FS	FS	FS	FS	DUP	DUP	FS	
Date	9/22/2009	4/21/2010	4/21/2010	4/22/2010	4/22/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	4/22/2010	
Chemical Class	Units												
<b>Polycyclic Aromatic Hydrocarbons</b>													
Acenaphthene	mg/kg		0.19 U		0.21 U		0.07 U		0.057 U				
Acenaphthylene	mg/kg		0.19 U		0.21 U		0.099 U		0.057 U				
Anthracene	mg/kg		0.19 U		0.21 U		0.07 U		0.057 U				
Benzo(A)Anthracene	mg/kg		0.21		0.21 U		0.11		0.059				
Benzo(B)Fluoranthene	mg/kg		0.31		0.21 U		0.17		0.072				
Benzo(G,H,I)Perylene	mg/kg		0.19 U		0.21 U		0.11		0.057 U				
Benzo(K)Fluoranthene	mg/kg		0.19 U		0.21 U		0.077 U		0.057 U				
Benzo(A)Pyrene	mg/kg		0.24		0.21 U		0.18		0.061				
Chrysene	mg/kg		0.27		0.21 U		0.16		0.064				
Dibenz(A,H)Anthracene	mg/kg		0.19 U		0.21 U		0.07 U		0.057 U				
Fluoranthene	mg/kg		0.38		0.21		0.17		0.083				
Fluorene	mg/kg		0.19 U		0.21 U		0.07 U		0.057 U				
Indeno (1,2,3-CD) Pyrene	mg/kg		0.19 U		0.21 U		0.096		0.057 U				
Naphthalene	mg/kg		0.19 U		0.21 U		0.089		0.057 U				
Phenanthrene	mg/kg		0.21		0.21 U		0.11		0.057 U				
Pyrene	mg/kg		0.43		0.25		0.2		0.11				
Total PAHs (Detections + 1/2 MDL)	mg/kg		2.905		1.93		1.711		0.734				
Total PAHs (Detections Only)	mg/kg		2.05		0.46		1.571		0.449				
<b>Semivolatile Organic Compounds - TICs</b>													
1,2,4-Trithiolane	mg/kg												
1,4-Benzenediol, 2-chloro-	mg/kg												
11H-Benzo[b]fluorene	mg/kg												
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg												
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg				6								
3-PENTEN-2-ONE, 4-METHYL-	mg/kg												
7H-Benz[de]anthracen-7-one	mg/kg												
9,10-Anthracenedione	mg/kg												
9-Octadecenamamide, (Z)-	mg/kg												
Acetamide, 2-chloro-N-(ethox	mg/kg												
Alachlor	mg/kg												
Benzenamine, 3-methyl-	mg/kg												
Benzenamine, 4,4',4"-methy	mg/kg												
Benzenamine, 4,4'-methyleneb	mg/kg												
Benzene, 1,2,3,4-tetrachloro	mg/kg												
Benzene, 1,2,3,5-tetrachloro	mg/kg												
Benzene, 1,2,3-trichloro-	mg/kg												
Benzene, 1,3,5-trichloro-	mg/kg												
Benzene, 1,3-bis(1-methyleth	mg/kg												
Benzene, 1,4-bis(1-methyleth	mg/kg												
Benzofuran, 2,3-dihydro-	mg/kg												
CYCLIC OCTAATOMIC SULFUR	mg/kg		63		7.6								
Diphenyl Ether	mg/kg												
Docosane	mg/kg												
Heneicosane	mg/kg												
Hexacosane	mg/kg												
Hexadecane	mg/kg												
Hexatriacontane	mg/kg												
m-Chloroaniline	mg/kg												
N,N-Diethylaniline	mg/kg												
n-Hexadecanoic acid	mg/kg												
Nonadecane	mg/kg												
o-Chloroaniline	mg/kg												
Octacosane	mg/kg												
Octadecane	mg/kg												
Octadecane, 1-chloro-	mg/kg												
Octadecanoic acid	mg/kg												
Parachlorophenol	mg/kg												
Pentadecane	mg/kg												
Perylene	mg/kg												
Phenol, 2,5-dichloro-	mg/kg												
Phenol, 3-chloro-	mg/kg												
Phenol, 4,4'-(1-methylethyl)	mg/kg												
Tetracosane	mg/kg												
Tetradecane	mg/kg												
Tetraethylene glycol	mg/kg												
Total SVOC TICs	mg/kg												
Triacontane	mg/kg												
Tributyl phosphate	mg/kg												
Tridecanoic acid	mg/kg												
Triphenyl phosphate	mg/kg												
UNKNOWN	mg/kg		2.715		2.650909091		0.8984		0.917894737				
Unknown acid	mg/kg												
Unknown Alcohol	mg/kg												
Unknown Aldol Condensate	mg/kg												
UNKNOWN ALKANE	mg/kg		2.6		3.3								

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	CARNEYS PT												
Field Sample ID	22522249	23615973	23615976	23624160	23681945	23716467	23716468	23716470	23716471	23929897	23929898	23948643	
Location ID	DER1-28	DER2-29-SD	DER2-29-SD	DER2-28-SD	DER2-28-SD	DER2-26-SD	DER2-26-SD	DER2-27-SD	DER2-27-SD	DER2-27-SD	DER2-27-SD	DER1-27	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	
Sample Purpose	DUP	FS	DUP	DUP	FS								
Date	9/22/2009	4/21/2010	4/21/2010	4/22/2010	4/22/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	4/22/2010	
Chemical Class	Units												
Unknown Alkene	mg/kg												
Unknown Amide	mg/kg												
Unknown Amine	mg/kg												
UNKNOWN AROMATIC	mg/kg												
Unknown Carboxylic Acid	mg/kg												
Unknown Cycloalkane	mg/kg												
Unknown Hydrocarbon	mg/kg												
Unknown Ketone	mg/kg												
Unknown PAH	mg/kg												
UNKNOWN SILOXANE	mg/kg												
<b>Semivolatile Organic Compounds</b>													
1,2,4-Trichlorobenzene	mg/kg	0.22			0.21	U		0.07	U	0.057	U		
1,2-Diphenylhydrazine	mg/kg	0.19	U		0.21	U		0.07	U	0.057	U		
1,4-Dioxane	mg/kg												
1-Naphthylamine	mg/kg	0.96	U		1	U		0.35	U	0.28	U		
2,3,4,6-Tetrachlorophenol	mg/kg												
2,4,5-Trichlorophenol	mg/kg												
2,4,6-Trichlorophenol	mg/kg	0.19	U		0.21	U		0.07	U	0.057	U		
2,4-Dichlorophenol	mg/kg	0.19	U		0.21	U		0.07	U	0.057	U		
2,4-Dimethylphenol	mg/kg	0.38	U		0.42	U		0.14	U	0.11	U		
2,4-Dinitrophenol	mg/kg	3.8	U		4.2	U		1.4	U	1.1	U		
2,4-Dinitrotoluene	mg/kg	0.38	U		0.42	U		0.14	U	0.11	U		
2,6-Dinitrotoluene	mg/kg	0.19	U		0.21	U		0.07	U	0.057	U		
2-Chloronaphthalene	mg/kg	0.19	U		0.21	U		0.07	U	0.057	U		
2-Chlorophenol	mg/kg	0.19	U		0.21	U		0.07	U	0.057	U		
2-Methylnaphthalene	mg/kg												
2-Methylphenol (O-Cresol)	mg/kg												
2-Naphthylamine	mg/kg	0.96	U		1	U		0.35	U	0.28	U		
2-Nitroaniline	mg/kg												
2-Nitrophenol	mg/kg	0.19	U		0.21	U		0.07	U	0.057	U		
3,3'-Dichlorobenzidine	mg/kg	0.58	U		0.62	U		0.21	U	0.17	U		
3,3'-Dimethylbenzidine	mg/kg												
3-Nitroaniline	mg/kg												
4,6-Dinitro-2-Methylphenol	mg/kg	0.96	U		1	U		0.35	U	0.28	U		
4-Aminobiphenyl	mg/kg	0.96	U		1	U		0.35	U	0.28	U		
4-Bromophenyl Phenyl Ether	mg/kg	0.19	U		0.21	U		0.07	U	0.057	U		
4-Chloro-3-Methylphenol	mg/kg	0.38	U		0.42	U		0.14	U	0.11	U		
4-Chloroaniline	mg/kg	0.38	U		0.42	U		0.14	U	0.11	U		
4-Chlorophenyl Phenyl Ether	mg/kg	0.19	U		0.21	U		0.07	U	0.057	U		
4-Methylphenol (P-Cresol)	mg/kg												
4-Nitroaniline	mg/kg												
4-Nitrophenol	mg/kg	0.96	U		1	U		0.35	U	0.28	U		
Acetophenone	mg/kg												
Aniline	mg/kg	0.96	U		1	U		0.35	U	0.28	U		
Benzidine	mg/kg	6.7	U		7.3	U		2.4	U	2	U		
Biphenyl	mg/kg												
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg												
Bis(2-Chloroethoxy)Methane	mg/kg	0.19	U		0.21	U		0.07	U	0.057	U		
Bis(2-Chloroethyl)Ether	mg/kg	0.19	U		0.21	U		0.07	U	0.057	U		
Bis(2-Chloroisopropyl)Ether	mg/kg	0.19	U		0.21	U		0.07	U	0.057	U		
Bis(2-Ethylhexyl)Phthalate	mg/kg	0.41	U		0.42	U		0.14	U	0.11	U		
Butyl Benzyl Phthalate	mg/kg	0.38	U		0.42	U		0.14	U	0.11	U		
Carbazole	mg/kg	0.19	U		0.21	U		0.07	U	0.057	U		
Dibenzofuran	mg/kg												
Diethyl Phthalate	mg/kg	0.38	U		0.42	U		0.14	U	0.11	U		
Dimethyl Phthalate	mg/kg	0.38	U		0.42	U		0.14	U	0.11	U		
Di-N-Butyl Phthalate	mg/kg	0.38	U		0.42	U		0.14	U	0.11	U		
Diphenyl Ether	mg/kg												
Hexachlorobenzene	mg/kg	0.19	U		0.21	U		0.07	U	0.057	U		
Hexachlorobutadiene	mg/kg	0.38	U		0.42	U		0.14	U	0.11	U		
Hexachlorocyclopentadiene	mg/kg	0.96	U		1	U		0.35	U	0.28	U		
Hexachloroethane	mg/kg	0.19	U		0.21	U		0.07	U	0.057	U		
Hexachloropropylene	mg/kg												
Isophorone	mg/kg	0.19	U		0.21	U		0.07	U	0.057	U		
N-Dioctyl Phthalate	mg/kg	0.38	U		0.42	U		0.14	U	0.11	U		
Nitrobenzene	mg/kg	0.19	U		0.21	U		0.07	U	0.057	U		
N-Nitrosodimethylamine	mg/kg	0.38	U		0.42	U		0.14	U	0.11	U		
N-Nitrosodi-N-Propylamine	mg/kg	0.19	U		0.21	U		0.07	U	0.057	U		
N-Nitrosodiphenylamine	mg/kg	0.19	U		0.21	U		0.07	U	0.057	U		
O-Toluidine	mg/kg	1.2	U		1.2	U		0.42	U	0.34	U		
Parathion	mg/kg												
Pentachlorobenzene	mg/kg												
Pentachlorophenol	mg/kg	0.96	U		1	U		0.35	U	0.28	U		
Phenol	mg/kg	0.19	U		0.21	U		0.07	U	0.057	U		
<b>Volatile Organic Compounds - TICs</b>													
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg												

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	CARNEYS PT													
Field Sample ID	22522249	23615973	23615976	23624160	23681945	23716467	23716468	23716470	23716471	23929897	23929898	23948643		
Location ID	DER1-28	DER2-29-SD	DER2-29-SD	DER2-28-SD	DER2-28-SD	DER2-26-SD	DER2-26-SD	DER2-27-SD	DER2-27-SD	DER2-27-SD	DER2-27-SD	DER1-27		
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50		
Sample Purpose	DUP	FS	DUP	DUP	FS									
Date	9/22/2009	4/21/2010	4/21/2010	4/22/2010	4/22/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	4/22/2010		
Chemical Class	Units													
1-Butene	mg/kg													
1-Heptene	mg/kg													
1-Propene, 2-methyl-	mg/kg													
Azulene	mg/kg													
BENZENE, 1,2,4-TRICHLORO-	mg/kg													
BENZENE, 1,2-DICHLORO-	mg/kg													
BENZENE, 1,4-DICHLORO-	mg/kg													
Camphene	mg/kg													
CYCLOHEXANE	mg/kg													
Cyclohexane, methyl-	mg/kg													
Cyclotrisiloxane, hexamethyl	mg/kg													
Diphenyl Ether	mg/kg													
Ethane, 1,1,2,2-tetrachloro-	mg/kg													
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg													
Ethane, 1,2-dichloro-1,1-dif	mg/kg													
Ethene, 1,1-dichloro-2,2-dif	mg/kg													
Hexane, 2-methyl-	mg/kg													
Hexane, 3-methyl-	mg/kg													
METHANE, CHLOROFLUORO-	mg/kg													
Naphthalene	mg/kg													
NAPHTHALENE, 2-METHYL-	mg/kg													
Nonanal	mg/kg													
Norflurane	mg/kg													
Pentane, 2,3-dimethyl-	mg/kg													
Phenol, 4-(1,1,3,3-tetrameth	mg/kg													
Propene	mg/kg													
Sulfur dioxide	mg/kg													
Tridecane	mg/kg													
UNKNOWN	mg/kg							0.024						
UNKNOWN ALICYCLIC	mg/kg													
UNKNOWN ALIPHATIC	mg/kg													
UNKNOWN ALKANE	mg/kg													
UNKNOWN AROMATIC	mg/kg													
UNKNOWN SILOXANE	mg/kg			0.027			0.022		0.016		0.037			
<b>Volatile Organic Compounds</b>														
1,1,1,2-Tetrachloroethane	mg/kg													
1,1,1-Trichloroethane	mg/kg			0.002	U		0.001	U		0.002	U		0.004	U
1,1,1-Trichlorotrifluoroethane	mg/kg													
1,1,2,2-Tetrachloroethane	mg/kg			0.002	U		0.001	U		0.002	U		0.004	U
1,1,2-Trichloroethane	mg/kg			0.002	U		0.001	U		0.002	U		0.004	U
1,1,2-Trichlorotrifluoroethane	mg/kg			0.004	U		0.002	U		0.004	U		0.008	U
1,1,2-Trifluoroethane	mg/kg													
1,1-Dichloro-1-Fluoroethane	mg/kg													
1,1-Dichloroethane	mg/kg			0.002	U		0.001	U		0.002	U		0.004	U
1,1-Dichloroethene	mg/kg			0.002	U		0.001	U		0.002	U		0.004	U
1,1-Dichloropropene	mg/kg													
1,2,4-Trimethylbenzene	mg/kg													
1,2-Dibromoethane (EDB)	mg/kg													
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg													
1,2-Dichloro-1-Fluoroethane	mg/kg													
1,2-Dichlorobenzene	mg/kg		0.5		0.21	U		0.1		0.057	U			
1,2-Dichloroethane	mg/kg			0.002	U		0.001	U		0.002	U		0.004	U
1,2-Dichloroethene	mg/kg													
1,2-Dichloropropane	mg/kg			0.002	U		0.001	U		0.002	U		0.004	U
1,2-Dichlorotetrafluoroethane	mg/kg													
1,3,5-Trimethylbenzene	mg/kg													
1,3-Dichlorobenzene	mg/kg		0.19	U		0.21	U		0.07	U		0.057	U	
1,4-Dichlorobenzene	mg/kg		1.2			0.21	U		0.15			0.057	U	
1-Chloro-1,1-Difluoroethane	mg/kg													
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg													
2-Chloro-1,1,1-Trifluoroethane	mg/kg													
2-Chloroethyl Vinyl Ether	mg/kg													
2-Chlorotoluene	mg/kg													
2-Hexanone	mg/kg													
4-Chlorotoluene	mg/kg													
4-Isopropyltoluene	mg/kg													
Acetone	mg/kg			0.035			0.008	U		0.023			0.093	
Acrolein	mg/kg			0.038	U		0.024	U		0.043	U		0.085	U
Acrylonitrile	mg/kg			0.009	U		0.005	U		0.009	U		0.017	U
Benzene	mg/kg			0.0009	U		0.0006	U		0.001	U		0.002	U
Bromodichloromethane	mg/kg			0.002	U		0.001	U		0.002	U		0.004	U
Bromoform	mg/kg			0.002	U		0.001	U		0.002	U		0.004	U
Carbon Disulfide	mg/kg			0.005			0.009			0.002	U		0.01	
Carbon Tetrachloride	mg/kg			0.002	U		0.001	U		0.002	U		0.004	U
CFC-1113	mg/kg													
Chlorobenzene	mg/kg			0.002	U		0.001	U		0.015			0.004	U

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Chemical Class	River Zone	CARNEYS PT											
	Field Sample ID	22522249	23615973	23615976	23624160	23681945	23716467	23716468	23716470	23716471	23929897	23929898	23948643
Chemical	Location ID	DER1-28	DER2-29-SD	DER2-29-SD	DER2-28-SD	DER2-28-SD	DER2-26-SD	DER2-26-SD	DER2-27-SD	DER2-27-SD	DER2-27-SD	DER2-27-SD	DER1-27
Units	Depth Interval (ft)	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50
	Sample Purpose	DUP	FS	DUP	DUP	FS							
	Date	9/22/2009	4/21/2010	4/21/2010	4/22/2010	4/22/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	5/4/2010	4/22/2010
Chlorodibromomethane	mg/kg			0.002	U		0.001	U		0.002	U	0.004	U
Chlorodifluoromethane	mg/kg												
Chlorofluoromethane	mg/kg												
Chloroform	mg/kg			0.002	U		0.001	U		0.002	U	0.004	U
Chloropentafluoroethane	mg/kg												
cis-1,2-Dichloroethene	mg/kg			0.002	U		0.001	U		0.002	U	0.004	U
cis-1,3-Dichloropropene	mg/kg			0.002	U		0.001	U		0.002	U	0.004	U
Cumene	mg/kg												
Dichlorodifluoromethane	mg/kg			0.004	U		0.002	U		0.004	U	0.008	U
Dichlorofluoromethane	mg/kg			0.004	U		0.002	U		0.004	U	0.008	U
Ethane	ug/L												
Ethyl Chloride	mg/kg			0.004	U		0.002	U		0.004	U	0.008	U
Ethylbenzene	mg/kg			0.002	U		0.001	U		0.002	U	0.004	U
Fluoromethane	mg/kg												
Hexane	mg/kg												
Isobutyl Alcohol	mg/kg												
Meta- And Para-Xylene	mg/kg												
Methacrylonitrile	mg/kg												
Methane	ug/L												
Methyl Bromide	mg/kg			0.004	U		0.002	U		0.004	U	0.008	U
Methyl Chloride	mg/kg			0.004	U		0.002	U		0.004	U	0.008	U
Methyl Ethyl Ketone	mg/kg												
Methyl Isobutyl Ketone	mg/kg												
Methyl Methacrylate	mg/kg												
Methyl Tertiary Butyl Ether	mg/kg												
Methylene Chloride	mg/kg			0.004	U		0.003			0.004	U	0.008	U
N-Butylbenzene	mg/kg												
N-Propylbenzene	mg/kg												
Ortho-Xylene	mg/kg												
Propionitrile	mg/kg												
sec-Butylbenzene	mg/kg												
Styrene	mg/kg												
tert-Butylbenzene	mg/kg												
Tetrachloroethene	mg/kg			0.002	U		0.001	U		0.002	U	0.004	U
Tetrahydrofuran	mg/kg												
Toluene	mg/kg			0.002	U		0.001	U		0.002	U	0.004	U
trans-1,2-Dichloroethene	mg/kg			0.002	U		0.001	U		0.002	U	0.004	U
trans-1,3-Dichloropropene	mg/kg			0.002	U		0.001	U		0.002	U	0.004	U
Trichloroethene	mg/kg			0.002	U		0.001	U		0.002	U	0.004	U
Trichlorofluoromethane	mg/kg			0.004	U		0.002	U		0.004	U	0.008	U
Vinyl Chloride	mg/kg			0.002	U		0.001	U		0.002	U	0.004	U
Vinyl Fluoride	mg/kg												
Xylenes	mg/kg			0.002	U		0.001	U		0.002	U	0.004	U

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	Location ID	Depth Interval (ft)	Sample Purpose	Date	CARNEYS PT							
						23948645	23949962	24831768	24831769	24831771	24831772	24894973	24895120
						DER1-29	DER1-22	DER3-17	DER3-17	DER3-18	DER3-18	DER3-18	DER3-27
						0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50
						FS							
						4/21/2010	5/4/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010	11/16/2010
Chemical Class	Chemical	Units											
<b>General Chemistry</b>													
	Black Carbon	mg/kg						4230				6850	
	Percent Moisture	%			25		32	54	29.9		46.6	49.1	47.3
	Percent Solids	%											
	Total Organic Carbon	mg/kg						11550				14800	16300
<b>Metals</b>													
	Aluminum	mg/kg						18500				17100	
	Antimony	mg/kg						2.15	U			1.84	U
	Arsenic	mg/kg						9.11				8.69	
	Barium	mg/kg						84.8				85.9	
	Beryllium	mg/kg						0.809				0.946	
	Cadmium	mg/kg						0.749				1.06	
	Calcium	mg/kg						5210				2940	
	Chromium	mg/kg						52.6				43.2	
	Cobalt	mg/kg						9.59				11.9	
	Copper	mg/kg						57.4				30.9	
	Iron	mg/kg						24100				26100	
	Lead	mg/kg						57.6				44.3	
	Magnesium	mg/kg						5150				5260	
	Manganese	mg/kg						799				830	
	Mercury	mg/kg						1.12				0.156	
	Nickel	mg/kg						22				24.4	
	Potassium	mg/kg						3200				2630	
	Selenium	mg/kg						2.11	U			1.8	U
	Silver	mg/kg						0.387	U			0.33	U
	Sodium	mg/kg						655				614	
	Thallium	mg/kg						3.12	U			2.66	U
	Tin	mg/kg						13.1				5.79	
	Titanium	mg/kg											
	Vanadium	mg/kg						40.8				40.9	
	Zinc	mg/kg						129				176	
<b>Metals - AVS/SEM</b>													
	Acid Volatile Sulfide	umol/g											
	Arsenic	umol/g											
	Cadmium	umol/g											
	Copper	umol/g											
	Lead	umol/g											
	Zinc	umol/g											
<b>Metals - Leachate</b>													
	Lead	ug/L											
<b>Per and Polyfluorinated Organic Substances</b>													
	Perfluorobutane Sulfonic Acid	mg/kg											
	Perfluorobutanoic Acid	mg/kg											
	Perfluorodecane Sulfonic Acid	mg/kg											
	Perfluorodecanoic Acid	mg/kg											
	Perfluorododecanoic Acid	mg/kg											
	Perfluoroheptanoic Acid	mg/kg											
	Perfluorohexane Sulfonic Acid	mg/kg											
	Perfluorohexanoic Acid	mg/kg											
	Perfluorononanoic Acid	mg/kg											
	Perfluorooctane Sulfonamide	mg/kg											
	Perfluoropentanoic Acid	mg/kg											
	Perfluorotetradecanoic Acid	mg/kg											
	Perfluorotridecanoic Acid	mg/kg											
	Perfluoroundecanoic Acid	mg/kg											
	PFOA	mg/kg	U	0.00064	U	0.00072	U						
	PFOA(trial)	mg/kg	U	0.00064	U	0.00072	U						
	PFOS	mg/kg	U	0.00015	U	0.00017	U						
	PFOS (trial)	mg/kg	U	0.00015	U	0.00017	U						
<b>Pesticides and Herbicides</b>													
	4,4'-DDD	mg/kg											
	4,4'-DDE	mg/kg											
	4,4'-DDT	mg/kg											
	Aldrin	mg/kg											
	Alpha Chlordane	mg/kg											
	Alpha-BHC	mg/kg											
	beta-BHC	mg/kg											
	delta-BHC	mg/kg											
	Dieldrin	mg/kg											
	Endosulfan I	mg/kg											
	Endosulfan II	mg/kg											
	Endosulfan Sulfate	mg/kg											
	Endrin	mg/kg											
	Endrin Aldehyde	mg/kg											
	Endrin Ketone	mg/kg											
	Gamma Chlordane	mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	CARNEYS PT								
Field Sample ID	23948645	23949962	24831768	24831769	24831771	24831772	24894973	24895120	
Location ID	DER1-29	DER1-22	DER3-17	DER3-17	DER3-18	DER3-18	DER3-18	DER3-27	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	
Sample Purpose	FS								
Date	4/21/2010	5/4/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010	11/16/2010	
Chemical Class									
Chemical	Units								
Heptachlor	mg/kg								
Heptachlor Epoxide	mg/kg								
Lindane	mg/kg								
Methoxychlor	mg/kg								
Toxaphene	mg/kg								
<b>Physical Properties</b>									
0.001 MM	% PASSING			0.5	U			4	2
0.002 MM	% PASSING			5				11	7
0.005 MM	% PASSING			10				20	11
0.02 MM	% PASSING			19				39	24
0.05 MM	% PASSING			30.5				65	41
0.064 MM	% PASSING			34				72.5	49
0.075 MM	% PASSING			34.8				75.1	53.1
0.15 MM	% PASSING			39.4				78.8	61.5
0.3 MM	% PASSING			56.8				85	82.4
0.6 MM	% PASSING			77				92.8	90.7
1.18 MM	% PASSING			84.1				95.9	92.1
19 MM	% PASSING			88.6				100	100
2.36 MM	% PASSING			87.1				97.9	94
3.35 MM	% PASSING			88				98.2	95.3
37.5 MM	% PASSING			100				100	100
4.75 MM	% PASSING			88.4				98.4	96.5
75 MM	% PASSING			100				100	100
Density	PCF								
<b>Polychlorinated Biphenyls - TICs</b>									
1,1'-Biphenyl, 2,3-dichloro-	mg/kg								
Unknown Biphenyl	mg/kg								
<b>Polychlorinated Biphenyls</b>									
Heptachlorobiphenyl	mg/kg								
Hexachlorobiphenyl	mg/kg								
Octachlorobiphenyl	mg/kg								
PCB 1	mg/kg								
PCB 10	mg/kg								
PCB 100	mg/kg								
PCB 101	mg/kg								
PCB 102	mg/kg								
PCB 103	mg/kg								
PCB 104	mg/kg								
PCB 105	mg/kg								
PCB 106	mg/kg								
PCB 107	mg/kg								
PCB 107/123	mg/kg								
PCB 108	mg/kg								
PCB 109	mg/kg								
PCB 11	mg/kg								
PCB 110	mg/kg								
PCB 111	mg/kg								
PCB 112	mg/kg								
PCB 113	mg/kg								
PCB 114	mg/kg								
PCB 115	mg/kg								
PCB 116	mg/kg								
PCB 117	mg/kg								
PCB 118	mg/kg								
PCB 119	mg/kg								
PCB 12	mg/kg								
PCB 120	mg/kg								
PCB 121	mg/kg								
PCB 121/95/88	mg/kg								
PCB 122	mg/kg								
PCB 123	mg/kg								
PCB 124	mg/kg								
PCB 125	mg/kg								
PCB 126	mg/kg								
PCB 127	mg/kg								
PCB 128	mg/kg								
PCB 129	mg/kg								
PCB 129/158	mg/kg								
PCB 13	mg/kg								
PCB 130	mg/kg								
PCB 130/164	mg/kg								
PCB 131	mg/kg								
PCB 132	mg/kg								
PCB 133	mg/kg								
PCB 134	mg/kg								
PCB 135	mg/kg								

Table A-1  
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Deepwater, New Jersey

River Zone	CARNEYS PT								
Field Sample ID	23948645	23949962	24831768	24831769	24831771	24831772	24894973	24895120	
Location ID	DER1-29	DER1-22	DER3-17	DER3-17	DER3-18	DER3-18	DER3-18	DER3-27	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	
Sample Purpose	FS								
Date	4/21/2010	5/4/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010	11/16/2010	
Chemical Class	Units								
PCB 136	mg/kg								
PCB 137	mg/kg								
PCB 138	mg/kg								
PCB 139	mg/kg								
PCB 14	mg/kg								
PCB 140	mg/kg								
PCB 141	mg/kg								
PCB 142	mg/kg								
PCB 143	mg/kg								
PCB 143/139	mg/kg								
PCB 144	mg/kg								
PCB 145	mg/kg								
PCB 146	mg/kg								
PCB 147	mg/kg								
PCB 148	mg/kg								
PCB 149	mg/kg								
PCB 15	mg/kg								
PCB 150	mg/kg								
PCB 151	mg/kg								
PCB 152	mg/kg								
PCB 153	mg/kg								
PCB 154	mg/kg								
PCB 155	mg/kg								
PCB 156	mg/kg								
PCB 157	mg/kg								
PCB 158	mg/kg								
PCB 159	mg/kg								
PCB 16	mg/kg								
PCB 160	mg/kg								
PCB 161	mg/kg								
PCB 162	mg/kg								
PCB 163	mg/kg								
PCB 163/160	mg/kg								
PCB 164	mg/kg								
PCB 165	mg/kg								
PCB 166	mg/kg								
PCB 167	mg/kg								
PCB 168	mg/kg								
PCB 169	mg/kg								
PCB 17	mg/kg								
PCB 170	mg/kg								
PCB 171	mg/kg								
PCB 172	mg/kg								
PCB 173	mg/kg								
PCB 174	mg/kg								
PCB 175	mg/kg								
PCB 176	mg/kg								
PCB 177	mg/kg								
PCB 178	mg/kg								
PCB 179	mg/kg								
PCB 18	mg/kg								
PCB 180	mg/kg								
PCB 181	mg/kg								
PCB 182	mg/kg								
PCB 182/175	mg/kg								
PCB 183	mg/kg								
PCB 184	mg/kg								
PCB 185	mg/kg								
PCB 186	mg/kg								
PCB 187	mg/kg								
PCB 188	mg/kg								
PCB 189	mg/kg								
PCB 19	mg/kg								
PCB 190	mg/kg								
PCB 191	mg/kg								
PCB 192	mg/kg								
PCB 193	mg/kg								
PCB 194	mg/kg								
PCB 195	mg/kg								
PCB 196	mg/kg								
PCB 197	mg/kg								
PCB 198	mg/kg								
PCB 199	mg/kg								
PCB 2	mg/kg								
PCB 20	mg/kg								
PCB 200	mg/kg								

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone	CARNEYS PT							
	Field Sample ID	23948645	23949962	24831768	24831769	24831771	24831772	24894973	24895120
Chemical	Location ID	DER1-29	DER1-22	DER3-17	DER3-17	DER3-18	DER3-18	DER3-18	DER3-27
Units	Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50
	Sample Purpose	FS							
	Date	4/21/2010	5/4/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010	11/16/2010
PCB 201	mg/kg								
PCB 202	mg/kg								
PCB 203	mg/kg								
PCB 204	mg/kg								
PCB 204/200	mg/kg								
PCB 205	mg/kg								
PCB 206	mg/kg								
PCB 207	mg/kg								
PCB 208	mg/kg								
PCB 209	mg/kg								
PCB 21	mg/kg								
PCB 21/20	mg/kg								
PCB 22	mg/kg								
PCB 23	mg/kg								
PCB 24	mg/kg								
PCB 25	mg/kg								
PCB 26	mg/kg								
PCB 27	mg/kg								
PCB 28	mg/kg								
PCB 29	mg/kg								
PCB 3	mg/kg								
PCB 30	mg/kg								
PCB 31	mg/kg								
PCB 32	mg/kg								
PCB 33	mg/kg								
PCB 34	mg/kg								
PCB 35	mg/kg								
PCB 36	mg/kg								
PCB 37	mg/kg								
PCB 38	mg/kg								
PCB 39	mg/kg								
PCB 4	mg/kg								
PCB 4/10	mg/kg								
PCB 40	mg/kg								
PCB 41	mg/kg								
PCB 42	mg/kg								
PCB 43	mg/kg								
PCB 44	mg/kg								
PCB 45	mg/kg								
PCB 46	mg/kg								
PCB 47	mg/kg								
PCB 48	mg/kg								
PCB 49	mg/kg								
PCB 5	mg/kg								
PCB 50	mg/kg								
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PCB 54	mg/kg								
PCB 55	mg/kg								
PCB 56	mg/kg								
PCB 57	mg/kg								
PCB 58	mg/kg								
PCB 59	mg/kg								
PCB 6	mg/kg								
PCB 60	mg/kg								
PCB 61	mg/kg								
PCB 62	mg/kg								
PCB 63	mg/kg								
PCB 64	mg/kg								
PCB 65	mg/kg								
PCB 65/75/62	mg/kg								
PCB 66	mg/kg								
PCB 67	mg/kg								
PCB 67/58	mg/kg								
PCB 68	mg/kg								
PCB 68/64	mg/kg								
PCB 69	mg/kg								
PCB 7	mg/kg								
PCB 70	mg/kg								
PCB 71	mg/kg								
PCB 72	mg/kg								
PCB 73	mg/kg								
PCB 73/46	mg/kg								
PCB 74	mg/kg								
PCB 75	mg/kg								

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	Field Sample ID	Location ID	Depth Interval (ft)	Sample Purpose	Date	CARNEYS PT 23948645 DER1-29 0.00-0.50 FS 4/21/2010	CARNEYS PT 23949962 DER1-22 0.00-0.50 FS 5/4/2010	CARNEYS PT 24831768 DER3-17 0.00-0.50 FS 11/15/2010	CARNEYS PT 24831769 DER3-17 0.50-1.00 FS 11/15/2010	CARNEYS PT 24831771 DER3-18 0.00-0.50 FS 11/15/2010	CARNEYS PT 24831772 DER3-18 0.50-1.00 FS 11/15/2010	CARNEYS PT 24894973 DER3-18 0.00-0.50 FS 11/15/2010	CARNEYS PT 24895120 DER3-27 0.00-0.50 FS 11/16/2010
Chemical Class	Chemical	Units											
PCB 76		mg/kg											
PCB 77		mg/kg											
PCB 78		mg/kg											
PCB 79		mg/kg											
PCB 8		mg/kg											
PCB 80		mg/kg											
PCB 81		mg/kg											
PCB 82		mg/kg											
PCB 83		mg/kg											
PCB 83/125/112		mg/kg											
PCB 84		mg/kg											
PCB 85		mg/kg											
PCB 86		mg/kg											
PCB 86/109		mg/kg											
PCB 87		mg/kg											
PCB 87/111		mg/kg											
PCB 88		mg/kg											
PCB 89		mg/kg											
PCB 89/84		mg/kg											
PCB 9		mg/kg											
PCB 90		mg/kg											
PCB 91		mg/kg											
PCB 92		mg/kg											
PCB 93		mg/kg											
PCB 94		mg/kg											
PCB 95		mg/kg											
PCB 96		mg/kg											
PCB 97		mg/kg											
PCB 98		mg/kg											
PCB 99		mg/kg											
PCB-100/93		mg/kg											
PCB-107/124		mg/kg											
PCB-108/119/86/97/125/87		mg/kg											
PCB-113/90/101		mg/kg											
PCB-116/85		mg/kg											
PCB-128/166		mg/kg											
PCB-13/12		mg/kg											
PCB-139/140		mg/kg											
PCB-147/149		mg/kg											
PCB-151/135		mg/kg											
PCB-153/168		mg/kg											
PCB-156/157		mg/kg											
PCB-163/138/129		mg/kg											
PCB-171/173		mg/kg											
PCB-180/193		mg/kg											
PCB-198/199		mg/kg											
PCB-21/33		mg/kg											
PCB-26/29		mg/kg											
PCB-28/20		mg/kg											
PCB-30/18		mg/kg											
PCB-44/47/65		mg/kg											
PCB-50/53		mg/kg											
PCB-59/62/75		mg/kg											
PCB-61/70/74/76		mg/kg											
PCB-69/49		mg/kg											
PCB-71/40		mg/kg											
PCB-90/101		mg/kg											
Pentachlorobiphenyl		mg/kg											
Tetrachlorobiphenyl		mg/kg											
Total Decachlorobiphenyls (congeners)		mg/kg											
Total Dichlorobiphenyls (congeners)		mg/kg											
Total Heptachlorobiphenyls (congeners)		mg/kg											
Total Hexachlorobiphenyls (congeners)		mg/kg											
Total Monochlorobiphenyls (congeners)		mg/kg											
Total Nonachlorobiphenyls (congeners)		mg/kg											
Total Octachlorobiphenyls (congeners)		mg/kg											
Total PCB (congeners)		mg/kg											
Total Pentachlorobiphenyls (congeners)		mg/kg											
Total Tetrachlorobiphenyls (congeners)		mg/kg											
Total Trichlorobiphenyls (congeners)		mg/kg											
Trichlorobiphenyl (total)		mg/kg											
<b>Polycyclic Aromatic Hydrocarbons - TICs</b>													
Benzo[e]pyrene		mg/kg											
Chrysene, 1-methyl-		mg/kg											
Naphthalene, 1-methyl-		mg/kg											
Pyrene, 1-methyl-		mg/kg											

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	CARNEYS PT								
Field Sample ID	23948645	23949962	24831768	24831769	24831771	24831772	24894973	24895120	
Location ID	DER1-29	DER1-22	DER3-17	DER3-17	DER3-18	DER3-18	DER3-18	DER3-27	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	
Sample Purpose	FS								
Date	4/21/2010	5/4/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010	11/16/2010	
Chemical Class									
Chemical									
Units									
<b>Polycyclic Aromatic Hydrocarbons</b>									
Acenaphthene	mg/kg		0.072	U		0.062	U		
Acenaphthylene	mg/kg		0.072	U		0.062	U		
Anthracene	mg/kg		0.072	U		0.062	U		
Benzo(A)Anthracene	mg/kg		0.072	U		0.082			
Benzo(B)Fluoranthene	mg/kg		0.086			0.14			
Benzo(G,H,I)Perylene	mg/kg		0.072	U		0.067			
Benzo(K)Fluoranthene	mg/kg		0.072	U		0.062	U		
Benzo(A)Pyrene	mg/kg		0.072	U		0.092			
Chrysene	mg/kg		0.072	U		0.094			
Dibenz(A,H)Anthracene	mg/kg		0.072	U		0.062	U		
Fluoranthene	mg/kg		0.097			0.13			
Fluorene	mg/kg		0.072	U		0.062	U		
Indeno (1,2,3-CD) Pyrene	mg/kg		0.072	U		0.062	U		
Naphthalene	mg/kg		0.09			0.12			
Phenanthrene	mg/kg		0.072	U		0.089			
Pyrene	mg/kg		0.12			0.16			
Total PAHs (Detections + 1/2 MDL)	mg/kg		0.825			1.191			
Total PAHs (Detections Only)	mg/kg		0.393			0.974			
<b>Semivolatile Organic Compounds - TICs</b>									
1,2,4-Trithiolane	mg/kg								
1,4-Benzenediol, 2-chloro-	mg/kg								
11H-Benzo[b]fluorene	mg/kg								
2-METHYLTHIANAPHTHENE-1,1 DI	mg/kg								
2-PENTANONE, 4-HYDROXY-4-MET	mg/kg								
3-PENTEN-2-ONE, 4-METHYL-	mg/kg								
7H-Benz[de]anthracen-7-one	mg/kg								
9,10-Anthracenedione	mg/kg								
9-Octadecenamamide, (Z)-	mg/kg								
Acetamide, 2-chloro-N-(ethox	mg/kg								
Alachlor	mg/kg								
Benzenamine, 3-methyl-	mg/kg								
Benzenamine, 4,4',4"-methy	mg/kg								
Benzenamine, 4,4'-methyleneb	mg/kg								
Benzene, 1,2,3,4-tetrachloro	mg/kg								
Benzene, 1,2,3,5-tetrachloro	mg/kg								
Benzene, 1,2,3-trichloro-	mg/kg								
Benzene, 1,3,5-trichloro-	mg/kg								
Benzene, 1,3-bis(1-methyleth	mg/kg								
Benzene, 1,4-bis(1-methyleth	mg/kg								
Benzofuran, 2,3-dihydro-	mg/kg								
CYCLIC OCTAATOMIC SULFUR	mg/kg								
Diphenyl Ether	mg/kg								
Docosane	mg/kg								
Heneicosane	mg/kg								
Hexacosane	mg/kg								
Hexadecane	mg/kg								
Hexatriacontane	mg/kg								
m-Chloroaniline	mg/kg								
N,N-Diethylaniline	mg/kg								
n-Hexadecanoic acid	mg/kg								
Nonadecane	mg/kg								
o-Chloroaniline	mg/kg								
Octacosane	mg/kg								
Octadecane	mg/kg								
Octadecane, 1-chloro-	mg/kg								
Octadecanoic acid	mg/kg								
Parachlorophenol	mg/kg								
Pentadecane	mg/kg								
Perylene	mg/kg								
Phenol, 2,5-dichloro-	mg/kg								
Phenol, 3-chloro-	mg/kg								
Phenol, 4,4'-(1-methylethyl)	mg/kg								
Tetracosane	mg/kg								
Tetradecane	mg/kg								
Tetraethylene glycol	mg/kg								
Total SVOC TICs	mg/kg								
Triacotane	mg/kg								
Tributyl phosphate	mg/kg								
Tridecanoic acid	mg/kg								
Triphenyl phosphate	mg/kg								
UNKNOWN	mg/kg		1.3328			1.2504			
Unknown acid	mg/kg								
Unknown Alcohol	mg/kg								
Unknown Aldol Condensate	mg/kg								
UNKNOWN ALKANE	mg/kg								

Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

River Zone	CARNEYS PT								
Field Sample ID	23948645	23949962	24831768	24831769	24831771	24831772	24894973	24895120	
Location ID	DER1-29	DER1-22	DER3-17	DER3-17	DER3-18	DER3-18	DER3-18	DER3-27	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	
Sample Purpose	FS								
Date	4/21/2010	5/4/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010	11/16/2010	
Chemical Class	Units								
Unknown Alkene	mg/kg								
Unknown Amide	mg/kg								
Unknown Amine	mg/kg								
UNKNOWN AROMATIC	mg/kg								
Unknown Carboxylic Acid	mg/kg								
Unknown Cycloalkane	mg/kg								
Unknown Hydrocarbon	mg/kg								
Unknown Ketone	mg/kg								
Unknown PAH	mg/kg								
UNKNOWN SILOXANE	mg/kg								
<b>Semivolatile Organic Compounds</b>									
1,2,4-Trichlorobenzene	mg/kg		0.072	U		0.062	U		
1,2-Diphenylhydrazine	mg/kg		0.072	U		0.062	U		
1,4-Dioxane	mg/kg								
1-Naphthylamine	mg/kg		0.36	U		0.31	U		
2,3,4,6-Tetrachlorophenol	mg/kg								
2,4,5-Trichlorophenol	mg/kg								
2,4,6-Trichlorophenol	mg/kg		0.072	U		0.062	U		
2,4-Dichlorophenol	mg/kg		0.072	U		0.062	U		
2,4-Dimethylphenol	mg/kg		0.14	U		0.12	U		
2,4-Dinitrophenol	mg/kg		1.2	U		1.2	U		
2,4-Dinitrotoluene	mg/kg		0.14	U		0.12	U		
2,6-Dinitrotoluene	mg/kg		0.072	U		0.062	U		
2-Chloronaphthalene	mg/kg		0.072	U		0.062	U		
2-Chlorophenol	mg/kg		0.072	U		0.062	U		
2-Methylnaphthalene	mg/kg								
2-Methylphenol (O-Cresol)	mg/kg								
2-Naphthylamine	mg/kg		0.36	U		0.31	U		
2-Nitroaniline	mg/kg								
2-Nitrophenol	mg/kg		0.072	U		0.062	U		
3,3'-Dichlorobenzidine	mg/kg		0.22	U		0.19	U		
3,3'-Dimethylbenzidine	mg/kg								
3-Nitroaniline	mg/kg								
4,6-Dinitro-2-Methylphenol	mg/kg		0.36	U		0.31	U		
4-Aminobiphenyl	mg/kg		0.36	U		0.31	U		
4-Bromophenyl Phenyl Ether	mg/kg		0.072	U		0.062	U		
4-Chloro-3-Methylphenol	mg/kg		0.14	U		0.12	U		
4-Chloroaniline	mg/kg		0.14	U		0.12	U		
4-Chlorophenyl Phenyl Ether	mg/kg		0.072	U		0.062	U		
4-Methylphenol (P-Cresol)	mg/kg								
4-Nitroaniline	mg/kg								
4-Nitrophenol	mg/kg		0.36	U		0.31	U		
Acetophenone	mg/kg								
Aniline	mg/kg		0.36	U		0.31	U		
Benzidine	mg/kg		2.5	U		2.2	U		
Biphenyl	mg/kg								
Bis(2-Chloro-1-Methylethyl) Ether	mg/kg								
Bis(2-Chloroethoxy)Methane	mg/kg		0.072	U		0.062	U		
Bis(2-Chloroethyl)Ether	mg/kg		0.072	U		0.062	U		
Bis(2-Chloroisopropyl)Ether	mg/kg		0.072	U		0.062	U		
Bis(2-Ethylhexyl)Phthalate	mg/kg		0.14	U		0.12	U		
Butyl Benzyl Phthalate	mg/kg		0.14	U		0.12	U		
Carbazole	mg/kg		0.072	U		0.062	U		
Dibenzofuran	mg/kg								
Diethyl Phthalate	mg/kg		0.14	U		0.12	U		
Dimethyl Phthalate	mg/kg		0.14	U		0.12	U		
Di-N-Butyl Phthalate	mg/kg		0.14	U		0.12	U		
Diphenyl Ether	mg/kg								
Hexachlorobenzene	mg/kg		0.072	U		0.062	U		
Hexachlorobutadiene	mg/kg		0.14	U		0.12	U		
Hexachlorocyclopentadiene	mg/kg		0.36	U		0.31	U		
Hexachloroethane	mg/kg		0.072	U		0.062	U		
Hexachloropropylene	mg/kg								
Isophorone	mg/kg		0.072	U		0.062	U		
N-Dioctyl Phthalate	mg/kg		0.14	U		0.12	U		
Nitrobenzene	mg/kg		0.42	U		0.16	U		
N-Nitrosodimethylamine	mg/kg		0.14	U		0.12	U		
N-Nitrosodi-N-Propylamine	mg/kg		0.072	U		0.062	U		
N-Nitrosodiphenylamine	mg/kg		0.14	U		0.062	U		
O-Toluidine	mg/kg		0.43	U		0.37	U		
Parathion	mg/kg								
Pentachlorobenzene	mg/kg								
Pentachlorophenol	mg/kg		0.36	U		0.31	U		
Phenol	mg/kg		0.072	U		0.062	U		
<b>Volatile Organic Compounds - TICs</b>									
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg								

**Table A-1**  
**Sediment Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT					
Field Sample ID	23948645	23949962	24831768	24831769	24831771	24831772	24894973	24895120	
Location ID	DER1-29	DER1-22	DER3-17	DER3-17	DER3-18	DER3-18	DER3-18	DER3-27	
Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	
Date	4/21/2010	5/4/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010	11/16/2010	
Chemical Class	Units								
1-Butene	mg/kg								
1-Heptene	mg/kg								
1-Propene, 2-methyl-	mg/kg								
Azulene	mg/kg								
BENZENE, 1,2,4-TRICHLORO-	mg/kg								
BENZENE, 1,2-DICHLORO-	mg/kg								
BENZENE, 1,4-DICHLORO-	mg/kg								
Camphene	mg/kg								
CYCLOHEXANE	mg/kg								
Cyclohexane, methyl-	mg/kg								
Cyclotrisiloxane, hexamethyl	mg/kg								
Diphenyl Ether	mg/kg								
Ethane, 1,1,2,2-tetrachloro-	mg/kg								
ETHANE, 1,2-DICHLORO-1,1,2-	mg/kg								
Ethane, 1,2-dichloro-1,1-dif	mg/kg								
Ethene, 1,1-dichloro-2,2-dif	mg/kg								
Hexane, 2-methyl-	mg/kg								
Hexane, 3-methyl-	mg/kg								
METHANE, CHLOROFLUORO-	mg/kg								
Naphthalene	mg/kg								
NAPHTHALENE, 2-METHYL-	mg/kg								
Nonanal	mg/kg								
Norflurane	mg/kg								
Pentane, 2,3-dimethyl-	mg/kg								
Phenol, 4-(1,1,3,3-tetrameth	mg/kg								
Propene	mg/kg								
Sulfur dioxide	mg/kg								
Tridecane	mg/kg								
UNKNOWN	mg/kg			0.13225	0.0202	0.096666667	0.38		
UNKNOWN ALICYCLIC	mg/kg								
UNKNOWN ALIPHATIC	mg/kg								
UNKNOWN ALKANE	mg/kg								
UNKNOWN AROMATIC	mg/kg								
UNKNOWN SILOXANE	mg/kg								0.021
<b>Volatile Organic Compounds</b>									
1,1,1,2-Tetrachloroethane	mg/kg								
1,1,1-Trichloroethane	mg/kg			0.002	U	0.001	U	0.003	U
1,1,1-Trichlorotrifluoroethane	mg/kg								
1,1,2,2-Tetrachloroethane	mg/kg			0.002	U	0.001	U	0.003	U
1,1,2-Trichloroethane	mg/kg			0.002	U	0.001	U	0.003	U
1,1,2-Trichlorotrifluoroethane	mg/kg			0.004	U	0.003	U	0.006	U
1,1,2-Trifluoroethane	mg/kg								
1,1-Dichloro-1-Fluoroethane	mg/kg								
1,1-Dichloroethane	mg/kg			0.002	U	0.001	U	0.003	U
1,1-Dichloroethene	mg/kg			0.002	U	0.001	U	0.003	U
1,1-Dichloropropene	mg/kg								
1,2,4-Trimethylbenzene	mg/kg								
1,2-Dibromoethane (EDB)	mg/kg								
1,2-Dichloro-1,1,2-Trifluoroethane	mg/kg								
1,2-Dichloro-1-Fluoroethane	mg/kg								
1,2-Dichlorobenzene	mg/kg			0.5		0.062	U		
1,2-Dichloroethane	mg/kg			0.002	U	0.001	U	0.002	U
1,2-Dichloroethene	mg/kg								
1,2-Dichloropropane	mg/kg			0.002	U	0.001	U	0.003	U
1,2-Dichlorotetrafluoroethane	mg/kg								
1,3,5-Trimethylbenzene	mg/kg								
1,3-Dichlorobenzene	mg/kg			0.072	U		0.062	U	
1,4-Dichlorobenzene	mg/kg			0.14			0.062	U	
1-Chloro-1,1-Difluoroethane	mg/kg								
2,2-Dichloro-1,1,1-Trifluoroethane	mg/kg								
2-Chloro-1,1,1-Trifluoroethane	mg/kg								
2-Chloroethyl Vinyl Ether	mg/kg								
2-Chlorotoluene	mg/kg								
2-Hexanone	mg/kg								
4-Chlorotoluene	mg/kg								
4-Isopropyltoluene	mg/kg								
Acetone	mg/kg			0.016		0.033		0.066	
Acrolein	mg/kg			0.039	U	0.026	U	0.065	U
Acrylonitrile	mg/kg			0.008	U	0.005	U	0.013	U
Benzene	mg/kg			0.002		0.0009		0.002	
Bromodichloromethane	mg/kg			0.002	U	0.001	U	0.003	U
Bromoform	mg/kg			0.002	U	0.001	U	0.003	U
Carbon Disulfide	mg/kg			0.005		0.01		0.006	
Carbon Tetrachloride	mg/kg			0.002	U	0.001	U	0.003	U
CFC-1113	mg/kg								
Chlorobenzene	mg/kg			0.002	U	0.012		0.003	U

**Table A-1  
Sediment Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey**

Chemical Class	River Zone	CARNEYS PT							
	Field Sample ID	23948645	23949962	24831768	24831769	24831771	24831772	24894973	24895120
Chemical	Location ID	DER1-29	DER1-22	DER3-17	DER3-17	DER3-18	DER3-18	DER3-18	DER3-27
Units	Depth Interval (ft)	0.00-0.50	0.00-0.50	0.00-0.50	0.50-1.00	0.00-0.50	0.50-1.00	0.00-0.50	0.00-0.50
	Sample Purpose	FS							
	Date	4/21/2010	5/4/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010	11/16/2010
Chlorodibromomethane	mg/kg			0.002 U	0.001 U	0.003 U	0.002 U		0.003 U
Chlorodifluoromethane	mg/kg								
Chlorofluoromethane	mg/kg								
Chloroform	mg/kg			0.002 U	0.001 U	0.003 U	0.002 U		0.003 U
Chloropentafluoroethane	mg/kg								
cis-1,2-Dichloroethene	mg/kg			0.002 U	0.001 U	0.003 U	0.002 U		0.003 U
cis-1,3-Dichloropropene	mg/kg			0.002 U	0.001 U	0.003 U	0.002 U		0.003 U
Cumene	mg/kg								
Dichlorodifluoromethane	mg/kg			0.004 U	0.003 U	0.006 U	0.004 U		0.006 U
Dichlorofluoromethane	mg/kg			0.004 U	0.003 U	0.006 U	0.004 U		0.006 U
Ethane	ug/L								
Ethyl Chloride	mg/kg			0.004 U	0.003 U	0.006 U	0.004 U		0.006 U
Ethylbenzene	mg/kg			0.002 U	0.001 U	0.003 U	0.002 U		0.003 U
Fluoromethane	mg/kg								
Hexane	mg/kg								
Isobutyl Alcohol	mg/kg								
Meta- And Para-Xylene	mg/kg								
Methacrylonitrile	mg/kg								
Methane	ug/L								
Methyl Bromide	mg/kg			0.004 U	0.003 U	0.006 U	0.004 U		0.006 U
Methyl Chloride	mg/kg			0.004 U	0.003 U	0.006 U	0.004 U		0.006 U
Methyl Ethyl Ketone	mg/kg								
Methyl Isobutyl Ketone	mg/kg								
Methyl Methacrylate	mg/kg								
Methyl Tertiary Butyl Ether	mg/kg								
Methylene Chloride	mg/kg			0.004 U	0.003 U	0.006 U	0.004 U		0.006 U
N-Butylbenzene	mg/kg								
N-Propylbenzene	mg/kg								
Ortho-Xylene	mg/kg								
Propionitrile	mg/kg								
sec-Butylbenzene	mg/kg								
Styrene	mg/kg								
tert-Butylbenzene	mg/kg								
Tetrachloroethene	mg/kg			0.002 U	0.001 U	0.003 U	0.002 U		0.003 U
Tetrahydrofuran	mg/kg								
Toluene	mg/kg			0.002 U	0.001 U	0.003 U	0.002 U		0.003 U
trans-1,2-Dichloroethene	mg/kg			0.002 U	0.001 U	0.003 U	0.002 U		0.003 U
trans-1,3-Dichloropropene	mg/kg			0.002 U	0.001 U	0.003 U	0.002 U		0.003 U
Trichloroethene	mg/kg			0.002 U	0.001 U	0.003 U	0.002 U		0.003 U
Trichlorofluoromethane	mg/kg			0.004 U	0.003 U	0.006 U	0.004 U		0.006 U
Vinyl Chloride	mg/kg			0.002 U	0.001 U	0.003 U	0.002 U		0.003 U
Vinyl Fluoride	mg/kg								
Xylenes	mg/kg			0.002 U	0.001 U	0.003 U	0.002 U		0.003 U

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit



Table A-2  
 Surface Water Analytical Results Summary  
 Delaware River Screening-Level Ecological Risk Assessment  
 Chemours Chambers Works  
 Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Sample Purpose Date	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL
		22373016,22373017	22373018,22373019	22373021,22373022	22373024,22373025	22373027,22373028	22373030,22373031	22373033,22373034	23626184,23626185	23626187,23626188	23626190,23626191	23626193,23626194	23626221,23626222
Chemical	Units	DER1-01 FS 9/22/2009	DER1-01 DUP 9/22/2009	DER1-03 FS 9/22/2009	DER1-05 FS 9/22/2009	DER1-07 FS 9/22/2009	DER1-09 FS 9/22/2009	DER1-11 FS 9/22/2009	DER2-02 FS 4/21/2010	DER2-05 FS 4/21/2010	DER2-07 FS 4/21/2010	DER2-12 FS 4/21/2010	DER2-30 FS 4/21/2010
delta-BHC	ug/L												
Dieldrin	ug/L												
Endosulfan I	ug/L												
Endosulfan II	ug/L												
Endosulfan Sulfate	ug/L												
Endrin	ug/L												
Endrin Aldehyde	ug/L												
Endrin Ketone	ug/L												
Gamma Chlordane	ug/L												
Heptachlor	ug/L												
Heptachlor Epoxide	ug/L												
Lindane	ug/L												
Methoxychlor	ug/L												
Toxaphene	ug/L												
<b>Polychlorinated Biphenyls</b>													
Heptachlorobiphenyl	ug/L												
Hexachlorobiphenyl	ug/L												
Octachlorobiphenyl	ug/L												
PCB 1	ug/L												
PCB 100	ug/L												
PCB 102	ug/L												
PCB 103	ug/L												
PCB 104	ug/L												
PCB 105	ug/L												
PCB 106	ug/L												
PCB 107/123	ug/L												
PCB 108	ug/L												
PCB 11	ug/L												
PCB 110	ug/L												
PCB 113	ug/L												
PCB 114	ug/L												
PCB 115	ug/L												
PCB 116	ug/L												
PCB 117	ug/L												
PCB 118	ug/L												
PCB 119	ug/L												
PCB 12	ug/L												
PCB 120	ug/L												
PCB 121/95/88	ug/L												
PCB 122	ug/L												
PCB 124	ug/L												
PCB 126	ug/L												
PCB 127	ug/L												
PCB 128	ug/L												
PCB 129/158	ug/L												
PCB 13	ug/L												
PCB 130/164	ug/L												
PCB 131	ug/L												
PCB 132	ug/L												
PCB 133	ug/L												
PCB 134	ug/L												
PCB 135	ug/L												
PCB 136	ug/L												
PCB 137	ug/L												
PCB 138	ug/L												
PCB 14	ug/L												
PCB 140	ug/L												
PCB 141	ug/L												
PCB 142	ug/L												
PCB 143/139	ug/L												
PCB 144	ug/L												
PCB 145	ug/L												
PCB 146	ug/L												
PCB 148	ug/L												
PCB 15	ug/L												
PCB 150	ug/L												
PCB 151	ug/L												
PCB 152	ug/L												
PCB 153	ug/L												
PCB 154	ug/L												
PCB 155	ug/L												
PCB 156	ug/L												
PCB 157	ug/L												
PCB 159	ug/L												
PCB 16	ug/L												
PCB 161	ug/L												
PCB 162	ug/L												
PCB 163/160	ug/L												
PCB 165	ug/L												
PCB 166	ug/L												
PCB 167	ug/L												
PCB 168	ug/L												
PCB 169	ug/L												

Table A-2  
 Surface Water Analytical Results Summary  
 Delaware River Screening-Level Ecological Risk Assessment  
 Chemours Chambers Works  
 Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Sample Purpose Date	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	
		22373016,22373017	22373018,22373019	22373021,22373022	22373024,22373025	22373027,22373028	22373030,22373031	22373033,22373034	23626184,23626185	23626187,23626188	23626190,23626191	23626193,23626194	23626221,23626222
Chemical	Units	DER1-01 FS 9/22/2009	DER1-01 DUP 9/22/2009	DER1-03 FS 9/22/2009	DER1-05 FS 9/22/2009	DER1-07 FS 9/22/2009	DER1-09 FS 9/22/2009	DER1-11 FS 9/22/2009	DER2-02 FS 4/21/2010	DER2-05 FS 4/21/2010	DER2-07 FS 4/21/2010	DER2-12 FS 4/21/2010	DER2-30 FS 4/21/2010
PCB 17	ug/L												
PCB 170	ug/L												
PCB 171	ug/L												
PCB 172	ug/L												
PCB 173	ug/L												
PCB 174	ug/L												
PCB 176	ug/L												
PCB 177	ug/L												
PCB 178	ug/L												
PCB 179	ug/L												
PCB 18	ug/L												
PCB 180	ug/L												
PCB 181	ug/L												
PCB 182/175	ug/L												
PCB 183	ug/L												
PCB 184	ug/L												
PCB 185	ug/L												
PCB 186	ug/L												
PCB 187	ug/L												
PCB 188	ug/L												
PCB 189	ug/L												
PCB 19	ug/L												
PCB 190	ug/L												
PCB 191	ug/L												
PCB 192	ug/L												
PCB 193	ug/L												
PCB 194	ug/L												
PCB 195	ug/L												
PCB 196	ug/L												
PCB 197	ug/L												
PCB 198	ug/L												
PCB 199	ug/L												
PCB 2	ug/L												
PCB 201	ug/L												
PCB 202	ug/L												
PCB 203	ug/L												
PCB 204/200	ug/L												
PCB 205	ug/L												
PCB 206	ug/L												
PCB 207	ug/L												
PCB 208	ug/L												
PCB 209	ug/L												
PCB 21/20	ug/L												
PCB 22	ug/L												
PCB 23	ug/L												
PCB 24	ug/L												
PCB 25	ug/L												
PCB 26	ug/L												
PCB 27	ug/L												
PCB 28	ug/L												
PCB 29	ug/L												
PCB 3	ug/L												
PCB 30	ug/L												
PCB 31	ug/L												
PCB 32	ug/L												
PCB 33	ug/L												
PCB 34	ug/L												
PCB 35	ug/L												
PCB 36	ug/L												
PCB 37	ug/L												
PCB 38	ug/L												
PCB 39	ug/L												
PCB 4/10	ug/L												
PCB 40	ug/L												
PCB 41	ug/L												
PCB 42	ug/L												
PCB 43	ug/L												
PCB 44	ug/L												
PCB 45	ug/L												
PCB 47	ug/L												
PCB 48	ug/L												
PCB 49	ug/L												
PCB 5	ug/L												
PCB 50	ug/L												
PCB 51	ug/L												
PCB 52	ug/L												
PCB 53	ug/L												
PCB 54	ug/L												
PCB 55	ug/L												
PCB 56	ug/L												
PCB 57	ug/L												
PCB 59	ug/L												
PCB 6	ug/L												

Table A-2  
 Surface Water Analytical Results Summary  
 Delaware River Screening-Level Ecological Risk Assessment  
 Chemours Chambers Works  
 Deepwater, New Jersey

Chemical Class	River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL											
Chemical	Field Sample ID	22373016,22373017	22373018,22373019	22373021,22373022	22373024,22373025	22373027,22373028	22373030,22373031	22373033,22373034	23626184,23626185	23626187,23626188	23626190,23626191	23626193,23626194	23626221,23626222		
Units	Location ID	DER1-01	DER1-01	DER1-03	DER1-05	DER1-07	DER1-09	DER1-11	DER2-02	DER2-05	DER2-07	DER2-12	DER2-30		
Chemical	Sample Purpose	FS	DUP	FS											
Chemical	Date	9/22/2009	9/22/2009	9/22/2009	9/22/2009	9/22/2009	9/22/2009	9/22/2009	4/21/2010	4/21/2010	4/21/2010	4/21/2010	4/21/2010		
PCB 60															
PCB 61															
PCB 63															
PCB 65/75/62															
PCB 66															
PCB 67/58															
PCB 68/64															
PCB 69															
PCB 7															
PCB 70															
PCB 71															
PCB 72															
PCB 73/46															
PCB 74															
PCB 76															
PCB 77															
PCB 78															
PCB 79															
PCB 8															
PCB 80															
PCB 81															
PCB 82															
PCB 83/125/112															
PCB 85															
PCB 86/109															
PCB 87/111															
PCB 89/84															
PCB 9															
PCB 91															
PCB 92															
PCB 93															
PCB 94															
PCB 96															
PCB 97															
PCB 98															
PCB 99															
PCB-147/149															
PCB-90/101															
Pentachlorobiphenyl															
Tetrachlorobiphenyl															
Total Decachlorobiphenyls (congeners)															
Total Dichlorobiphenyls (congeners)															
Total Monochlorobiphenyls (congeners)															
Total Nonachlorobiphenyls (congeners)															
Total PCB (congeners)															
Trichlorobiphenyl (total)															
<b>Polycyclic Aromatic Hydrocarbons</b>															
Acenaphthene	ug/L	1	U	0.9	U	1	U	0.9	U	1	U	1	U	1	U
Acenaphthylene	ug/L	1	U	0.9	U	1	U	0.9	U	1	U	1	U	1	U
Anthracene	ug/L	1	U	0.9	U	1	U	0.9	U	1	U	1	U	1	U
Benzo(A)Anthracene	ug/L	1	U	0.9	U	1	U	0.9	U	1	U	1	U	1	U
Benzo(B)Fluoranthene	ug/L	1	U	0.9	U	1	U	0.9	U	1	U	1	U	1	U
Benzo(K)Fluoranthene	ug/L	1	U	0.9	U	1	U	0.9	U	1	U	1	U	1	U
Benzo(A)Pyrene	ug/L	1	U	0.9	U	1	U	0.9	U	1	U	1	U	1	U
Chrysene	ug/L	1	U	0.9	U	1	U	0.9	U	1	U	1	U	1	U
Dibenz(A,H)Anthracene	ug/L	1	U	0.9	U	1	U	0.9	U	1	U	1	U	1	U
Fluoranthene	ug/L	1	U	0.9	U	1	U	0.9	U	1	U	1	U	1	U
Fluorene	ug/L	1	U	0.9	U	1	U	0.9	U	1	U	1	U	1	U
Indeno (1,2,3-CD) Pyrene	ug/L	1	U	0.9	U	1	U	0.9	U	1	U	1	U	1	U
Naphthalene	ug/L	1	U	0.9	U	1	U	0.9	U	1	U	1	U	1	U
Phenanthrene	ug/L	1	U	0.9	U	1	U	0.9	U	1	U	1	U	1	U
Pyrene	ug/L	1	U	0.9	U	1	U	0.9	U	1	U	1	U	1	U
<b>Semivolatile Organic Compounds - TICs</b>															
Total SVOC TICs	ug/L														
UNKNOWN	ug/L	5.666666667		6.666666667		7.5		11		6		12.5		8.5	
UNKNOWN ALKANE	ug/L		5									20.33333333		11.5	
UNKNOWN AROMATIC	ug/L														9.5
<b>Semivolatile Organic Compounds</b>															
1,2,4-Trichlorobenzene	ug/L	1	U	0.9	U	1	U	0.9	U	1	U	1	U	1	U
1,2-Dichlorobenzene	ug/L	1	U	0.9	U	1	U	0.9	U	1	U	1	U	1	U
1,2-Diphenylhydrazine	ug/L	1	U	0.9	U	1	U	0.9	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	1	U	0.9	U	1	U	0.9	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	1	U	0.9	U	1	U	0.9	U	1	U	1	U	1	U
1,4-Dioxane	ug/L														
1-Naphthylamine	ug/L	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,3,4,6-Tetrachlorophenol	ug/L														
2,4,5-Trichlorophenol	ug/L														
2,4,6-Trichlorophenol	ug/L	1	U	0.9	U	1	U	0.9	U	1	U	1	U	1	U
2,4-Dichlorophenol	ug/L	1	U	0.9	U	1	U	0.9	U	1	U	1	U	1	U
2,4-Dimethylphenol	ug/L	3	U	3	U	3	U	3	U	3	U	3	U	3	U
2,4-Dinitrophenol	ug/L	19	U	20	U	20	U								
2,4-Dinitrotoluene	ug/L	1	U	0.9	U	1	U	0.9	U	1	U	1	U	1	U
2,6-Dinitrotoluene	ug/L	1	U	0.9	U	1	U	0.9	U	1	U	1	U	1	U



Table A-2  
 Surface Water Analytical Results Summary  
 Delaware River Screening-Level Ecological Risk Assessment  
 Chemours Chambers Works  
 Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Sample Purpose Date Units	MZ-JL/TEL 22373016,22373017		MZ-JL/TEL 22373018,22373019		MZ-JL/TEL 22373021,22373022		MZ-JL/TEL 22373024,22373025		MZ-JL/TEL 22373027,22373028		MZ-JL/TEL 22373030,22373031		MZ-JL/TEL 22373033,22373034		MZ-JL/TEL 23626184,23626185		MZ-JL/TEL 23626187,23626188		MZ-JL/TEL 23626190,23626191		MZ-JL/TEL 23626193,23626194		MZ-JL/TEL 23626221,23626222			
		DER1-01 FS 9/22/2009	DER1-01 DUP 9/22/2009	DER1-03 FS 9/22/2009	DER1-05 FS 9/22/2009	DER1-07 FS 9/22/2009	DER1-09 FS 9/22/2009	DER1-11 FS 9/22/2009	DER2-02 FS 4/21/2010	DER2-05 FS 4/21/2010	DER2-07 FS 4/21/2010	DER2-12 FS 4/21/2010	DER2-30 FS 4/21/2010														
Chlorobenzene	ug/L	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Chlorodibromomethane	ug/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	ug/L	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
cis-1,2-Dichloroethene	ug/L	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
cis-1,3-Dichloropropene	ug/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Cumene	ug/L																										
Dichlorodifluoromethane	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Dichlorofluoromethane	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Ethyl Chloride	ug/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Ethylbenzene	ug/L	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Hexane	ug/L																										
Isobutyl Alcohol	ug/L																										
Meta- And Para-Xylene	ug/L																										
Methacrylonitrile	ug/L																										
Methyl Bromide	ug/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Methyl Chloride	ug/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Methyl Ethyl Ketone	ug/L																										
Methyl Isobutyl Ketone	ug/L																										
Methyl Methacrylate	ug/L																										
Methyl Tertiary Butyl Ether	ug/L																										
Methylene Chloride	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
N-Butylbenzene	ug/L																										
N-Propylbenzene	ug/L																										
Ortho-Xylene	ug/L																										
Propionitrile	ug/L																										
sec-Butylbenzene	ug/L																										
Styrene	ug/L																										
tert-Butylbenzene	ug/L																										
Tetrachloroethene	ug/L	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Tetrahydrofuran	ug/L																										
Toluene	ug/L	0.7	U	0.7	U	0.7	U	0.8	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U
trans-1,2-Dichloroethene	ug/L	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
trans-1,3-Dichloropropene	ug/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene	ug/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichlorofluoromethane	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Vinyl Chloride	ug/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Xylenes	ug/L	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U

Notes:  
 Blank Cell - Chemical not analyzed  
 TIC - Tentatively Identified Compound  
 U - Result below detection limit

**Table A-2**  
**Surface Water Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
Field Sample ID	23626224,23626225	24790814,24790815	24790817,24790818	SC-240-SW(082616),SC-240-SW(082616)-Z	SC-241-SW(082616),SC-241-SW(082616)-Z	SC-242-SW(082616),SC-242-SW(082616)-Z	22369192,22369193	22369195,22369196	22369198,22369199	22369204,22369205	22369207,22369208	22369210,22369211	
Location ID	DER2-31	DER3-19	DER3-20	SC-240	SC-241	SC-242	DER1-13	DER1-14	DER1-15	DER1-30	DER1-31	DER1-32	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Date	4/21/2010	11/15/2010	11/15/2010	8/26/2016	8/26/2016	8/26/2016	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	
Chemical Class													
Chemical													
<b>General Chemistry</b>													
Dissolved Organic Carbon	ug/L				3600	3600	3300						
Total Hardness As CaCO3	ug/L	74500	335000	309000	438000	419000	462000	250000	186000	187000	279000	237000	
Total Suspended Solids	ug/L				39600	28900	27700					225000	
<b>Metals - Total</b>													
Aluminum	ug/L	429	2160	2250	1230	1190	1200	1090	3160	937	1070	1790	
Antimony	ug/L	9.7	10	10	0.48	0.48	9.7	9.7	9.7	9.7	9.7	9.7	
Arsenic	ug/L	7.2	9.8	9.8	2	2.4	2.2	7.2	7.2	7.2	7.2	7.2	
Barium	ug/L	26.3	30.8	30.9	36.2	39.1	37	33	41	29.8	33.7	35.7	
Beryllium	ug/L	1.4	1.4	1.4	0.11	0.11	0.11	1.4	1.4	1.4	1.4	1.4	
Cadmium	ug/L	2	2	2	0.19	0.19	0.19	2	2	2	2	2	
Calcium	ug/L	19100	40000	43400	39300	41200	43300	49100	26200	26200	58800	43600	
Chromium	ug/L	3.4	4.2	3.7	2.3	2.5	2.1	3.4	8.1	3.4	5	4.7	
Cobalt	ug/L	2.1	2.3	2.3	0.47	0.53	0.5	2.1	2.1	2.1	2.1	2.1	
Copper	ug/L	5.8	3.3	2.9	2.8	3	2.7	4.1	7.4	3.6	4	4.4	
Iron	ug/L	575	2400	2350	1320	1340	1230	1470	4500	1220	1390	2430	
Lead	ug/L	8.9	8.9	8.9	1.7	2.1	1.8	8.9	8.9	8.9	8.9	8.9	
Magnesium	ug/L	6530	57200	48800	70000	74500	84300	31000	29400	29500	32000	31000	
Manganese	ug/L	32.1	66.8	66.5	53.1	59.7	89.1	70.6	207	47.8	72.8	124	
Mercury	ug/L	0.056	0.056	0.056	0.05	0.05	0.05	0.056	0.056	0.056	0.056	0.056	
Nickel	ug/L	1.8	3.1	3.3	2.3	2.7	2.3	3.4	4	1.8	3.9	3.6	
Potassium	ug/L	2210	20200	17600	23400	24800	27600	11800	10800	10500	12600	11800	
Selenium	ug/L	8.9	8.9	8.9	0.45	0.44	8.9	8.9	8.9	8.9	8.9	8.9	
Silver	ug/L	2.3	2.3	2.3	0.12	0.12	0.12	2.3	2.3	2.3	2.3	2.3	
Sodium	ug/L	27100	455000	382000	564000	515000	676000	239000	213000	222000	248000	239000	
Thallium	ug/L	14	14	14	0.16	0.16	0.16	14	14	14	14	14	
Tin	ug/L	9.8	9.8	9.8				9.8	9.8	9.8	9.8	9.8	
Titanium	ug/L				36.7	45.6	39.4						
Vanadium	ug/L	3	4.8	4.7	3.6	4	3.7	2.5	7.6	2.5	4	4.1	
Zinc	ug/L	8.3	18.1	19	8.5	9.8	9.1	12.8	29	9.2	12.2	17.3	
<b>Metals - Dissolved</b>													
Aluminum	ug/L	80.2	83.4	83.4	111	393	86.8	80.2	190	80.2	80.2	225	
Antimony	ug/L	9.7	10	10	0.53	0.48	9.7	9.7	9.7	9.7	9.7	9.7	
Arsenic	ug/L	7.2	9.8	9.8	1.6	1.8	7.2	7.2	7.2	7.2	7.2	7.2	
Barium	ug/L	21.4	21.4	21.7	28.9	33.5	33.7	28.8	25.5	25.8	30.5	28.6	
Beryllium	ug/L	1.4	1.6	1.6	0.11	0.11	0.11	1.4	1.4	1.4	1.4	1.4	
Cadmium	ug/L	2	2	2	0.19	0.19	0.19	2	2	2	2	2	
Calcium	ug/L	19000	38900	42400	39100	40200	43700	65200	26800	27400	65600	45000	
Chromium	ug/L	3.4	3.4	3.4	0.86	0.86	3.4	3.4	3.4	3.4	3.4	3.4	
Cobalt	ug/L	2.1	2.3	2.3	0.2	0.2	2.1	2.1	2.1	2.1	2.1	2.1	
Copper	ug/L	2.7	2.7	2.7	2.1	2.7	2	4.7	3.5	3.6	3.9	3.7	
Iron	ug/L	52.2	70.8	52.2	129	456	74.7	63.5	240	64.5	66	280	
Lead	ug/L	8.9	8.9	8.9	0.19	0.59	0.79	8.9	8.9	8.9	8.9	8.9	
Magnesium	ug/L	6610	56100	46500	68100	71500	83200	33500	29200	30300	33500	32000	
Manganese	ug/L	4	3.9	3.3	9.7	28	51.5	28.4	13.1	7.4	30.3	41.8	
Mercury	ug/L	0.056	0.056	0.056	0.05	0.05	0.05	0.056	0.056	0.056	0.056	0.056	
Nickel	ug/L	1.8	3	3	1.5	1.7	1.5	3.5	1.8	1.8	3.5	2	
Potassium	ug/L	2280	20700	18100	23000	24300	27400	12900	10200	10600	11800	11300	
Selenium	ug/L	8.9	8.9	8.9	0.44	0.44	8.9	8.9	8.9	8.9	8.9	8.9	
Silver	ug/L	2.3	2.3	2.3	0.12	0.12	0.12	2.3	2.3	2.3	2.3	2.3	
Sodium	ug/L	28200	418000	365000	540000	556000	629000	233000	202000	210000	235000	222000	
Thallium	ug/L	14	14	14	0.16	0.16	0.16	14	14	14	14	14	
Tin	ug/L	9.8	9.8	9.8				9.8	9.8	9.8	9.8	9.8	
Titanium	ug/L				6.3	12.7	6.3						
Vanadium	ug/L	2.5	2.5	2.5	1.6	2	1.5	2.5	2.5	2.5	2.5	2.5	
Zinc	ug/L	8.1	8.1	8.1	5.4	5.4	5.4	8.1	8.1	8.1	8.1	8.1	
<b>Per and Polyfluorinated Organic Substances</b>													
Perfluorobutane Sulfonic Acid	ug/L				0.0078	0.0079	0.0075						
Perfluorobutanoic Acid	ug/L				0.013	0.02	0.016						
Perfluorodecane Sulfonic Acid	ug/L				0.0088	0.0088	0.0083						
Perfluorodecanoic Acid	ug/L				0.0074	0.011	0.0071						
Perfluorododecanoic Acid	ug/L				0.014	0.014	0.014						
Perfluoroheptanoic Acid	ug/L				0.015	0.021	0.018						
Perfluorohexane Sulfonic Acid	ug/L				0.0066	0.0067	0.0064						
Perfluorohexanoic Acid	ug/L				0.066	0.089	0.082						
Perfluorononanoic Acid	ug/L				0.016	0.017	0.016						
Perfluorooctane Sulfonamide	ug/L				0.0053	0.0052	0.0068						
Perfluoropentanoic Acid	ug/L				0.036	0.053	0.044						
Perfluorotetradecanoic Acid	ug/L				0.014	0.014	0.013						
Perfluorotridecanoic Acid	ug/L				0.017	0.017	0.016						
Perfluoroundecanoic Acid	ug/L				0.0065	0.0066	0.0063						
PFOA	ug/L				0.022	0.04	0.029						
PFOA(trial)	ug/L						0.032						
PFOS	ug/L				0.013	0.013	0.012						
PFOS (trial)	ug/L						0.012						
<b>Pesticides and Herbicides</b>													
4,4'-DDD	ug/L				0.0041	0.0041	0.0041						
4,4'-DDE	ug/L				0.0041	0.0041	0.0041						
4,4'-DDT	ug/L				0.0043	0.0043	0.0043						
Aldrin	ug/L				0.0017	0.0016	0.0016						
Alpha Chlordane	ug/L				0.0025	0.0025	0.0025						
Alpha-BHC	ug/L				0.0025	0.0025	0.0025						
beta-BHC	ug/L				0.0028	0.0028	0.0028						

Table A-2  
 Surface Water Analytical Results Summary  
 Delaware River Screening-Level Ecological Risk Assessment  
 Chemours Chambers Works  
 Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Sample Purpose Date	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		23626224,23626225 DER2-31 FS 4/21/2010	24790814,24790815 DER3-19 FS 11/15/2010	24790817,24790818 DER3-20 FS 11/15/2010	SC-240-SW(082616),SC-240-SW(082616)-Z SC-240 FS 8/26/2016	SC-241-SW(082616),SC-241-SW(082616)-Z SC-241 FS 8/26/2016	SC-242-SW(082616),SC-242-SW(082616)-Z SC-242 FS 8/26/2016	22369192,22369193 DER1-13 FS 9/23/2009	22369195,22369196 DER1-14 FS 9/23/2009	22369198,22369199 DER1-15 FS 9/23/2009	22369204,22369205 DER1-30 FS 9/23/2009	22369207,22369208 DER1-31 FS 9/23/2009	22369210,22369211 DER1-32 FS 9/23/2009
delta-BHC	ug/L				0.0028 U	0.0028 U	0.0028 U						
Dieldrin	ug/L				0.0044 U	0.0044 U	0.0044 U						
Endosulfan I	ug/L				0.0036 U	0.0035 U	0.0035 U						
Endosulfan II	ug/L				0.012 U	0.012 U	0.012 U						
Endosulfan Sulfate	ug/L				0.0048 U	0.0048 U	0.0048 U						
Endrin	ug/L				0.0067 U	0.0067 U	0.0067 U						
Endrin Aldehyde	ug/L				0.017 U	0.016 U	0.016 U						
Endrin Ketone	ug/L				0.0041 U	0.0041 U	0.0041 U						
Gamma Chlordane	ug/L				0.0058 U	0.0058 U	0.0058 U						
Heptachlor	ug/L				0.0017 U	0.0016 U	0.0016 U						
Heptachlor Epoxide	ug/L				0.0019 U	0.0019 U	0.0019 U						
Lindane	ug/L				0.0017 U	0.0016 U	0.0016 U						
Methoxychlor	ug/L				0.025 U	0.025 U	0.025 U						
Toxaphene	ug/L				0.25 U	0.25 U	0.25 U						
<b>Polychlorinated Biphenyls</b>													
Heptachlorobiphenyl	ug/L				0.000278 U	0.000287 U	0.000269 U						
Hexachlorobiphenyl	ug/L				0.000278 U	0.000287 U	0.000269 U						
Octachlorobiphenyl	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 1	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 100	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 102	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 103	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 104	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 105	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 106	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 107/123	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 108	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 11	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 110	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 113	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 114	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 115	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 116	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 117	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 118	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 119	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 12	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 120	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 121/95/88	ug/L				0.000833 U	0.000862 U	0.000806 U						
PCB 122	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 124	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 126	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 127	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 128	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 129/158	ug/L				0.000586 U	0.000575 U	0.000538 U						
PCB 13	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 130/164	ug/L				0.000586 U	0.000575 U	0.000538 U						
PCB 131	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 132	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 133	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 134	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 135	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 136	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 137	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 138	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 14	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 140	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 141	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 142	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 143/139	ug/L				0.000586 U	0.000575 U	0.000538 U						
PCB 144	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 145	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 146	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 148	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 15	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 150	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 151	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 152	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 153	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 154	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 155	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 156	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 157	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 159	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 16	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 161	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 162	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 163/160	ug/L				0.000586 U	0.000575 U	0.000538 U						
PCB 165	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 166	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 167	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 168	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 169	ug/L				0.000278 U	0.000287 U	0.000269 U						

Table A-2  
 Surface Water Analytical Results Summary  
 Delaware River Screening-Level Ecological Risk Assessment  
 Chemours Chambers Works  
 Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Sample Purpose Date	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		23626224,23626225 DER2-31 FS 4/21/2010	24790814,24790815 DER3-19 FS 11/15/2010	24790817,24790818 DER3-20 FS 11/15/2010	SC-240-SW(082616),SC-240-SW(082616)-Z SC-240 FS 8/26/2016	SC-241-SW(082616),SC-241-SW(082616)-Z SC-241 FS 8/26/2016	SC-242-SW(082616),SC-242-SW(082616)-Z SC-242 FS 8/26/2016	22369192,22369193 DER1-13 FS 9/23/2009	22369195,22369196 DER1-14 FS 9/23/2009	22369198,22369199 DER1-15 FS 9/23/2009	22369204,22369205 DER1-30 FS 9/23/2009	22369207,22369208 DER1-31 FS 9/23/2009	22369210,22369211 DER1-32 FS 9/23/2009
PCB 17	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 170	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 171	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 172	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 173	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 174	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 176	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 177	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 178	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 179	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 18	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 180	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 181	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 182/175	ug/L				0.00556 U	0.00575 U	0.00538 U						
PCB 183	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 184	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 185	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 186	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 187	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 188	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 189	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 19	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 190	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 191	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 192	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 193	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 194	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 195	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 196	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 197	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 198	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 199	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 2	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 201	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 202	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 203	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 204/200	ug/L				0.00556 U	0.00575 U	0.00538 U						
PCB 205	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 206	ug/L				0.0016	0.000287 U	0.000269 U						
PCB 207	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 208	ug/L				0.000803	0.000287 U	0.000269 U						
PCB 209	ug/L				0.00286	0.000291	0.000269 U						
PCB 21/20	ug/L				0.00556 U	0.00575 U	0.00538 U						
PCB 22	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 23	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 24	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 25	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 26	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 27	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 28	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 29	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 3	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 30	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 31	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 32	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 33	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 34	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 35	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 36	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 37	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 38	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 39	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 4/10	ug/L				0.00556 U	0.00575 U	0.00538 U						
PCB 40	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 41	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 42	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 43	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 44	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 45	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 47	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 48	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 49	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 5	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 50	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 51	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 52	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 53	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 54	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 55	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 56	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 57	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 59	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 6	ug/L				0.000278 U	0.000287 U	0.000269 U						

Table A-2  
 Surface Water Analytical Results Summary  
 Delaware River Screening-Level Ecological Risk Assessment  
 Chemours Chambers Works  
 Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Sample Purpose Date	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		23626224,23626225 DER2-31 FS 4/21/2010	24790814,24790815 DER3-19 FS 11/15/2010	24790817,24790818 DER3-20 FS 11/15/2010	SC-240-SW(082616),SC-240-SW(082616)-Z SC-240 FS 8/26/2016	SC-241-SW(082616),SC-241-SW(082616)-Z SC-241 FS 8/26/2016	SC-242-SW(082616),SC-242-SW(082616)-Z SC-242 FS 8/26/2016	22369192,22369193 DER1-13 FS 9/23/2009	22369195,22369196 DER1-14 FS 9/23/2009	22369198,22369199 DER1-15 FS 9/23/2009	22369204,22369205 DER1-30 FS 9/23/2009	22369207,22369208 DER1-31 FS 9/23/2009	22369210,22369211 DER1-32 FS 9/23/2009
PCB 60	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 61	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 63	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 65/75/62	ug/L				0.000833 U	0.000862 U	0.000806 U						
PCB 66	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 67/58	ug/L				0.000556 U	0.000575 U	0.000538 U						
PCB 68/64	ug/L				0.000556 U	0.000575 U	0.000538 U						
PCB 69	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 7	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 70	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 71	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 72	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 73/46	ug/L				0.000556 U	0.000575 U	0.000538 U						
PCB 74	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 76	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 77	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 78	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 79	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 8	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 80	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 81	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 82	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 83/125/112	ug/L				0.000833 U	0.000862 U	0.000806 U						
PCB 85	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 86/109	ug/L				0.000556 U	0.000575 U	0.000538 U						
PCB 87/111	ug/L				0.000556 U	0.000575 U	0.000538 U						
PCB 89/84	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 9	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 91	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 92	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 93	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 94	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 96	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 97	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 98	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB 99	ug/L				0.000278 U	0.000287 U	0.000269 U						
PCB-147/149	ug/L				0.000556 U	0.000575 U	0.000538 U						
PCB-90/101	ug/L				0.000556 U	0.000575 U	0.000538 U						
Pentachlorobiphenyl	ug/L				0.000278 U	0.000287 U	0.000269 U						
Tetrachlorobiphenyl	ug/L				0.000278 U	0.000287 U	0.000269 U						
Total Decachlorobiphenyls (congeners)	ug/L				0.00286	0.000291	0.000269 U						
Total Dichlorobiphenyls (congeners)	ug/L				0.000278 U	0.000287 U	0.000269 U						
Total Monochlorobiphenyls (congeners)	ug/L				0.000278 U	0.000287 U	0.000269 U						
Total Nonachlorobiphenyls (congeners)	ug/L				0.0024	0.000287 U	0.000269 U						
Total PCB (congeners)	ug/L				0.00526	0.000291	0.000269 U						
Trichlorobiphenyl (total)	ug/L				0.000278 U	0.000287 U	0.000269 U						
<b>Polycyclic Aromatic Hydrocarbons</b>													
Acenaphthene	ug/L	1 U			0.1 U	0.1 U	0.1 U	0.9 U	1 U	1 U	1 U	1 U	0.9 U
Acenaphthylene	ug/L	1 U			0.1 U	0.1 U	0.1 U	0.9 U	1 U	1 U	1 U	1 U	0.9 U
Anthracene	ug/L	1 U			0.1 U	0.1 U	0.1 U	0.9 U	1 U	1 U	1 U	1 U	0.9 U
Benzo(A)Anthracene	ug/L	1 U			0.1 U	0.1 U	0.1 U	0.9 U	1 U	1 U	1 U	1 U	0.9 U
Benzo(B)Fluoranthene	ug/L	1 U			0.1 U	0.1 U	0.1 U	0.9 U	1 U	1 U	1 U	1 U	0.9 U
Benzo(K)Fluoranthene	ug/L	1 U			0.1 U	0.1 U	0.1 U	0.9 U	1 U	1 U	1 U	1 U	0.9 U
Benzo(A)Pyrene	ug/L	1 U			0.1 U	0.1 U	0.1 U	0.9 U	1 U	1 U	1 U	1 U	0.9 U
Chrysene	ug/L	1 U			0.1 U	0.1 U	0.1 U	0.9 U	1 U	1 U	1 U	1 U	0.9 U
Dibenz(A,H)Anthracene	ug/L	1 U			0.1 U	0.1 U	0.1 U	0.9 U	1 U	1 U	1 U	1 U	0.9 U
Fluoranthene	ug/L	1 U			0.2	0.1 U	0.1 U	0.9 U	1 U	1 U	1 U	1 U	0.9 U
Fluorene	ug/L	1 U			0.1 U	0.1 U	0.1 U	0.9 U	1 U	1 U	1 U	1 U	0.9 U
Indeno (1,2,3-CD) Pyrene	ug/L	1 U			0.1 U	0.1 U	0.1 U	0.9 U	1 U	1 U	1 U	1 U	0.9 U
Naphthalene	ug/L	1 U			0.1 U	0.1 U	0.1 U	0.9 U	1 U	1 U	1 U	1 U	0.9 U
Phenanthrene	ug/L	1 U			0.1	0.1 U	0.1 U	0.9 U	1 U	1 U	1 U	1 U	0.9 U
Pyrene	ug/L	1 U			0.2	0.1 U	0.1 U	0.9 U	1 U	1 U	1 U	1 U	0.9 U
<b>Semivolatile Organic Compounds - TICs</b>													
Total SVOC TICs	ug/L				8	22	10						
UNKNOWN	ug/L	9				12		30	7.5		43.5	6.5	18
UNKNOWN ALKANE	ug/L				8	10	10						
UNKNOWN AROMATIC	ug/L												
<b>Semivolatile Organic Compounds</b>													
1,2,4-Trichlorobenzene	ug/L	1 U			0.5 U	0.6 U	0.5 U	0.9 U	1 U	1 U	1 U	1 U	0.9 U
1,2-Dichlorobenzene	ug/L	1 U						0.9 U	1 U	1 U	1 U	1 U	0.9 U
1,2-Diphenylhydrazine	ug/L	1 U			0.5 U	0.6 U	0.5 U	0.9 U	1 U	1 U	1 U	1 U	0.9 U
1,3-Dichlorobenzene	ug/L	1 U						0.9 U	1 U	1 U	1 U	1 U	0.9 U
1,4-Dichlorobenzene	ug/L	1 U						0.9 U	1 U	1 U	1 U	1 U	0.9 U
1,4-Dioxane	ug/L				1 U	1 U	1 U						
1-Naphthylamine	ug/L	5 U			5 U	6 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2,3,4,6-Tetrachlorophenol	ug/L				0.5 U	0.6 U	0.5 U						
2,4,5-Trichlorophenol	ug/L				0.5 U	0.6 U	0.5 U						
2,4,6-Trichlorophenol	ug/L	1 U			0.5 U	0.6 U	0.5 U	0.9 U	1 U	1 U	1 U	1 U	0.9 U
2,4-Dichlorophenol	ug/L	1 U			0.5 U	0.6 U	0.5 U	0.9 U	1 U	1 U	1 U	1 U	0.9 U
2,4-Dimethylphenol	ug/L	3 U			0.5 U	0.6 U	0.5 U	3 U	3 U	3 U	3 U	3 U	3 U
2,4-Dinitrophenol	ug/L	19 U			11 U	11 U	11 U	19 U	22 U	19 U	19 U	19 U	19 U
2,4-Dinitrotoluene	ug/L	1 U			1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	0.9 U
2,6-Dinitrotoluene	ug/L	1 U			0.5 U	0.6 U	0.5 U	0.9 U	1 U	1 U	1 U	1 U	0.9 U

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 Surface Water Analytical Results Summary  
 Delaware River Screening-Level Ecological Risk Assessment  
 Chemours Chambers Works  
 Deepwater, New Jersey

River Zone	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-JL/TEL	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	
Field Sample ID	23626224,23626225	24790814,24790815	24790817,24790818	SC-240-SW(082616),SC-240-SW(082616)-Z SC-240	SC-241-SW(082616),SC-241-SW(082616)-Z SC-241	SC-242-SW(082616),SC-242-SW(082616)-Z SC-242	22369192,22369193	22369195,22369196	22369198,22369199	22369204,22369205	22369207,22369208	22369210,22369211	
Location ID	DER2-31	DER3-19	DER3-20	SC-240	SC-241	SC-242	DER1-13	DER1-14	DER1-15	DER1-30	DER1-31	DER1-32	
Sample Purpose	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	FS	
Chemical Class	4/21/2010	11/15/2010	11/15/2010	8/26/2016	8/26/2016	8/26/2016	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	9/23/2009	
Chemical	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	Units	
2-Chloronaphthalene	ug/L	2	U		0.4	U	0.5	U	0.4	U	2	U	
2-Chlorophenol	ug/L	1	U		0.5	U	0.6	U	0.5	U	0.9	U	
2-Methylnaphthalene	ug/L				0.1	U	0.1	U	0.1	U			
2-Methylphenol (O-Cresol)	ug/L				0.5	U	0.6	U	0.5	U			
2-Naphthylamine	ug/L	5	U		5	U	6	U	5	U	5	U	
2-Nitroaniline	ug/L				0.5	U	0.6	U	0.5	U			
2-Nitrophenol	ug/L	1	U		0.5	U	0.6	U	0.5	U	0.9	U	
3,3'-Dichlorobenzidine	ug/L	2	U		2	U	2	U	2	U	2	U	
3-Nitroaniline	ug/L				0.5	U	0.6	U	0.5	U			
4,6-Dinitro-2-Methylphenol	ug/L	5	U		5	U	6	U	5	U	5	U	
4-Aminobiphenyl	ug/L	2	U		0.5	U	0.6	U	0.5	U	2	U	
4-Bromophenyl Phenyl Ether	ug/L	1	U		0.5	U	0.6	U	0.5	U	0.9	U	
4-Chloro-3-Methylphenol	ug/L	1	U		0.5	U	0.6	U	0.5	U	0.9	U	
4-Chloroaniline	ug/L	1	U		2	U	2	U	2	U	2	U	
4-Chlorophenyl Phenyl Ether	ug/L	2	U		0.5	U	0.6	U	0.5	U	2	U	
4-Methylphenol (P-Cresol)	ug/L				0.5	U	0.6	U	0.5	U			
4-Nitroaniline	ug/L				0.5	U	0.6	U	0.5	U			
4-Nitrophenol	ug/L	10	U		11	U	11	U	9	U	11	U	
Acetophenone	ug/L				0.5	U	0.6	U	0.5	U			
Aniline	ug/L	1	U		0.5	U	0.6	U	0.5	U	0.9	U	
Benzidine	ug/L	19	U		21	U	23	U	19	U	22	U	
Benzo(G,H,I)Perylene	ug/L	1	U		0.1	U	0.1	U	0.1	U	0.9	U	
Biphenyl	ug/L				0.5	U	0.6	U	0.5	U			
Bis(2-Chloro-1-Methylethyl) Ether	ug/L				0.5	U	0.6	U	0.5	U			
Bis(2-Chloroethoxy)Methane	ug/L	1	U		0.5	U	0.6	U	0.5	U	0.9	U	
Bis(2-Chloroethyl)Ether	ug/L	1	U		0.5	U	0.6	U	0.5	U	0.9	U	
Bis(2-Chloroisopropyl)Ether	ug/L	1	U						0.9	U	1	U	
Bis(2-Ethylhexyl)Phthalate	ug/L	2	U		2	U	2	U	2	U	2	U	
Butyl Benzyl Phthalate	ug/L	2	U		2	U	2	U	2	U	2	U	
Carbazole	ug/L	1	U		0.5	U	0.6	U	0.5	U	0.9	U	
Dibenzofuran	ug/L				0.5	U	0.6	U	0.5	U			
Diethyl Phthalate	ug/L	2	U		2	U	2	U	2	U	2	U	
Dimethyl Phthalate	ug/L	2	U		2	U	2	U	2	U	2	U	
Di-N-Butyl Phthalate	ug/L	2	U		2	U	2	U	2	U	2	U	
Diphenyl Ether	ug/L				0.5	U	0.6	U	0.5	U			
Hexachlorobenzene	ug/L	1	U		0.1	U	0.1	U	0.1	U	0.9	U	
Hexachlorobutadiene	ug/L	1	U		0.5	U	0.6	U	0.5	U	0.9	U	
Hexachlorocyclopentadiene	ug/L	5	U		5	U	6	U	5	U	5	U	
Hexachloroethane	ug/L	1	U		1	U	1	U	1	U	1	U	
Isophorone	ug/L	1	U		0.5	U	0.6	U	0.5	U	0.9	U	
N-Dioctyl Phthalate	ug/L	2	U		2	U	2	U	2	U	2	U	
Nitrobenzene	ug/L	1	U		0.5	U	0.6	U	0.5	U	0.9	U	
N-Nitrosodimethylamine	ug/L	2	U		2	U	2	U	2	U	2	U	
N-Nitrosodi-N-Propylamine	ug/L	1	U		0.5	U	0.6	U	0.5	U	0.9	U	
N-Nitrosodiphenylamine	ug/L	2	U		0.5	U	0.6	U	0.5	U	0.9	U	
O-Toluidine	ug/L	1	U		0.5	U	0.6	U	0.5	U	0.9	U	
Parathion	ug/L				2	U	2	U	2	U			
Pentachlorobenzene	ug/L				0.5	U	0.6	U	0.5	U			
Pentachlorophenol	ug/L	3	U		1	U	1	U	3	U	3	U	
Phenol	ug/L	1	U		0.5	U	0.6	U	0.5	U	0.9	U	
<b>Volatile Organic Compounds - TICs</b>													
ETHANE, 2,2-DICHLORO-1,1,1-	ug/L												
<b>Volatile Organic Compounds</b>													
1,1,1,2-Tetrachloroethane	ug/L				0.5	U	0.5	U	0.5	U			
1,1,1-Trichloroethane	ug/L	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1,2,2-Tetrachloroethane	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
1,1,2-Trichloroethane	ug/L	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1,2-Trichlorotrifluoroethane	ug/L	2	U	2	U	2	U	2	U	2	U	2	U
1,1-Dichloroethane	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
1,1-Dichloroethene	ug/L	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
1,1-Dichloropropene	ug/L				1	U	1	U	1	U	1	U	
1,2,4-Trimethylbenzene	ug/L				1	U	1	U	1	U	1	U	
1,2-Dibromoethane (EDB)	ug/L				0.5	U	0.5	U	0.5	U			
1,2-Dichlorobenzene	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethane	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichloroethene	ug/L				0.5	U	0.5	U	0.5	U			
1,2-Dichloropropane	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
1,3,5-Trimethylbenzene	ug/L				1	U	1	U	1	U	1	U	
1,3-Dichlorobenzene	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
2-Chloroethyl Vinyl Ether	ug/L	2	U	2	U	2	U	2	U	2	U	2	U
2-Chlorotoluene	ug/L				1	U	1	U	1	U	1	U	
2-Hexanone	ug/L				3	U	3	U	3	U			
4-Chlorotoluene	ug/L				1	U	1	U	1	U	1	U	
4-Isopropyltoluene	ug/L				1	U	1	U	1	U	1	U	
Acetone	ug/L	6	U	6	U	6	U	6	U	6	U	6	U
Acrolein	ug/L	40	U	40	U	40	U	40	U	40	U	40	U
Acrylonitrile	ug/L	4	U	4	U	4	U	4	U	4	U	4	U
Benzene	ug/L	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U	0.5	U
Bromodichloromethane	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
Bromoform	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
Carbon Disulfide	ug/L	1	U	1	U	1	U	1	U	1	U	1	U
Carbon Tetrachloride	ug/L	1	U	1	U	1	U	1	U	1	U	1	U

**Table A-2**  
**Surface Water Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Chemical Class	River Zone Field Sample ID Location ID Sample Purpose Date	MZ-JL/TEL 23626224,23626225		MZ-JL/TEL 24790814,24790815		MZ-JL/TEL 24790817,24790818		MZ-JL/TEL SC-240-SW(082616),SC-240- SW(082616)-Z SC-240 FS 8/26/2016		MZ-JL/TEL SC-241-SW(082616),SC-241- SW(082616)-Z SC-241 FS 8/26/2016		MZ-JL/TEL SC-242-SW(082616),SC-242- SW(082616)-Z SC-242 FS 8/26/2016		MZ-FPA 22369192,22369193		MZ-FPA 22369195,22369196		MZ-FPA 22369198,22369199		MZ-FPA 22369204,22369205		MZ-FPA 22369207,22369208		MZ-FPA 22369210,22369211	
		Units	DER2-31 FS 4/21/2010	DER3-19 FS 11/15/2010	DER3-20 FS 11/15/2010	SC-240 FS 8/26/2016	SC-241 FS 8/26/2016	SC-242 FS 8/26/2016	DER1-13 FS 9/23/2009	DER1-14 FS 9/23/2009	DER1-15 FS 9/23/2009	DER1-30 FS 9/23/2009	DER1-31 FS 9/23/2009	DER1-32 FS 9/23/2009											
Chlorobenzene	ug/L	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	1	0.8	U	0.8	U	0.8	U	0.8	U	35	0.8	U		
Chlorodibromomethane	ug/L	1	U	1	U	1	U	0.5	U	0.5	U	0.5	1	U	1	U	1	U	1	U	1	U	1	U	
Chloroform	ug/L	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	0.8	U	0.8	U	0.8	U	0.8	U	2	0.8	U		
cis-1,2-Dichloroethene	ug/L	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	
cis-1,3-Dichloropropene	ug/L	1	U	1	U	1	U	0.5	U	0.5	U	0.5	1	U	1	U	1	U	1	U	1	U	1	U	
Cumene	ug/L							1	U	1	U	1													
Dichlorodifluoromethane	ug/L	2	U	2	U	2	U	0.5	U	0.5	U	0.5	2	U	2	U	2	U	2	U	2	U	2	U	
Dichlorofluoromethane	ug/L	2	U	2	U	2	U	0.5	U	0.5	U	0.5	2	U	2	U	2	U	2	U	2	U	2	U	
Ethyl Chloride	ug/L	1	U	1	U	1	U	0.5	U	0.5	U	0.5	1	U	1	U	1	U	1	U	1	U	1	U	
Ethylbenzene	ug/L	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	
Hexane	ug/L							2	U	2	U	2													
Isobutyl Alcohol	ug/L							100	U	100	U	100													
Meta- And Para-Xylene	ug/L							0.5	U	0.5	U	0.5													
Methacrylonitrile	ug/L							10	U	10	U	10													
Methyl Bromide	ug/L	1	U	1	U	1	U					0.5	1	U	1	U	1	U	1	U	1	U	1	U	
Methyl Chloride	ug/L	1	U	1	U	1	U	0.5	U	0.5	U	0.5	1	U	1	U	1	U	1	U	1	U	1	U	
Methyl Ethyl Ketone	ug/L							3	U	3	U	3													
Methyl Isobutyl Ketone	ug/L							3	U	3	U	3													
Methyl Methacrylate	ug/L							1	U	1	U	1													
Methyl Tertiary Butyl Ether	ug/L							0.5	U	0.5	U	0.5													
Methylene Chloride	ug/L	2	U	2	U	2	U	2	U	2	U	2	2	U	2	U	2	U	2	U	2	U	2	U	
N-Butylbenzene	ug/L							1	U	1	U	1													
N-Propylbenzene	ug/L							1	U	1	U	1													
Ortho-Xylene	ug/L							0.5	U	0.5	U	0.5													
Propionitrile	ug/L							30	U	30	U	30													
sec-Butylbenzene	ug/L							1	U	1	U	1													
Styrene	ug/L							1	U	1	U	1													
tert-Butylbenzene	ug/L							1	U	1	U	1													
Tetrachloroethene	ug/L	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	1	0.8	U
Tetrahydrofuran	ug/L							4	U	4	U	4													
Toluene	ug/L	0.7	U	0.7	U	0.7	U	0.5	U	0.5	U	0.5	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	2	0.7	U
trans-1,2-Dichloroethene	ug/L	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	
trans-1,3-Dichloropropene	ug/L	1	U	1	U	1	U					0.5	1	U	1	U	1	U	1	U	1	U	1	U	
Trichloroethene	ug/L	1	U	1	U	1	U	0.5	U	0.5	U	0.5	1	U	1	U	1	U	1	U	1	U	1	U	
Trichlorofluoromethane	ug/L	2	U	2	U	2	U	0.5	U	0.5	U	0.5	2	U	2	U	2	U	2	U	2	U	5	2	U
Vinyl Chloride	ug/L	1	U	1	U	1	U	0.5	U	0.5	U	0.5	1	U	1	U	1	U	1	U	1	U	1	U	
Xylenes	ug/L	0.8	U	0.8	U	0.8	U	0.5	U	0.5	U	0.5	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	1	0.8	U

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

**Table A-2**  
**Surface Water Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

River Zone	MZ-FPA	MZ-FPA											
Field Sample ID	22369213,22369214	23626196,23626197	23626199,23626200	23626202,23626203	23626205,23626206	23626208,23626209	23626210,23626211	24790820,24790821	24790822,24790823	24790825,24790826	24790828,24790829	24790831,24790832	
Location ID	DER1-33	DER2-14	DER2-16	DER2-17	DER2-18	DER2-19	DER2-19	DER3-21	DER3-21	DER3-22	DER3-23	DER3-24	
Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	DUP	FS	FS	FS	
Date	9/23/2009	4/21/2010	4/21/2010	4/21/2010	4/21/2010	4/21/2010	4/21/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010	
Chemical Class													
Chemical													
Units													
<b>General Chemistry</b>													
Dissolved Organic Carbon	ug/L												
Total Hardness As CaCO3	ug/L	284000	80400	261000	76200	99800	106000	107000	273000	272000	283000	224000	258000
Total Suspended Solids	ug/L												
<b>Metals - Total</b>													
Aluminum	ug/L	1100	1260	495	682	1180	3580	3690	3500	2950	3370	2790	2740
Antimony	ug/L	9.7	9.7	9.7	9.7	9.7	9.7	9.7	10	10	10	10	10
Arsenic	ug/L	7.2	7.2	7.2	7.2	7.2	7.2	7.2	9.8	9.8	9.8	9.8	9.8
Barium	ug/L	33.7	36.8	50	27.7	35.1	52.8	53.4	39	35.7	37.5	35.3	35
Beryllium	ug/L	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Cadmium	ug/L	2	2	2	2	2	2	2	2	2	2	2	2
Calcium	ug/L	58300	20200	92700	19500	28400	30000	30100	52000	51400	49100	44600	49300
Chromium	ug/L	3.4	5	6.8	3.4	5.5	12	12.1	6.5	6.1	6.7	5.4	5.5
Cobalt	ug/L	2.1	2.1	2.1	2.1	2.1	2.2	2.1	2.3	2.3	2.3	2.3	2.3
Copper	ug/L	3.9	3.1	4.8	2.7	3.8	6.5	7.9	3.5	2.8	3.6	3.6	2.7
Iron	ug/L	1480	2180	643	943	1660	5130	5210	3800	3400	3700	3220	3060
Lead	ug/L	8.9	8.9	8.9	8.9	8.9	8	9	8.9	8.9	8.9	8.9	8.9
Magnesium	ug/L	33700	7290	7150	6710	7020	7600	7640	34900	34900	39000	27200	32800
Manganese	ug/L	78.3	125	94.8	49.1	86.8	215	221	116	114	120	106	98.4
Mercury	ug/L	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056
Nickel	ug/L	3.7	2.8	6.3	1.8	6.2	3.1	6.2	4.7	4.6	4.6	4.3	3.9
Potassium	ug/L	13200	3400	5860	2470	2970	3550	3580	13300	13200	14900	10700	12700
Selenium	ug/L	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9
Silver	ug/L	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Sodium	ug/L	259000	27100	43800	28100	31000	32100	32200	259000	270000	298000	203000	254000
Thallium	ug/L	14	14	14	14	14	14	14	14	14	14	14	14
Tin	ug/L	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
Titanium	ug/L												
Vanadium	ug/L	2.5	5.3	3.7	3.9	4.8	11.1	11	7.4	6.5	6.6	5.8	5.8
Zinc	ug/L	12.7	14.5	15	8.9	15.2	43.3	44.5	24.5	23.6	25.2	23.2	22.4
<b>Metals - Dissolved</b>													
Aluminum	ug/L	80.2	80.2	109	80.2	80.2	112	96.4	83.4	83.4	83.4	213	83.4
Antimony	ug/L	9.7	9.7	9.7	9.7	9.7	9.7	9.7	10	10	10	10	10
Arsenic	ug/L	7.2	7.2	7.2	7.2	7.2	7.2	7.2	9.8	9.8	9.8	9.8	9.8
Barium	ug/L	28.6	23.9	42.6	20.5	23	22.3	22.1	22.8	22.5	22.3	22.2	22.3
Beryllium	ug/L	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.6	1.6	1.6	1.6	1.6
Cadmium	ug/L	2	2	2	2	2	2	2	2	2	2	2	2
Calcium	ug/L	60200	19800	90400	19400	27800	28600	28600	53900	53300	47600	42300	48800
Chromium	ug/L	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Cobalt	ug/L	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.3	2.3	2.3	2.3	2.3
Copper	ug/L	3.5	2.7	3.3	2.7	2.7	2.7	2.7	3.2	3.5	2.9	2.8	2.7
Iron	ug/L	52.2	119	73.5	75	52.2	140	112	63.9	53.2	83.1	284	64
Lead	ug/L	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9
Magnesium	ug/L	34700	7220	7100	6830	6810	6710	6660	39000	37800	37500	25900	32400
Manganese	ug/L	27.5	26.3	63.8	7.6	14.1	30.5	29.5	7.7	7.2	6.8	15.6	8.4
Mercury	ug/L	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056
Nickel	ug/L	2.7	1.8	5.6	1.8	1.8	1.8	1.8	3	3	3	3	3
Potassium	ug/L	13100	3230	5610	2290	2710	2760	2750	14700	14700	14600	10100	12600
Selenium	ug/L	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9
Silver	ug/L	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Sodium	ug/L	247000	28200	44500	29300	31800	32500	32400	272000	275000	280000	178000	225000
Thallium	ug/L	14	14	14	14	14	14	14	14	14	14	14	14
Tin	ug/L	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
Titanium	ug/L												
Vanadium	ug/L	2.5	2.5	3.6	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5
Zinc	ug/L	8.1	8.1	9.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
<b>Per and Polyfluorinated Organic Substances</b>													
Perfluorobutane Sulfonic Acid	ug/L												
Perfluorobutanoic Acid	ug/L												
Perfluorodecane Sulfonic Acid	ug/L												
Perfluorodecanoic Acid	ug/L												
Perfluorododecanoic Acid	ug/L												
Perfluoroheptanoic Acid	ug/L												
Perfluorohexane Sulfonic Acid	ug/L												
Perfluorohexanoic Acid	ug/L												
Perfluorononanoic Acid	ug/L												
Perfluorooctane Sulfonamide	ug/L												
Perfluoropentanoic Acid	ug/L												
Perfluorotetradecanoic Acid	ug/L												
Perfluorotridecanoic Acid	ug/L												
Perfluoroundecanoic Acid	ug/L												
PFOA	ug/L												
PFOA(trial)	ug/L												
PFOS	ug/L												
PFOS (trial)	ug/L												
<b>Pesticides and Herbicides</b>													
4,4'-DDD	ug/L												
4,4'-DDE	ug/L												
4,4'-DDT	ug/L												
Aldrin	ug/L												
Alpha Chlordane	ug/L												
Alpha-BHC	ug/L												
beta-BHC	ug/L												

Table A-2  
 Surface Water Analytical Results Summary  
 Delaware River Screening-Level Ecological Risk Assessment  
 Chemours Chambers Works  
 Deepwater, New Jersey

Chemical Class	River Zone	MZ-FPA											
	Field Sample ID	22369213,22369214	23626196,23626197	23626199,23626200	23626202,23626203	23626205,23626206	23626208,23626209	23626210,23626211	24790820,24790821	24790822,24790823	24790825,24790826	24790828,24790829	24790831,24790832
Chemical	Location ID	DER1-33	DER2-14	DER2-16	DER2-17	DER2-18	DER2-19	DER2-19	DER3-21	DER3-21	DER3-22	DER3-23	DER3-24
Units	Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	DUP	FS	FS	FS
	Date	9/23/2009	4/21/2010	4/21/2010	4/21/2010	4/21/2010	4/21/2010	4/21/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010
delta-BHC													
Dieldrin													
Endosulfan I													
Endosulfan II													
Endosulfan Sulfate													
Endrin													
Endrin Aldehyde													
Endrin Ketone													
Gamma Chlordane													
Heptachlor													
Heptachlor Epoxide													
Lindane													
Methoxychlor													
Toxaphene													
<b>Polychlorinated Biphenyls</b>													
Heptachlorobiphenyl													
Hexachlorobiphenyl													
Octachlorobiphenyl													
PCB 1													
PCB 100													
PCB 102													
PCB 103													
PCB 104													
PCB 105													
PCB 106													
PCB 107/123													
PCB 108													
PCB 11													
PCB 110													
PCB 113													
PCB 114													
PCB 115													
PCB 116													
PCB 117													
PCB 118													
PCB 119													
PCB 12													
PCB 120													
PCB 121/95/88													
PCB 122													
PCB 124													
PCB 126													
PCB 127													
PCB 128													
PCB 129/158													
PCB 13													
PCB 130/164													
PCB 131													
PCB 132													
PCB 133													
PCB 134													
PCB 135													
PCB 136													
PCB 137													
PCB 138													
PCB 14													
PCB 140													
PCB 141													
PCB 142													
PCB 143/139													
PCB 144													
PCB 145													
PCB 146													
PCB 148													
PCB 15													
PCB 150													
PCB 151													
PCB 152													
PCB 153													
PCB 154													
PCB 155													
PCB 156													
PCB 157													
PCB 159													
PCB 16													
PCB 161													
PCB 162													
PCB 163/160													
PCB 165													
PCB 166													
PCB 167													
PCB 168													
PCB 169													

Table A-2  
 Surface Water Analytical Results Summary  
 Delaware River Screening-Level Ecological Risk Assessment  
 Chemours Chambers Works  
 Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA						
		22369213,22369214 DER1-33 FS 9/23/2009	23626196,23626197 DER2-14 FS 4/21/2010	23626199,23626200 DER2-16 FS 4/21/2010	23626202,23626203 DER2-17 FS 4/21/2010	23626205,23626206 DER2-18 FS 4/21/2010	23626208,23626209 DER2-19 FS 4/21/2010	23626210,23626211 DER2-19 DUP 4/21/2010	24790820,24790821 DER3-21 FS 11/15/2010	24790822,24790823 DER3-21 DUP 11/15/2010	24790825,24790826 DER3-22 FS 11/15/2010	24790828,24790829 DER3-23 FS 11/15/2010
Chemical	Units											
PCB 17	ug/L											
PCB 170	ug/L											
PCB 171	ug/L											
PCB 172	ug/L											
PCB 173	ug/L											
PCB 174	ug/L											
PCB 176	ug/L											
PCB 177	ug/L											
PCB 178	ug/L											
PCB 179	ug/L											
PCB 18	ug/L											
PCB 180	ug/L											
PCB 181	ug/L											
PCB 182/175	ug/L											
PCB 183	ug/L											
PCB 184	ug/L											
PCB 185	ug/L											
PCB 186	ug/L											
PCB 187	ug/L											
PCB 188	ug/L											
PCB 189	ug/L											
PCB 19	ug/L											
PCB 190	ug/L											
PCB 191	ug/L											
PCB 192	ug/L											
PCB 193	ug/L											
PCB 194	ug/L											
PCB 195	ug/L											
PCB 196	ug/L											
PCB 197	ug/L											
PCB 198	ug/L											
PCB 199	ug/L											
PCB 2	ug/L											
PCB 201	ug/L											
PCB 202	ug/L											
PCB 203	ug/L											
PCB 204/200	ug/L											
PCB 205	ug/L											
PCB 206	ug/L											
PCB 207	ug/L											
PCB 208	ug/L											
PCB 209	ug/L											
PCB 21/20	ug/L											
PCB 22	ug/L											
PCB 23	ug/L											
PCB 24	ug/L											
PCB 25	ug/L											
PCB 26	ug/L											
PCB 27	ug/L											
PCB 28	ug/L											
PCB 29	ug/L											
PCB 3	ug/L											
PCB 30	ug/L											
PCB 31	ug/L											
PCB 32	ug/L											
PCB 33	ug/L											
PCB 34	ug/L											
PCB 35	ug/L											
PCB 36	ug/L											
PCB 37	ug/L											
PCB 38	ug/L											
PCB 39	ug/L											
PCB 4/10	ug/L											
PCB 40	ug/L											
PCB 41	ug/L											
PCB 42	ug/L											
PCB 43	ug/L											
PCB 44	ug/L											
PCB 45	ug/L											
PCB 47	ug/L											
PCB 48	ug/L											
PCB 49	ug/L											
PCB 5	ug/L											
PCB 50	ug/L											
PCB 51	ug/L											
PCB 52	ug/L											
PCB 53	ug/L											
PCB 54	ug/L											
PCB 55	ug/L											
PCB 56	ug/L											
PCB 57	ug/L											
PCB 59	ug/L											
PCB 6	ug/L											

Table A-2  
Surface Water Analytical Results Summary  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA	MZ-FPA
		22369213,2369214 DER1-33 FS 9/23/2009	23626196,23626197 DER2-14 FS 4/21/2010	23626199,23626200 DER2-16 FS 4/21/2010	23626202,23626203 DER2-17 FS 4/21/2010	23626205,23626206 DER2-18 FS 4/21/2010	23626208,23626209 DER2-19 FS 4/21/2010	23626210,23626211 DER2-19 DUP 4/21/2010	24790820,24790821 DER3-21 FS 11/15/2010	24790822,24790823 DER3-21 DUP 11/15/2010	24790825,24790826 DER3-22 FS 11/15/2010	24790828,24790829 DER3-23 FS 11/15/2010	24790831,24790832 DER3-24 FS 11/15/2010
PCB 60	ug/L												
PCB 61	ug/L												
PCB 63	ug/L												
PCB 65/75/62	ug/L												
PCB 66	ug/L												
PCB 67/58	ug/L												
PCB 68/64	ug/L												
PCB 69	ug/L												
PCB 7	ug/L												
PCB 70	ug/L												
PCB 71	ug/L												
PCB 72	ug/L												
PCB 73/46	ug/L												
PCB 74	ug/L												
PCB 76	ug/L												
PCB 77	ug/L												
PCB 78	ug/L												
PCB 79	ug/L												
PCB 8	ug/L												
PCB 80	ug/L												
PCB 81	ug/L												
PCB 82	ug/L												
PCB 83/125/112	ug/L												
PCB 85	ug/L												
PCB 86/109	ug/L												
PCB 87/111	ug/L												
PCB 89/84	ug/L												
PCB 9	ug/L												
PCB 91	ug/L												
PCB 92	ug/L												
PCB 93	ug/L												
PCB 94	ug/L												
PCB 96	ug/L												
PCB 97	ug/L												
PCB 98	ug/L												
PCB 99	ug/L												
PCB-147/149	ug/L												
PCB-90/101	ug/L												
Pentachlorobiphenyl	ug/L												
Tetrachlorobiphenyl	ug/L												
Total Decachlorobiphenyls (congeners)	ug/L												
Total Dichlorobiphenyls (congeners)	ug/L												
Total Monochlorobiphenyls (congeners)	ug/L												
Total Nonachlorobiphenyls (congeners)	ug/L												
Total PCB (congeners)	ug/L												
Trichlorobiphenyl (total)	ug/L												
<b>Polycyclic Aromatic Hydrocarbons</b>													
Acenaphthene	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U
Acenaphthylene	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U
Anthracene	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U
Benzo(A)Anthracene	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U
Benzo(B)Fluoranthene	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U
Benzo(K)Fluoranthene	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U
Benzo(A)Pyrene	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U
Chrysene	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U
Dibenz(A,H)Anthracene	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U
Fluoranthene	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U
Fluorene	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U
Indeno (1,2,3-CD) Pyrene	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U
Naphthalene	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U
Phenanthrene	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U
Pyrene	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U
<b>Semivolatile Organic Compounds - TICs</b>													
Total SVOC TICs	ug/L												
UNKNOWN	ug/L	31		20.66666667		9.4		16.5		12		11.4	
UNKNOWN ALKANE	ug/L												
UNKNOWN AROMATIC	ug/L							7					
<b>Semivolatile Organic Compounds</b>													
1,2,4-Trichlorobenzene	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U
1,2-Dichlorobenzene	ug/L	1	U	1	U	0.9	U	8	U	4	U	4	U
1,2-Diphenylhydrazine	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L	1	U	1	U	0.9	U	14	U	1	U	1	U
1,4-Dioxane	ug/L												
1-Naphthylamine	ug/L	5	U	5	U	5	U	5	U	5	U	5	U
2,3,4,6-Tetrachlorophenol	ug/L												
2,4,5-Trichlorophenol	ug/L												
2,4,6-Trichlorophenol	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U
2,4-Dichlorophenol	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U
2,4-Dimethylphenol	ug/L	3	U	3	U	3	U	3	U	3	U	3	U
2,4-Dinitrophenol	ug/L	19	U	19	U	19	U	20	U	19	U	19	U
2,4-Dinitrotoluene	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U
2,6-Dinitrotoluene	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U

**Table A-2**  
**Surface Water Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Chemical Class	River Zone Field Sample ID Location ID Sample Purpose Date	MZ-FPA 22369213,2369214		MZ-FPA 23626196,23626197		MZ-FPA 23626199,23626200		MZ-FPA 23626202,23626203		MZ-FPA 23626205,23626206		MZ-FPA 23626208,23626209		MZ-FPA 23626210,23626211		MZ-FPA 24790820,24790821		MZ-FPA 24790822,24790823		MZ-FPA 24790825,24790826		MZ-FPA 24790828,24790829		MZ-FPA 24790831,24790832		
		DER1-33 FS 9/23/2009		DER2-14 FS 4/21/2010		DER2-16 FS 4/21/2010		DER2-17 FS 4/21/2010		DER2-18 FS 4/21/2010		DER2-19 FS 4/21/2010		DER2-19 DUP 4/21/2010		DER3-21 FS 11/15/2010		DER3-21 DUP 11/15/2010		DER3-22 FS 11/15/2010		DER3-23 FS 11/15/2010		DER3-24 FS 11/15/2010		
		ug/L	U	ug/L	U	ug/L	U	ug/L	U	ug/L	U	ug/L	U	ug/L	U	ug/L	U	ug/L	U	ug/L	U	ug/L	U	ug/L	U	ug/L
2-Chloronaphthalene	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U											
2-Chlorophenol	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U	1	U											
2-Methylnaphthalene	ug/L																									
2-Methylphenol (O-Cresol)	ug/L																									
2-Naphthylamine	ug/L	5	U	5	U	5	U	5	U	5	U	5	U	5	U											
2-Nitroaniline	ug/L																									
2-Nitrophenol	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U	1	U											
3,3'-Dichlorobenzidine	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U											
3-Nitroaniline	ug/L																									
4,6-Dinitro-2-Methylphenol	ug/L	5	U	5	U	5	U	5	U	5	U	5	U	5	U											
4-Aminobiphenyl	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U											
4-Bromophenyl Phenyl Ether	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U	1	U											
4-Chloro-3-Methylphenol	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U	1	U											
4-Chloroaniline	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U	1	U											
4-Chlorophenyl Phenyl Ether	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U											
4-Methylphenol (P-Cresol)	ug/L																									
4-Nitroaniline	ug/L																									
4-Nitrophenol	ug/L	10	U	10	U	9	U	10	U	10	U	10	U	10	U											
Acetophenone	ug/L																									
Aniline	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U	1	U											
Benzidine	ug/L	19	U	19	U	19	U	20	U	19	U	19	U	19	U											
Benzo(G,H,I)Perylene	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U	1	U											
Biphenyl	ug/L																									
Bis(2-Chloro-1-Methylethyl) Ether	ug/L																									
Bis(2-Chloroethoxy)Methane	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U	1	U											
Bis(2-Chloroethyl)Ether	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U	1	U											
Bis(2-Chloroisopropyl)Ether	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U	1	U											
Bis(2-Ethylhexyl)Phthalate	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U											
Butyl Benzyl Phthalate	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U											
Carbazole	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U	1	U											
Dibenzofuran	ug/L																									
Diethyl Phthalate	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U											
Dimethyl Phthalate	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U											
Di-N-Butyl Phthalate	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U											
Diphenyl Ether	ug/L																									
Hexachlorobenzene	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U	1	U											
Hexachlorobutadiene	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U	1	U											
Hexachlorocyclopentadiene	ug/L	5	U	5	U	5	U	5	U	5	U	5	U	5	U											
Hexachloroethane	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U	1	U											
Isophorone	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U	1	U											
N-Dioctyl Phthalate	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U											
Nitrobenzene	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U	1	U											
N-Nitrosodimethylamine	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U											
N-Nitrosodi-N-Propylamine	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U	1	U											
N-Nitrosodiphenylamine	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U											
O-Toluidine	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U	1	U											
Parathion	ug/L																									
Pentachlorobenzene	ug/L																									
Pentachlorophenol	ug/L	3	U	3	U	3	U	3	U	3	U	3	U	3	U											
Phenol	ug/L	1	U	1	U	0.9	U	1	U	1	U	1	U	1	U											
<b>Volatile Organic Compounds - TICs</b>																										
ETHANE, 2,2-DICHLORO-1,1,1-	ug/L											15		15												
<b>Volatile Organic Compounds</b>																										
1,1,1,2-Tetrachloroethane	ug/L																									
1,1,1-Trichloroethane	ug/L	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U											
1,1,2,2-Tetrachloroethane	ug/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U											
1,1,2-Trichloroethane	ug/L	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U											
1,1,2-Trichlorotrifluoroethane	ug/L	15	U	2	U	2	U	3	U	30	U	170	U	180	U											
1,1-Dichloroethane	ug/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U											
1,1-Dichloroethene	ug/L	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U											
1,1-Dichloropropene	ug/L																									
1,2,4-Trimethylbenzene	ug/L																									
1,2-Dibromoethane (EDB)	ug/L																									
1,2-Dichlorobenzene	ug/L																									
1,2-Dichloroethane	ug/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U											
1,2-Dichloroethene	ug/L																									
1,2-Dichloropropane	ug/L	1	U	1	U	1	U	1	U	1	U	1	U	1	U											
1,3,5-Trimethylbenzene	ug/L																									
1,3-Dichlorobenzene	ug/L																									
1,4-Dichlorobenzene	ug/L																									
2-Chloroethyl Vinyl Ether	ug/L	2	U	2	U	2	U	2	U	2	U	2	U	2	U											
2-Chlorotoluene	ug/L																									
2-Hexanone	ug/L																									
4-Chlorotoluene	ug/L																									
4-Isopropyltoluene	ug/L																									
Acetone	ug/L	6	U	6	U	6	U	6	U	6	U	6	U	6	U											
Acrolein	ug/L	40	U	40	U	40	U	40	U	40	U	40	U	40	U											
Acrylonitrile	ug/L	4	U	4	U	4	U	4	U	4	U	4	U	4	U											
Benzene	ug/L	0.5	U	0.5	U	0.5	U	0.5</																		

**Table A-2**  
**Surface Water Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Chemical Class	River Zone	MZ-FPA											
	Field Sample ID	22369213,22369214	23626196,23626197	23626199,23626200	23626202,23626203	23626205,23626206	23626208,23626209	23626210,23626211	24790820,24790821	24790822,24790823	24790825,24790826	24790828,24790829	24790831,24790832
Chemical	Location ID	DER1-33	DER2-14	DER2-16	DER2-17	DER2-18	DER2-19	DER2-19	DER3-21	DER3-21	DER3-22	DER3-23	DER3-24
Units	Sample Purpose	FS	FS	FS	FS	FS	FS	DUP	FS	DUP	FS	FS	FS
	Date	9/23/2009	4/21/2010	4/21/2010	4/21/2010	4/21/2010	4/21/2010	4/21/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010	11/15/2010
Chlorobenzene	ug/L	1	0.8 U	2	2	35	4	4	0.8 U	0.8 U	0.8	0.8 U	5
Chlorodibromomethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Chloroform	ug/L	0.8 U	0.8 U	0.8 U	0.9	11	3	3	0.8 U				
cis-1,2-Dichloroethene	ug/L	0.8 U											
cis-1,3-Dichloropropene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Cumene	ug/L												
Dichlorodifluoromethane	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dichlorofluoromethane	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Ethyl Chloride	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Ethylbenzene	ug/L	0.8 U	0.8 U	0.8 U	0.8 U	1	0.8 U						
Hexane	ug/L												
Isobutyl Alcohol	ug/L												
Meta- And Para-Xylene	ug/L												
Methacrylonitrile	ug/L												
Methyl Bromide	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Chloride	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Methyl Ethyl Ketone	ug/L												
Methyl Isobutyl Ketone	ug/L												
Methyl Methacrylate	ug/L												
Methyl Tertiary Butyl Ether	ug/L												
Methylene Chloride	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
N-Butylbenzene	ug/L												
N-Propylbenzene	ug/L												
Ortho-Xylene	ug/L												
Propionitrile	ug/L												
sec-Butylbenzene	ug/L												
Styrene	ug/L												
tert-Butylbenzene	ug/L												
Tetrachloroethene	ug/L	0.8	0.8 U	0.8 U	0.8 U	3	11	11	0.8 U				
Tetrahydrofuran	ug/L												
Toluene	ug/L	0.7 U	0.7 U	0.7 U	0.7 U	9	0.7 U						
trans-1,2-Dichloroethene	ug/L	0.8 U											
trans-1,3-Dichloropropene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichloroethene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Trichlorofluoromethane	ug/L	10	2 U	2 U	2 U	26	76	78	2 U	2 U	2 U	2 U	2 U
Vinyl Chloride	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Xylenes	ug/L	0.8 U	0.8 U	0.8 U	0.8 U	7	0.8 U						

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

Table A-2  
 Surface Water Analytical Results Summary  
 Delaware River Screening-Level Ecological Risk Assessment  
 Chemours Chambers Works  
 Deepwater, New Jersey

River Zone	MZ-FPA	MZ-FPA	MZ-SWMU/HC	MZ-SWMU/HC	MZ-SWMU/HC	MZ-SWMU/HC	CARNEYS PT				
Field Sample ID	24790834,24790835	24790837,24790838	22369201,22369202	23626213,23626214	23626215,23626216	23626218,23626219	22369216,22369217	22369218,22369219	22369221,22369222	22437857,22437858	22437860,22437861
Location ID	DER3-25	DER3-26	DER1-18	DER2-21	DER2-21	DER2-24	DER1-29	DER1-29	DER1-28	DER1-20	DER1-22
Sample Purpose	FS	FS	FS	FS	DUP	FS	FS	DUP	FS	FS	FS
Date	11/15/2010	11/15/2010	9/23/2009	4/21/2010	4/21/2010	4/21/2010	9/23/2009	9/23/2009	9/23/2009	9/24/2009	9/24/2009
Units											
<b>General Chemistry</b>											
Dissolved Organic Carbon	ug/L										
Total Hardness As CaCO3	ug/L	295000	309000	134000	70400	67400	70800	171000	171000	156000	175000
Total Suspended Solids	ug/L										181000
<b>Metals - Total</b>											
Aluminum	ug/L	2730	2390	1250	313	312	1450	1110	1050	1240	1350
Antimony	ug/L	10	10	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
Arsenic	ug/L	9.8	9.8	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
Barium	ug/L	34.8	34.3	31.1	27.5	26.7	36.6	32	32.1	31.1	32.4
Beryllium	ug/L	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Cadmium	ug/L	2	2	2	2	2	2	2	2	2	2
Calcium	ug/L	59900	69200	21400	18500	17700	18200	25200	25300	23900	26200
Chromium	ug/L	5.1	5.3	3.7	3.4	3.4	5.8	3.4	3.4	3.4	3.4
Cobalt	ug/L	2.3	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Copper	ug/L	3.9	3.7	3.8	2.7	2.7	3.2	3.9	4.2	3.9	3.7
Iron	ug/L	3070	2620	2250	466	441	2480	1430	1450	1690	1710
Lead	ug/L	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9
Magnesium	ug/L	37700	33000	19500	5850	5620	6140	26300	26200	23400	26500
Manganese	ug/L	97.8	90.1	113	30.9	29.2	121	64.9	65.3	76	75.2
Mercury	ug/L	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.11
Nickel	ug/L	4.6	4.6	1.8	2.8	1.8	2.8	1.8	1.8	1.8	1.8
Potassium	ug/L	14500	13200	7350	2030	1960	2530	9680	9700	8580	9500
Selenium	ug/L	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9
Silver	ug/L	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Sodium	ug/L	292000	249000	137000	20700	19900	21700	193000	195000	162000	197000
Thallium	ug/L	14	14	14	14	14	14	14	14	14	14
Tin	ug/L	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
Titanium	ug/L										
Vanadium	ug/L	6.3	5.4	3.3	2.6	2.9	6.1	2.5	2.6	3.3	2.9
Zinc	ug/L	22.9	24.8	11.8	8.1	8.1	17.7	11.3	11.7	12.8	12.9
<b>Metals - Dissolved</b>											
Aluminum	ug/L	95	119	236	80.2	80.2	80.2	80.2	80.3	80.2	80.2
Antimony	ug/L	10	10	9.7	9.7	9.7	9.7	9.7	9.7	9.7	9.7
Arsenic	ug/L	9.8	9.8	7.2	7.2	7.2	7.2	7.2	7.2	7.2	7.2
Barium	ug/L	22.7	24.5	26.9	20.3	19.5	19.6	26.4	26.5	24.4	24.9
Beryllium	ug/L	1.6	1.6	1.4	1.4	1.4	1.4	1.4	1.4	1.4	1.4
Cadmium	ug/L	2	2	2	2	2	2	2	2	2	2
Calcium	ug/L	54400	68500	26900	16200	16600	17800	25800	26000	25300	26400
Chromium	ug/L	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4	3.4
Cobalt	ug/L	2.3	2.3	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Copper	ug/L	3.2	3.4	3	2.7	2.7	3.5	2.7	2.7	3.1	2.7
Iron	ug/L	115	148	302	52.2	52.2	263	52.2	88.2	52.2	52.2
Lead	ug/L	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9
Magnesium	ug/L	37100	33700	29000	5200	5360	5900	26300	26700	24400	27700
Manganese	ug/L	10.1	14.6	27.9	2.7	2.6	19.7	17.3	19.4	11.9	15.7
Mercury	ug/L	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056	0.056
Nickel	ug/L	3	3	1.8	1.8	1.8	1.8	1.8	1.8	1.8	1.8
Potassium	ug/L	14400	13400	10100	1720	1750	2110	9560	9550	8760	9870
Selenium	ug/L	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9	8.9
Silver	ug/L	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3	2.3
Sodium	ug/L	273000	246000	205000	18900	19400	22400	180000	183000	162000	205000
Thallium	ug/L	14	14	14	14	14	14	14	14	14	14
Tin	ug/L	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8	9.8
Titanium	ug/L										
Vanadium	ug/L	2.5	2.5	2.5	2.5	2.5	3.1	2.5	2.5	2.5	2.5
Zinc	ug/L	8.1	9.5	8.1	8.1	8.1	8.1	8.1	8.1	8.1	8.1
<b>Per and Polyfluorinated Organic Substances</b>											
Perfluorobutane Sulfonic Acid	ug/L										
Perfluorobutanoic Acid	ug/L										
Perfluorodecane Sulfonic Acid	ug/L										
Perfluorodecanoic Acid	ug/L										
Perfluorododecanoic Acid	ug/L										
Perfluorohexanoic Acid	ug/L										
Perfluorohexane Sulfonic Acid	ug/L										
Perfluorohexanoic Acid	ug/L										
Perfluorononanoic Acid	ug/L										
Perfluorooctane Sulfonamide	ug/L										
Perfluoropentanoic Acid	ug/L										
Perfluorotetradecanoic Acid	ug/L										
Perfluorotridecanoic Acid	ug/L										
Perfluoroundecanoic Acid	ug/L										
PFOA	ug/L										
PFOA(trial)	ug/L										
PFOS	ug/L										
PFOS (trial)	ug/L										
<b>Pesticides and Herbicides</b>											
4,4'-DDD	ug/L										
4,4'-DDE	ug/L										
4,4'-DDT	ug/L										
Aldrin	ug/L										
Alpha-Chlordane	ug/L										
Alpha-BHC	ug/L										
beta-BHC	ug/L										

Table A-2  
 Surface Water Analytical Results Summary  
 Delaware River Screening-Level Ecological Risk Assessment  
 Chemours Chambers Works  
 Deepwater, New Jersey

Chemical Class	River Zone	MZ-FPA	MZ-FPA	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	CARNEYS PT				
	Field Sample ID	24790834,24790835	24790837,24790838	22369201,22369202	23626213,23626214	23626215,23626216	23626218,23626219	22369216,22369217	22369218,22369219	22369221,22369222	22437857,22437858	22437860,22437861
Chemical	Location ID	DER3-25	DER3-26	DER1-18	DER2-21	DER2-21	DER2-24	DER1-29	DER1-29	DER1-28	DER1-20	DER1-22
Units	Sample Purpose	FS	FS	FS	FS	DUP	FS	FS	DUP	FS	FS	FS
	Date	11/15/2010	11/15/2010	9/23/2009	4/21/2010	4/21/2010	4/21/2010	9/23/2009	9/23/2009	9/23/2009	9/24/2009	9/24/2009
delta-BHC												
Dieldrin												
Endosulfan I												
Endosulfan II												
Endosulfan Sulfate												
Endrin												
Endrin Aldehyde												
Endrin Ketone												
Gamma Chlordane												
Heptachlor												
Heptachlor Epoxide												
Lindane												
Methoxychlor												
Toxaphene												
<b>Polychlorinated Biphenyls</b>												
Heptachlorobiphenyl												
Hexachlorobiphenyl												
Octachlorobiphenyl												
PCB 1												
PCB 100												
PCB 102												
PCB 103												
PCB 104												
PCB 105												
PCB 106												
PCB 107/123												
PCB 108												
PCB 11												
PCB 110												
PCB 113												
PCB 114												
PCB 115												
PCB 116												
PCB 117												
PCB 118												
PCB 119												
PCB 12												
PCB 120												
PCB 121/95/88												
PCB 122												
PCB 124												
PCB 126												
PCB 127												
PCB 128												
PCB 129/158												
PCB 13												
PCB 130/164												
PCB 131												
PCB 132												
PCB 133												
PCB 134												
PCB 135												
PCB 136												
PCB 137												
PCB 138												
PCB 14												
PCB 140												
PCB 141												
PCB 142												
PCB 143/139												
PCB 144												
PCB 145												
PCB 146												
PCB 148												
PCB 15												
PCB 150												
PCB 151												
PCB 152												
PCB 153												
PCB 154												
PCB 155												
PCB 156												
PCB 157												
PCB 159												
PCB 16												
PCB 161												
PCB 162												
PCB 163/160												
PCB 165												
PCB 166												
PCB 167												
PCB 168												
PCB 169												

Table A-2  
 Surface Water Analytical Results Summary  
 Delaware River Screening-Level Ecological Risk Assessment  
 Chemours Chambers Works  
 Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT
		24790834,24790835 DER3-25 FS 11/15/2010	24790837,24790838 DER3-26 FS 11/15/2010	22369201,22369202 DER1-18 FS 9/23/2009	23626213,23626214 DER2-21 FS 4/21/2010	23626215,23626216 DER2-21 DUP 4/21/2010	23626218,23626219 DER2-24 FS 4/21/2010	22369216,22369217 DER1-29 FS 9/23/2009	22369218,22369219 DER1-29 DUP 9/23/2009	22369221,22369222 DER1-28 FS 9/23/2009	22437857,22437858 DER1-20 FS 9/24/2009	22437860,22437861 DER1-22 FS 9/24/2009
Chemical	Units											
PCB 17	ug/L											
PCB 170	ug/L											
PCB 171	ug/L											
PCB 172	ug/L											
PCB 173	ug/L											
PCB 174	ug/L											
PCB 176	ug/L											
PCB 177	ug/L											
PCB 178	ug/L											
PCB 179	ug/L											
PCB 18	ug/L											
PCB 180	ug/L											
PCB 181	ug/L											
PCB 182/175	ug/L											
PCB 183	ug/L											
PCB 184	ug/L											
PCB 185	ug/L											
PCB 186	ug/L											
PCB 187	ug/L											
PCB 188	ug/L											
PCB 189	ug/L											
PCB 19	ug/L											
PCB 190	ug/L											
PCB 191	ug/L											
PCB 192	ug/L											
PCB 193	ug/L											
PCB 194	ug/L											
PCB 195	ug/L											
PCB 196	ug/L											
PCB 197	ug/L											
PCB 198	ug/L											
PCB 199	ug/L											
PCB 2	ug/L											
PCB 201	ug/L											
PCB 202	ug/L											
PCB 203	ug/L											
PCB 204/200	ug/L											
PCB 205	ug/L											
PCB 206	ug/L											
PCB 207	ug/L											
PCB 208	ug/L											
PCB 209	ug/L											
PCB 21/20	ug/L											
PCB 22	ug/L											
PCB 23	ug/L											
PCB 24	ug/L											
PCB 25	ug/L											
PCB 26	ug/L											
PCB 27	ug/L											
PCB 28	ug/L											
PCB 29	ug/L											
PCB 3	ug/L											
PCB 30	ug/L											
PCB 31	ug/L											
PCB 32	ug/L											
PCB 33	ug/L											
PCB 34	ug/L											
PCB 35	ug/L											
PCB 36	ug/L											
PCB 37	ug/L											
PCB 38	ug/L											
PCB 39	ug/L											
PCB 4/10	ug/L											
PCB 40	ug/L											
PCB 41	ug/L											
PCB 42	ug/L											
PCB 43	ug/L											
PCB 44	ug/L											
PCB 45	ug/L											
PCB 47	ug/L											
PCB 48	ug/L											
PCB 49	ug/L											
PCB 5	ug/L											
PCB 50	ug/L											
PCB 51	ug/L											
PCB 52	ug/L											
PCB 53	ug/L											
PCB 54	ug/L											
PCB 55	ug/L											
PCB 56	ug/L											
PCB 57	ug/L											
PCB 59	ug/L											
PCB 6	ug/L											

Table A-2  
 Surface Water Analytical Results Summary  
 Delaware River Screening-Level Ecological Risk Assessment  
 Chemours Chambers Works  
 Deepwater, New Jersey

Chemical Class	River Zone Field Sample ID Location ID Sample Purpose Date	MZ-FPA	MZ-FPA	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT											
		24790834,24790835 DER3-25 FS 11/15/2010	24790837,24790838 DER3-26 FS 11/15/2010	22369201,22369202 DER1-18 FS 9/23/2009	23626213,23626214 DER2-21 FS 4/21/2010	23626215,23626216 DER2-21 DUP 4/21/2010	23626218,23626219 DER2-24 FS 4/21/2010	22369216,22369217 DER1-29 FS 9/23/2009	22369218,22369219 DER1-29 DUP 9/23/2009	22369221,22369222 DER1-28 FS 9/23/2009	22437857,22437858 DER1-20 FS 9/24/2009	22437860,22437861 DER1-22 FS 9/24/2009											
Chemical	Units																						
PCB 60	ug/L																						
PCB 61	ug/L																						
PCB 63	ug/L																						
PCB 65/75/62	ug/L																						
PCB 66	ug/L																						
PCB 67/58	ug/L																						
PCB 68/64	ug/L																						
PCB 69	ug/L																						
PCB 7	ug/L																						
PCB 70	ug/L																						
PCB 71	ug/L																						
PCB 72	ug/L																						
PCB 73/46	ug/L																						
PCB 74	ug/L																						
PCB 76	ug/L																						
PCB 77	ug/L																						
PCB 78	ug/L																						
PCB 79	ug/L																						
PCB 8	ug/L																						
PCB 80	ug/L																						
PCB 81	ug/L																						
PCB 82	ug/L																						
PCB 83/125/112	ug/L																						
PCB 85	ug/L																						
PCB 86/109	ug/L																						
PCB 87/111	ug/L																						
PCB 89/84	ug/L																						
PCB 9	ug/L																						
PCB 91	ug/L																						
PCB 92	ug/L																						
PCB 93	ug/L																						
PCB 94	ug/L																						
PCB 96	ug/L																						
PCB 97	ug/L																						
PCB 98	ug/L																						
PCB 99	ug/L																						
PCB-147/149	ug/L																						
PCB-90/101	ug/L																						
Pentachlorobiphenyl	ug/L																						
Tetrachlorobiphenyl	ug/L																						
Total Decachlorobiphenyls (congeners)	ug/L																						
Total Dichlorobiphenyls (congeners)	ug/L																						
Total Monochlorobiphenyls (congeners)	ug/L																						
Total Nonachlorobiphenyls (congeners)	ug/L																						
Total PCB (congeners)	ug/L																						
Trichlorobiphenyl (total)	ug/L																						
<b>Polycyclic Aromatic Hydrocarbons</b>																							
Acenaphthene	ug/L			1	U	1	U	0.9	U	1	U	1	U	1	U								
Acenaphthylene	ug/L			1	U	1	U	0.9	U	1	U	1	U	1	U								
Anthracene	ug/L			1	U	1	U	0.9	U	1	U	1	U	1	U								
Benzo(A)Anthracene	ug/L			1	U	1	U	0.9	U	1	U	1	U	1	U								
Benzo(B)Fluoranthene	ug/L			1	U	1	U	0.9	U	1	U	1	U	1	U								
Benzo(K)Fluoranthene	ug/L			1	U	1	U	0.9	U	1	U	1	U	1	U								
Benzo(A)Pyrene	ug/L			1	U	1	U	0.9	U	1	U	1	U	1	U								
Chrysene	ug/L			1	U	1	U	0.9	U	1	U	1	U	1	U								
Dibenz(A,H)Anthracene	ug/L			1	U	1	U	0.9	U	1	U	1	U	1	U								
Fluoranthene	ug/L			1	U	1	U	0.9	U	1	U	1	U	1	U								
Fluorene	ug/L			1	U	1	U	0.9	U	1	U	1	U	1	U								
Indeno (1,2,3-CD) Pyrene	ug/L			1	U	1	U	0.9	U	1	U	1	U	1	U								
Naphthalene	ug/L			1	U	1	U	0.9	U	1	U	1	U	1	U								
Phenanthrene	ug/L			1	U	1	U	0.9	U	1	U	1	U	1	U								
Pyrene	ug/L			1	U	1	U	0.9	U	1	U	1	U	1	U								
<b>Semivolatile Organic Compounds - TICs</b>																							
Total SVOC TICs	ug/L																						
UNKNOWN	ug/L			19		19.5		12.25		15.28571429		4.5		4.5		17.66666667		35		45		16.5	
UNKNOWN ALKANE	ug/L																						
UNKNOWN AROMATIC	ug/L																						
<b>Semivolatile Organic Compounds</b>																							
1,2,4-Trichlorobenzene	ug/L			1	U	1	U	0.9	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Dichlorobenzene	ug/L			1	U	1	U	0.9	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,2-Diphenylhydrazine	ug/L			1	U	1	U	0.9	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,3-Dichlorobenzene	ug/L			1	U	1	U	0.9	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dichlorobenzene	ug/L			1	U	1	U	0.9	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
1,4-Dioxane	ug/L																						
1-Naphthylamine	ug/L			5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U	5	U
2,3,4,6-Tetrachlorophenol	ug/L																						
2,4,5-Trichlorophenol	ug/L																						
2,4,6-Trichlorophenol	ug/L			1	U	1	U	0.9	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2,4-Dichlorophenol	ug/L			1	U	1	U	0.9	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2,4-Dimethylphenol	ug/L			3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U	3	U
2,4-Dinitrophenol	ug/L			20	U	19	U	19	U	19	U	19	U	19	U	19	U	19	U	20	U	19	U
2,4-Dinitrotoluene	ug/L			1	U	1	U	0.9	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
2,6-Dinitrotoluene	ug/L			1	U	1	U	0.9	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U

**Table A-2**  
**Surface Water Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Chemical Class Chemical	River Zone	MZ-FPA	MZ-FPA	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	MZ-SWMU5/HC	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT	CARNEYS PT
	Field Sample ID	24790834,24790835	24790837,24790838	22369201,22369202	23626213,23626214	23626215,23626216	23626218,23626219	22369216,22369217	22369218,22369219	22369221,22369222	22437857,22437858	22437860,22437861
	Location ID Sample Purpose Date	DER3-25 FS 11/15/2010	DER3-26 FS 11/15/2010	DER1-18 FS 9/23/2009	DER2-21 FS 4/21/2010	DER2-21 DUP 4/21/2010	DER2-24 FS 4/21/2010	DER1-29 FS 9/23/2009	DER1-29 DUP 9/23/2009	DER1-28 FS 9/23/2009	DER1-20 FS 9/24/2009	DER1-22 FS 9/24/2009
2-Chloronaphthalene	ug/L			2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
2-Chlorophenol	ug/L			1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U
2-Methylnaphthalene	ug/L											
2-Methylphenol (O-Cresol)	ug/L											
2-Naphthylamine	ug/L			5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
2-Nitroaniline	ug/L											
2-Nitrophenol	ug/L			1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U
3,3'-Dichlorobenzidine	ug/L			2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
3-Nitroaniline	ug/L											
4,6-Dinitro-2-Methylphenol	ug/L			5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
4-Aminobiphenyl	ug/L			2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
4-Bromophenyl Phenyl Ether	ug/L			1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U
4-Chloro-3-Methylphenol	ug/L			1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U
4-Chloroaniline	ug/L			1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U
4-Chlorophenyl Phenyl Ether	ug/L			2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
4-Methylphenol (P-Cresol)	ug/L											
4-Nitroaniline	ug/L											
4-Nitrophenol	ug/L			10 U	10 U	10 U	9 U	10 U	10 U	10 U	10 U	10 U
Acetophenone	ug/L											
Aniline	ug/L			1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U
Benzidine	ug/L			20 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U	19 U
Benzo(G,H,I)Perylene	ug/L			1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U
Biphenyl	ug/L											
Bis(2-Chloro-1-Methylethyl) Ether	ug/L			1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U
Bis(2-Chloroethoxy)Methane	ug/L			1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U
Bis(2-Chloroethyl)Ether	ug/L			1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U
Bis(2-Chloroisopropyl)Ether	ug/L			1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U
Bis(2-Ethylhexyl)Phthalate	ug/L			2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Butyl Benzyl Phthalate	ug/L			2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Carbazole	ug/L			1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U
Dibenzofuran	ug/L											
Diethyl Phthalate	ug/L			2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Dimethyl Phthalate	ug/L			2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Di-N-Butyl Phthalate	ug/L			2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Diphenyl Ether	ug/L											
Hexachlorobenzene	ug/L			1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U
Hexachlorobutadiene	ug/L			1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U
Hexachlorocyclopentadiene	ug/L			5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
Hexachloroethane	ug/L			1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U
Isophorone	ug/L			1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U
N-Dioctyl Phthalate	ug/L			2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
Nitrobenzene	ug/L			1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U
N-Nitrosodimethylamine	ug/L			2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
N-Nitrosodi-N-Propylamine	ug/L			1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U
N-Nitrosodiphenylamine	ug/L			2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
O-Toluidine	ug/L			1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U
Parathion	ug/L											
Pentachlorobenzene	ug/L											
Pentachlorophenol	ug/L			3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U	3 U
Phenol	ug/L			1 U	1 U	1 U	0.9 U	1 U	1 U	1 U	1 U	1 U
<b>Volatile Organic Compounds - TICs</b>												
ETHANE, 2,2-DICHLORO-1,1,1-	ug/L											
<b>Volatile Organic Compounds</b>												
1,1,1,2-Tetrachloroethane	ug/L											
1,1,1-Trichloroethane	ug/L	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1,2,2-Tetrachloroethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1,2-Trichloroethane	ug/L	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1,2-Trichlorotrifluoroethane	ug/L	17	16	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
1,1-Dichloroethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,1-Dichloroethene	ug/L	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U	0.8 U
1,1-Dichloropropene	ug/L											
1,2,4-Trimethylbenzene	ug/L											
1,2-Dibromoethane (EDB)	ug/L											
1,2-Dichlorobenzene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,2-Dichloroethene	ug/L											
1,2-Dichloropropane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,3,5-Trimethylbenzene	ug/L											
1,3-Dichlorobenzene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
1,4-Dichlorobenzene	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
2-Chloroethyl Vinyl Ether	ug/L	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U	2 U
2-Chlorotoluene	ug/L											
2-Hexanone	ug/L											
4-Chlorotoluene	ug/L											
4-Isopropyltoluene	ug/L											
Acetone	ug/L	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U	6 U
Acrolein	ug/L	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U	40 U
Acrylonitrile	ug/L	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U	4 U
Benzene	ug/L	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U	0.5 U
Bromodichloromethane	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Bromoform	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Disulfide	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
Carbon Tetrachloride	ug/L	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

**Table A-2**  
**Surface Water Analytical Results Summary**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Chemical Class	River Zone Field Sample ID Location ID Sample Purpose Date Units	MZ-FPA 24790834,24790835		MZ-FPA 24790837,24790838		MZ-SWMU5/HC 22369201,22369202		MZ-SWMU5/HC 23626213,23626214		MZ-SWMU5/HC 23626215,23626216		MZ-SWMU5/HC 23626218,23626219		CARNEYS PT 22369216,22369217		CARNEYS PT 22369218,22369219		CARNEYS PT 22369221,22369222		CARNEYS PT 22437857,22437858		CARNEYS PT 22437860,22437861		
		DER3-25 FS 11/15/2010	DER3-26 FS 11/15/2010	DER1-18 FS 9/23/2009	DER2-21 FS 4/21/2010	DER2-21 DUP 4/21/2010	DER2-24 FS 4/21/2010	DER1-29 FS 9/23/2009	DER1-29 DUP 9/23/2009	DER1-28 FS 9/23/2009	DER1-20 FS 9/24/2009	DER1-22 FS 9/24/2009												
Chlorobenzene	ug/L	2	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Chlorodibromomethane	ug/L	1	U	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Chloroform	ug/L	0.8	U	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
cis-1,2-Dichloroethene	ug/L	0.8	U	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
cis-1,3-Dichloropropene	ug/L	1	U	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Cumene	ug/L																							
Dichlorodifluoromethane	ug/L	2	U	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Dichlorofluoromethane	ug/L	2	U	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Ethyl Chloride	ug/L	1	U	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Ethylbenzene	ug/L	0.8	U	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Hexane	ug/L																							
Isobutyl Alcohol	ug/L																							
Meta- And Para-Xylene	ug/L																							
Methacrylonitrile	ug/L																							
Methyl Bromide	ug/L	1	U	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Methyl Chloride	ug/L	1	U	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Methyl Ethyl Ketone	ug/L																							
Methyl Isobutyl Ketone	ug/L																							
Methyl Methacrylate	ug/L																							
Methyl Tertiary Butyl Ether	ug/L																							
Methylene Chloride	ug/L	2	U	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
N-Butylbenzene	ug/L																							
N-Propylbenzene	ug/L																							
Ortho-Xylene	ug/L																							
Propionitrile	ug/L																							
sec-Butylbenzene	ug/L																							
Styrene	ug/L																							
tert-Butylbenzene	ug/L																							
Tetrachloroethene	ug/L	0.8	U	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
Tetrahydrofuran	ug/L																							
Toluene	ug/L	0.7	U	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U	0.7	U
trans-1,2-Dichloroethene	ug/L	0.8	U	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U
trans-1,3-Dichloropropene	ug/L	1	U	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichloroethene	ug/L	1	U	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Trichlorofluoromethane	ug/L	14	U	U	4	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U	2	U
Vinyl Chloride	ug/L	1	U	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U	1	U
Xylenes	ug/L	0.8	U	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U	0.8	U

Notes:  
Blank Cell - Chemical not analyzed  
TIC - Tentatively Identified Compound  
U - Result below detection limit

## **Appendix B**

### **Wildlife Exposure Modeling Documentation**



# Appendix B: Wildlife Exposure Modeling Documentation

Chemours Chambers Works  
Deepwater, New Jersey

November 2018

Submitted on behalf of  
The Chemours Company

Submitted by  
EHS Support LLC  
Collegeville, Pennsylvania

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## Acronym List

Acronym	Explanation
AUF	Area use factor
BAZ	Biologically Active Zone
BSAF	Biota-sediment accumulation factor
BTV	Background threshold value
BW	Body weight
COPEC	Constituent of Potential Ecological Concern
C <sub>sediment</sub>	Concentration in sediment
DDX	Dichlorodiphenyltrichloroethane and metabolites
dw	Dry weight
Eco-SSL	Ecological Soil Screening Level
EDD	Estimated daily dose
EPA	U.S. Environmental Protection Agency
EPC	Exposure point concentrations
HMW	High molecular weight
HQ	Hazard quotient
HQ <sub>High</sub>	Hazard quotient based on high TRV
HQ <sub>Low</sub>	Hazard quotient based on low TRV
Kg	Kilogram
K <sub>ow</sub>	Octanol-water partitioning coefficient
LMW	Low molecular weight
LOAEL	Lowest observed adverse effect level
MeHg	methylmercury
mg/kg	Milligrams per Kilogram
NOAEL	No observed adverse effect level
PAH	Polycyclic Aromatic Hydrocarbon
PCB	Polychlorinated Biphenyl
RME	Reasonable maximum exposure
SLERA	Screening-Level Ecological Risk Assessment
SVOC	Semi-Volatile Organic Compound
TOC	Total Organic Carbon
TRV	Toxicity reference value
TRV <sub>High</sub>	High toxicity reference value
TRV <sub>Low</sub>	Low toxicity reference value
UCL <sub>mean</sub>	Upper confidence limit of the mean
USACE	U.S. Army Corps of Engineers
USCHPPM	U.S. Army Center for Health Promotion and Preventive Medicine
VOC	Volatile organic compound
ww	Wet weight

## 1.0 Introduction

This appendix describes the approach for estimating dietary exposure to semi-aquatic wildlife in the *Delaware River Screening Level Ecological Risk Assessment (SLERA)* for the Delaware River at the Chemours Chambers Works in Deepwater, New Jersey. Representative species used to evaluate potential exposure to semi-aquatic wildlife receptors include:

- Piscivorous bird: Double-crested cormorant (*Phalacrocorax auritus*)
- Omnivorous bird: American black duck (*Anas rubripes*)

These representative wildlife receptors may be exposed to bioaccumulative constituents of potential ecological concern (COPECs) through the following primary exposure routes:

- Dietary items: Direct ingestion
- Bulk sediment: Incidental ingestion

Wildlife may also be exposed through the direct and incidental ingestion of surface water from the Delaware River. However, this exposure route provides a negligible contribution to the total receptor dose when compared to the direct ingestion of dietary items and the incidental ingestion of bulk sediment. Therefore, wildlife ingestion of surface water is not an exposure route that will be quantitatively evaluated in the SLERA.

The following sections describe the approach for estimating dietary doses to representative wildlife receptors based on the direct ingestion of COPECs in dietary items, and for select receptors, the incidental ingestion of COPECs in sediment. The following sections present the exposure modeling approach, the selection of wildlife toxicity reference values (TRVs), risk calculations based on dietary doses, and uncertainty in the dietary modeling approach.

## 2.0 Dietary Exposure Modeling

Wildlife ingestion exposure pathways were evaluated for exposure to constituents with the potential to bioaccumulate. Bioaccumulative constituents were defined as organic constituents with log octanol-water partitioning coefficients ( $K_{ow}$ ) greater than 3.5 (see SLERA Section 4.5.1) and inorganic constituents identified by the U.S. Environmental Protection Agency (EPA) as important bioaccumulative constituents (EPA, 2000). A summary of constituents not included in addition to those constituents not meeting the criteria established above include:

- Tin: Tin was not included in dietary exposure modeling because total tin measurements in sediment samples from the Delaware River are not representative of the bioavailable or toxic organic forms of tin. Inorganic tin and associated salts are not toxic due to poor absorption, relative insolubility of tin oxides, and rapid tissue turnover (Eisler, 2000). However, organotins may be toxic and have the potential to bioaccumulate; EPA (2000) lists tributyltin as an important bioaccumulative constituent. As a result, available bioaccumulation data and toxicity information is based on exposure to organotins, particularly tributyltin. In sediments, organotins are typically present in concentrations that are one to two orders of magnitude lower than inorganic tin (Eisler, 2000). Given that total tin concentrations in sediment are representative of inorganic tin and available bioaccumulation/toxicity relationships are based on organotins, estimates of dietary exposure based on the available tin data in sediments are not appropriate.
- Volatile organic compounds (VOCs): VOCs typically do not bioaccumulate sufficiently in prey tissue to pose a risk to upper trophic wildlife consumers, and few bioaccumulation studies are available for use in estimating uptake into prey items. Therefore, VOC exposure to upper trophic receptors via bioaccumulation pathways is considered minimal and is not further evaluated in this SLERA. Direct contact toxicity of volatile COPECs to sediment-dwelling organisms is the primary exposure route for VOCs evaluated in the SLERA (see Section 4.5.2).

The list of sediment constituents detected in the Delaware River SLERA that are considered bioaccumulative and are included in wildlife exposure models are presented in Table B1.

Deterministic dose rate models were developed to calculate the estimated daily dose (EDD) that semi-aquatic wildlife receptors may receive through foraging activities in the Delaware River. Deterministic exposure models were developed using a tiered approach that incorporates screening-level and refined exposure estimates:

- Screening-level exposure estimates: Maximum exposure scenarios based on maximum exposure point concentrations (EPCs), conservative exposure assumptions, and first-tier TRVs, consistent with NJDEP (2018).
- Refined exposure estimates: Refined exposure estimates using EPCs based on upper confidence limits of the mean concentrations ( $UCL_{mean}$ ) that assume random foraging throughout each exposure area, area-use adjusted EDDs, and alternate chronic TRVs.

The following sections describe the basic model structure, receptor-specific exposure factors, exposure parameters, exposure variables, and TRVs that were used for dietary exposure modeling in the SLERA.

## 2.1 Model Structure

The following equation forms the basis for the deterministic exposure estimate for a given receptor (Equation 1):

$$EDD_{total} = \frac{IR_{diet} \times \sum (BSAF_{dw} \times C_{sediment} \times DF_i) \times AUF}{BW} + \frac{IR_{sediment} \times C_{sediment} \times AUF}{BW}$$

where:

- $EDD_{total}$  = Estimated daily dose (mg COPEC/kg BW wet weight [ww]/day)
- $BW$  = Body weight (kg ww)
- $IR_{diet}$  = Ingestion rate of food (kg food/day, dry weight [dw])
- $BSAF_{dw}$  = Biota-sediment accumulation factor (BSAF), specific to prey type and COPEC (mg COPEC/kg sediment, dw)
- $C_{sediment}$  = COPEC concentration in sediment (mg COPEC/kg, dw)
- $DF_i$  = Dietary fraction of item  $i$  in total diet (proportion)
- $IR_{sediment}$  = Incidental ingestion rate of sediment (kg/day, dw)
- $AUF$  = Area use factor for exposure area; an AUF of 1.0 is assumed for the screening-level wildlife ingestion model.

A general discussion of parameter estimation for the deterministic models is provided below.

## 2.2 Model Parameters

Receptor-specific exposure factors and exposure variables used in the deterministic models are discussed in the following sections.

### 2.2.1 Receptor-Specific Exposure Factors

Various literature sources were reviewed to select the receptor-specific exposure factors, including the EPA *Wildlife Exposure Factors Handbook* (EPA, 1993). Additional receptor-specific literature sources were also used to supplement exposure data compiled in EPA (1993). Receptor-specific exposure factors used in the deterministic models are summarized in Table B2; these exposure factors were not altered between the screening-level and refined exposure evaluations for semi-aquatic wildlife. A brief rationale for the selection of receptor-specific exposure factors is provided below:

- Body weight: Receptor body weights were obtained from average body weights reported in literature studies. Modeled body weights for the double-crested cormorant and American black duck were based on average female body weights reported in a compilation of avian body masses by Dunning (2008). Average female body weights for both receptors were lower than average male body weights; the lower average body weights were selected to provide a more conservative EDD.
- Dietary composition: The relative composition of prey items in the diets of select wildlife receptors were estimated based on dietary studies obtained from the Cornell Laboratory of Ornithology (2017) and EPA (1993). An exclusive diet of

fish was assumed for the piscivorous double-crested cormorant. The dietary composition of the American black duck was assumed to be the same as a mallard, which is an omnivorous water bird. However, the American black duck was conservatively assumed to include exclusively invertebrate tissue, which is typical of the shift that occurs from a largely herbivorous diet in winter to a high protein diet of mainly animal tissue during spring molt and spring/summer egg production (Swanson and Meyer, 1973; Swanson et al., 1979; Swanson et al., 1985; Heitmeyer, 1988).

- Food ingestion rate: Food ingestion rates were estimated as dry weight intake based on receptor-specific body weight values using appropriate empirical allometric (scaling) relationships developed by Nagy (2001) for carnivorous birds. Allometric equations for each representative receptor are provided in the notes to Table B2.
- Sediment ingestion rate: Sediment ingestion rates were estimated as dry weight intake to be 2 and 4 percent of the dry weight dietary intake rate for the double-crested cormorant and American black duck, respectively (Beyer et al., 2008). The sediment ingestion rate for double-crested cormorant was assumed to be consistent with sediment ingestion rates reported for the red-breasted merganser (*Mergus serrator*), which has similar foraging habits as a cormorant (e.g., diving piscivore that ingests fish from the water-column). Beyer et al. (2008) reported sediment ingestion rates of less than 2 percent of red-breasted merganser in the Chesapeake Bay and coastal northeastern United States. Sediment ingestion rates of the American black duck were reported to be less than 4 percent of dry weight dietary intake (Beyer and Fries [2003], as cited in Beyer et al. [2008]).
- Home range: Typical home ranges for representative receptors were obtained based on average home ranges in literature compilations (USDA, 2016, DeGraaf and Yamasaki, 2001; see Table B2). The double-crested cormorant home range was estimated as 4,480 acres based on the minimum breeding season and winter home ranges reported in the Animal and Plant Health Inspection Service literature for the double-crested cormorant (USDA, 2016). For the American black duck, the home range was assumed to be similar to the mallard (*Anas platyrhynchos*) and was estimated as 700 acres based on the minimum mallard home range reported in DeGraaf and Yamasaki (2001).
- Area use factor (AUF): The AUF is an estimate of the proportion of the dose that a receptor may obtain due to foraging activities within the Delaware River, relative to foraging within the typical home range of the receptor. The AUF is simply the ratio of the size of the study area to the receptor home range or territory size. For the screening-level exposure estimates, an AUF of 1.0 was assumed. Based on this conservative assumption, the model assumes that 100 percent of the receptor dose is obtained by foraging within each of the four exposure areas (i.e., the Jackson Labs/TEL Area, Fluoroproducts Area, SWMU 5/Henby Creek Area, and Carneys Point Zone) within the Delaware River adjacent to Chambers Works.

AUFs based on the proportion of the exposure area relative to the receptor-specific home range were incorporated into the EDD calculations in the refined wildlife exposure models. AUFs were calculated based on the size of the exposure area represented by the coverage of sediment samples collected as part of the various sampling programs that comprised the SLERA dataset.

Receptor-exposure area AUFs were calculated by dividing the size of the exposure area by the receptor-specific home range. AUFs were applied to the dose estimates for the double-crested cormorant and American black duck within each of the four exposure zones as shown in Equation 1 (Section 2.1). The resulting hazard quotients (HQs) were summed, providing a spatially weighted, area-use adjusted estimate of the risk to receptors potentially foraging randomly along the shoreline of Chambers Works. A summary of the exposure area sizes, home ranges, and calculated AUFs is provided in the following table:

Receptor	Home Range (acres)	Area Use Factors (AUFs) by Exposure Area				
		Jackson Labs/ TEL Area (85.5 acres)	Fluoro-products Area (57.2 acres)	SWMU 5/ Henby Creek (55.7 acres)	Carneys Point Zone (204 acres)	Combined Exposure Areas (402 acres)
Double-crested cormorant	4480	0.019	0.013	0.012	0.046	0.090
American black duck	700	0.122	0.082	0.08	0.291	0.575

## 2.2.2 Exposure Variables

The screening-level exposure evaluation estimated dietary doses to wildlife based on a reasonable maximum exposure (RME) scenario; the refined exposure evaluation estimated dietary doses based on a conservative measure of average exposure. COPEC concentrations in dietary items were estimated based on biota-sediment accumulation factors (BSAFs) obtained from literature sources (e.g., DiToro and McGrath, 2000; Bechtel, 1998; Gobas et al., 2003) or the U.S. Army Corps of Engineers (USACE) BSAF Database (USACE, 2017). The following sections describe the approach used to estimate EPCs in sediment and dietary items.

### Sediment

EPCs for sediment were estimated based on COPEC concentrations in sediment samples collected in the Delaware River from the biologically active zone (BAZ) of sediment, operationally defined as the 0 to 0.5-foot sampling interval. Exposure data were limited to the BAZ because this is the depth where the potential for bioaccumulation into dietary items and incidental sediment ingestion occurs.

For the screening-level evaluation, estimates of the dose associated with the bioaccumulation of COPECs into dietary items and the incidental ingestion of sediment were based on the maximum detected COPEC concentration as the EPC. Refined exposure models estimated the dose from the bioaccumulation of COPECs into dietary items and incidental sediment ingestion based on the upper confidence limit of the mean COPEC concentration ( $UCL_{mean}$ ) in the BAZ. The EPA-developed software program ProUCL Version 5.1 (EPA, 2015) was used to calculate  $UCL_{mean}$  using the mode that considers results that are below the analytical detection limit. Analytical results below detection limits were input into ProUCL at the analytical detection limit and coded as non-detected results.

## Dietary Items

Literature-based BSAFs were used to estimate the bioaccumulation of COPECs into dietary (e.g., prey) items as a function of sediment concentrations. Sources of BSAFs are summarized below by COPEC group:

- **Metals:** BSAFs for metals were estimated based on the preferred models from literature compilations (Bechtel, 1998) and individual studies (e.g., Hirsch, 1998; Song and Breslin, 1999). BSAFs for metals are expressed on a dry weight basis ( $BSAF_{dw}$ ).
- **PAHs:** Concentrations of PAHs were estimated based on organic carbon and lipid-normalized BSAFs estimated using the relationship presented in DiToro and McGrath (2000).
- **Other organic COPECs:** For other organics, including semi-volatile organic compounds (SVOCs), pesticides, and polychlorinated biphenyls (PCBs), organic carbon and lipid normalized BSAFs were obtained from the USACE BSAF database. Geometric mean whole body, dry weight BSAFs from freshwater test organisms were selected preferentially from the USACE BSAF database. Sufficient data were not available in the USACE BSAF database for phthalates. Therefore, a normalized BSAF obtained from Gobas et al. (2003) based on chironomid uptake of phthalate esters was used to estimate the bioaccumulation of phthalates into benthic invertebrates.

Organic carbon and lipid-normalized BSAFs were estimated on a dry weight basis using average lipid and average sediment organic carbon content within each exposure area, as follows:

$$BSAF_{dw} = BSAF_{oc} \times f_{lipid} \div f_{oc}$$

where:

- $BSAF_{dw}$  = BSAF specific to prey type and COPEC (kg sediment/kg tissue, dw)
- $BSAF_{oc}$  = Organic carbon and lipid-normalized BSAF, specific to prey type and COPEC (kg organic carbon/kg lipid)
- $f_{lipid}$  = Fraction of lipid in dietary items (0.065 assumed for benthic invertebrates; 0.08 assumed for fish)
- $f_{oc}$  = Fraction of organic carbon in sediment (the average total organic carbon in BAZ for each of the four exposure zones: 1 percent for the Jacobs Lab/TEL Area, 1.6 percent for the Fluoroproducts Area, 0.76 percent for the SWMU 5/Henby Creek Area, and 2.1 percent for the Carneys Point Zone.)

$BSAF_{dw}$  values for metals and organics were multiplied by the COPEC concentration in sediment ( $C_{sediment}$ ) expressed as mg/kg dw to estimate the COPEC concentration in the dietary item (see Equation 1 in Section 2.1). For the screening-level evaluation, maximum concentrations of COPECs detected in the BAZ were used as  $C_{sediment}$  to estimate concentrations in dietary items. In the refined exposure evaluation,  $C_{sediment}$  was estimated as the  $UCL_{mean}$  concentrations. The maximum diet calculations for the four exposure zones are presented in Tables B3 through B6.

## 2.3 Toxicity Reference Values

EDDs calculated using Equation 1 in Section 2.1 were compared to conservative TRVs to evaluate the potential for adverse effects to semi-aquatic wildlife. Two tiers of chronic TRVs representing no observed adverse effects levels (NOAELs) and lowest observed adverse effects levels (LOAELs) for growth, reproduction, and survival endpoints were identified to evaluate the potential for adverse effects:

- NOAEL TRV ( $TRV_{NOAEL}$ ): Represents a chronic NOAEL TRV for growth and reproduction endpoints identified in literature studies; and
- LOAEL TRV ( $TRV_{LOAEL}$ ): Represents a chronic LOAEL TRV for growth and reproduction endpoints identified in literature studies.

The two tiers of TRVs were used to evaluate potential wildlife exposure based on EDDs calculated using screening-level and refined exposure assumptions. NJDEP (2018) recommends using TRVs that were developed as part of the *Focused Feasibility Report for the Lower Eight Miles of the Lower Passaic River* (EPA, 2014) as the first tier of TRVs to consider, but also indicates that alternate TRVs may be proposed. For screening-level estimates, first-tier TRVs were preferentially obtained from NJDEP (2018) *Ecological Evaluation Technical Guidance*, followed by second-tier compilations of toxicity data provided in EPA (2005a) and Sample et al. (1996). For constituents lacking toxicity data from these compilations, literature sources were reviewed as third-tier sources to identify appropriate NOAEL and LOAEL TRVs. Table B7 provides a summary of TRVs selected for use in the screening-level exposure estimate.

For some COPECs, the TRVs used in the refined wildlife ingestion model were consistent with the TRVs used in the screening-level model. However, alternate TRVs that are considered protective of chronic exposure were selected for some COPECs in the refined exposure evaluation. Consistent with the recommendations in the NJDEP *Ecological Evaluation Technical Guidance* (NJDEP, 2018), first-tier TRVs developed in the focused feasibility study (EPA, 2014) were used in the screening-level exposure estimate. The first-tier TRVs are considered to be conservative and not likely to result in a false negative determination of risk (i.e., erroneously eliminate a constituent from further evaluation when adverse effects occur).

Alternate TRVs were selected for copper, lead, mercury, total low molecular weight (LMW) polycyclic aromatic hydrocarbons (PAHs), and total high molecular weight (HMW) PAHs. Alternate TRVs for copper and lead were selected from studies accepted by EPA in the derivation of Ecological Soil Screening Levels (Eco-SSLs), which is considered to be a second-tier source in NJDEP guidance (NJDEP, 2018). The  $TRV_{NOAEL}$  and  $TRV_{LOAEL}$  for copper and lead were derived as the geometric mean of growth and reproduction NOAEL and LOAEL endpoints, respectively, from accepted Eco-SSL studies.

Alternate TRVs for total HMW PAHs were selected from a bounded study by Trust et al. (1994), which was the only bounded study of avian exposure to HMW PAHs that was accepted by EPA for the derivation of Eco-SSLs. The alternate TRV for HMW PAH is considered to be more representative of potential dietary exposure in the Delaware River because the first-tier  $TRV_{NOAEL}$  for HMW PAHs was developed based on a  $TRV_{LOAEL}$  (with uncertainty factors applied) established in a study that exposed pigeons intramuscularly to benzo(a)pyrene. Thus, the toxicant was introduced in a pure, fully bioavailable form via a non-dietary exposure route. Under typical exposure conditions in sediment, HMW PAHs would be partially if not entirely bound to the sediment matrix,

resulting in much lower bioavailability than the conditions used in the study. As a result, the first-tier  $TRV_{NOAEL}$  recommended by NJDEP is more than 40-times lower than the oral avian  $TRV_{NOAEL}$  of 2 mg/kg bw per day reported for Trust et al. (1994) in Eco-SSL guidance to develop conservative soil screening levels. For LMW PAHs, bounded endpoints from a study by Patton and Dieter (1980) were selected as alternate TRVs.

For mercury, alternate TRVs were selected to represent exposure to inorganic mercury, which is more representative of the total mercury concentrations measured in sediment samples collected in the Delaware River. First-tier TRVs for mercury provided in NJDEP (2018) were derived exposure to methylmercury (MeHg), the more bioavailable and toxic form of mercury. Mercury typically occurs in the environment in two forms: inorganic compounds of mercury, which exist as readily dissociated salts (e.g., mercuric chloride), and MeHg, which forms naturally in water from the bioconversion of inorganic forms of mercury. Although most mercury in aquatic systems consists of inorganic mercury, a variable amount of inorganic mercury may be methylated into MeHg, which may partition to biota or sediment or volatilize to air (ATSDR, 1999). The extent of mercury methylation is highly variable, depending on site-specific biogeochemical conditions, including pH, reduction-oxidation potential, organic content, microbial communities, and ambient temperature. Due to the site-specific factors that control mercury methylation, generalized estimates of the proportion of MeHg to total mercury are not reliable. However, MeHg concentrations typically represent a relatively low percentage (< 10 percent) of total mercury concentrations in sediment (e.g., Baralkiewicz et al., 2007). Therefore, total mercury concentrations in sediment are more representative of inorganic mercury concentrations than MeHg concentrations. As a result, the assumption that all total mercury measured in sediment samples collected from the Delaware River is MeHg is highly conservative.

Given that TRVs based on exposure to inorganic mercury are more representative of EDDs calculated using total mercury concentrations in sediment, a bounded study of chronic avian exposure to inorganic mercuric chloride reported in Hill and Schaffner (1976), as cited by Sample et al. (1996) was used as the basis for alternate TRVs for total mercury. Hill and Schaffner (1976) evaluated potential reproductive effects in Japanese quail (*Coturnix japonica*) exposed to dietary mercuric chloride over a period of one year. Based on reduced fertility and hatchability, a  $TRV_{LOAEL}$  was established at 0.9 mg/kg bw per day and  $TRV_{NOAEL}$  was established at 0.45 mg/kg bw per day. The resulting alternate  $TRV_{NOAEL}$  based on mercuric chloride is approximately 35 times greater than the first-tier  $TRV_{NOAEL}$  based on MeHg provided in NJDEP (2018).

Table B7 provides a summary of the TRVs selected to evaluate estimated doses to representative semi-aquatic wildlife receptors identified in the Delaware River. Only  $TRV_{NOAEL}$  values were used to develop conclusions during the screening-level wildlife exposure evaluation. The refined exposure evaluation also considered  $TRV_{LOAEL}$  results, as well as TRVs from alternate literature sources (Table B8), when appropriate.

## 3.0 Risk Characterization

The following sections present the approach for evaluating the potential for adverse effects to semi-aquatic wildlife receptors in the Delaware River based on EDDs calculated using the deterministic models described in Section 2.0.

### 3.1 Risk Calculation

Potential risks associated with dietary exposure to wildlife were expressed as HQs, which represent the ratio of the EDD to the TRV:

$$HQ = \frac{EDD}{TRV}$$

HQs are calculated for  $TRV_{NOAEL}$  ( $HQ_{NOAEL}$ ) and  $TRV_{LOAEL}$  ( $HQ_{LOAEL}$ ) for each EDD. Potential risk may be characterized based on HQs, as follows:

- $HQ_{NOAEL}$  value less than 1.0 indicates limited potential for adverse effects because the estimated EDD is below the NOAEL TRV; the potential for adverse effects is negligible. Only the  $HQ_{NOAEL}$  value is used for decisions during the screening-level evaluation for wildlife receptors.
- For the refined wildlife receptor evaluation,  $HQ_{NOAEL}$  values greater than 1.0 and  $HQ_{LOAEL}$  values less than 1.0 indicate that the EDD exceeds a conservative NOAEL TRV but is within the range of NOAEL to LOAEL TRVs identified in the literature; the potential for adverse population-level effects is minimal.
- $HQ_{LOAEL}$  values greater than 1.0 in the refined evaluation indicate that the EDD exceeds a LOAEL TRV and the potential for adverse effects cannot be dismissed; further evaluation of dietary exposure may be warranted.

For the screening-level exposure evaluation, potential risk to semi-aquatic birds was characterized within each exposure area (i.e., AUF = 1) based on the maximum exposure scenario. For the refined exposure evaluation, potential risk was characterized based on a more representative exposure scenario that accounts for the proportion of time receptors may forage within exposure areas while foraging randomly throughout each receptor-specific home range. To estimate the overall risk associated with exposure to bioaccumulative COPECs in sediment within the four exposure areas adjacent to Chambers Works, HQs calculated based on AUF-adjusted doses for each exposure area in the refined exposure evaluation were summed to provide overall HQs for the combined exposure areas.

### 3.2 Risk Characterization

Based on the modeling approach presented in the previous sections, exposure estimates for ingestion pathways were calculated for representative wildlife receptors that may opportunistically forage in the Delaware River. The following sections present the exposure estimates and risk characterizations for wildlife based on screening-level and refined exposure assumptions.

#### 3.2.1 Screening-Level Exposure Evaluation

Screening-level exposure estimates for the double-crested cormorant and American black duck based on the maximum exposure scenario are presented in Tables B9 through B16 for the four Delaware River exposure zones and summarized in Table B17.

The results of the screening-level evaluation of wildlife potentially foraging along the Delaware River shoreline adjacent to Chambers Works indicate the potential for adverse effects to semi-aquatic wildlife based on the maximum exposure scenario that assumes maximum EPCs and first-tier TRVs. HQs exceeding TRVs for any constituents based on modeled doses to the double-crested cormorant or American black duck are summarized in the table below. Based on conservative screening-level exposure assumptions, EDDs for all other bioaccumulative COPECs were lower than  $TRV_{NOAEL}$  values; no further evaluation of wildlife ingestion pathways was conducted for these COPECs.

Analyte	Double-crested Cormorant							
	Jackson Labs/TEL Area		Fluoroproducts Area		SWMU 5/Henby Creek Area		Carneys Point Zone	
	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>
Chromium	<1	<1	<1	<1	<1	<1	<1	<1
Copper	<1	<1	<1	<1	<1	<1	<1	<1
Lead	37.0	3.7	2.3	<1	2.8	<1	1.8	<1
Mercury	87.7	43.9	48.9	24.4	24.4	12.2	11.5	5.8
Total LMW PAHs	3.3	<1	5.5	<1	9.9	<1	<1	<1
Total HMW PAHs	149	14.9	180	18.0	289	28.8	10.8	1.1
Butyl Benzyl Phthalate	--	--	4.3	<1	--	--	--	--
Di-N-Butyl Phthalate	1.0	<1	<1	<1	5.8	<1	--	--
Analyte	American Black Duck							
	Jackson Labs/TEL Area		Fluoroproducts Area		SWMU 5/Henby Creek Area		Carneys Point Zone	
	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>
Chromium	22.2	3.8	1.4	<1	<1	<1	1.0	<1
Copper	4.8	2.4	4.2	2.0	4.5	2.2	4.3	2.1
Lead	54.1	5.4	3.3	<1	4.1	<1	2.6	<1
Mercury	105	52.7	58.7	29.4	29.3	14.7	13.8	6.9
Total LMW PAHs	3.2	<1	5.4	<1	9.6	<1	<1	<1
Total HMW PAHs	144	14.4	175	17.5	280	28.0	10.5	1.1
Butyl Benzyl Phthalate	--	--	4.2	<1	--	--	--	--
Di-N-Butyl Phthalate	<1	<1	<1	<1	5.7	<1	--	--

--(dash) = COPEC not detected

HMW = high molecular weight

LMW = low molecular weight

PAH = polycyclic aromatic hydrocarbons

Based on maximum EPCs, estimated doses of chromium, copper, lead, mercury, total LMW PAHs, total HMW PAHs, butyl benzyl phthalate, and di-n-butyl phthalate exceeded NOAEL-based TRVs (i.e.,  $HQ_{NOAEL} > 1$ ) for at least one receptor. The estimated dose of these COPECs, except LMW PAHs, butyl benzyl phthalate, and di-n-butyl phthalate, also exceeded the high TRV (i.e.,  $HQ_{LOAEL} > 1$ ) based on maximum exposure assumptions. Under the maximum exposure scenario, the greatest HQs were observed for mercury and total HMW PAHs. Elevated HQs for mercury are attributed to the first-tier TRVs for mercury in NJDEP (2018) that are based on MeHg. The comparison of EDDs modeled based on total mercury sediment concentrations to TRVs based on MeHg greatly overestimates exposure to wildlife. Further, the potential for adverse impacts to wildlife associated with HMW PAHs may be overestimated due to the use of the first-tier TRVs for total HMW PAHs recommended in NJDEP (2018), which are substantially lower than other chronic TRVs available from other sources (EPA, 2007).

No COPECs were eliminated due to low frequency of detection (i.e., detection frequency < 5 percent). Although chromium in the Fluoroproducts Area and Carneys Point Zone was detected at maximum concentrations that were below representative background threshold values (BTVs), chromium was retained for further evaluation in the refined exposure evaluation because concentrations in other zones exceeded background (Table B17). Therefore, chromium, copper, lead, mercury, LMW PAHs, HMW PAHs, butyl benzyl phthalate, and di-n-butyl phthalate were carried forward for further evaluation based on refined exposure assumptions.

### 3.2.2 Refined Exposure Evaluation

Refined exposure estimates for semi-aquatic wildlife were calculated using  $UCL_{mean}$  sediment concentrations as EPCs, AUF-adjusted doses, and alternate TRVs for bioaccumulative COPECs with  $HQ_{NOAEL}$  values > 1 in the screening-level evaluation. In addition, EDDs calculated based on AUF-adjusted doses were summed to provide a risk estimate for overall risk for the combined exposure areas.

The results of the refined evaluation indicate that exposure to COPECs in the Delaware River adjacent to Chambers Works are not likely to result in adverse effects to semi-aquatic wildlife. Refined dietary calculations for the four exposure zones based on  $UCL_{mean}$  EPCs are presented in Tables B18 through B21. Refined exposure estimates for the double-crested cormorant and American black duck are presented in Tables B22 through B29 for the four Delaware River exposure zones. A summary of AUF-weighted EDDs for double-crested cormorant and American black duck is provided in Table 30 for the four exposure zones;  $HQ_{NOAEL}$  and  $HQ_{LOAEL}$  values estimated for the refined exposure evaluation are provided below:

Analyte	Double-crested Cormorant									
	Jackson Labs/ TEL Area		Fluoroproducts Area		SWMU 5/Henby Creek Area		Carneys Point Zone		Area-Weighted $\Sigma$ HQ	
	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>
Chromium	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Copper	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Mercury	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total LMW PAHs	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total HMW PAHs	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl Benzyl Phthalate	--	--	<1	<1	--	--	--	--	<1	<1
Di-N-Butyl Phthalate	<1	<1	<1	<1	<1	<1	--	--	<1	<1

Analyte	American Black Duck									
	Jackson Labs/ TEL Area		Fluoroproducts Area		SWMU 5/Henby Creek Area		Carneys Point Zone		Area-Weighted $\Sigma$ HQ	
	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>	HQ <sub>NOAEL</sub>	HQ <sub>LOAEL</sub>
Chromium	<1	<1	<1	<1	<1	<1	<1	<1	1.0	<1
Copper	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Lead	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Mercury	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total LMW PAHs	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Total HMW PAHs	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Butyl Benzyl Phthalate	--	--	<1	<1	--	--	--	--	<1	<1
Di-N-Butyl Phthalate	<1	<1	<1	<1	<1	<1	--	--	<1	<1

--(dash) = COPEC not detected

HQ = hazard quotient

HMW = high molecular weight

LMW = low molecular weight

PAH = polycyclic aromatic hydrocarbon

Based on the refined exposure evaluation and comparisons to alternate TRVs, HQS<sub>NOAEL</sub> were < 1 within each exposure area. In addition, the sum of AUF-adjusted EDDs for double-crested cormorants and American black duck foraging within the combined exposure areas was equal to or less than alternate TRV<sub>NOAEL</sub> doses. These findings indicate that risk is negligible for the double-crested cormorant and American black duck populations that may forage along the shoreline of Chambers Works. Further discussion of wildlife exposure to the COPECs evaluated in the refined food chain model is presented in the following paragraphs.

Refined exposure estimates based on AUF-adjusted doses were lower than first-tier LOAEL TRVs for all estimated doses except mercury and HMW PAHs for the American black duck (Table B30). Except for HMW PAHs, summed AUF-adjusted EDDs based on refined exposure estimates for the double-crested cormorant were lower than the first-tier TRVs<sub>NOAEL</sub> (Table B30). The AUF-adjusted EDD for HMW PAHs for the double-crested cormorant was lower than the first-tier TRV<sub>LOAEL</sub> and the alternate TRV<sub>NOAEL</sub> (Table B30). For the American black duck, summed AUF-adjusted EDDs were lower

than the first-tier  $TRV_{NOAEL}$  for LMW PAHs and phthalate compounds. AUF-adjusted EDDs for American black duck were lower than the first-tier  $TRV_{LOAEL}$  for chromium, copper, and lead (Table B30).

Summed AUF-adjusted EDDs for mercury and HMW PAHs are not likely to adversely affect American black duck foraging within the exposure areas in the Delaware River adjacent to Chambers Works. The summed AUF-adjusted EDDs for mercury and HMW PAHs exceeded first-tier  $TRV_{LOAEL}$  values, resulting in  $HQ_{LOAEL}$  values of 2.3 and 1.5, respectively (Table B30). However, summed AUF-adjusted EDDs for total mercury and HMW PAHs were lower than the alternate  $TRV_{NOAEL}$  values (Table B30). First-tier TRVs for mercury were derived based on exposure to MeHg, the more bioavailable and toxic form of mercury. As discussed in greater detail in Section 2.3, the comparison of EDDs modeled based on total mercury EPCs to TRVs based on MeHg exposure greatly overestimates exposure to wildlife. The summed AUF-adjusted mercury EDD for all exposure areas was lower than the alternate  $TRV_{NOAEL}$  derived based on exposure to inorganic mercuric chloride (Hill and Schaffner [1976], as cited in Sample et al., 1996). Given that alternate TRVs for inorganic mercury are more appropriate for comparison with EDDs calculated using total mercury EPCs, these results indicate that mercury concentrations in sediment are not likely to adversely affect semi-aquatic wildlife foraging within the exposure areas adjacent to Chambers Works. As discussed in Section 2.3, the first-tier TRV for HMW PAHs is based on a non-dietary study. Therefore, the alternate TRV based on dietary exposure to HMW PAHs is more representative of exposure conditions to American black duck in the Delaware River.

In general, refined exposure estimates for the American black duck are greater than exposure estimates for the double-crested cormorant. Greater exposure to the American black duck in the refined exposure evaluation is attributed to greater area use associated with a smaller home range relative to the home range of the double-crested cormorant (Section 2.2.1). In addition, the estimated sediment ingestion rate for the American black duck was two times the estimated sediment ingestion rate of the double-crested cormorant, indicating greater contribution to the total dose from incidental sediment ingestion.

### 3.2.3 Risk Summary

The results of the refined exposure evaluation indicate negligible site-related risk to semi-aquatic wildlife that may potentially forage in the Delaware River in the area adjacent to Chambers Works. AUF-adjusted EDDs for semi-aquatic wildlife foraging calculated based on  $UCL_{mean}$  EPCs resulted in negligible risk (i.e.,  $HQ < 1$ ) for all COPECs and exposure areas when alternate TRVs were used in the refined exposure estimate. In addition,  $HQ_{NOAEL}$  values calculated based on summed AUF-adjusted doses for all exposure areas were less than or equal to 1 (Table B30). Potential exposure to the American black duck was greater than exposure to the double-crested cormorant due to the greater estimated area use and greater assumed incidental sediment ingestion rates. However, the findings of the refined exposure estimate indicate negligible risk to the double-crested cormorant and American black duck populations that may forage along the shoreline of Chambers Works. Based on these findings, no further evaluation of wildlife exposure in the Delaware River adjacent to Chambers Works is warranted. A discussion of the uncertainty associated with risk estimates for the American black duck and double-crested cormorant are presented in the following section.

## 4.0 Uncertainty Analysis

There is inherent uncertainty in estimating potential exposure to wildlife using the deterministic dietary models described in this appendix. Unlike probabilistic exposure modeling, deterministic models do not account for the variability in the selection of receptor-specific exposure factors or exposure variables. To minimize the uncertainty in selecting static exposure parameters and exposure variables, the models were parameterized with conservative exposure assumptions intended to minimize the probability of underestimating exposure to wildlife via ingestion pathways. Key uncertainties associated with model parameters that may overestimate, underestimate, or have an unknown effect on the estimation of exposure to wildlife receptors are summarized below:

- **Exposure factors:** Exposure factors selected for the model are intended to be representative of typical populations of wildlife receptors. Estimated rates of food and incidental sediment ingestion were based on standard sources of exposure parameters to provide representative estimates of typical intake. However, these parameters may not be representative of the site-specific exposure conditions and receptors that may forage within the Delaware River.
- **BSAFs:** Bioaccumulation of COPECs from sediment to receptors is site- and receptor-specific. Therefore, the use of literature-derived BSAFs may not accurately reflect the bioaccumulation of COPECs from sediment in the Delaware River. The uncertainty associated with estimating COPEC concentrations in biota based on sediment concentrations may underestimate or overestimate actual exposure.
- **Exposure point concentrations:** EPCs were intended to minimize the underestimation of exposure conditions in the deterministic model. In the screening-level evaluation, the EPC was based on the maximum detect concentration, which represents the worst-case exposure scenario by assuming that the receptors are exposed to the maximum concentration 100 percent of the time. Based on the maximum EPC, there is minimal uncertainty that the potential ecological risks from site-related COPECs were underestimated; however, it is highly likely that ecological risks from site-related COPECs were overestimated.

The refined exposure evaluation was intended to provide a more representative scenario of receptors that may be exposed to average concentrations of EPCs by foraging randomly throughout the Delaware River. The  $UCL_{mean}$  was used as a conservative estimate of the mean for the refined exposure evaluation to minimize the potential of underestimating the EDD.

- **Area use factor:** Deterministic models conservatively estimated EDDs based on receptors that forage 100 percent of the time within exposure areas defined for the Delaware River. As previously discussed, limited habitat within the riparian zone of the Delaware River adjacent to Chambers Works likely limits wildlife use to opportunistic wildlife. Therefore, the assumption of 100 percent area use likely overestimates wildlife exposure in the Delaware River in the screening-level exposure evaluation. The application of exposure area- and receptor-specific AUFs in the refined exposure estimate provide a more representative estimate of likely exposure resulting from typical foraging behavior adjacent to the site.
- **Seasonal variability:** Seasonal differences in dietary composition or foraging behavior are not accounted for in the estimation of EDD. Seasonal variability in

dietary preferences may result in lower or higher exposures. To minimize the effect of this uncertainty on risk calculations, more conservative exposure factors were used in the calculation of EDDs. For example, the dietary preference of the American black duck was assumed to be based on 100 percent consumption of benthic invertebrates to conservatively higher protein requirements during spring molt and spring/summer egg production (Section 2.2.2).

- Toxicity Reference Values: As discussed in Section 2.3, there was uncertainty in the application of some first-tier TRVs in the screening-level exposure evaluation due to differences in the chemical form of COPECs used as the basis for the TRV as compared to the form modeled in the deterministic models. This uncertainty was reduced with the application of alternate TRVs based on comparable forms measured in sediment.

Given the conservative parameters included in the deterministic exposure models, it is not likely that dietary exposures to wildlife were underestimated in the SLERA.

## 5.0 References

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## **Appendix B Tables**

**Table B1**  
**Summary of Bioaccumulative COPECs for Evaluation in Wildlife Exposure Modeling**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Log Octanol-Water Partitioning Coefficient (log K <sub>ow</sub> ) EPA EPISUITE	Important Bioaccumulative Constituent (EPA, 2000)	log K <sub>ow</sub> > 3.5	Bioaccumulative COPEC
<b>Metals</b>				
Aluminum	NA	No	No	No
Antimony	NA	No	No	No
Arsenic	NA	Yes	No	Yes
Barium	NA	No	No	No
Beryllium	NA	No	No	No
Cadmium	NA	Yes	No	Yes
Calcium	NA	No	No	No
Chromium	NA	Yes	No	Yes
Cobalt	NA	No	No	No
Copper	NA	Yes	No	Yes
Iron	NA	No	No	No
Lead	NA	Yes	No	Yes
Magnesium	NA	No	No	No
Manganese	NA	No	No	No
Mercury	NA	Yes	No	Yes
Nickel	NA	Yes	No	Yes
Potassium	NA	No	No	No
Selenium	NA	Yes	No	Yes
Silver	NA	Yes	No	Yes
Sodium	NA	No	No	No
Thallium	NA	No	No	No
Tin	NA	No	No	No
Titanium	NA	No	No	No
Vanadium	NA	No	No	No
Zinc	NA	Yes	No	Yes
<b>Polycyclic Aromatic Hydrocarbons</b>				
Acenaphthene	4.15	Yes	Yes	Yes
Acenaphthylene	3.22	Yes	No	Yes
Anthracene	4.53	Yes	Yes	Yes
Benzo(A)Anthracene	6.71	Yes	Yes	Yes
Benzo(B)Fluoranthene	6.27	Yes	Yes	Yes
Benzo(G,H,I)Perylene	6.51	Yes	Yes	Yes
Benzo(K)Fluoranthene	6.29	Yes	Yes	Yes
Benzo[A]Pyrene	6.11	No	Yes	Yes
Benzo[e]pyrene	6.11	No	Yes	Yes
Chrysene	5.71	Yes	Yes	Yes
Dibenz(A,H)Anthracene	6.71	Yes	Yes	Yes
Fluoranthene	5.08	Yes	Yes	Yes
Fluorene	4.21	Yes	Yes	Yes
Indeno (1,2,3-cd) Pyrene	6.72	No	Yes	Yes
Naphthalene	3.36	Yes	No	Yes
Phenanthrene	4.57	Yes	Yes	Yes
Pyrene	4.92	Yes	Yes	Yes
<b>Semi-Volatile Organic Compounds</b>				
1,2,4-Trichlorobenzene	3.93	Yes	Yes	Yes
1,2-Diphenylhydrazine	3.06	No	No	No
1,3-Dichlorobenzene	3.28	Yes	No	Yes

**Table B1**  
**Summary of Bioaccumulative COPECs for Evaluation in Wildlife Exposure Modeling**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Log Octanol-Water Partitioning Coefficient (log K <sub>ow</sub> ) EPA EPISUITE	Important Bioaccumulative Constituent (EPA, 2000)	log K <sub>ow</sub> > 3.5	Bioaccumulative COPEC
1-Naphthylamine	2.25	No	No	No
2,4-Dichlorophenol	2.80	No	No	No
2,4-Dinitrotoluene	2.18	No	No	No
2,6-Dinitrotoluene	2.18	No	No	No
2-Chlorophenol	2.16	No	No	No
2-Methylnaphthalene	3.72	No	Yes	Yes
2-Methylphenol (O-Cresol)	2.06	No	No	No
4-Chloroaniline	1.72	No	No	No
4-Methylphenol (P-Cresol)	2.06	No	No	No
Acetophenone	1.67	No	No	No
Aniline	1.08	No	No	No
Biphenyl	3.76	No	Yes	Yes
Bis(2-Ethylhexyl)Phthalate	8.39	No	Yes	Yes
Butyl Benzyl Phthalate	4.84	No	Yes	Yes
Carbazole	3.23	No	No	No
Dibenzofuran	3.71	No	Yes	Yes
Diethyl Phthalate	2.65	No	No	No
Di-N-Butyl Phthalate	4.61	No	Yes	Yes
Diphenyl Ether	4.05	No	Yes	Yes
Hexachlorobenzene	5.86	Yes	Yes	Yes
Hexachlorobutadiene	4.72	Yes	Yes	Yes
N-Dioctyl Phthalate	8.54	No	Yes	Yes
Nitrobenzene	1.81	No	No	No
N-Nitrosodiphenylamine	3.16	No	No	No
2-Chloronaphthalene	3.81	No	Yes	Yes
Pentachlorobenzene	5.22	No	Yes	Yes
Phenol	1.51	No	No	No
<b>Pesticides</b>				
4,4'-DDE	6.00	Yes	Yes	Yes
4,4'-DDT	6.79	Yes	Yes	Yes
Alpha-BHC	4.26	Yes	Yes	Yes
beta-BHC	4.26	Yes	Yes	Yes
delta-BHC	4.26	Yes	Yes	Yes
Endosulfan I	3.50	Yes	No	Yes
Endosulfan Sulfate	3.64	No	Yes	Yes
Heptachlor	5.86	Yes	Yes	Yes
<b>Polychlorinated Biphenyls</b>				
Total PCB (congeners)	NA	Yes	Yes	Yes

**Notes:**

COPEC: Constituent of Potential Ecological Concern

NA: Not Available

**Table B2**  
**Summary of Exposure Parameters for Wildlife Receptors of Concern**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Representative Species			Foraging Range <sup>a</sup>	Foraging Range Reference	Area Use Factor (AUF)		Body Weight (kg wet weight)		Dietary Composition					Ingestion Rates				
Common Name	Scientific Name	Food-web classification			Screening Estimate	Refined Estimate	Mean	Body Weight Reference	Plant Material	Invertebrates	Fish	Small Mammals	Dietary Composition Reference	Dietary		Incidental Substrate		
			kg dry weight/day	Reference										Average % of Dry Intake	kg dry weight/day	Reference		
<b>Avian Receptors</b>																		
Double-crested Cormorant	<i>Phalacrocorax auritus</i>	large aquatic piscivore	4480 ac	USDA (2016) <sup>d</sup>	1.0	0.09	1.83	Dunning (2008)			100%		Cornell Lab of Ornithology (2017)	0.1236	Nagy (2001) <sup>b</sup>	2%	0.0025	Beyer et al. (2008)
American Black Duck	<i>Anas rubripes</i>	Dabbling waterfowl	700 ac	DeGraaf and Yamasaki (2001) <sup>e</sup>	1.0	0.57	1.1	Dunning (2008)		100%			EPA (1993) <sup>f</sup>	0.0882	Nagy (2001) <sup>b</sup>	4%	0.0035	Beyer et al. (2008)

**Notes:**

a, ac, acres

b, Estimated food ingestion rate (kg/day dry weight) for carnivorous birds =  $(0.849[\text{Body Weight in grams}]^{0.663})/1000$  (Nagy 2001);

c, Ingestion of water is not considered a significant pathway, and is not evaluated. Drinking water ingestion rates provided for informational purposes only. See text for details.

d, Minimum home range in USDA (2016)

e, Assumed to be similar to mallard; DeGraaf and Yamasaki (2001)

f, Assumed to be similar to mallard; EPA (1993)

**Table B3**  
**Estimated Aquatic Prey Concentrations - Screening-Level Exposure Evaluation**  
**Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	log K <sub>ow</sub>	Maximum Sediment Concentration (mg/kg, dry weight)	Normalized BSAF (kg OC/kg lipid) <sup>a</sup>	Estimated Concentrations in Dietary Items of Aquatic Receptors (mg/kg, dry weight)					
				Aquatic Life Stage Benthic Invertebrates			Fish		
				BSAF <sup>b</sup>	Estimated Concentration	BSAF/BCF Reference	BSAF	Estimated Concentration	BSAF Reference
<b>Metals</b>									
Arsenic	NA	6.50E+01	NA	1.27E-01	8.26E+00	Bechtel-Jacobs (1998) <sup>c</sup>	1.54E-01	1.00E+01	Song and Breslin (1999) <sup>h</sup>
Cadmium	NA	1.67E+00	NA	3.07E+00	5.13E+00	Bechtel-Jacobs (1998) <sup>d</sup>	3.70E-02	6.18E-02	Song and Breslin (1999) <sup>h</sup>
Chromium	NA	1.17E+03	NA	5.88E-01	6.88E+02	Bechtel-Jacobs (1998) <sup>e</sup>	9.00E-03	1.05E+01	Song and Breslin (1999) <sup>h</sup>
Copper	NA	8.78E+01	NA	95% UPL	1.35E+02	Bechtel-Jacobs (1998) <sup>f</sup>	1.70E-01	1.49E+01	Song and Breslin (1999) <sup>h</sup>
Lead	NA	1.21E+03	NA	6.60E-02	7.99E+01	Bechtel-Jacobs (1998) <sup>c</sup>	6.60E-02	7.99E+01	Song and Breslin (1999) <sup>h</sup>
Mercury	NA	9.60E+00	NA	1.74E+00	1.67E+01	Bechtel-Jacobs (1998) <sup>e</sup>	1.74E+00	1.67E+01	Bechtel-Jacobs (1998) <sup>j</sup>
Nickel	NA	7.60E+01	NA	95% UPL	1.91E+01	Bechtel-Jacobs (1998) <sup>f</sup>	1.60E-01	1.22E+01	Song and Breslin (1999) <sup>h</sup>
Selenium	NA	4.41E+00	NA	1.42E+00	6.27E+00	Regression/developed <sup>g</sup>	1.42E+00	6.27E+00	Regression/developed <sup>i</sup>
Silver	NA	1.08E+00	NA	1.80E-01	1.94E-01	Hirsch (1998)	1.60E-01	1.73E-01	Song and Breslin (1999) <sup>h</sup>
Thallium	NA	4.21E+00	NA	2.00E-02	8.42E-02	Turner et al. (2013)	2.00E-02	8.42E-02	Turner et al. (2013) <sup>j</sup>
Tin	NA	9.87E+00	NA	1.20E+01	1.18E+02	Meador et al. (2002) <sup>h</sup>	2.02E+00	2.00E+01	Oregon DEQ (2017) <sup>h</sup>
Zinc	NA	2.84E+02	NA	95% UPL	3.42E+02	Bechtel-Jacobs (1998) <sup>f</sup>	2.16E-01	6.13E+01	Song and Breslin (1999) <sup>h</sup>
<b>Pesticides/Herbicides</b>									
4,4'-DDE	6.0	1.10E-03	6.12E+00	3.98E+01	4.38E-02	USACE BSAF Database	4.90E+01	5.39E-02	USACE BSAF Database
4,4'-DDT	6.79	1.50E-03	5.68E-01	3.69E+00	5.54E-03	USACE BSAF Database	4.54E+00	6.81E-03	USACE BSAF Database
Total DDX		2.60E-03			4.93E-02			6.07E-02	
Alpha-BHC	4.26	2.90E-03	6.70E-01	4.36E+00	1.26E-02	USACE BSAF Database	5.36E+00	1.55E-02	USACE BSAF Database
beta-BHC	4.26	2.50E-02	4.00E-01	2.60E+00	6.50E-02	USACE BSAF Database	3.20E+00	8.00E-02	USACE BSAF Database
delta-BHC	4.26	1.60E-03	3.39E-01	2.20E+00	3.53E-03	USACE BSAF Database	2.71E+00	4.34E-03	USACE BSAF Database
Endosulfan I	3.5	9.20E-03	2.62E-01	1.70E+00	1.57E-02	USACE BSAF Database	2.10E+00	1.93E-02	USACE BSAF Database
Endosulfan Sulfate	3.64	1.80E-03	2.62E-01	1.70E+00	3.07E-03	USACE BSAF Database	2.10E+00	3.77E-03	USACE BSAF Database
Heptachlor	5.86	5.50E-02	1.56E-01	1.01E+00	5.58E-02	USACE BSAF Database	1.25E+00	6.86E-02	USACE BSAF Database
<b>Polychlorinated biphenyls (PCBs)</b>									
Total PCB (congeners)	NA	2.65E-01	7.22E-01	4.69E+00	1.24E+00	USACE BSAF Database	3.85E+00	1.02E+00	USACE BSAF Database

**Table B3**  
**Estimated Aquatic Prey Concentrations - Screening-Level Exposure Evaluation**  
**Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	log K <sub>ow</sub>	Maximum Sediment Concentration (mg/kg, dry weight)	Normalized BSAF (kg OC/kg lipid) <sup>a</sup>	Estimated Concentrations in Dietary Items of Aquatic Receptors (mg/kg, dry weight)					
				Aquatic Life Stage Benthic Invertebrates			Fish		
				BSAF <sup>b</sup>	Estimated Concentration	BSAF/BCF Reference	BSAF	Estimated Concentration	BSAF Reference
<b>Semi-volatile Organic Compounds (SVOCs) - Polycyclic Aromatic Hydrocarbons (PAHs)</b>									
Low Molecular Weight (LMW) PAHs:									
Acenaphthene	4.15	6.30E-01	6.96E-01	4.52E+00	2.85E+00	DiToro and McGrath (2000)	5.56E+00	3.51E+00	DiToro and McGrath (2000)
Acenaphthylene	3.22	2.70E-01	7.54E-01	4.90E+00	1.32E+00	DiToro and McGrath (2000)	6.04E+00	1.63E+00	DiToro and McGrath (2000)
Anthracene	4.53	9.80E-01	6.73E-01	4.37E+00	4.29E+00	DiToro and McGrath (2000)	5.38E+00	5.27E+00	DiToro and McGrath (2000)
Fluorene	4.21	4.00E-01	6.92E-01	4.50E+00	1.80E+00	DiToro and McGrath (2000)	5.53E+00	2.21E+00	DiToro and McGrath (2000)
Naphthalene	3.36	1.50E+00	7.45E-01	4.84E+00	7.27E+00	DiToro and McGrath (2000)	5.96E+00	8.94E+00	DiToro and McGrath (2000)
Phenanthrene	4.57	2.10E+00	6.70E-01	4.36E+00	9.15E+00	DiToro and McGrath (2000)	5.36E+00	1.13E+01	DiToro and McGrath (2000)
Total LMW PAHs		5.88E+00			2.67E+01			3.28E+01	
High Molecular Weight (HMW) PAHs:									
Benzo(a)anthracene	6.71	2.30E+00	5.56E-01	3.61E+00	8.31E+00	DiToro and McGrath (2000)	4.45E+00	1.02E+01	DiToro and McGrath (2000)
Benzo[A]Pyrene	6.11	2.00E+00	5.86E-01	3.81E+00	7.62E+00	DiToro and McGrath (2000)	4.69E+00	9.37E+00	DiToro and McGrath (2000)
Benzo(b)fluoranthene	6.27	2.30E+00	5.78E-01	3.76E+00	8.64E+00	DiToro and McGrath (2000)	4.62E+00	1.06E+01	DiToro and McGrath (2000)
Benzo(g,h,i)perylene	6.51	1.10E+00	5.66E-01	3.68E+00	4.05E+00	DiToro and McGrath (2000)	4.53E+00	4.98E+00	DiToro and McGrath (2000)
Benzo(k)fluoranthene	6.29	1.30E+00	5.77E-01	3.75E+00	4.87E+00	DiToro and McGrath (2000)	4.61E+00	6.00E+00	DiToro and McGrath (2000)
Chrysene	5.71	2.00E+00	6.07E-01	3.94E+00	7.89E+00	DiToro and McGrath (2000)	4.85E+00	9.71E+00	DiToro and McGrath (2000)
Dibenz(A,H)Anthracene	6.71	2.10E-01	5.56E-01	3.61E+00	7.59E-01	DiToro and McGrath (2000)	4.45E+00	9.34E-01	DiToro and McGrath (2000)
Fluoranthene	5.08	5.50E+00	6.41E-01	4.17E+00	2.29E+01	DiToro and McGrath (2000)	5.13E+00	2.82E+01	DiToro and McGrath (2000)
Indeno (1,2,3-CD) Pyrene	6.72	1.00E+00	5.55E-01	3.61E+00	3.61E+00	DiToro and McGrath (2000)	4.44E+00	4.44E+00	DiToro and McGrath (2000)
Pyrene	4.92	4.00E+00	6.50E-01	4.23E+00	1.69E+01	DiToro and McGrath (2000)	5.20E+00	2.08E+01	DiToro and McGrath (2000)
Total HMW PAHs		2.17E+01			8.56E+01			1.05E+02	
<b>Semi-volatile Organic Compounds (SVOCs) - Non-PAH SVOCs</b>									
1,2,4-Trichlorobenzene	3.93	2.70E+01	7.09E-01	4.61E+00	1.24E+02	DiToro and McGrath (2000) <sup>j</sup>	5.67E+00	1.53E+02	DiToro and McGrath (2000) <sup>j</sup>
2-Methylnaphthalene	3.72	1.80E-01	7.22E-01	4.69E+00	8.45E-01	DiToro and McGrath (2000) <sup>j</sup>	5.78E+00	1.04E+00	DiToro and McGrath (2000) <sup>j</sup>
Biphenyl	3.76	ND	5.15E-01	3.35E+00	--	USACE BSAF Database	4.12E+00	--	USACE BSAF Database

**Table B3**  
**Estimated Aquatic Prey Concentrations - Screening-Level Exposure Evaluation**  
**Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	log K <sub>ow</sub>	Maximum Sediment Concentration (mg/kg, dry weight)	Normalized BSAF (kg OC/kg lipid) <sup>a</sup>	Estimated Concentrations in Dietary Items of Aquatic Receptors (mg/kg, dry weight)					
				Aquatic Life Stage Benthic Invertebrates			Fish		
				BSAF <sup>b</sup>	Estimated Concentration	BSAF/BCF Reference	BSAF	Estimated Concentration	BSAF Reference
Bis(2-Ethylhexyl)Phthalate	8.39	4.10E-01	5.00E-01	3.25E+00	1.33E+00	Gobas et al. (2003) <sup>k</sup>	4.00E+00	1.64E+00	Gobas et al. (2003) <sup>k</sup>
Butyl Benzyl Phthalate	4.84	ND	5.00E-01	3.25E+00	--	Gobas et al. (2003) <sup>k</sup>	4.00E+00	--	Gobas et al. (2003) <sup>k</sup>
Dibenzofuran	3.71	ND	7.23E-01	4.70E+00	--	DiToro and McGrath (2000) <sup>j</sup>	5.78E+00	--	DiToro and McGrath (2000) <sup>j</sup>
Di-N-Butyl Phthalate	4.61	4.10E-01	5.00E-01	3.25E+00	1.33E+00	Gobas et al. (2003) <sup>k</sup>	4.00E+00	1.64E+00	Gobas et al. (2003) <sup>k</sup>
Diphenyl Ether	4.05	ND	7.02E-01	4.56E+00	--	DiToro and McGrath (2000) <sup>j</sup>	5.61E+00	--	DiToro and McGrath (2000) <sup>j</sup>
Hexachlorobenzene	5.86	4.90E-02	1.38E+00	8.98E+00	4.40E-01	USACE BSAF Database	1.11E+01	5.42E-01	USACE BSAF Database
Hexachlorobutadiene	4.72	ND	6.62E-01	4.30E+00	--	DiToro and McGrath (2000) <sup>j</sup>	5.29E+00	--	DiToro and McGrath (2000) <sup>j</sup>
N-Dioctyl Phthalate	8.54	6.60E-01	5.00E-01	3.25E+00	2.15E+00	Gobas et al. (2003) <sup>k</sup>	4.00E+00	2.64E+00	Gobas et al. (2003) <sup>k</sup>
2-Chloronaphthalene	3.81	ND	7.16E-01	4.66E+00	--	DiToro and McGrath (2000) <sup>j</sup>	5.73E+00	--	DiToro and McGrath (2000) <sup>j</sup>
Pentachlorobenzene	5.22	ND	6.33E-01	4.12E+00	--	USACE BSAF Database	5.07E+00	--	USACE BSAF Database

**Notes:**

NA, Normalized BSAF was not applicable for metals  
 ND, Not detected

a, Normalized BSAF (kg OC / kg lipid) calculated based on K<sub>ow</sub>, where BSAF = K<sub>ow</sub><sup>-0.038</sup> (DiToro and McGrath 2000)

b, For organic constituents, normalized BSAFs were expressed on a dry weight basis using sediment organic carbon and lipid content as follows:

$$BSAF_{dw} = BSAF_{norm} \times f_{lipid} \div f_{oc}$$

where:

BSAF<sub>norm</sub> = Normalized BSAF (kg OC/kg lipid)

f<sub>lipid</sub> = Fraction of lipids in prey item expressed on a dry weight basis (0.065, invertebrates; 0.08, fish)

f<sub>oc</sub> = Fraction of sediment organic carbon expressed on a dry weight basis (0.01 or 1%)

c, Median BSAF for non-depurated invertebrates determined by Bechtel (1998)

d, 90th percentile BSAF for depurated invertebrates determined by Bechtel (1998)

e, 90th percentile BSAF for non-depurated invertebrates determined by Bechtel (1998)

f, 95% upper predictive limit equation for all organisms (copper) or only depurated organisms (nickel and zinc) from Bechtel (1998)

g, Invertebrate concentrations (mg/kg dry weight) calculated based on regression models, where slopes (B1) and intercepts (B0) are as follows:

Metal	B0	B1	Data Source for Model
Selenium	--	1.422	Hamilton and Buhl (2003a and 2003b)

h, Mean BSAF calculated from Song and Breslin (1999)

i, Sediment-to-fish BSAFs could not be identified; therefore, concentrations in fish were assumed to be equal to concentrations in benthic invertebrates.

j, Method described in DiToro and McGrath (2000) used when empirical data not available from USACE BSAF database.

k, Based on the normalized BSAF for phthalate esters for chironomids reported in Gobas et al. (2003).

**Table B4**  
**Estimated Aquatic Prey Concentrations - Screening-Level Exposure Evaluation**  
**Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	log K <sub>ow</sub>	Maximum Sediment Concentration (mg/kg, dry weight)	Normalized BSAF (kg OC/kg lipid) <sup>a</sup>	Estimated Concentrations in Dietary Items of Aquatic Receptors (mg/kg, dry weight)					
				Aquatic Life Stage Benthic Invertebrates			Fish		
				BSAF <sup>b</sup>	Estimated Concentration	BSAF/BCF Reference	BSAF	Estimated Concentration	BSAF Reference
<b>Metals</b>									
Arsenic	NA	4.57E+01	NA	1.27E-01	5.80E+00	Bechtel-Jacobs (1998) <sup>c</sup>	1.54E-01	7.04E+00	Song and Breslin (1999) <sup>h</sup>
Cadmium	NA	1.60E+00	NA	3.07E+00	4.92E+00	Bechtel-Jacobs (1998) <sup>d</sup>	3.70E-02	5.92E-02	Song and Breslin (1999) <sup>h</sup>
Chromium	NA	7.36E+01	NA	5.88E-01	4.33E+01	Bechtel-Jacobs (1998) <sup>e</sup>	9.00E-03	6.62E-01	Song and Breslin (1999) <sup>h</sup>
Copper	NA	5.31E+01	NA	95% UPL	1.18E+02	Bechtel-Jacobs (1998) <sup>f</sup>	1.70E-01	9.03E+00	Song and Breslin (1999) <sup>h</sup>
Lead	NA	7.48E+01	NA	6.60E-02	4.94E+00	Bechtel-Jacobs (1998) <sup>c</sup>	6.60E-02	4.94E+00	Song and Breslin (1999) <sup>h</sup>
Mercury	NA	5.35E+00	NA	1.74E+00	9.31E+00	Bechtel-Jacobs (1998) <sup>e</sup>	1.74E+00	9.31E+00	Bechtel-Jacobs (1998) <sup>i</sup>
Nickel	NA	3.88E+01	NA	95% UPL	1.20E+01	Bechtel-Jacobs (1998) <sup>f</sup>	1.60E-01	6.21E+00	Song and Breslin (1999) <sup>h</sup>
Selenium	NA	3.26E+00	NA	1.42E+00	4.64E+00	Regression/developed <sup>g</sup>	1.42E+00	4.64E+00	Regression/developed <sup>d</sup>
Silver	NA	1.44E+00	NA	1.80E-01	2.59E-01	Hirsch (1998)	1.60E-01	2.30E-01	Song and Breslin (1999) <sup>h</sup>
Thallium	NA	2.47E-01	NA	2.00E-02	4.94E-03	Turner et al. (2013)	2.00E-02	4.94E-03	Turner et al. (2013) <sup>i</sup>
Tin	NA	1.80E+01	NA	1.92E+01	3.46E+02	Meador et al. (2002) <sup>h</sup>	2.02E+00	3.64E+01	Oregon DEQ (2017) <sup>h</sup>
Zinc	NA	2.16E+02	NA	95% UPL	3.31E+02	Bechtel-Jacobs (1998) <sup>f</sup>	2.16E-01	4.67E+01	Song and Breslin (1999) <sup>h</sup>
<b>Pesticides/Herbicides</b>									
4,4'-DDE	6.0	ND	6.12E+00	2.49E+01	--	USACE BSAF Database	3.06E+01	--	USACE BSAF Database
4,4'-DDT	6.79	ND	5.68E-01	2.31E+00	--	USACE BSAF Database	2.84E+00	--	USACE BSAF Database
Total DDx		0.00E+00			0.00E+00			0.00E+00	
Alpha-BHC	4.26	ND	6.70E-01	2.72E+00	--	USACE BSAF Database	3.35E+00	--	USACE BSAF Database
beta-BHC	4.26	ND	4.00E-01	1.63E+00	--	USACE BSAF Database	2.00E+00	--	USACE BSAF Database
delta-BHC	4.26	ND	3.39E-01	1.38E+00	--	USACE BSAF Database	1.70E+00	--	USACE BSAF Database
Endosulfan I	3.5	ND	2.62E-01	1.06E+00	--	USACE BSAF Database	1.31E+00	--	USACE BSAF Database
Endosulfan Sulfate	3.64	ND	2.62E-01	1.06E+00	--	USACE BSAF Database	1.31E+00	--	USACE BSAF Database
Heptachlor	5.86	ND	1.56E-01	6.34E-01	--	USACE BSAF Database	7.80E-01	--	USACE BSAF Database
<b>Polychlorinated biphenyls (PCBs)</b>									
Total PCB (congeners)	NA	9.60E-01	7.22E-01	2.93E+00	2.81E+00	USACE BSAF Database	3.85E+00	3.69E+00	USACE BSAF Database

**Table B4**  
**Estimated Aquatic Prey Concentrations - Screening-Level Exposure Evaluation**  
**Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	log K <sub>ow</sub>	Maximum Sediment Concentration (mg/kg, dry weight)	Normalized BSAF (kg OC/kg lipid) <sup>a</sup>	Estimated Concentrations in Dietary Items of Aquatic Receptors (mg/kg, dry weight)					
				Aquatic Life Stage Benthic Invertebrates			Fish		
				BSAF <sup>b</sup>	Estimated Concentration	BSAF/BCF Reference	BSAF	Estimated Concentration	BSAF Reference
<b>Semi-volatile Organic Compounds (SVOCs) - Polycyclic Aromatic Hydrocarbons (PAHs)</b>									
Low Molecular Weight (LMW) PAHs:									
Acenaphthene	4.15	7.30E-01	6.96E-01	2.83E+00	2.06E+00	DiToro and McGrath (2000)	3.48E+00	2.54E+00	DiToro and McGrath (2000)
Acenaphthylene	3.22	1.90E-01	7.54E-01	3.07E+00	5.82E-01	DiToro and McGrath (2000)	3.77E+00	7.17E-01	DiToro and McGrath (2000)
Anthracene	4.53	1.90E+00	6.73E-01	2.73E+00	5.19E+00	DiToro and McGrath (2000)	3.36E+00	6.39E+00	DiToro and McGrath (2000)
Fluorene	4.21	6.40E-01	6.92E-01	2.81E+00	1.80E+00	DiToro and McGrath (2000)	3.46E+00	2.21E+00	DiToro and McGrath (2000)
Naphthalene	3.36	7.40E+00	7.45E-01	3.03E+00	2.24E+01	DiToro and McGrath (2000)	3.73E+00	2.76E+01	DiToro and McGrath (2000)
Phenanthrene	4.57	4.50E+00	6.70E-01	2.72E+00	1.23E+01	DiToro and McGrath (2000)	3.35E+00	1.51E+01	DiToro and McGrath (2000)
Total LMW PAHs		1.54E+01			4.43E+01			5.45E+01	
High Molecular Weight (HMW) PAHs:									
Benzo(a)anthracene	6.71	5.30E+00	5.56E-01	2.26E+00	1.20E+01	DiToro and McGrath (2000)	2.78E+00	1.47E+01	DiToro and McGrath (2000)
Benzo[A]Pyrene	6.11	4.00E+00	5.86E-01	2.38E+00	9.52E+00	DiToro and McGrath (2000)	2.93E+00	1.17E+01	DiToro and McGrath (2000)
Benzo(b)fluoranthene	6.27	4.50E+00	5.78E-01	2.35E+00	1.06E+01	DiToro and McGrath (2000)	2.89E+00	1.30E+01	DiToro and McGrath (2000)
Benzo(g,h,i)perylene	6.51	1.80E+00	5.66E-01	2.30E+00	4.14E+00	DiToro and McGrath (2000)	2.83E+00	5.09E+00	DiToro and McGrath (2000)
Benzo(k)fluoranthene	6.29	1.70E+00	5.77E-01	2.34E+00	3.98E+00	DiToro and McGrath (2000)	2.88E+00	4.90E+00	DiToro and McGrath (2000)
Chrysene	5.71	9.50E+00	6.07E-01	2.46E+00	2.34E+01	DiToro and McGrath (2000)	3.03E+00	2.88E+01	DiToro and McGrath (2000)
Dibenz(A,H)Anthracene	6.71	6.60E-01	5.56E-01	2.26E+00	1.49E+00	DiToro and McGrath (2000)	2.78E+00	1.83E+00	DiToro and McGrath (2000)
Fluoranthene	5.08	6.30E+00	6.41E-01	2.60E+00	1.64E+01	DiToro and McGrath (2000)	3.21E+00	2.02E+01	DiToro and McGrath (2000)
Indeno (1,2,3-CD) Pyrene	6.72	1.70E+00	5.55E-01	2.26E+00	3.84E+00	DiToro and McGrath (2000)	2.78E+00	4.72E+00	DiToro and McGrath (2000)
Pyrene	4.92	6.70E+00	6.50E-01	2.64E+00	1.77E+01	DiToro and McGrath (2000)	3.25E+00	2.18E+01	DiToro and McGrath (2000)
Total HMW PAHs		4.22E+01			1.03E+02			1.27E+02	
<b>Semi-volatile Organic Compounds (SVOCs) - Non-PAH SVOCs</b>									
1,2,4-Trichlorobenzene	3.93	2.00E+00	7.09E-01	2.88E+00	5.76E+00	DiToro and McGrath (2000) <sup>j</sup>	3.55E+00	7.09E+00	DiToro and McGrath (2000) <sup>j</sup>
2-Methylnaphthalene	3.72	3.80E-01	7.22E-01	2.93E+00	1.11E+00	DiToro and McGrath (2000) <sup>j</sup>	3.61E+00	1.37E+00	DiToro and McGrath (2000) <sup>j</sup>
Biphenyl	3.76	1.20E-01	5.15E-01	2.09E+00	2.51E-01	USACE BSAF Database	2.58E+00	3.09E-01	USACE BSAF Database
Bis(2-Ethylhexyl)Phthalate	8.39	1.20E+00	5.00E-01	2.03E+00	2.44E+00	Gobas et al. (2003) <sup>k</sup>	2.50E+00	3.00E+00	Gobas et al. (2003) <sup>k</sup>

**Table B4**  
**Estimated Aquatic Prey Concentrations - Screening-Level Exposure Evaluation**  
**Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	log K <sub>ow</sub>	Maximum Sediment Concentration (mg/kg, dry weight)	Normalized BSAF (kg OC/kg lipid) <sup>a</sup>	Estimated Concentrations in Dietary Items of Aquatic Receptors (mg/kg, dry weight)					
				Aquatic Life Stage Benthic Invertebrates			Fish		
				BSAF <sup>b</sup>	Estimated Concentration	BSAF/BCF Reference	BSAF	Estimated Concentration	BSAF Reference
Butyl Benzyl Phthalate	4.84	2.80E+00	5.00E-01	2.03E+00	5.69E+00	Gobas et al. (2003) <sup>k</sup>	2.50E+00	7.00E+00	Gobas et al. (2003) <sup>k</sup>
Dibenzofuran	3.71	2.80E-01	7.23E-01	2.94E+00	8.22E-01	DiToro and McGrath (2000) <sup>j</sup>	3.61E+00	1.01E+00	DiToro and McGrath (2000) <sup>j</sup>
Di-N-Butyl Phthalate	4.61	5.90E-01	5.00E-01	2.03E+00	1.20E+00	Gobas et al. (2003) <sup>k</sup>	2.50E+00	1.48E+00	Gobas et al. (2003) <sup>k</sup>
Diphenyl Ether	4.05	1.70E-01	7.02E-01	2.85E+00	4.85E-01	DiToro and McGrath (2000) <sup>j</sup>	3.51E+00	5.96E-01	DiToro and McGrath (2000) <sup>j</sup>
Hexachlorobenzene	5.86	4.00E-01	1.38E+00	5.61E+00	2.25E+00	USACE BSAF Database	6.91E+00	2.76E+00	USACE BSAF Database
Hexachlorobutadiene	4.72	1.30E-01	6.62E-01	2.69E+00	3.50E-01	DiToro and McGrath (2000) <sup>j</sup>	3.31E+00	4.30E-01	DiToro and McGrath (2000) <sup>j</sup>
N-Dioctyl Phthalate	8.54	ND	5.00E-01	2.03E+00	--	Gobas et al. (2003) <sup>k</sup>	2.50E+00	--	Gobas et al. (2003) <sup>k</sup>
2-Chloronaphthalene	3.81	1.00E-01	7.16E-01	2.91E+00	2.91E-01	DiToro and McGrath (2000) <sup>j</sup>	3.58E+00	3.58E-01	DiToro and McGrath (2000) <sup>j</sup>
Pentachlorobenzene	5.22	5.70E-02	6.33E-01	2.57E+00	1.47E-01	USACE BSAF Database	3.17E+00	1.81E-01	USACE BSAF Database

**Notes:**

NA, Normalized BSAF was not applicable for metals

ND, Not detected

a, Normalized BSAF (kg OC / kg lipid) calculated based on K<sub>ow</sub>, where BSAF = K<sub>ow</sub><sup>-0.038</sup> (DiToro and McGrath 2000)

b, For organic constituents, normalized BASFs were expressed on a dry weight basis using sediment organic carbon and lipid content as follows:

$$BSAF_{dw} = BSAF_{norm} \times f_{lipid} \div f_{oc}$$

where:

BSAF<sub>norm</sub> = Normalized BSAF (kg OC/kg lipid)

f<sub>lipid</sub> = Fraction of lipids in prey item expressed on a dry weight basis (0.065, invertebrates; 0.08, fish)

f<sub>oc</sub> = Fraction of sediment organic carbon expressed on a dry weight basis (0.016 or 1.6%)

c, Median BSAF for non-depurated invertebrates determined by Bechtel (1998)

d, 90th percentile BSAF for depurated invertebrates determined by Bechtel (1998)

e, 90th percentile BSAF for non-depurated invertebrates determined by Bechtel (1998)

f, 95% upper predictive limit equation for all organisms (copper) or only depurated organisms (nickel and zinc) from Bechtel (1998)

g, Invertebrate concentrations (mg/kg dry weight) calculated based on regression models, where slopes (B1) and intercepts (B0) are as follows:

Metal	B0	B1	Data Source for Model
Selenium	--	1.422	Hamilton and Buhl (2003a and 2003b)

h, Mean BSAF calculated from Song and Breslin (1999)

i, Sediment-to-fish BASFs could not be identified; therefore, concentrations in fish were assumed to be equal to concentrations in benthic invertebrates.

j, Method described in DiToro and McGrath (2000) used when empirical data not available from USACE BSAF database.

k, Based on the normalized BSAF for phthalate esters for chironomids reported in Gobas et al. (2003).

**Table B5**  
**Estimated Aquatic Prey Concentrations - Screening-Level Exposure Evaluation**  
**SWMU 5/Henby Creek Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	log K <sub>ow</sub>	Maximum Sediment Concentration (mg/kg, dry weight)	Normalized BSAF (kg OC/kg lipid) <sup>a</sup>	Estimated Concentrations in Dietary Items of Aquatic Receptors (mg/kg, dry weight)					
				Aquatic Life Stage Benthic Invertebrates			Fish		
				BSAF <sup>b</sup>	Estimated Concentration	BSAF/BCF Reference	BSAF	Estimated Concentration	BSAF Reference
<b>Metals</b>									
Arsenic	NA	1.35E+01	NA	1.27E-01	1.71E+00	Bechtel-Jacobs (1998) <sup>c</sup>	1.54E-01	2.08E+00	Song and Breslin (1999) <sup>h</sup>
Cadmium	NA	9.85E-01	NA	3.07E+00	3.03E+00	Bechtel-Jacobs (1998) <sup>d</sup>	3.70E-02	3.64E-02	Song and Breslin (1999) <sup>h</sup>
Chromium	NA	4.96E+01	NA	5.88E-01	2.92E+01	Bechtel-Jacobs (1998) <sup>e</sup>	9.00E-03	4.46E-01	Song and Breslin (1999) <sup>h</sup>
Copper	NA	7.14E+01	NA	95% UPL	1.28E+02	Bechtel-Jacobs (1998) <sup>f</sup>	1.70E-01	1.21E+01	Song and Breslin (1999) <sup>h</sup>
Lead	NA	9.26E+01	NA	6.60E-02	6.11E+00	Bechtel-Jacobs (1998) <sup>c</sup>	6.60E-02	6.11E+00	Song and Breslin (1999) <sup>h</sup>
Mercury	NA	2.67E+00	NA	1.74E+00	4.65E+00	Bechtel-Jacobs (1998) <sup>e</sup>	1.74E+00	4.65E+00	Bechtel-Jacobs (1998) <sup>i</sup>
Nickel	NA	2.48E+01	NA	95% UPL	8.80E+00	Bechtel-Jacobs (1998) <sup>f</sup>	1.60E-01	3.97E+00	Song and Breslin (1999) <sup>h</sup>
Selenium	NA	1.74E+00	NA	1.42E+00	2.47E+00	Regression/developed <sup>g</sup>	1.42E+00	2.47E+00	Regression/developed <sup>i</sup>
Silver	NA	5.42E-01	NA	1.80E-01	9.76E-02	Hirsch (1998)	1.60E-01	8.67E-02	Song and Breslin (1999) <sup>h</sup>
Thallium	NA	ND	NA	2.00E-02	--	Turner et al. (2013)	2.00E-02	--	Turner et al. (2013) <sup>j</sup>
Tin	NA	2.63E+01	NA	9.12E+00	2.40E+02	Meador et al. (2002) <sup>h</sup>	2.02E+00	5.32E+01	Oregon DEQ (2017) <sup>h</sup>
Zinc	NA	1.41E+02	NA	95% UPL	3.13E+02	Bechtel-Jacobs (1998) <sup>f</sup>	2.16E-01	3.05E+01	Song and Breslin (1999) <sup>h</sup>
<b>Pesticides/Herbicides</b>									
4,4'-DDE	6.0	ND	6.12E+00	5.24E+01	--	USACE BSAF Database	6.45E+01	--	USACE BSAF Database
4,4'-DDT	6.79	ND	5.68E-01	4.86E+00	--	USACE BSAF Database	5.98E+00	--	USACE BSAF Database
Total DDx		0.00E+00			0.00E+00			0.00E+00	
Alpha-BHC	4.26	ND	6.70E-01	5.73E+00	--	USACE BSAF Database	7.05E+00	--	USACE BSAF Database
beta-BHC	4.26	ND	4.00E-01	3.42E+00	--	USACE BSAF Database	4.21E+00	--	USACE BSAF Database
delta-BHC	4.26	ND	3.39E-01	2.90E+00	--	USACE BSAF Database	3.57E+00	--	USACE BSAF Database
Endosulfan I	3.5	ND	2.62E-01	2.24E+00	--	USACE BSAF Database	2.76E+00	--	USACE BSAF Database
Endosulfan Sulfate	3.64	ND	2.62E-01	2.24E+00	--	USACE BSAF Database	2.76E+00	--	USACE BSAF Database
Heptachlor	5.86	ND	1.56E-01	1.33E+00	--	USACE BSAF Database	1.64E+00	--	USACE BSAF Database
<b>Polychlorinated biphenyls (PCBs)</b>									
Total PCB (congeners)	NA	1.49E-02	7.22E-01	6.17E+00	9.18E-02	USACE BSAF Database	3.85E+00	5.72E-02	USACE BSAF Database

**Table B5**  
**Estimated Aquatic Prey Concentrations - Screening-Level Exposure Evaluation**  
**SWMU 5/Henby Creek Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	log K <sub>ow</sub>	Maximum Sediment Concentration (mg/kg, dry weight)	Normalized BSAF (kg OC/kg lipid) <sup>a</sup>	Estimated Concentrations in Dietary Items of Aquatic Receptors (mg/kg, dry weight)					
				Aquatic Life Stage Benthic Invertebrates			Fish		
				BSAF <sup>b</sup>	Estimated Concentration	BSAF/BCF Reference	BSAF	Estimated Concentration	BSAF Reference
<b>Semi-volatile Organic Compounds (SVOCs) - Polycyclic Aromatic Hydrocarbons (PAHs)</b>									
Low Molecular Weight (LMW) PAHs:									
Acenaphthene	4.15	4.60E-01	6.96E-01	5.95E+00	2.74E+00	DiToro and McGrath (2000)	7.32E+00	3.37E+00	DiToro and McGrath (2000)
Acenaphthylene	3.22	ND	7.54E-01	6.45E+00	--	DiToro and McGrath (2000)	7.94E+00	--	DiToro and McGrath (2000)
Anthracene	4.53	2.70E+00	6.73E-01	5.75E+00	1.55E+01	DiToro and McGrath (2000)	7.08E+00	1.91E+01	DiToro and McGrath (2000)
Fluorene	4.21	1.00E+00	6.92E-01	5.92E+00	5.92E+00	DiToro and McGrath (2000)	7.28E+00	7.28E+00	DiToro and McGrath (2000)
Naphthalene	3.36	1.90E+00	7.45E-01	6.37E+00	1.21E+01	DiToro and McGrath (2000)	7.85E+00	1.49E+01	DiToro and McGrath (2000)
Phenanthrene	4.57	7.60E+00	6.70E-01	5.73E+00	4.36E+01	DiToro and McGrath (2000)	7.06E+00	5.36E+01	DiToro and McGrath (2000)
Total LMW PAHs		1.37E+01			7.99E+01			9.83E+01	
High Molecular Weight (HMW) PAHs:									
Benzo(a)anthracene	6.71	4.60E+00	5.56E-01	4.75E+00	2.19E+01	DiToro and McGrath (2000)	5.85E+00	2.69E+01	DiToro and McGrath (2000)
Benzo[A]Pyrene	6.11	3.10E+00	5.86E-01	5.01E+00	1.55E+01	DiToro and McGrath (2000)	6.17E+00	1.91E+01	DiToro and McGrath (2000)
Benzo(b)fluoranthene	6.27	2.40E+00	5.78E-01	4.94E+00	1.19E+01	DiToro and McGrath (2000)	6.08E+00	1.46E+01	DiToro and McGrath (2000)
Benzo(g,h,i)perylene	6.51	1.20E+00	5.66E-01	4.84E+00	5.81E+00	DiToro and McGrath (2000)	5.96E+00	7.15E+00	DiToro and McGrath (2000)
Benzo(k)fluoranthene	6.29	1.10E+00	5.77E-01	4.93E+00	5.43E+00	DiToro and McGrath (2000)	6.07E+00	6.68E+00	DiToro and McGrath (2000)
Chrysene	5.71	7.40E+00	6.07E-01	5.19E+00	3.84E+01	DiToro and McGrath (2000)	6.39E+00	4.73E+01	DiToro and McGrath (2000)
Dibenz(A,H)Anthracene	6.71	5.00E-02	5.56E-01	4.75E+00	2.38E-01	DiToro and McGrath (2000)	5.85E+00	2.93E-01	DiToro and McGrath (2000)
Fluoranthene	5.08	4.00E+00	6.41E-01	5.48E+00	2.19E+01	DiToro and McGrath (2000)	6.75E+00	2.70E+01	DiToro and McGrath (2000)
Indeno (1,2,3-CD) Pyrene	6.72	9.40E-01	5.55E-01	4.75E+00	4.47E+00	DiToro and McGrath (2000)	5.85E+00	5.50E+00	DiToro and McGrath (2000)
Pyrene	4.92	7.30E+00	6.50E-01	5.56E+00	4.06E+01	DiToro and McGrath (2000)	6.84E+00	5.00E+01	DiToro and McGrath (2000)
Total HMW PAHs		3.21E+01			1.66E+02			2.04E+02	
<b>Semi-volatile Organic Compounds (SVOCs) - Non-PAH SVOCs</b>									
1,2,4-Trichlorobenzene	3.93	1.40E+00	7.09E-01	6.06E+00	8.49E+00	DiToro and McGrath (2000) <sup>j</sup>	7.46E+00	1.04E+01	DiToro and McGrath (2000) <sup>j</sup>
2-Methylnaphthalene	3.72	ND	7.22E-01	6.18E+00	--	DiToro and McGrath (2000) <sup>j</sup>	7.60E+00	--	DiToro and McGrath (2000) <sup>j</sup>
Biphenyl	3.76	ND	5.15E-01	4.40E+00	--	USACE BSAF Database	5.42E+00	--	USACE BSAF Database
Bis(2-Ethylhexyl)Phthalate	8.39	1.30E-01	5.00E-01	4.28E+00	5.56E-01	Gobas et al. (2003) <sup>k</sup>	5.26E+00	6.84E-01	Gobas et al. (2003) <sup>k</sup>

**Table B5**  
**Estimated Aquatic Prey Concentrations - Screening-Level Exposure Evaluation**  
**SWMU 5/Henby Creek Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	log K <sub>ow</sub>	Maximum Sediment Concentration (mg/kg, dry weight)	Normalized BSAF (kg OC/kg lipid) <sup>a</sup>	Estimated Concentrations in Dietary Items of Aquatic Receptors (mg/kg, dry weight)					
				Aquatic Life Stage Benthic Invertebrates			Fish		
				BSAF <sup>b</sup>	Estimated Concentration	BSAF/BCF Reference	BSAF	Estimated Concentration	BSAF Reference
Butyl Benzyl Phthalate	4.84	ND	5.00E-01	4.28E+00	--	Gobas et al. (2003) <sup>k</sup>	5.26E+00	--	Gobas et al. (2003) <sup>k</sup>
Dibenzofuran	3.71	ND	7.23E-01	6.18E+00	--	DiToro and McGrath (2000) <sup>j</sup>	7.61E+00	--	DiToro and McGrath (2000) <sup>j</sup>
Di-N-Butyl Phthalate	4.61	1.80E+00	5.00E-01	4.28E+00	7.70E+00	Gobas et al. (2003) <sup>k</sup>	5.26E+00	9.47E+00	Gobas et al. (2003) <sup>k</sup>
Diphenyl Ether	4.05	ND	7.02E-01	6.00E+00	--	DiToro and McGrath (2000) <sup>j</sup>	7.39E+00	--	DiToro and McGrath (2000) <sup>j</sup>
Hexachlorobenzene	5.86	ND	1.38E+00	1.18E+01	--	USACE BSAF Database	1.45E+01	--	USACE BSAF Database
Hexachlorobutadiene	4.72	ND	6.62E-01	5.66E+00	--	DiToro and McGrath (2000) <sup>j</sup>	6.97E+00	--	DiToro and McGrath (2000) <sup>j</sup>
N-Dioctyl Phthalate	8.54	ND	5.00E-01	4.28E+00	--	Gobas et al. (2003) <sup>k</sup>	5.26E+00	--	Gobas et al. (2003) <sup>k</sup>
2-Chloronaphthalene	3.81	3.70E-01	7.16E-01	6.13E+00	2.27E+00	DiToro and McGrath (2000) <sup>j</sup>	7.54E+00	2.79E+00	DiToro and McGrath (2000) <sup>j</sup>
Pentachlorobenzene	5.22	ND	6.33E-01	5.42E+00	--	USACE BSAF Database	6.67E+00	--	USACE BSAF Database

**Notes:**

NA, Normalized BSAF was not applicable for metals

ND, Not detected

a, Normalized BSAF (kg OC / kg lipid) calculated based on K<sub>ow</sub>, where BSAF = K<sub>ow</sub><sup>-0.038</sup> (DiToro and McGrath 2000)

b, For organic constituents, normalized BASFs were expressed on a dry weight basis using sediment organic carbon and lipid content as follows:

$$BSAF_{dw} = BSAF_{norm} \times f_{lipid} \div f_{oc}$$

where:

BSAF<sub>norm</sub> = Normalized BSAF (kg OC/kg lipid)

f<sub>lipid</sub> = Fraction of lipids in prey item expressed on a dry weight basis (0.065, invertebrates; 0.08, fish)

f<sub>oc</sub> = Fraction of sediment organic carbon expressed on a dry weight basis (0.0076 or 0.76%)

c, Median BSAF for non-depurated invertebrates determined by Bechtel (1998)

d, 90th percentile BSAF for depurated invertebrates determined by Bechtel (1998)

e, 90th percentile BSAF for non-depurated invertebrates determined by Bechtel (1998)

f, 95% upper predictive limit equation for all organisms (copper) or only depurated organisms (nickel and zinc) from Bechtel (1998)

g, Invertebrate concentrations (mg/kg dry weight) calculated based on regression models, where slopes (B1) and intercepts (B0) are as follows:

Metal	B0	B1	Data Source for Model
Selenium	--	1.422	Hamilton and Buhl (2003a and 2003b)

h, Mean BSAF calculated from Song and Breslin (1999)

i, Sediment-to-fish BASFs could not be identified; therefore, concentrations in fish were assumed to be equal to concentrations in benthic invertebrates.

j, Method described in DiToro and McGrath (2000) used when empirical data not available from USACE BSAF database.

k, Based on the normalized BSAF for phthalate esters for chironomids reported in Gobas et al. (2003).

**Table B6**  
**Estimated Aquatic Prey Concentrations - Screening-Level Exposure Evaluation**  
**Carneys Point Zone**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	log K <sub>ow</sub>	Maximum Sediment Concentration (mg/kg, dry weight)	Normalized BSAF (kg OC/kg lipid) <sup>a</sup>	Estimated Concentrations in Dietary Items of Aquatic Receptors (mg/kg, dry weight)					
				Aquatic Life Stage Benthic Invertebrates			Fish		
				BSAF <sup>b</sup>	Estimated Concentration	BSAF/BCF Reference	BSAF	Estimated Concentration	BSAF Reference
<b>Metals</b>									
Arsenic	NA	9.63E+00	NA	1.27E-01	1.22E+00	Bechtel-Jacobs (1998) <sup>c</sup>	1.54E-01	1.48E+00	Song and Breslin (1999) <sup>h</sup>
Cadmium	NA	1.06E+00	NA	3.07E+00	3.26E+00	Bechtel-Jacobs (1998) <sup>d</sup>	3.70E-02	3.92E-02	Song and Breslin (1999) <sup>h</sup>
Chromium	NA	5.40E+01	NA	5.88E-01	3.18E+01	Bechtel-Jacobs (1998) <sup>e</sup>	9.00E-03	4.86E-01	Song and Breslin (1999) <sup>h</sup>
Copper	NA	5.74E+01	NA	95% UPL	1.20E+02	Bechtel-Jacobs (1998) <sup>f</sup>	1.70E-01	9.76E+00	Song and Breslin (1999) <sup>h</sup>
Lead	NA	5.76E+01	NA	6.60E-02	3.80E+00	Bechtel-Jacobs (1998) <sup>c</sup>	6.60E-02	3.80E+00	Song and Breslin (1999) <sup>h</sup>
Mercury	NA	1.26E+00	NA	1.74E+00	2.19E+00	Bechtel-Jacobs (1998) <sup>e</sup>	1.74E+00	2.19E+00	Bechtel-Jacobs (1998) <sup>i</sup>
Nickel	NA	2.89E+01	NA	95% UPL	9.79E+00	Bechtel-Jacobs (1998) <sup>f</sup>	1.60E-01	4.62E+00	Song and Breslin (1999) <sup>h</sup>
Selenium	NA	2.07E+00	NA	1.42E+00	2.94E+00	Regression/developed <sup>g</sup>	1.42E+00	2.94E+00	Regression/developed <sup>i</sup>
Silver	NA	ND	NA	1.80E-01	--	Hirsch (1998)	1.60E-01	--	Song and Breslin (1999) <sup>h</sup>
Thallium	NA	ND	NA	2.00E-02	--	Turner et al. (2013)	2.00E-02	--	Turner et al. (2013) <sup>j</sup>
Tin	NA	1.71E+01	NA	2.28E+01	3.90E+02	Meador et al. (2002) <sup>h</sup>	2.02E+00	3.46E+01	Oregon DEQ (2017) <sup>h</sup>
Zinc	NA	2.23E+02	NA	95% UPL	3.32E+02	Bechtel-Jacobs (1998) <sup>f</sup>	2.16E-01	4.82E+01	Song and Breslin (1999) <sup>h</sup>
<b>Pesticides/Herbicides</b>									
4,4'-DDE	6.0	ND	6.12E+00	2.09E+01	--	USACE BSAF Database	2.58E+01	--	USACE BSAF Database
4,4'-DDT	6.79	ND	5.68E-01	1.94E+00	--	USACE BSAF Database	2.39E+00	--	USACE BSAF Database
Total DDx		0.00E+00			0.00E+00			0.00E+00	
Alpha-BHC	4.26	ND	6.70E-01	2.29E+00	--	USACE BSAF Database	2.82E+00	--	USACE BSAF Database
beta-BHC	4.26	ND	4.00E-01	1.37E+00	--	USACE BSAF Database	1.68E+00	--	USACE BSAF Database
delta-BHC	4.26	ND	3.39E-01	1.16E+00	--	USACE BSAF Database	1.43E+00	--	USACE BSAF Database
Endosulfan I	3.5	ND	2.62E-01	8.96E-01	--	USACE BSAF Database	1.10E+00	--	USACE BSAF Database
Endosulfan Sulfate	3.64	ND	2.62E-01	8.96E-01	--	USACE BSAF Database	1.10E+00	--	USACE BSAF Database
Heptachlor	5.86	ND	1.56E-01	5.34E-01	--	USACE BSAF Database	6.57E-01	--	USACE BSAF Database
<b>Polychlorinated biphenyls (PCBs)</b>									
Total PCB (congeners)	NA	7.17E-02	7.22E-01	2.47E+00	1.77E-01	USACE BSAF Database	3.85E+00	2.76E-01	USACE BSAF Database

**Table B6**  
**Estimated Aquatic Prey Concentrations - Screening-Level Exposure Evaluation**  
**Carneys Point Zone**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	log K <sub>ow</sub>	Maximum Sediment Concentration (mg/kg, dry weight)	Normalized BSAF (kg OC/kg lipid) <sup>a</sup>	Estimated Concentrations in Dietary Items of Aquatic Receptors (mg/kg, dry weight)					
				Aquatic Life Stage Benthic Invertebrates			Fish		
				BSAF <sup>b</sup>	Estimated Concentration	BSAF/BCF Reference	BSAF	Estimated Concentration	BSAF Reference
<b>Semi-volatile Organic Compounds (SVOCs) - Polycyclic Aromatic Hydrocarbons (PAHs)</b>									
Low Molecular Weight (LMW) PAHs:									
Acenaphthene	4.15	ND	6.96E-01	2.38E+00	--	DiToro and McGrath (2000)	2.93E+00	--	DiToro and McGrath (2000)
Acenaphthylene	3.22	9.90E-02	7.54E-01	2.58E+00	2.56E-01	DiToro and McGrath (2000)	3.18E+00	3.14E-01	DiToro and McGrath (2000)
Anthracene	4.53	8.20E-02	6.73E-01	2.30E+00	1.89E-01	DiToro and McGrath (2000)	2.83E+00	2.32E-01	DiToro and McGrath (2000)
Fluorene	4.21	ND	6.92E-01	2.37E+00	--	DiToro and McGrath (2000)	2.91E+00	--	DiToro and McGrath (2000)
Naphthalene	3.36	1.20E-01	7.45E-01	2.55E+00	3.06E-01	DiToro and McGrath (2000)	3.14E+00	3.77E-01	DiToro and McGrath (2000)
Phenanthrene	4.57	2.40E-01	6.70E-01	2.29E+00	5.50E-01	DiToro and McGrath (2000)	2.82E+00	6.77E-01	DiToro and McGrath (2000)
Total LMW PAHs		5.41E-01			1.30E+00			1.60E+00	
High Molecular Weight (HMW) PAHs:									
Benzo(a)anthracene	6.71	3.40E-01	5.56E-01	1.90E+00	6.47E-01	DiToro and McGrath (2000)	2.34E+00	7.96E-01	DiToro and McGrath (2000)
Benzo[A]Pyrene	6.11	2.70E-01	5.86E-01	2.00E+00	5.41E-01	DiToro and McGrath (2000)	2.47E+00	6.66E-01	DiToro and McGrath (2000)
Benzo(b)fluoranthene	6.27	3.50E-01	5.78E-01	1.98E+00	6.92E-01	DiToro and McGrath (2000)	2.43E+00	8.51E-01	DiToro and McGrath (2000)
Benzo(g,h,i)perylene	6.51	1.70E-01	5.66E-01	1.94E+00	3.29E-01	DiToro and McGrath (2000)	2.38E+00	4.05E-01	DiToro and McGrath (2000)
Benzo(k)fluoranthene	6.29	1.40E-01	5.77E-01	1.97E+00	2.76E-01	DiToro and McGrath (2000)	2.43E+00	3.40E-01	DiToro and McGrath (2000)
Chrysene	5.71	3.70E-01	6.07E-01	2.08E+00	7.68E-01	DiToro and McGrath (2000)	2.55E+00	9.45E-01	DiToro and McGrath (2000)
Dibenz(A,H)Anthracene	6.71	ND	5.56E-01	1.90E+00	--	DiToro and McGrath (2000)	2.34E+00	--	DiToro and McGrath (2000)
Fluoranthene	5.08	6.60E-01	6.41E-01	2.19E+00	1.45E+00	DiToro and McGrath (2000)	2.70E+00	1.78E+00	DiToro and McGrath (2000)
Indeno (1,2,3-CD) Pyrene	6.72	1.60E-01	5.55E-01	1.90E+00	3.04E-01	DiToro and McGrath (2000)	2.34E+00	3.74E-01	DiToro and McGrath (2000)
Pyrene	4.92	5.30E-01	6.50E-01	2.22E+00	1.18E+00	DiToro and McGrath (2000)	2.74E+00	1.45E+00	DiToro and McGrath (2000)
Total HMW PAHs		2.99E+00			6.18E+00			7.61E+00	
<b>Semi-volatile Organic Compounds (SVOCs) - Non-PAH SVOCs</b>									
1,2,4-Trichlorobenzene	3.93	2.20E-01	7.09E-01	2.43E+00	5.34E-01	DiToro and McGrath (2000) <sup>j</sup>	2.99E+00	6.57E-01	DiToro and McGrath (2000) <sup>j</sup>
2-Methylnaphthalene	3.72	ND	7.22E-01	2.47E+00	--	DiToro and McGrath (2000) <sup>j</sup>	3.04E+00	--	DiToro and McGrath (2000) <sup>j</sup>
Biphenyl	3.76	ND	5.15E-01	1.76E+00	--	USACE BSAF Database	2.17E+00	--	USACE BSAF Database

**Table B6**  
**Estimated Aquatic Prey Concentrations - Screening-Level Exposure Evaluation**  
**Carneys Point Zone**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	log K <sub>ow</sub>	Maximum Sediment Concentration (mg/kg, dry weight)	Normalized BSAF (kg OC/kg lipid) <sup>a</sup>	Estimated Concentrations in Dietary Items of Aquatic Receptors (mg/kg, dry weight)					
				Aquatic Life Stage Benthic Invertebrates			Fish		
				BSAF <sup>b</sup>	Estimated Concentration	BSAF/BCF Reference	BSAF	Estimated Concentration	BSAF Reference
Bis(2-Ethylhexyl)Phthalate	8.39	4.10E-01	5.00E-01	1.71E+00	7.01E-01	Gobas et al. (2003) <sup>k</sup>	2.11E+00	8.63E-01	Gobas et al. (2003) <sup>k</sup>
Butyl Benzyl Phthalate	4.84	ND	5.00E-01	1.71E+00	--	Gobas et al. (2003) <sup>k</sup>	2.11E+00	--	Gobas et al. (2003) <sup>k</sup>
Dibenzofuran	3.71	ND	7.23E-01	2.47E+00	--	DiToro and McGrath (2000) <sup>j</sup>	3.04E+00	--	DiToro and McGrath (2000) <sup>j</sup>
Di-N-Butyl Phthalate	4.61	ND	5.00E-01	1.71E+00	--	Gobas et al. (2003) <sup>k</sup>	2.11E+00	--	Gobas et al. (2003) <sup>k</sup>
Diphenyl Ether	4.05	ND	7.02E-01	2.40E+00	--	DiToro and McGrath (2000) <sup>j</sup>	2.95E+00	--	DiToro and McGrath (2000) <sup>j</sup>
Hexachlorobenzene	5.86	ND	1.38E+00	4.73E+00	--	USACE BSAF Database	5.82E+00	--	USACE BSAF Database
Hexachlorobutadiene	4.72	ND	6.62E-01	2.26E+00	--	DiToro and McGrath (2000) <sup>j</sup>	2.79E+00	--	DiToro and McGrath (2000) <sup>j</sup>
N-Dioctyl Phthalate	8.54	ND	5.00E-01	1.71E+00	--	Gobas et al. (2003) <sup>k</sup>	2.11E+00	--	Gobas et al. (2003) <sup>k</sup>
2-Chloronaphthalene	3.81	ND	7.16E-01	2.45E+00	--	DiToro and McGrath (2000) <sup>j</sup>	3.02E+00	--	DiToro and McGrath (2000) <sup>j</sup>
Pentachlorobenzene	5.22	ND	6.33E-01	2.17E+00	--	USACE BSAF Database	2.67E+00	--	USACE BSAF Database

**Notes:**

NA, Normalized BSAF was not applicable for metals

ND, Not detected

a, Normalized BSAF (kg OC / kg lipid) calculated based on K<sub>ow</sub>, where BSAF = K<sub>ow</sub><sup>-0.038</sup> (DiToro and McGrath 2000)

b, For organic constituents, normalized BASFs were expressed on a dry weight basis using sediment organic carbon and lipid content as follows:

$$BSAF_{dw} = BSAF_{nom} \times f_{lipid} \div f_{oc}$$

where:

BSAF<sub>norm</sub> = Normalized BSAF (kg OC/kg lipid)

f<sub>lipid</sub> = Fraction of lipids in prey item expressed on a dry weight basis (0.065, invertebrates; 0.08, fish)

f<sub>oc</sub> = Fraction of sediment organic carbon expressed on a dry weight basis (0.019 or 1.9%)

c, Median BSAF for non-depurated invertebrates determined by Bechtel (1998)

d, 90th percentile BSAF for depurated invertebrates determined by Bechtel (1998)

e, 90th percentile BSAF for non-depurated invertebrates determined by Bechtel (1998)

f, 95% upper predictive limit equation for all organisms (copper) or only depurated organisms (nickel and zinc) from Bechtel (1998)

g, Invertebrate concentrations (mg/kg dry weight) calculated based on regression models, where slopes (B1) and intercepts (B0) are as follows:

Metal	BO	B1	Data Source for Model
Selenium	--	1.422	Hamilton and Buhl (2003a and 2003b)

h, Mean BSAF calculated from Song and Breslin (1999)

i, Sediment-to-fish BASFs could not be identified; therefore, concentrations in fish were assumed to be equal to concentrations in benthic invertebrates.

j, Method described in DiToro and McGrath (2000) used when empirical data not available from USACE BSAF database.

k, Based on the normalized BSAF for phthalate esters for chironomids reported in Gobas et al. (2003).

**Table B7**  
**Toxicity Reference Values - Screening-Level Exposure Evaluation**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analytes	Avian Receptors			
	Chronic TRV <sub>NOAEL</sub> <sup>a</sup>	Chronic TRV <sub>LOAEL</sub> <sup>b</sup>	Test Animal	Source
	(mg/kg-bw/d)			
<b>Metals</b>				
Arsenic	2.24	4.51	geometric mean	EPA (2005)
Cadmium	1.47	6.3	geometric Mean	EPA (2005)
Chromium	2.66	15.6	geometric mean	EPA (2005)
Copper	2.3	4.7	Wild turkey	NJDEP (2018)
Lead	0.19	1.9	Japanese quail	NJDEP (2018)
Mercury	0.013	0.026	mallard	NJDEP (2018)
Nickel	6.71	18.6	geometric mean	EPA (2005)
Selenium	0.6	0.82	geometric mean	EPA (2005)
Silver	2.2	60.5	geometric mean	EPA (2005)
Zinc	66.1	171	geometric mean	EPA (2005)
<b>Pesticides/Herbicides</b>				
Total DDX	0.009	0.027	brown pelican	NJDEP (2018)
Alpha-BHC	0.4	2	rat	Sample et al. (1996)
beta-BHC	0.4	2	rat	Sample et al. (1996)
delta-BHC	0.4	2	rat	Sample et al. (1996)
Endosulfan I	10	NA	gray partridge	Sample et al. (1996)
Endosulfan Sulfate	10	NA	gray partridge	Sample et al. (1996)
Heptachlor	NA	NA	—	—
<b>PCBs</b>				
Total PCB (congeners)	0.4	0.5	chicken	NJDEP (2018)

**Table B7**  
**Toxicity Reference Values - Screening-Level Exposure Evaluation**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analytes	Avian Receptors			
	Chronic TRV <sub>NOAEL</sub> <sup>a</sup>	Chronic TRV <sub>LOAEL</sub> <sup>b</sup>	Test Animal	Source
	(mg/kg-bw/d)			
<b>Semi-volatile Organic Compounds (SVOCs) - Polycyclic Aromatic Hydrocarbons (PAHs)</b>				
Total LMW PAHs	0.67	6.7	red-winged blackbird	NJDEP (2018)
Total HMW PAHs	0.048	0.48	pigeon	NJDEP (2018)
<b>Semi-volatile Organic Compounds (SVOCs) - Non-PAH SVOCs</b>				
1,2,4-Trichlorobenzene	NA	NA	---	---
2-Chloronaphthalene	NA	NA	---	---
2-Methylnaphthalene	NA	NA	---	---
Biphenyl	NA	NA	---	---
Bis(2-ethylhexyl)phthalate	1.1	11	Ringed dove	Sample et al. (1996)
Butyl Benzyl Phthalate	0.11	1.1	Ringed dove	Sample et al. (1996) <sup>c</sup>
Dibenzofuran	NA	NA	---	---
Di-N-Butyl Phthalate	0.11	1.1	Ringed dove	Sample et al. (1996)
Diphenyl Ether	NA	NA	---	---
Hexachlorobenzene	5	50	Japanese quail	LANL (2017)
Hexachlorobutadiene	NA	NA	---	---
N-Dioctyl Phthalate	NA	NA	---	---
Pentachlorobenzene	NA	NA	---	---

**Notes:**

- a, NOAEL is no observable adverse effects level.
- b, LOAEL is low observable adverse effects level.
- c, Di-n-butyl phthalate used as a surrogate for avian exposure to phthalates.
- Appropriate data are not available from published literature to derive NOAEL and LOAEL values.
- NA, Toxicity Reference Value not available.

**Table B8**  
**Toxicity Reference Values - Refined Exposure Evaluation**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analytes	Avian Receptors			
	Chronic TRV <sub>NOAEL</sub> <sup>a</sup>	Chronic TRV <sub>LOAEL</sub> <sup>b</sup>	Test Animal	Source
	(mg/kg-bw/d)			
<b>Metals</b>				
Chromium	2.66	15.6	geometric mean	EPA (2005)
Copper	18.4	34.8	geometric mean	EPA (2005)
Lead	10.9	44.6	geometric mean	EPA (2005)
Mercury	0.45	0.91	Japanese quail	Sample et al. (1996)
<b>Semi-volatile Organic Compounds (SVOCs) - Polycyclic Aromatic Hydrocarbons (PAHs)</b>				
Total LMW PAHs	16.1	161	mallard	Patton and Dieter (1980)
Total HMW PAHs	2	20	European starling	USEPA (2007)
<b>Semi-volatile Organic Compounds (SVOCs) - Non-PAH SVOCs</b>				
Butyl Benzyl Phthalate	0.11	1.1	Ringed dove	Sample et al. (1996) <sup>c</sup>
Di-N-Butyl Phthalate	0.11	1.1	Ringed dove	Sample et al. (1996)

**Notes:**

a, NOAEL is no observable adverse effects level.

b, LOAEL is low observable adverse effects level.

c, Di-n-butyl phthalate used as a surrogate for avian exposure to phthalates.

**Table B9**  
**Screening-Level Exposure Evaluation - Double-Crested Cormorant**  
**Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	Double-crested Cormorant Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>						
	Maximum Sediment Concentration (mg/kg, dw)									
<b>Inorganics - Metals</b>										
Arsenic	6.50E+01	0.0E+00	6.8E-01	6.8E-01	8.8E-02	0.76	2.24	<1	4.51	<1
Cadmium	1.67E+00	0.0E+00	4.2E-03	4.2E-03	2.3E-03	0.01	1.47	<1	6.30	<1
Chromium	1.17E+03	0.0E+00	7.1E-01	7.1E-01	1.6E+00	2.29	2.66	<1	15.60	<1
Copper	8.78E+01	0.0E+00	1.0E+00	1.0E+00	1.2E-01	1.13	2.30	<1	4.70	<1
Lead	1.21E+03	0.0E+00	5.4E+00	5.4E+00	1.6E+00	7.03	0.19	<b>37.0</b>	1.90	<b>3.7</b>
Mercury	9.60E+00	0.0E+00	1.1E+00	1.1E+00	1.3E-02	1.14	0.013	<b>87.7</b>	0.026	<b>43.9</b>
Nickel	7.60E+01	0.0E+00	8.2E-01	8.2E-01	1.0E-01	0.92	6.71	<1	18.60	<1
Selenium	4.41E+00	0.0E+00	4.2E-01	4.2E-01	6.0E-03	0.43	0.61	<1	0.82	<1
Silver	1.08E+00	0.0E+00	1.2E-02	1.2E-02	1.5E-03	0.01	2.20	<1	60.50	<1
Zinc	2.84E+02	0.0E+00	4.1E+00	4.1E+00	3.8E-01	4.52	66.10	<1	171.00	<1
<b>Pesticides/Herbicides</b>										
Total DDx	2.60E-03	0.0E+00	4.1E-03	4.1E-03	3.5E-06	0.00	0.01	<1	0.03	<1
Alpha-BHC	2.90E-03	0.0E+00	1.0E-03	1.0E-03	3.9E-06	0.00	0.40	<1	2.00	<1
beta-BHC	2.50E-02	0.0E+00	5.4E-03	5.4E-03	3.4E-05	0.01	0.40	<1	2.00	<1
delta-BHC	1.60E-03	0.0E+00	2.9E-04	2.9E-04	2.2E-06	0.00	0.40	<1	2.00	<1
Endosulfan I	9.20E-03	0.0E+00	1.3E-03	1.3E-03	1.2E-05	0.00	10.00	<1	NA	--
Endosulfan Sulfate	1.80E-03	0.0E+00	2.5E-04	2.5E-04	2.4E-06	0.00	10.00	<1	NA	--
Heptachlor	5.50E-02	0.0E+00	4.6E-03	4.6E-03	7.4E-05	0.00	NA	--	NA	--
<b>PCBs</b>										
Total PCB (congeners)	2.65E-01	0.0E+00	6.9E-02	6.9E-02	3.6E-04	0.07	0.40	<1	0.50	<1
<b>Polycyclic Aromatic Hydrocarbons (PAHs)</b>										
Low Molecular Weight (LMW) PAHs:										
Acenaphthene	6.30E-01	0.0E+00	2.4E-01	2.4E-01	8.5E-04	0.24				
Acenaphthylene	2.70E-01	0.0E+00	1.1E-01	1.1E-01	3.6E-04	0.11				
Anthracene	9.80E-01	0.0E+00	3.6E-01	3.6E-01	1.3E-03	0.36				
Fluorene	4.00E-01	0.0E+00	1.5E-01	1.5E-01	5.4E-04	0.15				
Naphthalene	1.50E+00	0.0E+00	6.0E-01	6.0E-01	2.0E-03	0.61				
Phenanthrene	2.10E+00	0.0E+00	7.6E-01	7.6E-01	2.8E-03	0.76				
Total LMW PAHs				2.2E+00	7.9E-03	2.22	0.67	<b>3.3</b>	6.70	<1
High Molecular Weight (HMW) PAHs:										
Benzo(a)anthracene	2.30E+00	0.0E+00	6.9E-01	6.9E-01	3.1E-03	0.69				
Benzo(A)Pyrene	2.00E+00	0.0E+00	6.3E-01	6.3E-01	2.7E-03	0.64				
Benzo(b)fluoranthene	2.30E+00	0.0E+00	7.2E-01	7.2E-01	3.1E-03	0.72				
Benzo(g,h,i)perylene	1.10E+00	0.0E+00	3.4E-01	3.4E-01	1.5E-03	0.34				
Benzo(k)fluoranthene	1.30E+00	0.0E+00	4.0E-01	4.0E-01	1.8E-03	0.41				

**Table B9**  
**Screening-Level Exposure Evaluation - Double-Crested Cormorant**  
**Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	Double-crested Cormorant Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	Maximum Sediment Concentration (mg/kg, dw)	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>					
Chrysene	2.00E+00	0.0E+00	6.6E-01	6.6E-01	2.7E-03	0.66				
Dibenz(A,H)Anthracene	2.10E-01	0.0E+00	6.3E-02	6.3E-02	2.8E-04	0.06				
Fluoranthene	5.50E+00	0.0E+00	1.9E+00	1.9E+00	7.4E-03	1.91				
Indeno (1,2,3-CD) Pyrene	1.00E+00	0.0E+00	3.0E-01	3.0E-01	1.4E-03	0.30				
Pyrene	4.00E+00	0.0E+00	1.4E+00	1.4E+00	5.4E-03	1.41				
Total HMW PAHs				7.1E+00	2.9E-02	7.14	0.05	<b>148.7</b>	0.48	<b>14.9</b>
<b>Semi-volatile Organic Compounds (SVOCs) - Non-PAH SVOCs</b>										
1,2,4-Trichlorobenzene	2.70E+01	0.0E+00	1.0E+01	1.0E+01	3.6E-02	10.38	NA	--	NA	--
2-Methylnaphthalene	1.80E-01	0.0E+00	7.0E-02	7.0E-02	2.4E-04	0.07	NA	--	NA	--
Biphenyl	ND	--	--	--	--	--	--	--	--	--
Bis(2-Ethylhexyl)Phthalate	4.10E-01	0.0E+00	1.1E-01	1.1E-01	5.5E-04	0.11	1.10	<1	11.00	<1
Butyl Benzyl Phthalate	ND	--	--	--	--	--	--	--	--	--
Dibenzofuran	ND	--	--	--	--	--	--	--	--	--
Di-N-Butyl Phthalate	4.10E-01	0.0E+00	1.1E-01	1.1E-01	5.5E-04	0.11	0.11	<b>1.0</b>	1.10	<1
Diphenyl Ether	ND	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	4.90E-02	0.0E+00	3.7E-02	3.7E-02	6.6E-05	0.04	5.00	<1	50.00	<1
Hexachlorobutadiene	ND	--	--	--	--	--	--	--	--	--
N-Dioctyl Phthalate	6.60E-01	0.0E+00	1.8E-01	1.8E-01	8.9E-04	0.18	NA	--	NA	--
2-Chloronaphthalene	ND	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	ND	--	--	--	--	--	--	--	--	--

**Notes:**

$$a, EDD_{total} = \frac{IR_{diet} \times \sum (BSAF_{dw} \times C_{se\ dim\ ent} \times DF_i) \times AUF}{BW} + \frac{IR_{se\ dim\ ent} \times C_{se\ dim\ ent} \times AUF}{BW}$$

Where:

- EDD<sub>diet</sub> = Dose of COPEC obtained from the diet (mg COPEC/kg receptor body weight-day)
- IR<sub>diet</sub> = Ingestion rate of food (kg food ingested per day, dry weight)
- B(S)AF = Bioaccumulation factor (BAF) or biota-sediment accumulation factor (BSAF), specific to prey type and COPEC (kg substrate/kg food, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)
- DF<sub>i</sub> = Dietary fraction of food item i (proportion of food type in the diet)
- AUF = Area use factor includes seasonal use rates, area use rates, COPEC assimilation rate
- BW = Body weight of the receptor, wet weight (kg)
- EDD<sub>substrate</sub> = Dose of COPEC from incidental substrate ingestion (mg COPEC/kg body weight-day)
- IR<sub>substrate</sub> = Incidental Ingestion Rate of substrate (kg substrate ingested per day, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)

NA, TRV was not available.

ND, not detected

--, HQ could not be calculated because TRV was not available or chemical was not detected.

**Table B10**  
**Screening-Level Exposure Evaluation - American Black Duck**  
**Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	American Black Duck Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>						
	Maximum Sediment Concentration (mg/kg, dw)									
<b>Inorganics - Metals</b>										
Arsenic	6.50E+01	6.6E-01	0.0E+00	6.6E-01	2.1E-01	0.87	2.24	<1	4.51	<1
Cadmium	1.67E+00	4.1E-01	0.0E+00	4.1E-01	5.4E-03	0.42	1.47	<1	6.30	<1
Chromium	1.17E+03	5.5E+01	0.0E+00	5.5E+01	3.8E+00	58.93	2.66	<b>22.2</b>	15.60	<b>3.8</b>
Copper	8.78E+01	1.1E+01	0.0E+00	1.1E+01	2.8E-01	11.11	2.30	<b>4.8</b>	4.70	<b>2.4</b>
Lead	1.21E+03	6.4E+00	0.0E+00	6.4E+00	3.9E+00	10.28	0.19	<b>54.1</b>	1.90	<b>5.4</b>
Mercury	9.60E+00	1.3E+00	0.0E+00	1.3E+00	3.1E-02	1.37	0.01	<b>105.4</b>	0.03	<b>52.7</b>
Nickel	7.60E+01	1.5E+00	0.0E+00	1.5E+00	2.4E-01	1.78	6.71	<1	18.60	<1
Selenium	4.41E+00	5.0E-01	0.0E+00	5.0E-01	1.4E-02	0.52	0.61	<1	0.82	<1
Silver	1.08E+00	1.6E-02	0.0E+00	1.6E-02	3.5E-03	0.02	2.20	<1	60.50	<1
Zinc	2.84E+02	2.7E+01	0.0E+00	2.7E+01	9.1E-01	28.33	66.10	<1	171.00	<1
<b>Pesticides/Herbicides</b>										
Total DDx	2.60E-03	4.0E-03	0.0E+00	4.0E-03	8.3E-06	0.00	0.01	<1	0.03	<1
Alpha-BHC	2.90E-03	1.0E-03	0.0E+00	1.0E-03	9.3E-06	0.00	0.40	<1	2.00	<1
beta-BHC	2.50E-02	5.2E-03	0.0E+00	5.2E-03	8.0E-05	0.01	0.40	<1	2.00	<1
delta-BHC	1.60E-03	2.8E-04	0.0E+00	2.8E-04	5.1E-06	0.00	0.40	<1	2.00	<1
Endosulfan I	9.20E-03	1.3E-03	0.0E+00	1.3E-03	2.9E-05	0.00	10.00	<1	NA	--
Endosulfan Sulfate	1.80E-03	2.5E-04	0.0E+00	2.5E-04	5.8E-06	0.00	10.00	<1	NA	--
Heptachlor	5.50E-02	4.5E-03	0.0E+00	4.5E-03	1.8E-04	0.00	NA	--	NA	--
<b>PCBs</b>										
Total PCB (congeners)	2.65E-01	9.9E-02	0.0E+00	9.9E-02	8.5E-04	0.10	0.40	<1	0.50	<1
<b>Polycyclic Aromatic Hydrocarbons (PAHs)</b>										
Low Molecular Weight (LMW) PAHs:										
Acenaphthene	6.30E-01	2.3E-01	0.0E+00	2.3E-01	2.0E-03	0.23				
Acenaphthylene	2.70E-01	1.1E-01	0.0E+00	1.1E-01	8.7E-04	0.11				
Anthracene	9.80E-01	3.4E-01	0.0E+00	3.4E-01	3.1E-03	0.35				
Fluorene	4.00E-01	1.4E-01	0.0E+00	1.4E-01	1.3E-03	0.15				
Naphthalene	1.50E+00	5.8E-01	0.0E+00	5.8E-01	4.8E-03	0.59				
Phenanthrene	2.10E+00	7.3E-01	0.0E+00	7.3E-01	6.7E-03	0.74				

**Table B10**  
**Screening-Level Exposure Evaluation - American Black Duck**  
**Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	American Black Duck Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>						
Total LMW PAHs				2.1E+00	1.9E-02	2.16	0.67	<b>3.2</b>	6.70	<1
High Molecular Weight (HMW) PAHs:										
Benzo(a)anthracene	2.30E+00	6.7E-01	0.0E+00	6.7E-01	7.4E-03	0.67				
Benzo[A]Pyrene	2.00E+00	6.1E-01	0.0E+00	6.1E-01	6.4E-03	0.62				
Benzo(b)fluoranthene	2.30E+00	6.9E-01	0.0E+00	6.9E-01	7.4E-03	0.70				
Benzo(g,h,i)perylene	1.10E+00	3.2E-01	0.0E+00	3.2E-01	3.5E-03	0.33				
Benzo(k)fluoranthene	1.30E+00	3.9E-01	0.0E+00	3.9E-01	4.2E-03	0.39				
Chrysene	2.00E+00	6.3E-01	0.0E+00	6.3E-01	6.4E-03	0.64				
Dibenz(A,H)Anthracene	2.10E-01	6.1E-02	0.0E+00	6.1E-02	6.7E-04	0.06				
Fluoranthene	5.50E+00	1.8E+00	0.0E+00	1.8E+00	1.8E-02	1.85				
Indeno (1,2,3-CD) Pyrene	1.00E+00	2.9E-01	0.0E+00	2.9E-01	3.2E-03	0.29				
Pyrene	4.00E+00	1.4E+00	0.0E+00	1.4E+00	1.3E-02	1.37				
Total HMW PAHs				6.9E+00	7.0E-02	6.93	0.05	<b>144.3</b>	0.48	<b>14.4</b>
<b>Semi-volatile Organic Compounds (SVOCs) - Non-PAH SVOCs</b>										
1,2,4-Trichlorobenzene	2.70E+01	1.0E+01	0.0E+00	1.0E+01	8.7E-02	10.06	NA	--	NA	--
2-Methylnaphthalene	1.80E-01	6.8E-02	0.0E+00	6.8E-02	5.8E-04	0.07	NA	--	NA	--
Biphenyl	ND	--	--	--	--	--	--	--	--	--
Bis(2-Ethylhexyl)Phthalate	4.10E-01	1.1E-01	0.0E+00	1.1E-01	1.3E-03	0.11	1.10	<1	11.00	<1
Butyl Benzyl Phthalate	ND	--	--	--	--	--	--	--	--	--
Dibenzofuran	ND	--	--	--	--	--	--	--	--	--
Di-N-Butyl Phthalate	4.10E-01	1.1E-01	0.0E+00	1.1E-01	1.3E-03	0.11	0.11	<1	1.10	<1
Diphenyl Ether	ND	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	4.90E-02	3.5E-02	0.0E+00	3.5E-02	1.6E-04	0.04	5.00	<1	50.00	<1
Hexachlorobutadiene	ND	--	--	--	--	--	--	--	--	--
N-Dioctyl Phthalate	6.60E-01	1.7E-01	0.0E+00	1.7E-01	2.1E-03	0.17	NA	--	NA	--
2-Chloronaphthalene	ND	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	ND	--	--	--	--	--	--	--	--	--

**Table B10**  
**Screening-Level Exposure Evaluation - American Black Duck**  
**Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	American Black Duck Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>						
	Maximum Sediment Concentration (mg/kg, dw)									

**Notes:**

$$a. EDD_{total} = \frac{IR_{diet} \times \sum (BSAF_{dw} \times C_{se\ dim\ ent} \times DF_i) \times AUF}{BW} + \frac{IR_{se\ dim\ ent} \times C_{se\ dim\ ent} \times AUF}{BW}$$

Where:

- EDD<sub>diet</sub> = Dose of COPEC obtained from the diet (mg COPEC/kg receptor body weight-day)
- IR<sub>diet</sub> = Ingestion rate of food (kg food ingested per day, dry weight)
- B(S)AF = Bioaccumulation factor (BAF) or biota-sediment accumulation factor (BSAF), specific to prey type and COPEC (kg substrate/kg food, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)
- DF<sub>i</sub> = Dietary fraction of food item i (proportion of food type in the diet)
- AUF = Area use factor includes seasonal use rates, area use rates, COPEC assimilation rate
- BW = Body weight of the receptor, wet weight (kg)
- EDD<sub>substrate</sub> = Dose of COPEC from incidental substrate ingestion (mg COPEC/kg body weight-day)
- IR<sub>substrate</sub> = Incidental Ingestion Rate of substrate (kg substrate ingested per day, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)

NA, TRV was not available.

ND, not detected

--, HQ could not be calculated because TRV was not available or chemical was not detected.

**Table B11**  
**Screening-Level Exposure Evaluation - Double-Crested Cormorant**  
**Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	Double-crested Cormorant Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>						
	Maximum Sediment Concentration (mg/kg, dw)									
<b>Inorganics - Metals</b>										
Arsenic	4.57E+01	0.0E+00	4.8E-01	4.8E-01	6.2E-02	0.54	2.24	<1	4.51	<1
Cadmium	1.60E+00	0.0E+00	4.0E-03	4.0E-03	2.2E-03	0.01	1.47	<1	6.30	<1
Chromium	7.36E+01	0.0E+00	4.5E-02	4.5E-02	9.9E-02	0.14	2.66	<1	15.60	<1
Copper	5.31E+01	0.0E+00	6.1E-01	6.1E-01	7.2E-02	0.68	2.30	<1	4.70	<1
Lead	7.48E+01	0.0E+00	3.3E-01	3.3E-01	1.0E-01	0.43	0.19	<b>2.3</b>	1.90	<1
Mercury	5.35E+00	0.0E+00	6.3E-01	6.3E-01	7.2E-03	0.64	0.01	<b>48.9</b>	0.03	<b>24.4</b>
Nickel	3.88E+01	0.0E+00	4.2E-01	4.2E-01	5.2E-02	0.47	6.71	<1	18.60	<1
Selenium	3.26E+00	0.0E+00	3.1E-01	3.1E-01	4.4E-03	0.32	0.61	<1	0.82	<1
Silver	1.44E+00	0.0E+00	1.6E-02	1.6E-02	1.9E-03	0.02	2.20	<1	60.50	<1
Zinc	2.16E+02	0.0E+00	3.1E+00	3.1E+00	2.9E-01	3.44	66.10	<1	171.00	<1
<b>Pesticides/Herbicides</b>										
Total DDx	0.00E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.00	0.01	<1	0.03	<1
Alpha-BHC	ND	--	--	--	--	--	--	--	--	--
beta-BHC	ND	--	--	--	--	--	--	--	--	--
delta-BHC	ND	--	--	--	--	--	--	--	--	--
Endosulfan I	ND	--	--	--	--	--	--	--	--	--
Endosulfan Sulfate	ND	--	--	--	--	--	--	--	--	--
Heptachlor	ND	--	--	--	--	--	--	--	--	--
<b>PCBs</b>										
Total PCB (congeners)	9.60E-01	0.0E+00	2.5E-01	2.5E-01	1.3E-03	0.25	0.40	<1	0.50	<1
<b>Polycyclic Aromatic Hydrocarbons (PAHs)</b>										
Low Molecular Weight (LMW) PAHs:										
Acenaphthene	7.30E-01	0.0E+00	1.7E-01	1.7E-01	9.9E-04	0.17				
Acenaphthylene	1.90E-01	0.0E+00	4.8E-02	4.8E-02	2.6E-04	0.05				
Anthracene	1.90E+00	0.0E+00	4.3E-01	4.3E-01	2.6E-03	0.43				
Fluorene	6.40E-01	0.0E+00	1.5E-01	1.5E-01	8.6E-04	0.15				
Naphthalene	7.40E+00	0.0E+00	1.9E+00	1.9E+00	1.0E-02	1.87				
Phenanthrene	4.50E+00	0.0E+00	1.0E+00	1.0E+00	6.1E-03	1.02				
Total LMW PAHs				3.7E+00	2.1E-02	3.70	0.67	<b>5.5</b>	6.70	<1
High Molecular Weight (HMW) PAHs:										
Benzo(a)anthracene	5.30E+00	0.0E+00	9.9E-01	9.9E-01	7.2E-03	1.00				
Benzo[A]Pyrene	4.00E+00	0.0E+00	7.9E-01	7.9E-01	5.4E-03	0.80				
Benzo(b)fluoranthene	4.50E+00	0.0E+00	8.8E-01	8.8E-01	6.1E-03	0.88				
Benzo(g,h,i)perylene	1.80E+00	0.0E+00	3.4E-01	3.4E-01	2.4E-03	0.35				
Benzo(k)fluoranthene	1.70E+00	0.0E+00	3.3E-01	3.3E-01	2.3E-03	0.33				
Chrysene	9.50E+00	0.0E+00	1.9E+00	1.9E+00	1.3E-02	1.96				
Dibenz(A,H)Anthracene	6.60E-01	0.0E+00	1.2E-01	1.2E-01	8.9E-04	0.12				

**Table B11**  
**Screening-Level Exposure Evaluation - Double-Crested Cormorant**  
**Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	Double-crested Cormorant Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>						
	Maximum Sediment Concentration (mg/kg, dw)									
Fluoranthene	6.30E+00	0.0E+00	1.4E+00	1.4E+00	8.5E-03	1.37				
Indeno (1,2,3-CD) Pyrene	1.70E+00	0.0E+00	3.2E-01	3.2E-01	2.3E-03	0.32				
Pyrene	6.70E+00	0.0E+00	1.5E+00	1.5E+00	9.0E-03	1.48				
Total HMW PAHs				8.6E+00	5.7E-02	8.62	0.05	<b>179.5</b>	0.48	<b>18.0</b>
<b>Semi-volatile Organic Compounds (SVOCs) - Non-PAH SVOCs</b>										
1,2,4-Trichlorobenzene	2.00E+00	0.0E+00	4.8E-01	4.8E-01	2.7E-03	0.48	NA	--	NA	--
2-Methylnaphthalene	3.80E-01	0.0E+00	9.3E-02	9.3E-02	5.1E-04	0.09	NA	--	NA	--
Biphenyl	1.20E-01	0.0E+00	2.1E-02	2.1E-02	1.6E-04	0.02	NA	--	NA	--
Bis(2-Ethylhexyl)Phthalate	1.20E+00	0.0E+00	2.0E-01	2.0E-01	1.6E-03	0.20	1.10	<1	11.00	<1
Butyl Benzyl Phthalate	2.80E+00	0.0E+00	4.7E-01	4.7E-01	3.8E-03	0.48	0.11	<b>4.3</b>	1.10	<1
Dibenzofuran	2.80E-01	0.0E+00	6.8E-02	6.8E-02	3.8E-04	0.07	NA	--	NA	--
Di-N-Butyl Phthalate	5.90E-01	0.0E+00	1.0E-01	1.0E-01	8.0E-04	0.10	0.11	<1	1.10	<1
Diphenyl Ether	1.70E-01	0.0E+00	4.0E-02	4.0E-02	2.3E-04	0.04	NA	--	NA	--
Hexachlorobenzene	4.00E-01	0.0E+00	1.9E-01	1.9E-01	5.4E-04	0.19	5.00	<1	50.00	<1
Hexachlorobutadiene	1.30E-01	0.0E+00	2.9E-02	2.9E-02	1.8E-04	0.03	NA	--	NA	--
N-Dioctyl Phthalate	ND	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	1.00E-01	0.0E+00	2.4E-02	2.4E-02	1.4E-04	0.02	NA	--	NA	--
Pentachlorobenzene	5.70E-02	0.0E+00	1.2E-02	1.2E-02	7.7E-05	0.01	NA	--	NA	--

**Notes:**

$$a, EDD_{total} = \frac{IR_{diet} \times \sum (BSAF_{dw} \times C_{sediment} \times DF_i) \times AUF}{BW} + \frac{IR_{substrate} \times C_{substrate} \times AUF}{BW}$$

Where:

- EDD<sub>diet</sub> = Dose of COPEC obtained from the diet (mg COPEC/kg receptor body weight-day)
- IR<sub>diet</sub> = Ingestion rate of food (kg food ingested per day, dry weight)
- B(S)AF = Bioaccumulation factor (BAF) or biota-sediment accumulation factor (BSAF), specific to prey type and COPEC (kg substrate/kg food, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)
- DF<sub>i</sub> = Dietary fraction of food item i (proportion of food type in the diet)
- AUF = Area use factor includes seasonal use rates, area use rates, COPEC assimilation rate
- BW = Body weight of the receptor, wet weight (kg)
- EDD<sub>substrate</sub> = Dose of COPEC from incidental substrate ingestion (mg COPEC/kg body weight-day)
- IR<sub>substrate</sub> = Incidental Ingestion Rate of substrate (kg substrate ingested per day, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)

NA, TRV was not available.

ND, not detected

--, HQ could not be calculated because TRV was not available or chemical was not detected.

Table B12  
 Screening-Level Exposure Evaluation - American Black Duck  
 Fluoroproducts Area  
 Delaware River Screening-Level Ecological Risk Assessment  
 Chemours Chambers Works  
 Deepwater, New Jersey

Analyte	Exposure Point Concentration	American Black Duck Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>						
	Maximum Sediment Concentration (mg/kg, dw)									
<b>Inorganics - Metals</b>										
Arsenic	4.57E+01	4.7E-01	0.0E+00	4.7E-01	1.5E-01	0.61	2.24	<1	4.51	<1
Cadmium	1.60E+00	3.9E-01	0.0E+00	3.9E-01	5.1E-03	0.40	1.47	<1	6.30	<1
Chromium	7.36E+01	3.5E+00	0.0E+00	3.5E+00	2.4E-01	3.71	2.66	<b>1.4</b>	15.60	<1
Copper	5.31E+01	9.4E+00	0.0E+00	9.4E+00	1.7E-01	9.59	2.30	<b>4.2</b>	4.70	<b>2.0</b>
Lead	7.48E+01	4.0E-01	0.0E+00	4.0E-01	2.4E-01	0.64	0.19	<b>3.3</b>	1.90	<1
Mercury	5.35E+00	7.5E-01	0.0E+00	7.5E-01	1.7E-02	0.76	0.01	<b>58.7</b>	0.03	<b>29.4</b>
Nickel	3.88E+01	9.6E-01	0.0E+00	9.6E-01	1.2E-01	1.09	6.71	<1	18.60	<1
Selenium	3.26E+00	3.7E-01	0.0E+00	3.7E-01	1.0E-02	0.38	0.61	<1	0.82	<1
Silver	1.44E+00	2.1E-02	0.0E+00	2.1E-02	4.6E-03	0.03	2.20	<1	60.50	<1
Zinc	2.16E+02	2.6E+01	0.0E+00	2.6E+01	6.9E-01	27.19	66.10	<1	171.00	<1
<b>Pesticides/Herbicides</b>										
Total DDX	0.00E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.00	0.01	<1	0.03	<1
Alpha-BHC	ND	--	--	--	--	--	--	--	--	--
beta-BHC	ND	--	--	--	--	--	--	--	--	--
delta-BHC	ND	--	--	--	--	--	--	--	--	--
Endosulfan I	ND	--	--	--	--	--	--	--	--	--
Endosulfan Sulfate	ND	--	--	--	--	--	--	--	--	--
Heptachlor	ND	--	--	--	--	--	--	--	--	--
<b>PCBs</b>										
Total PCB (congeners)	9.60E-01	2.3E-01	0.0E+00	2.3E-01	3.1E-03	0.23	0.40	<1	0.50	<1
<b>Polycyclic Aromatic Hydrocarbons (PAHs)</b>										
Low Molecular Weight (LMW) PAHs:										
Acenaphthene	7.30E-01	1.7E-01	0.0E+00	1.7E-01	2.3E-03	0.17				
Acenaphthylene	1.90E-01	4.7E-02	0.0E+00	4.7E-02	6.1E-04	0.05				
Anthracene	1.90E+00	4.2E-01	0.0E+00	4.2E-01	6.1E-03	0.42				
Fluorene	6.40E-01	1.4E-01	0.0E+00	1.4E-01	2.1E-03	0.15				
Naphthalene	7.40E+00	1.8E+00	0.0E+00	1.8E+00	2.4E-02	1.82				
Phenanthrene	4.50E+00	9.8E-01	0.0E+00	9.8E-01	1.4E-02	1.00				

Table B12  
 Screening-Level Exposure Evaluation - American Black Duck  
 Fluoroproducts Area  
 Delaware River Screening-Level Ecological Risk Assessment  
 Chemours Chambers Works  
 Deepwater, New Jersey

Analyte	Exposure Point Concentration	American Black Duck Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>						
Total LMW PAHs				3.6E+00	4.9E-02	3.60	0.67	<b>5.4</b>	6.70	<1
High Molecular Weight (HMW) PAHs:										
Benzo(a)anthracene	5.30E+00	9.6E-01	0.0E+00	9.6E-01	1.7E-02	0.98				
Benzo(A)Pyrene	4.00E+00	7.6E-01	0.0E+00	7.6E-01	1.3E-02	0.78				
Benzo(b)fluoranthene	4.50E+00	8.5E-01	0.0E+00	8.5E-01	1.4E-02	0.86				
Benzo(g,h,i)perylene	1.80E+00	3.3E-01	0.0E+00	3.3E-01	5.8E-03	0.34				
Benzo(k)fluoranthene	1.70E+00	3.2E-01	0.0E+00	3.2E-01	5.5E-03	0.32				
Chrysene	9.50E+00	1.9E+00	0.0E+00	1.9E+00	3.0E-02	1.91				
Dibenz(A,H)Anthracene	6.60E-01	1.2E-01	0.0E+00	1.2E-01	2.1E-03	0.12				
Fluoranthene	6.30E+00	1.3E+00	0.0E+00	1.3E+00	2.0E-02	1.34				
Indeno (1,2,3-CD) Pyrene	1.70E+00	3.1E-01	0.0E+00	3.1E-01	5.5E-03	0.31				
Pyrene	6.70E+00	1.4E+00	0.0E+00	1.4E+00	2.1E-02	1.44				
Total HMW PAHs				8.3E+00	1.4E-01	8.39	0.05	<b>174.9</b>	0.48	<b>17.5</b>
<b>Semi-volatile Organic Compounds (SVOCs) - Non-PAH SVOCs</b>										
1,2,4-Trichlorobenzene	2.00E+00	4.6E-01	0.0E+00	4.6E-01	6.4E-03	0.47	NA	--	NA	--
2-Methylnaphthalene	3.80E-01	8.9E-02	0.0E+00	8.9E-02	1.2E-03	0.09	NA	--	NA	--
Biphenyl	1.20E-01	2.0E-02	0.0E+00	2.0E-02	3.8E-04	0.02	NA	--	NA	--
Bis(2-Ethylhexyl)Phthalate	1.20E+00	2.0E-01	0.0E+00	2.0E-01	3.8E-03	0.20	1.10	<1	11.00	<1
Butyl Benzyl Phthalate	2.80E+00	4.6E-01	0.0E+00	4.6E-01	9.0E-03	0.46	0.11	<b>4.2</b>	1.10	<1
Dibenzofuran	2.80E-01	6.6E-02	0.0E+00	6.6E-02	9.0E-04	0.07	NA	--	NA	--
Di-N-Butyl Phthalate	5.90E-01	9.6E-02	0.0E+00	9.6E-02	1.9E-03	0.10	0.11	<1	1.10	<1
Diphenyl Ether	1.70E-01	3.9E-02	0.0E+00	3.9E-02	5.5E-04	0.04	NA	--	NA	--
Hexachlorobenzene	4.00E-01	1.8E-01	0.0E+00	1.8E-01	1.3E-03	0.18	5.00	<1	50.00	<1
Hexachlorobutadiene	1.30E-01	2.8E-02	0.0E+00	2.8E-02	4.2E-04	0.03	NA	--	NA	--
N-Dioctyl Phthalate	ND	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	1.00E-01	2.3E-02	0.0E+00	2.3E-02	3.2E-04	0.02	NA	--	NA	--
Pentachlorobenzene	5.70E-02	1.2E-02	0.0E+00	1.2E-02	1.8E-04	0.01	NA	--	NA	--

Table B12  
 Screening-Level Exposure Evaluation - American Black Duck  
 Fluoroproducts Area  
 Delaware River Screening-Level Ecological Risk Assessment  
 Chemours Chambers Works  
 Deepwater, New Jersey

Analyte	Exposure Point Concentration	American Black Duck Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>						
	Maximum Sediment Concentration (mg/kg, dw)									

**Notes:**

$$a, EDD_{total} = \frac{IR_{diet} \times \sum (BSAF_{dw} \times C_{se\ dim\ ent} \times DF_i) \times AUF}{BW} + \frac{IR_{se\ dim\ ent} \times C_{se\ dim\ ent} \times AUF}{BW}$$

Where:

- EDD<sub>diet</sub> = Dose of COPEC obtained from the diet (mg COPEC/kg receptor body weight-day)
- IR<sub>diet</sub> = Ingestion rate of food (kg food ingested per day, dry weight)
- B(S)AF = Bioaccumulation factor (BAF) or biota-sediment accumulation factor (BSAF), specific to prey type and COPEC (kg substrate/kg food, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)
- DF<sub>i</sub> = Dietary fraction of food item i (proportion of food type in the diet)
- AUF = Area use factor includes seasonal use rates, area use rates, COPEC assimilation rate
- BW = Body weight of the receptor, wet weight (kg)
- EDD<sub>substrate</sub> = Dose of COPEC from incidental substrate ingestion (mg COPEC/kg body weight-day)
- IR<sub>substrate</sub> = Incidental Ingestion Rate of substrate (kg substrate ingested per day, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)

NA, TRV was not available.

ND, not detected

--, HQ could not be calculated because TRV was not available or chemical was not detected.

**Table B13**  
**Screening-Level Exposure Evaluation - Double-Crested Cormorant**  
**SWMU 5/Henby Creek Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	Double-crested Cormorant Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>						
	Maximum Sediment Concentration (mg/kg, dw)									
<b>Inorganics - Metals</b>										
Arsenic	1.35E+01	0.0E+00	1.4E-01	1.4E-01	1.8E-02	0.16	2.24	<1	4.51	<1
Cadmium	9.85E-01	0.0E+00	2.5E-03	2.5E-03	1.3E-03	0.00	1.47	<1	6.30	<1
Chromium	4.96E+01	0.0E+00	3.0E-02	3.0E-02	6.7E-02	0.10	2.66	<1	15.60	<1
Copper	7.14E+01	0.0E+00	8.2E-01	8.2E-01	9.6E-02	0.92	2.30	<1	4.70	<1
Lead	9.26E+01	0.0E+00	4.1E-01	4.1E-01	1.3E-01	0.54	0.19	<b>2.8</b>	1.90	<1
Mercury	2.67E+00	0.0E+00	3.1E-01	3.1E-01	3.6E-03	0.32	0.01	<b>24.4</b>	0.03	<b>12.2</b>
Nickel	2.48E+01	0.0E+00	2.7E-01	2.7E-01	3.3E-02	0.30	6.71	<1	18.60	<1
Selenium	1.74E+00	0.0E+00	1.7E-01	1.7E-01	2.3E-03	0.17	0.61	<1	0.82	<1
Silver	5.42E-01	0.0E+00	5.9E-03	5.9E-03	7.3E-04	0.01	2.20	<1	60.50	<1
Zinc	1.41E+02	0.0E+00	2.1E+00	2.1E+00	1.9E-01	2.25	66.10	<1	171.00	<1
<b>Pesticides/Herbicides</b>										
Total DDX	0.00E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.00	0.01	<1	0.03	<1
Alpha-BHC	ND	--	--	--	--	--	--	--	--	--
beta-BHC	ND	--	--	--	--	--	--	--	--	--
delta-BHC	ND	--	--	--	--	--	--	--	--	--
Endosulfan I	ND	--	--	--	--	--	--	--	--	--
Endosulfan Sulfate	ND	--	--	--	--	--	--	--	--	--
Heptachlor	ND	--	--	--	--	--	--	--	--	--
<b>PCBs</b>										
Total PCB (congeners)	1.49E-02	0.0E+00	3.9E-03	3.9E-03	2.0E-05	0.00	0.40	<1	0.50	<1
<b>Polycyclic Aromatic Hydrocarbons (PAHs)</b>										
Low Molecular Weight (LMW) PAHs:										
Acenaphthene	4.60E-01	0.0E+00	2.3E-01	2.3E-01	6.2E-04	0.23				
Acenaphthylene	ND	--	--	--	--	--				
Anthracene	2.70E+00	0.0E+00	1.3E+00	1.3E+00	3.6E-03	1.29				
Fluorene	1.00E+00	0.0E+00	4.9E-01	4.9E-01	1.4E-03	0.49				
Naphthalene	1.90E+00	0.0E+00	1.0E+00	1.0E+00	2.6E-03	1.01				
Phenanthrene	7.60E+00	0.0E+00	3.6E+00	3.6E+00	1.0E-02	3.63				

**Table B13**  
**Screening-Level Exposure Evaluation - Double-Crested Cormorant**  
**SWMU 5/Henby Creek Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	Double-crested Cormorant Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>						
	Maximum Sediment Concentration (mg/kg, dw)									
Total LMW PAHs				6.6E+00	1.8E-02	6.66	0.67	<b>9.9</b>	6.70	<1
High Molecular Weight (HMW) PAHs:										
Benzo(a)anthracene	4.60E+00	0.0E+00	1.8E+00	1.8E+00	6.2E-03	1.82				
Benzo[A]Pyrene	3.10E+00	0.0E+00	1.3E+00	1.3E+00	4.2E-03	1.29				
Benzo(b)fluoranthene	2.40E+00	0.0E+00	9.9E-01	9.9E-01	3.2E-03	0.99				
Benzo(g,h,i)perylene	1.20E+00	0.0E+00	4.8E-01	4.8E-01	1.6E-03	0.48				
Benzo(k)fluoranthene	1.10E+00	0.0E+00	4.5E-01	4.5E-01	1.5E-03	0.45				
Chrysene	7.40E+00	0.0E+00	3.2E+00	3.2E+00	1.0E-02	3.20				
Dibenz(A,H)Anthracene	5.00E-02	0.0E+00	2.0E-02	2.0E-02	6.8E-05	0.02				
Fluoranthene	4.00E+00	0.0E+00	1.8E+00	1.8E+00	5.4E-03	1.83				
Indeno (1,2,3-CD) Pyrene	9.40E-01	0.0E+00	3.7E-01	3.7E-01	1.3E-03	0.37				
Pyrene	7.30E+00	0.0E+00	3.4E+00	3.4E+00	9.9E-03	3.38				
Total HMW PAHs				1.4E+01	4.3E-02	13.85	0.05	<b>288.5</b>	0.48	<b>28.8</b>
<b>Semi-volatile Organic Compounds (SVOCs) - Non-PAH SVOCs</b>										
1,2,4-Trichlorobenzene	1.40E+00	0.0E+00	7.1E-01	7.1E-01	1.9E-03	0.71	NA	--	NA	--
2-Methylnaphthalene	ND	--	--	--	--	--	--	--	--	--
Biphenyl	ND	--	--	--	--	--	--	--	--	--
Bis(2-Ethylhexyl)Phthalate	1.30E-01	0.0E+00	4.6E-02	4.6E-02	1.8E-04	0.05	1.10	<1	11.00	<1
Butyl Benzyl Phthalate	ND	--	--	--	--	--	--	--	--	--
Dibenzofuran	ND	--	--	--	--	--	--	--	--	--
Di-N-Butyl Phthalate	1.80E+00	0.0E+00	6.4E-01	6.4E-01	2.4E-03	0.64	0.11	<b>5.8</b>	1.10	<1
Diphenyl Ether	ND	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	ND	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	ND	--	--	--	--	--	--	--	--	--
N-Dioctyl Phthalate	ND	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	3.70E-01	0.0E+00	1.9E-01	1.9E-01	5.0E-04	0.19	NA	--	NA	--
Pentachlorobenzene	ND	--	--	--	--	--	--	--	--	--

**Table B13**  
**Screening-Level Exposure Evaluation - Double-Crested Cormorant**  
**SWMU 5/Henby Creek Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	Double-crested Cormorant Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>						
	Maximum Sediment Concentration (mg/kg, dw)									

**Notes:**

$$a, EDD_{total} = \frac{IR_{diet} \times \sum (BSAF_{dw} \times C_{se\ dim\ ent} \times DF_i) \times AUF}{BW} + \frac{IR_{se\ dim\ ent} \times C_{se\ dim\ ent} \times AUF}{BW}$$

Where:

- EDD<sub>diet</sub> = Dose of COPEC obtained from the diet (mg COPEC/kg receptor body weight-day)
- IR<sub>diet</sub> = Ingestion rate of food (kg food ingested per day, dry weight)
- B(S)AF = Bioaccumulation factor (BAF) or biota-sediment accumulation factor (BSAF), specific to prey type and COPEC (kg substrate/kg food, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)
- DF<sub>i</sub> = Dietary fraction of food item i (proportion of food type in the diet)
- AUF = Area use factor includes seasonal use rates, area use rates, COPEC assimilation rate
- BW = Body weight of the receptor, wet weight (kg)
- EDD<sub>substrate</sub> = Dose of COPEC from incidental substrate ingestion (mg COPEC/kg body weight-day)
- IR<sub>substrate</sub> = Incidental Ingestion Rate of substrate (kg substrate ingested per day, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)

NA, TRV was not available.

ND, not detected

--, HQ could not be calculated because TRV was not available or chemical was not detected.

**Table B14**  
**Screening-Level Exposure Evaluation - American Black Duck**  
**SWMU 5/Henby Creek Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	American Black Duck Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>						
	Maximum Sediment Concentration (mg/kg, dw)									
<b>Inorganics - Metals</b>										
Arsenic	1.35E+01	1.4E-01	0.0E+00	1.4E-01	4.3E-02	0.18	2.24	<1	4.51	<1
Cadmium	9.85E-01	2.4E-01	0.0E+00	2.4E-01	3.2E-03	0.25	1.47	<1	6.30	<1
Chromium	4.96E+01	2.3E+00	0.0E+00	2.3E+00	1.6E-01	2.50	2.66	<1	15.60	<1
Copper	7.14E+01	1.0E+01	0.0E+00	1.0E+01	2.3E-01	10.46	2.30	<b>4.5</b>	4.70	<b>2.2</b>
Lead	9.26E+01	4.9E-01	0.0E+00	4.9E-01	3.0E-01	0.79	0.19	<b>4.1</b>	1.90	<1
Mercury	2.67E+00	3.7E-01	0.0E+00	3.7E-01	8.6E-03	0.38	0.01	<b>29.3</b>	0.03	<b>14.7</b>
Nickel	2.48E+01	7.1E-01	0.0E+00	7.1E-01	8.0E-02	0.78	6.71	<1	18.60	<1
Selenium	1.74E+00	2.0E-01	0.0E+00	2.0E-01	5.6E-03	0.20	0.61	<1	0.82	<1
Silver	5.42E-01	7.8E-03	0.0E+00	7.8E-03	1.7E-03	0.01	2.20	<1	60.50	<1
Zinc	1.41E+02	2.5E+01	0.0E+00	2.5E+01	4.5E-01	25.56	66.10	<1	171.00	<1
<b>Pesticides/Herbicides</b>										
Total DDX	0.00E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.00	0.01	<1	0.03	<1
Alpha-BHC	ND	--	--	--	--	--	--	--	--	--
beta-BHC	ND	--	--	--	--	--	--	--	--	--
delta-BHC	ND	--	--	--	--	--	--	--	--	--
Endosulfan I	ND	--	--	--	--	--	--	--	--	--
Endosulfan Sulfate	ND	--	--	--	--	--	--	--	--	--
Heptachlor	ND	--	--	--	--	--	--	--	--	--
<b>PCBs</b>										
Total PCB (congeners)	1.49E-02	7.4E-03	0.0E+00	7.4E-03	4.8E-05	0.01	0.40	<1	0.50	<1
<b>Polycyclic Aromatic Hydrocarbons (PAHs)</b>										
Low Molecular Weight (LMW) PAHs:										
Acenaphthene	4.60E-01	2.2E-01	0.0E+00	2.2E-01	1.5E-03	0.22				
Acenaphthylene	ND	--	--	--	--	--				
Anthracene	2.70E+00	1.2E+00	0.0E+00	1.2E+00	8.7E-03	1.25				
Fluorene	1.00E+00	4.7E-01	0.0E+00	4.7E-01	3.2E-03	0.48				
Naphthalene	1.90E+00	9.7E-01	0.0E+00	9.7E-01	6.1E-03	0.98				
Phenanthrene	7.60E+00	3.5E+00	0.0E+00	3.5E+00	2.4E-02	3.52				

**Table B14**  
**Screening-Level Exposure Evaluation - American Black Duck**  
**SWMU 5/Henby Creek Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	American Black Duck Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>						
Total LMW PAHs				6.4E+00	4.4E-02	6.45	0.67	<b>9.6</b>	6.70	<1
High Molecular Weight (HMW) PAHs:										
Benzo(a)anthracene	4.60E+00	1.8E+00	0.0E+00	1.8E+00	1.5E-02	1.77				
Benzo[A]Pyrene	3.10E+00	1.2E+00	0.0E+00	1.2E+00	9.9E-03	1.26				
Benzo(b)fluoranthene	2.40E+00	9.5E-01	0.0E+00	9.5E-01	7.7E-03	0.96				
Benzo(g,h,i)perylene	1.20E+00	4.7E-01	0.0E+00	4.7E-01	3.8E-03	0.47				
Benzo(k)fluoranthene	1.10E+00	4.3E-01	0.0E+00	4.3E-01	3.5E-03	0.44				
Chrysene	7.40E+00	3.1E+00	0.0E+00	3.1E+00	2.4E-02	3.10				
Dibenz(A,H)Anthracene	5.00E-02	1.9E-02	0.0E+00	1.9E-02	1.6E-04	0.02				
Fluoranthene	4.00E+00	1.8E+00	0.0E+00	1.8E+00	1.3E-02	1.77				
Indeno (1,2,3-CD) Pyrene	9.40E-01	3.6E-01	0.0E+00	3.6E-01	3.0E-03	0.36				
Pyrene	7.30E+00	3.3E+00	0.0E+00	3.3E+00	2.3E-02	3.28				
Total HMW PAHs				1.3E+01	1.0E-01	13.42	0.05	<b>279.6</b>	0.48	<b>28.0</b>
<b>Semi-volatile Organic Compounds (SVOCs) - Non-PAH SVOCs</b>										
1,2,4-Trichlorobenzene	1.40E+00	6.8E-01	0.0E+00	6.8E-01	4.5E-03	0.69	NA	--	NA	--
2-Methylnaphthalene	ND	--	--	--	--	--	--	--	--	--
Biphenyl	ND	--	--	--	--	--	--	--	--	--
Bis(2-Ethylhexyl)Phthalate	1.30E-01	4.5E-02	0.0E+00	4.5E-02	4.2E-04	0.04	1.10	<1	11.00	<1
Butyl Benzyl Phthalate	ND	--	--	--	--	--	--	--	--	--
Dibenzofuran	ND	--	--	--	--	--	--	--	--	--
Di-N-Butyl Phthalate	1.80E+00	6.2E-01	0.0E+00	6.2E-01	5.8E-03	0.62	0.11	<b>5.7</b>	1.10	<1
Diphenyl Ether	ND	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	ND	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	ND	--	--	--	--	--	--	--	--	--
N-Dioctyl Phthalate	ND	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	3.70E-01	1.8E-01	0.0E+00	1.8E-01	1.2E-03	0.18	NA	--	NA	--
Pentachlorobenzene	ND	--	--	--	--	--	--	--	--	--

**Table B14**  
**Screening-Level Exposure Evaluation - American Black Duck**  
**SWMU 5/Henby Creek Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	American Black Duck Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>						
	Maximum Sediment Concentration (mg/kg, dw)									

**Notes:**

$$a, EDD_{total} = \frac{IR_{diet} \times \sum (BSAF_{dw} \times C_{sediment} \times DF_i) \times AUF}{BW} + \frac{IR_{sediment} \times C_{sediment} \times AUF}{BW}$$

Where:

- EDD<sub>diet</sub> = Dose of COPEC obtained from the diet (mg COPEC/kg receptor body weight-day)
- IR<sub>diet</sub> = Ingestion rate of food (kg food ingested per day, dry weight)
- B(S)AF = Bioaccumulation factor (BAF) or biota-sediment accumulation factor (BSAF), specific to prey type and COPEC (kg substrate/kg food, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)
- DF<sub>i</sub> = Dietary fraction of food item i (proportion of food type in the diet)
- AUF = Area use factor includes seasonal use rates, area use rates, COPEC assimilation rate
- BW = Body weight of the receptor, wet weight (kg)
- EDD<sub>substrate</sub> = Dose of COPEC from incidental substrate ingestion (mg COPEC/kg body weight-day)
- IR<sub>substrate</sub> = Incidental Ingestion Rate of substrate (kg substrate ingested per day, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)

NA, TRV was not available.

ND, not detected

--, HQ could not be calculated because TRV was not available or chemical was not detected.

**Table B15**  
**Screening-Level Exposure Evaluation - Double-Crested Cormorant**  
**Carneys Point Zone**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	Double-crested Cormorant Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>						
	Maximum Sediment Concentration (mg/kg, dw)									
<b>Inorganics - Metals</b>										
Arsenic	9.63E+00	0.0E+00	1.0E-01	1.0E-01	1.3E-02	0.11	2.24	<1	4.51	<1
Cadmium	1.06E+00	0.0E+00	2.6E-03	2.6E-03	1.4E-03	0.00	1.47	<1	6.30	<1
Chromium	5.40E+01	0.0E+00	3.3E-02	3.3E-02	7.3E-02	0.11	2.66	<1	15.60	<1
Copper	5.74E+01	0.0E+00	6.6E-01	6.6E-01	7.8E-02	0.74	2.30	<1	4.70	<1
Lead	5.76E+01	0.0E+00	2.6E-01	2.6E-01	7.8E-02	0.33	0.19	<b>1.8</b>	1.90	<1
Mercury	1.26E+00	0.0E+00	1.5E-01	1.5E-01	1.7E-03	0.15	0.01	<b>11.5</b>	0.03	<b>5.8</b>
Nickel	2.89E+01	0.0E+00	3.1E-01	3.1E-01	3.9E-02	0.35	6.71	<1	18.60	<1
Selenium	2.07E+00	0.0E+00	2.0E-01	2.0E-01	2.8E-03	0.20	0.61	<1	0.82	<1
Silver	ND	--	--	--	--	--	--	--	--	--
Zinc	2.23E+02	0.0E+00	3.3E+00	3.3E+00	3.0E-01	3.55	66.10	<1	171.00	<1
<b>Pesticides/Herbicides</b>										
Total DDX	0.00E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.00	0.01	<1	0.03	<1
Alpha-BHC	ND	--	--	--	--	--	--	--	--	--
beta-BHC	ND	--	--	--	--	--	--	--	--	--
delta-BHC	ND	--	--	--	--	--	--	--	--	--
Endosulfan I	ND	--	--	--	--	--	--	--	--	--
Endosulfan Sulfate	ND	--	--	--	--	--	--	--	--	--
Heptachlor	ND	--	--	--	--	--	--	--	--	--
<b>PCBs</b>										
Total PCB (congeners)	7.17E-02	0.0E+00	1.9E-02	1.9E-02	9.7E-05	0.02	0.40	<1	0.50	<1
<b>Polycyclic Aromatic Hydrocarbons (PAHs)</b>										
Low Molecular Weight (LMW) PAHs:										
Acenaphthene	ND	--	--	--	--	--	--	--	--	--
Acenaphthylene	9.90E-02	0.0E+00	2.1E-02	2.1E-02	1.3E-04	0.02				
Anthracene	8.20E-02	0.0E+00	1.6E-02	1.6E-02	1.1E-04	0.02				
Fluorene	ND	--	--	--	--	--				
Naphthalene	1.20E-01	0.0E+00	2.5E-02	2.5E-02	1.6E-04	0.03				
Phenanthrene	2.40E-01	0.0E+00	4.6E-02	4.6E-02	3.2E-04	0.05				

**Table B15**  
**Screening-Level Exposure Evaluation - Double-Crested Cormorant**  
**Carneys Point Zone**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	Double-crested Cormorant Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>						
Total LMW PAHs				1.1E-01	7.3E-04	0.11	0.67	<1	6.70	<1
High Molecular Weight (HMW) PAHs:										
Benzo(a)anthracene	3.40E-01	0.0E+00	5.4E-02	5.4E-02	4.6E-04	0.05				
Benzo(a)Pyrene	2.70E-01	0.0E+00	4.5E-02	4.5E-02	3.6E-04	0.05				
Benzo(b)fluoranthene	3.50E-01	0.0E+00	5.7E-02	5.7E-02	4.7E-04	0.06				
Benzo(g,h,i)perylene	1.70E-01	0.0E+00	2.7E-02	2.7E-02	2.3E-04	0.03				
Benzo(k)fluoranthene	1.40E-01	0.0E+00	2.3E-02	2.3E-02	1.9E-04	0.02				
Chrysene	3.70E-01	0.0E+00	6.4E-02	6.4E-02	5.0E-04	0.06				
Dibenz(A,H)Anthracene	ND	--	--	--	--	--	--	--	--	--
Fluoranthene	6.60E-01	0.0E+00	1.2E-01	1.2E-01	8.9E-04	0.12				
Indeno (1,2,3-CD) Pyrene	1.60E-01	0.0E+00	2.5E-02	2.5E-02	2.2E-04	0.03				
Pyrene	5.30E-01	0.0E+00	9.8E-02	9.8E-02	7.2E-04	0.10				
Total HMW PAHs				5.1E-01	4.0E-03	0.52	0.05	<b>10.8</b>	0.48	<b>1.1</b>
<b>Semi-volatile Organic Compounds (SVOCs) - Non-PAH SVOCs</b>										
1,2,4-Trichlorobenzene	2.20E-01	0.0E+00	4.4E-02	4.4E-02	3.0E-04	0.04	NA	--	NA	--
2-Methylnaphthalene	ND	--	--	--	--	--	--	--	--	--
Biphenyl	ND	--	--	--	--	--	--	--	--	--
Bis(2-Ethylhexyl)Phthalate	4.10E-01	0.0E+00	5.8E-02	5.8E-02	5.5E-04	0.06	1.10	<1	11.00	<1
Butyl Benzyl Phthalate	ND	--	--	--	--	--	--	--	--	--
Dibenzofuran	ND	--	--	--	--	--	--	--	--	--
Di-N-Butyl Phthalate	ND	--	--	--	--	--	--	--	--	--
Diphenyl Ether	ND	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	ND	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	ND	--	--	--	--	--	--	--	--	--
N-Dioctyl Phthalate	ND	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	ND	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	ND	--	--	--	--	--	--	--	--	--

**Table B15**  
**Screening-Level Exposure Evaluation - Double-Crested Cormorant**  
**Carneys Point Zone**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	Double-crested Cormorant Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>						
	Maximum Sediment Concentration (mg/kg, dw)									

**Notes:**

$$a, EDD_{total} = \frac{IR_{diet} \times \sum (BSAF_{dw} \times C_{se\ dim\ ent} \times DF_i) \times AUF}{BW} + \frac{IR_{se\ dim\ ent} \times C_{se\ dim\ ent} \times AUF}{BW}$$

Where:

- EDD<sub>diet</sub> = Dose of COPEC obtained from the diet (mg COPEC/kg receptor body weight-day)
- IR<sub>diet</sub> = Ingestion rate of food (kg food ingested per day, dry weight)
- B(S)AF = Bioaccumulation factor (BAF) or biota-sediment accumulation factor (BSAF), specific to prey type and COPEC (kg substrate/kg food, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)
- DF<sub>i</sub> = Dietary fraction of food item i (proportion of food type in the diet)
- AUF = Area use factor includes seasonal use rates, area use rates, COPEC assimilation rate
- BW = Body weight of the receptor, wet weight (kg)
- EDD<sub>substrate</sub> = Dose of COPEC from incidental substrate ingestion (mg COPEC/kg body weight-day)
- IR<sub>substrate</sub> = Incidental Ingestion Rate of substrate (kg substrate ingested per day, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)

NA, TRV was not available.

ND, not detected

--, HQ could not be calculated because TRV was not available or chemical was not detected.

**Table B16**  
**Screening-Level Exposure Evaluation - American Black Duck**  
**Carneys Point Zone**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	American Black Duck Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>Low</sub>	TRV <sub>LOAEL</sub>	HQ <sub>High</sub>
	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>						
	Maximum Sediment Concentration (mg/kg, dw)									
<b>Inorganics - Metals</b>										
Arsenic	9.63E+00	9.8E-02	0.0E+00	9.8E-02	3.1E-02	0.13	2.24	<1	4.51	<1
Cadmium	1.06E+00	2.6E-01	0.0E+00	2.6E-01	3.4E-03	0.26	1.47	<1	6.30	<1
Chromium	5.40E+01	2.5E+00	0.0E+00	2.5E+00	1.7E-01	2.72	2.66	<b>1.0</b>	15.60	<1
Copper	5.74E+01	9.6E+00	0.0E+00	9.6E+00	1.8E-01	9.81	2.30	<b>4.3</b>	4.70	<b>2.1</b>
Lead	5.76E+01	3.0E-01	0.0E+00	3.0E-01	1.8E-01	0.49	0.19	<b>2.6</b>	1.90	<1
Mercury	1.26E+00	1.8E-01	0.0E+00	1.8E-01	4.0E-03	0.18	0.01	<b>13.8</b>	0.03	<b>6.9</b>
Nickel	2.89E+01	7.8E-01	0.0E+00	7.8E-01	9.3E-02	0.88	6.71	<1	18.60	<1
Selenium	2.07E+00	2.4E-01	0.0E+00	2.4E-01	6.6E-03	0.24	0.61	<1	0.82	<1
Silver	ND	--	--	--	--	--	--	--	--	--
Zinc	2.23E+02	2.7E+01	0.0E+00	2.7E+01	7.2E-01	27.32	66.10	<1	171.00	<1
<b>Pesticides/Herbicides</b>										
Total DDX	0.00E+00	0.0E+00	0.0E+00	0.0E+00	0.0E+00	0.00	0.01	<1	0.03	<1
Alpha-BHC	ND	--	--	--	--	--	--	--	--	--
beta-BHC	ND	--	--	--	--	--	--	--	--	--
delta-BHC	ND	--	--	--	--	--	--	--	--	--
Endosulfan I	ND	--	--	--	--	--	--	--	--	--
Endosulfan Sulfate	ND	--	--	--	--	--	--	--	--	--
Heptachlor	ND	--	--	--	--	--	--	--	--	--
<b>PCBs</b>										
Total PCB (congeners)	7.17E-02	1.4E-02	0.0E+00	1.4E-02	2.3E-04	0.01	0.40	<1	0.50	<1
<b>Polycyclic Aromatic Hydrocarbons (PAHs)</b>										
Low Molecular Weight (LMW) PAHs:										
Acenaphthene	ND	--	--	--	--	--	--	--	--	--
Acenaphthylene	9.90E-02	2.0E-02	0.0E+00	2.0E-02	3.2E-04	0.02				
Anthracene	8.20E-02	1.5E-02	0.0E+00	1.5E-02	2.6E-04	0.02				
Fluorene	ND	--	--	--	--	--				
Naphthalene	1.20E-01	2.5E-02	0.0E+00	2.5E-02	3.8E-04	0.02				
Phenanthrene	2.40E-01	4.4E-02	0.0E+00	4.4E-02	7.7E-04	0.04				

**Table B16**  
**Screening-Level Exposure Evaluation - American Black Duck**  
**Carneys Point Zone**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	American Black Duck Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>Low</sub>	TRV <sub>LOAEL</sub>	HQ <sub>High</sub>
	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>						
	Maximum Sediment Concentration (mg/kg, dw)									
Total LMW PAHs				1.0E-01	1.7E-03	0.11	0.67	<1	6.70	<1
High Molecular Weight (HMW) PAHs:										
Benzo(a)anthracene	3.40E-01	5.2E-02	0.0E+00	5.2E-02	1.1E-03	0.05				
Benzo(A)Pyrene	2.70E-01	4.3E-02	0.0E+00	4.3E-02	8.7E-04	0.04				
Benzo(b)fluoranthene	3.50E-01	5.5E-02	0.0E+00	5.5E-02	1.1E-03	0.06				
Benzo(g,h,i)perylene	1.70E-01	2.6E-02	0.0E+00	2.6E-02	5.5E-04	0.03				
Benzo(k)fluoranthene	1.40E-01	2.2E-02	0.0E+00	2.2E-02	4.5E-04	0.02				
Chrysene	3.70E-01	6.2E-02	0.0E+00	6.2E-02	1.2E-03	0.06				
Dibenz(A,H)Anthracene	ND	--	--	--	--	--				
Fluoranthene	6.60E-01	1.2E-01	0.0E+00	1.2E-01	2.1E-03	0.12				
Indeno (1,2,3-CD) Pyrene	1.60E-01	2.4E-02	0.0E+00	2.4E-02	5.1E-04	0.02				
Pyrene	5.30E-01	9.5E-02	0.0E+00	9.5E-02	1.7E-03	0.10				
Total HMW PAHs				5.0E-01	9.6E-03	0.51	0.05	<b>10.5</b>	0.48	<b>1.1</b>
<b>Semi-volatile Organic Compounds (SVOCs) - Non-PAH SVOCs</b>										
1,2,4-Trichlorobenzene	2.20E-01	4.3E-02	0.0E+00	4.3E-02	7.1E-04	0.04	NA	--	NA	--
2-Methylnaphthalene	ND	--	--	--	--	--	--	--	--	--
Biphenyl	ND	--	--	--	--	--	--	--	--	--
Bis(2-Ethylhexyl)Phthalate	4.10E-01	5.6E-02	0.0E+00	5.6E-02	1.3E-03	0.06	1.10	<1	11.00	<1
Butyl Benzyl Phthalate	ND	--	--	--	--	--	--	--	--	--
Dibenzofuran	ND	--	--	--	--	--	--	--	--	--
Di-N-Butyl Phthalate	ND	--	--	--	--	--	--	--	--	--
Diphenyl Ether	ND	--	--	--	--	--	--	--	--	--
Hexachlorobenzene	ND	--	--	--	--	--	--	--	--	--
Hexachlorobutadiene	ND	--	--	--	--	--	--	--	--	--
N-Dioctyl Phthalate	ND	--	--	--	--	--	--	--	--	--
2-Chloronaphthalene	ND	--	--	--	--	--	--	--	--	--
Pentachlorobenzene	ND	--	--	--	--	--	--	--	--	--

**Table B16**  
**Screening-Level Exposure Evaluation - American Black Duck**  
**Carneys Point Zone**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	American Black Duck Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>Low</sub>	TRV <sub>LOAEL</sub>	HQ <sub>High</sub>
	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>						
	Maximum Sediment Concentration (mg/kg, dw)									

**Notes:**

$$a, EDD_{total} = \frac{IR_{diet} \times \sum (BSAF_{dw} \times C_{se\ dim\ ent} \times DF_i) \times AUF}{BW} + \frac{IR_{se\ dim\ ent} \times C_{se\ dim\ ent} \times AUF}{BW}$$

Where:

- EDD<sub>diet</sub> = Dose of COPEC obtained from the diet (mg COPEC/kg receptor body weight-day)
- IR<sub>diet</sub> = Ingestion rate of food (kg food ingested per day, dry weight)
- B(S)AF = Bioaccumulation factor (BAF) or biota-sediment accumulation factor (BSAF), specific to prey type and COPEC (kg substrate/kg food, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)
- DF<sub>i</sub> = Dietary fraction of food item i (proportion of food type in the diet)
- AUF = Area use factor includes seasonal use rates, area use rates, COPEC assimilation rate
- BW = Body weight of the receptor, wet weight (kg)
- EDD<sub>substrate</sub> = Dose of COPEC from incidental substrate ingestion (mg COPEC/kg body weight-day)
- IR<sub>substrate</sub> = Incidental Ingestion Rate of substrate (kg substrate ingested per day, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)

NA, TRV was not available.

ND, not detected

--, HQ could not be calculated because TRV was not available or chemical was not detected.

**Table B17**  
**Summary of the Screening-Level Wildlife Exposure Evaluation**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Double-crested Cormorant HQ <sub>NOAEL</sub> > 1	American Black Duck HQ <sub>NOAEL</sub> > 1	Background Threshold Value (BTV)	Maximum EPC (mg/kg)	Total Samples	Number of detections	Maximum EPC < BTV?	Frequency of detection	<5% Detection Frequency?	Carry forward to refined evaluation?
<b>Jackson Labs/TEL Area</b>										
Chromium	No	Yes	139.64	1170	37	37	No	100	No	Yes
Copper	No	Yes	36.06	87.8	37	37	No	100	No	Yes
Lead	Yes	Yes	55.56	1210	37	37	No	100	No	Yes
Mercury	Yes	Yes	0.39	9.6	37	35	No	94.6	No	Yes
Total LMW PAHs	Yes	Yes	0.23	5.88	37	22	No	59.5	No	Yes
Total HMW PAHs	Yes	Yes	0.70	21.7	37	25	No	67.6	No	Yes
Di-N-Butyl Phthalate	Yes	No	--	0.41	37	2	No	5.4	No	Yes
<b>Fluoroproducts Area</b>										
Chromium	No	Yes	139.64	73.6	50	50	Yes	100	No	Yes
Copper	No	Yes	36.06	53.1	50	50	No	100	No	Yes
Lead	Yes	Yes	55.56	74.8	50	50	No	100	No	Yes
Mercury	Yes	Yes	0.39	5.35	50	49	No	98	No	Yes
Total LMW PAHs	Yes	Yes	0.23	15.4	50	36	No	72	No	Yes
Total HMW PAHs	Yes	Yes	0.70	42.2	50	45	No	90	No	Yes
Butyl Benzyl Phthalate	Yes	Yes	--	2.80	50	3	No	6	No	Yes
Di-N-Butyl Phthalate	No	No	--	0.59	50	4	No	8	No	Yes
<b>SWMU 5/Henby Creek Area</b>										
Copper	No	Yes	36.06	71.4	13	13	No	100	No	Yes
Lead	Yes	Yes	55.56	92.60	16	16	No	100	No	Yes
Mercury	Yes	Yes	0.39	2.67	13	13	No	100	No	Yes
Total LMW PAHs	Yes	Yes	0.23	13.7	18	5	No	27.8	No	Yes
Total HMW PAHs	Yes	Yes	0.70	32.09	13	13	No	100	No	Yes
Di-N-Butyl Phthalate	Yes	Yes	--	1.80	13	5	No	38.5	No	Yes
<b>Carneys Point Zone</b>										
Chromium	No	Yes	139.64	54.0	21	21	Yes	100	No	Yes
Copper	No	Yes	36.06	57.4	21	21	No	100	No	Yes
Lead	Yes	Yes	55.56	57.6	22	22	No	100	No	Yes
Mercury	Yes	Yes	0.39	1.26	23	21	No	91.3	No	Yes
Total HMW PAHs	Yes	Yes	0.70	2.99	21	12	No	57.1	No	Yes

**Table B18**  
**Estimated Aquatic Prey Concentrations - Refined Exposure Evaluation**  
**Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	log K <sub>ow</sub>	Refined Sediment Concentration (mg/kg, dry weight)	Normalized BSAF (kg OC/kg lipid) <sup>a</sup>	Estimated Concentrations in Dietary Items of Aquatic Receptors (mg/kg, dry weight)					
				Aquatic Life Stage Benthic Invertebrates			Fish		
				BSAF <sup>b</sup>	Estimated Concentration	BSAF/BCF Reference	BSAF	Estimated Concentration	BSAF Reference
<b>Metals</b>									
Chromium	NA	3.05E+02	NA	5.88E-01	1.80E+02	Bechtel-Jacobs (1998) <sup>e</sup>	9.00E-03	2.75E+00	Song and Breslin (1999) <sup>h</sup>
Copper	NA	3.51E+01	NA	95% UPL	1.05E+02	Bechtel-Jacobs (1998) <sup>f</sup>	1.70E-01	5.97E+00	Song and Breslin (1999) <sup>h</sup>
Lead	NA	2.20E+02	NA	6.60E-02	1.45E+01	Bechtel-Jacobs (1998) <sup>c</sup>	6.60E-02	1.45E+01	Song and Breslin (1999) <sup>h</sup>
Mercury	NA	8.89E-01	NA	1.74E+00	1.55E+00	Bechtel-Jacobs (1998) <sup>e</sup>	1.74E+00	1.55E+00	Bechtel-Jacobs (1998) <sup>i</sup>
<b>Semi-volatile Organic Compounds (SVOCs) - Polycyclic Aromatic Hydrocarbons (PAHs)</b>									
Low Molecular Weight (LMW) PAHs:									
Acenaphthene	4.15	9.58E-02	6.96E-01	4.52E+00	4.33E-01	DiToro and McGrath (2000)	5.56E+00	5.33E-01	DiToro and McGrath (2000)
Acenaphthylene	3.22	4.29E-02	7.54E-01	4.90E+00	2.11E-01	DiToro and McGrath (2000)	6.04E+00	2.59E-01	DiToro and McGrath (2000)
Anthracene	4.53	1.63E-01	6.73E-01	4.37E+00	7.14E-01	DiToro and McGrath (2000)	5.38E+00	8.79E-01	DiToro and McGrath (2000)
Fluorene	4.21	7.44E-02	6.92E-01	4.50E+00	3.34E-01	DiToro and McGrath (2000)	5.53E+00	4.12E-01	DiToro and McGrath (2000)
Naphthalene	3.36	2.87E-01	7.45E-01	4.84E+00	1.39E+00	DiToro and McGrath (2000)	5.96E+00	1.71E+00	DiToro and McGrath (2000)
Phenanthrene	4.57	3.72E-01	6.70E-01	4.36E+00	1.62E+00	DiToro and McGrath (2000)	5.36E+00	2.00E+00	DiToro and McGrath (2000)
Total LMW PAHs		1.04E+00			4.71E+00			5.79E+00	
High Molecular Weight (HMW) PAHs:									
Benzo(a)anthracene	6.71	3.63E-01	5.56E-01	3.61E+00	1.31E+00	DiToro and McGrath (2000)	4.45E+00	1.62E+00	DiToro and McGrath (2000)
Benzo[A]Pyrene	6.11	3.14E-01	5.86E-01	3.81E+00	1.20E+00	DiToro and McGrath (2000)	4.69E+00	1.47E+00	DiToro and McGrath (2000)
Benzo(b)fluoranthene	6.27	2.09E-01	5.78E-01	3.76E+00	7.85E-01	DiToro and McGrath (2000)	4.62E+00	9.66E-01	DiToro and McGrath (2000)
Benzo(g,h,i)perylene	6.51	1.77E-01	5.66E-01	3.68E+00	6.50E-01	DiToro and McGrath (2000)	4.53E+00	8.00E-01	DiToro and McGrath (2000)
Benzo(k)fluoranthene	6.29	1.98E-01	5.77E-01	3.75E+00	7.41E-01	DiToro and McGrath (2000)	4.61E+00	9.12E-01	DiToro and McGrath (2000)
Chrysene	5.71	3.80E-01	6.07E-01	3.94E+00	1.50E+00	DiToro and McGrath (2000)	4.85E+00	1.85E+00	DiToro and McGrath (2000)
Dibenz(A,H)Anthracene	6.71	3.37E-02	5.56E-01	3.61E+00	1.22E-01	DiToro and McGrath (2000)	4.45E+00	1.50E-01	DiToro and McGrath (2000)
Fluoranthene	5.08	8.33E-01	6.41E-01	4.17E+00	3.47E+00	DiToro and McGrath (2000)	5.13E+00	4.27E+00	DiToro and McGrath (2000)
Indeno (1,2,3-CD) Pyrene	6.72	1.54E-01	5.55E-01	3.61E+00	5.57E-01	DiToro and McGrath (2000)	4.44E+00	6.86E-01	DiToro and McGrath (2000)
Pyrene	4.92	6.52E-01	6.50E-01	4.23E+00	2.76E+00	DiToro and McGrath (2000)	5.20E+00	3.39E+00	DiToro and McGrath (2000)
Total HMW PAHs		3.31E+00			1.31E+01			1.61E+01	

**Table B18**  
**Estimated Aquatic Prey Concentrations - Refined Exposure Evaluation**  
**Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	log K <sub>ow</sub>	Refined Sediment Concentration (mg/kg, dry weight)	Normalized BSAF (kg OC/kg lipid) <sup>a</sup>	Estimated Concentrations in Dietary Items of Aquatic Receptors (mg/kg, dry weight)					
				Aquatic Life Stage Benthic Invertebrates			Fish		
				BSAF <sup>b</sup>	Estimated Concentration	BSAF/BCF Reference	BSAF	Estimated Concentration	BSAF Reference
<b>Semi-volatile Organic Compounds (SVOCs) - Non-PAH SVOCs</b>									
Butyl Benzyl Phthalate	4.84	ND	5.00E-01	3.25E+00	--	Gobas et al. (2003) <sup>j</sup>	4.00E+00	--	Gobas et al. (2003) <sup>j</sup>
Di-N-Butyl Phthalate	4.61	1.51E-01	5.00E-01	3.25E+00	4.90E-01	Gobas et al. (2003) <sup>j</sup>	4.00E+00	6.02E-01	Gobas et al. (2003) <sup>j</sup>

**Notes:**

NA, Normalized BSAF was not applicable for metals

ND, Not detected

a, Normalized BSAF (kg OC / kg lipid) calculated based on K<sub>ow</sub>, where BSAF = K<sub>ow</sub><sup>-0.038</sup> (DiToro and McGrath 2000)

b, For organic constituents, normalized BASFs were expressed on a dry weight basis using sediment organic carbon and lipid content as follows:

$$BSAF_{dw} = BSAF_{norm} \times f_{lipid} \div f_{oc}$$

where:

BSAF<sub>norm</sub> = Normalized BSAF (kg OC/kg lipid)

f<sub>lipid</sub> = Fraction of lipids in prey item expressed on a dry weight basis (0.065, invertebrates; 0.08, fish)

f<sub>oc</sub> = Fraction of sediment organic carbon expressed on a dry weight basis (0.01 or 1%)

c, Median BSAF for non-depurated invertebrates determined by Bechtel (1998)

d, 90th percentile BSAF for depurated invertebrates determined by Bechtel (1998)

e, 90th percentile BSAF for non-depurated invertebrates determined by Bechtel (1998)

f, 95% upper predictive limit equation for all organisms (copper) or only depurated organisms (nickel and zinc) from Bechtel (1998)

g, Invertebrate concentrations (mg/kg dry weight) calculated based on regression models, where slopes (B1) and intercepts (B0) are as follows:

Metal	B0	B1	Data Source for Model
Selenium	--	1.422	Hamilton and Buhl (2003a and 2003b)

h, Mean BSAF calculated from Song and Breslin (1999)

i, Sediment-to-fish BASFs could not be identified; therefore, concentrations in fish were assumed to be equal to concentrations in benthic invertebrates.

j, Based on the normalized BSAF for phthalate esters for chironomids reported in Gobas et al. (2003).

**Table B19**  
**Estimated Aquatic Prey Concentrations - Refined Exposure Evaluation**  
**Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	log K <sub>ow</sub>	Refined Sediment Concentration (mg/kg, dry weight)	Normalized BSAF (kg OC/kg lipid) <sup>a</sup>	Estimated Concentrations in Dietary Items of Aquatic Receptors (mg/kg, dry weight)					
				Aquatic Life Stage Benthic Invertebrates			Fish		
				BSAF <sup>b</sup>	Estimated Concentration	BSAF/BCF Reference	BSAF	Estimated Concentration	BSAF Reference
<b>Metals</b>									
Chromium	NA	4.30E+01	NA	5.88E-01	2.53E+01	Bechtel-Jacobs (1998) <sup>e</sup>	9.00E-03	3.87E-01	Song and Breslin (1999) <sup>h</sup>
Copper	NA	2.97E+01	NA	95% UPL	1.00E+02	Bechtel-Jacobs (1998) <sup>f</sup>	1.70E-01	5.05E+00	Song and Breslin (1999) <sup>h</sup>
Lead	NA	4.39E+01	NA	6.60E-02	2.90E+00	Bechtel-Jacobs (1998) <sup>c</sup>	6.60E-02	2.90E+00	Song and Breslin (1999) <sup>h</sup>
Mercury	NA	5.10E-01	NA	1.74E+00	8.87E-01	Bechtel-Jacobs (1998) <sup>e</sup>	1.74E+00	8.87E-01	Bechtel-Jacobs (1998) <sup>i</sup>
<b>Semi-volatile Organic Compounds (SVOCs) - Polycyclic Aromatic Hydrocarbons (PAHs)</b>									
Low Molecular Weight (LMW) PAHs:									
Acenaphthene	4.15	1.00E-01	6.96E-01	2.83E+00	2.83E-01	DiToro and McGrath (2000)	3.48E+00	3.49E-01	DiToro and McGrath (2000)
Acenaphthylene	3.22	3.58E-02	7.54E-01	3.07E+00	1.10E-01	DiToro and McGrath (2000)	3.77E+00	1.35E-01	DiToro and McGrath (2000)
Anthracene	4.53	1.25E-01	6.73E-01	2.73E+00	3.40E-01	DiToro and McGrath (2000)	3.36E+00	4.19E-01	DiToro and McGrath (2000)
Fluorene	4.21	1.42E-01	6.92E-01	2.81E+00	3.99E-01	DiToro and McGrath (2000)	3.46E+00	4.92E-01	DiToro and McGrath (2000)
Naphthalene	3.36	5.52E-01	7.45E-01	3.03E+00	1.67E+00	DiToro and McGrath (2000)	3.73E+00	2.06E+00	DiToro and McGrath (2000)
Phenanthrene	4.57	3.89E-01	6.70E-01	2.72E+00	1.06E+00	DiToro and McGrath (2000)	3.35E+00	1.30E+00	DiToro and McGrath (2000)
Total LMW PAHs		1.34E+00			3.86E+00			4.76E+00	
High Molecular Weight (HMW) PAHs:									
Benzo(a)anthracene	6.71	3.75E-01	5.56E-01	2.26E+00	8.47E-01	DiToro and McGrath (2000)	2.78E+00	1.04E+00	DiToro and McGrath (2000)
Benzo[A]Pyrene	6.11	3.03E-01	5.86E-01	2.38E+00	7.21E-01	DiToro and McGrath (2000)	2.93E+00	8.87E-01	DiToro and McGrath (2000)
Benzo(b)fluoranthene	6.27	4.18E-01	5.78E-01	2.35E+00	9.80E-01	DiToro and McGrath (2000)	2.89E+00	1.21E+00	DiToro and McGrath (2000)
Benzo(g,h,i)perylene	6.51	1.52E-01	5.66E-01	2.30E+00	3.50E-01	DiToro and McGrath (2000)	2.83E+00	4.31E-01	DiToro and McGrath (2000)
Benzo(k)fluoranthene	6.29	1.44E-01	5.77E-01	2.34E+00	3.37E-01	DiToro and McGrath (2000)	2.88E+00	4.14E-01	DiToro and McGrath (2000)
Chrysene	5.71	1.29E+00	6.07E-01	2.46E+00	3.18E+00	DiToro and McGrath (2000)	3.03E+00	3.91E+00	DiToro and McGrath (2000)
Dibenz(A,H)Anthracene	6.71	9.93E-02	5.56E-01	2.26E+00	2.24E-01	DiToro and McGrath (2000)	2.78E+00	2.76E-01	DiToro and McGrath (2000)
Fluoranthene	5.08	6.07E-01	6.41E-01	2.60E+00	1.58E+00	DiToro and McGrath (2000)	3.21E+00	1.95E+00	DiToro and McGrath (2000)
Indeno (1,2,3-CD) Pyrene	6.72	2.60E-01	5.55E-01	2.26E+00	5.88E-01	DiToro and McGrath (2000)	2.78E+00	7.23E-01	DiToro and McGrath (2000)
Pyrene	4.92	6.49E-01	6.50E-01	2.64E+00	1.71E+00	DiToro and McGrath (2000)	3.25E+00	2.11E+00	DiToro and McGrath (2000)
Total HMW PAHs		4.30E+00			1.05E+01			1.30E+01	

**Table B19**  
**Estimated Aquatic Prey Concentrations - Refined Exposure Evaluation**  
**Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	log K <sub>ow</sub>	Refined Sediment Concentration (mg/kg, dry weight)	Normalized BSAF (kg OC/kg lipid) <sup>a</sup>	Estimated Concentrations in Dietary Items of Aquatic Receptors (mg/kg, dry weight)					
				Aquatic Life Stage Benthic Invertebrates			Fish		
				BSAF <sup>b</sup>	Estimated Concentration	BSAF/BCF Reference	BSAF	Estimated Concentration	BSAF Reference
<b>Semi-volatile Organic Compounds (SVOCs) - Non-PAH SVOCs</b>									
Butyl Benzyl Phthalate	4.84	2.51E-01	5.00E-01	2.03E+00	5.11E-01	Gobas et al. (2003) <sup>i</sup>	2.50E+00	6.29E-01	Gobas et al. (2003) <sup>i</sup>
Di-N-Butyl Phthalate	4.61	1.31E-01	5.00E-01	2.03E+00	2.66E-01	Gobas et al. (2003) <sup>i</sup>	2.50E+00	3.27E-01	Gobas et al. (2003) <sup>i</sup>

**Notes:**

NA, Normalized BSAF was not applicable for metals

a, Normalized BSAF (kg OC / kg lipid) calculated based on K<sub>ow</sub>, where BSAF = K<sub>ow</sub><sup>-0.038</sup> (DiToro and McGrath 2000)

a, Normalized BSAF (kg OC / kg lipid) calculated based on K<sub>ow</sub>, where BSAF = K<sub>ow</sub><sup>-0.038</sup> (DiToro and McGrath 2000)

b, For organic constituents, normalized BASFs were expressed on a dry weight basis using sediment organic carbon and lipid content as follows:

$$BSAF_{dw} = BSAF_{norm} \times f_{lipid} \div f_{oc}$$

where:

BSAF<sub>norm</sub> = Normalized BSAF (kg OC/kg lipid)

f<sub>lipid</sub> = Fraction of lipids in prey item expressed on a dry weight basis (0.065, invertebrates; 0.08, fish)

f<sub>oc</sub> = Fraction of sediment organic carbon expressed on a dry weight basis (0.016 or 1.6%)

c, Median BSAF for non-depurated invertebrates determined by Bechtel (1998)

d, 90th percentile BSAF for depurated invertebrates determined by Bechtel (1998)

e, 90th percentile BSAF for non-depurated invertebrates determined by Bechtel (1998)

f, 95% upper predictive limit equation for all organisms (nickel and zinc) from Bechtel (1998)

g, Invertebrate concentrations (mg/kg dry weight) calculated based on regression models, where slopes (B1) and intercepts (B0) are as follows:

Metal	B0	B1	Data Source for Model
Selenium	--	1.422	Hamilton and Buhl (2003a and 2003b)

i, Mean BSAF calculated from Song and Breslin (1999)

j, Sediment-to-fish BASFs could not be identified; therefore, concentrations in fish were assumed to be equal to concentrations in benthic invertebrates.

k, Method described in DiToro and McGrath (2000) used when empirical data not available from USACE BSAF database.

**Table B20**  
**Estimated Aquatic Prey Concentrations - Refined Exposure Evaluation**  
**SWMU 5/Henby Creek Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	log K <sub>ow</sub>	Refined Sediment Concentration (mg/kg, dry weight)	Normalized BSAF (kg OC/kg lipid) <sup>a</sup>	Estimated Concentrations in Dietary Items of Aquatic Receptors (mg/kg, dry weight)					
				Aquatic Life Stage Benthic Invertebrates			Fish		
				BSAF <sup>b</sup>	Estimated Concentration	BSAF/BCF Reference	BSAF	Estimated Concentration	BSAF Reference
<b>Metals</b>									
Chromium	NA	3.56E+01	NA	5.88E-01	2.09E+01	Bechtel-Jacobs (1998) <sup>e</sup>	9.00E-03	3.20E-01	Song and Breslin (1999) <sup>h</sup>
Copper	NA	2.92E+01	NA	95% UPL	9.96E+01	Bechtel-Jacobs (1998) <sup>f</sup>	1.70E-01	4.97E+00	Song and Breslin (1999) <sup>h</sup>
Lead	NA	5.82E+01	NA	6.60E-02	3.84E+00	Bechtel-Jacobs (1998) <sup>c</sup>	6.60E-02	3.84E+00	Song and Breslin (1999) <sup>h</sup>
Mercury	NA	1.36E+00	NA	1.74E+00	2.37E+00	Bechtel-Jacobs (1998) <sup>e</sup>	1.74E+00	2.37E+00	Bechtel-Jacobs (1998) <sup>i</sup>
<b>Semi-volatile Organic Compounds (SVOCs) - Polycyclic Aromatic Hydrocarbons (PAHs)</b>									
Low Molecular Weight (LMW) PAHs:									
Acenaphthene	4.15	3.47E-01	6.96E-01	5.95E+00	2.07E+00	DiToro and McGrath (2000)	7.32E+00	2.54E+00	DiToro and McGrath (2000)
Acenaphthylene	3.22	ND	7.54E-01	6.45E+00	--	DiToro and McGrath (2000)	7.94E+00	--	DiToro and McGrath (2000)
Anthracene	4.53	6.94E-01	6.73E-01	5.75E+00	3.99E+00	DiToro and McGrath (2000)	7.08E+00	4.91E+00	DiToro and McGrath (2000)
Fluorene	4.21	ND	6.92E-01	5.92E+00	--	DiToro and McGrath (2000)	7.28E+00	--	DiToro and McGrath (2000)
Naphthalene	3.36	6.47E-01	7.45E-01	6.37E+00	4.13E+00	DiToro and McGrath (2000)	7.85E+00	5.08E+00	DiToro and McGrath (2000)
Phenanthrene	4.57	4.35E+00	6.70E-01	5.73E+00	2.50E+01	DiToro and McGrath (2000)	7.06E+00	3.07E+01	DiToro and McGrath (2000)
Total LMW PAHs		6.04E+00			3.51E+01			4.33E+01	
High Molecular Weight (HMW) PAHs:									
Benzo(a)anthracene	6.71	2.02E+00	5.56E-01	4.75E+00	9.59E+00	DiToro and McGrath (2000)	5.85E+00	1.18E+01	DiToro and McGrath (2000)
Benzo[A]Pyrene	6.11	1.38E+00	5.86E-01	5.01E+00	6.94E+00	DiToro and McGrath (2000)	6.17E+00	8.54E+00	DiToro and McGrath (2000)
Benzo(b)fluoranthene	6.27	1.11E+00	5.78E-01	4.94E+00	5.50E+00	DiToro and McGrath (2000)	6.08E+00	6.77E+00	DiToro and McGrath (2000)
Benzo(g,h,i)perylene	6.51	5.66E-01	5.66E-01	4.84E+00	2.74E+00	DiToro and McGrath (2000)	5.96E+00	3.37E+00	DiToro and McGrath (2000)
Benzo(k)fluoranthene	6.29	5.07E-01	5.77E-01	4.93E+00	2.50E+00	DiToro and McGrath (2000)	6.07E+00	3.08E+00	DiToro and McGrath (2000)
Chrysene	5.71	3.30E+00	6.07E-01	5.19E+00	1.71E+01	DiToro and McGrath (2000)	6.39E+00	2.11E+01	DiToro and McGrath (2000)
Dibenz(A,H)Anthracene	6.71	ND	5.56E-01	4.75E+00	--	DiToro and McGrath (2000)	5.85E+00	--	DiToro and McGrath (2000)
Fluoranthene	5.08	1.79E+00	6.41E-01	5.48E+00	9.84E+00	DiToro and McGrath (2000)	6.75E+00	1.21E+01	DiToro and McGrath (2000)
Indeno (1,2,3-CD) Pyrene	6.72	8.21E-01	5.55E-01	4.75E+00	3.90E+00	DiToro and McGrath (2000)	5.85E+00	4.80E+00	DiToro and McGrath (2000)
Pyrene	4.92	3.21E+00	6.50E-01	5.56E+00	1.78E+01	DiToro and McGrath (2000)	6.84E+00	2.19E+01	DiToro and McGrath (2000)

**Table B20**  
**Estimated Aquatic Prey Concentrations - Refined Exposure Evaluation**  
**SWMU 5/Henby Creek Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	log K <sub>ow</sub>	Refined Sediment Concentration (mg/kg, dry weight)	Normalized BSAF (kg OC/kg lipid) <sup>a</sup>	Estimated Concentrations in Dietary Items of Aquatic Receptors (mg/kg, dry weight)					
				Aquatic Life Stage Benthic Invertebrates			Fish		
				BSAF <sup>b</sup>	Estimated Concentration	BSAF/BCF Reference	BSAF	Estimated Concentration	BSAF Reference
Total HMW PAHs		1.47E+01			7.60E+01			9.35E+01	
<b>Semi-volatile Organic Compounds (SVOCs) - Non-PAH SVOCs</b>									
Butyl Benzyl Phthalate	4.84	ND	5.00E-01	4.28E+00	--	Gobas et al. (2003) <sup>j</sup>	5.26E+00	--	Gobas et al. (2003) <sup>j</sup>
Di-N-Butyl Phthalate	4.61	6.32E-01	5.00E-01	4.28E+00	2.70E+00	Gobas et al. (2003) <sup>j</sup>	5.26E+00	3.33E+00	Gobas et al. (2003) <sup>j</sup>

**Notes:**

NA, Normalized BSAF was not applicable for metals

ND, Not detected

a, Normalized BSAF (kg OC / kg lipid) calculated based on K<sub>ow</sub>, where  $BSAF = K_{ow}^{-0.038}$  (DiToro and McGrath 2000)

b, For organic constituents, normalized BASFs were expressed on a dry weight basis using sediment organic carbon and lipid content as follows:

$$BSAF_{dw} = BSAF_{norm} \times f_{lipid} \div f_{oc}$$

where:

BSAF<sub>norm</sub> = Normalized BSAF (kg OC/kg lipid)

f<sub>lipid</sub> = Fraction of lipids in prey item expressed on a dry weight basis (0.065, invertebrates; 0.08, fish)

f<sub>oc</sub> = Fraction of sediment organic carbon expressed on a dry weight basis (0.007 or 0.7%)

c, Median BSAF for non-depurated invertebrates determined by Bechtel (1998)

d, 90th percentile BSAF for depurated invertebrates determined by Bechtel (1998)

e, 90th percentile BSAF for non-depurated invertebrates determined by Bechtel (1998)

f, 95% upper predictive limit equation for all organisms (copper) or only depurated organisms (nickel and zinc) from Bechtel (1998)

g, Invertebrate concentrations (mg/kg dry weight) calculated based on regression models, where slopes (B1) and intercepts (B0) are as follows:

Metal	B0	B1	Data Source for Model
Selenium	--	1.422	Hamilton and Buhl (2003a and 2003b)

h, Mean BSAF calculated from Song and Breslin (1999)

i, Sediment-to-fish BASFs could not be identified; therefore, concentrations in fish were assumed to be equal to concentrations in benthic invertebrates.

j, Based on the normalized BSAF for phthalate esters for chironomids reported in Gobas et al. (2003).

**Table B21**  
**Estimated Aquatic Prey Concentrations - Refined Exposure Evaluation**  
**Carneys Point Zone**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	log K <sub>ow</sub>	Refined Sediment Concentration (mg/kg, dry weight)	Normalized BSAF (kg OC/kg lipid) <sup>a</sup>	Estimated Concentrations in Dietary Items of Aquatic Receptors (mg/kg, dry weight)					
				Aquatic Life Stage Benthic Invertebrates			Fish		
				BSAF <sup>b</sup>	Estimated Concentration	BSAF/BCF Reference	BSAF	Estimated Concentration	BSAF Reference
<b>Metals</b>									
Chromium	NA	3.57E+01	NA	5.88E-01	2.10E+01	Bechtel-Jacobs (1998) <sup>e</sup>	9.00E-03	3.21E-01	Song and Breslin (1999) <sup>h</sup>
Copper	NA	2.27E+01	NA	95% UPL	9.28E+01	Bechtel-Jacobs (1998) <sup>f</sup>	1.70E-01	3.86E+00	Song and Breslin (1999) <sup>h</sup>
Lead	NA	3.23E+01	NA	6.60E-02	2.13E+00	Bechtel-Jacobs (1998) <sup>c</sup>	6.60E-02	2.13E+00	Song and Breslin (1999) <sup>h</sup>
Mercury	NA	5.51E-01	NA	1.74E+00	9.60E-01	Bechtel-Jacobs (1998) <sup>e</sup>	1.74E+00	9.60E-01	Bechtel-Jacobs (1998) <sup>i</sup>
<b>Semi-volatile Organic Compounds (SVOCs) - Polycyclic Aromatic Hydrocarbons (PAHs)</b>									
Low Molecular Weight (LMW) PAHs:									
Acenaphthene	4.15	ND	6.96E-01	2.38E+00	--	DiToro and McGrath (2000)	2.93E+00	--	DiToro and McGrath (2000)
Acenaphthylene	3.22	ND	7.54E-01	2.58E+00	--	DiToro and McGrath (2000)	3.18E+00	--	DiToro and McGrath (2000)
Anthracene	4.53	ND	6.73E-01	2.30E+00	--	DiToro and McGrath (2000)	2.83E+00	--	DiToro and McGrath (2000)
Fluorene	4.21	ND	6.92E-01	2.37E+00	--	DiToro and McGrath (2000)	2.91E+00	--	DiToro and McGrath (2000)
Naphthalene	3.36	6.20E-02	7.45E-01	2.55E+00	1.58E-01	DiToro and McGrath (2000)	3.14E+00	1.95E-01	DiToro and McGrath (2000)
Phenanthrene	4.57	9.79E-02	6.70E-01	2.29E+00	2.24E-01	DiToro and McGrath (2000)	2.82E+00	2.76E-01	DiToro and McGrath (2000)
Total LMW PAHs		1.60E-01			3.83E-01			4.71E-01	
High Molecular Weight (HMW) PAHs:									
Benzo(a)anthracene	6.71	1.13E-01	5.56E-01	1.90E+00	2.14E-01	DiToro and McGrath (2000)	2.34E+00	2.64E-01	DiToro and McGrath (2000)
Benzo[A]Pyrene	6.11	1.14E-01	5.86E-01	2.00E+00	2.29E-01	DiToro and McGrath (2000)	2.47E+00	2.82E-01	DiToro and McGrath (2000)
Benzo(b)fluoranthene	6.27	1.41E-01	5.78E-01	1.98E+00	2.79E-01	DiToro and McGrath (2000)	2.43E+00	3.43E-01	DiToro and McGrath (2000)
Benzo(g,h,i)perylene	6.51	7.74E-02	5.66E-01	1.94E+00	1.50E-01	DiToro and McGrath (2000)	2.38E+00	1.84E-01	DiToro and McGrath (2000)
Benzo(k)fluoranthene	6.29	6.36E-02	5.77E-01	1.97E+00	1.26E-01	DiToro and McGrath (2000)	2.43E+00	1.54E-01	DiToro and McGrath (2000)
Chrysene	5.71	1.28E-01	6.07E-01	2.08E+00	2.66E-01	DiToro and McGrath (2000)	2.55E+00	3.28E-01	DiToro and McGrath (2000)
Dibenz(A,H)Anthracene	6.71	ND	5.56E-01	1.90E+00	--	DiToro and McGrath (2000)	2.34E+00	--	DiToro and McGrath (2000)
Fluoranthene	5.08	1.94E-01	6.41E-01	2.19E+00	4.24E-01	DiToro and McGrath (2000)	2.70E+00	5.22E-01	DiToro and McGrath (2000)
Indeno (1,2,3-CD) Pyrene	6.72	6.67E-02	5.55E-01	1.90E+00	1.27E-01	DiToro and McGrath (2000)	2.34E+00	1.56E-01	DiToro and McGrath (2000)
Pyrene	4.92	1.95E-01	6.50E-01	2.22E+00	4.34E-01	DiToro and McGrath (2000)	2.74E+00	5.34E-01	DiToro and McGrath (2000)
Total HMW PAHs		1.09E+00			2.25E+00			2.77E+00	

**Table B21**  
**Estimated Aquatic Prey Concentrations - Refined Exposure Evaluation**  
**Carneys Point Zone**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	log K <sub>ow</sub>	Refined Sediment Concentration (mg/kg, dry weight)	Normalized BSAF (kg OC/kg lipid) <sup>a</sup>	Estimated Concentrations in Dietary Items of Aquatic Receptors (mg/kg, dry weight)					
				Aquatic Life Stage Benthic Invertebrates			Fish		
				BSAF <sup>b</sup>	Estimated Concentration	BSAF/BCF Reference	BSAF	Estimated Concentration	BSAF Reference
<b>Semi-volatile Organic Compounds (SVOCs) - Non-PAH SVOCs</b>									
Butyl Benzyl Phthalate	4.84	ND	5.00E-01	1.71E+00	--	Gobas et al. (2003) <sup>j</sup>	2.11E+00	--	Gobas et al. (2003) <sup>j</sup>
Di-N-Butyl Phthalate	4.61	ND	5.00E-01	1.71E+00	--	Gobas et al. (2003) <sup>j</sup>	2.11E+00	--	Gobas et al. (2003) <sup>j</sup>

**Notes:**

NA, Normalized BSAF was not applicable for metals

ND, Not detected

a, Normalized BSAF (kg OC / kg lipid) calculated based on K<sub>ow</sub>, where BSAF = K<sub>ow</sub><sup>-0.038</sup> (DiToro and McGrath 2000)

b, For organic constituents, normalized BASFs were expressed on a dry weight basis using sediment organic carbon and lipid content as follows:

$$BSAF_{dw} = BSAF_{norm} \times f_{lipid} \div f_{oc}$$

where:

BSAF<sub>norm</sub> = Normalized BSAF (kg OC/kg lipid)

f<sub>lipid</sub> = Fraction of lipids in prey item expressed on a dry weight basis (0.065, invertebrates; 0.08, fish)

f<sub>oc</sub> = Fraction of sediment organic carbon expressed on a dry weight basis (0.019 or 1.9%)

c, Median BSAF for non-depurated invertebrates determined by Bechtel (1998)

d, 90th percentile BSAF for depurated invertebrates determined by Bechtel (1998)

e, 90th percentile BSAF for non-depurated invertebrates determined by Bechtel (1998)

f, 95% upper predictive limit equation for all organisms (copper) or only depurated organisms (nickel and zinc) from Bechtel (1998)

g, Invertebrate concentrations (mg/kg dry weight) calculated based on regression models, where slopes (B1) and intercepts (B0) are as follows:

Metal	B0	B1	Data Source for Model
Selenium	--	1.422	Hamilton and Buhl (2003a and 2003b)

h, Mean BSAF calculated from Song and Breslin (1999)

i, Sediment-to-fish BASFs could not be identified; therefore, concentrations in fish were assumed to be equal to concentrations in benthic invertebrates.

j, Based on the normalized BSAF for phthalate esters for chironomids reported in Gobas et al. (2003).

**Table B22**  
**Refined Exposure Evaluation - Double-Crested Cormorant**  
**Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	Double-crested Cormorant Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	UCL <sub>mean</sub> Sediment Concentration (mg/kg, dw)	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>					
<b>Inorganics - Metals</b>										
Chromium	3.05E+02	0.0E+00	3.5E-03	3.5E-03	7.9E-03	1.14E-02	2.66	<1	15.60	<1
Copper	3.51E+01	0.0E+00	7.7E-03	7.7E-03	9.0E-04	8.59E-03	18.40	<1	34.80	<1
Lead	2.20E+02	0.0E+00	1.9E-02	1.9E-02	5.7E-03	2.44E-02	10.90	<1	44.60	<1
Mercury	8.89E-01	0.0E+00	2.0E-03	2.0E-03	2.3E-05	2.02E-03	0.45	<1	0.91	<1
<b>Polycyclic Aromatic Hydrocarbons (PAHs)</b>										
Low Molecular Weight (LMW) PAHs:										
Acenaphthene	9.58E-02	0.0E+00	6.9E-04	6.9E-04	2.5E-06	6.89E-04				
Acenaphthylene	4.29E-02	0.0E+00	3.3E-04	3.3E-04	1.1E-06	3.35E-04				
Anthracene	1.63E-01	0.0E+00	1.1E-03	1.1E-03	4.2E-06	1.14E-03				
Fluorene	7.44E-02	0.0E+00	5.3E-04	5.3E-04	1.9E-06	5.32E-04				
Naphthalene	2.87E-01	0.0E+00	2.2E-03	2.2E-03	7.4E-06	2.22E-03				
Phenanthrene	3.72E-01	0.0E+00	2.6E-03	2.6E-03	9.6E-06	2.58E-03				
Total LMW PAHs				7.5E-03	2.7E-05	7.49E-03	16.10	<1	161.00	<1
High Molecular Weight (HMW) PAHs:										
Benzo(a)anthracene	3.63E-01	0.0E+00	2.1E-03	2.1E-03	9.4E-06	2.09E-03				
Benzo[A]Pyrene	3.14E-01	0.0E+00	1.9E-03	1.9E-03	8.1E-06	1.90E-03				
Benzo(b)fluoranthene	2.09E-01	0.0E+00	1.2E-03	1.2E-03	5.4E-06	1.25E-03				
Benzo(g,h,i)perylene	1.77E-01	0.0E+00	1.0E-03	1.0E-03	4.6E-06	1.04E-03				
Benzo(k)fluoranthene	1.98E-01	0.0E+00	1.2E-03	1.2E-03	5.1E-06	1.18E-03				
Chrysene	3.80E-01	0.0E+00	2.4E-03	2.4E-03	9.8E-06	2.39E-03				
Dibenz(A,H)Anthracene	3.37E-02	0.0E+00	1.9E-04	1.9E-04	8.7E-07	1.94E-04				
Fluoranthene	8.33E-01	0.0E+00	5.5E-03	5.5E-03	2.1E-05	5.52E-03				
Indeno (1,2,3-CD) Pyrene	1.54E-01	0.0E+00	8.8E-04	8.8E-04	4.0E-06	8.88E-04				
Pyrene	6.52E-01	0.0E+00	4.4E-03	4.4E-03	1.7E-05	4.39E-03				
Total HMW PAHs	3.31E+00			2.1E-02	8.5E-05	2.08E-02	2.00	<1	20.00	<1

**Table B22**  
**Refined Exposure Evaluation - Double-Crested Cormorant**  
**Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	Double-crested Cormorant Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	UCL <sub>mean</sub> Sediment Concentration (mg/kg, dw)	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>					
<b>Semi-volatile Organic Compounds (SVOCs) - Non-PAH SVOCs</b>										
Butyl Benzyl Phthalate	ND	--	--	--	--	--	--	--	--	--
Di-N-Butyl Phthalate	1.51E-01	0.0E+00	7.8E-04	7.8E-04	3.9E-06	7.80E-04	0.11	<1	1.10	<1

**Notes:**

$$a, EDD_{total} = \frac{IR_{diet} \times \sum (BSAF_{dw} \times C_{se\ dim\ ent} \times DF_i) \times AUF}{BW} + \frac{IR_{se\ dim\ ent} \times C_{se\ dim\ ent} \times AUF}{BW}$$

Where:

- EDD<sub>diet</sub> = Dose of COPEC obtained from the diet (mg COPEC/kg receptor body weight-day)
- IR<sub>diet</sub> = Ingestion rate of food (kg food ingested per day, dry weight)
- B(S)AF = Bioaccumulation factor (BAF) or biota-sediment accumulation factor (BSAF), specific to prey type and COPEC (kg substrate/kg food, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)
- DF<sub>i</sub> = Dietary fraction of food item i (proportion of food type in the diet)
- AUF = Area use factor includes seasonal use rates, area use rates, COPEC assimilation rate
- BW = Body weight of the receptor, wet weight (kg)
- EDD<sub>substrate</sub> = Dose of COPEC from incidental substrate ingestion (mg COPEC/kg body weight-day)
- IR<sub>substrate</sub> = Incidental Ingestion Rate of substrate (kg substrate ingested per day, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)

ND, not detected

--, HQ could not be calculated because chemical was not detected or TRV was not available.

**Table B23**  
**Refined Exposure Evaluation - American Black Duck**  
**Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	American Black Duck Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	UCL <sub>mean</sub> Sediment Concentration (mg/kg, dw)	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>					
<b>Inorganics - Metals</b>										
Chromium	3.05E+02	1.8E+00	0.0E+00	1.8E+00	1.2E-01	1.88E+00	2.66	<1	15.60	<1
Copper	3.51E+01	1.0E+00	0.0E+00	1.0E+00	1.4E-02	1.04E+00	18.40	<1	34.80	<1
Lead	2.20E+02	1.4E-01	0.0E+00	1.4E-01	8.6E-02	2.29E-01	10.90	<1	44.60	<1
Mercury	8.89E-01	1.5E-02	0.0E+00	1.5E-02	3.5E-04	1.55E-02	0.45	<1	0.91	<1
<b>Polycyclic Aromatic Hydrocarbons (PAHs)</b>										
Low Molecular Weight (LMW) PAHs:										
Acenaphthene	9.58E-02	4.2E-03	0.0E+00	4.2E-03	3.8E-05	4.28E-03				
Acenaphthylene	4.29E-02	2.1E-03	0.0E+00	2.1E-03	1.7E-05	2.08E-03				
Anthracene	1.63E-01	7.0E-03	0.0E+00	7.0E-03	6.4E-05	7.06E-03				
Fluorene	7.44E-02	3.3E-03	0.0E+00	3.3E-03	2.9E-05	3.30E-03				
Naphthalene	2.87E-01	1.4E-02	0.0E+00	1.4E-02	1.1E-04	1.37E-02				
Phenanthrene	3.72E-01	1.6E-02	0.0E+00	1.6E-02	1.5E-04	1.60E-02				
Total LMW PAHs				4.6E-02	4.1E-04	4.65E-02	16.10	<1	161.00	<1
High Molecular Weight (HMW) PAHs:										
Benzo(a)anthracene	3.63E-01	1.3E-02	0.0E+00	1.3E-02	1.4E-04	1.30E-02				
Benzo[A]Pyrene	3.14E-01	1.2E-02	0.0E+00	1.2E-02	1.2E-04	1.18E-02				
Benzo(b)fluoranthene	2.09E-01	7.7E-03	0.0E+00	7.7E-03	8.2E-05	7.77E-03				
Benzo(g,h,i)perylene	1.77E-01	6.4E-03	0.0E+00	6.4E-03	6.9E-05	6.44E-03				
Benzo(k)fluoranthene	1.98E-01	7.3E-03	0.0E+00	7.3E-03	7.7E-05	7.33E-03				
Chrysene	3.80E-01	1.5E-02	0.0E+00	1.5E-02	1.5E-04	1.48E-02				
Dibenz(A,H)Anthracene	3.37E-02	1.2E-03	0.0E+00	1.2E-03	1.3E-05	1.21E-03				
Fluoranthene	8.33E-01	3.4E-02	0.0E+00	3.4E-02	3.3E-04	3.43E-02				
Indeno (1,2,3-CD) Pyrene	1.54E-01	5.5E-03	0.0E+00	5.5E-03	6.0E-05	5.52E-03				
Pyrene	6.52E-01	2.7E-02	0.0E+00	2.7E-02	2.6E-04	2.72E-02				
Total HMW PAHs	3.31E+00			1.3E-01	1.3E-03	1.29E-01	2.00	<1	20.00	<1

**Table B23**  
**Refined Exposure Evaluation - American Black Duck**  
**Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	American Black Duck Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	UCL <sub>mean</sub> Sediment Concentration (mg/kg, dw)	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>					
<b>Semi-volatile Organic Compounds (SVOCs) - Non-PAH SVOCs</b>										
Butyl Benzyl Phthalate	ND	--	--	--	--	--	--	--	--	--
Di-N-Butyl Phthalate	1.51E-01	4.8E-03	0.0E+00	4.8E-03	5.9E-05	4.85E-03	0.11	<1	1.10	<1

**Notes:**

$$a, EDD_{total} = \frac{IR_{diet} \times \sum (BSAF_{dw} \times C_{se\ dim\ ent} \times DF_i) \times AUF}{BW} + \frac{IR_{se\ dim\ ent} \times C_{se\ dim\ ent} \times AUF}{BW}$$

Where:

- EDD<sub>diet</sub> = Dose of COPEC obtained from the diet (mg COPEC/kg receptor body weight-day)
- IR<sub>diet</sub> = Ingestion rate of food (kg food ingested per day, dry weight)
- B(S)AF = Bioaccumulation factor (BAF) or biota-sediment accumulation factor (BSAF), specific to prey type and COPEC (kg substrate/kg food, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)
- DF<sub>i</sub> = Dietary fraction of food item i (proportion of food type in the diet)
- AUF = Area use factor includes seasonal use rates, area use rates, COPEC assimilation rate
- BW = Body weight of the receptor, wet weight (kg)
- EDD<sub>substrate</sub> = Dose of COPEC from incidental substrate ingestion (mg COPEC/kg body weight-day)
- IR<sub>substrate</sub> = Incidental Ingestion Rate of substrate (kg substrate ingested per day, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)

NA, TRV was not available.

ND, not detected

--, HQ could not be calculated because chemical was not detected or TRV was not available.

**Table B24**  
**Refined Exposure Evaluation - Double-Crested Cormorant**  
**Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	Double-crested Cormorant Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	UCL <sub>mean</sub> Sediment Concentration (mg/kg, dw)	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>					
<b>Inorganics - Metals</b>										
Chromium	4.30E+01	0.0E+00	3.3E-04	3.3E-04	7.4E-04	1.08E-03	2.66	<1	15.60	<1
Copper	2.97E+01	0.0E+00	4.4E-03	4.4E-03	5.1E-04	4.86E-03	18.40	<1	34.80	<1
Lead	4.39E+01	0.0E+00	2.5E-03	2.5E-03	7.6E-04	3.25E-03	10.90	<1	44.60	<1
Mercury	5.10E-01	0.0E+00	7.6E-04	7.6E-04	8.8E-06	7.74E-04	0.45	<1	0.91	<1
<b>Polycyclic Aromatic Hydrocarbons (PAHs)</b>										
Low Molecular Weight (LMW) PAHs:										
Acenaphthene	1.00E-01	0.0E+00	3.0E-04	3.0E-04	1.7E-06	3.02E-04				
Acenaphthylene	3.58E-02	0.0E+00	1.2E-04	1.2E-04	6.2E-07	1.17E-04				
Anthracene	1.25E-01	0.0E+00	3.6E-04	3.6E-04	2.1E-06	3.63E-04				
Fluorene	1.42E-01	0.0E+00	4.2E-04	4.2E-04	2.4E-06	4.26E-04				
Naphthalene	5.52E-01	0.0E+00	1.8E-03	1.8E-03	9.5E-06	1.78E-03				
Phenanthrene	3.89E-01	0.0E+00	1.1E-03	1.1E-03	6.7E-06	1.13E-03				
Total LMW PAHs				4.1E-03	2.3E-05	4.12E-03	16.10	<1	161.00	<1
High Molecular Weight (HMW) PAHs:										
Benzo(a)anthracene	3.75E-01	0.0E+00	9.0E-04	9.0E-04	6.5E-06	9.05E-04				
Benzo[A]Pyrene	3.03E-01	0.0E+00	7.6E-04	7.6E-04	5.2E-06	7.70E-04				
Benzo(b)fluoranthene	4.18E-01	0.0E+00	1.0E-03	1.0E-03	7.2E-06	1.05E-03				
Benzo(g,h,i)perylene	1.52E-01	0.0E+00	3.7E-04	3.7E-04	2.6E-06	3.74E-04				
Benzo(k)fluoranthene	1.44E-01	0.0E+00	3.6E-04	3.6E-04	2.5E-06	3.60E-04				
Chrysene	1.29E+00	0.0E+00	3.4E-03	3.4E-03	2.2E-05	3.40E-03				
Dibenz(A,H)Anthracene	9.93E-02	0.0E+00	2.4E-04	2.4E-04	1.7E-06	2.40E-04				
Fluoranthene	6.07E-01	0.0E+00	1.7E-03	1.7E-03	1.0E-05	1.69E-03				
Indeno (1,2,3-CD) Pyrene	2.60E-01	0.0E+00	6.2E-04	6.2E-04	4.5E-06	6.28E-04				
Pyrene	6.49E-01	0.0E+00	1.8E-03	1.8E-03	1.1E-05	1.83E-03				
Total HMW PAHs	4.30E+00			1.1E-02	7.4E-05	1.12E-02	2.00	<1	20.00	<1

**Table B24**  
**Refined Exposure Evaluation - Double-Crested Cormorant**  
**Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	Double-crested Cormorant Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	UCL <sub>mean</sub> Sediment Concentration (mg/kg, dw)	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>					
<b>Semi-volatile Organic Compounds (SVOCs) - Non-PAH SVOCs</b>										
Butyl Benzyl Phthalate	2.51E-01	0.0E+00	5.4E-04	5.4E-04	4.3E-06	5.46E-04	0.11	<1	1.10	<1
Di-N-Butyl Phthalate	1.31E-01	0.0E+00	2.8E-04	2.8E-04	2.3E-06	2.84E-04	0.11	<1	1.10	<1

**Notes:**

$$a, EDD_{total} = \frac{IR_{diet} \times \sum (BSAF_{dw} \times C_{se\ dim\ ent} \times DF_i) \times AUF}{BW} + \frac{IR_{se\ dim\ ent} \times C_{se\ dim\ ent} \times AUF}{BW}$$

Where:

- EDD<sub>diet</sub> = Dose of COPEC obtained from the diet (mg COPEC/kg receptor body weight-day)
- IR<sub>diet</sub> = Ingestion rate of food (kg food ingested per day, dry weight)
- B(S)AF = Bioaccumulation factor (BAF) or biota-sediment accumulation factor (BSAF), specific to prey type and COPEC (kg substrate/kg food, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)
- DF<sub>i</sub> = Dietary fraction of food item i (proportion of food type in the diet)
- AUF = Area use factor includes seasonal use rates, area use rates, COPEC assimilation rate
- BW = Body weight of the receptor, wet weight (kg)
- EDD<sub>substrate</sub> = Dose of COPEC from incidental substrate ingestion (mg COPEC/kg body weight-day)
- IR<sub>substrate</sub> = Incidental Ingestion Rate of substrate (kg substrate ingested per day, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)

NA, TRV was not available.

ND, not detected

--, HQ could not be calculated because chemical was not detected or TRV was not available.

**Table B25**  
**Refined Exposure Evaluation - American Black Duck**  
**Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	American Black Duck Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>						
	UCL <sub>mean</sub> Sediment Concentration (mg/kg, dw)									
<b>Inorganics - Metals</b>										
Chromium	4.30E+01	1.7E-01	0.0E+00	1.7E-01	1.1E-02	1.77E-01	2.66	<1	15.60	<1
Copper	2.97E+01	6.6E-01	0.0E+00	6.6E-01	7.8E-03	6.63E-01	18.40	<1	34.80	<1
Lead	4.39E+01	1.9E-02	0.0E+00	1.9E-02	1.1E-02	3.05E-02	10.90	<1	44.60	<1
Mercury	5.10E-01	5.8E-03	0.0E+00	5.8E-03	1.3E-04	5.95E-03	0.45	<1	0.91	<1
<b>Polycyclic Aromatic Hydrocarbons (PAHs)</b>										
Low Molecular Weight (LMW) PAHs:										
Acenaphthene	1.00E-01	1.9E-03	0.0E+00	1.9E-03	2.6E-05	1.88E-03				
Acenaphthylene	3.58E-02	7.2E-04	0.0E+00	7.2E-04	9.4E-06	7.29E-04				
Anthracene	1.25E-01	2.2E-03	0.0E+00	2.2E-03	3.3E-05	2.26E-03				
Fluorene	1.42E-01	2.6E-03	0.0E+00	2.6E-03	3.7E-05	2.65E-03				
Naphthalene	5.52E-01	1.1E-02	0.0E+00	1.1E-02	1.4E-04	1.11E-02				
Phenanthrene	3.89E-01	6.9E-03	0.0E+00	6.9E-03	1.0E-04	7.04E-03				
Total LMW PAHs				2.5E-02	3.5E-04	2.57E-02	16.10	<1	161.00	<1
High Molecular Weight (HMW) PAHs:										
Benzo(a)anthracene	3.75E-01	5.5E-03	0.0E+00	5.5E-03	9.8E-05	5.65E-03				
Benzo[A]Pyrene	3.03E-01	4.7E-03	0.0E+00	4.7E-03	7.9E-05	4.80E-03				
Benzo(b)fluoranthene	4.18E-01	6.4E-03	0.0E+00	6.4E-03	1.1E-04	6.53E-03				
Benzo(g,h,i)perylene	1.52E-01	2.3E-03	0.0E+00	2.3E-03	4.0E-05	2.33E-03				
Benzo(k)fluoranthene	1.44E-01	2.2E-03	0.0E+00	2.2E-03	3.8E-05	2.24E-03				
Chrysene	1.29E+00	2.1E-02	0.0E+00	2.1E-02	3.4E-04	2.12E-02				
Dibenz(A,H)Anthracene	9.93E-02	1.5E-03	0.0E+00	1.5E-03	2.6E-05	1.50E-03				
Fluoranthene	6.07E-01	1.0E-02	0.0E+00	1.0E-02	1.6E-04	1.05E-02				
Indeno (1,2,3-CD) Pyrene	2.60E-01	3.8E-03	0.0E+00	3.8E-03	6.8E-05	3.92E-03				
Pyrene	6.49E-01	1.1E-02	0.0E+00	1.1E-02	1.7E-04	1.14E-02				
Total HMW PAHs	4.30E+00			6.9E-02	1.1E-03	7.01E-02	2.00	<1	20.00	<1

**Table B25**  
**Refined Exposure Evaluation - American Black Duck**  
**Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	American Black Duck Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	UCL <sub>mean</sub> Sediment Concentration (mg/kg, dw)	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>					
<b>Semi-volatile Organic Compounds (SVOCs) - Non-PAH SVOCs</b>										
Butyl Benzyl Phthalate	2.51E-01	3.3E-03	0.0E+00	3.3E-03	6.6E-05	3.41E-03	0.11	<1	1.10	<1
Di-N-Butyl Phthalate	1.31E-01	1.7E-03	0.0E+00	1.7E-03	3.4E-05	1.77E-03	0.11	<1	1.10	<1

**Notes:**

$$a, EDD_{total} = \frac{IR_{diet} \times \sum (BSAF_{dw} \times C_{se\ dim\ ent} \times DF_i) \times AUF}{BW} + \frac{IR_{se\ dim\ ent} \times C_{se\ dim\ ent} \times AUF}{BW}$$

Where:

- EDD<sub>diet</sub> = Dose of COPEC obtained from the diet (mg COPEC/kg receptor body weight-day)
- IR<sub>diet</sub> = Ingestion rate of food (kg food ingested per day, dry weight)
- B(S)AF = Bioaccumulation factor (BAF) or biota-sediment accumulation factor (BSAF), specific to prey type and COPEC (kg substrate/kg food, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)
- DF<sub>i</sub> = Dietary fraction of food item i (proportion of food type in the diet)
- AUF = Area use factor includes seasonal use rates, area use rates, COPEC assimilation rate
- BW = Body weight of the receptor, wet weight (kg)
- EDD<sub>substrate</sub> = Dose of COPEC from incidental substrate ingestion (mg COPEC/kg body weight-day)
- IR<sub>substrate</sub> = Incidental Ingestion Rate of substrate (kg substrate ingested per day, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)

NA, TRV was not available.

ND, not detected

--, HQ could not be calculated because chemical was not detected or TRV was not available.

**Table B26**  
**Refined Exposure Evaluation - Double-Crested Cormorant**  
**SWMU 5/Henby Creek Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	Double-crested Cormorant Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	UCL <sub>mean</sub> Sediment Concentration (mg/kg, dw)	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>					
<b>Inorganics - Metals</b>										
Chromium	3.56E+01	0.0E+00	2.7E-04	2.7E-04	6.0E-04	8.66E-04	2.66	<1	15.60	<1
Copper	2.92E+01	0.0E+00	4.2E-03	4.2E-03	4.9E-04	4.66E-03	18.40	<1	34.80	<1
Lead	5.82E+01	0.0E+00	3.2E-03	3.2E-03	9.8E-04	4.20E-03	10.90	<1	44.60	<1
Mercury	1.36E+00	0.0E+00	2.0E-03	2.0E-03	2.3E-05	2.02E-03	0.45	<1	0.91	<1
<b>Polycyclic Aromatic Hydrocarbons (PAHs)</b>										
Low Molecular Weight (LMW) PAHs:										
Acenaphthene	3.47E-01	0.0E+00	2.1E-03	2.1E-03	5.8E-06	2.14E-03				
Acenaphthylene	ND	--	--	--	--	--				
Anthracene	6.94E-01	0.0E+00	4.1E-03	4.1E-03	1.2E-05	4.14E-03				
Fluorene	ND	--	--	--	--	--				
Naphthalene	6.47E-01	0.0E+00	4.3E-03	4.3E-03	1.1E-05	4.27E-03				
Phenanthrene	4.35E+00	0.0E+00	2.6E-02	2.6E-02	7.3E-05	2.59E-02				
Total LMW PAHs				3.6E-02	1.0E-04	3.64E-02	16.10	<1	161.00	<1
High Molecular Weight (HMW) PAHs:										
Benzo(a)anthracene	2.02E+00	0.0E+00	9.9E-03	9.9E-03	3.4E-05	9.95E-03				
Benzo[A]Pyrene	1.38E+00	0.0E+00	7.2E-03	7.2E-03	2.3E-05	7.19E-03				
Benzo(b)fluoranthene	1.11E+00	0.0E+00	5.7E-03	5.7E-03	1.9E-05	5.70E-03				
Benzo(g,h,i)perylene	5.66E-01	0.0E+00	2.8E-03	2.8E-03	9.5E-06	2.84E-03				
Benzo(k)fluoranthene	5.07E-01	0.0E+00	2.6E-03	2.6E-03	8.5E-06	2.59E-03				
Chrysene	3.30E+00	0.0E+00	1.8E-02	1.8E-02	5.5E-05	1.77E-02				
Dibenz(A,H)Anthracene	ND	--	--	--	--	--				
Fluoranthene	1.79E+00	0.0E+00	1.0E-02	1.0E-02	3.0E-05	1.02E-02				
Indeno (1,2,3-CD) Pyrene	8.21E-01	0.0E+00	4.0E-03	4.0E-03	1.4E-05	4.04E-03				
Pyrene	3.21E+00	0.0E+00	1.8E-02	1.8E-02	5.4E-05	1.85E-02				
Total HMW PAHs	1.47E+01			7.8E-02	2.5E-04	7.87E-02	2.00	<1	20.00	<1

**Table B26**  
**Refined Exposure Evaluation - Double-Crested Cormorant**  
**SWMU 5/Henby Creek Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	Double-crested Cormorant Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	UCL <sub>mean</sub> Sediment Concentration (mg/kg, dw)	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>					
<b>Semi-volatile Organic Compounds (SVOCs) - Non-PAH SVOCs</b>										
Butyl Benzyl Phthalate	ND	--	--	--	--	--	--	--	--	--
Di-N-Butyl Phthalate	6.32E-01	0.0E+00	2.8E-03	2.8E-03	1.1E-05	2.80E-03	0.11	<1	1.10	<1

**Notes:**

$$a, EDD_{total} = \frac{IR_{diet} \times \sum (BSAF_{dw} \times C_{se\ dim\ ent} \times DF_i) \times AUF}{BW} + \frac{IR_{se\ dim\ ent} \times C_{se\ dim\ ent} \times AUF}{BW}$$

Where:

- EDD<sub>diet</sub> = Dose of COPEC obtained from the diet (mg COPEC/kg receptor body weight-day)
- IR<sub>diet</sub> = Ingestion rate of food (kg food ingested per day, dry weight)
- B(S)AF = Bioaccumulation factor (BAF) or biota-sediment accumulation factor (BSAF), specific to prey type and COPEC (kg substrate/kg food, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)
- DF<sub>i</sub> = Dietary fraction of food item i (proportion of food type in the diet)
- AUF = Area use factor includes seasonal use rates, area use rates, COPEC assimilation rate
- BW = Body weight of the receptor, wet weight (kg)
- EDD<sub>substrate</sub> = Dose of COPEC from incidental substrate ingestion (mg COPEC/kg body weight-day)
- IR<sub>substrate</sub> = Incidental Ingestion Rate of substrate (kg substrate ingested per day, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)

NA, TRV was not available.

ND, not detected

--, HQ could not be calculated because chemical was not detected or TRV was not available.

**Table B27**  
**Refined Exposure Evaluation - American Black Duck**  
**SWMU 5/Henby Creek Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	American Black Duck Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>						
UCL <sub>mean</sub> Sediment Concentration (mg/kg, dw)										
<b>Inorganics - Metals</b>										
Chromium	3.56E+01	1.3E-01	0.0E+00	1.3E-01	9.1E-03	1.43E-01	2.66	<1	15.60	<1
Copper	2.92E+01	6.4E-01	0.0E+00	6.4E-01	7.5E-03	6.42E-01	18.40	<1	34.80	<1
Lead	5.82E+01	2.5E-02	0.0E+00	2.5E-02	1.5E-02	3.94E-02	10.90	<1	44.60	<1
Mercury	1.36E+00	1.5E-02	0.0E+00	1.5E-02	3.5E-04	1.55E-02	0.45	<1	0.91	<1
<b>Polycyclic Aromatic Hydrocarbons (PAHs)</b>										
Low Molecular Weight (LMW) PAHs:										
Acenaphthene	3.47E-01	1.3E-02	0.0E+00	1.3E-02	8.9E-05	1.33E-02				
Acenaphthylene	ND	--	--	--	--	--				
Anthracene	6.94E-01	2.5E-02	0.0E+00	2.5E-02	1.8E-04	2.56E-02				
Fluorene	ND	--	--	--	--	--				
Naphthalene	6.47E-01	2.6E-02	0.0E+00	2.6E-02	1.7E-04	2.65E-02				
Phenanthrene	4.35E+00	1.6E-01	0.0E+00	1.6E-01	1.1E-03	1.60E-01				
Total LMW PAHs				2.2E-01	1.5E-03	2.26E-01	16.10	<1	161.00	<1
High Molecular Weight (HMW) PAHs:										
Benzo(a)anthracene	2.02E+00	6.1E-02	0.0E+00	6.1E-02	5.1E-04	6.17E-02				
Benzo[A]Pyrene	1.38E+00	4.4E-02	0.0E+00	4.4E-02	3.5E-04	4.46E-02				
Benzo(b)fluoranthene	1.11E+00	3.5E-02	0.0E+00	3.5E-02	2.8E-04	3.54E-02				
Benzo(g,h,i)perylene	5.66E-01	1.7E-02	0.0E+00	1.7E-02	1.4E-04	1.76E-02				
Benzo(k)fluoranthene	5.07E-01	1.6E-02	0.0E+00	1.6E-02	1.3E-04	1.61E-02				
Chrysene	3.30E+00	1.1E-01	0.0E+00	1.1E-01	8.4E-04	1.10E-01				
Dibenz(A,H)Anthracene	ND	--	--	--	--	--				
Fluoranthene	1.79E+00	6.3E-02	0.0E+00	6.3E-02	4.6E-04	6.32E-02				
Indeno (1,2,3-CD) Pyrene	8.21E-01	2.5E-02	0.0E+00	2.5E-02	2.1E-04	2.51E-02				
Pyrene	3.21E+00	1.1E-01	0.0E+00	1.1E-01	8.2E-04	1.15E-01				
Total HMW PAHs	1.47E+01			4.8E-01	3.8E-03	4.88E-01	2.00	<1	20.00	<1

**Table B27**  
**Refined Exposure Evaluation - American Black Duck**  
**SWMU 5/Henby Creek Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	American Black Duck Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	UCL <sub>mean</sub> Sediment Concentration (mg/kg, dw)	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>					
<b>Semi-volatile Organic Compounds (SVOCs) - Non-PAH SVOCs</b>										
Butyl Benzyl Phthalate	ND	--	--	--	--	--	--	--	--	--
Di-N-Butyl Phthalate	6.32E-01	1.7E-02	0.0E+00	1.7E-02	1.6E-04	1.74E-02	0.11	<1	1.10	<1

**Notes:**

$$a, EDD_{total} = \frac{IR_{diet} \times \sum (BSAF_{dw} \times C_{se\ dim\ ent} \times DF_i) \times AUF}{BW} + \frac{IR_{se\ dim\ ent} \times C_{se\ dim\ ent} \times AUF}{BW}$$

Where:

- EDD<sub>diet</sub> = Dose of COPEC obtained from the diet (mg COPEC/kg receptor body weight-day)
- IR<sub>diet</sub> = Ingestion rate of food (kg food ingested per day, dry weight)
- B(S)AF = Bioaccumulation factor (BAF) or biota-sediment accumulation factor (BSAF), specific to prey type and COPEC (kg substrate/kg food, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)
- DF<sub>i</sub> = Dietary fraction of food item i (proportion of food type in the diet)
- AUF = Area use factor includes seasonal use rates, area use rates, COPEC assimilation rate
- BW = Body weight of the receptor, wet weight (kg)
- EDD<sub>substrate</sub> = Dose of COPEC from incidental substrate ingestion (mg COPEC/kg body weight-day)
- IR<sub>substrate</sub> = Incidental Ingestion Rate of substrate (kg substrate ingested per day, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)

NA, TRV was not available.

ND, not detected

--, HQ could not be calculated because chemical was not detected or TRV was not available.

**Table B28**  
**Refined Exposure Evaluation - Double-Crested Cormorant**  
**Carneys Point Zone**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	Double-crested Cormorant Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	UCL <sub>mean</sub> Sediment Concentration (mg/kg, dw)	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>					
<b>Inorganics - Metals</b>										
Chromium	3.57E+01	0.0E+00	9.9E-04	9.9E-04	2.2E-03	3.18E-03	2.66	<1	15.60	<1
Copper	2.27E+01	0.0E+00	1.2E-02	1.2E-02	1.4E-03	1.32E-02	18.40	<1	34.80	<1
Lead	3.23E+01	0.0E+00	6.5E-03	6.5E-03	2.0E-03	8.53E-03	10.90	<1	44.60	<1
Mercury	5.51E-01	0.0E+00	2.9E-03	2.9E-03	3.4E-05	2.98E-03	0.45	<1	0.91	<1
<b>Polycyclic Aromatic Hydrocarbons (PAHs)</b>										
Low Molecular Weight (LMW) PAHs:										
Acenaphthene	ND	--	--	--	--	--				
Acenaphthylene	ND	--	--	--	--	--				
Anthracene	ND	--	--	--	--	--				
Fluorene	ND	--	--	--	--	--				
Naphthalene	6.20E-02	0.0E+00	6.0E-04	6.0E-04	3.8E-06	6.01E-04				
Phenanthrene	9.79E-02	0.0E+00	8.5E-04	8.5E-04	6.0E-06	8.54E-04				
Total LMW PAHs				1.4E-03	9.8E-06	1.46E-03	16.10	<1	161.00	<1
High Molecular Weight (HMW) PAHs:										
Benzo(a)anthracene	1.13E-01	0.0E+00	8.1E-04	8.1E-04	6.9E-06	8.16E-04				
Benzo[A]Pyrene	1.14E-01	0.0E+00	8.7E-04	8.7E-04	7.0E-06	8.73E-04				
Benzo(b)fluoranthene	1.41E-01	0.0E+00	1.1E-03	1.1E-03	8.7E-06	1.06E-03				
Benzo(g,h,i)perylene	7.74E-02	0.0E+00	5.7E-04	5.7E-04	4.8E-06	5.71E-04				
Benzo(k)fluoranthene	6.36E-02	0.0E+00	4.7E-04	4.7E-04	3.9E-06	4.78E-04				
Chrysene	1.28E-01	0.0E+00	1.0E-03	1.0E-03	7.9E-06	1.01E-03				
Dibenz(A,H)Anthracene	ND	--	--	--	--	--				
Fluoranthene	1.94E-01	0.0E+00	1.6E-03	1.6E-03	1.2E-05	1.62E-03				
Indeno (1,2,3-CD) Pyrene	6.67E-02	0.0E+00	4.8E-04	4.8E-04	4.1E-06	4.83E-04				
Pyrene	1.95E-01	0.0E+00	1.6E-03	1.6E-03	1.2E-05	1.65E-03				
Total HMW PAHs	1.09E+00			8.5E-03	6.7E-05	8.57E-03	2.00	<1	20.00	<1

**Table B28**  
**Refined Exposure Evaluation - Double-Crested Cormorant**  
**Carneys Point Zone**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	Double-crested Cormorant Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	UCL <sub>mean</sub> Sediment Concentration (mg/kg, dw)	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>					
<b>Semi-volatile Organic Compounds (SVOCs) - Non-PAH SVOCs</b>										
Butyl Benzyl Phthalate	ND	--	--	--	--	--	--	--	--	--
Di-N-Butyl Phthalate	ND	--	--	--	--	--	--	--	--	--

**Notes:**

$$a, EDD_{total} = \frac{IR_{diet} \times \sum (BSAF_{dw} \times C_{se\ dim\ ent} \times DF_i) \times AUF}{BW} + \frac{IR_{se\ dim\ ent} \times C_{se\ dim\ ent} \times AUF}{BW}$$

Where:

- EDD<sub>diet</sub> = Dose of COPEC obtained from the diet (mg COPEC/kg receptor body weight-day)
- IR<sub>diet</sub> = Ingestion rate of food (kg food ingested per day, dry weight)
- B(S)AF = Bioaccumulation factor (BAF) or biota-sediment accumulation factor (BSAF), specific to prey type and COPEC (kg substrate/kg food, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)
- DF<sub>i</sub> = Dietary fraction of food item i (proportion of food type in the diet)
- AUF = Area use factor includes seasonal use rates, area use rates, COPEC assimilation rate
- BW = Body weight of the receptor, wet weight (kg)
- EDD<sub>substrate</sub> = Dose of COPEC from incidental substrate ingestion (mg COPEC/kg body weight-day)
- IR<sub>substrate</sub> = Incidental Ingestion Rate of substrate (kg substrate ingested per day, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)

NA, TRV was not available.

ND, not detected

--, HQ could not be calculated because TRV was not available or chemical was not detected.

NA, TRV was not available.

ND, not detected

--, HQ could not be calculated because chemical was not detected or TRV was not available.

**Table B29**  
**Refined Exposure Evaluation - American Black Duck**  
**Carneys Point**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	American Black Duck Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	UCL <sub>mean</sub> Sediment Concentration (mg/kg, dw)	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>					
<b>Inorganics - Metals</b>										
Chromium	3.57E+01	4.9E-01	0.0E+00	4.9E-01	3.3E-02	5.24E-01	2.66	<1	15.60	<1
Copper	2.27E+01	2.2E+00	0.0E+00	2.2E+00	2.1E-02	2.19E+00	18.40	<1	34.80	<1
Lead	3.23E+01	5.0E-02	0.0E+00	5.0E-02	3.0E-02	7.99E-02	10.90	<1	44.60	<1
Mercury	5.51E-01	2.2E-02	0.0E+00	2.2E-02	5.1E-04	2.29E-02	0.45	<1	0.91	<1
<b>Polycyclic Aromatic Hydrocarbons (PAHs)</b>										
Low Molecular Weight (LMW) PAHs:										
Acenaphthene	ND	--	--	--	--	--				
Acenaphthylene	ND	--	--	--	--	--				
Anthracene	ND	--	--	--	--	--				
Fluorene	ND	--	--	--	--	--				
Naphthalene	6.20E-02	3.7E-03	0.0E+00	3.7E-03	5.8E-05	3.75E-03				
Phenanthrene	9.79E-02	5.2E-03	0.0E+00	5.2E-03	9.1E-05	5.33E-03				
Total LMW PAHs				8.9E-03	1.5E-04	9.08E-03	16.10	<1	161.00	<1
High Molecular Weight (HMW) PAHs:										
Benzo(a)anthracene	1.13E-01	5.0E-03	0.0E+00	5.0E-03	1.1E-04	5.10E-03				
Benzo[A]Pyrene	1.14E-01	5.3E-03	0.0E+00	5.3E-03	1.1E-04	5.46E-03				
Benzo(b)fluoranthene	1.41E-01	6.5E-03	0.0E+00	6.5E-03	1.3E-04	6.64E-03				
Benzo(g,h,i)perylene	7.74E-02	3.5E-03	0.0E+00	3.5E-03	7.2E-05	3.57E-03				
Benzo(k)fluoranthene	6.36E-02	2.9E-03	0.0E+00	2.9E-03	5.9E-05	2.99E-03				
Chrysene	1.28E-01	6.2E-03	0.0E+00	6.2E-03	1.2E-04	6.34E-03				
Dibenz(A,H)Anthracene	ND	--	--	--	--	--				
Fluoranthene	1.94E-01	9.9E-03	0.0E+00	9.9E-03	1.8E-04	1.01E-02				
Indeno (1,2,3-CD) Pyrene	6.67E-02	3.0E-03	0.0E+00	3.0E-03	6.2E-05	3.02E-03				
Pyrene	1.95E-01	1.0E-02	0.0E+00	1.0E-02	1.8E-04	1.03E-02				
Total HMW PAHs	1.09E+00			5.2E-02	1.0E-03	5.35E-02	2.00	<1	20.00	<1

**Table B29**  
**Refined Exposure Evaluation - American Black Duck**  
**Carneys Point**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Exposure Point Concentration	American Black Duck Dose (mg/kg bw-day)								
		Diet			Substrate	Total Estimated Daily Dose (EDD <sub>Total</sub> ) <sup>a</sup>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
	UCL <sub>mean</sub> Sediment Concentration (mg/kg, dw)	Invertebrates	Fish	Dose <sub>diet</sub>	Dose <sub>substrate</sub>					
<b>Semi-volatile Organic Compounds (SVOCs) - Non-PAH SVOCs</b>										
Butyl Benzyl Phthalate	ND	--	--	--	--	--	--	--	--	--
Di-N-Butyl Phthalate	ND	--	--	--	--	--	--	--	--	--

**Notes:**

$$a, EDD_{total} = \frac{IR_{diet} \times \sum (BSAF_{dw} \times C_{se\ dim\ ent} \times DF_i) \times AUF}{BW} + \frac{IR_{se\ dim\ ent} \times C_{se\ dim\ ent} \times AUF}{BW}$$

Where:

- EDD<sub>diet</sub> = Dose of COPEC obtained from the diet (mg COPEC/kg receptor body weight-day)
- IR<sub>diet</sub> = Ingestion rate of food (kg food ingested per day, dry weight)
- B(S)AF = Bioaccumulation factor (BAF) or biota-sediment accumulation factor (BSAF), specific to prey type and COPEC (kg substrate/kg food, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)
- DF<sub>i</sub> = Dietary fraction of food item i (proportion of food type in the diet)
- AUF = Area use factor includes seasonal use rates, area use rates, COPEC assimilation rate
- BW = Body weight of the receptor, wet weight (kg)
- EDD<sub>substrate</sub> = Dose of COPEC from incidental substrate ingestion (mg COPEC/kg body weight-day)
- IR<sub>substrate</sub> = Incidental Ingestion Rate of substrate (kg substrate ingested per day, dry weight)
- C<sub>substrate</sub> = COPEC concentration in substrate (mg COPEC/kg substrate, dry weight)

NA, TRV was not available.

ND, not detected

--, HQ could not be calculated because TRV was not available or chemical was not detected.

NA, TRV was not available.

ND, not detected

--, HQ could not be calculated because chemical was not detected or TRV was not available.

**Table B30**  
**Summary of the Refined Exposure Evaluation - AUF-Weighted Estimated Daily Doses**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Double-Crested Cormorant AUF-Weighted Estimated Daily Dose (EDD) (mg/kg bw-day)					First-Tier Toxicity Reference Values (TRVs)				Alternate Toxicity Reference Values (TRVs)			
	Jackson Labs/ TEL Area (AUF=0.019)	Fluoroproducts Area (AUF=0.013)	SWMU 5/Henby Creek Area (AUF=0.012)	Carneys Point Zone (AUF=0.046)	Total EDD (AUF=0.09)	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
Chromium	0.011	0.001	0.001	0.003	0.02	2.66	<1	15.6	<1	2.66	<1	15.6	<1
Copper	0.009	0.005	0.005	0.013	0.03	2.3	<1	4.7	<1	18.4	<1	34.8	<1
Lead	0.024	0.003	0.004	0.009	0.04	0.19	<1	1.9	<1	10.9	<1	44.6	<1
Mercury	0.002	0.001	0.002	0.003	0.008	0.013	<1	0.026	<1	0.45	<1	0.91	<1
Total LMW PAHs	0.007	0.004	0.036	0.001	0.05	0.67	<1	6.7	<1	16.1	<1	161	<1
Total HMW PAHs	0.021	0.011	0.079	0.009	0.119	0.048	<b>2.5</b>	0.48	<1	2	<1	20	<1
Butyl Benzyl Phthalate	--	0.001	--	--	0.001	0.11	<1	1.1	<1	0.11	<1	1.1	<1
Di-N-Butyl Phthalate	0.001	0.000	0.003	--	0.004	0.11	<1	1.1	<1	0.11	<1	1.1	<1

Analyte	Black Duck AUF-Weighted Estimated Daily Dose (EDD) (mg/kg bw-day)					First-Tier Toxicity Reference Values (TRVs)				Alternate Toxicity Reference Values (TRVs)			
	Jackson Labs/TEL Area (AUF=0.122)	Fluoroproducts Area (AUF=0.082)	SWMU 5/Henby Creek Area (AUF=0.08)	Carneys Point Zone (AUF=0.291)	Total EDD (AUF=0.575)	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>	TRV <sub>NOAEL</sub>	HQ <sub>NOAEL</sub>	TRV <sub>LOAEL</sub>	HQ <sub>LOAEL</sub>
Chromium	1.878	0.177	0.143	0.524	2.72	2.66	<b>1.0</b>	15.6	<1	2.66	<b>1.0</b>	15.6	<1
Copper	1.039	0.663	0.642	2.187	4.5	2.3	<b>2.0</b>	4.7	<1	18.4	<1	34.8	<1
Lead	0.229	0.030	0.039	0.080	0.38	0.19	<b>2.0</b>	1.9	<1	10.9	<1	44.6	<1
Mercury	0.016	0.006	0.015	0.023	0.060	0.013	<b>4.6</b>	0.026	<b>2.3</b>	0.45	<1	0.91	<1
Total LMW PAHs	0.046	0.026	0.226	0.009	0.31	0.67	<1	6.7	<1	16.1	<1	161	<1
Total HMW PAHs	0.129	0.070	0.488	0.054	0.741	0.048	<b>15.4</b>	0.48	<b>1.5</b>	2	<1	20	<1
Butyl Benzyl Phthalate	--	0.003	--	--	0.003	0.11	<1	1.1	<1	0.11	<1	1.1	<1
Di-N-Butyl Phthalate	0.005	0.002	0.017	--	0.024	0.11	<1	1.1	<1	0.11	<1	1.1	<1

## **Appendix C**

### **Documentation of Upper Confidence Limit of the Mean ( $UCL_{\text{mean}}$ ) Calculations**

**Table C1**  
**Upper Confidence Limit of the Mean Concentration (UCL<sub>mean</sub>)**  
**Descriptions of ProUCL 5.1 Calculation Methods**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

EPA ProUCL 5.1 Software Upper Confidence Limit (UCL) Method	Description
95% Adjusted Gamma UCL	95% UCL based upon adjusted gamma distribution
95% Approximate Gamma UCL	95% UCL based upon chi-square approximation
95% Chebyshev (Mean, Sd) UCL	95% UCL based upon Chebyshev inequality
95% H-UCL	95% UCL based on Land's H-statistic
95% KM (Chebyshev) UCL	95% UCL based upon Kaplan-Meier estimates using Chebyshev inequality
95% KM (t) UCL	95% UCL based upon Kaplan-Meier estimates using the Student's t-distribution critical value
95% KM Adjusted Gamma UCL	95% UCL based upon Kaplan-Meier adjusted gamma distribution
95% KM Approximate Gamma UCL	95% UCL based upon Kaplan-Meier approximation
95% KM Bootstrap t UCL	95% UCL based upon Kaplan-Meier estimates using percentile bootstrap method
95% Student's-t UCL	95% UCL based upon Student's-t distribution
97.5% KM (Chebyshev) UCL	97.5% UCL based upon Kaplan-Meier estimates using Chebyshev inequality
99% KM (Chebyshev) UCL	99% UCL based upon Kaplan-Meier estimates using Chebyshev inequality
KM H-UCL	95% UCL based upon Land's H-statistic and Kaplan-Meier estimates on logged data assuming lognormal distribution
Gamma Adjusted KM-UCL	95% UCL based upon Kaplan-Meier adjusted gamma distribution

**Table C2**  
**Jackson Labs/TEL Area Upper Confidence Limit of the Mean Concentration (UCL<sub>mean</sub>) for Bulk Sediment**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Upper Confidence Limit (UCL) Method	UCL Value
<b>0.00-0.50 Foot Sampling Interval</b>				
<b>Metals (mg/kg)</b>				
Aluminum	37	37	95% Student's-t UCL	19,683
Antimony	37	11	KM H-UCL	0.884
Arsenic	37	37	95% H-UCL	12.6
Barium	37	--	95% Adjusted Gamma UCL	142.7
Beryllium	37	36	95% KM Adjusted Gamma UCL	1.92
Cadmium	37	34	95% KM (t) UCL	0.642
Chromium	37	37	95% Chebyshev (Mean, Sd) UCL	305.4
Copper	37	37	95% H-UCL	35.1
Iron	37	37	95% Adjusted Gamma UCL	31,896
Lead	37	37	95% Chebyshev (Mean, Sd) UCL	220.4
Manganese	37	37	95% Chebyshev (Mean, Sd) UCL	965.7
Mercury	37	35	KM H-UCL	0.889
Nickel	37	37	95% Student's-t UCL	28.9
Selenium	37	11	Gamma Adjusted KM-UCL	1.04
Silver	37	12	Gamma Adjusted KM-UCL	0.250
Thallium	37	12	95% KM (Chebyshev) UCL	1.31
Tin	28	--	95% Student's-t UCL	5.68
Titanium	9	--	95% Student's-t UCL	2,336
Vanadium	37	--	95% Student's-t UCL	51.7
Zinc	37	37	95% Adjusted Gamma UCL	136.9
<b>Volatile Organic Compounds (mg/kg)</b>				
1,1,2-Trichlorotrifluoroethane	9	1	--	--
1,2-Dichlorobenzene	28	8	Gamma Adjusted KM-UCL	1.29
1,4-Dichlorobenzene	28	6	Gamma Adjusted KM-UCL	1.03
Acetone	9	7	95% KM (t) UCL	0.136
Carbon Disulfide	9	7	95% KM (t) UCL	0.034
Chlorobenzene	9	1	--	--
Chloroform	9	1	--	--
Trichloroethene	9	1	--	--
<b>Polycyclic Aromatic Hydrocarbons (mg/kg)</b>				
Acenaphthene	37	8	Gamma Adjusted KM-UCL	0.096
Acenaphthylene	37	7	Gamma Adjusted KM-UCL	0.043
Anthracene	37	12	Gamma Adjusted KM-UCL	0.163
Benzo(A)Anthracene	37	17	Gamma Adjusted KM-UCL	0.363
Benzo(G,H,I)Perylene	37	14	Gamma Adjusted KM-UCL	0.177
Benzo(K)Fluoranthene	37	13	Gamma Adjusted KM-UCL	0.198
Benzo[A]Pyrene	37	18	Gamma Adjusted KM-UCL	0.314
Chrysene	37	20	Gamma Adjusted KM-UCL	0.380

**Table C2**  
**Jackson Labs/TEL Area Upper Confidence Limit of the Mean Concentration (UCL<sub>mean</sub>) for Bulk Sediment**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Upper Confidence Limit (UCL) Method	UCL Value
Dibenz(A,H)Anthracene	37	8	95% KM (t) UCL	0.034
Fluoranthene	37	22	KM H-UCL	0.833
Fluorene	37	10	Gamma Adjusted KM-UCL	0.074
Indeno (1,2,3-CD) Pyrene	37	14	Gamma Adjusted KM-UCL	0.154
Naphthalene	37	14	Gamma Adjusted KM-UCL	0.287
Phenanthrene	37	20	Gamma Adjusted KM-UCL	0.372
Pyrene	37	24	Gamma Adjusted KM-UCL	0.652
Total PAHs (Detections + 1/2 MDL)	37	25	Gamma Adjusted KM-UCL	4.08
Total PAHs (Detections Only)	37	25	Gamma Adjusted KM-UCL	4.01
<b>Semivolatile Organic Compounds (mg/kg)</b>				
1,2,4-Trichlorobenzene	37	3	95% KM (t) UCL	2.25
2,4-Dinitrotoluene	37	1	--	--
2-Methylnaphthalene	9	6	95% KM (Chebyshev) UCL	0.148
4-Chloroaniline	37	3	95% KM (t) UCL	0.175
4-Methylphenol (P-Cresol)	9	3	95% KM (t) UCL	0.471
Bis(2-Ethylhexyl)Phthalate	37	4	95% KM (t) UCL	0.131
Hexachlorobenzene	37	1	--	--
Nitrobenzene	37	5	95% KM (Chebyshev) UCL	0.182
<b>Pesticides and Herbicides (mg/kg)</b>				
beta-BHC	2	1	--	--
Endosulfan I	2	2	--	--
<b>Polychlorinated Biphenyls (mg/kg)</b>				
Total PCB (congeners)	9	9	95% Adjusted Gamma UCL	0.156
<b>0.50-1.00 Foot Sampling Interval</b>				
<b>Metals (mg/kg)</b>				
Aluminum	9	9	95% Student's-t UCL	19,596
Antimony	9	9	95% Adjusted Gamma UCL	1.71
Arsenic	9	9	95% Student's-t UCL	21.5
Barium	9	--	95% Student's-t UCL	221.9
Beryllium	9	--	95% Adjusted Gamma UCL	4.24
Cadmium	9	9	95% Student's-t UCL	0.412
Chromium	9	9	95% Student's-t UCL	311.8
Copper	9	9	95% Student's-t UCL	40.0
Iron	9	9	95% Adjusted Gamma UCL	72,211
Lead	9	9	95% Student's-t UCL	83.6
Mercury	9	7	95% KM (t) UCL	0.256
Nickel	9	9	95% Student's-t UCL	36.2
Silver	9	6	95% KM (t) UCL	0.288
Thallium	9	--	95% Student's-t UCL	0.166
Titanium	9	--	95% Student's-t UCL	1,208

**Table C2**  
**Jackson Labs/TEL Area Upper Confidence Limit of the Mean Concentration (UCL<sub>mean</sub>) for Bulk Sediment**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Upper Confidence Limit (UCL) Method	UCL Value
Vanadium	9	--	95% Student's-t UCL	66.7
Zinc	9	9	95% Adjusted Gamma UCL	146.2
<b>Volatile Organic Compounds (mg/kg)</b>				
1,1,2-Trichlorotrifluoroethane	37	2	97.5% KM (Chebyshev) UCL	0.223
Acetone	37	34	95% KM (t) UCL	0.070
Benzene	37	8	Gamma Adjusted KM-UCL	0.253
Carbon Disulfide	37	30	Gamma Adjusted KM-UCL	0.012
Chlorobenzene	37	16	97.5% KM (Chebyshev) UCL	1.33
Chloroform	37	2	99% KM (Chebyshev) UCL	0.483
Dichlorofluoromethane	37	2	95% KM (t) UCL	0.002
Trichlorofluoromethane	37	1	--	--
<b>Polycyclic Aromatic Hydrocarbons (mg/kg)</b>				
Acenaphthene	9	3	95% KM (t) UCL	0.073
Acenaphthylene	9	2	95% KM (Chebyshev) UCL	0.012
Anthracene	9	6	95% KM Bootstrap t UCL	0.555
Benzo(A)Anthracene	9	8	95% KM Bootstrap t UCL	2.85
Benzo(G,H,I)Perylene	9	6	95% KM Bootstrap t UCL	0.803
Benzo(K)Fluoranthene	9	6	95% KM Bootstrap t UCL	1.23
Benzo[A]Pyrene	9	8	95% KM Bootstrap t UCL	1.79
Chrysene	9	7	95% KM Bootstrap t UCL	1.52
Dibenz(A,H)Anthracene	9	4	95% KM (t) UCL	0.042
Fluoranthene	9	8	95% KM Bootstrap t UCL	7.59
Fluorene	9	4	95% KM (t) UCL	0.084
Indeno (1,2,3-CD) Pyrene	9	6	95% KM Bootstrap t UCL	0.606
Naphthalene	9	7	95% KM (t) UCL	0.092
Phenanthrene	9	7	95% KM Bootstrap t UCL	3.56
Pyrene	9	9	95% Adjusted Gamma UCL	1.87
Total PAHs (Detections + 1/2 MDL)	9	9	95% Adjusted Gamma UCL	11.1
Total PAHs (Detections Only)	9	9	95% Adjusted Gamma UCL	12.0
<b>Semivolatile Organic Compounds (mg/kg)</b>				
2-Methylnaphthalene	9	6	95% KM (t) UCL	0.045
4-Methylphenol (P-Cresol)	9	2	95% KM (t) UCL	0.157
<b>Pesticides and Herbicides (mg/kg)</b>				
4,4'-DDE	2	1	--	--
<b>Polychlorinated Biphenyls (mg/kg)</b>				
Total PCB (congeners)	2	1	--	--

**Table C3**  
**Fluoroproducts Area Upper Confidence Limit of the Mean Concentration (UCL<sub>mean</sub>) for Bulk Sediment**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Upper Confidence Limit (UCL) Method	UCL Value
<b>0.00-0.50 Foot Sampling Interval</b>				
<b>Metals (mg/kg)</b>				
Antimony	50	29	95% KM (Chebyshev) UCL	1.05
Arsenic	50	50	95% Approximate Gamma UCL	10.5
Barium	50	50	95% Student's-t UCL	81.6
Beryllium	50	49	95% KM (t) UCL	0.816
Cadmium	50	44	95% KM (t) UCL	0.615
Chromium	50	50	95% Student's-t UCL	43.0
Copper	50	50	95% Student's-t UCL	29.7
Iron	50	50	95% Student's-t UCL	23,900
Lead	50	50	95% Student's-t UCL	43.9
Manganese	50	50	95% Student's-t UCL	679.4
Mercury	50	49	KM H-UCL	0.510
Nickel	50	50	95% Student's-t UCL	23.0
Selenium	50	27	KM H-UCL	0.739
Silver	50	31	95% KM Approximate Gamma UCL	0.356
Thallium	50	27	95% KM (t) UCL	0.177
Tin	23	23	95% Student's-t UCL	8.71
Vanadium	50	50	95% Student's-t UCL	42.3
Zinc	50	50	95% Student's-t UCL	137.1
<b>Volatile Organic Compounds (mg/kg)</b>				
1,1,1-Trichlorotrifluoroethane	27	9	95% KM (t) UCL	0.195
1,1,2-Trichlorotrifluoroethane	38	18	Gamma Adjusted KM-UCL	2.29
1,1-Dichloroethane	38	1	--	--
1,1-Dichloroethene	38	3	95% KM (t) UCL	0.008
1,2,4-Trimethylbenzene	27	3	95% KM (t) UCL	0.026
1,2-Dichloro-1,1,2-Trifluoroethane	27	16	Gamma Adjusted KM-UCL	0.462
1,2-Dichlorobenzene	50	47	95% KM Approximate Gamma UCL	14.3
1,2-Dichloroethene	27	4	95% KM (t) UCL	0.055
1,2-Dichlorotetrafluoroethane	27	15	Gamma Adjusted KM-UCL	0.234
1,3,5-Trimethylbenzene	27	2	95% KM (t) UCL	0.003
1,3-Dichlorobenzene	50	18	KM H-UCL	3.47
1,4-Dichlorobenzene	50	41	95% KM Approximate Gamma UCL	26.2
2,2-Dichloro-1,1,1-Trifluoroethane	27	15	95% KM (Chebyshev) UCL	0.559
2-Chloro-1,1,1-Trifluoroethane	27	6	95% KM (Chebyshev) UCL	0.225
2-Chlorotoluene	27	3	95% KM (t) UCL	0.020
Acetone	38	26	95% KM Adjusted Gamma UCL	0.118
Benzene	38	20	97.5% KM (Chebyshev) UCL	1.04
Carbon Disulfide	38	26	95% KM (Chebyshev) UCL	0.028
CFC-1113	27	2	95% KM (t) UCL	0.014

**Table C3**  
**Fluoroproducts Area Upper Confidence Limit of the Mean Concentration (UCL<sub>mean</sub>) for Bulk Sediment**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Upper Confidence Limit (UCL) Method	UCL Value
Chlorobenzene	38	35	99% KM (Chebyshev) UCL	61.2
Chlorodifluoromethane	27	3	95% KM (t) UCL	0.003
Chlorofluoromethane	27	12	95% KM (Chebyshev) UCL	0.229
Chloroform	38	12	Gamma Adjusted KM-UCL	0.146
Cumene	27	5	95% KM (t) UCL	0.137
Dichlorofluoromethane	38	15	Gamma Adjusted KM-UCL	1.03
Ethylbenzene	38	6	Gamma Adjusted KM-UCL	0.360
Meta- And Para-Xylene	27	8	Gamma Adjusted KM-UCL	2.01
Methylene Chloride	38	4	Gamma Adjusted KM-UCL	0.065
Ortho-Xylene	27	8	Gamma Adjusted KM-UCL	0.735
Tetrachloroethene	38	20	Gamma Adjusted KM-UCL	2.82
Trichloroethene	38	9	95% KM (t) UCL	0.064
Trichlorofluoromethane	38	15	Gamma Adjusted KM-UCL	0.675
Xylenes	38	13	Gamma Adjusted KM-UCL	1.81
<b>Polycyclic Aromatic Hydrocarbons (mg/kg)</b>				
Acenaphthene	50	28	KM H-UCL	0.100
Acenaphthylene	50	27	KM H-UCL	0.036
Anthracene	50	29	KM H-UCL	0.125
Benzo(A)Anthracene	50	40	KM H-UCL	0.375
Benzo(G,H,I)Perylene	50	32	KM H-UCL	0.152
Benzo(K)Fluoranthene	50	31	KM H-UCL	0.144
Benzo[A]Pyrene	50	38	KM H-UCL	0.303
Chrysene	50	42	95% KM (Chebyshev) UCL	1.29
Dibenz(A,H)Anthracene	50	26	95% KM (Chebyshev) UCL	0.099
Fluoranthene	50	43	KM H-UCL	0.607
Fluorene	50	29	95% KM (Chebyshev) UCL	0.142
Indeno (1,2,3-CD) Pyrene	50	30	95% KM (Chebyshev) UCL	0.260
Naphthalene	50	36	KM H-UCL	0.552
Phenanthrene	50	39	KM H-UCL	0.389
Pyrene	50	44	KM H-UCL	0.649
Total PAHs (Detections + 1/2 MDL)	50	45	95% KM (Chebyshev) UCL	8.18
Total PAHs (Detections Only)	50	45	95% KM (Chebyshev) UCL	7.97
<b>Semivolatile Organic Compounds (mg/kg)</b>				
2,4-Dichlorophenol	50	3	95% KM (t) UCL	0.031
2,4-Dinitrotoluene	50	1	--	--
2,6-Dinitrotoluene	50	1	--	--
2-Chlorophenol	50	6	95% KM Approximate Gamma UCL	0.042
2-Methylnaphthalene	27	25	KM H-UCL	0.164
4-Chloroaniline	50	8	95% KM (t) UCL	0.285
4-Methylphenol (P-Cresol)	27	13	95% KM (t) UCL	0.053

**Table C3**  
**Fluoroproducts Area Upper Confidence Limit of the Mean Concentration (UCL<sub>mean</sub>) for Bulk Sediment**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Upper Confidence Limit (UCL) Method	UCL Value
Acetophenone	27	4	95% KM (t) UCL	0.024
Aniline	50	1	--	--
Bis(2-Ethylhexyl)Phthalate	50	7	95% KM Approximate Gamma UCL	0.176
Butyl Benzyl Phthalate	50	3	95% KM (t) UCL	0.251
Carbazole	50	9	95% KM Approximate Gamma UCL	0.051
Diethyl Phthalate	50	4	95% KM (t) UCL	0.199
Diphenyl Ether	27	7	95% KM (t) UCL	0.043
Hexachlorobenzene	50	4	97.5% KM (Chebyshev) UCL	0.071
Hexachlorobutadiene	50	1	--	--
Nitrobenzene	50	6	95% KM Approximate Gamma UCL	0.257
Phenol	50	9	95% KM (t) UCL	0.046
<b>Polychlorinated Biphenyls (mg/kg)</b>				
Total PCB (congeners)	37	37	95% H-UCL	0.195
<b>0.50-1.00 Foot Sampling Interval</b>				
<b>Metals (mg/kg)</b>				
Aluminum	27	27	95% Student's-t UCL	16,275
Antimony	27	26	95% KM Adjusted Gamma UCL	1.42
Arsenic	27	27	95% Adjusted Gamma UCL	15.4
Barium	27	27	95% Chebyshev (Mean, Sd) UCL	111.5
Beryllium	27	27	95% Adjusted Gamma UCL	0.949
Cadmium	27	22	95% KM (t) UCL	0.786
Chromium	27	27	95% Adjusted Gamma UCL	71.9
Copper	27	27	95% Adjusted Gamma UCL	79.9
Iron	27	27	95% H-UCL	27,883
Lead	27	27	95% Adjusted Gamma UCL	203.2
Manganese	27	27	95% Adjusted Gamma UCL	765.2
Mercury	23	21	95% KM Adjusted Gamma UCL	0.982
Nickel	27	27	95% H-UCL	30.3
Selenium	27	19	95% KM Adjusted Gamma UCL	1.31
Silver	27	21	95% KM Adjusted Gamma UCL	0.745
Thallium	27	27	95% Student's-t UCL	0.199
Vanadium	27	27	95% Student's-t UCL	59.4
Zinc	27	27	95% Adjusted Gamma UCL	195.4
<b>Volatile Organic Compounds (mg/kg)</b>				
1,1,1-Trichlorotrifluoroethane	27	7	Gamma Adjusted KM-UCL	0.309
1,1,2-Trichlorotrifluoroethane	55	20	97.5% KM (Chebyshev) UCL	90.6
1,1-Dichloroethene	55	4	95% KM Approximate Gamma UCL	0.239
1,2,4-Trimethylbenzene	27	4	97.5% KM (Chebyshev) UCL	0.214
1,2-Dichloro-1,1,2-Trifluoroethane	27	13	Gamma Adjusted KM-UCL	0.034
1,2-Dichlorobenzene	32	30	97.5% KM (Chebyshev) UCL	69.2

**Table C3**  
**Fluoroproducts Area Upper Confidence Limit of the Mean Concentration (UCL<sub>mean</sub>) for Bulk Sediment**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Upper Confidence Limit (UCL) Method	UCL Value
1,2-Dichloroethene	27	1	--	--
1,2-Dichlorotetrafluoroethane	27	11	Gamma Adjusted KM-UCL	0.114
1,3,5-Trimethylbenzene	27	3	95% KM (t) UCL	0.039
1,3-Dichlorobenzene	32	18	Gamma Adjusted KM-UCL	1.01
1,4-Dichlorobenzene	32	31	Gamma Adjusted KM-UCL	23.1
2,2-Dichloro-1,1,1-Trifluoroethane	27	12	Gamma Adjusted KM-UCL	0.309
2-Chloro-1,1,1-Trifluoroethane	27	5	95% KM (Chebyshev) UCL	0.095
2-Chlorotoluene	27	5	97.5% KM (Chebyshev) UCL	0.190
Acetone	55	33	KM H-UCL	0.193
Benzene	55	32	97.5% KM (Chebyshev) UCL	0.639
Carbon Disulfide	55	27	KM H-UCL	0.009
CFC-1113	27	4	95% KM (t) UCL	0.051
Chlorobenzene	55	50	97.5% KM (Chebyshev) UCL	25.4
Chlorodifluoromethane	27	2	95% KM (Chebyshev) UCL	0.006
Chlorofluoromethane	27	10	95% KM (t) UCL	0.014
Chloroform	55	12	95% KM Approximate Gamma UCL	0.257
cis-1,2 Dichloroethene	55	2	97.5% KM (Chebyshev) UCL	0.670
Cumene	27	8	Gamma Adjusted KM-UCL	11.7
Dichlorofluoromethane	55	10	95% KM Approximate Gamma UCL	0.481
Ethylbenzene	55	8	95% KM Approximate Gamma UCL	0.091
Meta- And Para-Xylene	27	12	Gamma Adjusted KM-UCL	0.113
Methyl Ethyl Ketone	27	7	95% KM (t) UCL	0.021
Methylene Chloride	55	14	95% KM (Chebyshev) UCL	0.070
Ortho-Xylene	27	10	97.5% KM (Chebyshev) UCL	0.215
Tetrachloroethene	55	19	97.5% KM (Chebyshev) UCL	31.0
Toluene	55	25	95% KM (Chebyshev) UCL	0.167
Trichloroethene	55	5	95% KM Approximate Gamma UCL	0.178
Trichlorofluoromethane	55	15	97.5% KM (Chebyshev) UCL	53.0
Vinyl Chloride	55	4	95% KM Approximate Gamma UCL	0.086
Xylenes	55	29	95% KM (Chebyshev) UCL	0.437
<b>Polycyclic Aromatic Hydrocarbons (mg/kg)</b>				
Acenaphthene	32	22	95% KM (Chebyshev) UCL	0.852
Acenaphthylene	32	18	95% KM (Chebyshev) UCL	0.197
Anthracene	32	24	95% KM (Chebyshev) UCL	0.834
Benzo(A)Anthracene	32	25	95% KM (Chebyshev) UCL	4.29
Benzo(B)Fluoranthene	32	26	95% KM (Chebyshev) UCL	2.79
Benzo(G,H,I)Perylene	32	23	KM H-UCL	0.252
Benzo(K)Fluoranthene	32	22	KM H-UCL	0.281
Benzo[A]Pyrene	32	25	95% KM (Chebyshev) UCL	2.59
Chrysene	32	27	95% KM (Chebyshev) UCL	14.3

**Table C3**  
**Fluoroproducts Area Upper Confidence Limit of the Mean Concentration (UCL<sub>mean</sub>) for Bulk Sediment**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Upper Confidence Limit (UCL) Method	UCL Value
Dibenz(A,H)Anthracene	32	16	95% KM (Chebyshev) UCL	0.488
Fluoranthene	32	26	95% KM (Chebyshev) UCL	3.87
Fluorene	32	24	95% KM (Chebyshev) UCL	0.895
Indeno (1,2,3-CD) Pyrene	32	22	KM H-UCL	0.191
Naphthalene	32	28	KM H-UCL	1.69
Phenanthrene	32	28	95% KM (Chebyshev) UCL	4.04
Pyrene	32	27	KM H-UCL	1.97
Total PAHs (Detections + 1/2 MDL)	32	30	95% KM (Chebyshev) UCL	44.4
Total PAHs (Detections Only)	32	30	95% KM (Chebyshev) UCL	44.4
<b>Semivolatile Organic Compounds (mg/kg)</b>				
2,4-Dinitrotoluene	32	1	--	--
2-Chlorophenol	32	7	95% KM (t) UCL	0.041
2-Methylnaphthalene	27	25	95% KM (Chebyshev) UCL	1.05
4-Chloroaniline	32	12	Gamma Adjusted KM-UCL	3.45
4-Methylphenol (P-Cresol)	27	13	95% KM (t) UCL	0.144
Acetophenone	27	5	95% KM (t) UCL	0.051
Biphenyl	27	12	Gamma Adjusted KM-UCL	0.348
Bis(2-Ethylhexyl)Phthalate	32	12	KM H-UCL	0.357
Butyl Benzyl Phthalate	32	6	95% KM (Chebyshev) UCL	1.19
Carbazole	32	5	95% KM (t) UCL	0.120
Dibenzofuran	27	10	Gamma Adjusted KM-UCL	0.759
Di-N-Butyl Phthalate	32	2	97.5% KM (Chebyshev) UCL	1.93
Diphenyl Ether	27	12	KM H-UCL	0.165
Hexachlorobenzene	32	3	95% KM (t) UCL	0.208
Nitrobenzene	32	5	Gamma Adjusted KM-UCL	1.16
Phenol	32	5	95% KM (t) UCL	0.082
<b>Polychlorinated Biphenyls (mg/kg)</b>				
Total PCB (congeners)	27	27	95% Adjusted Gamma UCL	0.666

**Table C4**  
**SWMU5/Henby Creek Area Upper Confidence Limit of the Mean Concentration (UCL<sub>mean</sub>) for Bulk Sediment**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Upper Confidence Limit (UCL) Method	UCL Value
<b>0.00-0.50 Foot Sampling Interval</b>				
<b>Metals (mg/kg)</b>				
Antimony	13	5	95% KM (t) UCL	1.95
Arsenic	13	13	95% H-UCL	8.01
Barium	13	13	95% Student's-t UCL	74.5
Beryllium	13	12	95% KM (t) UCL	0.667
Cadmium	13	11	95% KM (t) UCL	0.61
Chromium	13	13	95% Student's-t UCL	35.6
Copper	13	13	95% Student's-t UCL	29.2
Iron	13	13	95% Adjusted Gamma UCL	22,893
Lead	16	16	95% Adjusted Gamma UCL	58.2
Manganese	13	13	95% Student's-t UCL	408.3
Mercury	13	13	95% Adjusted Gamma UCL	1.36
Nickel	13	13	95% Student's-t UCL	17.3
Silver	13	2	95% KM (t) UCL	0.327
Tin	13	13	95% Student's-t UCL	14.4
Vanadium	13	13	95% Student's-t UCL	31.9
Zinc	13	13	95% Student's-t UCL	107.4
<b>Volatile Organic Compounds (mg/kg)</b>				
1,2-Dichlorobenzene	13	8	95% KM Bootstrap t UCL	1.06
1,4-Dichlorobenzene	13	5	95% KM Adjusted Gamma UCL	0.499
Acetone	4	2	95% KM (t) UCL	0.036
Dichlorofluoromethane	4	1	--	--
<b>Polycyclic Aromatic Hydrocarbons (mg/kg)</b>				
Acenaphthene	13	2	97.5% KM (Chebyshev) UCL	0.347
Anthracene	13	3	95% KM (t) UCL	0.694
Benzo(A)Anthracene	13	11	95% KM (Chebyshev) UCL	2.02
Benzo(G,H,I)Perylene	13	9	95% KM (Chebyshev) UCL	0.566
Benzo(K)Fluoranthene	13	6	95% KM (Chebyshev) UCL	0.507
Benzo[A]Pyrene	13	10	95% KM (Chebyshev) UCL	1.38
Chrysene	13	11	95% KM (Chebyshev) UCL	3.30
Fluoranthene	13	11	95% KM (Chebyshev) UCL	1.79
Fluorene	13	2	--	--
Indeno (1,2,3-CD) Pyrene	13	7	95% KM Bootstrap t UCL	0.821
Naphthalene	18	5	95% KM (Chebyshev) UCL	0.647
Phenanthrene	13	9	97.5% KM (Chebyshev) UCL	4.35
Pyrene	13	13	95% Chebyshev (Mean, Sd) UCL	3.21
Total PAHs (Detections + 1/2 MDL)	13	13	95% Chebyshev (Mean, Sd) UCL	20.2
Total PAHs (Detections Only)	13	13	95% Chebyshev (Mean, Sd) UCL	19.8
<b>Semivolatile Organic Compounds (mg/kg)</b>				
2,4-Dinitrotoluene	13	2	95% KM (Chebyshev) UCL	0.331
2,6-Dinitrotoluene	13	1	--	--

**Table C4**  
**SWMU5/Henby Creek Area Upper Confidence Limit of the Mean Concentration (UCL<sub>mean</sub>) for Bulk Sediment**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Upper Confidence Limit (UCL) Method	UCL Value
4-Chloroaniline	23	4	95% KM (t) UCL	0.096
Di-N-Butyl Phthalate	13	5	95% KM (t) UCL	0.632
Nitrobenzene	18	4	95% KM (t) UCL	0.698
<b>0.50-1.00 Foot Sampling Interval</b>				
<b>Metals (mg/kg)</b>				
Lead	1	1	--	--
<b>Volatile Organic Compounds (mg/kg)</b>				
1,2-Dichlorobenzene	1	1	--	--
1,4-Dichlorobenzene	1	1	--	--
Acetone	13	12	95% KM (Chebyshev) UCL	0.173
Carbon Disulfide	13	10	95% KM Adjusted Gamma UCL	0.013
Chlorobenzene	14	6	95% KM (t) UCL	0.186
Dichlorofluoromethane	13	2	95% KM (Chebyshev) UCL	0.008
Trichlorofluoromethane	13	1	--	--
<b>Polycyclic Aromatic Hydrocarbons (mg/kg)</b>				
Naphthalene	1	1	--	--
<b>Semivolatile Organic Compounds (mg/kg)</b>				
Nitrobenzene	1	1	--	--

**Table C5**  
**Carneys Point Zone Upper Confidence Limit of the Mean Concentration (UCL<sub>mean</sub>) for Bulk Sediment**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Constituent	Number of Samples	Number of Detections	Upper Confidence Limit (UCL) Method	UCL Value
<b>0.00-0.50 Foot Sampling Interval</b>				
<b>Metals (mg/kg)</b>				
Barium	16	16	95% Student's-t UCL	77.7
Beryllium	21	17	95% KM (t) UCL	0.630
Cadmium	21	17	95% KM (t) UCL	0.514
Chromium	21	21	95% Student's-t UCL	35.7
Copper	21	21	95% Adjusted Gamma UCL	22.7
Iron	16	16	95% Student's-t UCL	22,359
Lead	22	22	95% Student's-t UCL	32.3
Manganese	16	16	95% Student's-t UCL	627.6
Mercury	23	21	95% KM (Chebyshev) UCL	0.551
Nickel	21	21	95% Student's-t UCL	18.5
Selenium	21	6	95% KM (Chebyshev) UCL	0.83
Tin	16	16	95% Adjusted Gamma UCL	7.86
Vanadium	16	16	95% Student's-t UCL	35.1
Zinc	21	21	95% Student's-t UCL	118.2
<b>Volatile Organic Compounds (mg/kg)</b>				
1,2-Dichlorobenzene	16	3	95% KM (t) UCL	0.187
1,4-Dichlorobenzene	16	3	95% KM (t) UCL	0.281
Acetone	3	3	95% Student's-t UCL	0.191
<b>Polycyclic Aromatic Hydrocarbons (mg/kg)</b>				
Acenaphthylene	21	1	--	--
Benzo(A)Anthracene	21	8	95% KM (t) UCL	0.113
Chrysene	21	8	95% KM (t) UCL	0.128
Pyrene	21	12	95% KM (t) UCL	0.195
<b>Semivolatile Organic Compounds (mg/kg)</b>				
Bis(2-Ethylhexyl)Phthalate	21	2	95% KM (t) UCL	0.148
Nitrobenzene	16	2	95% KM (Chebyshev) UCL	0.222
<b>Polychlorinated Biphenyls (mg/kg)</b>				
Total PCB (congeners)	5	5	95% Student's-t UCL	0.067
<b>0.50-1.00 Foot Sampling Interval</b>				
<b>Volatile Organic Compounds (mg/kg)</b>				
Acetone	16	14	95% KM (Chebyshev) UCL	0.317

## **Appendix D**

# **Equilibrium Partitioning Sediment Benchmark Documentation**



# Appendix D: Equilibrium Partitioning Sediment Benchmark Documentation

Chemours Chambers Works  
Deepwater, New Jersey

November 2018

Submitted on behalf of  
The Chemours Company

Submitted by  
EHS Support LLC  
Collegeville, Pennsylvania

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## Acronym List

Acronym	Explanation
$\sum \text{ESBTU}_{FCV,13}$	Sum of equilibrium sediment benchmark toxic units for 13 PAHs
$\sum \text{ESBTU}_{FCV,Total}$	Sum of equilibrium sediment benchmark toxic units for 34 PAHs
$\sum \text{IWTU}_{FCV}$	Sum of IWTUs for the PAH Mixture
$\mu\text{g}/\text{kg}$	Micrograms per Kilogram
$\mu\text{g}/\text{L}$	Micrograms per Liter
$\mu\text{mol}/\text{g}$	Micromole per gram
ATSDR	Agency for Toxic Substances and Disease Registry
ACR	Acute-to-Chronic Ratio
BTAG	Biological Technical Assistance Group
$C_d$	Dissolved Phase Concentration
$C_{d,PAHi}$	Dissolved Phase Concentration of PAH <i>i</i> In Pore Water
$C_{d,PAHi,FCVi}$	Pore Water Critical Concentration of PAH <i>i</i> Based on the FCV
cm	Centimeter
$C_{ocPAHi}$	Organic-Carbon Normalized Concentration of PAH <i>i</i>
$C_{ocPAHi,FCVi}$	Organic-Carbon Normalized Final Chronic Value Concentration of PAH <i>i</i>
ChV	Chronic Values
COPEC	Constituent of Potential Ecological Concern
CRG	Corporate Remediation Group
CSM	Conceptual Site Model
$C_{s,PAHi}$	Concentration of PAH <i>i</i> In Sediment
EC <sub>50</sub>	Effect Concentration for 50 percent of Test Organisms
ECOSAR	Ecological Structure Activity Relationships
ECOTOX	EPA ECOTOXicology Database
EPA	U.S. Environmental Protection Agency
EPI	Estimation Programs Interface
EqP	Equilibrium Partitioning
ESB	Equilibrium Partitioning Sediment Benchmarks
ESBTU	Equilibrium Sediment Benchmark Toxic Unit
ESC	Ecological Screening Criteria
ESL	Ecological Screening Level
ESV	Ecological Screening Value
$f_{BC}$	Fraction of Black Carbon in Sediment
FCV	Final Chronic Value
$f_{NSOC}$	Fraction of Natural Sedimentary Organic Carbon
$f_{oc}$	Fraction of Organic Carbon
$f_{solids}$	Fraction of Solids
FW	Freshwater
GMAV	Genus Mean Acute Values
IWTU	Interstitial Water Toxic Unit
$K_{BC}$	Black Carbon-Water Partitioning Coefficient
Kg	Kilogram
$K_{oc}$	Organic Carbon Partitioning Coefficient
$K_{ow}$	Octanol-Water Partitioning Coefficient
$K_p$	Sediment-Water Partitioning Coefficient
L/kg	Liters per Kilogram
LC <sub>50</sub>	Lethal Concentration to 50 percent of Organisms

<b>Acronym</b>	<b>Explanation</b>
MDEQ	Michigan Department of Environmental Quality
mg/kg	Milligrams per Kilogram
mmol/L	Millimole per Liter
NOEC	No Observed Effect Concentrations
NRWQC	National Recommended Water Quality Criteria
NSOC	Natural Sedimentary Organic Carbon
ORNL	Oak Ridge National Laboratory
PAH	Polycyclic Aromatic Hydrocarbon
QSAR	Quantitative Structure-Activity Relationship
SAV	Secondary Acute Value
SCV	Secondary Chronic Value
SLERA	Screening-Level Ecological Risk Assessment
SVOC	Semi-Volatile Organic Compound
TCEQ	Texas Commission on Environmental Quality
TLM	Target Lipid Model
TOC	Total Organic Carbon
UF	Uncertainty Factor
VOC	Volatile Organic Compound
WQB	Water Quality Benchmark
WQB <sub>NOEC</sub>	Water Quality Benchmarks based on No Observed Effect Concentrations

## 1.0 Introduction

This appendix describes the approach for deriving equilibrium partitioning sediment benchmarks (ESBs) to evaluate benthic invertebrate exposure to bulk sediment in the *Delaware River Screening Level Ecological Risk Assessment (SLERA)* for the Delaware River adjacent to the Chemours Chambers Works Complex in Deepwater, New Jersey. ESBs were derived for nonionic organic constituents of potential ecological concern (COPECs) with maximum concentrations exceeding conservative ecological screening values (ESVs) in the screening-level exposure evaluation and select organic constituents lacking ESVs.

ESBs were developed to provide more representative, site-specific sediment benchmarks to evaluate chronic direct contact exposure to benthic invertebrates. ESBs for non-polycyclic aromatic hydrocarbon (non-PAH) nonionic organic constituents were developed using the equilibrium partitioning (EqP) approach described in *Procedures for the Derivation of Equilibrium Partitioning Sediment Benchmarks (ESBs) for the Protection of Benthic Organisms: Compendium of Tier 2 Values for Nonionic Organics* (EPA, 2008). Benthic invertebrate exposure to PAHs was evaluated using EqP models depending on the availability of sample-specific carbon data:

- One-Carbon Model: For samples with only total organic carbon (TOC) analyses, a one-carbon model was applied consistent with the *Procedures for the Derivation of Equilibrium Partitioning Sediment Benchmarks (ESBs) for the Protection of Benthic Organisms: PAH Mixtures* (EPA, 2003).
- Two-Carbon Model: For samples with TOC and black carbon analyses, a two-carbon model was applied consistent with the *Equilibrium Partitioning Sediment Benchmarks (ESBs) for the Protection of Benthic Organisms: Procedures for the Determination of Freely Dissolved Interstitial Water Concentrations of Nonionic Organics* (EPA, 2012) to complement the one-carbon model.

The following sections identify the COPECs selected for the derivation of ESBs and describe the calculation procedures, including assumptions regarding input parameters in the ESB calculations.

## 2.0 Derivation of Equilibrium Partitioning Sediment Benchmarks

ESBs were derived for nonionic organic COPECs with maximum concentrations exceeding conservative ESVs in the screening-level exposure evaluation and select organic constituents lacking ESVs. A summary of ESBs derived in this appendix and the associated chemical characteristics, toxicological basis, and aqueous toxicity endpoints are presented in Table D1. The following sections describe each approach for calculating ESBs for the organic COPECs identified in Table D1.

### 2.1 Equilibrium Partitioning (EqP) Approach for Nonionic Organic Constituents

ESB values represent concentrations of nonionic organic constituents in bulk sediment that, at equilibrium, would result in partitioning to sediment pore water at concentrations equivalent to no observed effect concentration (NOEC) water quality benchmarks ( $WQB_{NOEC}$ ). Sample-specific comparisons of  $ESB_{NOEC}$  to concentrations measured in Delaware River exposure areas are provided for the Jackson Labs/TEL Area (Table D2), Fluoroproducts Area (Table D3), SWMU 5/Henby Creek Area (Table D4), and Carneys Point Zone (Table D6).  $ESB_{NOEC}$  values for nonionic constituents were calculated on a sample-specific basis using chronic  $WQB_{NOEC}$ , sample specific-TOC measurements, and constituent-specific organic carbon-water partitioning coefficients ( $K_{oc}$ ):

$$ESB_{NOEC} = (f_{oc} \times K_{oc} \times WQB_{NOEC})$$

where:

$ESB_{NOEC}$	= Equilibrium-partitioning sediment benchmark based on NOEC aqueous toxicity data (microgram per kilogram [ $\mu\text{g}/\text{kg}$ ] dry weight sediment)
$f_{oc}$	= Fraction of organic carbon in sediment
$K_{oc}$	= Organic carbon-water partitioning coefficient (liter per kilogram [ $\text{L}/\text{kg}$ ])
$WQB_{NOEC}$	= Water quality benchmark based on a chronic NOEC (microgram per liter [ $\mu\text{g}/\text{L}$ ])

Constituent-specific organic carbon-water partitioning coefficient ( $K_{oc}$ ) values were calculated as a function of  $K_{ow}$ . Constituent-specific values for  $K_{ow}$  were obtained from EPA Estimation Programs Interface (EPI) Suite database, with preference given to experimental values of  $K_{ow}$  before estimated values.  $K_{oc}$  values were estimated based on constituent-specific  $K_{ow}$  values based on the following relationship (EPA, 2008; Di Toro et al, 1991):

$$\log K_{oc} = 0.0028 + 0.983 \times (\log K_{ow})$$

where:

- $\log K_{oc}$  = log organic carbon-normalized sediment quality benchmark (L/kg); and
- $\log K_{ow}$  = log octanol-water partition coefficient (unitless).

For weakly hydrophobic organic constituents, defined as organic constituents with  $\log K_{oc}$  values less than 2.0, the contribution of the dissolved phase was accounted for in the EqP model using the modification proposed by Fuchsman (2003):

$$ESB_{NOEC} = WQB_{NOEC} \times \left[ (f_{oc} \times K_{oc}) + \frac{1 - f_{solids}}{f_{solids}} \right]$$

where:  $f_{solids}$  is the proportion of sediment as solids. An  $f_{solids}$  value of 0.7 was used for sediments based on a sediment moisture content of 30 percent ( $1 - 0.3 = 0.7$ ). Details regarding the derivation of chronic  $WQB_{NOEC}$  values are described in the following sections.

### 2.1.1 Water Quality Benchmarks

Chronic  $WQB_{NOEC}$  values were derived based on conventional water quality criteria or narcosis theory, depending on the constituent-specific mode of toxicity (EPA, 2008). The toxicological basis for the selection of  $WQB_{NOEC}$  values for constituents with derived ESBs is summarized in Table D1. The following sections present the approach for deriving Chronic  $WQB_{NOEC}$  values based on conventional and narcotic toxicity.

#### Narcotic Toxicity

Chronic  $WQB_{NOEC}$  values for nonionic organic constituents with narcotic mode of toxicity were derived using the approach presented by DiToro et al. (2000). The method provides the basis for the development of chronic  $WQB_{NOEC}$  values for type 1 narcotic chemicals based on the analysis of a database of the lethal concentrations to 50 percent of organisms ( $LC_{50}$ ) comprising 156 chemical and 33 test organisms, including fish, amphibians, arthropods, mollusks, polychaetes, coelenterates, and protozoans (DiToro et al., 2000). A target lipid model (TLM) is proposed that accounts for differences in species sensitivities and constituent differences. Based on the TLM, aqueous  $LC_{50}$  values can be estimated based on the critical body burden related to 50 percent narcotic mortality and a constituent-specific target lipid-water partitioning coefficient, which is a function of constituent-specific  $K_{ow}$ . Final chronic values (FCVs) are estimated from the 5<sup>th</sup> percentile of acute  $LC_{50}$  genus mean acute values (GMAVs) using an acute-to-chronic ratio; the resulting FCVs are considered to represent a 95<sup>th</sup> percentile level of protection. Based on these relationships, DiToro et al. (2000) derives FCV values for narcotic constituents as follows:

$$\log(FCV) = \log[C_L^*(5\%, baseline) \times \Delta C_l / ACR] - 0.945 \times \log(K_{ow})$$

Where:

$\log(FCV)$	= log final chronic value (millimole per liter [mmol/L]).
$C_L^*(5\%, baseline)$	= Critical body burden estimated as the 5 <sup>th</sup> percentile concentration from ranked ordered GMAVs. Estimated as 35.3 micromole per gram ( $\mu\text{mol/g}$ ) octanol in DiToro et al. (2000).
$\Delta C_l$	= Chemical class correction to account for toxicity differences between chemical groups. A chemical class correction of -0.244 was applied to halogenated chemicals per DiToro et al. (2000); no other chemical class corrections were applicable.
ACR	= Acute-to-chronic ratio. Estimated as $5.09 \pm 0.95$ in DiToro et al. (2000).

$\log K_{ow}$  = log octanol-water partition coefficient (unitless).

FCVs calculated based on the approach presented above for narcotic constituents are summarized in Table D1. FCVs were applied in EqP models as chronic  $WQB_{NOEC}$  values as the basis for calculating ESBs for narcotic COPECs.

### Conventional Toxicity

For constituents with conventional modes of chronic toxicity values,  $WQB_{NOEC}$  values were selected from sources of aqueous screening criteria. Sources of available conventional chronic toxicity data for these constituents are briefly discussed below and are summarized in Table D1.

When available, conventional water quality values from federal, state, or regional compilations of surface water benchmarks were used as the basis of  $WQB_{NOEC}$  values. If available, conventional WQBs compiled in EPA (2008) for the derivation of ESBs were used preferentially in the section of  $WQB_{NOEC}$  values for ESB calculations. If conventional WQBs were not available in EPA (2008), additional compilations of surface water quality screening criteria were consulted, including:

- NJDEP freshwater chronic ecological screening criteria (FW2 Chronic ESC; NJDEP, 2009)
- Texas Commission on Environmental Quality (TCEQ, 2017)
- Michigan Department of Environmental Quality (MDEQ, 2014)
- Chronic National Recommended Water Quality Criteria (NRWQC)
- EPA Region 3 Biological Technical Assistance Group (BTAG)
- EPA Region 5 ecological screening levels (ESLs)
- EPA Region 6 Surface Water Benchmarks
- Oak Ridge National Laboratory (ORNL) Toxicological Benchmarks for Screening Potential Contaminants of Concern for Effects on Aquatic Biota: 1996 Revision (Suter and Tsao, 1996).

In the absence of chronic WQBs, studies from peer-reviewed literature, EPA ECOTOXicology database (ECOTOX), and Ecological Structure Activity Relationships (ECOSAR) were reviewed as additional sources of  $WQB_{NOEC}$  values. Aqueous toxicity data for benthic invertebrate test organisms were selected preferentially over toxicity data based on other aquatic test organisms. For nitrobenzene, a 21-day NOEC for daphnid reproduction reported by Kuhn et al. (1989) was used as a chronic  $WQB_{NOEC}$  for ESB calculations. For 4-chloroaniline, an acute  $LC_{50}$  concentration for midges reported by Julin and Sanders (1978) was identified as an acute WQB; a chronic  $WQB_{NOEC}$  for 4-chloroaniline was estimated from the acute  $LC_{50}$  using an acute-to-chronic ratio (ACR) of 8.1 based on 48-hour  $LC_{50}$  data reported for aniline by Sloof et al. (1983) and 21-day NOEC data by Gersich and Milazzo (1990), respectively.

Where chemical-specific toxicity data were not available, a quantitative structure-activity relationship (QSAR) was used. Chronic values for exposure to daphnid test organisms (Daphnid ChV) were estimated based on QSAR using the EPA Ecological Structure Activity Relationships (ECOSAR) module in the EPA Estimation Programs Interface (EPI) Suite software program (Table D1). However, if available, measured data were preferentially selected over QSAR-estimated values.

## 2.2 Equilibrium Partitioning Sediment Benchmarks for PAH Mixtures

Benthic invertebrate exposure to PAHs was evaluated using the following EqP models depending on the availability of sample-specific carbon data:

- One-Carbon EqP Model: For samples with only TOC analyses, a one-carbon model was applied consistent with the *Procedures for the Derivation of Equilibrium Partitioning Sediment Benchmarks (ESBs) for the Protection of Benthic Organisms: PAH Mixtures* (EPA, 2003).
- Two-Carbon EqP Model: For samples with TOC and black carbon analyses, a two-carbon model was applied consistent with the *Equilibrium Partitioning Sediment Benchmarks (ESBs) for the Protection of Benthic Organisms: Procedures for the Determination of Freely Dissolved Interstitial Water Concentrations of Nonionic Organics* (EPA, 2012) to complement the one-carbon model.

The following sections describe the development of EqP models to evaluate potential exposure to PAHs in sediment in the Delaware River adjacent to Chambers Works.

### 2.2.1 One-Carbon EqP Model

The one-carbon EqP model was based on ESBs derived in EPA (2003) to estimate the potential narcotic effects of PAHs in sediment based on theoretical partitioning of PAH compounds between sediment organic carbon and pore water. Concentrations of individual PAHs measured in sediment were normalized based on the sample-specific TOC fraction ( $C_{OC,PAHi}$  mg PAH/kg TOC) and compared to the organic carbon-normalized PAH-specific critical sediment concentration ( $C_{oc,PAHi,FCVi}$ , mg PAH/kg TOC) derived in EPA (2003) using the PAH-specific final chronic value (FCV). Equilibrium sediment benchmark toxic unit (ESBTU) values for each individual PAH were calculated as the ratio of the organic carbon normalized concentration of the measured PAH compound to the organic carbon-normalized PAH-specific critical sediment concentration. Exposure to mixture of PAH compounds in sediment evaluated based on the sum of PAH  $\sum$ ESBTUs calculated from individual PAH compounds:

$$PAH \sum ESBTU_{FCV,Total} = \sum_{i=1}^{13} \frac{C_{oc,PAHi}}{C_{oc,PAHi,FCVi}} \times UF$$

Where:

- $PAH \sum ESBTU_{FCV,Total}$  = Sum of ESBTUs for the PAH mixture (unitless).
- $C_{oc,PAHi}$  = Organic carbon normalized concentration of PAH $i$  (mg PAH/kg TOC).
- $C_{oc,PAHi,FCVi}$  = Organic carbon normalized critical concentration of PAH $i$  based on the final chronic value (mg PAH/kg TOC).
- UF = Uncertainty factor to estimate the toxicity of total PAHs (based on 34 PAHs – 18 parent and 16 alkylated compounds) using measurements of 13 PAHs in bulk sediment in the Delaware River.

$\sum ESBTU_{FCV,Total}$  values were calculated based on 13 PAH compounds measured in sediment samples from the Delaware River; however, EPA (2003) estimates  $\sum ESBTU_{FCV,Total}$  based on the analysis of 34 PAH compounds. To account for

unmeasured PAH compounds estimation of  $\sum \text{ESBTU}_{FCV, Total}$  in the SLERA, an uncertainty factor (UF) of 2.75 was applied to the summed toxic units calculated based on 13 PAHs compounds ( $\sum \text{ESBTU}_{FCV, 13}$ ). A UF of 2.75 corresponds to the median (50<sup>th</sup> percentile) of the distribution of  $\sum \text{ESBTU}_{FCV, Total} / \sum \text{ESBTU}_{FCV, 13}$  evaluated in EPA (2003).  $\sum \text{ESBTU}_{FCV, Total}$  values less than 1.0 are considered to be protective of benthic invertebrate communities; values exceeding 1.0 indicate the potential for narcotic effects in benthic invertebrates (EPA, 2012; EPA, 2003).

Sample-specific calculations of one-carbon  $\sum \text{ESBTU}_{FCV, Total}$  values in Delaware River exposure areas are provided for the Jackson Labs/TEL Area (Table D6), Fluoroproducts Area (Table D7), SWMU 5/Henby Creek Area (Table D8), and Carneys Point Zone (Table D9).

## 2.2.2 Two-Carbon EqP Model

The two-carbon EqP model was applied to Delaware River Remedial Investigation samples analyzed for PAHs, TOC, and black carbon (URS, 2011) to complement the one-carbon model and better estimate site-specific partitioning. As previously stated, black carbon represents the fraction of pyrogenic carbon present in sediment. Incorporation of the black carbon fraction into the EqP model provides a more accurate estimate of site-specific partitioning behavior that may be substantially different between diagenic organic carbon (e.g., plant material) and pyrogenic carbon (Burgess et al., 2004). The two-carbon model accounts for PAH partitioning to the fraction of black carbon in sediment ( $f_{BC}$ ) and the fraction of natural sedimentary organic carbon ( $f_{NSOC}$ ), which is calculated as the difference between  $f_{OC}$  and  $f_{BC}$ .

The two-carbon model estimates the dissolved phase concentration ( $C_d$ ) of PAH  $i$  in pore water based on the general EqP model and sediment-pore water partitioning coefficient ( $K_p$ ) that accounts for partitioning to natural sedimentary organic carbon (NSOC) and black carbon (EPA, 2012; Accardi-Dey and Gschwend, 2002):

$$C_{d, PAHi} = \frac{C_{s, PAHi}}{K_p} = \frac{C_{s, PAHi}}{f_{NSOC} \times K_{OC} + f_{BC} \times K_{BC}}$$

Where:

$C_{d, PAHi}$	= Dissolved phase concentration of PAH $i$ in pore water ( $\mu\text{g/L}$ )
$C_{s, PAHi}$	= Concentration of PAH $i$ in sediment ( $\text{mg/Kg}$ , dry weight)
$K_p$	= Sediment-water partitioning coefficient ( $\text{L/Kg}$ )
$f_{NSOC}$	= Fraction of natural sedimentary organic carbon ( $\text{Kg NSOC/Kg dry weight}$ )
$K_{OC}$	= Organic carbon-water partitioning coefficient ( $\text{L/Kg}$ )
$f_{BC}$	= Fraction of black carbon ( $\text{Kg black carbon/Kg dry weight}$ )
$K_{BC}$	= Black carbon-water partitioning coefficient ( $\text{L/Kg}$ )

Partitioning coefficients ( $K_{OC}$  and  $K_{BC}$ ) used in the two-carbon model were consistent with the values developed by EPA (EPA, 2012; EPA, 2003).

Interstitial water (i.e., pore water) toxic units (IWTUs) were calculated by dividing the PAH-specific dissolved phase concentration estimated using the two-carbon model by the PAH-specific FCV developed by EPA (EPA, 2003; EPA, 2012). IWTUs were summed for each sample to estimate the additive narcotic toxicity of the PAH mixture:

$$\sum IWTU_{FCV} = \sum_{i=1}^{15} \frac{C_{d,PAHi}}{C_{d,PAHi,FCVi}} \times UF$$

where:

- $\sum IWTU_{FCV}$  = Sum of IWTUs for the PAH mixture (unitless).
- $C_{d,PAHi}$  = Pore water concentrations of PAH  $i$  ( $\mu\text{g/L}$ ).
- $C_{d,PAHi,FCVi}$  = Pore water critical concentration of PAH  $i$  based on the FCV ( $\mu\text{g/L}$ ).
- UF = Uncertainty factor to estimate the toxicity of total PAHs (based on 34 PAHs) based on estimated  $C_d$  for 15 PAHs.

Consistent with the estimation of  $\sum$ ESBTU values, an uncertainty factor of 2.75 was applied to the  $\sum$ IWTU calculated based on 15 PAHs measured in sediment in the Delaware River to account for the potential toxicity of unmeasured PAHs. Application of this UF assumes a similar relationship between estimation of toxic units based on bulk sediment and pore water.  $\sum$ IWTU values less than or equal to 1.0 are considered acceptable for the protection of benthic invertebrate receptors (EPA, 2012); values exceeding 1.0 indicate a potential for narcotic effects in benthic receptors.

A modification of the two-carbon model proposed by Accardi-Dey and Gschwend (2002) uses the Freundlich exponent to account for non-linear sorption behavior of PAHs. This modification reduces the estimated dissolved phase concentration in pore water by accounting for simultaneous partitioning of PAHs between NSOC and black carbon. However, this modification requires iterative calculation of a variable that appears on both sides of the model equation, which was not practical for sample-specific calculations presented in the SLERA. As demonstrated in Figure 5 in Accardi-Dey and Gschwend (2002), omitting the Freundlich exponent modification likely overestimates the dissolved phase PAH concentration in pore water; therefore, exposure estimates based on the two-carbon model presented in the SLERA are considered conservative.

Sample-specific calculations of two-carbon  $\sum$ IWTU values in Delaware River exposure areas are provided for the Jackson Labs/TEL Area (Table D10), Fluoroproducts Area (Table D11), SWMU 5/Henby Creek Area (Table D12), and Carneys Point Zone (Table D13).

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## **Appendix D Tables**

**Table D1**  
**Summary of Sediment Quality Benchmarks (SQB)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	CAS Number	log K <sub>ow</sub>	log K <sub>oc</sub>	Molecular Weight (g/mol)	Chemical Class Correction <sup>a</sup>	Final Chronic Value (FCV) (µg/L)	FCV Toxicological Basis	FCV Source	ESB <sub>NOEC</sub> (µg/kg oc)	ESB <sub>NOEC</sub> (µg/kg dw) 1% TOC
<b>Volatile Organic Compounds</b>										
1,1-Dichloroethene	75354	2.19	2.15	96.94	-0.244	3268	Narcosis	USEPA (2008)	466,304	4,663
1,1,1-Trichlorotrifluoroethane	354585	3.09	3.04	187.38	0	1298	Conventional	EcoSAR - Daphnid ChV	1,471,503	14,715
1,1,2-Trichlorotrifluoroethane	76131	3.09	3.04	187.38	0	1298	Conventional	EcoSAR - Daphnid ChV	1,471,503	14,715
1,2,4-Trimethylbenzene	95636	3.65	3.59	120.19	0	296	Narcosis	USEPA (2008)	1,148,703	11,487
1,2-Dichlorobenzene	95501	3.43	3.37	147	-0.244	334	Narcosis	USEPA (2008)	785,772	7,858
1,2-Dichloroethane	107062	1.4	1.38	98.96	-0.244	18613	Narcosis	USEPA (2008)	442,893	4,429
1,2-Dichloroethene	540590	1.98	1.95	96.94	0	590	Conventional	Suter and Tsao (1996)	77,462	775
1,2-Dichloro-1,1,2-Trifluoroethane	354234	2.17	2.13	152.93	0	5160	Conventional	EcoSAR - Daphnid ChV	922,662	9,227
1,2-Dichlorotetrafluoroethane	76142	2.78	2.73	170.92	0	2029	Conventional	EcoSAR - Daphnid ChV	1,184,198	11,842
1,3,5-Trimethylbenzene	108678	3.69	3.63	120.19	0	272	Narcosis	USEPA (2008)	1,152,731	11,527
1,3-Dichlorobenzene	541731	3.43	3.37	147	-0.244	334	Narcosis	USEPA (2008)	785,772	7,858
1,4-Dichlorobenzene	106467	3.42	3.36	147	-0.244	341	Narcosis	USEPA (2008)	785,085	7,851
1-Methylnaphthalene	90120	3.84	3.78	142.2	-0.244	132	Narcosis	USEPA (2008)	787,878	7,879
2-Chlorotoluene	95498	3.18	3.13	126.59	0	868	Narcosis	USEPA (2008) <sup>a</sup>	1,161,125	11,611
2,2-Dichloro-1,1,1-Trifluoroethane	306832	2.17	2.13		0	5160	Conventional	EcoSAR - Daphnid ChV	922,662	9,227
2-Chloro-1,1,1-Trifluoroethane	75887	1.99	1.96	118.483	0	5452	Conventional	EcoSAR - Daphnid ChV	726,838	7,268
4-Isopropyltoluene	99876	4	3.93	134.22	0	85	Conventional	USEPA Region 3	730,918	7,309
Acetone	67641	-0.24	0.73	58.08	-0.244	387424	Narcosis	USEPA (2008)	3,120,882	31,209
Benzene	71432	2.13	2.09	78.11	0	5263	Narcosis	USEPA (2008)	653,561	6,536
Carbon Disulfide	75150	1.94	1.91	76.13	0	244	Conventional	Suter and Tsao (1996)	30,167.3	302
CFC-1113	76131	3.09	3.04	187.38	0	1298	Conventional	EcoSAR - Daphnid ChV	1,415,874	14,159
Carbon Tetrachloride	56235	2.73	2.68	153.82	-0.244	1601	Narcosis	USEPA (2008)	773,379	7,734
Chlorobenzene	108907	2.86	2.81	112.56	-0.244	883	Narcosis	USEPA (2008)	572,405	5,724
Chlorodifluoromethane	75456	0.89	0.88	86.47	0	26301	Conventional	EcoSAR - Daphnid ChV	1,324,484	13,245
Chlorofluoromethane	593704	1.03	1.01	68.48	0	16579	Conventional	EcoSAR - Daphnid ChV	881,266	8,813
Chloroform	67663	1.91	1.88	119.38	-0.244	7402	Narcosis	USEPA (2008)	558,664	5,587
cis-1,2 Dichloroethene	156592	1.98	1.95	96.94	0	590	Conventional	Suter and Tsao (1996)	77,462	775
Cumene	98828	3.49	3.43	120.19	0	420	Narcosis	USEPA (2008)	1,132,734	11,327
Dichlorodifluoromethane	75718	1.82	1.79	120.91	0	1960	Conventional	USEPA Region 6	204,669	2,047
Dichlorofluoromethane	75434	1.21	1.19	102.92	0	18272	Conventional	EcoSAR - Daphnid ChV	1,065,897	10,659
Ethylbenzene	100414	3.14	3.09	106.17	0	794	Narcosis	USEPA (2008)	970,423	9,704
Methyl Ethyl Ketone	78933	0.316	0.31	72.11	-0.244	143461	Narcosis	USEPA (2008)	293,524	2,935
Methylene Chloride	75092	1.18	1.16	84.93	-0.244	25782	Narcosis	USEPA (2008)	372,856	3,729
N-Propylbenzene	103651	3.67	3.61	120.19	0	284	Narcosis	USEPA (2008)	1,150,715	11,507
Tetrachloroethene	127184	2.67	2.62	165.83	-0.244	1967	Narcosis	USEPA (2008)	829,397	8,294

**Table D1**  
**Summary of Sediment Quality Benchmarks (SQB)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	CAS Number	log K <sub>ow</sub>	log K <sub>oc</sub>	Molecular Weight (g/mol)	Chemical Class Correction <sup>a</sup>	Final Chronic Value (FCV) (µg/L)	FCV Toxicological Basis	FCV Source	ESB <sub>NOEC</sub> (µg/kg oc)	ESB <sub>NOEC</sub> (µg/kg dw) 1% TOC
Toluene	108883	2.75	2.70	92.14	0	1611	Narcosis	USEPA (2008)	813,931	8,139
Trichloroethene	79016	2.71	2.66	131.39	-0.244	1429	Narcosis	USEPA (2008)	659,450	6,594
Trichlorofluoromethane	75694	2.13	2.09	137.37	0	1740	Conventional	USEPA Region 6	290,654	2,907
Vinyl Chloride	75014	1.62	1.59	62.5	0	930	Conventional	USEPA Region 3	76,267	763
Meta- And Para-Xylene	108383/ 106423	3.2	3.15	106.17	0	697	Narcosis	USEPA (2008)	975,531	9,755
Ortho-Xylene	95476	3.09	3.04	106.17	0	886	Narcosis	USEPA (2008)	966,187	9,662
Xylenes	XYLENES	3.13	3.08	106.17	0	812	Narcosis	USEPA (2008)	969,575	9,696
<b>Semi-Volatile Organic Compounds</b>										
1-Naphthylamine	134327	2.25	2.21	143.19	0	7431	Narcosis	USEPA (2008)	1210744	12107
1,2,3-Trichlorobenzene	87616	3.98	3.91	181.45	-0.244	124	Narcosis	USEPA (2008)	1017739	10177
1,2,4-Trichlorobenzene	120821	4	3.93	181.45	-0.244	119	Narcosis	USEPA (2008)	1,019,522	10195
1,2-Diphenylhydrazine	122667	3.06	3.01	184.24	0	2.7	Conventional	NRWQC Chronic	2,752	28
2,4-Dinitrotoluene	121142	2.18	2.14	182.14	0	291	Conventional	EcoSAR - Daphnid ChV	40,468	405
2,6-Dinitrotoluene	606202	2.18	2.14	182.14	0	291	Conventional	EcoSAR - Daphnid ChV	40,468	405
2-Chloronaphthalene	91587	3.88	3.81	162.62	-0.244	139	Narcosis	USEPA (2008)	904177	9042
2-Chlorophenol	95578	2.15	2.11	128.56	0	776	Conventional	USEPA (2008)	100,882	1,009
2-Methylnaphthalene	91576	3.857	3.79	142.2	0	72.16	Narcosis	USEPA (2003)	446,691	4,467
2-Methylphenol (O-Cresol)	95487	2.06	2.03	108.14	0	560	Conventional	TCEQ (2017)	59,354	594
4-Chloroaniline	106478	1.72	1.69	127.57	0	5309	Conventional	Derived <sup>b</sup>	260,647	2,606
4-Methylphenol (P-Cresol)	106445	2.06	2.03	108.14	0	272	Conventional	TCEQ (2017)	28,829	288
Acetophenone	98862	1.67	1.64	120.15	0	22026	Narcosis	USEPA (2008) <sup>a</sup>	965,658	9,657
Biphenyl	92524	3.91	3.84	154.21	0	216	Narcosis	USEPA (2008)	1507759	15078
Bis(2-Ethylhexyl)Phthalate	117817	8.39	8.25	390.57	0	0.3	Conventional	NJDEP FW2 Chronic	53,060,490	530,605
Butyl Benzyl Phthalate	85687	4.84	4.76	312.37	0	19	Conventional	USEPA (2008)	1,088,312	10883
Carbazole	86748	3.29	3.23	167.2	0	4	Conventional	MDEQ (2014)	6,861	69
Dibenzofuran	132649	3.71	3.65	168.2	0	364	Narcosis	USEPA (2008)	1,616,015	16160
Diethyl Phthalate	84662	2.50	2.46	222.24	0	270	Conventional	USEPA (2008)	77,472	775
Di-N-Butyl Phthalate	84742	4.61	4.53	278.35	0	35	Conventional	USEPA (2008)	1,191,182	11,912
Diphenyl Ether	101848	4.36	4.29	170.21	0	89.6	Narcosis	USEPA (2008)	1,731,030	17,310
Hexachlorobenzene	118741	5.86	5.76	284.78	0	5.73	Narcosis	USEPA (2008) <sup>a</sup>	3,302,395	33,024
N-Dioctyl Phthalate	117817	8.39	8.25	390.57	0	0.3	Conventional	NJDEP FW2 Chronic	53,060,490	530,605
Nitrobenzene	98953	1.81	1.78	123.11	0	2600	Conventional	Kuhn et al. (1989)	156,489	1,565
N-Nitrosodiphenylamine	86306	3.16	3.11	198.23	0	412	Conventional	USEPA Region 5	526,571	5,266
Pentachlorobenzene	608935	5.32	5.23	250.34	-0.244	9.30	Narcosis	USEPA (2008)	1,578,809	15,788
Phenol	108952	1.51	1.48	94.11	0	180	Conventional	NJDEP FW2 Chronic	5,494	55

**Table D1**  
**Summary of Sediment Quality Benchmarks (SQB)**  
**Delaware River Screening-Level Ecological Risk Assessment**  
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**Deepwater, New Jersey**

Analyte	CAS Number	log K <sub>ow</sub>	log K <sub>oc</sub>	Molecular Weight (g/mol)	Chemical Class Correction <sup>a</sup>	Final Chronic Value (FCV) (µg/L)	FCV Toxicological Basis	FCV Source	ESB <sub>NOEC</sub> (µg/kg oc)	ESB <sub>NOEC</sub> (µg/kg dw) 1% TOC
<b>Pesticides and Herbicides</b>										
beta-BHC	319857	3.78	3.72	290.83	0	2.2	Conventional	USEPA (2008)	11,440	114
delta-BHC	319868	3.78	3.72	290.83	0	2.2	Conventional	USEPA (2008)	11,440	114
Endosulfan I	959988	3.83	3.77	406.92	0	0.056	Conventional	USEPA (2008)	326	3

**Notes:**

a, A chemical class correction of -0.244 was applied to halogenated chemicals per DiToro et al. (2000); no other chemical class corrections were applicable (Section 2.1.1)

b, Refer to Section 2.1.1 for detail regarding the derivation of the final chronic value for 4-chloroaniline

FCV, Final chronic value

ESB<sub>NOEC</sub>, Equilibrium-partitioning sediment benchmark based on NOEC aqueous toxicity data

EcoSAR - Daphnid ChV, Chronic value for daphnids estimated by EPA Ecological Structure Activity Relationships (ECOSAR)

NJDEP FW2 Chronic, NJDEP freshwater chronic (FW2) surface water screening criteria (NJDEP, 2009)

TOC, Total organic carbon

**Table D2**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER1-01 0.00-0.50 9/21/2009				DER1-01 0.50-1.00 9/21/2009				DER1-04 0.00-0.50 9/24/2009				DER1-04 0.50-1.00 9/24/2009				DER1-05 0.00-0.50 9/21/2009				DER1-05 0.50-1.00 9/21/2009			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																							
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	---	---	---	---	0.002	0	0.75	0.003	---	---	---	---	0.003	0	2.78	0.001	---	---	---	---	0.029	1	3.28	0.009
Carbon Disulfide	30.2	Conventional	---	---	---	---	0.001	0	0.02	0.065	---	---	---	---	0.002	1	0.06	0.035	---	---	---	---	0.001	0	0.07	0.015
Dichlorodifluoromethane	204.7	Conventional	---	---	---	---	0.002	0	0.10	0.019	---	---	---	---	0.003	0	0.39	0.008	---	---	---	---	0.002	0	0.46	0.004
Dichlorofluoromethane	1065.9	Conventional	---	---	---	---	0.002	0	0.54	0.004	---	---	---	---	0.003	0	2.01	0.001	---	---	---	---	0.002	0	2.38	0.001
Trichlorofluoromethane	290.7	Conventional	---	---	---	---	0.002	0	0.15	0.013	---	---	---	---	0.003	0	0.55	0.005	---	---	---	---	0.002	0	0.65	0.003
1,2-Dichlorobenzene	785.8	Narcosis	0.039	0	1.64	0.024	---	---	---	---	0.04	0	0.95	0.042	---	---	---	---	0.048	1	1.45	0.033	---	---	---	---
1,4-Dichlorobenzene	785.1	Narcosis	0.039	0	1.64	0.024	---	---	---	---	0.04	0	0.95	0.042	---	---	---	---	0.039	0	1.45	0.027	---	---	---	---
Acetone	3120.9	Narcosis	---	---	---	---	0.01	1	1.59	0.006	---	---	---	---	0.027	1	5.90	0.005	---	---	---	---	0.013	1	6.96	0.002
Benzene	653.6	Narcosis	---	---	---	---	0.0005	0	0.33	0.002	---	---	---	---	0.0006	0	1.24	0.000	---	---	---	---	0.0005	0	1.46	0.000
Chlorobenzene	572.4	Narcosis	---	---	---	---	0.001	0	0.29	0.003	---	---	---	---	0.001	0	1.08	0.001	---	---	---	---	0.001	1	1.28	0.001
Chloroform	558.7	Narcosis	---	---	---	---	0.001	0	0.28	0.004	---	---	---	---	0.001	0	1.06	0.001	---	---	---	---	0.001	0	1.25	0.001
Trichloroethene	659.4	Narcosis	---	---	---	---	0.001	0	0.34	0.003	---	---	---	---	0.001	0	1.25	0.001	---	---	---	---	0.001	0	1.47	0.001
<b>Semi-Volatile Organic Compounds</b>																										
2,4-Dinitrotoluene	40.5	Conventional	0.077	0	0.08	0.910	---	---	---	---	0.08	0	0.05	1.641	---	---	---	---	0.078	0	0.07	1.045	---	---	---	---
2-Methylphenol (O-Cresol)	59.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Chloroaniline	260.6	Conventional	0.077	0	0.54	0.141	---	---	---	---	0.08	0	0.31	0.255	---	---	---	---	0.078	0	0.48	0.162	---	---	---	---
4-Methylphenol (P-Cresol)	28.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.077	0	110.90	0.001	---	---	---	---	0.08	0	63.94	0.001	---	---	---	---	0.078	0	97.90	0.001	---	---	---	---
N-Dioctyl Phthalate	53060.5	Conventional	0.077	0	110.90	0.001	---	---	---	---	0.08	0	63.94	0.001	---	---	---	---	0.078	0	97.90	0.001	---	---	---	---
Nitrobenzene	156.5	Conventional	0.039	0	0.33	0.119	---	---	---	---	0.04	0	0.19	0.212	---	---	---	---	0.039	0	0.29	0.135	---	---	---	---
1,2,4-Trichlorobenzene	1019.5	Narcosis	0.039	0	2.13	0.018	---	---	---	---	0.04	0	1.23	0.033	---	---	---	---	0.039	0	1.88	0.021	---	---	---	---
2-Methylnaphthalene	446.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorobenzene	3302.4	Narcosis	0.039	0	6.90	0.006	---	---	---	---	0.04	0	3.98	0.010	---	---	---	---	0.039	0	6.09	0.006	---	---	---	---
<b>Pesticides and Herbicides</b>																										
beta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
delta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Endosulfan I	0.326	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<b>Sediment Organic Carbon</b>																										
Black Carbon	NA	NA	720	1	NA	---	400	1	NA	---	270	1	NA	---	1175	1	NA	---	600	1	NA	---	3255	1	NA	---
Total Organic Carbon	NA	NA	2090	1	NA	---	510	1	NA	---	1205	1	NA	---	1890	1	NA	---	1845	1	NA	---	2230	1	NA	---
<b>Sum of Narcotic ESBTUs:</b>			0.071				0.018				0.127				0.008				0.087				0.004			

**Table D2**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined EqP Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER1-07 0.00-0.50 9/21/2009				DER1-07 0.50-1.00 9/21/2009				DER1-08 0.00-0.50 9/24/2009				DER1-08 0.50-1.00 9/24/2009				DER1-09 0.00-0.50 9/21/2009				DER1-09 0.50-1.00 9/21/2009																							
			Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU																				
			<b>Volatile Organic Compounds</b>																																											
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	---	---	---	---	0.002	0	4.16	0.000	---	---	---	---	0.002	0	8.50	0.000	---	---	---	---	0.005	0	36.13	0.000																				
Carbon Disulfide	30.2	Conventional	---	---	---	---	0.002	1	0.09	0.023	---	---	---	---	0.002	1	0.17	0.011	---	---	---	---	0.003	1	0.74	0.004																				
Dichlorodifluoromethane	204.7	Conventional	---	---	---	---	0.002	0	0.58	0.003	---	---	---	---	0.002	0	1.18	0.002	---	---	---	---	0.005	0	5.02	0.001																				
Dichlorofluoromethane	1065.9	Conventional	---	---	---	---	0.002	0	3.01	0.001	---	---	---	---	0.002	0	6.16	0.000	---	---	---	---	0.005	0	26.17	0.000																				
Trichlorofluoromethane	290.7	Conventional	---	---	---	---	0.002	0	0.82	0.002	---	---	---	---	0.002	0	1.68	0.001	---	---	---	---	0.005	0	7.14	0.001																				
1,2-Dichlorobenzene	785.8	Narcosis	0.045	0	1.97	0.023	---	---	---	---	0.048	0	3.65	0.013	---	---	---	---	0.078	1	3.27	0.024	---	---	---	---																				
1,4-Dichlorobenzene	785.1	Narcosis	0.045	0	1.97	0.023	---	---	---	---	0.048	0	3.65	0.013	---	---	---	---	0.082	1	3.27	0.025	---	---	---	---																				
Acetone	3120.9	Narcosis	---	---	---	---	0.032	1	8.82	0.004	---	---	---	---	0.019	1	18.02	0.001	---	---	---	---	0.11	1	76.62	0.001																				
Benzene	653.6	Narcosis	---	---	---	---	0.44	1	1.85	0.238	---	---	---	---	0.0006	0	3.77	0.000	---	---	---	---	0.001	1	16.04	0.000																				
Chlorobenzene	572.4	Narcosis	---	---	---	---	4.9	1	1.62	<b>3.030</b>	---	---	---	---	0.006	1	3.31	0.002	---	---	---	---	0.054	1	14.05	0.004																				
Chloroform	558.7	Narcosis	---	---	---	---	0.001	0	1.58	0.001	---	---	---	---	0.001	0	3.23	0.000	---	---	---	---	0.002	0	13.72	0.000																				
Trichloroethene	659.4	Narcosis	---	---	---	---	0.001	0	1.86	0.001	---	---	---	---	0.001	0	3.81	0.000	---	---	---	---	0.002	0	16.19	0.000																				
<b>Semi-Volatile Organic Compounds</b>																																														
2,4-Dinitrotoluene	40.5	Conventional	0.09	0	0.10	0.886	---	---	---	---	0.096	0	0.19	0.510	---	---	---	---	0.091	0	0.17	0.540	---	---	---	---																				
2-Methylphenol (O-Cresol)	59.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																				
4-Chloroaniline	260.6	Conventional	0.09	0	0.65	0.138	---	---	---	---	0.096	0	1.21	0.079	---	---	---	---	0.091	0	1.09	0.084	---	---	---	---																				
4-Methylphenol (P-Cresol)	28.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																				
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.09	0	133.18	0.001	---	---	---	---	0.096	0	246.73	0.000	---	---	---	---	0.091	0	221.00	0.000	---	---	---	---																				
N-Dioctyl Phthalate	53060.5	Conventional	0.09	0	133.18	0.001	---	---	---	---	0.096	0	246.73	0.000	---	---	---	---	0.091	0	221.00	0.000	---	---	---	---																				
Nitrobenzene	156.5	Conventional	0.045	0	0.39	0.115	---	---	---	---	0.048	0	0.73	0.066	---	---	---	---	0.046	0	0.65	0.071	---	---	---	---																				
1,2,4-Trichlorobenzene	1019.5	Narcosis	0.045	0	2.56	0.018	---	---	---	---	0.048	0	4.74	0.010	---	---	---	---	0.046	0	4.25	0.011	---	---	---	---																				
2-Methylnaphthalene	446.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																				
Hexachlorobenzene	3302.4	Narcosis	0.045	0	8.29	0.005	---	---	---	---	0.048	0	15.36	0.003	---	---	---	---	0.046	0	13.75	0.003	---	---	---	---																				
<b>Pesticides and Herbicides</b>																																														
beta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																				
delta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																				
Endosulfan I	0.326	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																				
<b>Sediment Organic Carbon</b>																																														
Black Carbon	NA	NA	2080	1	NA	---	1215	1	NA	---	2240	1	NA	---	3455	1	NA	---	440	1	NA	---	8705	1	NA	---																				
Total Organic Carbon	NA	NA	2510	1	NA	---	2825	1	NA	---	4650	1	NA	---	5775	1	NA	---	4165	1	NA	---	24550	1	NA	---																				
<b>Sum of Narcotic ESBTUs:</b>			0.069				<b>Sum of Narcotic ESBTUs:</b>				3.273				<b>Sum of Narcotic ESBTUs:</b>				0.040				<b>Sum of Narcotic ESBTUs:</b>				0.004				<b>Sum of Narcotic ESBTUs:</b>				0.063				<b>Sum of Narcotic ESBTUs:</b>				0.006			

**Table D2**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER1-06 0.00-0.50 9/24/2009				DER1-06 0.50-1.00 9/24/2009				DER1-11 0.00-0.50 9/21/2009				DER1-11 0.50-1.00 9/21/2009				DER2-01-SD 0.00-0.50 4/21/2010				DER2-01-SD 0.50-1.00 4/21/2010			
			Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																							
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	---	---	---	---	0.002	0	10.40	0.000	---	---	---	---	0.005	0	7.96	0.001	---	---	---	---	0.002	0	2.16	0.001
Carbon Disulfide	30.2	Conventional	---	---	---	---	0.004	1	0.21	0.019	---	---	---	---	0.006	1	0.16	0.037	---	---	---	---	0.001	1	0.04	0.023
Dichlorodifluoromethane	204.7	Conventional	---	---	---	---	0.002	0	1.45	0.001	---	---	---	---	0.005	0	1.11	0.005	---	---	---	---	0.002	0	0.30	0.007
Dichlorofluoromethane	1065.9	Conventional	---	---	---	---	0.002	0	7.54	0.000	---	---	---	---	0.005	0	5.77	0.001	---	---	---	---	0.002	0	1.56	0.001
Trichlorofluoromethane	290.7	Conventional	---	---	---	---	0.002	0	2.05	0.001	---	---	---	---	0.005	0	1.57	0.003	---	---	---	---	0.002	0	0.43	0.005
1,2-Dichlorobenzene	785.8	Narcosis	0.039	0	2.36	0.017	---	---	---	---	0.072	0	14.65	0.005	---	---	---	---	0.041	0	1.26	0.033	---	---	---	---
1,4-Dichlorobenzene	785.1	Narcosis	0.039	0	2.36	0.017	---	---	---	---	0.072	0	14.64	0.005	---	---	---	---	0.041	0	1.26	0.033	---	---	---	---
Acetone	3120.9	Narcosis	---	---	---	---	0.075	1	22.06	0.003	---	---	---	---	0.12	1	16.88	0.007	---	---	---	---	0.007	0	4.57	0.002
Benzene	653.6	Narcosis	---	---	---	---	0.0008	1	4.62	0.000	---	---	---	---	0.001	0	3.54	0.000	---	---	---	---	0.0005	0	0.96	0.001
Chlorobenzene	572.4	Narcosis	---	---	---	---	0.072	1	4.05	0.018	---	---	---	---	0.016	1	3.10	0.005	---	---	---	---	0.001	0	0.84	0.001
Chloroform	558.7	Narcosis	---	---	---	---	0.001	0	3.95	0.000	---	---	---	---	0.002	0	3.02	0.001	---	---	---	---	0.001	0	0.82	0.001
Trichloroethene	659.4	Narcosis	---	---	---	---	0.001	0	4.66	0.000	---	---	---	---	0.002	0	3.57	0.001	---	---	---	---	0.001	0	0.97	0.001
<b>Semi-Volatile Organic Compounds</b>																										
2,4-Dinitrotoluene	40.5	Conventional	0.078	0	0.12	0.641	---	---	---	---	0.14	0	0.75	0.185	---	---	---	---	0.083	0	0.06	1.282	---	---	---	---
2-Methylphenol (O-Cresol)	59.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Chloroaniline	260.6	Conventional	0.078	0	0.78	0.100	---	---	---	---	0.14	0	4.86	0.029	---	---	---	---	0.083	0	0.42	0.199	---	---	---	---
4-Methylphenol (P-Cresol)	28.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.078	0	159.45	0.000	---	---	---	---	0.14	0	989.58	0.000	---	---	---	---	0.083	0	84.90	0.001	---	---	---	---
N-Dioctyl Phthalate	53060.5	Conventional	0.078	0	159.45	0.000	---	---	---	---	0.14	0	989.58	0.000	---	---	---	---	0.083	0	84.90	0.001	---	---	---	---
Nitrobenzene	156.5	Conventional	0.039	0	0.47	0.083	---	---	---	---	0.072	0	2.92	0.025	---	---	---	---	0.041	0	0.25	0.164	---	---	---	---
1,2,4-Trichlorobenzene	1019.5	Narcosis	0.039	0	3.06	0.013	---	---	---	---	0.072	0	19.01	0.004	---	---	---	---	0.041	0	1.63	0.025	---	---	---	---
2-Methylnaphthalene	446.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorobenzene	3302.4	Narcosis	0.049	1	9.92	0.005	---	---	---	---	0.072	0	61.59	0.001	---	---	---	---	0.041	0	5.28	0.008	---	---	---	---
<b>Pesticides and Herbicides</b>																										
beta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
delta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Endosulfan I	0.326	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<b>Sediment Organic Carbon</b>																										
Black Carbon	NA	NA	920	1	NA	---	500	1	NA	---	1630	1	NA	---	4100	1	NA	---	155	1	NA	---	---	---	NA	---
Total Organic Carbon	NA	NA	3005	1	NA	---	7070	1	NA	---	18650	1	NA	---	5410	1	NA	---	1600	1	NA	---	1465	1	NA	---
<b>Sum of Narcotic ESBTUs:</b>					0.051				0.022				0.015				0.014				0.098				0.006	

**Table D2**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined EqP Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER1-10 0.00-0.50 9/24/2009				DER1-10 0.50-1.00 9/24/2009				DER2-06-SD 0.00-0.50 4/23/2010				DER2-06-SD 0.50-1.00 4/23/2010				DER2-07-SD 0.00-0.50 4/22/2010				DER2-07-SD 0.50-1.00 4/22/2010			
			Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																							
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	---	---	---	---	0.01	0	26.12	0.000	---	---	---	---	0.003	0	13.52	0.000	---	---	---	---	0.006	0	18.10	0.000
Carbon Disulfide	30.2	Conventional	---	---	---	---	0.029	1	0.54	0.054	---	---	---	---	0.002	0	0.28	0.007	---	---	---	---	0.003	1	0.37	0.008
Dichlorodifluoromethane	204.7	Conventional	---	---	---	---	0.01	0	3.63	0.003	---	---	---	---	0.003	0	1.88	0.002	---	---	---	---	0.006	0	2.52	0.002
Dichlorofluoromethane	1065.9	Conventional	---	---	---	---	0.01	0	18.92	0.001	---	---	---	---	0.003	0	9.80	0.000	---	---	---	---	0.006	0	13.11	0.000
Trichlorofluoromethane	290.7	Conventional	---	---	---	---	0.01	0	5.16	0.002	---	---	---	---	0.003	0	2.67	0.001	---	---	---	---	0.006	0	3.58	0.002
1,2-Dichlorobenzene	785.8	Narcosis	0.34	1	18.15	0.019	---	---	---	---	0.18	0	7.29	0.025	---	---	---	---	0.19	0	10.77	0.018	---	---	---	---
1,4-Dichlorobenzene	785.1	Narcosis	0.43	1	18.14	0.024	---	---	---	---	0.18	0	7.29	0.025	---	---	---	---	0.19	0	10.76	0.018	---	---	---	---
Acetone	3120.9	Narcosis	---	---	---	---	0.19	1	55.40	0.003	---	---	---	---	0.025	1	28.68	0.001	---	---	---	---	0.087	1	38.39	0.002
Benzene	653.6	Narcosis	---	---	---	---	0.002	0	11.60	0.000	---	---	---	---	0.0009	0	6.01	0.000	---	---	---	---	0.001	0	8.04	0.000
Chlorobenzene	572.4	Narcosis	---	---	---	---	0.006	1	10.16	0.001	---	---	---	---	0.002	0	5.26	0.000	---	---	---	---	0.003	0	7.04	0.000
Chloroform	558.7	Narcosis	---	---	---	---	0.005	0	9.92	0.001	---	---	---	---	0.002	0	5.13	0.000	---	---	---	---	0.003	0	6.87	0.000
Trichloroethene	659.4	Narcosis	---	---	---	---	0.005	0	11.71	0.000	---	---	---	---	0.002	0	6.06	0.000	---	---	---	---	0.003	0	8.11	0.000
<b>Semi-Volatile Organic Compounds</b>																										
2,4-Dinitrotoluene	40.5	Conventional	0.24	1	0.93	0.257	---	---	---	---	0.36	0	0.38	0.959	---	---	---	---	0.38	0	0.55	0.685	---	---	---	---
2-Methylphenol (O-Cresol)	59.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Chloroaniline	260.6	Conventional	0.19	0	6.02	0.032	---	---	---	---	0.36	0	2.42	0.149	---	---	---	---	0.38	0	3.57	0.106	---	---	---	---
4-Methylphenol (P-Cresol)	28.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.21	1	1225.70	0.000	---	---	---	---	0.36	0	492.40	0.001	---	---	---	---	0.38	0	726.93	0.001	---	---	---	---
N-Dioctyl Phthalate	53060.5	Conventional	0.19	0	1225.70	0.000	---	---	---	---	0.36	0	492.40	0.001	---	---	---	---	0.66	1	726.93	0.001	---	---	---	---
Nitrobenzene	156.5	Conventional	0.096	0	3.61	0.027	---	---	---	---	0.18	0	1.45	0.124	---	---	---	---	0.19	0	2.14	0.089	---	---	---	---
1,2,4-Trichlorobenzene	1019.5	Narcosis	0.1	1	23.55	0.004	---	---	---	---	0.18	0	9.46	0.019	---	---	---	---	0.19	0	13.97	0.014	---	---	---	---
2-Methylnaphthalene	446.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorobenzene	3302.4	Narcosis	0.096	0	76.29	0.001	---	---	---	---	0.18	0	30.65	0.006	---	---	---	---	0.19	0	45.24	0.004	---	---	---	---
<b>Pesticides and Herbicides</b>																										
beta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
delta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Endosulfan I	0.326	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<b>Sediment Organic Carbon</b>																										
Black Carbon	NA	NA	1590	1	NA	---	635	1	NA	---	505	1	NA	---	---	---	NA	---	665	1	NA	---	---	---	NA	---
Total Organic Carbon	NA	NA	23100	1	NA	---	17750	1	NA	---	9280	1	NA	---	9190	1	NA	---	13700	1	NA	---	12300	1	NA	---
<b>Sum of Narcotic ESBTUs:</b>			0.048				0.005				0.074				0.002				0.053				0.004			

**Table D2**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER2-03-SD 0.00-0.50 4/22/2010				DER2-03-SD 0.50-1.00 4/22/2010				DER2-05-SD 0.00-0.50 4/27/2010				DER2-05-SD 0.50-1.00 4/27/2010				DER2-10-SD 0.00-0.50 4/20/2010				DER2-10-SD 0.50-1.00 4/20/2010																							
			Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU																				
			<b>Volatile Organic Compounds</b>																																											
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	---	---	---	---	0.008	0	16.48	0.000	---	---	---	---	0.84	1	2.29	0.367	---	---	---	---	0.007	0	29.06	0.000																				
Carbon Disulfide	30.2	Conventional	---	---	---	---	0.011	1	0.34	0.033	---	---	---	---	0.06	1	0.05	1.279	---	---	---	---	0.007	1	0.60	0.012																				
Dichlorodifluoromethane	204.7	Conventional	---	---	---	---	0.008	0	2.29	0.003	---	---	---	---	0.036	1	0.32	0.113	---	---	---	---	0.007	0	4.04	0.002																				
Dichlorofluoromethane	1065.9	Conventional	---	---	---	---	0.008	0	11.94	0.001	---	---	---	---	0.002	1	1.66	0.001	---	---	---	---	0.007	0	21.05	0.000																				
Trichlorofluoromethane	290.7	Conventional	---	---	---	---	0.008	0	3.26	0.002	---	---	---	---	0.04	1	0.45	0.089	---	---	---	---	0.007	0	5.74	0.001																				
1,2-Dichlorobenzene	785.8	Narcosis	0.09	0	11.94	0.008	---	---	---	---	5.5	1	6.10	0.901	---	---	---	---	0.085	0	15.32	0.006	---	---	---	---																				
1,4-Dichlorobenzene	785.1	Narcosis	0.09	0	11.93	0.008	---	---	---	---	2.5	1	6.10	0.410	---	---	---	---	0.085	0	15.31	0.006	---	---	---	---																				
Acetone	3120.9	Narcosis	---	---	---	---	0.064	1	34.95	0.002	---	---	---	---	0.072	1	4.85	0.015	---	---	---	---	0.076	1	61.64	0.001																				
Benzene	653.6	Narcosis	---	---	---	---	0.002	0	7.32	0.000	---	---	---	---	0.028	1	1.02	0.028	---	---	---	---	0.002	0	12.91	0.000																				
Chlorobenzene	572.4	Narcosis	---	---	---	---	0.004	0	6.41	0.001	---	---	---	---	0.51	1	0.89	0.573	---	---	---	---	0.004	0	11.31	0.000																				
Chloroform	558.7	Narcosis	---	---	---	---	0.004	0	6.26	0.001	---	---	---	---	1.2	1	0.87	1.381	---	---	---	---	0.004	0	11.03	0.000																				
Trichloroethene	659.4	Narcosis	---	---	---	---	0.004	0	7.39	0.001	---	---	---	---	0.016	1	1.03	0.016	---	---	---	---	0.004	0	13.02	0.000																				
<b>Semi-Volatile Organic Compounds</b>																																														
2,4-Dinitrotoluene	40.5	Conventional	0.18	0	0.62	0.293	---	---	---	---	0.18	0	0.31	0.573	---	---	---	---	0.17	0	0.79	0.215	---	---	---	---																				
2-Methylphenol (O-Cresol)	59.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																				
4-Chloroaniline	260.6	Conventional	0.18	0	3.96	0.045	---	---	---	---	0.18	0	2.02	0.089	---	---	---	---	0.17	0	5.08	0.033	---	---	---	---																				
4-Methylphenol (P-Cresol)	28.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																				
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.25	1	806.52	0.000	---	---	---	---	0.18	0	412.01	0.000	---	---	---	---	0.17	0	1034.68	0.000	---	---	---	---																				
N-Dioctyl Phthalate	53060.5	Conventional	0.18	0	806.52	0.000	---	---	---	---	---	---	---	---	---	---	---	---	0.17	0	1034.68	0.000	---	---	---	---																				
Nitrobenzene	156.5	Conventional	0.09	0	2.38	0.038	---	---	---	---	0.09	0	1.22	0.074	---	---	---	---	0.085	0	3.05	0.028	---	---	---	---																				
1,2,4-Trichlorobenzene	1019.5	Narcosis	0.09	0	15.50	0.006	---	---	---	---	27	1	7.92	3.411	---	---	---	---	0.085	0	19.88	0.004	---	---	---	---																				
2-Methylnaphthalene	446.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																				
Hexachlorobenzene	3302.4	Narcosis	0.09	0	50.20	0.002	---	---	---	---	0.09	0	25.64	0.004	---	---	---	---	0.085	0	64.40	0.001	---	---	---	---																				
<b>Pesticides and Herbicides</b>																																														
beta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																				
delta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																				
Endosulfan I	0.326	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																				
<b>Sediment Organic Carbon</b>																																														
Black Carbon	NA	NA	565	1	NA	---	---	---	NA	---	6870	1	NA	---	---	---	NA	---	4025	1	NA	---	---	---	NA	---																				
Total Organic Carbon	NA	NA	15200	1	NA	---	11200	1	NA	---	7765	1	NA	---	1555	1	NA	---	19500	1	NA	---	19750	1	NA	---																				
<b>Sum of Narcotic ESBTUs:</b>			0.023				<b>Sum of Narcotic ESBTUs:</b>				0.004				<b>Sum of Narcotic ESBTUs:</b>				4.726				<b>Sum of Narcotic ESBTUs:</b>				2.012				<b>Sum of Narcotic ESBTUs:</b>				0.017				<b>Sum of Narcotic ESBTUs:</b>				0.002			

**Table D2**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined EqP Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER2-08-SD 0.00-0.50 4/23/2010				DER2-08-SD 0.50-1.00 4/23/2010				DER2-09-SD 0.00-0.50 4/21/2010				DER2-09-SD 0.50-1.00 4/21/2010				DER2-31-SD 0.00-0.50 4/27/2010				DER2-31-SD 0.50-1.00 4/27/2010			
			Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																							
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	---	---	---	---	0.004	0	23.10	0.000	---	---	---	---	0.007	0	29.80	0.000	---	---	---	---	0.002	0	1.51	0.001
Carbon Disulfide	30.2	Conventional	---	---	---	---	0.005	1	0.47	0.011	---	---	---	---	0.007	1	0.61	0.011	---	---	---	---	0.001	1	0.03	0.032
Dichlorodifluoromethane	204.7	Conventional	---	---	---	---	0.004	0	3.21	0.001	---	---	---	---	0.007	0	4.14	0.002	---	---	---	---	0.002	0	0.21	0.010
Dichlorofluoromethane	1065.9	Conventional	---	---	---	---	0.004	0	16.73	0.000	---	---	---	---	0.007	0	21.58	0.000	---	---	---	---	0.002	0	1.09	0.002
Trichlorofluoromethane	290.7	Conventional	---	---	---	---	0.004	0	4.56	0.001	---	---	---	---	0.007	0	5.89	0.001	---	---	---	---	0.002	0	0.30	0.007
1,2-Dichlorobenzene	785.8	Narcosis	0.3	0	14.89	0.020	---	---	---	---	0.11	0	17.88	0.006	---	---	---	---	0.2	1	6.22	0.032	---	---	---	---
1,4-Dichlorobenzene	785.1	Narcosis	0.3	0	14.88	0.020	---	---	---	---	0.11	0	17.86	0.006	---	---	---	---	0.11	0	6.22	0.018	---	---	---	---
Acetone	3120.9	Narcosis	---	---	---	---	0.068	1	49.00	0.001	---	---	---	---	0.055	1	63.20	0.001	---	---	---	---	0.007	0	3.20	0.002
Benzene	653.6	Narcosis	---	---	---	---	0.001	0	10.26	0.000	---	---	---	---	0.002	0	13.23	0.000	---	---	---	---	0.001	1	0.67	0.001
Chlorobenzene	572.4	Narcosis	---	---	---	---	0.003	1	8.99	0.000	---	---	---	---	0.004	0	11.59	0.000	---	---	---	---	0.005	1	0.59	0.009
Chloroform	558.7	Narcosis	---	---	---	---	0.002	0	8.77	0.000	---	---	---	---	0.004	0	11.31	0.000	---	---	---	---	0.0009	0	0.57	0.002
Trichloroethene	659.4	Narcosis	---	---	---	---	0.002	0	10.35	0.000	---	---	---	---	0.004	0	13.35	0.000	---	---	---	---	0.0009	0	0.68	0.001
<b>Semi-Volatile Organic Compounds</b>																										
2,4-Dinitrotoluene	40.5	Conventional	0.59	0	0.77	0.769	---	---	---	---	0.22	0	0.92	0.239	---	---	---	---	0.21	0	0.32	0.655	---	---	---	---
2-Methylphenol (O-Cresol)	59.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Chloroaniline	260.6	Conventional	0.59	0	4.94	0.119	---	---	---	---	0.22	0	5.93	0.037	---	---	---	---	1.1	1	2.06	0.533	---	---	---	---
4-Methylphenol (P-Cresol)	28.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.59	0	1005.50	0.001	---	---	---	---	0.41	1	1207.13	0.000	---	---	---	---	0.33	1	420.24	0.001	---	---	---	---
N-Dioctyl Phthalate	53060.5	Conventional	0.59	0	1005.50	0.001	---	---	---	---	0.22	0	1207.13	0.000	---	---	---	---	0.21	0	420.24	0.000	---	---	---	---
Nitrobenzene	156.5	Conventional	0.3	0	2.97	0.101	---	---	---	---	0.11	0	3.56	0.031	---	---	---	---	0.11	0	1.24	0.089	---	---	---	---
1,2,4-Trichlorobenzene	1019.5	Narcosis	0.3	0	19.32	0.016	---	---	---	---	0.11	0	23.19	0.005	---	---	---	---	0.11	0	8.07	0.014	---	---	---	---
2-Methylnaphthalene	446.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorobenzene	3302.4	Narcosis	0.3	0	62.58	0.005	---	---	---	---	0.11	0	75.13	0.001	---	---	---	---	0.11	0	26.15	0.004	---	---	---	---
<b>Pesticides and Herbicides</b>																										
beta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
delta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Endosulfan I	0.326	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<b>Sediment Organic Carbon</b>																										
Black Carbon	NA	NA	1030	1	NA	---	---	---	NA	---	1950	1	NA	---	---	---	NA	---	2585	1	NA	---	---	---	NA	---
Total Organic Carbon	NA	NA	18950	1	NA	---	15700	1	NA	---	22750	1	NA	---	20250	1	NA	---	7920	1	NA	---	1025	1	NA	---
<b>Sum of Narcotic ESBTUs:</b>					0.061				0.002				0.019				0.002				0.068				0.015	

**Table D2**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER2-11-SD 0.00-0.50 4/20/2010				DER2-11-SD 0.50-1.00 4/20/2010				DER2-12-SD 0.00-0.50 4/20/2010				DER2-12-SD 0.50-1.00 4/20/2010				DER2-30-SD 0.00-0.50 4/27/2010				DER2-30-SD 0.50-1.00 4/27/2010			
			Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																							
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	---	---	---	---	0.008	0	29.95	0.000	---	---	---	---	0.007	0	29.43	0.000	---	---	---	---	0.002	0	0.69	0.003
Carbon Disulfide	30.2	Conventional	---	---	---	---	0.004	0	0.61	0.007	---	---	---	---	0.004	1	0.60	0.007	---	---	---	---	0.0009	1	0.01	0.063
Dichlorodifluoromethane	204.7	Conventional	---	---	---	---	0.008	0	4.17	0.002	---	---	---	---	0.007	0	4.09	0.002	---	---	---	---	0.002	0	0.10	0.021
Dichlorofluoromethane	1065.9	Conventional	---	---	---	---	0.008	0	21.69	0.000	---	---	---	---	0.007	0	21.32	0.000	---	---	---	---	0.002	0	0.50	0.004
Trichlorofluoromethane	290.7	Conventional	---	---	---	---	0.008	0	5.91	0.001	---	---	---	---	0.007	0	5.81	0.001	---	---	---	---	0.002	0	0.14	0.015
1,2-Dichlorobenzene	785.8	Narcosis	0.1	0	16.50	0.006	---	---	---	---	0.095	0	15.60	0.006	---	---	---	---	0.045	0	3.36	0.013	---	---	---	---
1,4-Dichlorobenzene	785.1	Narcosis	0.1	0	16.49	0.006	---	---	---	---	0.095	0	15.58	0.006	---	---	---	---	0.066	1	3.35	0.020	---	---	---	---
Acetone	3120.9	Narcosis	---	---	---	---	0.071	1	63.51	0.001	---	---	---	---	0.11	1	62.42	0.002	---	---	---	---	0.006	0	1.47	0.004
Benzene	653.6	Narcosis	---	---	---	---	0.002	0	13.30	0.000	---	---	---	---	0.002	0	13.07	0.000	---	---	---	---	0.14	1	0.31	0.456
Chlorobenzene	572.4	Narcosis	---	---	---	---	0.004	0	11.65	0.000	---	---	---	---	0.003	0	11.45	0.000	---	---	---	---	0.17	1	0.27	0.632
Chloroform	558.7	Narcosis	---	---	---	---	0.004	0	11.37	0.000	---	---	---	---	0.003	0	11.17	0.000	---	---	---	---	0.0008	0	0.26	0.003
Trichloroethene	659.4	Narcosis	---	---	---	---	0.004	0	13.42	0.000	---	---	---	---	0.003	0	13.19	0.000	---	---	---	---	0.0008	0	0.31	0.003
<b>Semi-Volatile Organic Compounds</b>																										
2,4-Dinitrotoluene	40.5	Conventional	0.2	0	0.85	0.235	---	---	---	---	0.19	0	0.80	0.237	---	---	---	---	0.09	0	0.17	0.521	---	---	---	---
2-Methylphenol (O-Cresol)	59.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Chloroaniline	260.6	Conventional	0.2	0	5.47	0.037	---	---	---	---	0.19	0	5.17	0.037	---	---	---	---	0.41	1	1.11	0.368	---	---	---	---
4-Methylphenol (P-Cresol)	28.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.2	0	1114.27	0.000	---	---	---	---	0.19	0	1053.25	0.000	---	---	---	---	0.09	0	226.57	0.000	---	---	---	---
N-Dioctyl Phthalate	53060.5	Conventional	0.2	0	1114.27	0.000	---	---	---	---	0.19	0	1053.25	0.000	---	---	---	---	0.09	0	226.57	0.000	---	---	---	---
Nitrobenzene	156.5	Conventional	0.1	0	3.29	0.030	---	---	---	---	0.095	0	3.11	0.031	---	---	---	---	0.045	0	0.67	0.067	---	---	---	---
1,2,4-Trichlorobenzene	1019.5	Narcosis	0.1	0	21.41	0.005	---	---	---	---	0.095	0	20.24	0.005	---	---	---	---	0.045	0	4.35	0.010	---	---	---	---
2-Methylnaphthalene	446.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorobenzene	3302.4	Narcosis	0.1	0	69.35	0.001	---	---	---	---	0.095	0	65.55	0.001	---	---	---	---	0.045	0	14.10	0.003	---	---	---	---
<b>Pesticides and Herbicides</b>																										
beta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
delta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Endosulfan I	0.326	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<b>Sediment Organic Carbon</b>																										
Black Carbon	NA	NA	2215	1	NA	---	---	---	NA	---	3855	1	NA	---	---	---	NA	---	470	1	NA	---	---	---	NA	---
Total Organic Carbon	NA	NA	21000	1	NA	---	20350	1	NA	---	19850	1	NA	---	20000	1	NA	---	4270	1	NA	---	470	1	NA	---
<b>Sum of Narcotic ESBTUs:</b>					0.018				0.002				0.018				0.003				0.047				1.097	

**Table D2**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined EqP Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER3-01 0.00-0.50 11/16/2010				DER3-01 0.50-1.00 11/16/2010				DER3-02 0.00-0.50 11/16/2010				DER3-02 0.50-1.00 11/16/2010				DER3-03 0.00-0.50 11/16/2010				DER3-03 0.50-1.00 11/16/2010			
			Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																							
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	0.008	0	10.59	0.001	0.015	0	10.59	0.001	0.003	0	1.65	0.002	0.003	0	1.65	0.002	0.008	0	25.97	0.000	0.007	0	25.97	0.000
Carbon Disulfide	30.2	Conventional	0.025	1	0.22	0.115	0.023	1	0.22	0.106	0.014	1	0.03	0.414	0.01	1	0.03	0.296	0.014	1	0.53	0.026	0.007	1	0.53	0.013
Dichlorodifluoromethane	204.7	Conventional	0.008	0	1.47	0.005	0.015	0	1.47	0.010	0.003	0	0.23	0.013	0.003	0	0.23	0.013	0.008	0	3.61	0.002	0.007	0	3.61	0.002
Dichlorofluoromethane	1065.9	Conventional	0.008	0	7.67	0.001	0.015	0	7.67	0.002	0.003	0	1.19	0.003	0.003	1	1.19	0.003	0.008	0	18.81	0.000	0.007	0	18.81	0.000
Trichlorofluoromethane	290.7	Conventional	0.008	0	2.09	0.004	0.015	0	2.09	0.007	0.003	0	0.33	0.009	0.003	0	0.33	0.009	0.008	0	5.13	0.002	0.007	0	5.13	0.001
1,2-Dichlorobenzene	785.8	Narcosis	0.094	0	5.66	0.017	---	---	---	---	0.51	1	0.88	0.580	---	---	---	---	0.09	0	13.87	0.006	---	---	---	---
1,4-Dichlorobenzene	785.1	Narcosis	0.094	0	5.65	0.017	---	---	---	---	0.063	1	0.88	0.072	---	---	---	---	0.09	0	13.86	0.006	---	---	---	---
Acetone	3120.9	Narcosis	0.11	1	22.47	0.005	0.14	1	22.47	0.006	0.013	1	3.50	0.004	0.019	1	3.50	0.005	0.074	1	55.08	0.001	0.054	1	55.08	0.001
Benzene	653.6	Narcosis	0.002	0	4.71	0.000	0.004	0	4.71	0.001	0.0007	0	0.73	0.001	0.027	1	0.73	0.037	0.002	0	11.54	0.000	0.002	0	11.54	0.000
Chlorobenzene	572.4	Narcosis	0.004	0	4.12	0.001	0.007	0	4.12	0.002	0.001	0	0.64	0.002	0.22	1	0.64	0.343	0.004	0	10.10	0.000	0.003	0	10.10	0.000
Chloroform	558.7	Narcosis	0.004	0	4.02	0.001	0.007	0	4.02	0.002	0.001	0	0.63	0.002	0.004	1	0.63	0.006	0.004	0	9.86	0.000	0.003	0	9.86	0.000
Trichloroethene	659.4	Narcosis	0.004	0	4.75	0.001	0.007	0	4.75	0.001	0.001	0	0.74	0.001	0.004	1	0.74	0.005	0.004	0	11.64	0.000	0.003	0	11.64	0.000
<b>Semi-Volatile Organic Compounds</b>																										
2,4-Dinitrotoluene	40.5	Conventional	0.19	0	0.29	0.652	---	---	---	---	0.086	0	0.05	1.897	---	---	---	---	0.18	0	0.71	0.252	---	---	---	---
2-Methylphenol (O-Cresol)	59.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Chloroaniline	260.6	Conventional	0.19	0	1.88	0.101	---	---	---	---	0.086	0	0.29	0.295	---	---	---	---	0.18	0	4.60	0.039	---	---	---	---
4-Methylphenol (P-Cresol)	28.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.19	0	382.04	0.000	---	---	---	---	0.086	0	59.43	0.001	---	---	---	---	0.18	0	936.52	0.000	---	---	---	---
N-Dioctyl Phthalate	53060.5	Conventional	0.19	0	382.04	0.000	---	---	---	---	0.086	0	59.43	0.001	---	---	---	---	0.18	0	936.52	0.000	---	---	---	---
Nitrobenzene	156.5	Conventional	0.84	1	1.13	0.746	---	---	---	---	0.043	0	0.18	0.245	---	---	---	---	0.24	1	2.76	0.087	---	---	---	---
1,2,4-Trichlorobenzene	1019.5	Narcosis	0.094	0	7.34	0.013	---	---	---	---	0.043	0	1.14	0.038	---	---	---	---	0.09	0	17.99	0.005	---	---	---	---
2-Methylnaphthalene	446.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorobenzene	3302.4	Narcosis	0.094	0	23.78	0.004	---	---	---	---	0.043	0	3.70	0.012	---	---	---	---	0.09	0	58.29	0.002	---	---	---	---
<b>Pesticides and Herbicides</b>																										
beta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
delta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Endosulfan I	0.326	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<b>Sediment Organic Carbon</b>																										
Black Carbon	NA	NA	7360	1	NA	---	---	---	NA	---	330	1	NA	---	---	---	NA	---	3650	1	NA	---	---	---	NA	---
Total Organic Carbon	NA	NA	7200	1	NA	---	7200	---	NA	---	1120	1	NA	---	1120	---	NA	---	17650	1	NA	---	17650	---	NA	---
<b>Sum of Narcotic ESBTUs:</b>					0.058				0.012				0.710				0.397				0.022				0.002	

**Table D2**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER3-04 0.00-0.50				DER3-04 0.50-1.00				DER3-05 0.00-0.50				DER3-05 0.50-1.00				DER3-06 0.00-0.50				DER3-06 0.50-1.00								
			11/15/2010				11/15/2010				11/16/2010				11/16/2010				11/15/2010				11/15/2010								
			Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU					
<b>Volatile Organic Compounds</b>																															
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	0.003	0	25.09	0.000	0.002	0	25.09	0.000	0.01	0	22.22	0.000	0.012	0	22.22	0.001	0.003	0	9.98	0.000	0.003	0	9.98	0.000					
Carbon Disulfide	30.2	Conventional	0.003	1	0.51	0.006	0.001	0	0.51	0.002	0.024	1	0.46	0.053	0.018	1	0.46	0.040	0.002	0	0.20	0.010	0.007	1	0.20	0.034					
Dichlorodifluoromethane	204.7	Conventional	0.003	0	3.49	0.001	0.002	0	3.49	0.001	0.01	0	3.09	0.003	0.012	0	3.09	0.004	0.003	0	1.39	0.002	0.003	0	1.39	0.002					
Dichlorofluoromethane	1065.9	Conventional	0.003	0	18.17	0.000	0.002	0	18.17	0.000	0.01	0	16.10	0.001	0.012	0	16.10	0.001	0.003	0	7.23	0.000	0.003	0	7.23	0.000					
Trichlorofluoromethane	290.7	Conventional	0.003	0	4.96	0.001	0.002	0	4.96	0.000	0.01	0	4.39	0.002	0.012	0	4.39	0.003	0.003	0	1.97	0.002	0.003	0	1.97	0.002					
1,2-Dichlorobenzene	785.8	Narcosis	2.5	1	13.40	0.187	---	---	---	---	0.096	0	11.87	0.008	---	---	---	---	0.1	1	5.33	0.019	---	---	---	---					
1,4-Dichlorobenzene	785.1	Narcosis	4.2	1	13.39	0.314	---	---	---	---	0.096	0	11.85	0.008	---	---	---	---	0.058	0	5.32	0.011	---	---	---	---					
Acetone	3120.9	Narcosis	0.015	1	53.21	0.000	0.011	1	53.21	0.000	0.14	1	47.13	0.003	0.11	1	47.13	0.002	0.021	1	21.16	0.001	0.017	1	21.16	0.001					
Benzene	653.6	Narcosis	0.0007	0	11.14	0.000	0.0005	0	11.14	0.000	0.002	0	9.87	0.000	0.003	0	9.87	0.000	0.0009	0	4.43	0.000	1.4	1	4.43	0.316					
Chlorobenzene	572.4	Narcosis	0.001	0	9.76	0.000	0.01	1	9.76	0.001	0.005	0	8.64	0.001	0.006	0	8.64	0.001	0.002	0	3.88	0.001	3.9	1	3.88	1.005					
Chloroform	558.7	Narcosis	0.001	0	9.53	0.000	0.001	0	9.53	0.000	0.005	0	8.44	0.001	0.006	0	8.44	0.001	0.002	0	3.79	0.001	0.001	0	3.79	0.000					
Trichloroethene	659.4	Narcosis	0.001	0	11.24	0.000	0.001	0	11.24	0.000	0.005	0	9.96	0.001	0.006	0	9.96	0.001	0.002	0	4.47	0.000	0.001	0	4.47	0.000					
<b>Semi-Volatile Organic Compounds</b>																															
2,4-Dinitrotoluene	40.5	Conventional	0.082	0	0.69	0.119	---	---	---	---	0.19	0	0.61	0.311	---	---	---	---	0.12	0	0.27	0.437	---	---	---	---					
2-Methylphenol (O-Cresol)	59.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---					
4-Chloroaniline	260.6	Conventional	0.9	1	4.44	0.203	---	---	---	---	0.19	0	3.94	0.048	---	---	---	---	0.12	0	1.77	0.068	---	---	---	---					
4-Methylphenol (P-Cresol)	28.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---					
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.082	0	904.68	0.000	---	---	---	---	0.19	0	801.21	0.000	---	---	---	---	0.12	0	359.75	0.000	---	---	---	---					
N-Dioctyl Phthalate	53060.5	Conventional	0.082	0	904.68	0.000	---	---	---	---	0.19	0	801.21	0.000	---	---	---	---	0.12	0	359.75	0.000	---	---	---	---					
Nitrobenzene	156.5	Conventional	0.26	1	2.67	0.097	---	---	---	---	0.2	1	2.36	0.085	---	---	---	---	0.25	1	1.06	0.236	---	---	---	---					
1,2,4-Trichlorobenzene	1019.5	Narcosis	0.44	1	17.38	0.025	---	---	---	---	0.096	0	15.39	0.006	---	---	---	---	0.058	0	6.91	0.008	---	---	---	---					
2-Methylnaphthalene	446.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---					
Hexachlorobenzene	3302.4	Narcosis	0.041	0	56.31	0.001	---	---	---	---	0.096	0	49.87	0.002	---	---	---	---	0.058	0	22.39	0.003	---	---	---	---					
<b>Pesticides and Herbicides</b>																															
beta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---					
delta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---					
Endosulfan I	0.326	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---					
<b>Sediment Organic Carbon</b>																															
Black Carbon	NA	NA	3190	1	NA	---	---	---	NA	---	2280	1	NA	---	---	---	NA	---	1430	1	NA	---	---	---	NA	---					
Total Organic Carbon	NA	NA	17050	1	NA	---	17050	---	NA	---	15100	1	NA	---	15100	---	NA	---	6780	1	NA	---	6780	---	NA	---					
<b>Sum of Narcotic ESBTUs:</b>						0.527	<b>Sum of Narcotic ESBTUs:</b>				0.001	<b>Sum of Narcotic ESBTUs:</b>				0.029	<b>Sum of Narcotic ESBTUs:</b>				0.005	<b>Sum of Narcotic ESBTUs:</b>				0.043	<b>Sum of Narcotic ESBTUs:</b>				1.322

**Table D2**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined EqP Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER3-19 0.00-0.50 11/18/2010				DER3-20 0.00-0.50 11/18/2010				SC-229 0.00-0.50 8/24/2016				SC-229 0.50-0.80 8/24/2016				SC-230 0.00-0.50 8/25/2016				SC-230 0.50-1.00 8/25/2016												
			Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU									
			<b>Volatile Organic Compounds</b>																																
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	2.4	1	14.86	0.161	0.003	0	7.48	0.000	---	---	---	---	0.003	0	12.64	0.000	---	---	---	---	0.002	0	0.53	0.004									
Carbon Disulfide	30.2	Conventional	0.13	0	0.30	0.427	0.003	1	0.15	0.020	---	---	---	---	0.015	1	0.26	0.058	---	---	---	---	0.001	0	0.01	0.092									
Dichlorodifluoromethane	204.7	Conventional	0.26	0	2.07	0.126	0.003	0	1.04	0.003	---	---	---	---	0.003	0	1.76	0.002	---	---	---	---	0.002	0	0.07	0.027									
Dichlorofluoromethane	1065.9	Conventional	0.26	0	10.77	0.024	0.003	0	5.41	0.001	---	---	---	---	0.003	0	9.16	0.000	---	---	---	---	0.002	0	0.38	0.005									
Trichlorofluoromethane	290.7	Conventional	0.26	0	2.94	0.089	0.003	0	1.48	0.002	---	---	---	---	0.003	0	2.50	0.001	---	---	---	---	0.002	0	0.10	0.019									
1,2-Dichlorobenzene	785.8	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	0.002	0	6.75	0.000	---	---	---	---	0.001	0	0.28	0.004									
1,4-Dichlorobenzene	785.1	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	0.002	0	6.74	0.000	---	---	---	---	0.001	0	0.28	0.004									
Acetone	3120.9	Narcosis	0.92	0	31.52	0.029	0.01	0	15.85	0.001	---	---	---	---	0.12	1	26.81	0.004	---	---	---	---	0.009	1	1.13	0.008									
Benzene	653.6	Narcosis	0.066	0	6.60	0.010	0.0007	0	3.32	0.000	---	---	---	---	0.0008	0	5.61	0.000	---	---	---	---	0.0006	0	0.24	0.003									
Chlorobenzene	572.4	Narcosis	2.7	1	5.78	0.467	0.001	0	2.91	0.000	---	---	---	---	0.002	0	4.92	0.000	---	---	---	---	0.001	0	0.21	0.005									
Chloroform	558.7	Narcosis	1.5	1	5.64	0.266	0.001	0	2.84	0.000	---	---	---	---	0.002	0	4.80	0.000	---	---	---	---	0.001	0	0.20	0.005									
Trichloroethene	659.4	Narcosis	0.82	1	6.66	0.123	0.001	0	3.35	0.000	---	---	---	---	0.002	0	5.66	0.000	---	---	---	---	0.001	0	0.24	0.004									
<b>Semi-Volatile Organic Compounds</b>																																			
2,4-Dinitrotoluene	40.5	Conventional	---	---	---	---	---	---	---	---	0.084	0	0.41	0.204	0.099	0	0.35	0.285	0.079	0	0.01	10.011	0.08	0	0.01	5.476									
2-Methylphenol (O-Cresol)	59.4	Conventional	---	---	---	---	---	---	---	---	0.067	1	0.61	0.111	0.025	0	0.51	0.049	0.02	0	0.01	1.728	0.02	0	0.02	0.933									
4-Chloroaniline	260.6	Conventional	---	---	---	---	---	---	---	---	0.042	0	2.66	0.016	0.05	0	2.24	0.022	0.039	0	0.05	0.767	0.04	0	0.09	0.425									
4-Methylphenol (P-Cresol)	28.8	Conventional	---	---	---	---	---	---	---	---	0.021	0	0.29	0.071	0.24	1	0.25	0.969	0.02	0	0.01	3.558	0.02	0	0.01	1.922									
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	---	---	---	---	---	---	---	---	0.084	0	541.22	0.000	0.099	0	455.79	0.000	0.079	0	10.35	0.008	0.08	0	19.15	0.004									
N-Dioctyl Phthalate	53060.5	Conventional	---	---	---	---	---	---	---	---	0.084	0	541.22	0.000	0.099	0	455.79	0.000	0.079	0	10.35	0.008	0.08	0	19.15	0.004									
Nitrobenzene	156.5	Conventional	---	---	---	---	---	---	---	---	0.021	0	1.60	0.013	0.025	0	1.34	0.019	0.02	0	0.03	0.655	0.02	0	0.06	0.354									
1,2,4-Trichlorobenzene	1019.5	Narcosis	---	---	---	---	---	---	---	---	0.021	0	10.40	0.002	0.028	1	8.76	0.003	0.02	0	0.20	0.101	0.02	0	0.37	0.054									
2-Methylnaphthalene	446.7	Narcosis	---	---	---	---	---	---	---	---	0.011	1	4.56	0.002	0.033	1	3.84	0.009	0.004	0	0.09	0.046	0.004	0	0.16	0.025									
Hexachlorobenzene	3302.4	Narcosis	---	---	---	---	---	---	---	---	0.004	0	33.68	0.000	0.005	0	28.37	0.000	0.004	0	0.64	0.006	0.004	0	1.19	0.003									
<b>Pesticides and Herbicides</b>																																			
beta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---								
delta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---								
Endosulfan I	0.326	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---								
<b>Sediment Organic Carbon</b>																																			
Black Carbon	NA	NA	---	---	NA	---	---	---	NA	---	---	---	NA	---	---	---	NA	---	---	---	NA	---	---	---	NA	---	---								
Total Organic Carbon	NA	NA	10100	1	NA	---	5080	1	NA	---	10200	1	NA	---	8590	1	NA	---	195	0	NA	---	361	1	NA	---									
<b>Sum of Narcotic ESBTUs:</b>					0.895	<b>Sum of Narcotic ESBTUs:</b>					0.002	<b>Sum of Narcotic ESBTUs:</b>					0.005	<b>Sum of Narcotic ESBTUs:</b>					0.018	<b>Sum of Narcotic ESBTUs:</b>					0.153	<b>Sum of Narcotic ESBTUs:</b>					0.114

**Table D2**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER3-07 0.00-0.50 11/16/2010				DER3-07 0.50-1.00 11/16/2010				SC-232 0.00-0.50 8/25/2016				SC-232 0.50-1.00 8/25/2016				SC-233 0.00-0.50 8/25/2016				SC-233 0.50-1.00 8/25/2016							
			Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																											
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	0.008	0	25.02	0.000	0.009	0	25.02	0.000	---	---	---	---	0.002	0	6.20	0.000	---	---	---	---	0.002	0	0.24	0.008	0.002	0	0.00	0.202
Carbon Disulfide	30.2	Conventional	0.068	1	0.51	0.133	0.008	1	0.51	0.016	---	---	---	---	0.002	1	0.13	0.016	---	---	---	---	0.001	0	0.00	0.060	0.001	0	0.03	0.060
Dichlorodifluoromethane	204.7	Conventional	0.008	0	3.48	0.002	0.009	0	3.48	0.003	---	---	---	---	0.002	0	0.86	0.002	---	---	---	---	0.002	0	0.17	0.011	0.002	0	0.05	0.042
Dichlorofluoromethane	1065.9	Conventional	0.008	0	18.12	0.000	0.009	0	18.12	0.000	---	---	---	---	0.002	0	4.49	0.000	---	---	---	---	0.002	0	0.13	0.008	0.001	0	0.13	0.008
Trichlorofluoromethane	290.7	Conventional	0.008	0	4.94	0.002	0.009	0	4.94	0.002	---	---	---	---	0.002	0	1.22	0.002	---	---	---	---	0.002	0	0.13	0.008	0.001	0	0.13	0.008
1,2-Dichlorobenzene	785.8	Narcosis	0.089	0	13.36	0.007	---	---	---	---	---	---	---	---	0.001	0	3.31	0.000	---	---	---	---	0.001	0	0.13	0.008	0.001	0	0.13	0.008
1,4-Dichlorobenzene	785.1	Narcosis	0.089	0	13.35	0.007	---	---	---	---	---	---	---	---	0.001	0	3.31	0.000	---	---	---	---	0.001	0	0.13	0.008	0.001	0	0.13	0.008
Acetone	3120.9	Narcosis	0.25	1	53.05	0.005	0.088	1	53.05	0.002	---	---	---	---	0.037	1	13.14	0.003	---	---	---	---	0.014	1	0.51	0.027	0.005	0	0.11	0.005
Benzene	653.6	Narcosis	0.002	0	11.11	0.000	0.002	0	11.11	0.000	---	---	---	---	0.0006	0	2.75	0.000	---	---	---	---	0.0005	0	0.11	0.005	0.001	0	0.09	0.011
Chlorobenzene	572.4	Narcosis	0.004	0	9.73	0.000	0.004	0	9.73	0.000	---	---	---	---	0.001	0	2.41	0.000	---	---	---	---	0.001	0	0.09	0.011	0.001	0	0.09	0.011
Chloroform	558.7	Narcosis	0.004	0	9.50	0.000	0.004	0	9.50	0.000	---	---	---	---	0.001	0	2.35	0.000	---	---	---	---	0.001	0	0.09	0.011	0.001	0	0.11	0.009
Trichloroethene	659.4	Narcosis	0.004	0	11.21	0.000	0.004	0	11.21	0.000	---	---	---	---	0.001	0	2.78	0.000	---	---	---	---	0.001	0	0.11	0.009	0.001	0	0.11	0.009
<b>Semi-Volatile Organic Compounds</b>																														
2,4-Dinitrotoluene	40.5	Conventional	0.18	0	0.69	0.262	---	---	---	---	0.47	0	0.41	<b>1.150</b>	0.082	0	0.17	0.481	0.42	0	0.17	<b>2.507</b>	0.079	0	0.01	<b>11.903</b>	0.079	0	0.01	<b>11.903</b>
2-Methylphenol (O-Cresol)	59.4	Conventional	---	---	---	---	---	---	---	---	0.12	0	0.60	0.200	0.02	0	0.25	0.080	0.11	0	0.25	0.448	0.02	0	0.01	<b>2.055</b>	0.02	0	0.01	<b>2.055</b>
4-Chloroaniline	260.6	Conventional	0.18	0	4.43	0.041	---	---	---	---	0.23	0	2.63	0.087	0.041	0	1.10	0.037	0.21	0	1.08	0.195	0.04	0	0.04	0.936	0.04	0	0.04	0.936
4-Methylphenol (P-Cresol)	28.8	Conventional	---	---	---	---	---	---	---	---	0.12	0	0.29	0.412	0.02	0	0.12	0.165	0.11	0	0.12	0.922	0.02	0	0.00	<b>4.230</b>	0.02	0	0.00	<b>4.230</b>
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.18	0	902.03	0.000	---	---	---	---	0.47	0	535.91	0.001	0.082	0	223.38	0.000	0.42	0	219.67	0.002	0.079	0	8.70	0.009	0.079	0	8.70	0.009
N-Diethyl Phthalate	53060.5	Conventional	0.18	0	902.03	0.000	---	---	---	---	0.47	0	535.91	0.001	0.082	0	223.38	0.000	0.42	0	219.67	0.002	0.079	0	8.70	0.009	0.079	0	8.70	0.009
Nitrobenzene	156.5	Conventional	0.089	0	2.66	0.033	---	---	---	---	0.12	0	1.58	0.076	0.02	0	0.66	0.030	0.11	0	0.65	0.170	0.02	0	0.03	0.779	0.02	0	0.03	0.779
1,2,4-Trichlorobenzene	1019.5	Narcosis	0.089	0	17.33	0.005	---	---	---	---	0.12	0	10.30	0.012	0.02	0	4.29	0.005	0.11	0	4.22	0.026	0.02	0	0.17	0.120	0.02	0	0.17	0.120
2-Methylnaphthalene	446.7	Narcosis	---	---	---	---	---	---	---	---	0.15	1	4.51	0.033	0.009	1	1.88	0.005	0.021	0	1.85	0.011	0.004	0	0.07	0.055	0.004	0	0.07	0.055
Hexachlorobenzene	3302.4	Narcosis	0.089	0	56.14	0.002	---	---	---	---	0.023	0	33.35	0.001	0.004	0	13.90	0.000	0.021	0	13.67	0.002	0.004	0	0.54	0.007	0.004	0	0.54	0.007
<b>Pesticides and Herbicides</b>																														
beta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.019	0	0.05	0.401	0.00036	0	0.00	0.192	0.00036	0	0.00	0.192
delta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0016	1	0.05	0.034	0.00054	0	0.00	0.288	0.00054	0	0.00	0.288
Endosulfan I	0.326	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.0031	1	0.001	<b>2.296</b>	0.00026	0	0.00	<b>4.862</b>	0.00026	0	0.00	<b>4.862</b>
<b>Sediment Organic Carbon</b>																														
Black Carbon	NA	NA	3600	1	NA	---	---	---	NA	---	---	---	NA	---	---	---	NA	---	---	---	NA	---	---	---	NA	---	---	---	NA	---
Total Organic Carbon	NA	NA	17000	1	NA	---	17000	---	NA	---	10100	1	NA	---	4210	1	NA	---	4140	1	NA	---	164	0	NA	---	164	0	NA	---
<b>Sum of Narcotic ESBTUs:</b>					0.026				0.003				0.046				0.015				0.039				0.260				0.260	

**Table D2**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined EqP Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	SC-231 0.00-0.50 8/25/2016				SC-231 0.50-1.00 8/25/2016				SC-236 0.00-0.50 8/25/2016				SC-236 0.50-1.00 8/25/2016				SC-237 0.00-0.50 8/24/2016				SC-237 0.50-1.00 8/24/2016			
			Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																							
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	---	---	---	---	0.004	0	45.32	0.000	---	---	---	---	0.005	0	38.99	0.000	---	---	---	---	0.002	0	0.27	0.007
Carbon Disulfide	30.2	Conventional	---	---	---	---	0.017	1	0.93	0.018	---	---	---	---	0.004	1	0.80	0.005	---	---	---	---	0.002	1	0.01	0.356
Dichlorodifluoromethane	204.7	Conventional	---	---	---	---	0.004	0	6.30	0.001	---	---	---	---	0.005	0	5.42	0.001	---	---	---	---	0.002	0	0.04	0.053
Dichlorofluoromethane	1065.9	Conventional	---	---	---	---	0.004	0	32.83	0.000	---	---	---	---	0.005	0	28.25	0.000	---	---	---	---	0.002	0	0.20	0.010
Trichlorofluoromethane	290.7	Conventional	---	---	---	---	0.004	0	8.95	0.000	---	---	---	---	0.005	0	7.70	0.001	---	---	---	---	0.002	0	0.05	0.037
1,2-Dichlorobenzene	785.8	Narcosis	---	---	---	---	0.003	1	24.20	0.000	---	---	---	---	0.032	1	20.82	0.002	---	---	---	---	0.011	1	0.15	0.075
1,4-Dichlorobenzene	785.1	Narcosis	---	---	---	---	0.002	0	24.18	0.000	---	---	---	---	0.004	1	20.80	0.000	---	---	---	---	0.006	1	0.15	0.041
Acetone	3120.9	Narcosis	---	---	---	---	0.088	1	96.12	0.001	---	---	---	---	0.077	1	82.70	0.001	---	---	---	---	0.062	1	0.58	0.107
Benzene	653.6	Narcosis	---	---	---	---	0.001	0	20.13	0.000	---	---	---	---	0.001	0	17.32	0.000	---	---	---	---	0.0006	0	0.12	0.005
Chlorobenzene	572.4	Narcosis	---	---	---	---	0.002	0	17.63	0.000	---	---	---	---	0.072	1	15.17	0.005	---	---	---	---	0.004	1	0.11	0.038
Chloroform	558.7	Narcosis	---	---	---	---	0.002	0	17.21	0.000	---	---	---	---	0.003	0	14.80	0.000	---	---	---	---	0.001	0	0.10	0.010
Trichloroethene	659.4	Narcosis	---	---	---	---	0.002	0	20.31	0.000	---	---	---	---	0.003	0	17.48	0.000	---	---	---	---	0.001	0	0.12	0.008
<b>Semi-Volatile Organic Compounds</b>																										
2,4-Dinitrotoluene	40.5	Conventional	0.65	0	1.04	0.627	0.53	0	1.25	0.425	0.55	0	0.53	<b>1.045</b>	0.65	0	1.07	0.606	0.078	0	0.01	<b>9.542</b>	0.077	0	0.01	<b>10.230</b>
2-Methylphenol (O-Cresol)	59.4	Conventional	0.16	0	1.52	0.105	0.13	0	1.83	0.071	0.14	0	0.77	0.181	0.16	0	1.57	0.102	0.019	0	0.01	<b>1.585</b>	0.019	0	0.01	<b>1.721</b>
4-Chloroaniline	260.6	Conventional	0.33	0	6.67	0.049	0.27	0	8.03	0.034	0.28	0	3.39	0.083	0.32	0	6.91	0.046	0.039	0	0.05	0.741	0.038	0	0.05	0.784
4-Methylphenol (P-Cresol)	28.8	Conventional	1.3	1	0.74	<b>1.761</b>	0.27	1	0.89	0.304	0.14	0	0.37	0.374	0.16	0	0.76	0.209	0.019	0	0.01	<b>3.263</b>	0.019	0	0.01	<b>3.543</b>
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.65	0	1358.35	0.000	0.53	0	1634.26	0.000	0.55	0	689.79	0.001	0.65	0	1406.10	0.000	0.078	0	10.72	0.007	0.077	0	9.87	0.008
N-Dioctyl Phthalate	53060.5	Conventional	0.65	0	1358.35	0.000	0.53	0	1634.26	0.000	0.55	0	689.79	0.001	0.65	0	1406.10	0.000	0.078	0	10.72	0.007	0.077	0	9.87	0.008
Nitrobenzene	156.5	Conventional	0.16	0	4.01	0.040	0.13	0	4.82	0.027	0.14	0	2.03	0.069	0.16	0	4.15	0.039	0.019	0	0.03	0.601	0.019	0	0.03	0.653
1,2,4-Trichlorobenzene	1019.5	Narcosis	0.16	0	26.10	0.006	0.13	0	31.40	0.004	0.14	0	13.25	0.011	0.16	0	27.02	0.006	0.019	0	0.21	0.092	0.097	1	0.19	0.512
2-Methylnaphthalene	446.7	Narcosis	0.18	1	11.44	0.016	0.071	1	13.76	0.005	0.028	0	5.81	0.005	0.086	1	11.84	0.007	0.019	1	0.09	0.211	0.006	1	0.08	0.072
Hexachlorobenzene	3302.4	Narcosis	0.033	0	84.54	0.000	0.027	0	101.71	0.000	0.028	0	42.93	0.001	0.032	0	87.51	0.000	0.004	0	0.67	0.006	0.004	0	0.61	0.007
<b>Pesticides and Herbicides</b>																										
beta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---	0.025	1	0.15	0.168	0.0017	1	0.30	0.006	---	---	---	---	---	---	---	---
delta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---	0.0037	0	0.15	0.025	0.00088	0	0.30	0.003	---	---	---	---	---	---	---	---
Endosulfan I	0.326	Conventional	---	---	---	---	---	---	---	---	0.0092	1	0.004	<b>2.170</b>	0.0015	1	0.01	0.174	---	---	---	---	---	---	---	---
<b>Sediment Organic Carbon</b>																										
Black Carbon	NA	NA	---	---	NA	---	---	---	NA	---	---	---	NA	---	---	---	NA	---	---	---	NA	---	---	---	NA	---
Total Organic Carbon	NA	NA	25600	1	NA	---	30800	1	NA	---	13000	1	NA	---	26500	1	NA	---	202	0	NA	---	186	0	NA	---
<b>Sum of Narcotic ESBTUs:</b>			0.022				0.011				0.016				0.021				0.309				0.874			

Table D2  
Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Jackson Labs/TEL Area  
Delaware River Screening-Level Ecological Risk Assessment  
Chemours Chambers Works  
Deepwater, New Jersey

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	SC-234 0.00-0.50 8/24/2016				SC-234 0.50-1.00 8/24/2016					
			Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU		
			<b>Volatile Organic Compounds</b>									
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	---	---	---	---	0.002	0	2.24	0.001		
Carbon Disulfide	30.2	Conventional	---	---	---	---	0.002	1	0.05	0.044		
Dichlorodifluoromethane	204.7	Conventional	---	---	---	---	0.002	0	0.31	0.006		
Dichlorofluoromethane	1065.9	Conventional	---	---	---	---	0.002	0	1.62	0.001		
Trichlorofluoromethane	290.7	Conventional	---	---	---	---	0.002	0	0.44	0.005		
1,2-Dichlorobenzene	785.8	Narcosis	---	---	---	---	0.001	0	1.19	0.001		
1,4-Dichlorobenzene	785.1	Narcosis	---	---	---	---	0.001	0	1.19	0.001		
Acetone	3120.9	Narcosis	---	---	---	---	0.023	1	4.74	0.005		
Benzene	653.6	Narcosis	---	---	---	---	0.0006	0	0.99	0.001		
Chlorobenzene	572.4	Narcosis	---	---	---	---	0.001	0	0.87	0.001		
Chloroform	558.7	Narcosis	---	---	---	---	0.001	0	0.85	0.001		
Trichloroethene	659.4	Narcosis	---	---	---	---	0.001	0	1.00	0.001		
<b>Semi-Volatile Organic Compounds</b>												
2,4-Dinitrotoluene	40.5	Conventional	0.073	0	0.13	0.574	0.071	0	0.06	1.154		
2-Methylphenol (O-Cresol)	59.4	Conventional	0.018	0	0.19	0.097	0.018	0	0.09	0.200		
4-Chloroaniline	260.6	Conventional	0.036	0	0.82	0.044	0.036	0	0.40	0.091		
4-Methylphenol (P-Cresol)	28.8	Conventional	0.034	1	0.09	0.376	0.018	0	0.04	0.411		
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.073	0	166.61	0.000	0.071	0	80.65	0.001		
N-Dioctyl Phthalate	53060.5	Conventional	0.073	0	166.61	0.000	0.071	0	80.65	0.001		
Nitrobenzene	156.5	Conventional	0.018	0	0.49	0.037	0.018	0	0.24	0.076		
1,2,4-Trichlorobenzene	1019.5	Narcosis	0.018	0	3.20	0.006	0.018	0	1.55	0.012		
2-Methylnaphthalene	446.7	Narcosis	0.009	1	1.40	0.006	0.004	0	0.68	0.006		
Hexachlorobenzene	3302.4	Narcosis	0.004	0	10.37	0.000	0.004	0	5.02	0.001		
<b>Pesticides and Herbicides</b>												
beta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---		
delta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---		
Endosulfan I	0.326	Conventional	---	---	---	---	---	---	---	---		
<b>Sediment Organic Carbon</b>												
Black Carbon	NA	NA	---	---	NA	---	---	---	NA	---		
Total Organic Carbon	NA	NA	3140	1	NA	---	1520	1	NA	---		
<b>Sum of Narcotic ESBTUs:</b>						0.012	<b>Sum of Narcotic ESBTUs:</b>					
							0.029					

**Table D2**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined EqP Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	SC-235 0.00-0.50 8/25/2016				SC-235 0.50-1.00 8/25/2016				
			Result	Detection	Refined ESB (mg/kg dw)	ESBTU	Result	Detection	Refined ESB (mg/kg dw)	ESBTU	
			<b>Volatile Organic Compounds</b>								
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	---	---	---	---	0.003	0	7.45	0.000	
Carbon Disulfide	30.2	Conventional	---	---	---	---	0.002	1	0.15	0.013	
Dichlorodifluoromethane	204.7	Conventional	---	---	---	---	0.003	0	1.04	0.003	
Dichlorofluoromethane	1065.9	Conventional	---	---	---	---	0.003	0	5.39	0.001	
Trichlorofluoromethane	290.7	Conventional	---	---	---	---	0.003	0	1.47	0.002	
1,2-Dichlorobenzene	785.8	Narcosis	---	---	---	---	0.001	0	3.98	0.000	
1,4-Dichlorobenzene	785.1	Narcosis	---	---	---	---	0.001	0	3.97	0.000	
Acetone	3120.9	Narcosis	---	---	---	---	0.015	1	15.79	0.001	
Benzene	653.6	Narcosis	---	---	---	---	0.0006	0	3.31	0.000	
Chlorobenzene	572.4	Narcosis	---	---	---	---	0.001	0	2.90	0.000	
Chloroform	558.7	Narcosis	---	---	---	---	0.001	0	2.83	0.000	
Trichloroethene	659.4	Narcosis	---	---	---	---	0.001	0	3.34	0.000	
<b>Semi-Volatile Organic Compounds</b>											
2,4-Dinitrotoluene	40.5	Conventional	0.089	0	0.08	1.176	0.087	0	0.20	0.425	
2-Methylphenol (O-Cresol)	59.4	Conventional	0.022	0	0.11	0.198	0.022	0	0.30	0.073	
4-Chloroaniline	260.6	Conventional	0.044	0	0.49	0.090	0.044	0	1.32	0.033	
4-Methylphenol (P-Cresol)	28.8	Conventional	0.031	1	0.05	0.575	0.022	0	0.15	0.151	
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.089	0	99.22	0.001	0.087	0	268.49	0.000	
N-Dioctyl Phthalate	53060.5	Conventional	0.089	0	99.22	0.001	0.087	0	268.49	0.000	
Nitrobenzene	156.5	Conventional	0.022	0	0.29	0.075	0.022	0	0.79	0.028	
1,2,4-Trichlorobenzene	1019.5	Narcosis	0.022	0	1.91	0.012	0.022	0	5.16	0.004	
2-Methylnaphthalene	446.7	Narcosis	0.02	1	0.84	0.024	0.005	1	2.26	0.002	
Hexachlorobenzene	3302.4	Narcosis	0.004	0	6.18	0.001	0.004	0	16.71	0.000	
<b>Pesticides and Herbicides</b>											
beta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---	
delta-BHC	11.4	Conventional	---	---	---	---	---	---	---	---	
Endosulfan I	0.326	Conventional	---	---	---	---	---	---	---	---	
<b>Sediment Organic Carbon</b>											
Black Carbon	NA	NA	---	---	NA	---	---	---	NA	---	
Total Organic Carbon	NA	NA	1870	1	NA	---	5060	1	NA	---	
<b>Sum of Narcotic ESBTUs:</b>						0.036	<b>Sum of Narcotic ESBTUs:</b>				0.009

Notes:  
ESBTU, Equilibrium partitioning sediment benchmark toxic unit  
OC, Organic carbon  
Sum of Narcotic ESBTUs, Sample-specific sum of ESBTU values for COPECs with a narcotic mode of toxicity.

**Table D3**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER1-12 0.00-0.50 9/24/2009				DER1-12 0.50-1.00 9/24/2009				DER1-13 0.00-0.50 9/22/2009				DER1-13 0.50-1.00 9/22/2009				DER1-14 0.00-0.50 9/22/2009			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																			
1,1,1-Trichlorotrifluoroethane	1471.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	---	---	---	---	0.003	0	6.34	0.000	---	---	---	---	0.009	0	22.37	0.000	---	---	---	---
1,2-Dichloro-1,1,2-Trifluoroethane	922.7	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-Dichloroethene	77.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-Dichlorotetrafluoroethane	1184.2	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,2-Dichloro-1,1,1-Trifluoroethane	922.7	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Chloro-1,1,1-Trifluoroethane	726.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Isopropyltoluene	730.9	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Carbon Disulfide	30.2	Conventional	---	---	---	---	0.004	1	0.13	0.031	---	---	---	---	0.016	1	0.46	0.035	---	---	---	---
CFC-1113	1415.9	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chlorodifluoromethane	1324.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chlorofluoromethane	881.3	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
cis-1,2 Dichloroethene	77.5	Conventional	---	---	---	---	0.001	0	0.33	0.003	---	---	---	---	0.004	0	1.18	0.003	---	---	---	---
Dichlorofluoromethane	1065.9	Conventional	---	---	---	---	0.003	0	4.59	0.001	---	---	---	---	0.009	0	16.20	0.001	---	---	---	---
Trichlorofluoromethane	290.7	Conventional	---	---	---	---	0.003	0	1.25	0.002	---	---	---	---	0.009	0	4.42	0.002	---	---	---	---
Vinyl Chloride	76.3	Conventional	---	---	---	---	0.001	0	0.33	0.003	---	---	---	---	0.004	0	1.16	0.003	---	---	---	---
1,1-Dichloroethene	466.3	Narcosis	---	---	---	---	0.001	0	2.01	0.000	---	---	---	---	0.004	0	7.09	0.001	---	---	---	---
1,2,4-Trimethylbenzene	1148.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-Dichlorobenzene	785.8	Narcosis	0.052	0	5.10	0.010	---	---	---	---	0.31	1	8.25	0.038	---	---	---	---	0.1	1	0.25	0.404
1,3,5-Trimethylbenzene	1152.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,3-Dichlorobenzene	785.8	Narcosis	0.052	0	5.10	0.010	---	---	---	---	0.093	0	8.25	0.011	---	---	---	---	0.053	0	0.25	0.214
1,4-Dichlorobenzene	785.1	Narcosis	0.052	0	5.10	0.010	---	---	---	---	0.19	1	8.24	0.023	---	---	---	---	0.053	0	0.25	0.214
2-Chlorotoluene	1161.1	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acetone	3120.9	Narcosis	---	---	---	---	0.086	1	13.45	0.006	---	---	---	---	0.27	1	47.44	0.006	---	---	---	---
Benzene	653.6	Narcosis	---	---	---	---	0.002	1	2.82	0.001	---	---	---	---	0.002	0	9.93	0.000	---	---	---	---
Chlorobenzene	572.4	Narcosis	---	---	---	---	0.015	1	2.47	0.006	---	---	---	---	0.011	1	8.70	0.001	---	---	---	---
Chloroform	558.7	Narcosis	---	---	---	---	0.001	0	2.41	0.000	---	---	---	---	0.004	0	8.49	0.000	---	---	---	---
Cumene	1132.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Ethylbenzene	970.4	Narcosis	---	---	---	---	0.001	0	4.18	0.000	---	---	---	---	0.004	0	14.75	0.000	---	---	---	---
Meta- And Para-Xylene	975.5	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Methyl Ethyl Ketone	293.5	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Methylene Chloride	372.9	Narcosis	---	---	---	---	0.004	1	1.61	0.002	---	---	---	---	0.009	0	5.67	0.002	---	---	---	---
Ortho-Xylene	966.2	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tetrachloroethene	829.4	Narcosis	---	---	---	---	0.001	0	3.57	0.000	---	---	---	---	0.004	0	12.61	0.000	---	---	---	---
Toluene	813.9	Narcosis	---	---	---	---	0.008	1	3.51	0.002	---	---	---	---	0.008	1	12.37	0.001	---	---	---	---
Trichloroethene	659.4	Narcosis	---	---	---	---	0.001	0	2.84	0.000	---	---	---	---	0.004	0	10.02	0.000	---	---	---	---
Xylenes	969.6	Narcosis	---	---	---	---	0.001	1	4.18	0.000	---	---	---	---	0.006	1	14.74	0.000	---	---	---	---
<b>Semi-Volatile Organic Compounds</b>																						
2-Chlorophenol	100.9	Conventional	0.052	0	0.65	0.079	---	---	---	---	0.093	0	1.06	0.088	---	---	---	---	0.053	0	0.03	1.668
4-Chloroaniline	260.6	Conventional	0.1	0	1.69	0.059	---	---	---	---	0.19	0	2.74	0.069	---	---	---	---	0.11	0	0.08	1.340
4-Methylphenol (P-Cresol)	28.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.1	0	344.36	0.000	---	---	---	---	0.29	1	557.14	0.001	---	---	---	---	0.13	1	16.71	0.008
Butyl Benzyl Phthalate	1088.3	Conventional	0.1	0	7.06	0.014	---	---	---	---	0.19	0	11.43	0.017	---	---	---	---	0.11	0	0.34	0.321
Carbazole	6.9	Conventional	0.052	0	0.045	1.168	---	---	---	---	0.093	0	0.07	1.291	---	---	---	---	0.093	1	0.00	43.029
Diethyl Phthalate	77.5	Conventional	0.1	0	0.50	0.199	---	---	---	---	0.84	1	0.81	1.033	---	---	---	---	0.11	0	0.02	4.508
Di-N-Butyl Phthalate	1191.2	Conventional	0.1	0	7.73	0.013	---	---	---	---	0.19	0	12.51	0.015	---	---	---	---	0.11	0	0.38	0.293
Nitrobenzene	156.5	Conventional	0.052	0	1.02	0.051	---	---	---	---	0.093	0	1.64	0.057	---	---	---	---	0.061	1	0.05	1.237
Phenol	5.5	Conventional	0.052	0	0.04	1.458	---	---	---	---	0.093	0	0.06	1.612	---	---	---	---	0.053	0	0.00	30.625
2-Methylnaphthalene	446.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acetophenone	965.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Biphenyl	1507.8	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dibenzofuran	1616.0	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Diphenyl Ether	1731.0	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorobenzene	3302.4	Narcosis	0.052	0	21.43	0.002	---	---	---	---	0.093	0	34.68	0.003	---	---	---	---	0.053	0	1.04	0.051
<b>Sediment Organic Carbon</b>																						
Black Carbon	NA	NA	1885	1	NA	---	---	---	NA	---	885	1	NA	---	1195	1	NA	---	2310	1	NA	---
Total Organic Carbon	NA	NA	6490	1	NA	---	---	---	NA	---	10500	1	NA	---	15200	1	NA	---	315	1	NA	---
<b>Sum of Narcotic ESBTUs:</b>							<b>0.033</b>				<b>0.020</b>				<b>0.075</b>				<b>0.012</b>			<b>0.883</b>

**Table D3**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER1-14 0.50-1.00 9/22/2009				DER1-15 0.00-0.50 9/22/2009				DER1-15 0.50-1.00 9/22/2009				DER2-13-SD 0.00-0.50 4/23/2010				DER2-13-SD 0.50-1.00 4/23/2010																			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU																
			<b>Volatile Organic Compounds</b>																																			
1,1,1-Trichlorotrifluoroethane	1471.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	0.003	0	10.58	0.000	---	---	---	---	0.19	1	1.88	0.101	---	---	---	---	0.004	0	25.24	0.000																
1,2-Dichloro-1,1,2-Trifluoroethane	922.7	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																
1,2-Dichloroethene	77.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																
1,2-Dichlorotetrafluoroethane	1184.2	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																
2,2-Dichloro-1,1,1-Trifluoroethane	922.7	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																
2-Chloro-1,1,1-Trifluoroethane	726.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																
4-Isopropyltoluene	730.9	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																
Carbon Disulfide	30.2	Conventional	0.002	1	0.22	0.009	---	---	---	---	0.062	0	0.04	1.606	---	---	---	---	0.003	1	0.52	0.006																
CFC-1113	1415.9	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																
Chlorodifluoromethane	1324.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																
Chlorofluoromethane	881.3	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																
cis-1,2 Dichloroethene	77.5	Conventional	0.001	0	0.56	0.002	---	---	---	---	0.062	0	0.10	0.625	---	---	---	---	0.002	0	1.33	0.002																
Dichlorofluoromethane	1065.9	Conventional	0.003	0	7.66	0.000	---	---	---	---	0.12	0	1.36	0.088	---	---	---	---	0.004	0	18.28	0.000																
Trichlorofluoromethane	290.7	Conventional	0.003	0	2.09	0.001	---	---	---	---	0.12	0	0.37	0.323	---	---	---	---	0.004	0	4.98	0.001																
Vinyl Chloride	76.3	Conventional	0.001	0	0.55	0.002	---	---	---	---	0.062	0	0.10	0.635	---	---	---	---	0.002	0	1.31	0.002																
1,1-Dichloroethene	466.3	Narcosis	0.001	0	3.35	0.000	---	---	---	---	0.062	0	0.60	0.104	---	---	---	---	0.002	0	8.00	0.000																
1,2,4-Trimethylbenzene	1148.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																
1,2-Dichlorobenzene	785.8	Narcosis	---	---	---	---	1.7	1	2.41	0.706	---	---	---	---	0.21	1	10.69	0.020	---	---	---	---																
1,3,5-Trimethylbenzene	1152.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																
1,3-Dichlorobenzene	785.8	Narcosis	---	---	---	---	0.047	0	2.41	0.020	---	---	---	---	0.19	0	10.69	0.018	---	---	---	---																
1,4-Dichlorobenzene	785.1	Narcosis	---	---	---	---	0.1	1	2.41	0.042	---	---	---	---	0.19	0	10.68	0.018	---	---	---	---																
2-Chlorotoluene	1161.1	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																
Acetone	3120.9	Narcosis	0.029	1	22.44	0.001	---	---	---	---	0.43	0	3.99	0.108	---	---	---	---	0.063	1	53.52	0.001																
Benzene	653.6	Narcosis	0.0007	0	4.70	0.000	---	---	---	---	0.06	1	0.84	0.072	---	---	---	---	0.002	1	11.21	0.000																
Chlorobenzene	572.4	Narcosis	0.001	0	4.12	0.000	---	---	---	---	4	1	0.73	5.459	---	---	---	---	0.28	1	9.82	0.029																
Chloroform	558.7	Narcosis	0.001	0	4.02	0.000	---	---	---	---	0.062	0	0.72	0.087	---	---	---	---	0.002	0	9.58	0.000																
Cumene	1132.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																
Ethylbenzene	970.4	Narcosis	0.001	0	6.98	0.000	---	---	---	---	0.062	0	1.24	0.050	---	---	---	---	0.002	0	16.64	0.000																
Meta- And Para-Xylene	975.5	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																
Methyl Ethyl Ketone	293.5	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																
Methylene Chloride	372.9	Narcosis	0.003	0	2.68	0.001	---	---	---	---	0.12	0	0.48	0.251	---	---	---	---	0.004	0	6.39	0.001																
Ortho-Xylene	966.2	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																
Tetrachloroethene	829.4	Narcosis	0.001	0	5.96	0.000	---	---	---	---	0.78	1	1.06	0.735	---	---	---	---	0.002	0	14.22	0.000																
Toluene	813.9	Narcosis	0.003	1	5.85	0.001	---	---	---	---	0.062	0	1.04	0.060	---	---	---	---	0.004	1	13.96	0.000																
Trichloroethene	659.4	Narcosis	0.001	0	4.74	0.000	---	---	---	---	0.062	0	0.84	0.073	---	---	---	---	0.002	0	11.31	0.000																
Xylenes	969.6	Narcosis	0.001	0	6.97	0.000	---	---	---	---	0.062	0	1.24	0.050	---	---	---	---	0.009	1	16.63	0.001																
<b>Semi-Volatile Organic Compounds</b>																																						
2-Chlorophenol	100.9	Conventional	---	---	---	---	0.047	0	0.31	0.152	---	---	---	---	0.19	0	1.37	0.138	---	---	---	---																
4-Chloroaniline	260.6	Conventional	---	---	---	---	0.25	1	0.80	0.313	---	---	---	---	0.39	0	3.54	0.110	---	---	---	---																
4-Methylphenol (P-Cresol)	28.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	---	---	---	---	0.11	1	162.63	0.001	---	---	---	---	0.39	0	721.62	0.001	---	---	---	---																
Butyl Benzyl Phthalate	1088.3	Conventional	---	---	---	---	0.095	0	3.34	0.028	---	---	---	---	0.39	0	14.80	0.026	---	---	---	---																
Carbazole	6.9	Conventional	---	---	---	---	0.047	0	0.02	2.235	---	---	---	---	0.19	0	0.09	2.036	---	---	---	---																
Diethyl Phthalate	77.5	Conventional	---	---	---	---	0.095	0	0.24	0.400	---	---	---	---	0.39	0	1.05	0.370	---	---	---	---																
Di-N-Butyl Phthalate	1191.2	Conventional	---	---	---	---	0.095	0	3.65	0.026	---	---	---	---	0.39	0	16.20	0.024	---	---	---	---																
Nitrobenzene	156.5	Conventional	---	---	---	---	0.047	0	0.48	0.098	---	---	---	---	0.19	0	2.13	0.089	---	---	---	---																
Phenol	5.5	Conventional	---	---	---	---	0.047	0	0.02	2.791	---	---	---	---	0.19	0	0.07	2.543	---	---	---	---																
2-Methylnaphthalene	446.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																
Acetophenone	965.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																
Biphenyl	1507.8	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																
Dibenzofuran	1616.0	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																
Diphenyl Ether	1731.0	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																
Hexachlorobenzene	3302.4	Narcosis	---	---	---	---	0.047	0	10.12	0.005	---	---	---	---	0.19	0	44.91	0.004	---	---	---	---																
<b>Sediment Organic Carbon</b>																																						
Black Carbon	NA	NA	3110	1	NA	---	185	1	NA	---	185	1	NA	---	1505	1	NA	---	---	---	NA	---																
Total Organic Carbon	NA	NA	7190	1	NA	---	3065	1	NA	---	1280	1	NA	---	13600	1	NA	---	17150	1	NA	---																
<b>Sum of Narcotic ESBTUs:</b>			0.005				<b>Sum of Narcotic ESBTUs:</b>				0.772				<b>Sum of Narcotic ESBTUs:</b>				7.048				<b>Sum of Narcotic ESBTUs:</b>				0.059				<b>Sum of Narcotic ESBTUs:</b>				0.032			

**Table D3**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER2-14-SD 0.00-0.50 4/23/2010				DER2-14-SD 0.50-1.00 4/23/2010				DER2-15-SD 0.00-0.50 4/23/2010				DER2-15-SD 0.50-1.00 4/23/2010				DER2-16-SD 0.00-0.50 4/20/2010			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																			
1,1,1-Trichlorotrifluoroethane	1471.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	---	---	---	---	0.002	0	18.61	0.000	---	---	---	---	0.004	0	31.86	0.000	---	---	---	---
1,2-Dichloro-1,1,2-Trifluoroethane	922.7	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-Dichloroethene	77.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-Dichlorotetrafluoroethane	1184.2	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,2-Dichloro-1,1,1-Trifluoroethane	922.7	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Chloro-1,1,1-Trifluoroethane	726.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Isopropyltoluene	730.9	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Carbon Disulfide	30.2	Conventional	---	---	---	---	0.002	1	0.38	0.005	---	---	---	---	0.007	1	0.65	0.011	---	---	---	---
CFC-1113	1415.9	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chlorodifluoromethane	1324.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chlorofluoromethane	881.3	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
cis-1,2 Dichloroethene	77.5	Conventional	---	---	---	---	0.001	0	0.98	0.001	---	---	---	---	0.002	0	1.68	0.001	---	---	---	---
Dichlorofluoromethane	1065.9	Conventional	---	---	---	---	0.002	0	13.48	0.000	---	---	---	---	0.004	0	23.08	0.000	---	---	---	---
Trichlorofluoromethane	290.7	Conventional	---	---	---	---	0.002	0	3.68	0.001	---	---	---	---	0.004	0	6.29	0.001	---	---	---	---
Vinyl Chloride	76.3	Conventional	---	---	---	---	0.001	0	0.96	0.001	---	---	---	---	0.002	0	1.65	0.001	---	---	---	---
1,1-Dichloroethene	466.3	Narcosis	---	---	---	---	0.001	0	5.90	0.000	---	---	---	---	0.002	0	10.10	0.000	---	---	---	---
1,2,4-Trimethylbenzene	1148.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-Dichlorobenzene	785.8	Narcosis	0.61	1	9.23	0.066	---	---	---	---	0.31	1	11.83	0.026	---	---	---	---	0.22	1	15.95	0.014
1,3,5-Trimethylbenzene	1152.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,3-Dichlorobenzene	785.8	Narcosis	0.2	0	9.23	0.022	---	---	---	---	0.23	0	11.83	0.019	---	---	---	---	0.083	0	15.95	0.005
1,4-Dichlorobenzene	785.1	Narcosis	0.96	1	9.22	0.104	---	---	---	---	0.23	0	11.82	0.019	---	---	---	---	0.13	1	15.94	0.008
2-Chlorotoluene	1161.1	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acetone	3120.9	Narcosis	---	---	---	---	0.007	0	39.48	0.000	---	---	---	---	0.078	1	67.57	0.001	---	---	---	---
Benzene	653.6	Narcosis	---	---	---	---	0.006	1	8.27	0.000	---	---	---	---	0.002	1	14.15	0.000	---	---	---	---
Chlorobenzene	572.4	Narcosis	---	---	---	---	0.006	1	7.24	0.001	---	---	---	---	0.33	1	12.39	0.027	---	---	---	---
Chloroform	558.7	Narcosis	---	---	---	---	0.001	0	7.07	0.000	---	---	---	---	0.002	0	12.10	0.000	---	---	---	---
Cumene	1132.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Ethylbenzene	970.4	Narcosis	---	---	---	---	0.001	0	12.28	0.000	---	---	---	---	0.002	1	21.01	0.000	---	---	---	---
Meta- And Para-Xylene	975.5	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Methyl Ethyl Ketone	293.5	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Methylene Chloride	372.9	Narcosis	---	---	---	---	0.002	0	4.72	0.000	---	---	---	---	0.004	0	8.07	0.000	---	---	---	---
Ortho-Xylene	966.2	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tetrachloroethene	829.4	Narcosis	---	---	---	---	0.001	0	10.49	0.000	---	---	---	---	0.002	0	17.96	0.000	---	---	---	---
Toluene	813.9	Narcosis	---	---	---	---	0.001	0	10.30	0.000	---	---	---	---	0.006	1	17.62	0.000	---	---	---	---
Trichloroethene	659.4	Narcosis	---	---	---	---	0.001	0	8.34	0.000	---	---	---	---	0.002	0	14.28	0.000	---	---	---	---
Xylenes	969.6	Narcosis	---	---	---	---	0.001	0	12.27	0.000	---	---	---	---	0.014	1	20.99	0.001	---	---	---	---
<b>Semi-Volatile Organic Compounds</b>																						
2-Chlorophenol	100.9	Conventional	0.2	0	1.19	0.169	---	---	---	---	0.23	0	1.52	0.151	---	---	---	---	0.083	0	2.05	0.041
4-Chloroaniline	260.6	Conventional	0.4	0	3.06	0.131	---	---	---	---	0.46	0	3.92	0.117	---	---	---	---	0.17	0	5.29	0.032
4-Methylphenol (P-Cresol)	28.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.4	0	623.46	0.001	---	---	---	---	0.46	0	798.56	0.001	---	---	---	---	0.17	0	1077.13	0.000
Butyl Benzyl Phthalate	1088.3	Conventional	0.4	0	12.79	0.031	---	---	---	---	0.46	0	16.38	0.028	---	---	---	---	0.17	0	22.09	0.008
Carbazole	6.9	Conventional	0.2	0	0.08	2.481	---	---	---	---	0.23	0	0.10	2.227	---	---	---	---	0.083	0	0.14	0.596
Diethyl Phthalate	77.5	Conventional	0.4	0	0.91	0.439	---	---	---	---	0.46	0	1.17	0.395	---	---	---	---	0.17	0	1.57	0.108
Di-N-Butyl Phthalate	1191.2	Conventional	0.4	0	14.00	0.029	---	---	---	---	0.46	0	17.93	0.026	---	---	---	---	0.17	0	24.18	0.007
Nitrobenzene	156.5	Conventional	0.2	0	1.84	0.109	---	---	---	---	0.23	0	2.36	0.098	---	---	---	---	0.083	0	3.18	0.026
Phenol	5.5	Conventional	0.2	0	0.06	3.098	---	---	---	---	0.23	0	0.08	2.782	---	---	---	---	0.083	0	0.11	0.744
2-Methylnaphthalene	446.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acetophenone	965.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Biphenyl	1507.8	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dibenzofuran	1616.0	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Diphenyl Ether	1731.0	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorobenzene	3302.4	Narcosis	0.2	0	38.80	0.005	---	---	---	---	0.23	0	49.70	0.005	---	---	---	---	0.083	0	67.04	0.001
<b>Sediment Organic Carbon</b>																						
Black Carbon	NA	NA	2180	1	NA	---	---	---	NA	---	2340	1	NA	---	---	---	NA	---	2005	1	NA	---
Total Organic Carbon	NA	NA	11750	1	NA	---	---	---	NA	---	15050	1	NA	---	---	---	NA	---	20300	1	NA	---
<b>Sum of Narcotic ESBTUs:</b>							<b>0.197</b>								<b>0.070</b>				<b>0.030</b>			<b>0.028</b>

**Table D3**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER2-16-SD 0.50-1.00 4/20/2010				DER2-17-SD 0.00-0.50 4/27/2010				DER2-17-SD 0.50-1.00 4/27/2010				DER2-18-SD 0.00-0.50 4/27/2010				DER2-18-SD 0.50-1.00 4/27/2010															
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU												
			<b>Volatile Organic Compounds</b>																															
1,1,1-Trichlorotrifluoroethane	1471.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---													
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	0.006	0	32.96	0.000	---	---	---	---	22	1	52.24	0.421	---	---	---	---	---	24	1	21.70	1.106											
1,2-Dichloro-1,1,2-Trifluoroethane	922.7	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
1,2-Dichloroethene	77.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
1,2-Dichlorotetrafluoroethane	1184.2	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
2,2-Dichloro-1,1,1-Trifluoroethane	922.7	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
2-Chloro-1,1,1-Trifluoroethane	726.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
4-Isopropyltoluene	730.9	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
Carbon Disulfide	30.2	Conventional	0.007	1	0.68	0.010	---	---	---	---	0.065	0	1.07	0.061	---	---	---	---	---	0.11	0	0.44	0.247											
CFC-1113	1415.9	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
Chlorodifluoromethane	1324.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
Chlorofluoromethane	881.3	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
cis-1,2 Dichloroethene	77.5	Conventional	0.003	0	1.74	0.002	---	---	---	---	0.065	0	2.75	0.024	---	---	---	---	---	3.7	1	1.14	3.238											
Dichlorofluoromethane	1065.9	Conventional	0.006	0	23.88	0.000	---	---	---	---	2.1	1	37.84	0.055	---	---	---	---	---	0.5	1	15.72	0.032											
Trichlorofluoromethane	290.7	Conventional	0.006	0	6.51	0.001	---	---	---	---	18	1	10.32	1.744	---	---	---	---	---	0.68	1	4.29	0.159											
Vinyl Chloride	76.3	Conventional	0.003	0	1.71	0.002	---	---	---	---	0.065	0	2.71	0.024	---	---	---	---	---	0.72	1	1.12	0.640											
1,1-Dichloroethene	466.3	Narcosis	0.003	0	10.45	0.000	---	---	---	---	0.067	1	16.55	0.004	---	---	---	---	---	0.11	0	6.88	0.016											
1,2,4-Trimethylbenzene	1148.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---											
1,2-Dichlorobenzene	785.8	Narcosis	---	---	---	---	3.2	1	9.98	0.321	---	---	---	---	7.4	1	17.13	0.432	---	---	---	---	---											
1,3,5-Trimethylbenzene	1152.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---											
1,3-Dichlorobenzene	785.8	Narcosis	---	---	---	---	0.16	1	9.98	0.016	---	---	---	---	0.21	1	17.13	0.012	---	---	---	---	---											
1,4-Dichlorobenzene	785.1	Narcosis	---	---	---	---	4.8	1	9.97	0.481	---	---	---	---	2	1	17.11	0.117	---	---	---	---	---											
2-Chlorotoluene	1161.1	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---											
Acetone	3120.9	Narcosis	0.12	1	69.91	0.002	---	---	---	---	0.45	0	110.79	0.004	---	---	---	---	---	0.79	0	46.03	0.017											
Benzene	653.6	Narcosis	0.002	0	14.64	0.000	---	---	---	---	2.6	1	23.20	0.112	---	---	---	---	---	0.057	0	9.64	0.006											
Chlorobenzene	572.4	Narcosis	0.21	1	12.82	0.016	---	---	---	---	58	1	20.32	2.854	---	---	---	---	---	0.91	1	8.44	0.108											
Chloroform	558.7	Narcosis	0.003	0	12.51	0.000	---	---	---	---	0.25	1	19.83	0.013	---	---	---	---	---	0.11	0	8.24	0.013											
Cumene	1132.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---											
Ethylbenzene	970.4	Narcosis	0.003	0	21.74	0.000	---	---	---	---	0.17	1	34.45	0.005	---	---	---	---	---	0.11	0	14.31	0.008											
Meta- And Para-Xylene	975.5	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---											
Methyl Ethyl Ketone	293.5	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---											
Methylene Chloride	372.9	Narcosis	0.006	0	8.35	0.001	---	---	---	---	0.56	1	13.24	0.042	---	---	---	---	---	0.23	0	5.50	0.042											
Ortho-Xylene	966.2	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---											
Tetrachloroethene	829.4	Narcosis	0.003	0	18.58	0.000	---	---	---	---	2.2	1	29.44	0.075	---	---	---	---	---	1.1	1	12.23	0.090											
Toluene	813.9	Narcosis	0.004	1	18.23	0.000	---	---	---	---	0.19	1	28.89	0.007	---	---	---	---	---	1.3	1	12.01	0.108											
Trichloroethene	659.4	Narcosis	0.003	0	14.77	0.000	---	---	---	---	0.065	0	23.41	0.003	---	---	---	---	---	1.5	1	9.73	0.154											
Xylenes	969.6	Narcosis	0.007	1	21.72	0.000	---	---	---	---	0.95	1	34.42	0.028	---	---	---	---	---	0.19	1	14.30	0.013											
<b>Semi-Volatile Organic Compounds</b>																																		
2-Chlorophenol	100.9	Conventional	---	---	---	---	0.13	0	1.28	0.101	---	---	---	---	0.17	0	2.20	0.077	---	---	---	---	---											
4-Chloroaniline	260.6	Conventional	---	---	---	---	0.25	0	3.31	0.076	---	---	---	---	2.1	1	5.68	0.370	---	---	---	---	---											
4-Methylphenol (P-Cresol)	28.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---											
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	---	---	---	---	0.25	0	673.87	0.000	---	---	---	---	1.2	1	1156.72	0.001	---	---	---	---	---											
Butyl Benzyl Phthalate	1088.3	Conventional	---	---	---	---	0.25	0	13.82	0.018	---	---	---	---	2.8	1	23.73	0.118	---	---	---	---	---											
Carbazole	6.9	Conventional	---	---	---	---	0.13	0	0.09	1.492	---	---	---	---	0.17	0	0.15	1.137	---	---	---	---	---											
Diethyl Phthalate	77.5	Conventional	---	---	---	---	0.41	1	0.98	0.417	---	---	---	---	0.36	1	1.69	0.213	---	---	---	---	---											
Di-N-Butyl Phthalate	1191.2	Conventional	---	---	---	---	0.25	0	15.13	0.017	---	---	---	---	0.33	0	25.97	0.013	---	---	---	---	---											
Nitrobenzene	156.5	Conventional	---	---	---	---	0.13	0	1.99	0.065	---	---	---	---	0.17	0	3.41	0.050	---	---	---	---	---											
Phenol	5.5	Conventional	---	---	---	---	0.13	0	0.07	1.863	---	---	---	---	0.17	0	0.12	1.419	---	---	---	---	---											
2-Methylnaphthalene	446.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---											
Acetophenone	965.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---											
Biphenyl	1507.8	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---											
Dibenzofuran	1616.0	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---											
Diphenyl Ether	1731.0	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---											
Hexachlorobenzene	3302.4	Narcosis	---	---	---	---	0.13	0	41.94	0.003	---	---	---	---	0.17	0	71.99	0.002	---	---	---	---	---											
<b>Sediment Organic Carbon</b>																																		
Black Carbon	NA	NA	---	---	NA	---	1990	1	NA	---	---	---	NA	---	9000	1	NA	---	---	---	NA	---	---											
Total Organic Carbon	NA	NA	22400	1	NA	---	12700	1	NA	---	35500	1	NA	---	21800	1	NA	---	---	14750	1	NA	---											
<b>Sum of Narcotic ESBTUs:</b>						0.021	<b>Sum of Narcotic ESBTUs:</b>						0.821	<b>Sum of Narcotic ESBTUs:</b>						3.146	<b>Sum of Narcotic ESBTUs:</b>						0.563	<b>Sum of Narcotic ESBTUs:</b>						0.575

**Table D3**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER2-19-SD 0.00-0.50 4/27/2010				DER2-19-SD 0.50-1.00 4/27/2010				DER2-20-SD 0.00-0.50 5/4/2010				DER2-20-SD 0.50-1.00 5/4/2010				DER3-08 0.00-0.50 11/16/2010															
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU												
			<b>Volatile Organic Compounds</b>																															
1,1,1-Trichlorotrifluoroethane	1471.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---													
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	---	---	---	---	0.006	0	40.61	0.000	---	---	---	---	0.003	0	65.26	0.000	0.007	0	27.08	0.000												
1,2-Dichloro-1,1,2-Trifluoroethane	922.7	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
1,2-Dichloroethene	77.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
1,2-Dichlorotetrafluoroethane	1184.2	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
2,2-Dichloro-1,1,1-Trifluoroethane	922.7	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
2-Chloro-1,1,1-Trifluoroethane	726.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
4-Isopropyltoluene	730.9	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
Carbon Disulfide	30.2	Conventional	---	---	---	---	0.003	0	0.83	0.004	---	---	---	---	0.001	0	1.34	0.001	0.008	1	0.56	0.014												
CFC-1113	1415.9	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
Chlorodifluoromethane	1324.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
Chlorofluoromethane	881.3	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
cis-1,2 Dichloroethene	77.5	Conventional	---	---	---	---	0.003	0	2.14	0.001	---	---	---	---	0.001	0	3.44	0.000	0.004	0	1.43	0.003												
Dichlorofluoromethane	1065.9	Conventional	---	---	---	---	0.006	0	29.42	0.000	---	---	---	---	0.003	0	47.27	0.000	0.007	0	19.61	0.000												
Trichlorofluoromethane	290.7	Conventional	---	---	---	---	0.006	0	8.02	0.001	---	---	---	---	0.003	0	12.89	0.000	0.007	0	5.35	0.001												
Vinyl Chloride	76.3	Conventional	---	---	---	---	0.003	0	2.10	0.001	---	---	---	---	0.001	0	3.38	0.000	0.004	0	1.40	0.003												
1,1-Dichloroethene	466.3	Narcosis	---	---	---	---	0.003	0	12.87	0.000	---	---	---	---	0.001	0	20.68	0.000	0.004	0	8.58	0.000												
1,2,4-Trimethylbenzene	1148.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
1,2-Dichlorobenzene	785.8	Narcosis	2.8	1	25.03	0.112	---	---	---	---	3.9	1	10.57	0.369	---	---	---	---	0.46	1	14.46	0.032												
1,3,5-Trimethylbenzene	1152.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
1,3-Dichlorobenzene	785.8	Narcosis	0.36	1	25.03	0.014	---	---	---	---	0.43	1	10.57	0.041	---	---	---	---	0.09	1	14.46	0.006												
1,4-Dichlorobenzene	785.1	Narcosis	2.1	1	25.00	0.084	---	---	---	---	1.5	1	10.56	0.142	---	---	---	---	0.31	1	14.45	0.021												
2-Chlorotoluene	1161.1	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
Acetone	3120.9	Narcosis	---	---	---	---	0.05	1	86.14	0.001	---	---	---	---	0.013	1	138.41	0.000	0.061	1	57.42	0.001												
Benzene	653.6	Narcosis	---	---	---	---	0.009	1	18.04	0.000	---	---	---	---	0.0007	0	28.99	0.000	0.002	0	12.03	0.000												
Chlorobenzene	572.4	Narcosis	---	---	---	---	0.032	1	15.80	0.002	---	---	---	---	0.009	1	25.39	0.000	0.005	1	10.53	0.000												
Chloroform	558.7	Narcosis	---	---	---	---	0.003	0	15.42	0.000	---	---	---	---	0.001	0	24.78	0.000	0.004	0	10.28	0.000												
Cumene	1132.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
Ethylbenzene	970.4	Narcosis	---	---	---	---	0.003	0	26.78	0.000	---	---	---	---	0.001	0	43.04	0.000	0.004	0	17.86	0.000												
Meta- And Para-Xylene	975.5	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
Methyl Ethyl Ketone	293.5	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
Methylene Chloride	372.9	Narcosis	---	---	---	---	0.006	0	10.29	0.001	---	---	---	---	0.003	0	16.54	0.000	0.007	0	6.86	0.001												
Ortho-Xylene	966.2	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
Tetrachloroethene	829.4	Narcosis	---	---	---	---	0.003	1	22.89	0.000	---	---	---	---	0.001	0	36.78	0.000	0.004	0	15.26	0.000												
Toluene	813.9	Narcosis	---	---	---	---	0.014	1	22.46	0.001	---	---	---	---	0.001	0	36.10	0.000	0.004	0	14.98	0.000												
Trichloroethene	659.4	Narcosis	---	---	---	---	0.003	0	18.20	0.000	---	---	---	---	0.001	0	29.25	0.000	0.004	0	12.13	0.000												
Xylenes	969.6	Narcosis	---	---	---	---	0.022	1	26.76	0.001	---	---	---	---	0.001	0	43.00	0.000	0.004	0	17.84	0.000												
<b>Semi-Volatile Organic Compounds</b>																																		
2-Chlorophenol	100.9	Conventional	0.16	0	3.21	0.050	---	---	---	---	0.063	0	1.36	0.046	---	---	---	---	0.083	0	1.86	0.045												
4-Chloroaniline	260.6	Conventional	0.31	0	8.30	0.037	---	---	---	---	2.3	1	3.51	0.656	---	---	---	---	0.17	0	4.80	0.035												
4-Methylphenol (P-Cresol)	28.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.37	1	1689.98	0.000	---	---	---	---	0.35	1	713.66	0.000	---	---	---	---	0.17	0	976.31	0.000												
Butyl Benzyl Phthalate	1088.3	Conventional	0.31	0	34.66	0.009	---	---	---	---	0.13	0	14.64	0.009	---	---	---	---	0.17	0	20.02	0.008												
Carbazole	6.9	Conventional	0.16	0	0.22	0.732	---	---	---	---	0.35	1	0.09	3.793	---	---	---	---	0.083	0	0.13	0.657												
Diethyl Phthalate	77.5	Conventional	1.5	1	2.47	0.608	---	---	---	---	0.13	0	1.04	0.125	---	---	---	---	0.17	0	1.43	0.119												
Di-N-Butyl Phthalate	1191.2	Conventional	0.43	1	37.94	0.011	---	---	---	---	0.19	1	16.02	0.012	---	---	---	---	0.17	0	21.92	0.008												
Nitrobenzene	156.5	Conventional	0.16	0	4.98	0.032	---	---	---	---	0.34	1	2.10	0.162	---	---	---	---	2.2	1	2.88	0.764												
Phenol	5.5	Conventional	0.16	0	0.17	0.914	---	---	---	---	0.14	1	0.07	1.895	---	---	---	---	0.11	1	0.10	1.088												
2-Methylnaphthalene	446.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
Acetophenone	965.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
Biphenyl	1507.8	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
Dibenzofuran	1616.0	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
Diphenyl Ether	1731.0	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---												
Hexachlorobenzene	3302.4	Narcosis	0.16	0	105.18	0.002	---	---	---	---	0.063	0	44.42	0.001	---	---	---	---	0.083	0	60.76	0.001												
<b>Sediment Organic Carbon</b>																																		
Black Carbon	NA	NA	8070	1	NA	---	---	---	NA	---	3585	1	NA	---	---	---	NA	---	4600	1	NA	---												
Total Organic Carbon	NA	NA	31850	1	NA	---	---	---	NA	---	13450	1	NA	---	---	---	NA	---	18400	1	NA	---												
<b>Sum of Narcotic ESBTUs:</b>						0.212	<b>Sum of Narcotic ESBTUs:</b>						0.006	<b>Sum of Narcotic ESBTUs:</b>						0.553	<b>Sum of Narcotic ESBTUs:</b>						0.001	<b>Sum of Narcotic ESBTUs:</b>						0.066

**Table D3**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER3-08 0.50-1.00 11/16/2010				DER3-09 0.00-0.50 11/16/2010				DER3-09 0.50-1.00 11/16/2010				DER3-10 0.00-0.50 11/18/2010				DER3-10 0.50-1.00 11/18/2010																			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU																
			<b>Volatile Organic Compounds</b>																																			
1,1,1-Trichlorotrifluoroethane	1471.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	0.008	0	27.08	0.000	0.005	0	12.99	0.000	0.003	0	12.99	0.000	0.003	0	16.26	0.000	0.002	0	16.26	0.000																
1,2-Dichloro-1,1,2-Trifluoroethane	922.7	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
1,2-Dichloroethene	77.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
1,2-Dichlorotetrafluoroethane	1184.2	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
2,2-Dichloro-1,1,1-Trifluoroethane	922.7	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
2-Chloro-1,1,1-Trifluoroethane	726.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
4-Isopropyltoluene	730.9	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
Carbon Disulfide	30.2	Conventional	0.007	1	0.56	0.013	0.009	1	0.27	0.034	0.004	1	0.27	0.015	0.011	1	0.33	0.033	0.001	0	0.33	0.003																
CFC-1113	1415.9	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
Chlorodifluoromethane	1324.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
Chlorofluoromethane	881.3	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
cis-1,2 Dichloroethene	77.5	Conventional	0.004	0	1.43	0.003	0.002	0	0.68	0.003	0.001	0	0.68	0.001	0.001	0	0.86	0.001	0.001	0	0.86	0.001																
Dichlorofluoromethane	1065.9	Conventional	0.008	0	19.61	0.000	0.005	0	9.41	0.001	0.003	0	9.41	0.000	0.003	0	11.78	0.000	0.002	0	11.78	0.000																
Trichlorofluoromethane	290.7	Conventional	0.008	0	5.35	0.001	0.005	0	2.57	0.002	0.003	0	2.57	0.001	0.003	0	3.21	0.001	0.002	0	3.21	0.001																
Vinyl Chloride	76.3	Conventional	0.004	0	1.40	0.003	0.002	0	0.67	0.003	0.001	0	0.67	0.001	0.001	0	0.84	0.001	0.001	0	0.84	0.001																
1,1-Dichloroethene	466.3	Narcosis	0.004	0	8.58	0.000	0.002	0	4.12	0.000	0.001	0	4.12	0.000	0.001	0	5.15	0.000	0.001	0	5.15	0.000																
1,2,4-Trimethylbenzene	1148.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
1,2-Dichlorobenzene	785.8	Narcosis	---	---	---	---	0.38	1	6.94	0.055	---	---	---	---	1.6	1	8.68	0.184	---	---	---																	
1,3,5-Trimethylbenzene	1152.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
1,3-Dichlorobenzene	785.8	Narcosis	---	---	---	---	0.056	0	6.94	0.008	---	---	---	---	0.15	0	8.68	0.017	---	---	---																	
1,4-Dichlorobenzene	785.1	Narcosis	---	---	---	---	0.066	1	6.93	0.010	---	---	---	---	0.15	0	8.68	0.017	---	---	---																	
2-Chlorotoluene	1161.1	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
Acetone	3120.9	Narcosis	0.13	1	57.42	0.002	0.028	1	27.56	0.001	0.017	1	27.56	0.001	0.034	1	34.49	0.001	0.01	1	34.49	0.000																
Benzene	653.6	Narcosis	0.002	0	12.03	0.000	0.001	0	5.77	0.000	0.0007	0	5.77	0.000	0.0007	0	7.22	0.000	0.0006	0	7.22	0.000																
Chlorobenzene	572.4	Narcosis	0.006	1	10.53	0.001	0.002	0	5.05	0.000	0.001	0	5.05	0.000	0.001	0	6.33	0.000	0.001	0	6.33	0.000																
Chloroform	558.7	Narcosis	0.004	0	10.28	0.000	0.002	0	4.93	0.000	0.001	0	4.93	0.000	0.001	0	6.17	0.000	0.001	0	6.17	0.000																
Cumene	1132.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
Ethylbenzene	970.4	Narcosis	0.004	0	17.86	0.000	0.002	0	8.57	0.000	0.001	0	8.57	0.000	0.001	0	10.72	0.000	0.001	0	10.72	0.000																
Meta- And Para-Xylene	975.5	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
Methyl Ethyl Ketone	293.5	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
Methylene Chloride	372.9	Narcosis	0.008	0	6.86	0.001	0.005	0	3.29	0.002	0.003	0	3.29	0.001	0.003	0	4.12	0.001	0.002	0	4.12	0.000																
Ortho-Xylene	966.2	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
Tetrachloroethene	829.4	Narcosis	0.004	0	15.26	0.000	0.002	0	7.32	0.000	0.001	0	7.32	0.000	0.001	0	9.16	0.000	0.001	0	9.16	0.000																
Toluene	813.9	Narcosis	0.004	0	14.98	0.000	0.002	0	7.19	0.000	0.001	0	7.19	0.000	0.001	0	8.99	0.000	0.001	0	8.99	0.000																
Trichloroethene	659.4	Narcosis	0.004	0	12.13	0.000	0.002	0	5.82	0.000	0.001	0	5.82	0.000	0.001	0	7.29	0.000	0.001	0	7.29	0.000																
Xylenes	969.6	Narcosis	0.005	1	17.84	0.000	0.002	0	8.56	0.000	0.001	0	8.56	0.000	0.001	0	10.71	0.000	0.001	0	10.71	0.000																
<b>Semi-Volatile Organic Compounds</b>																																						
2-Chlorophenol	100.9	Conventional	---	---	---	---	0.056	0	0.89	0.063	---	---	---	---	0.15	0	1.11	0.135	---	---	---																	
4-Chloroaniline	260.6	Conventional	---	---	---	---	0.11	0	2.30	0.048	---	---	---	---	0.31	0	2.88	0.108	---	---	---																	
4-Methylphenol (P-Cresol)	28.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	---	---	---	---	0.11	0	468.52	0.000	---	---	---	---	0.31	0	586.32	0.001	---	---	---																	
Butyl Benzyl Phthalate	1088.3	Conventional	---	---	---	---	0.11	0	9.61	0.011	---	---	---	---	0.31	0	12.03	0.026	---	---	---																	
Carbazole	6.9	Conventional	---	---	---	---	0.056	0	0.06	0.924	---	---	---	---	0.15	0	0.08	1.978	---	---	---																	
Diethyl Phthalate	77.5	Conventional	---	---	---	---	0.11	0	0.68	0.161	---	---	---	---	0.31	0	0.86	0.362	---	---	---																	
Di-N-Butyl Phthalate	1191.2	Conventional	---	---	---	---	0.11	0	10.52	0.010	---	---	---	---	0.31	0	13.16	0.024	---	---	---																	
Nitrobenzene	156.5	Conventional	---	---	---	---	0.68	1	1.38	0.492	---	---	---	---	0.56	1	1.73	0.324	---	---	---																	
Phenol	5.5	Conventional	---	---	---	---	0.056	0	0.05	1.154	---	---	---	---	0.15	0	0.06	2.471	---	---	---																	
2-Methylnaphthalene	446.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
Acetophenone	965.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
Biphenyl	1507.8	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
Dibenzofuran	1616.0	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
Diphenyl Ether	1731.0	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
Hexachlorobenzene	3302.4	Narcosis	---	---	---	---	0.056	0	29.16	0.002	---	---	---	---	0.15	0	36.49	0.004	---	---	---																	
<b>Sediment Organic Carbon</b>																																						
Black Carbon	NA	NA	---	---	NA	---	5220	1	NA	---	---	---	NA	---	2170	1	NA	---	---	---	NA	---																
Total Organic Carbon	NA	NA	18400	---	NA	---	8830	1	NA	---	8830	---	NA	---	11050	1	NA	---	11050	---	NA	---																
<b>Sum of Narcotic ESBTUs:</b>			0.006				<b>Sum of Narcotic ESBTUs:</b>				0.080				<b>Sum of Narcotic ESBTUs:</b>				0.003				<b>Sum of Narcotic ESBTUs:</b>				0.226				<b>Sum of Narcotic ESBTUs:</b>				0.002			

**Table D3**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER3-11 0.00-0.50 11/18/2010				DER3-11 0.50-1.00 11/18/2010				DER3-12 0.00-0.50 11/18/2010				DER3-12 0.50-1.00 11/18/2010				DER3-21 0.00-0.50 11/18/2010			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																			
1,1,1-Trichlorotrifluoroethane	1471.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	0.004	0	19.28	0.000	0.098	0	19.28	0.005	0.005	0	12.39	0.000	0.005	0	12.39	0.000	0.004	0	14.46	0.000
1,2-Dichloro-1,1,2-Trifluoroethane	922.7	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-Dichloroethene	77.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-Dichlorotetrafluoroethane	1184.2	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,2-Dichloro-1,1,1-Trifluoroethane	922.7	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Chloro-1,1,1-Trifluoroethane	726.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Isopropyltoluene	730.9	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Carbon Disulfide	30.2	Conventional	0.003	1	0.40	0.008	0.049	0	0.40	0.124	0.004	1	0.25	0.016	0.011	1	0.25	0.043	0.01	1	0.30	0.034
CFC-1113	1415.9	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chlorodifluoromethane	1324.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chlorofluoromethane	881.3	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
cis-1,2 Dichloroethene	77.5	Conventional	0.002	0	1.01	0.002	0.049	0	1.01	0.048	0.002	0	0.65	0.003	0.002	0	0.65	0.003	0.002	0	0.76	0.003
Dichlorofluoromethane	1065.9	Conventional	0.004	0	13.96	0.000	0.098	0	13.96	0.007	0.005	0	8.97	0.001	0.005	0	8.97	0.001	0.004	0	10.48	0.000
Trichlorofluoromethane	290.7	Conventional	0.004	0	3.81	0.001	0.098	0	3.81	0.026	0.005	0	2.45	0.002	0.005	0	2.45	0.002	0.004	0	2.86	0.001
Vinyl Chloride	76.3	Conventional	0.002	0	1.00	0.002	0.049	0	1.00	0.049	0.002	0	0.64	0.003	0.002	0	0.64	0.003	0.002	0	0.75	0.003
1,1-Dichloroethene	466.3	Narcosis	0.002	0	6.11	0.000	0.049	0	6.11	0.008	0.002	0	3.93	0.001	0.002	0	3.93	0.001	0.002	0	4.58	0.000
1,2,4-Trimethylbenzene	1148.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-Dichlorobenzene	785.8	Narcosis	0.77	1	10.29	0.075	---	---	---	---	0.38	1	6.62	0.057	---	---	---	---	---	---	---	---
1,3,5-Trimethylbenzene	1152.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,3-Dichlorobenzene	785.8	Narcosis	0.19	0	10.29	0.018	---	---	---	---	0.18	0	6.62	0.027	---	---	---	---	---	---	---	---
1,4-Dichlorobenzene	785.1	Narcosis	0.45	1	10.28	0.044	---	---	---	---	0.37	1	6.61	0.056	---	---	---	---	---	---	---	---
2-Chlorotoluene	1161.1	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acetone	3120.9	Narcosis	0.04	1	40.88	0.001	0.34	0	40.88	0.008	0.056	1	26.28	0.002	0.042	1	26.28	0.002	0.067	1	30.68	0.002
Benzene	653.6	Narcosis	0.001	0	8.56	0.000	0.025	0	8.56	0.003	0.001	0	5.50	0.000	0.001	0	5.50	0.000	0.001	0	6.42	0.000
Chlorobenzene	572.4	Narcosis	0.003	1	7.50	0.000	4.1	1	7.50	0.547	0.006	1	4.82	0.001	0.018	1	4.82	0.004	0.008	1	5.63	0.001
Chloroform	558.7	Narcosis	0.002	0	7.32	0.000	0.049	0	7.32	0.007	0.002	0	4.70	0.000	0.002	0	4.70	0.000	0.002	0	5.49	0.000
Cumene	1132.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Ethylbenzene	970.4	Narcosis	0.002	0	12.71	0.000	0.049	0	12.71	0.004	0.002	0	8.17	0.000	0.002	0	8.17	0.000	0.002	0	9.54	0.000
Meta- And Para-Xylene	975.5	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Methyl Ethyl Ketone	293.5	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Methylene Chloride	372.9	Narcosis	0.004	0	4.88	0.001	0.098	0	4.88	0.020	0.005	0	3.14	0.002	0.005	0	3.14	0.002	0.004	0	3.67	0.001
Ortho-Xylene	966.2	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tetrachloroethene	829.4	Narcosis	0.002	0	10.87	0.000	0.049	0	10.87	0.005	0.002	0	6.98	0.000	0.002	0	6.98	0.000	0.002	0	8.15	0.000
Toluene	813.9	Narcosis	0.002	0	10.66	0.000	0.055	1	10.66	0.005	0.002	0	6.85	0.000	0.002	0	6.85	0.000	0.002	0	8.00	0.000
Trichloroethene	659.4	Narcosis	0.002	0	8.64	0.000	0.049	0	8.64	0.006	0.002	0	5.55	0.000	0.002	0	5.55	0.000	0.002	0	6.48	0.000
Xylenes	969.6	Narcosis	0.002	0	12.70	0.000	0.095	1	12.70	0.007	0.002	0	8.16	0.000	0.003	1	8.16	0.000	0.002	0	9.53	0.000
<b>Semi-Volatile Organic Compounds</b>																						
2-Chlorophenol	100.9	Conventional	0.19	0	1.32	0.144	---	---	---	---	0.18	0	0.85	0.212	---	---	---	---	---	---	---	---
4-Chloroaniline	260.6	Conventional	0.39	0	3.41	0.114	---	---	---	---	0.37	0	2.19	0.169	---	---	---	---	---	---	---	---
4-Methylphenol (P-Cresol)	28.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.39	0	695.09	0.001	---	---	---	---	0.37	0	446.77	0.001	---	---	---	---	---	---	---	---
Butyl Benzyl Phthalate	1088.3	Conventional	0.39	0	14.26	0.027	---	---	---	---	0.37	0	9.16	0.040	---	---	---	---	---	---	---	---
Carbazole	6.9	Conventional	0.19	0	0.09	2.114	---	---	---	---	0.18	0	0.06	3.116	---	---	---	---	---	---	---	---
Diethyl Phthalate	77.5	Conventional	0.39	0	1.01	0.384	---	---	---	---	0.37	0	0.65	0.567	---	---	---	---	---	---	---	---
Di-N-Butyl Phthalate	1191.2	Conventional	0.39	0	15.60	0.025	---	---	---	---	0.37	0	10.03	0.037	---	---	---	---	---	---	---	---
Nitrobenzene	156.5	Conventional	0.59	1	2.05	0.288	---	---	---	---	0.18	0	1.32	0.137	---	---	---	---	---	---	---	---
Phenol	5.5	Conventional	0.19	0	0.07	2.640	---	---	---	---	0.18	0	0.05	3.891	---	---	---	---	---	---	---	---
2-Methylnaphthalene	446.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acetophenone	965.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Biphenyl	1507.8	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dibenzofuran	1616.0	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Diphenyl Ether	1731.0	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorobenzene	3302.4	Narcosis	0.19	0	43.26	0.004	---	---	---	---	0.18	0	27.81	0.006	---	---	---	---	---	---	---	---
<b>Sediment Organic Carbon</b>																						
Black Carbon	NA	NA	2420	1	NA	---	---	---	NA	---	2920	1	NA	---	---	---	NA	---	---	---	NA	---
Total Organic Carbon	NA	NA	13100	1	NA	---	13100	---	NA	---	8420	1	NA	---	8420	---	NA	---	---	9830	1	NA
<b>Sum of Narcotic ESBTUs:</b>						0.145				0.619				0.155					0.010			0.007

**Table D3**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER3-22 0.00-0.50 11/18/2010				DER3-23 0.00-0.50 11/18/2010				DER3-24 0.00-0.50 11/18/2010				DER3-25 0.00-0.50 11/18/2010				DER3-26 0.00-0.50 11/18/2010			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																			
1,1,1-Trichlorotrifluoroethane	1471.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	0.88	1	3.41	0.258	0.007	0	34.43	0.000	1.1	1	30.75	0.036	0.008	0	34.73	0.000	0.018	1	50.33	0.000
1,2-Dichloro-1,1,2-Trifluoroethane	922.7	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-Dichloroethene	77.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-Dichlorotetrafluoroethane	1184.2	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,2-Dichloro-1,1,1-Trifluoroethane	922.7	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Chloro-1,1,1-Trifluoroethane	726.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Isopropyltoluene	730.9	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Carbon Disulfide	30.2	Conventional	0.007	1	0.07	0.100	0.007	1	0.71	0.010	0.054	1	0.63	0.086	0.005	1	0.71	0.007	0.005	1	1.03	0.005
CFC-1113	1415.9	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chlorodifluoromethane	1324.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chlorofluoromethane	881.3	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
cis-1,2 Dichloroethene	77.5	Conventional	0.002	1	0.18	0.011	0.003	0	1.81	0.002	0.016	1	1.62	0.010	0.004	0	1.83	0.002	0.002	0	2.65	0.001
Dichlorofluoromethane	1065.9	Conventional	0.005	1	2.47	0.002	0.007	0	24.94	0.000	4.5	1	22.28	0.202	0.029	1	25.16	0.001	0.029	1	36.45	0.001
Trichlorofluoromethane	290.7	Conventional	0.038	1	0.67	0.056	0.007	0	6.80	0.001	1	1	6.07	0.165	0.008	0	6.86	0.001	0.005	1	9.94	0.001
Vinyl Chloride	76.3	Conventional	0.002	0	0.18	0.011	0.003	0	1.78	0.002	0.003	0	1.59	0.002	0.004	0	1.80	0.002	0.002	0	2.61	0.001
1,1-Dichloroethene	466.3	Narcosis	0.003	1	1.08	0.003	0.003	0	10.91	0.000	0.01	1	9.75	0.001	0.004	0	11.00	0.000	0.002	0	15.95	0.000
1,2,4-Trimethylbenzene	1148.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-Dichlorobenzene	785.8	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,3,5-Trimethylbenzene	1152.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,3-Dichlorobenzene	785.8	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,4-Dichlorobenzene	785.1	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Chlorotoluene	1161.1	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acetone	3120.9	Narcosis	0.028	1	7.24	0.004	0.023	0	73.03	0.000	0.063	1	65.23	0.001	0.051	1	73.65	0.001	0.027	1	106.73	0.000
Benzene	653.6	Narcosis	0.006	1	1.52	0.004	0.002	0	15.29	0.000	4	1	13.66	0.293	0.007	1	15.42	0.000	0.008	1	22.35	0.000
Chlorobenzene	572.4	Narcosis	0.3	1	1.33	0.226	0.003	0	13.39	0.000	52	1	11.96	<b>4.347</b>	0.031	1	13.51	0.002	0.034	1	19.58	0.002
Chloroform	558.7	Narcosis	0.022	1	1.30	0.017	0.003	0	13.07	0.000	0.04	1	11.68	0.003	0.004	0	13.18	0.000	0.002	0	19.11	0.000
Cumene	1132.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Ethylbenzene	970.4	Narcosis	0.002	0	2.25	0.001	0.003	0	22.71	0.000	0.004	1	20.28	0.000	0.004	0	22.90	0.000	0.002	0	33.19	0.000
Meta- And Para-Xylene	975.5	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Methyl Ethyl Ketone	293.5	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Methylene Chloride	372.9	Narcosis	0.003	0	0.87	0.003	0.007	0	8.72	0.001	0.006	0	7.79	0.001	0.008	0	8.80	0.001	0.004	0	12.75	0.000
Ortho-Xylene	966.2	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tetrachloroethene	829.4	Narcosis	0.1	1	1.92	0.052	0.003	0	19.41	0.000	0.01	1	17.33	0.001	0.004	0	19.57	0.000	0.003	1	28.37	0.000
Toluene	813.9	Narcosis	0.004	1	1.89	0.002	0.003	0	19.05	0.000	0.031	1	17.01	0.002	0.023	1	19.21	0.001	0.005	1	27.84	0.000
Trichloroethene	659.4	Narcosis	0.01	1	1.53	0.007	0.003	0	15.43	0.000	0.01	1	13.78	0.001	0.004	0	15.56	0.000	0.002	0	22.55	0.000
Xylenes	969.6	Narcosis	0.002	1	2.25	0.001	0.003	0	22.69	0.000	0.013	1	20.26	0.001	0.015	1	22.88	0.001	0.002	1	33.16	0.000
<b>Semi-Volatile Organic Compounds</b>																						
2-Chlorophenol	100.9	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Chloroaniline	260.6	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Methylphenol (P-Cresol)	28.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Butyl Benzyl Phthalate	1088.3	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Carbazole	6.9	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Diethyl Phthalate	77.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Di-N-Butyl Phthalate	1191.2	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Nitrobenzene	156.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Phenol	5.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Methylnaphthalene	446.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acetophenone	965.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Biphenyl	1507.8	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dibenzofuran	1616.0	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Diphenyl Ether	1731.0	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorobenzene	3302.4	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<b>Sediment Organic Carbon</b>																						
Black Carbon	NA	NA	---	---	NA	---	---	---	NA	---	---	---	NA	---	---	---	NA	---	---	---	NA	---
Total Organic Carbon	NA	NA	2320	1	NA	---	23400	1	NA	---	20900	1	NA	---	23600	1	NA	---	34200	1	NA	---
<b>Sum of Narcotic ESBTUs:</b>						0.319				0.003				4.650				0.008				0.003

**Table D3**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	D15-BOR-01 0.00-0.50 3/28/2009				D15-BOR-01 0.50-1.00 3/27/2009				D15-BOR-02 0.00-0.50 3/28/2009				D15-BOR-02 0.50-1.00 3/27/2009				D15-BOR-03 0.00-0.50 3/28/2009			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																			
1,1,1-Trichlorotrifluoroethane	1471.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	---	---	---	---	0.002	0	34.43	0.000	---	---	---	---	0.02	1	30.75	0.001	---	---	---	---
1,2-Dichloro-1,1,2-Trifluoroethane	922.7	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-Dichloroethene	77.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-Dichlorotetrafluoroethane	1184.2	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,2-Dichloro-1,1,1-Trifluoroethane	922.7	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Chloro-1,1,1-Trifluoroethane	726.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Isopropyltoluene	730.9	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Carbon Disulfide	30.2	Conventional	---	---	---	---	0.001	0	0.71	0.001	---	---	---	---	0.005	1	0.63	0.008	---	---	---	---
CFC-1113	1415.9	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chlorodifluoromethane	1324.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chlorofluoromethane	881.3	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
cis-1,2 Dichloroethene	77.5	Conventional	---	---	---	---	0.001	0	1.81	0.001	---	---	---	---	0.001	0	1.62	0.001	---	---	---	---
Dichlorofluoromethane	1065.9	Conventional	---	---	---	---	0.002	0	24.94	0.000	---	---	---	---	0.002	0	22.28	0.000	---	---	---	---
Trichlorofluoromethane	290.7	Conventional	---	---	---	---	0.002	0	6.80	0.000	---	---	---	---	0.004	1	6.07	0.001	---	---	---	---
Vinyl Chloride	76.3	Conventional	---	---	---	---	0.001	0	1.78	0.001	---	---	---	---	0.001	0	1.59	0.001	---	---	---	---
1,1-Dichloroethene	466.3	Narcosis	---	---	---	---	0.001	0	10.91	0.000	---	---	---	---	0.001	0	9.75	0.000	---	---	---	---
1,2,4-Trimethylbenzene	1148.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-Dichlorobenzene	785.8	Narcosis	0.46	0	18.39	0.025	---	---	---	---	3.7	1	16.42	0.225	---	---	---	---	0.29	1	0.69	0.420
1,3,5-Trimethylbenzene	1152.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,3-Dichlorobenzene	785.8	Narcosis	0.46	0	18.39	0.025	---	---	---	---	0.38	1	16.42	0.023	---	---	---	---	0.24	0	0.69	0.347
1,4-Dichlorobenzene	785.1	Narcosis	0.46	0	18.37	0.025	---	---	---	---	6.5	1	16.41	0.396	---	---	---	---	0.44	1	0.69	0.638
2-Chlorotoluene	1161.1	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acetone	3120.9	Narcosis	---	---	---	---	0.034	1	73.03	0.000	---	---	---	---	0.038	1	65.23	0.001	---	---	---	---
Benzene	653.6	Narcosis	---	---	---	---	0.0005	0	15.29	0.000	---	---	---	---	0.004	1	13.66	0.000	---	---	---	---
Chlorobenzene	572.4	Narcosis	---	---	---	---	0.001	0	13.39	0.000	---	---	---	---	0.044	1	11.96	0.004	---	---	---	---
Chloroform	558.7	Narcosis	---	---	---	---	0.001	0	13.07	0.000	---	---	---	---	0.005	1	11.68	0.000	---	---	---	---
Cumene	1132.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Ethylbenzene	970.4	Narcosis	---	---	---	---	0.001	0	22.71	0.000	---	---	---	---	0.001	0	20.28	0.000	---	---	---	---
Meta- And Para-Xylene	975.5	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Methyl Ethyl Ketone	293.5	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Methylene Chloride	372.9	Narcosis	---	---	---	---	0.021	1	8.72	0.002	---	---	---	---	0.006	1	7.79	0.001	---	---	---	---
Ortho-Xylene	966.2	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tetrachloroethene	829.4	Narcosis	---	---	---	---	0.001	0	19.41	0.000	---	---	---	---	0.001	0	17.33	0.000	---	---	---	---
Toluene	813.9	Narcosis	---	---	---	---	0.001	0	19.05	0.000	---	---	---	---	0.003	1	17.01	0.000	---	---	---	---
Trichloroethene	659.4	Narcosis	---	---	---	---	0.001	0	15.43	0.000	---	---	---	---	0.001	0	13.78	0.000	---	---	---	---
Xylenes	969.6	Narcosis	---	---	---	---	0.001	0	22.69	0.000	---	---	---	---	0.001	1	20.26	0.000	---	---	---	---
<b>Semi-Volatile Organic Compounds</b>																						
2-Chlorophenol	100.9	Conventional	0.46	0	2.36	0.195	---	---	---	---	0.32	0	2.11	0.152	---	---	---	---	0.24	0	0.09	<b>2.707</b>
4-Chloroaniline	260.6	Conventional	0.93	0	6.10	0.152	---	---	---	---	0.64	0	5.45	0.117	---	---	---	---	0.47	0	0.23	<b>2.051</b>
4-Methylphenol (P-Cresol)	28.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.93	0	1241.62	0.001	---	---	---	---	0.64	0	1108.96	0.001	---	---	---	---	0.47	0	46.64	0.010
Butyl Benzyl Phthalate	1088.3	Conventional	0.93	0	25.47	0.037	---	---	---	---	0.64	0	22.75	0.028	---	---	---	---	0.47	0	0.96	0.491
Carbazole	6.9	Conventional	0.46	0	0.16	<b>2.865</b>	---	---	---	---	0.32	0	0.14	<b>2.231</b>	---	---	---	---	0.24	0	0.01	<b>39.794</b>
Diethyl Phthalate	77.5	Conventional	0.93	0	1.81	0.513	---	---	---	---	0.64	0	1.62	0.395	---	---	---	---	0.47	0	0.07	<b>6.902</b>
Di-N-Butyl Phthalate	1191.2	Conventional	0.93	0	27.87	0.033	---	---	---	---	0.64	0	24.90	0.026	---	---	---	---	0.47	0	1.05	0.449
Nitrobenzene	156.5	Conventional	0.46	0	3.66	0.126	---	---	---	---	0.32	0	3.27	0.098	---	---	---	---	0.24	0	0.14	<b>1.745</b>
Phenol	5.5	Conventional	0.46	0	0.13	<b>3.578</b>	---	---	---	---	0.32	0	0.11	<b>2.787</b>	---	---	---	---	0.24	0	0.00	<b>49.698</b>
2-Methylnaphthalene	446.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acetophenone	965.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Biphenyl	1507.8	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dibenzofuran	1616.0	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Diphenyl Ether	1731.0	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorobenzene	3302.4	Narcosis	0.46	0	77.28	0.006	---	---	---	---	0.32	0	69.02	0.005	---	---	---	---	0.24	0	2.90	0.083
<b>Sediment Organic Carbon</b>																						
Black Carbon	NA	NA	---	---	NA	---	---	---	NA	---	---	---	NA	---	---	---	NA	---	---	---	NA	---
Total Organic Carbon	NA	NA	23400	1	NA	---	23400	---	NA	---	20900	1	NA	---	20900	---	NA	---	879	1	NA	---
<b>Sum of Narcotic ESBTUs:</b>							<b>0.081</b>				<b>0.003</b>				<b>0.649</b>				<b>0.006</b>			<b>1.488</b>

**Table D3**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	D15-BOR-03 0.50-1.00 3/27/2009				D15-BOR-04 0.50-1.00 3/25/2009				D15-BOR-06 0.50-1.00 3/25/2009				D15-BOR-07 0.00-0.50 3/28/2009				D15-BOR-07 0.50-1.00 3/25/2009			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																			
1,1,1-Trichlorotrifluoroethane	1471.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	0.008	1	1.29	0.006	0.04	1	0.29	0.139	0.29	0	0.29	<b>1.000</b>	---	---	---	---	0.003	0	41.05	0.000
1,2-Dichloro-1,1,2-Trifluoroethane	922.7	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-Dichloroethene	77.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-Dichlorotetrafluoroethane	1184.2	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,2-Dichloro-1,1,1-Trifluoroethane	922.7	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Chloro-1,1,1-Trifluoroethane	726.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Isopropyltoluene	730.9	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Carbon Disulfide	30.2	Conventional	0.001	0	0.03	0.038	0.006	1	0.01	<b>1.015</b>	0.14	0	0.01	<b>23.557</b>	---	---	---	---	0.004	1	0.84	0.005
CFC-1113	1415.9	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chlorodifluoromethane	1324.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chlorofluoromethane	881.3	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
cis-1,2 Dichloroethene	77.5	Conventional	0.001	0	0.07	0.015	0.003	0	0.02	0.198	0.14	0	0.02	<b>9.174</b>	---	---	---	---	0.002	0	2.16	0.001
Dichlorofluoromethane	1065.9	Conventional	0.002	0	0.94	0.002	0.006	0	0.21	0.029	0.29	0	0.21	<b>1.381</b>	---	---	---	---	0.003	0	29.74	0.000
Trichlorofluoromethane	290.7	Conventional	0.002	0	0.26	0.008	0.006	0	0.06	0.105	0.29	0	0.06	<b>5.065</b>	---	---	---	---	0.003	0	8.11	0.000
Vinyl Chloride	76.3	Conventional	0.001	0	0.07	0.015	0.003	0	0.01	0.201	0.14	0	0.02	<b>9.318</b>	---	---	---	---	0.002	0	2.13	0.001
1,1-Dichloroethene	466.3	Narcosis	0.001	0	0.41	0.002	0.003	0	0.09	0.033	0.14	0	0.09	<b>1.524</b>	---	---	---	---	0.002	0	13.01	0.000
1,2,4-Trimethylbenzene	1148.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-Dichlorobenzene	785.8	Narcosis	---	---	---	---	1.8	1	0.15	<b>11.687</b>	2.1	1	0.15	<b>13.566</b>	0.52	0	21.92	0.024	0.12	1	21.92	0.005
1,3,5-Trimethylbenzene	1152.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,3-Dichlorobenzene	785.8	Narcosis	---	---	---	---	0.23	1	0.15	<b>1.493</b>	0.32	1	0.15	<b>2.067</b>	0.52	0	21.92	0.024	0.044	0	21.92	0.002
1,4-Dichlorobenzene	785.1	Narcosis	---	---	---	---	3.1	1	0.15	<b>20.146</b>	5.4	1	0.15	<b>34.915</b>	0.52	0	21.92	0.024	0.18	1	21.92	0.008
2-Chlorotoluene	1161.1	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acetone	3120.9	Narcosis	0.019	1	2.74	0.007	0.14	1	0.61	0.229	1	0	0.61	<b>1.627</b>	---	---	---	---	0.093	1	87.07	0.001
Benzene	653.6	Narcosis	0.0005	0	0.57	0.001	0.003	1	0.13	0.023	2	1	0.13	<b>15.534</b>	---	---	---	---	0.001	1	18.23	0.000
Chlorobenzene	572.4	Narcosis	0.001	1	0.50	0.002	0.31	1	0.11	<b>2.763</b>	110	1	0.11	<b>975.490</b>	---	---	---	---	0.078	1	15.97	0.005
Chloroform	558.7	Narcosis	0.001	0	0.49	0.002	0.003	0	0.11	0.027	0.14	0	0.11	<b>1.272</b>	---	---	---	---	0.002	0	15.59	0.000
Cumene	1132.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Ethylbenzene	970.4	Narcosis	0.001	0	0.85	0.001	0.006	1	0.19	0.032	0.79	1	0.19	<b>4.132</b>	---	---	---	---	0.002	0	27.07	0.000
Meta- And Para-Xylene	975.5	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Methyl Ethyl Ketone	293.5	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Methylene Chloride	372.9	Narcosis	0.004	1	0.33	0.012	0.006	0	0.07	0.082	0.29	0	0.07	<b>3.948</b>	---	---	---	---	0.006	1	10.40	0.001
Ortho-Xylene	966.2	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tetrachloroethene	829.4	Narcosis	0.001	0	0.73	0.001	0.017	1	0.16	0.105	0.14	0	0.16	0.857	---	---	---	---	0.002	0	23.14	0.000
Toluene	813.9	Narcosis	0.001	0	0.72	0.001	0.014	1	0.16	0.088	0.29	1	0.16	<b>1.809</b>	---	---	---	---	0.002	0	22.71	0.000
Trichloroethene	659.4	Narcosis	0.001	0	0.58	0.002	0.003	0	0.13	0.023	0.14	0	0.13	<b>1.078</b>	---	---	---	---	0.002	0	18.40	0.000
Xylenes	969.6	Narcosis	0.001	0	0.85	0.001	0.051	1	0.19	0.268	3.4	1	0.19	<b>17.800</b>	---	---	---	---	0.002	0	27.05	0.000
<b>Semi-Volatile Organic Compounds</b>																						
2-Chlorophenol	100.9	Conventional	---	---	---	---	0.066	0	0.02	<b>3.338</b>	0.073	1	0.02	<b>3.673</b>	0.52	0	2.81	0.185	0.044	0	2.81	0.016
4-Chloroaniline	260.6	Conventional	---	---	---	---	0.62	1	0.05	<b>12.136</b>	0.13	0	0.05	<b>2.532</b>	1	0	7.27	0.138	0.35	1	7.27	0.048
4-Methylphenol (P-Cresol)	28.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	---	---	---	---	0.5	1	10.40	0.048	0.14	1	10.45	0.013	1	0	1480.39	0.001	0.27	1	1480.39	0.000
Butyl Benzyl Phthalate	1088.3	Conventional	---	---	---	---	0.14	1	0.21	0.656	0.13	0	0.21	0.606	1	0	30.36	0.033	0.12	1	30.36	0.004
Carbazole	6.9	Conventional	---	---	---	---	0.066	0	0.00	<b>49.077</b>	0.065	0	0.00	<b>48.088</b>	0.52	0	0.19	<b>2.716</b>	0.044	0	0.19	0.230
Diethyl Phthalate	77.5	Conventional	---	---	---	---	0.13	0	0.02	<b>8.561</b>	0.13	0	0.02	<b>8.518</b>	1	0	2.16	0.463	0.088	0	2.16	0.041
Di-N-Butyl Phthalate	1191.2	Conventional	---	---	---	---	0.13	0	0.23	0.557	0.13	0	0.23	0.554	1	0	33.23	0.030	0.088	0	33.23	0.003
Nitrobenzene	156.5	Conventional	---	---	---	---	0.066	0	0.03	<b>2.152</b>	0.065	0	0.03	<b>2.108</b>	0.52	0	4.37	0.119	0.044	0	4.37	0.010
Phenol	5.5	Conventional	---	---	---	---	0.066	0	0.00	<b>61.292</b>	0.065	0	0.00	<b>60.057</b>	0.52	0	0.15	<b>3.392</b>	0.044	0	0.15	0.287
2-Methylnaphthalene	446.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acetophenone	965.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Biphenyl	1507.8	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dibenzofuran	1616.0	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Diphenyl Ether	1731.0	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorobenzene	3302.4	Narcosis	---	---	---	---	0.066	0	0.65	0.102	0.065	0	0.65	0.100	0.52	0	92.14	0.006	0.044	0	92.14	0.000
<b>Sediment Organic Carbon</b>																						
Black Carbon	NA	NA	---	---	NA	---	---	---	NA	---	---	---	NA	---	---	---	NA	---	---	---	NA	---
Total Organic Carbon	NA	NA	879	---	NA	---	196	---	NA	---	197	---	NA	---	27900	1	NA	---	27900	---	NA	---
<b>Sum of Narcotic ESBTUs:</b>							<b>0.033</b>			<b>37.102</b>				<b>1075.719</b>				<b>0.077</b>			<b>0.023</b>	

**Table D3**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	D15-BOR-09 0.50-1.00 3/26/2009				D15-BOR-10 0.50-1.00 3/26/2009				D15-BOR-11 0.00-0.50 3/28/2009				D15-BOR-11 0.50-1.00 3/27/2009				D15-BOR-13 0.50-1.00 3/27/2009			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																			
1,1,1-Trichlorotrifluoroethane	1471.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	0.002	0	0.19	0.011	0.002	0	2.94	0.001	---	---	---	---	1.7	1	13.83	0.123	0.017	1	0.34	0.049
1,2-Dichloro-1,1,2-Trifluoroethane	922.7	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-Dichloroethene	77.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-Dichlorotetrafluoroethane	1184.2	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2,2-Dichloro-1,1,1-Trifluoroethane	922.7	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
2-Chloro-1,1,1-Trifluoroethane	726.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
4-Isopropyltoluene	730.9	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Carbon Disulfide	30.2	Conventional	0.018	1	0.00	<b>4.717</b>	0.002	1	0.06	0.033	---	---	---	0.055	0	0.28	0.194	0.001	0	0.01	0.142	
CFC-1113	1415.9	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chlorodifluoromethane	1324.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Chlorofluoromethane	881.3	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
cis-1,2 Dichloroethene	77.5	Conventional	0.001	0	0.01	0.102	0.001	0	0.15	0.006	---	---	---	0.055	0	0.73	0.076	0.001	0	0.02	0.055	
Dichlorofluoromethane	1065.9	Conventional	0.002	0	0.13	0.015	0.002	0	2.13	0.001	---	---	---	0.11	0	10.02	0.011	0.002	0	0.25	0.008	
Trichlorofluoromethane	290.7	Conventional	0.002	0	0.04	0.054	0.002	0	0.58	0.003	---	---	---	1.7	1	2.73	0.622	0.005	1	0.07	0.074	
Vinyl Chloride	76.3	Conventional	0.001	0	0.01	0.104	0.001	0	0.15	0.007	---	---	---	0.055	0	0.72	0.077	0.001	0	0.02	0.056	
1,1-Dichloroethene	466.3	Narcosis	0.001	0	0.06	0.017	0.001	0	0.93	0.001	---	---	---	0.055	0	4.38	0.013	0.001	0	0.11	0.009	
1,2,4-Trimethylbenzene	1148.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,2-Dichlorobenzene	785.8	Narcosis	0.042	0	0.10	0.423	0.039	0	1.57	0.025	0.99	1	7.39	0.134	---	---	---	---	---	---	---	---
1,3,5-Trimethylbenzene	1152.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,3-Dichlorobenzene	785.8	Narcosis	0.042	0	0.10	0.423	0.039	0	1.57	0.025	0.32	0	7.39	0.043	---	---	---	---	---	---	---	---
1,4-Dichlorobenzene	785.1	Narcosis	0.042	0	0.10	0.423	0.041	1	1.57	0.026	0.98	1	7.38	0.133	---	---	---	---	---	---	---	---
2-Chlorotoluene	1161.1	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acetone	3120.9	Narcosis	0.021	1	0.39	0.053	0.015	1	6.24	0.002	---	---	---	0.38	0	29.34	0.013	0.013	1	0.73	0.018	
Benzene	653.6	Narcosis	0.005	1	0.08	0.060	0.002	1	1.31	0.002	---	---	---	0.027	0	6.14	0.004	0.0005	0	0.15	0.003	
Chlorobenzene	572.4	Narcosis	0.008	1	0.07	0.110	0.002	1	1.14	0.002	---	---	---	0.77	1	5.38	0.143	0.001	0	0.13	0.007	
Chloroform	558.7	Narcosis	0.001	0	0.07	0.014	0.001	0	1.12	0.001	---	---	---	0.055	0	5.25	0.010	0.001	0	0.13	0.008	
Cumene	1132.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Ethylbenzene	970.4	Narcosis	0.001	0	0.12	0.008	0.001	0	1.94	0.001	---	---	---	0.055	0	9.12	0.006	0.001	0	0.23	0.004	
Meta- And Para-Xylene	975.5	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Methyl Ethyl Ketone	293.5	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Methylene Chloride	372.9	Narcosis	0.009	1	0.05	0.191	0.002	0	0.75	0.003	---	---	---	0.11	0	3.50	0.031	0.006	1	0.09	0.069	
Ortho-Xylene	966.2	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Tetrachloroethene	829.4	Narcosis	0.001	0	0.10	0.010	0.001	0	1.66	0.001	---	---	---	1.7	1	7.80	0.218	0.001	1	0.19	0.005	
Toluene	813.9	Narcosis	0.001	0	0.10	0.010	0.001	1	1.63	0.001	---	---	---	0.055	0	7.65	0.007	0.001	0	0.19	0.005	
Trichloroethene	659.4	Narcosis	0.001	0	0.08	0.012	0.001	0	1.32	0.001	---	---	---	0.055	0	6.20	0.009	0.001	0	0.15	0.006	
Xylenes	969.6	Narcosis	0.001	0	0.12	0.008	0.001	0	1.94	0.001	---	---	---	0.055	0	9.11	0.006	0.001	0	0.23	0.004	
<b>Semi-Volatile Organic Compounds</b>																						
2-Chlorophenol	100.9	Conventional	0.042	0	0.01	<b>3.291</b>	0.039	0	0.20	0.193	0.32	0	0.95	0.337	---	---	---	---	---	---	---	---
4-Chloroaniline	260.6	Conventional	0.083	0	0.03	<b>2.517</b>	0.078	0	0.52	0.150	0.64	0	2.45	0.261	---	---	---	---	---	---	---	---
4-Methylphenol (P-Cresol)	28.8	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.14	1	6.71	0.021	0.078	0	106.12	0.001	0.64	0	498.77	0.001	---	---	---	---	---	---	---	---
Butyl Benzyl Phthalate	1088.3	Conventional	0.083	0	0.14	0.603	0.078	0	2.18	0.036	0.64	0	10.23	0.063	---	---	---	---	---	---	---	---
Carbazole	6.9	Conventional	0.042	0	0.00	<b>48.389</b>	0.039	0	0.01	<b>2.842</b>	0.32	0	0.06	<b>4.961</b>	---	---	---	---	---	---	---	---
Diethyl Phthalate	77.5	Conventional	0.083	0	0.01	<b>8.469</b>	0.078	0	0.15	0.503	0.64	0	0.73	0.879	---	---	---	---	---	---	---	---
Di-N-Butyl Phthalate	1191.2	Conventional	0.083	0	0.15	0.551	0.078	0	2.38	0.033	0.64	0	11.20	0.057	---	---	---	---	---	---	---	---
Nitrobenzene	156.5	Conventional	0.042	0	0.02	<b>2.122</b>	0.039	0	0.31	0.125	0.32	0	1.47	0.218	---	---	---	---	---	---	---	---
Phenol	5.5	Conventional	0.042	0	0.00	<b>60.433</b>	0.039	0	0.01	<b>3.549</b>	0.32	0	0.05	<b>6.196</b>	---	---	---	---	---	---	---	---
2-Methylnaphthalene	446.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acetophenone	965.7	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Biphenyl	1507.8	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Dibenzofuran	1616.0	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Diphenyl Ether	1731.0	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Hexachlorobenzene	3302.4	Narcosis	0.042	0	0.42	0.101	0.039	0	6.60	0.006	0.32	0	31.04	0.010	---	---	---	---	---	---	---	---
<b>Sediment Organic Carbon</b>																						
Black Carbon	NA	NA	---	---	NA	---	---	---	NA	---	---	---	NA	---	---	---	NA	---	---	---	NA	---
Total Organic Carbon	NA	NA	126.5	---	NA	---	2000	---	NA	---	9400	1	NA	---	9400	---	NA	---	234	---	NA	---
<b>Sum of Narcotic ESBTUs:</b>						<b>1.862</b>			<b>0.095</b>				<b>0.320</b>				<b>0.461</b>				<b>0.140</b>	

**Table D3**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	D15-BOR-14 0.00-0.50 10/26/2016				D15-BOR-14 0.50-1.00 10/26/2016				D15-BOR-15 0.00-0.50 10/27/2016				D15-BOR-15 0.50-1.00 10/27/2016				D15-BOR-16 0.00-0.50 11/1/2016			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																			
1,1,1-Trichlorotrifluoroethane	1471.5	Conventional	0.005	0	0.44	0.011	0.006	0	0.39	0.015	0.42	1	4.66	0.090	0.031	1	0.33	0.095	0.006	0	4.34	0.001
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	0.007	1	0.44	0.016	0.14	0	0.39	0.358	5.1	1	4.66	<b>1.093</b>	0.11	0	0.33	0.337	0.14	0	4.34	0.032
1,2-Dichloro-1,1,2-Trifluoroethane	922.7	Conventional	0.001	0	0.28	0.004	0.001	0	0.25	0.004	0.025	1	2.92	0.009	0.002	1	0.20	0.010	0.02	1	2.72	0.007
1,2-Dichloroethene	77.5	Conventional	0.001	0	0.02	0.043	0.069	0	0.02	<b>3.349</b>	0.12	0	0.25	0.489	0.054	0	0.02	<b>3.140</b>	0.069	0	0.23	0.302
1,2-Dichlorotetrafluoroethane	1184.2	Conventional	0.002	0	0.36	0.006	0.002	0	0.31	0.006	0.034	1	3.75	0.009	0.004	1	0.26	0.015	0.003	0	3.49	0.001
2,2-Dichloro-1,1,1-Trifluoroethane	922.7	Conventional	0.001	0	0.28	0.004	0.001	0	0.25	0.004	0.057	1	2.92	0.019	0.009	1	0.20	0.044	0.001	0	2.72	0.000
2-Chloro-1,1,1-Trifluoroethane	726.8	Conventional	0.002	0	0.22	0.009	0.14	0	0.19	0.724	0.23	0	2.30	0.100	0.11	0	0.16	0.682	0.14	0	2.14	0.065
4-Isopropyltoluene	730.9	Conventional	0.002	1	0.22	0.009	0.069	0	0.19	0.355	0.12	0	2.32	0.052	0.054	0	0.16	0.333	0.069	0	2.16	0.032
Carbon Disulfide	30.2	Conventional	0.003	1	0.01	0.331	0.11	1	0.01	<b>13.708</b>	0.12	0	0.10	<b>1.255</b>	0.054	0	0.01	<b>8.063</b>	0.077	1	0.09	0.865
CFC-1113	1415.9	Conventional	0.002	0	0.42	0.005	0.14	0	0.38	0.372	0.23	0	4.49	0.051	0.11	0	0.31	0.350	0.14	0	4.18	0.034
Chlorodifluoromethane	1324.5	Conventional	0.002	0	0.40	0.005	0.002	0	0.35	0.006	0.003	0	4.20	0.001	0.002	0	0.29	0.007	0.003	0	3.91	0.001
Chlorofluoromethane	881.3	Conventional	0.001	0	0.26	0.004	0.001	0	0.23	0.004	0.001	0	2.79	0.000	0.001	0	0.20	0.005	0.001	0	2.60	0.000
cis-1,2 Dichloroethene	77.5	Conventional	0.001	0	0.02	0.043	0.069	0	0.02	<b>3.349</b>	0.12	0	0.25	0.489	0.054	0	0.02	<b>3.140</b>	0.069	0	0.23	0.302
Dichlorofluoromethane	1065.9	Conventional	0.002	0	0.32	0.006	0.14	0	0.28	0.494	0.23	0	3.38	0.068	0.11	0	0.24	0.465	0.14	0	3.14	0.045
Trichlorofluoromethane	290.7	Conventional	0.002	0	0.09	0.023	0.14	0	0.08	<b>1.811</b>	0.49	1	0.92	0.532	0.11	0	0.06	<b>1.705</b>	0.14	0	0.86	0.163
Vinyl Chloride	76.3	Conventional	0.001	0	0.02	0.044	0.069	0	0.02	<b>3.401</b>	0.12	0	0.24	0.496	0.054	0	0.02	<b>3.189</b>	0.069	0	0.22	0.307
1,1-Dichloroethene	466.3	Narcosis	0.001	0	0.14	0.007	0.069	0	0.12	0.556	0.12	0	1.48	0.081	0.054	0	0.10	0.522	0.069	0	1.38	0.050
1,2,4-Trimethylbenzene	1148.7	Narcosis	0.015	1	0.34	0.044	0.069	0	0.31	0.226	0.18	1	3.64	0.049	0.054	0	0.26	0.212	0.069	0	3.39	0.020
1,2-Dichlorobenzene	785.8	Narcosis	0.4	1	0.24	<b>1.697</b>	1.3	1	0.21	<b>6.220</b>	15	1	2.49	<b>6.022</b>	2.1	1	0.17	<b>12.038</b>	10	1	2.32	<b>4.314</b>
1,3,5-Trimethylbenzene	1152.7	Narcosis	0.007	1	0.35	0.020	0.069	0	0.31	0.225	0.12	0	3.65	0.033	0.054	0	0.26	0.211	0.069	0	3.40	0.020
1,3-Dichlorobenzene	785.8	Narcosis	0.028	1	0.24	0.119	0.071	1	0.21	0.340	1.3	1	2.49	0.522	0.16	1	0.17	0.917	0.55	1	2.32	<b>7.347</b>
1,4-Dichlorobenzene	785.1	Narcosis	0.43	1	0.24	<b>1.826</b>	1.9	1	0.21	<b>9.098</b>	28	1	2.49	<b>11.251</b>	3.7	1	0.17	<b>21.229</b>	17	1	2.32	<b>7.340</b>
2-Chlorotoluene	1161.1	Narcosis	0.001	1	0.35	0.003	0.069	0	0.31	0.223	0.12	0	3.68	0.033	0.054	0	0.26	0.209	0.069	0	3.43	0.020
Acetone	3120.9	Narcosis	0.021	1	0.94	0.022	0.49	0	0.83	0.590	0.82	0	9.89	0.083	0.38	0	0.69	0.548	0.48	0	9.21	0.052
Benzene	653.6	Narcosis	0.003	1	0.20	0.015	0.091	1	0.17	0.523	0.14	1	2.07	0.068	0.027	0	0.15	0.186	1.1	1	1.93	0.571
Chlorobenzene	572.4	Narcosis	0.11	1	0.17	0.641	1.2	1	0.15	<b>7.881</b>	20	1	1.81	<b>11.022</b>	2.6	1	0.13	<b>20.461</b>	12	1	1.69	<b>7.106</b>
Chloroform	558.7	Narcosis	0.004	1	0.17	0.024	0.28	1	0.15	<b>1.884</b>	0.19	1	1.77	0.107	0.054	0	0.12	0.435	0.76	1	1.65	0.461
Cumene	1132.7	Narcosis	0.001	0	0.34	0.003	0.069	0	0.30	0.229	0.12	0	3.59	0.033	0.054	0	0.25	0.215	0.069	0	3.34	0.021
Ethylbenzene	970.4	Narcosis	0.004	1	0.29	0.014	0.069	0	0.26	0.267	0.25	1	3.08	0.081	0.054	0	0.22	0.251	0.26	1	2.86	0.091
Meta- And Para-Xylene	975.5	Narcosis	0.027	1	0.29	0.092	0.11	1	0.26	0.424	1.1	1	3.09	0.356	0.093	1	0.22	0.429	0.31	1	2.88	0.108
Methyl Ethyl Ketone	293.5	Narcosis	0.004	0	0.09	0.045	0.28	0	0.08	<b>3.586</b>	0.47	0	0.93	0.505	0.22	0	0.07	<b>3.376</b>	0.28	0	0.87	0.323
Methylene Chloride	372.9	Narcosis	0.002	0	0.11	0.018	0.14	0	0.10	<b>1.412</b>	0.23	0	1.18	0.195	0.11	0	0.08	<b>1.329</b>	0.14	0	1.10	0.127
Ortho-Xylene	966.2	Narcosis	0.009	1	0.29	0.031	0.069	0	0.26	0.268	0.37	1	3.06	0.121	0.054	0	0.21	0.252	0.1	1	2.85	0.035
Tetrachloroethene	829.4	Narcosis	0.003	1	0.25	0.012	0.069	0	0.22	0.313	2	1	2.63	0.761	0.13	1	0.18	0.706	0.069	0	2.45	0.028
Toluene	813.9	Narcosis	0.006	1	0.24	0.025	0.093	1	0.22	0.430	0.12	0	2.58	0.047	0.054	0	0.18	0.299	0.53	1	2.40	0.221
Trichloroethene	659.4	Narcosis	0.001	0	0.20	0.005	0.069	0	0.18	0.393	0.12	1	2.09	0.057	0.054	0	0.15	0.369	0.069	0	1.95	0.035
Xylenes	969.6	Narcosis	0.036	1	0.29	0.124	0.11	1	0.26	0.427	1.5	1	3.07	0.488	0.093	1	0.22	0.432	0.41	1	2.86	0.143
<b>Semi-Volatile Organic Compounds</b>																						
2-Chlorophenol	100.9	Conventional	0.018	0	0.03	0.595	0.019	0	0.03	0.708	0.047	1	0.32	0.147	0.02	1	0.02	0.893	0.042	1	0.30	0.141
4-Chloroaniline	260.6	Conventional	0.15	1	0.08	<b>1.918</b>	0.074	1	0.07	<b>1.067</b>	0.044	0	0.83	0.053	0.036	0	0.06	0.622	0.044	0	0.77	0.057
4-Methylphenol (P-Cresol)	28.8	Conventional	0.018	0	0.01	<b>2.081</b>	0.019	0	0.01	<b>2.478</b>	0.022	0	0.09	0.241	0.018	0	0.01	<b>2.812</b>	0.022	0	0.09	0.259
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.073	0	15.92	0.005	0.075	0	14.11	0.005	0.089	1	168.20	0.001	0.072	0	11.78	0.006	0.089	0	156.53	0.001
Butyl Benzyl Phthalate	1088.3	Conventional	0.073	0	0.33	0.224	0.075	0	0.29	0.259	0.088	0	3.45	0.026	0.072	0	0.24	0.298	0.089	0	3.21	0.028
Carbazole	6.9	Conventional	0.018	0	0.00	<b>8.745</b>	0.019	0	0.00	<b>10.410</b>	0.062	1	0.02	<b>2.851</b>	0.018	0	0.00	<b>11.817</b>	0.022	0	0.02	<b>1.087</b>
Diethyl Phthalate	77.5	Conventional	0.073	0	0.02	<b>3.141</b>	0.075	0	0.02	<b>3.639</b>	0.088	0	0.25	0.358	0.072	0	0.02	<b>4.186</b>	0.089	0	0.23	0.389
Di-N-Butyl Phthalate	1191.2	Conventional	0.073	0	0.36	0.204	0.075	0	0.32	0.237	0.088	0	3.78	0.023	0.072	0	0.26	0.272	0.089	0	3.51	0.025
Nitrobenzene	156.5	Conventional	0.018	0	0.05	0.383	0.019	0	0.04	0.456	0.022	0	0.50	0.044	0.018	0	0.03	0.518	0.022	0	0.46	0.048
Phenol	5.5	Conventional	0.028	1	0.00	<b>16.988</b>	0.019	0	0.00	<b>13.001</b>	0.022	0	0.02	<b>1.263</b>	0.018	0	0.00	<b>14.758</b>	0.022	0	0.02	<b>1.357</b>
2-Methylnaphthalene	446.7	Narcosis	0.049	1	0.13	0.366	0.011	1	0.12	0.093	0.099	1	1.42	0.070	0.005	1	0.10	0.050	0.027	1	1.32	0.020
Acetophenone	965.7	Narcosis	0.018	0	0.29	0.062	0.019	0	0.26	0.074	0.022	0										

**Table D3**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	D15-BOR-16 0.50-1.00 11/1/2016				D15-BOR-17 0.00-0.50 10/31/2016				D15-BOR-17 0.50-1.00 10/31/2016				D15-BOR-18 0.00-0.50 10/27/2016				D15-BOR-18 0.50-1.00 10/27/2016			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																			
1,1,1-Trichlorotrifluoroethane	1471.5	Conventional	0.006	0	0.37	0.016	1.3	1	37.52	0.035	0.19	1	0.28	0.672	0.011	1	0.30	0.037	0.005	0	0.29	0.017
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	0.12	0	0.37	0.322	14	1	37.52	0.373	10	0	0.28	35.4	0.05	1	0.30	0.167	0.13	1	0.29	0.448
1,2-Dichloro-1,1,2-Trifluoroethane	922.7	Conventional	0.022	1	0.23	0.094	0.064	1	23.53	0.003	0.004	1	0.18	0.023	0.003	1	0.19	0.016	0.001	0	0.18	0.006
1,2-Dichloroethene	77.5	Conventional	0.058	0	0.02	2.960	1.3	0	1.98	0.658	5.2	0	0.01	350	0.001	0	0.02	0.064	0.001	0	0.02	0.066
1,2-Dichlorotetrafluoroethane	1184.2	Conventional	0.002	0	0.30	0.007	0.12	1	30.20	0.004	0.012	1	0.23	0.053	0.003	1	0.24	0.012	0.002	0	0.23	0.009
2,2-Dichloro-1,1,1-Trifluoroethane	922.7	Conventional	0.001	0	0.23	0.004	0.19	1	23.53	0.008	0.02	1	0.18	0.113	0.007	1	0.19	0.037	0.001	0	0.18	0.006
2-Chloro-1,1,1-Trifluoroethane	726.8	Conventional	0.12	0	0.18	0.653	2.6	0	18.53	0.140	10	0	0.14	71.7	0.002	0	0.15	0.014	0.002	0	0.14	0.014
4-Isopropyltoluene	730.9	Conventional	0.058	0	0.18	0.314	1.3	0	18.64	0.070	5.2	0	0.14	37.1	0.001	0	0.15	0.007	0.001	0	0.14	0.007
Carbon Disulfide	30.2	Conventional	0.058	0	0.01	7.599	1.3	0	0.77	1.690	5.2	0	0.01	898	0.001	0	0.01	0.163	0.005	1	0.01	0.841
CFC-1113	1415.9	Conventional	0.12	0	0.36	0.335	2.6	0	36.10	0.072	10	0	0.27	36.8	0.002	0	0.29	0.007	0.002	0	0.28	0.007
Chlorodifluoromethane	1324.5	Conventional	0.002	0	0.34	0.006	0.005	0	33.77	0.000	0.002	0	0.25	0.008	0.002	0	0.27	0.007	0.002	0	0.26	0.008
Chlorofluoromethane	881.3	Conventional	0.001	0	0.22	0.004	0.002	0	22.47	0.000	0.001	0	0.17	0.006	0.001	0	0.18	0.006	0.001	0	0.17	0.006
cis-1,2 Dichloroethene	77.5	Conventional	0.058	0	0.02	2.960	1.3	0	1.98	0.658	5.2	0	0.01	350	0.001	0	0.02	0.064	0.001	0	0.02	0.066
Dichlorofluoromethane	1065.9	Conventional	0.12	0	0.27	0.445	2.6	0	27.18	0.096	10	0	0.20	48.9	0.002	0	0.22	0.009	0.003	1	0.21	0.014
Trichlorofluoromethane	290.7	Conventional	0.12	0	0.07	1.632	2.6	0	7.41	0.351	10	0	0.06	179	0.005	1	0.06	0.085	0.047	1	0.06	0.821
Vinyl Chloride	76.3	Conventional	0.058	0	0.02	3.006	1.3	0	1.94	0.668	5.2	0	0.01	355	0.001	0	0.02	0.065	0.001	0	0.02	0.067
1,1-Dichloroethene	466.3	Narcosis	0.058	0	0.12	0.492	1.3	0	11.89	0.109	5.2	0	0.09	58.1	0.001	0	0.09	0.011	0.003	1	0.09	0.033
1,2,4-Trimethylbenzene	1148.7	Narcosis	0.058	0	0.29	0.200	1.3	0	29.29	0.044	5.2	0	0.22	23.6	0.001	0	0.23	0.004	0.001	0	0.23	0.004
1,2-Dichlorobenzene	785.8	Narcosis	2.7	1	0.20	13.581	130	1	20.04	6.488	61	1	0.15	404	0.005	1	0.16	0.031	0.006	1	0.15	0.039
1,3,5-Trimethylbenzene	1152.7	Narcosis	0.058	0	0.29	0.199	1.3	0	29.39	0.044	5.2	0	0.22	23.5	0.001	0	0.23	0.004	0.001	0	0.23	0.004
1,3-Dichlorobenzene	785.8	Narcosis	0.13	1	0.20	0.654	9.3	1	20.04	0.464	5.3	1	0.15	35.1	0.001	0	0.16	0.006	0.001	0	0.15	0.006
1,4-Dichlorobenzene	785.1	Narcosis	4.4	1	0.20	22.152	230	1	20.02	11.489	120	1	0.15	796	0.008	1	0.16	0.050	0.008	1	0.15	0.052
2-Chlorotoluene	1161.1	Narcosis	0.058	0	0.29	0.197	1.3	0	29.61	0.044	5.2	0	0.22	23.3	0.001	0	0.24	0.004	0.001	0	0.23	0.004
Acetone	3120.9	Narcosis	0.41	0	0.79	0.519	9.3	0	79.58	0.117	36	0	0.60	60.1	0.018	1	0.63	0.028	0.019	1	0.61	0.031
Benzene	653.6	Narcosis	0.35	1	0.17	2.117	0.89	1	16.67	0.053	2.6	0	0.13	20.7	0.0006	0	0.13	0.005	0.001	1	0.13	0.008
Chlorobenzene	572.4	Narcosis	3.9	1	0.14	26.930	170	1	14.60	11.647	23	1	0.11	209	0.009	1	0.12	0.077	0.029	1	0.11	0.257
Chloroform	558.7	Narcosis	0.56	1	0.14	3.962	1.3	0	14.25	0.091	5.2	0	0.11	48.5	0.001	0	0.11	0.009	0.019	1	0.11	0.173
Cumene	1132.7	Narcosis	0.058	0	0.29	0.202	1.3	0	28.88	0.045	5.2	0	0.22	23.9	0.001	0	0.23	0.004	0.001	0	0.22	0.004
Ethylbenzene	970.4	Narcosis	0.075	1	0.25	0.305	2	1	24.75	0.081	5.2	0	0.19	27.9	0.001	0	0.20	0.005	0.001	0	0.19	0.005
Meta- And Para-Xylene	975.5	Narcosis	0.32	1	0.25	1.297	7.5	1	24.88	0.301	5.2	0	0.19	27.8	0.001	0	0.20	0.005	0.001	0	0.19	0.005
Methyl Ethyl Ketone	293.5	Narcosis	0.23	0	0.07	3.097	5.3	0	7.48	0.708	21	0	0.06	373	0.005	0	0.06	0.084	0.004	0	0.06	0.069
Methylene Chloride	372.9	Narcosis	0.12	0	0.09	1.272	2.6	0	9.51	0.273	10	0	0.07	140	0.002	0	0.08	0.026	0.002	0	0.07	0.027
Ortho-Xylene	966.2	Narcosis	0.091	1	0.24	0.372	2.7	1	24.64	0.110	5.2	0	0.19	28.0	0.001	0	0.20	0.005	0.001	0	0.19	0.005
Tetrachloroethene	829.4	Narcosis	0.058	0	0.21	0.276	17	1	21.15	0.804	5.2	0	0.16	32.7	0.014	1	0.17	0.083	0.043	1	0.16	0.263
Toluene	813.9	Narcosis	0.39	1	0.21	1.894	1.3	0	20.76	0.063	5.2	0	0.16	33.3	0.001	0	0.17	0.006	0.001	0	0.16	0.006
Trichloroethene	659.4	Narcosis	0.058	0	0.17	0.348	1.3	0	16.82	0.077	5.2	0	0.13	41.1	0.001	1	0.13	0.007	0.008	1	0.13	0.062
Xylenes	969.6	Narcosis	0.41	1	0.25	1.671	10	1	24.72	0.404	5.2	0	0.19	27.9	0.001	0	0.20	0.005	0.001	0	0.19	0.005
<b>Semi-Volatile Organic Compounds</b>																						
2-Chlorophenol	100.9	Conventional	0.05	1	0.03	1.959	0.23	1	2.57	0.089	0.02	0	0.02	1.03	0.019	0	0.02	0.928	0.019	0	0.02	0.956
4-Chloroaniline	260.6	Conventional	0.042	0	0.07	0.637	0.068	0	6.65	0.010	0.04	0	0.05	0.799	0.038	0	0.05	0.718	0.038	0	0.05	0.740
4-Methylphenol (P-Cresol)	28.8	Conventional	0.021	0	0.01	2.879	0.034	0	0.74	0.046	0.02	0	0.01	3.61	0.019	0	0.01	3.247	0.019	0	0.01	3.345
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.084	0	13.42	0.006	0.14	0	1353.04	0.000	0.08	0	10.19	0.008	0.076	0	10.77	0.007	0.076	0	10.45	0.007
Butyl Benzyl Phthalate	1088.3	Conventional	0.084	0	0.28	0.305	0.14	0	27.75	0.005	0.08	0	0.21	0.383	0.076	0	0.22	0.344	0.076	0	0.21	0.354
Carbazole	6.9	Conventional	0.021	0	0.00	12.097	0.034	0	0.17	0.194	0.02	0	0.00	15.2	0.019	0	0.00	13.641	0.019	0	0.00	14.057
Diethyl Phthalate	77.5	Conventional	0.084	0	0.02	4.286	0.14	0	1.98	0.071	0.08	0	0.01	5.38	0.076	0	0.02	4.833	0.076	0	0.02	4.980
Di-N-Butyl Phthalate	1191.2	Conventional	0.084	0	0.30	0.279	0.24	1	30.38	0.008	0.08	0	0.23	0.350	0.076	0	0.24	0.314	0.076	0	0.23	0.324
Nitrobenzene	156.5	Conventional	0.021	0	0.04	0.530	0.034	0	3.99	0.009	0.02	0	0.03	0.666	0.019	0	0.03	0.598	0.019	0	0.03	0.616
Phenol	5.5	Conventional	0.021	0	0.00	15.108	0.041	1	0.14	0.293	0.02	0	0.00	19.0	0.019	0	0.00	17.036	0.019	0	0.00	17.555
2-Methylnaphthalene	446.7	Narcosis	0.005	1	0.11	0.044	0.073	1	11.39	0.006	0.022	1	0.09	0.257	0.004	0	0.09	0.044	0.004	0	0.09	0.045
Acetophenone	965.7	Narcosis	0.022	1	0.24	0.090	0.034	0	24.62	0.001	0.02	0	0.19	0.108	0.019	0	0.20	0.097	0.019	0	0.19	0.100
Biphenyl	1507.8	Narcosis	0.021	0	0.38	0.055	0.037	1	38.45	0.001	0.02	0	0.29	0.069	0.019	0	0.31					

**Table D3**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	D15-BOR-19 0.00-0.50 10/29/2016				D15-BOR-19 0.50-1.00 10/29/2016				D15-BOR-21 0.00-0.50 11/4/2017				D15-BOR-21 0.50-1.00 11/4/2017				D15-BOR-22 0.00-0.50 11/3/2017			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																			
1,1,1-Trichlorotrifluoroethane	1471.5	Conventional	0.006	0	0.39	0.016	0.005	0	0.29	0.017	0.011	0	43.41	0.000	0.011	0	56.80	0.000	0.011	0	29.72	0.000
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	0.12	0	0.39	0.310	0.002	1	0.29	0.007	0.005	0	43.41	0.000	0.004	0	56.80	0.000	0.98	1	29.72	0.033
1,2-Dichloro-1,1,2-Trifluoroethane	922.7	Conventional	0.001	0	0.24	0.004	0.001	0	0.18	0.006	0.002	0	27.22	0.000	0.002	0	35.61	0.000	0.11	1	18.64	0.006
1,2-Dichloroethene	77.5	Conventional	0.061	0	0.02	<b>2.994</b>	0.001	0	0.02	0.066	0.002	0	2.29	0.001	0.002	0	2.99	0.001	0.014	1	1.56	0.009
1,2-Dichlorotetrafluoroethane	1184.2	Conventional	0.002	0	0.31	0.006	0.002	0	0.23	0.009	0.004	0	34.93	0.000	0.004	0	45.71	0.000	0.034	1	23.92	0.001
2,2-Dichloro-1,1,1-Trifluoroethane	922.7	Conventional	0.001	0	0.24	0.004	0.001	0	0.18	0.006	0.002	0	27.22	0.000	0.002	0	35.61	0.000	0.1	1	18.64	0.005
2-Chloro-1,1,1-Trifluoroethane	726.8	Conventional	0.12	0	0.19	0.628	0.002	0	0.14	0.014	0.005	0	21.44	0.000	0.004	0	28.06	0.000	0.004	0	14.68	0.000
4-Isopropyltoluene	730.9	Conventional	0.061	0	0.19	0.317	0.001	0	0.14	0.007	0.002	0	21.56	0.000	0.002	0	28.21	0.000	0.014	1	14.76	0.001
Carbon Disulfide	30.2	Conventional	0.061	0	0.01	<b>7.688</b>	0.002	1	0.01	0.338	0.004	1	0.89	0.004	0.005	1	1.16	0.004	0.083	1	0.61	0.136
CFC-1113	1415.9	Conventional	0.12	0	0.37	0.322	0.002	0	0.28	0.007	0.005	0	41.77	0.000	0.004	0	54.65	0.000	0.026	1	28.60	0.001
Chlorodifluoromethane	1324.5	Conventional	0.002	0	0.35	0.006	0.002	0	0.26	0.008	0.004	0	39.07	0.000	0.004	0	51.13	0.000	0.004	0	26.75	0.000
Chlorofluoromethane	881.3	Conventional	0.001	0	0.23	0.004	0.001	0	0.17	0.006	0.002	0	26.00	0.000	0.002	0	34.02	0.000	0.002	0	17.80	0.000
cis-1,2 Dichloroethene	77.5	Conventional	0.061	0	0.02	<b>2.994</b>	0.001	0	0.02	0.066	0.002	0	2.29	0.001	0.002	0	2.99	0.001	0.014	1	1.56	0.009
Dichlorofluoromethane	1065.9	Conventional	0.12	0	0.28	0.428	0.002	0	0.21	0.010	0.005	0	31.44	0.000	0.004	0	41.14	0.000	0.004	0	21.53	0.000
Trichlorofluoromethane	290.7	Conventional	0.12	0	0.08	<b>1.570</b>	0.002	0	0.06	0.035	0.005	0	8.57	0.001	0.004	0	11.22	0.000	0.31	1	5.87	0.053
Vinyl Chloride	76.3	Conventional	0.061	0	0.02	<b>3.041</b>	0.001	0	0.01	0.067	0.002	0	2.25	0.001	0.002	0	2.94	0.001	0.006	1	1.54	0.004
1,1-Dichloroethene	466.3	Narcosis	0.061	0	0.12	0.497	0.001	0	0.09	0.011	0.002	0	13.76	0.000	0.002	0	18.00	0.000	0.068	1	9.42	0.007
1,2,4-Trimethylbenzene	1148.7	Narcosis	0.061	0	0.30	0.202	0.001	0	0.23	0.004	0.002	0	33.89	0.000	0.006	1	44.34	0.000	0.039	1	23.20	0.002
1,2-Dichlorobenzene	785.8	Narcosis	2	1	0.21	<b>9.678</b>	0.046	1	0.15	0.299	0.007	1	23.18	0.000	0.012	1	30.33	0.000	4.3	1	15.87	0.271
1,3,5-Trimethylbenzene	1152.7	Narcosis	0.061	0	0.30	0.201	0.001	0	0.23	0.004	0.002	0	34.01	0.000	0.003	1	44.50	0.000	0.006	1	23.29	0.000
1,3-Dichlorobenzene	785.8	Narcosis	0.13	1	0.21	0.629	0.001	1	0.15	0.006	0.002	0	23.18	0.000	0.004	1	30.33	0.000	0.31	1	15.87	0.020
1,4-Dichlorobenzene	785.1	Narcosis	3.5	1	0.21	<b>16.951</b>	0.037	1	0.15	0.240	0.004	1	23.16	0.000	0.019	1	30.30	0.001	11	1	15.86	0.694
2-Chlorotoluene	1161.1	Narcosis	0.061	0	0.31	0.200	0.001	0	0.23	0.004	0.002	0	34.25	0.000	0.008	1	44.82	0.000	0.01	1	23.45	0.000
Acetone	3120.9	Narcosis	0.43	0	0.82	0.524	0.033	1	0.61	0.054	0.18	1	92.07	0.002	0.19	1	120.47	0.002	0.43	1	63.04	0.007
Benzene	653.6	Narcosis	0.73	1	0.17	<b>4.247</b>	0.004	1	0.13	0.031	0.001	0	19.28	0.000	0.002	1	25.23	0.000	0.22	1	13.20	0.017
Chlorobenzene	572.4	Narcosis	11	1	0.15	<b>73.069</b>	0.063	1	0.11	0.562	0.057	1	16.89	0.003	0.21	1	22.09	0.010	9.5	1	11.56	0.822
Chloroform	558.7	Narcosis	0.58	1	0.15	<b>3.947</b>	0.003	1	0.11	0.027	0.002	0	16.48	0.000	0.002	0	21.56	0.000	0.16	1	11.29	0.014
Cumene	1132.7	Narcosis	0.061	0	0.30	0.205	0.001	0	0.22	0.005	0.002	0	33.42	0.000	0.002	0	43.72	0.000	0.32	1	22.88	0.014
Ethylbenzene	970.4	Narcosis	0.061	0	0.26	0.239	0.001	0	0.19	0.005	0.002	0	28.63	0.000	0.002	0	37.46	0.000	0.013	1	19.60	0.001
Meta- And Para-Xylene	975.5	Narcosis	0.31	1	0.26	<b>1.208</b>	0.001	1	0.19	0.005	0.002	0	28.78	0.000	0.004	1	37.66	0.000	0.012	1	19.71	0.001
Methyl Ethyl Ketone	293.5	Narcosis	0.24	0	0.08	<b>3.109</b>	0.005	0	0.06	0.087	0.018	1	8.66	0.002	0.02	1	11.33	0.002	0.034	1	5.93	0.006
Methylene Chloride	372.9	Narcosis	0.12	0	0.10	<b>1.224</b>	0.003	1	0.07	0.041	0.005	0	11.00	0.000	0.004	0	14.39	0.000	0.011	1	7.53	0.001
Ortho-Xylene	966.2	Narcosis	0.089	1	0.25	0.350	0.001	0	0.19	0.005	0.002	0	28.50	0.000	0.006	1	37.29	0.000	0.009	1	19.52	0.000
Tetrachloroethene	829.4	Narcosis	0.095	1	0.22	0.436	0.001	0	0.16	0.006	0.002	0	24.47	0.000	0.002	0	32.01	0.000	6.5	1	16.75	0.388
Toluene	813.9	Narcosis	0.63	1	0.21	<b>2.943</b>	0.003	1	0.16	0.019	0.002	0	24.01	0.000	0.003	1	31.42	0.000	0.006	1	16.44	0.000
Trichloroethene	659.4	Narcosis	0.061	0	0.17	0.352	0.001	0	0.13	0.008	0.002	0	19.45	0.000	0.002	0	25.45	0.000	0.26	1	13.32	0.020
Xylenes	969.6	Narcosis	0.4	1	0.25	<b>1.569</b>	0.001	1	0.19	0.005	0.002	0	28.60	0.000	0.01	1	37.43	0.000	0.021	1	19.59	0.001
<b>Semi-Volatile Organic Compounds</b>																						
2-Chlorophenol	100.9	Conventional	0.065	1	0.03	<b>2.450</b>	0.019	1	0.02	0.961	0.031	0	2.98	0.010	0.033	0	3.89	0.008	0.028	0	2.04	0.014
4-Chloroaniline	260.6	Conventional	0.042	0	0.07	0.613	0.038	0	0.05	0.744	0.062	0	7.69	0.008	0.065	0	10.06	0.006	0.056	0	5.27	0.011
4-Methylphenol (P-Cresol)	28.8	Conventional	0.021	0	0.01	<b>2.770</b>	0.019	0	0.01	<b>3.363</b>	0.095	1	0.85	0.112	0.041	1	1.11	0.037	0.028	0	0.58	0.048
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.085	0	13.95	0.006	0.075	0	10.40	0.007	0.12	0	1565.28	0.000	0.22	1	2048.13	0.000	0.11	0	1071.82	0.000
Butyl Benzyl Phthalate	1088.3	Conventional	0.085	0	0.29	0.297	0.075	0	0.21	0.352	0.12	0	32.11	0.004	0.13	0	42.01	0.003	0.11	0	21.98	0.005
Carbazole	6.9	Conventional	0.021	0	0.00	<b>11.637</b>	0.019	0	0.00	<b>14.128</b>	0.031	0	0.20	0.153	0.033	0	0.26	0.125	0.1	1	0.14	0.722
Diethyl Phthalate	77.5	Conventional	0.085	0	0.02	<b>4.172</b>	0.075	0	0.02	<b>4.939</b>	0.12	0	2.29	0.053	0.13	0	2.99	0.043	0.11	0	1.56	0.070
Di-N-Butyl Phthalate	1191.2	Conventional	0.085	0	0.31	0.271	0.075	0	0.23	0.321	0.12	0	35.14	0.003	0.13	0	45.98	0.003	0.11	0	24.06	0.005
Nitrobenzene	156.5	Conventional	0.021	0	0.04	0.510	0.019	0	0.03	0.619	0.031	0	4.62	0.007	0.033	0	6.04	0.005	0.028	0	3.16	0.009
Phenol	5.5	Conventional	0.021	0	0.00	<b>14.534</b>	0.019	0	0.00	<b>17.645</b>	0.031	0	0.16	0.191	0.033	0	0.21	0.156	0.028	0	0.11	0.252
2-Methylnaphthalene	446.7	Narcosis	0.004	0	0.12	0.034	0.004	0	0.09	0.046	0.035	1	13.18	0.003	0.054	1	17.24	0.003	0.21	1	9.02	0.023
Acetophenone	965.7	Narcosis	0.021	0	0.25	0.083	0.019															

**Table D3**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	D15-BOR-22 0.50-1.00 11/3/2017				D15-BOR-23 0.00-0.50 11/3/2017				D15-BOR-23 0.50-1.00 11/3/2017				D15-BOR-24 0.00-0.50 11/1/2017				D15-BOR-24 0.50-1.00 11/1/2017			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																			
1,1,1-Trichlorotrifluoroethane	1471.5	Conventional	0.006	0	0.81	0.007	0.011	0	42.53	0.000	0.007	0	11.58	0.001	0.006	0	6.95	0.001	0.008	0	31.05	0.000
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	0.15	1	0.81	0.185	0.61	1	42.53	0.014	0.63	1	11.58	0.054	0.002	0	6.95	0.000	0.19	0	31.05	0.006
1,2-Dichloro-1,1,2-Trifluoroethane	922.7	Conventional	0.001	0	0.51	0.002	0.98	1	26.66	0.037	0.027	1	7.26	0.004	0.001	0	4.35	0.000	0.002	0	19.47	0.000
1,2-Dichloroethene	77.5	Conventional	0.001	0	0.04	0.023	0.12	0	2.24	0.054	0.061	0	0.61	0.100	0.001	0	0.37	0.003	0.096	0	1.63	0.059
1,2-Dichlorotetrafluoroethane	1184.2	Conventional	0.002	0	0.65	0.003	0.55	1	34.22	0.016	0.085	1	9.32	0.009	0.002	0	5.59	0.000	0.003	0	24.99	0.000
2,2-Dichloro-1,1,1-Trifluoroethane	922.7	Conventional	0.001	0	0.51	0.002	2.1	1	26.66	0.079	0.19	1	7.26	0.026	0.001	0	4.35	0.000	0.002	0	19.47	0.000
2-Chloro-1,1,1-Trifluoroethane	726.8	Conventional	0.002	0	0.40	0.005	0.24	0	21.01	0.011	0.12	0	5.72	0.021	0.002	0	3.43	0.001	0.19	0	15.34	0.012
4-Isopropyltoluene	730.9	Conventional	0.001	0	0.40	0.002	0.12	0	21.12	0.006	0.061	0	5.75	0.011	0.001	0	3.45	0.000	0.096	0	15.42	0.006
Carbon Disulfide	30.2	Conventional	0.016	1	0.02	0.964	0.12	0	0.87	0.138	0.061	0	0.24	0.257	0.004	1	0.14	0.028	0.096	0	0.64	0.151
CFC-1113	1415.9	Conventional	0.002	0	0.78	0.003	0.24	0	40.92	0.006	0.12	0	11.14	0.011	0.002	0	6.68	0.000	0.19	0	29.87	0.006
Chlorodifluoromethane	1324.5	Conventional	0.002	0	0.73	0.003	0.004	0	38.28	0.000	0.003	0	10.42	0.000	0.002	0	6.25	0.000	0.003	0	27.95	0.000
Chlorofluoromethane	881.3	Conventional	0.001	0	0.48	0.002	0.008	1	25.47	0.000	0.001	0	6.94	0.000	0.001	0	4.16	0.000	0.045	1	18.59	0.002
cis-1,2 Dichloroethene	77.5	Conventional	0.001	0	0.04	0.023	0.12	0	2.24	0.054	0.061	0	0.61	0.100	0.001	0	0.37	0.003	0.096	0	1.63	0.059
Dichlorofluoromethane	1065.9	Conventional	0.016	1	0.59	0.027	0.47	1	30.80	0.015	0.12	0	8.39	0.014	0.002	0	5.03	0.000	0.19	0	22.49	0.008
Trichlorofluoromethane	290.7	Conventional	0.22	1	0.16	<b>1.376</b>	0.31	1	8.40	0.037	0.24	1	2.29	0.105	0.002	0	1.37	0.001	0.19	0	6.13	0.031
Vinyl Chloride	76.3	Conventional	0.001	0	0.04	0.024	0.12	0	2.20	0.054	0.061	0	0.60	0.102	0.001	0	0.36	0.003	0.096	0	1.61	0.060
1,1-Dichloroethene	466.3	Narcosis	0.003	1	0.26	0.012	0.12	0	13.48	0.009	0.061	0	3.67	0.017	0.001	0	2.20	0.000	0.096	0	9.84	0.010
1,2,4-Trimethylbenzene	1148.7	Narcosis	0.001	0	0.63	0.002	0.12	0	33.20	0.004	0.061	0	9.04	0.007	0.001	0	5.42	0.000	0.096	0	24.24	0.004
1,2-Dichlorobenzene	785.8	Narcosis	0.039	1	0.43	0.090	7.8	1	22.71	0.343	3	1	6.18	0.485	0.004	1	3.71	0.001	1.5	1	16.58	0.090
1,3,5-Trimethylbenzene	1152.7	Narcosis	0.001	0	0.63	0.002	0.12	0	33.31	0.004	0.061	0	9.07	0.007	0.001	0	5.44	0.000	0.096	0	24.32	0.004
1,3-Dichlorobenzene	785.8	Narcosis	0.001	1	0.43	0.002	0.31	1	22.71	0.014	0.11	1	6.18	0.018	0.001	0	3.71	0.000	1.1	1	16.58	0.066
1,4-Dichlorobenzene	785.1	Narcosis	0.063	1	0.43	0.146	13	1	22.69	0.573	5.8	1	6.18	0.939	0.01	1	3.71	0.003	6.6	1	16.57	0.398
2-Chlorotoluene	1161.1	Narcosis	0.001	0	0.64	0.002	0.15	1	33.56	0.004	0.061	0	9.14	0.007	0.001	0	5.48	0.000	0.096	0	24.50	0.004
Acetone	3120.9	Narcosis	0.053	1	1.72	0.031	0.84	0	90.19	0.009	0.43	0	24.56	0.018	0.016	1	14.73	0.001	0.67	0	65.85	0.010
Benzene	653.6	Narcosis	0.017	1	0.36	0.047	2.2	1	18.89	0.116	0.84	1	5.14	0.163	0.0008	1	3.08	0.000	1.3	1	13.79	0.094
Chlorobenzene	572.4	Narcosis	0.2	1	0.31	0.635	88	1	16.54	<b>5.320</b>	26	1	4.50	<b>5.772</b>	0.028	1	2.70	0.010	45	1	12.08	<b>3.726</b>
Chloroform	558.7	Narcosis	0.025	1	0.31	0.081	0.21	1	16.15	0.013	0.096	1	4.40	0.022	0.001	0	2.64	0.000	0.096	0	11.79	0.008
Cumene	1132.7	Narcosis	0.001	0	0.62	0.002	0.12	0	32.74	0.004	0.061	0	8.91	0.007	0.001	0	5.35	0.000	0.096	0	23.90	0.004
Ethylbenzene	970.4	Narcosis	0.001	0	0.53	0.002	0.12	0	28.05	0.004	0.061	0	7.64	0.008	0.001	0	4.58	0.000	0.41	1	20.48	0.020
Meta- And Para-Xylene	975.5	Narcosis	0.001	0	0.54	0.002	0.23	1	28.19	0.008	0.061	0	7.68	0.008	0.001	0	4.60	0.000	0.22	1	20.58	0.011
Methyl Ethyl Ketone	293.5	Narcosis	0.005	0	0.16	0.031	0.48	0	8.48	0.057	0.24	0	2.31	0.104	0.004	0	1.39	0.003	0.39	0	6.19	0.063
Methylene Chloride	372.9	Narcosis	0.004	1	0.21	0.020	0.36	1	10.78	0.033	0.2	1	2.93	0.068	0.002	1	1.76	0.001	0.19	0	7.87	0.024
Ortho-Xylene	966.2	Narcosis	0.001	0	0.53	0.002	0.12	0	27.92	0.004	0.061	0	7.60	0.008	0.001	0	4.56	0.000	0.096	0	20.39	0.005
Tetrachloroethene	829.4	Narcosis	0.1	1	0.46	0.219	5.9	1	23.97	0.246	2.9	1	6.53	0.444	0.001	0	3.91	0.000	0.096	0	17.50	0.005
Toluene	813.9	Narcosis	0.001	0	0.45	0.002	0.13	1	23.52	0.006	0.061	0	6.41	0.010	0.001	0	3.84	0.000	0.096	0	17.17	0.006
Trichloroethene	659.4	Narcosis	0.009	1	0.36	0.025	0.26	1	19.06	0.014	0.11	1	5.19	0.021	0.001	0	3.11	0.000	0.096	0	13.91	0.007
Xylenes	969.6	Narcosis	0.001	0	0.53	0.002	0.23	1	28.02	0.008	0.061	0	7.63	0.008	0.001	0	4.58	0.000	0.22	1	20.46	0.011
<b>Semi-Volatile Organic Compounds</b>																						
2-Chlorophenol	100.9	Conventional	0.02	0	0.06	0.360	0.09	1	2.92	0.031	0.084	1	0.79	0.106	0.02	0	0.48	0.042	0.14	1	2.13	0.066
4-Chloroaniline	260.6	Conventional	0.04	0	0.14	0.279	0.16	1	7.53	0.021	0.089	1	2.05	0.043	0.04	0	1.23	0.033	0.051	0	5.50	0.009
4-Methylphenol (P-Cresol)	28.8	Conventional	0.02	0	0.02	<b>1.261</b>	0.067	1	0.83	0.080	0.022	1	0.23	0.097	0.02	0	0.14	0.147	0.032	1	0.61	0.053
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.079	0	29.18	0.003	0.13	0	1533.45	0.000	0.086	0	417.59	0.000	0.08	0	250.45	0.000	0.1	0	1119.58	0.000
Butyl Benzyl Phthalate	1088.3	Conventional	0.079	0	0.60	0.132	0.3	1	31.45	0.010	0.097	1	8.57	0.011	0.08	0	5.14	0.016	0.1	0	22.96	0.004
Carbazole	6.9	Conventional	0.02	0	0.00	<b>5.300</b>	0.032	0	0.20	0.161	0.022	0	0.05	0.407	0.02	0	0.03	0.618	0.025	0	0.14	0.173
Diethyl Phthalate	77.5	Conventional	0.079	0	0.04	<b>1.854</b>	0.13	0	2.24	0.058	0.086	0	0.61	0.141	0.08	0	0.37	0.219	0.1	0	1.63	0.061
Di-N-Butyl Phthalate	1191.2	Conventional	0.079	0	0.66	0.121	0.13	0	34.43	0.004	0.086	0	9.37	0.009	0.08	0	5.62	0.014	0.1	0	25.13	0.004
Nitrobenzene	156.5	Conventional	0.02	0	0.09	0.232	0.032	0	4.52	0.007	0.025	1	1.23	0.020	0.02	0	0.74	0.027	0.025	0	3.30	0.008
Phenol	5.5	Conventional	0.02	0	0.00	<b>6.619</b>	0.11	1	0.16	0.693	0.039	1	0.04	0.902	0.02	0	0.03	0.771	0.025	0	0.12	0.216
2-Methylnaphthalene	446.7	Narcosis	0.007	1	0.25	0.028	0.13	1	12.91	0.010	0.046	1	3.52	0.013	0.052	1	2.11	0.025	0.036	1	9.43	0.004
Acetophenone	965.7	Narcosis	0.02	0	0.53	0.038	0.032	0	27.91	0.001	0.022	0	7.60	0.003	0.02	0	4.56	0.004	0.025	0	20.38	0.001
Biphenyl	1507																					

**Table D3**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	D16-BOR-02 0.00-0.50 11/1/2016				D16-BOR-02 0.50-1.00 11/1/2016				D16-BOR-03 0.00-0.50 11/1/2016				D16-BOR-03 0.50-1.00 11/1/2016				D16-BOR-04 0.00-0.50 10/31/2016							
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU				
			<b>Volatile Organic Compounds</b>																							
1,1,1-Trichlorotrifluoroethane	1471.5	Conventional	0.34	1	10.18	0.033		0.22	1	6.30	0.035		0.03	1	41.35	0.001		0.01	0	30.02	0.000		0.009	0	5.11	0.002
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	4	1	10.18	0.393		1.6	1	6.30	0.254		0.32	1	41.35	0.008		0.25	1	30.02	0.008		0.003	0	5.11	0.001
1,2-Dichloro-1,1,2-Trifluoroethane	922.7	Conventional	0.19	1	6.38	0.030		0.13	1	3.95	0.033		0.006	1	25.93	0.000		0.004	1	18.82	0.000		0.002	0	3.20	0.001
1,2-Dichloroethene	77.5	Conventional	0.081	0	0.54	0.151		0.056	0	0.33	0.169		0.002	0	2.18	0.001		0.002	0	1.58	0.001		0.002	0	0.27	0.007
1,2-Dichlorotetrafluoroethane	1184.2	Conventional	0.066	1	8.19	0.008		0.045	1	5.07	0.009		0.008	1	33.28	0.000		0.005	1	24.16	0.000		0.004	0	4.11	0.001
2,2-Dichloro-1,1,1-Trifluoroethane	922.7	Conventional	0.038	1	6.38	0.006		0.028	1	3.95	0.007		0.035	1	25.93	0.001		0.023	1	18.82	0.001		0.002	0	3.20	0.001
2-Chloro-1,1,1-Trifluoroethane	726.8	Conventional	0.16	0	5.03	0.032		0.11	0	3.11	0.035		0.018	1	20.42	0.001		0.039	1	14.83	0.003		0.003	0	2.52	0.001
4-Isopropyltoluene	730.9	Conventional	0.081	0	5.06	0.016		0.056	0	3.13	0.018		0.002	0	20.54	0.000		0.002	0	14.91	0.000		0.002	0	2.54	0.001
Carbon Disulfide	30.2	Conventional	0.081	0	0.21	0.388		0.056	0	0.13	0.434		0.003	1	0.85	0.004		0.004	1	0.62	0.006		0.005	1	0.10	0.048
CFC-1113	1415.9	Conventional	0.16	0	9.80	0.016		0.11	0	6.06	0.018		0.004	0	39.79	0.000		0.004	0	28.88	0.000		0.003	0	4.91	0.001
Chlorodifluoromethane	1324.5	Conventional	0.003	0	9.17	0.000		0.002	0	5.67	0.000		0.006	0	37.22	0.000		0.004	0	27.02	0.000		0.004	0	4.60	0.001
Chlorofluoromethane	881.3	Conventional	0.004	1	6.10	0.001		0.003	1	3.77	0.001		0.007	1	24.76	0.000		0.009	1	17.98	0.001		0.002	0	3.06	0.001
cis-1,2 Dichloroethene	77.5	Conventional	0.081	0	0.54	0.151		0.056	0	0.33	0.169		0.002	0	2.18	0.001		0.002	0	1.58	0.001		0.002	0	0.27	0.007
Dichlorofluoromethane	1065.9	Conventional	0.48	1	7.38	0.065		0.21	1	4.56	0.046		0.033	1	29.95	0.001		0.029	1	21.74	0.001		0.003	0	3.70	0.001
Trichlorofluoromethane	290.7	Conventional	1	1	2.01	0.497		0.22	1	1.24	0.177		0.37	1	8.17	0.045		0.26	1	5.93	0.044		0.003	0	1.01	0.003
Vinyl Chloride	76.3	Conventional	0.081	0	0.53	0.153		0.056	0	0.33	0.172		0.002	0	2.14	0.001		0.002	0	1.56	0.001		0.002	0	0.26	0.008
1,1-Dichloroethene	466.3	Narcosis	0.081	0	3.23	0.025		0.056	0	2.00	0.028		0.002	0	13.10	0.000		0.002	0	9.51	0.000		0.002	0	1.62	0.001
1,2,4-Trimethylbenzene	1148.7	Narcosis	0.081	0	7.95	0.010		0.056	0	4.92	0.011		0.002	0	32.28	0.000		0.002	0	23.43	0.000		0.002	0	3.99	0.001
1,2-Dichlorobenzene	785.8	Narcosis	1.8	1	5.44	0.331		1.5	1	3.36	0.446		0.024	1	22.08	0.001		0.011	1	16.03	0.001		0.003	1	2.73	0.001
1,3,5-Trimethylbenzene	1152.7	Narcosis	0.081	0	7.98	0.010		0.056	0	4.93	0.011		0.002	0	32.39	0.000		0.002	0	23.52	0.000		0.002	0	4.00	0.001
1,3-Dichlorobenzene	785.8	Narcosis	0.1	1	5.44	0.018		0.085	1	3.36	0.025		0.002	0	22.08	0.000		0.002	0	16.03	0.000		0.002	0	2.73	0.001
1,4-Dichlorobenzene	785.1	Narcosis	5.2	1	5.43	0.957		4.2	1	3.36	<b>1.250</b>		0.016	1	22.06	0.001		0.007	1	16.02	0.000		0.002	1	2.72	0.001
2-Chlorotoluene	1161.1	Narcosis	0.081	0	8.03	0.010		0.056	0	4.97	0.011		0.002	0	32.63	0.000		0.002	0	23.69	0.000		0.002	0	4.03	0.000
Acetone	3120.9	Narcosis	0.57	0	21.60	0.026		0.39	0	13.36	0.029		0.055	1	87.70	0.001		0.076	1	63.67	0.001		0.095	1	10.83	0.009
Benzene	653.6	Narcosis	0.046	1	4.52	0.010		0.029	1	2.80	0.010		0.003	1	18.37	0.000		0.003	1	13.33	0.000		0.008	0	2.27	0.000
Chlorobenzene	572.4	Narcosis	4.8	1	3.96	<b>1.212</b>		4	1	2.45	<b>1.633</b>		0.039	1	16.08	0.002		0.03	1	11.68	0.003		0.009	1	1.99	0.005
Chloroform	558.7	Narcosis	0.081	0	3.87	0.021		0.056	0	2.39	0.023		0.003	1	15.70	0.000		0.002	0	11.40	0.000		0.002	0	1.94	0.001
Cumene	1132.7	Narcosis	0.081	0	7.84	0.010		0.056	0	4.85	0.012		0.002	0	31.83	0.000		0.002	0	23.11	0.000		0.002	0	3.93	0.001
Ethylbenzene	970.4	Narcosis	0.081	0	6.72	0.012		0.056	0	4.15	0.013		0.002	0	27.27	0.000		0.002	0	19.80	0.000		0.002	0	3.37	0.001
Meta- And Para-Xylene	975.5	Narcosis	0.081	0	6.75	0.012		0.056	0	4.18	0.013		0.002	0	27.41	0.000		0.002	0	19.90	0.000		0.002	0	3.39	0.001
Methyl Ethyl Ketone	293.5	Narcosis	0.33	0	2.03	0.162		0.23	0	1.26	0.183		0.007	0	8.25	0.001		0.008	1	5.99	0.001		0.014	1	1.02	0.014
Methylene Chloride	372.9	Narcosis	0.16	0	2.58	0.062		0.11	0	1.60	0.069		0.004	0	10.48	0.000		0.004	0	7.61	0.001		0.003	0	1.29	0.002
Ortho-Xylene	966.2	Narcosis	0.081	0	6.69	0.012		0.056	0	4.14	0.014		0.002	0	27.15	0.000		0.002	0	19.71	0.000		0.002	0	3.35	0.001
Tetrachloroethene	829.4	Narcosis	0.43	1	5.74	0.075		0.36	1	3.55	0.101		0.006	1	23.31	0.000		0.005	1	16.92	0.000		0.002	0	2.88	0.001
Toluene	813.9	Narcosis	0.081	0	5.63	0.014		0.056	0	3.48	0.016		0.003	1	22.87	0.000		0.003	1	16.60	0.000		0.002	0	2.82	0.001
Trichloroethene	659.4	Narcosis	0.081	0	4.56	0.018		0.056	0	2.82	0.020		0.002	0	18.53	0.000		0.002	0	13.45	0.000		0.002	0	2.29	0.001
Xylenes	969.6	Narcosis	0.081	0	6.71	0.012		0.056	0	4.15	0.013		0.002	0	27.25	0.000		0.002	0	19.78	0.000		0.002	0	3.36	0.001
<b>Semi-Volatile Organic Compounds</b>																										
2-Chlorophenol	100.9	Conventional	0.023	0	0.70	0.033		0.021	0	0.43	0.049		0.15	0	2.83	0.053		0.14	0	2.06	0.068		0.027	0	0.35	0.077
4-Chloroaniline	260.6	Conventional	0.045	0	1.80	0.025		0.043	0	1.12	0.039		0.29	0	7.32	0.040		0.27	0	5.32	0.051		0.055	0	0.90	0.061
4-Methylphenol (P-Cresol)	28.8	Conventional	0.023	0	0.20	0.115		0.021	0	0.12	0.170		0.15	0	0.81	0.185		0.14	0	0.59	0.238		0.027	0	0.10	0.270
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.09	0	367.18	0.000		0.085	0	227.10	0.000		0.58	0	1491.00	0.000		0.55	0	1082.43	0.001		0.11	0	184.12	0.001
Butyl Benzyl Phthalate	1088.3	Conventional	0.09	0	7.53	0.012		0.085	0	4.66	0.018		0.58	0	30.58	0.019		0.55	0	22.20	0.025		0.11	0	3.78	0.029
Carbazole	6.9	Conventional	0.032	1	0.05	0.674		0.021	0	0.03	0.715		0.15	0	0.19	0.778		0.14	0	0.14	<b>1.000</b>		0.027	0	0.02	<b>1.134</b>
Diethyl Phthalate	77.5	Conventional	0.09	0	0.54	0.168		0.094	1	0.33	0.283		0.58	0	2.18	0.266		0.55	0	1.58	0.348		0.11	0	0.27	0.409
Di-N-Butyl Phthalate	1191.2	Conventional	0.09	0	8.24	0.011		0.085	0	5.10	0.017		0.58	0	33.47	0.017		0.55	0	24.30	0.023		0.11	0	4.13	

**Table D3**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	D16-BOR-04 0.50-1.00 10/31/2016				D16-BOR-05 0.00-0.50 11/2/2016				D16-BOR-05 0.50-1.00 11/2/2016				D16-BOR-06 0.00-0.50 10/25/2016				D16-BOR-06 0.50-1.00 10/25/2016			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																			
1,1,1-Trichlorotrifluoroethane	1471.5	Conventional	0.009	0	9.51	0.001	0.035	1	27.37	0.001	0.011	0	30.90	0.000	0.014	0	28.69	0.000	0.011	0	41.35	0.000
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	0.003	0	9.51	0.000	0.86	1	27.37	0.031	0.24	0	30.90	0.008	0.005	0	28.69	0.000	0.004	0	41.35	0.000
1,2-Dichloro-1,1,2-Trifluoroethane	922.7	Conventional	0.002	0	5.96	0.000	0.007	1	17.16	0.000	0.006	1	19.38	0.000	0.003	0	17.99	0.000	0.002	0	25.93	0.000
1,2-Dichloroethene	77.5	Conventional	0.002	0	0.50	0.004	0.002	0	1.44	0.001	0.12	0	1.63	0.074	0.002	0	1.51	0.001	0.002	0	2.18	0.001
1,2-Dichlorotetrafluoroethane	1184.2	Conventional	0.004	0	7.65	0.001	0.008	1	22.03	0.000	0.004	0	24.87	0.000	0.005	0	23.09	0.000	0.005	0	33.28	0.000
2,2-Dichloro-1,1,1-Trifluoroethane	922.7	Conventional	0.002	0	5.96	0.000	0.02	1	17.16	0.001	0.009	1	19.38	0.000	0.003	0	17.99	0.000	0.002	0	25.93	0.000
2-Chloro-1,1,1-Trifluoroethane	726.8	Conventional	0.003	0	4.70	0.001	0.018	1	13.52	0.001	0.24	0	15.26	0.016	0.005	0	14.17	0.000	0.004	0	20.42	0.000
4-Isopropyltoluene	730.9	Conventional	0.002	0	4.72	0.000	0.002	0	13.60	0.000	0.12	0	15.35	0.008	0.002	0	14.25	0.000	0.002	0	20.54	0.000
Carbon Disulfide	30.2	Conventional	0.004	1	0.19	0.021	0.009	1	0.56	0.016	0.12	0	0.63	0.189	0.009	1	0.59	0.015	0.002	1	0.85	0.002
CFC-1113	1415.9	Conventional	0.003	0	9.15	0.000	0.005	0	26.34	0.000	0.24	0	29.73	0.008	0.005	0	27.61	0.000	0.004	0	39.79	0.000
Chlorodifluoromethane	1324.5	Conventional	0.004	0	8.56	0.000	0.005	0	24.64	0.000	0.004	0	27.81	0.000	0.005	0	25.83	0.000	0.005	0	37.22	0.000
Chlorofluoromethane	881.3	Conventional	0.002	0	5.69	0.000	0.006	1	16.39	0.000	0.012	1	18.51	0.001	0.003	0	17.18	0.000	0.002	0	24.76	0.000
cis-1,2 Dichloroethene	77.5	Conventional	0.002	0	0.50	0.004	0.002	0	1.44	0.001	0.12	0	1.63	0.074	0.002	0	1.51	0.001	0.002	0	2.18	0.001
Dichlorofluoromethane	1065.9	Conventional	0.003	0	6.89	0.000	0.1	1	19.83	0.005	0.24	0	22.38	0.011	0.005	0	20.78	0.000	0.004	0	29.95	0.000
Trichlorofluoromethane	290.7	Conventional	0.003	0	1.88	0.002	1	1	5.41	0.185	0.24	0	6.10	0.039	0.005	0	5.67	0.001	0.004	0	8.17	0.000
Vinyl Chloride	76.3	Conventional	0.002	0	0.49	0.004	0.002	0	1.42	0.001	0.12	0	1.60	0.075	0.002	0	1.49	0.001	0.002	0	2.14	0.001
1,1-Dichloroethene	466.3	Narcosis	0.002	0	3.01	0.001	0.002	0	8.67	0.000	0.12	0	9.79	0.012	0.002	0	9.09	0.000	0.002	0	13.10	0.000
1,2,4-Trimethylbenzene	1148.7	Narcosis	0.002	0	7.42	0.000	0.002	0	21.37	0.000	0.12	0	24.12	0.005	0.002	0	22.40	0.000	0.002	0	32.28	0.000
1,2-Dichlorobenzene	785.8	Narcosis	0.006	1	5.08	0.001	0.036	1	14.62	0.002	0.54	1	16.50	0.033	0.004	1	15.32	0.000	0.007	1	22.08	0.000
1,3,5-Trimethylbenzene	1152.7	Narcosis	0.002	0	7.45	0.000	0.002	0	21.44	0.000	0.12	0	24.21	0.005	0.002	0	22.48	0.000	0.002	0	32.39	0.000
1,3-Dichlorobenzene	785.8	Narcosis	0.002	0	5.08	0.000	0.002	0	14.62	0.000	0.12	0	16.50	0.007	0.002	0	15.32	0.000	0.002	0	22.08	0.000
1,4-Dichlorobenzene	785.1	Narcosis	0.006	1	5.07	0.001	0.019	1	14.60	0.001	0.22	1	16.49	0.013	0.002	0	15.31	0.000	0.005	1	22.06	0.000
2-Chlorotoluene	1161.1	Narcosis	0.002	0	7.50	0.000	0.002	0	21.60	0.000	0.12	0	24.38	0.005	0.002	0	22.64	0.000	0.002	0	32.63	0.000
Acetone	3120.9	Narcosis	0.087	1	20.16	0.004	0.093	1	58.05	0.002	0.84	0	65.54	0.013	0.2	1	60.86	0.003	0.067	1	87.70	0.001
Benzene	653.6	Narcosis	0.0009	1	4.22	0.000	0.005	1	12.16	0.000	0.06	0	13.72	0.004	0.001	0	12.74	0.000	0.001	0	18.37	0.000
Chlorobenzene	572.4	Narcosis	0.051	1	3.70	0.014	0.057	1	10.65	0.005	2.1	1	12.02	0.175	0.006	1	11.16	0.001	0.029	1	16.08	0.002
Chloroform	558.7	Narcosis	0.002	0	3.61	0.001	0.006	1	10.39	0.001	0.12	0	11.73	0.010	0.002	0	10.89	0.000	0.002	0	15.70	0.000
Cumene	1132.7	Narcosis	0.032	1	7.32	0.004	0.002	0	21.07	0.000	0.12	0	23.79	0.005	0.002	0	22.09	0.000	0.002	0	31.83	0.000
Ethylbenzene	970.4	Narcosis	0.002	0	6.27	0.000	0.002	0	18.05	0.000	0.12	0	20.38	0.006	0.002	0	18.92	0.000	0.002	0	27.27	0.000
Meta- And Para-Xylene	975.5	Narcosis	0.002	1	6.30	0.000	0.002	0	18.14	0.000	0.12	0	20.49	0.006	0.002	0	19.02	0.000	0.002	0	27.41	0.000
Methyl Ethyl Ketone	293.5	Narcosis	0.01	1	1.90	0.005	0.009	0	5.46	0.002	0.48	0	6.16	0.078	0.024	1	5.72	0.004	0.008	0	8.25	0.001
Methylene Chloride	372.9	Narcosis	0.003	0	2.41	0.001	0.005	0	6.94	0.001	0.24	0	7.83	0.031	0.005	0	7.27	0.001	0.004	0	10.48	0.000
Ortho-Xylene	966.2	Narcosis	0.005	1	6.24	0.001	0.002	0	17.97	0.000	0.12	0	20.29	0.006	0.002	0	18.84	0.000	0.002	1	27.15	0.000
Tetrachloroethene	829.4	Narcosis	0.002	0	5.36	0.000	0.018	1	15.43	0.001	0.12	0	17.42	0.007	0.002	0	16.17	0.000	0.002	0	23.31	0.000
Toluene	813.9	Narcosis	0.002	0	5.26	0.000	0.003	1	15.14	0.000	0.12	0	17.09	0.007	0.002	0	15.87	0.000	0.002	0	22.87	0.000
Trichloroethene	659.4	Narcosis	0.002	0	4.26	0.000	0.002	0	12.27	0.000	0.12	0	13.85	0.009	0.002	0	12.86	0.000	0.002	0	18.53	0.000
Xylenes	969.6	Narcosis	0.007	1	6.26	0.001	0.002	0	18.03	0.000	0.12	0	20.36	0.006	0.002	0	18.91	0.000	0.002	1	27.25	0.000
<b>Semi-Volatile Organic Compounds</b>																						
2-Chlorophenol	100.9	Conventional	0.023	0	0.65	0.035	0.032	0	1.88	0.017	0.031	0	2.12	0.015	0.033	0	1.97	0.017	0.03	0	2.83	0.011
4-Chloroaniline	260.6	Conventional	0.076	1	1.68	0.045	0.064	0	4.85	0.013	5.2	1	5.47	0.950	0.065	0	5.08	0.013	1.2	1	7.32	0.164
4-Methylphenol (P-Cresol)	28.8	Conventional	0.023	0	0.19	0.123	0.071	1	0.54	0.132	0.17	1	0.61	0.281	0.065	1	0.56	0.116	0.2	1	0.81	0.247
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.093	0	342.77	0.000	0.13	0	986.93	0.000	0.44	1	1114.27	0.000	0.13	0	1034.68	0.000	0.27	1	1491.00	0.000
Butyl Benzyl Phthalate	1088.3	Conventional	0.093	0	7.03	0.013	0.13	0	20.24	0.006	1.4	1	22.85	0.061	0.13	0	21.22	0.006	0.12	0	30.58	0.004
Carbazole	6.9	Conventional	0.023	0	0.04	0.519	0.032	0	0.13	0.251	0.051	1	0.14	0.354	0.033	0	0.13	0.247	0.03	0	0.19	0.156
Diethyl Phthalate	77.5	Conventional	0.093	0	0.50	0.186	0.13	0	1.44	0.090	0.12	0	1.63	0.074	0.13	0	1.51	0.086	0.12	0	2.18	0.055
Di-N-Butyl Phthalate	1191.2	Conventional	0.093	0	7.70	0.012	0.13	0	22.16	0.006	0.12	0	25.01	0.005	0.13	0	23.23	0.006	0.12	0	33.47	0.004
Nitrobenzene	156.5	Conventional	0.023	0	1.01	0.023	0.032	0	2.91	0.011	0.031	0	3.29	0.009	0.033	0	3.05	0.011	0.034	1	4.40	0.008
Phenol	5.5	Conventional	0.023	0	0.04	0.648	0.032	0	0.10	0.313	0.031	0	0.12	0.269	0.033	0	0.11	0.308	0.27	1	0.15	1.749
2-Methylnaphthalene	446.7	Narcosis	0.034	1	2.89	0.012	0.056	1	8.31	0.007	0.58	1	9.38	0.062	0.037	1	8.71	0.004	0.09	1	12.55	0.007
Acetophenone	965.7	Narcosis	0.023	0	6.24	0.004	0.032	0	17.96	0.002	0.031	0	20.28	0.002	0.033							

**Table D3**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	D16-BOR-09 0.00-0.50 11/6/2017				D16-BOR-09 0.50-1.00 11/6/2017				D16-BOR-10 0.00-0.50 11/7/2017				D16-BOR-10 0.50-1.00 11/7/2017				D16-BOR-11 0.00-0.50 11/7/2017			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																			
1,1,1-Trichlorotrifluoroethane	1471.5	Conventional	0.009	0	36.05	0.000	0.011	0	52.39	0.000	0.009	0	45.62	0.000	0.013	0	67.54	0.000	0.012	0	32.37	0.000
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	0.003	0	36.05	0.000	0.23	0	52.39	0.004	0.004	0	45.62	0.000	0.26	0	67.54	0.004	0.004	0	32.37	0.000
1,2-Dichloro-1,1,2-Trifluoroethane	922.7	Conventional	0.002	0	22.61	0.000	0.002	0	32.85	0.000	0.002	0	28.60	0.000	0.003	0	42.35	0.000	0.002	0	20.30	0.000
1,2-Dichloroethene	77.5	Conventional	0.001	0	1.90	0.001	0.11	0	2.76	0.040	0.002	0	2.40	0.001	0.13	0	3.56	0.037	0.002	0	1.70	0.001
1,2-Dichlorotetrafluoroethane	1184.2	Conventional	0.003	0	29.01	0.000	0.004	0	42.16	0.000	0.004	0	36.71	0.000	0.005	0	54.35	0.000	0.005	0	26.05	0.000
2,2-Dichloro-1,1,1-Trifluoroethane	922.7	Conventional	0.002	0	22.61	0.000	0.002	0	32.85	0.000	0.002	0	28.60	0.000	0.003	0	42.35	0.000	0.002	0	20.30	0.000
2-Chloro-1,1,1-Trifluoroethane	726.8	Conventional	0.003	0	17.81	0.000	0.23	0	25.88	0.009	0.004	0	22.53	0.000	0.26	0	33.36	0.008	0.004	0	15.99	0.000
4-Isopropyltoluene	730.9	Conventional	0.001	0	17.91	0.000	0.11	0	26.02	0.004	0.002	0	22.66	0.000	0.13	0	33.55	0.004	0.002	0	16.08	0.000
Carbon Disulfide	30.2	Conventional	0.002	1	0.74	0.003	0.11	0	1.07	0.102	0.005	1	0.94	0.005	0.13	0	1.38	0.094	0.007	1	0.66	0.011
CFC-1113	1415.9	Conventional	0.003	0	34.69	0.000	0.23	0	50.41	0.005	0.004	0	43.89	0.000	0.26	0	64.99	0.004	0.004	0	31.15	0.000
Chlorodifluoromethane	1324.5	Conventional	0.003	0	32.45	0.000	0.004	0	47.15	0.000	0.004	0	41.06	0.000	0.005	0	60.79	0.000	0.005	0	29.14	0.000
Chlorofluoromethane	881.3	Conventional	0.002	0	21.59	0.000	0.002	0	31.37	0.000	0.002	0	27.32	0.000	0.003	0	40.45	0.000	0.002	0	19.39	0.000
cis-1,2 Dichloroethene	77.5	Conventional	0.001	0	1.90	0.001	0.11	0	2.76	0.040	0.002	0	2.40	0.001	0.13	0	3.56	0.037	0.002	0	1.70	0.001
Dichlorofluoromethane	1065.9	Conventional	0.003	0	26.11	0.000	0.23	0	37.95	0.006	0.004	0	33.04	0.000	0.26	0	48.92	0.005	0.004	0	23.45	0.000
Trichlorofluoromethane	290.7	Conventional	0.003	0	7.12	0.000	0.23	0	10.35	0.022	0.004	0	9.01	0.000	0.26	0	13.34	0.019	0.004	0	6.39	0.001
Vinyl Chloride	76.3	Conventional	0.001	0	1.87	0.001	0.11	0	2.72	0.041	0.002	0	2.36	0.001	0.13	0	3.50	0.037	0.002	0	1.68	0.001
1,1-Dichloroethene	466.3	Narcosis	0.001	0	11.42	0.000	0.11	0	16.60	0.007	0.002	0	14.46	0.000	0.13	0	21.40	0.006	0.002	0	10.26	0.000
1,2,4-Trimethylbenzene	1148.7	Narcosis	0.001	0	28.14	0.000	0.11	0	40.89	0.003	0.002	0	35.61	0.000	0.13	0	52.73	0.002	0.002	0	25.27	0.000
1,2-Dichlorobenzene	785.8	Narcosis	0.002	1	19.25	0.000	0.21	1	27.97	0.008	0.004	1	24.36	0.000	1.2	1	36.07	0.033	0.007	1	17.29	0.000
1,3,5-Trimethylbenzene	1152.7	Narcosis	0.001	0	28.24	0.000	0.11	0	41.04	0.003	0.002	0	35.73	0.000	0.13	0	52.91	0.002	0.002	0	25.36	0.000
1,3-Dichlorobenzene	785.8	Narcosis	0.001	0	19.25	0.000	0.11	0	27.97	0.004	0.002	0	24.36	0.000	1.3	1	36.07	0.036	0.002	0	17.29	0.000
1,4-Dichlorobenzene	785.1	Narcosis	0.003	1	19.23	0.000	0.46	1	27.95	0.016	0.002	0	24.34	0.000	6.5	1	36.04	0.180	0.003	1	17.27	0.000
2-Chlorotoluene	1161.1	Narcosis	0.001	0	28.45	0.000	0.11	0	41.34	0.003	0.002	0	35.99	0.000	0.13	0	53.30	0.002	0.002	0	25.54	0.000
Acetone	3120.9	Narcosis	0.067	1	76.46	0.001	0.79	0	111.10	0.007	0.12	1	96.75	0.001	0.92	0	143.25	0.006	0.15	1	68.66	0.002
Benzene	653.6	Narcosis	0.0007	0	16.01	0.000	0.057	0	23.27	0.002	0.001	0	20.26	0.000	0.066	0	30.00	0.002	0.001	0	14.38	0.000
Chlorobenzene	572.4	Narcosis	0.002	1	14.02	0.000	3.2	1	20.38	0.157	0.043	1	17.74	0.002	14	1	26.27	0.533	0.057	1	12.59	0.005
Chloroform	558.7	Narcosis	0.001	0	13.69	0.000	0.11	0	19.89	0.006	0.002	0	17.32	0.000	0.13	0	25.64	0.005	0.002	0	12.29	0.000
Cumene	1132.7	Narcosis	0.001	0	27.75	0.000	0.18	1	40.33	0.004	0.003	1	35.11	0.000	0.76	1	51.99	0.015	0.068	1	24.92	0.003
Ethylbenzene	970.4	Narcosis	0.001	0	23.78	0.000	0.11	0	34.55	0.003	0.002	0	30.08	0.000	0.13	0	44.54	0.003	0.002	0	21.35	0.000
Meta- And Para-Xylene	975.5	Narcosis	0.001	0	23.90	0.000	0.11	0	34.73	0.003	0.002	0	30.24	0.000	0.26	1	44.78	0.006	0.002	0	21.46	0.000
Methyl Ethyl Ketone	293.5	Narcosis	0.007	1	7.19	0.001	0.45	0	10.45	0.043	0.011	1	9.10	0.001	0.53	0	13.47	0.039	0.015	1	6.46	0.002
Methylene Chloride	372.9	Narcosis	0.003	0	9.13	0.000	0.23	0	13.27	0.017	0.004	0	11.56	0.000	0.26	0	17.11	0.015	0.004	0	8.20	0.000
Ortho-Xylene	966.2	Narcosis	0.001	0	23.67	0.000	0.11	0	34.40	0.003	0.002	0	29.95	0.000	0.21	1	44.35	0.005	0.005	1	21.26	0.000
Tetrachloroethene	829.4	Narcosis	0.001	0	20.32	0.000	0.11	0	29.53	0.004	0.002	0	25.71	0.000	0.13	0	38.07	0.003	0.002	0	18.25	0.000
Toluene	813.9	Narcosis	0.001	1	19.94	0.000	0.11	0	28.98	0.004	0.003	1	25.23	0.000	0.13	0	37.36	0.003	0.002	1	17.91	0.000
Trichloroethene	659.4	Narcosis	0.001	0	16.16	0.000	0.11	0	23.48	0.005	0.002	0	20.44	0.000	0.13	0	30.27	0.004	0.002	0	14.51	0.000
Xylenes	969.6	Narcosis	0.001	0	23.75	0.000	0.11	0	34.52	0.003	0.002	0	30.06	0.000	0.47	1	44.50	0.011	0.005	1	21.33	0.000
<b>Semi-Volatile Organic Compounds</b>																						
2-Chlorophenol	100.9	Conventional	0.028	0	2.47	0.011	0.032	0	3.59	0.009	0.03	0	3.13	0.010	0.18	0	4.63	0.039	0.14	0	2.22	0.063
4-Chloroaniline	260.6	Conventional	0.86	1	6.39	0.135	2	1	9.28	0.216	0.72	1	8.08	0.089	4	1	11.96	0.334	0.28	0	5.73	0.049
4-Methylphenol (P-Cresol)	28.8	Conventional	0.061	1	0.71	0.086	0.12	1	1.03	0.117	0.11	1	0.89	0.123	0.22	1	1.32	0.166	0.14	0	0.63	0.221
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.11	0	1299.98	0.000	0.26	1	1888.95	0.000	0.12	0	1644.88	0.000	1.2	1	2435.48	0.000	0.56	0	1167.33	0.000
Butyl Benzyl Phthalate	1088.3	Conventional	0.27	1	26.66	0.010	0.13	0	38.74	0.003	0.12	0	33.74	0.004	0.73	0	49.95	0.015	0.56	0	23.94	0.023
Carbazole	6.9	Conventional	0.047	1	0.17	0.280	0.032	0	0.24	0.131	0.03	0	0.21	0.141	0.18	0	0.31	0.572	0.14	0	0.15	0.927
Diethyl Phthalate	77.5	Conventional	0.11	0	1.90	0.058	0.13	0	2.76	0.047	0.12	0	2.40	0.050	0.73	0	3.56	0.205	0.56	0	1.70	0.329
Di-N-Butyl Phthalate	1191.2	Conventional	0.11	0	29.18	0.004	0.13	0	42.41	0.003	0.12	0	36.93	0.003	0.73	0	54.68	0.013	0.56	0	26.21	0.021
Nitrobenzene	156.5	Conventional	0.028	0	3.83	0.007	0.032	0	5.57	0.006	0.03	0	4.85	0.006	0.18	0	7.18	0.025	0.14	0	3.44	0.041
Phenol	5.5	Conventional	0.065	1	0.13	0.483	0.032	0	0.20	0.164	0.12	1	0.17	0.705	0.2	1	0.25	0.793	0.14	0	0.12	1.158
2-Methylnaphthalene	446.7	Narcosis	0.14	1	10.94	0.013	0.087	1	15.90	0.005	0.19	1	13.85	0.014	0.6	1	20.50	0.029	0.086	1	9.83	0.009
Acetophenone	965.7	Narcosis	0.028	0	23.66	0.001	0.032	0	34.38	0.001	0.03	0	29.94	0.001	0.18	0						

**Table D3**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	D16-BOR-11 0.50-1.00 11/7/2017				D16-BOR-12 0.00-0.50 11/6/2017				D16-BOR-12 0.50-1.00 11/6/2017				D16-BOR-13 0.00-0.50 11/6/2017				D16-BOR-13 0.50-1.00 11/6/2017			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																			
1,1,1-Trichlorotrifluoroethane	1471.5	Conventional	0.012	0	124.19	0.000	0.011	0	38.70	0.000	0.012	0	56.06	0.000	0.011	0	43.56	0.000	0.012	0	49.44	0.000
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	0.31	0	124.19	0.002	0.3	1	38.70	0.008	0.51	1	56.06	0.009	0.004	0	43.56	0.000	0.005	0	49.44	0.000
1,2-Dichloro-1,1,2-Trifluoroethane	922.7	Conventional	0.002	0	77.87	0.000	0.014	1	24.27	0.001	0.015	1	35.15	0.000	0.002	0	27.31	0.000	0.002	0	31.00	0.000
1,2-Dichloroethene	77.5	Conventional	0.15	0	6.54	0.023	0.002	0	2.04	0.001	0.002	0	2.95	0.001	0.002	0	2.29	0.001	0.003	0	2.60	0.001
1,2-Dichlorotetrafluoroethane	1184.2	Conventional	0.005	0	99.95	0.000	0.009	1	31.14	0.000	0.005	0	45.12	0.000	0.004	0	35.05	0.000	0.005	0	39.79	0.000
2,2-Dichloro-1,1,1-Trifluoroethane	922.7	Conventional	0.002	0	77.87	0.000	0.065	1	24.27	0.003	0.078	1	35.15	0.002	0.002	0	27.31	0.000	0.002	0	31.00	0.000
2-Chloro-1,1,1-Trifluoroethane	726.8	Conventional	0.31	0	61.35	0.005	0.009	1	19.12	0.000	0.053	1	27.69	0.002	0.004	0	21.51	0.000	0.005	0	24.42	0.000
4-Isopropyltoluene	730.9	Conventional	0.61	1	61.69	0.010	0.002	0	19.22	0.000	0.002	0	27.85	0.000	0.002	0	21.64	0.000	0.003	0	24.56	0.000
Carbon Disulfide	30.2	Conventional	0.15	0	2.55	0.059	0.009	1	0.79	0.011	0.01	1	1.15	0.009	0.006	1	0.89	0.007	0.01	1	1.01	0.010
CFC-1113	1415.9	Conventional	0.31	0	119.50	0.003	0.005	0	37.24	0.000	0.028	1	53.94	0.001	0.004	0	41.91	0.000	0.005	0	47.57	0.000
Chlorodifluoromethane	1324.5	Conventional	0.005	0	111.79	0.000	0.005	0	34.83	0.000	0.005	0	50.46	0.000	0.004	0	39.20	0.000	0.005	0	44.50	0.000
Chlorofluoromethane	881.3	Conventional	0.002	0	74.38	0.000	0.007	1	23.18	0.000	0.045	1	33.58	0.001	0.002	0	26.09	0.000	0.002	0	29.61	0.000
cis-1,2 Dichloroethene	77.5	Conventional	0.15	0	6.54	0.023	0.002	0	2.04	0.001	0.002	0	2.95	0.001	0.002	0	2.29	0.001	0.003	0	2.60	0.001
Dichlorofluoromethane	1065.9	Conventional	0.31	0	89.96	0.003	0.042	1	28.03	0.001	0.067	1	40.61	0.002	0.004	0	31.55	0.000	0.005	0	35.81	0.000
Trichlorofluoromethane	290.7	Conventional	0.31	0	24.53	0.013	0.21	1	7.64	0.027	0.29	1	11.07	0.026	0.004	0	8.60	0.000	0.005	0	9.77	0.001
Vinyl Chloride	76.3	Conventional	0.15	0	6.44	0.023	0.002	0	2.01	0.001	0.002	0	2.91	0.001	0.002	0	2.26	0.001	0.003	0	2.56	0.001
1,1-Dichloroethene	466.3	Narcosis	0.15	0	39.36	0.004	0.002	0	12.26	0.000	0.002	0	17.77	0.000	0.002	0	13.80	0.000	0.003	0	15.67	0.000
1,2,4-Trimethylbenzene	1148.7	Narcosis	0.66	1	96.95	0.007	0.002	0	30.21	0.000	0.004	1	43.77	0.000	0.002	0	34.00	0.000	0.003	0	38.60	0.000
1,2-Dichlorobenzene	785.8	Narcosis	0.3	1	66.32	0.005	0.013	1	20.67	0.001	0.038	1	29.94	0.001	0.005	1	23.26	0.000	0.009	1	26.40	0.000
1,3,5-Trimethylbenzene	1152.7	Narcosis	0.31	1	97.29	0.003	0.002	0	30.32	0.000	0.002	0	43.92	0.000	0.002	0	34.12	0.000	0.003	0	38.73	0.000
1,3-Dichlorobenzene	785.8	Narcosis	0.33	1	66.32	0.005	0.002	0	20.67	0.000	0.003	1	29.94	0.000	0.002	0	23.26	0.000	0.003	0	26.40	0.000
1,4-Dichlorobenzene	785.1	Narcosis	0.77	1	66.26	0.012	0.006	1	20.65	0.000	0.008	1	29.91	0.000	0.003	1	23.24	0.000	0.004	1	26.38	0.000
2-Chlorotoluene	1161.1	Narcosis	0.6	1	98.00	0.006	0.002	0	30.54	0.000	0.004	1	44.24	0.000	0.002	0	34.37	0.000	0.008	1	39.01	0.000
Acetone	3120.9	Narcosis	1.1	0	263.40	0.004	0.14	1	82.08	0.002	0.25	1	118.91	0.002	0.14	1	92.38	0.002	0.39	1	104.86	0.004
Benzene	653.6	Narcosis	0.077	0	55.16	0.001	0.007	1	17.19	0.000	0.032	1	24.90	0.001	0.001	0	19.35	0.000	0.001	1	21.96	0.000
Chlorobenzene	572.4	Narcosis	6	1	48.31	0.124	0.028	1	15.05	0.002	0.15	1	21.81	0.007	0.006	1	16.94	0.000	0.11	1	19.23	0.006
Chloroform	558.7	Narcosis	0.15	0	47.15	0.003	0.002	1	14.69	0.000	0.009	1	21.29	0.000	0.002	0	16.54	0.000	0.003	0	18.77	0.000
Cumene	1132.7	Narcosis	39	1	95.60	0.408	0.002	0	29.79	0.000	0.002	0	43.16	0.000	0.002	0	33.53	0.000	0.003	0	38.06	0.000
Ethylbenzene	970.4	Narcosis	0.15	0	81.90	0.002	0.002	0	25.52	0.000	0.002	0	36.97	0.000	0.002	0	28.72	0.000	0.003	0	32.61	0.000
Meta- And Para-Xylene	975.5	Narcosis	0.26	1	82.33	0.003	0.002	0	25.66	0.000	0.014	1	37.17	0.000	0.002	0	28.88	0.000	0.003	0	32.78	0.000
Methyl Ethyl Ketone	293.5	Narcosis	0.62	0	24.77	0.025	0.013	1	7.72	0.002	0.03	1	11.18	0.003	0.012	1	8.69	0.001	0.047	1	9.86	0.005
Methylene Chloride	372.9	Narcosis	0.31	0	31.47	0.010	0.005	0	9.81	0.001	0.008	1	14.21	0.001	0.004	0	11.04	0.000	0.03	1	12.53	0.002
Ortho-Xylene	966.2	Narcosis	0.65	1	81.55	0.008	0.002	0	25.41	0.000	0.012	1	36.81	0.000	0.002	0	28.60	0.000	0.004	1	32.46	0.000
Tetrachloroethene	829.4	Narcosis	0.15	0	70.00	0.002	0.004	1	21.81	0.000	0.007	1	31.60	0.000	0.002	0	24.55	0.000	0.003	0	27.87	0.000
Toluene	813.9	Narcosis	0.15	0	68.70	0.002	0.005	1	21.41	0.000	0.013	1	31.01	0.000	0.002	1	24.09	0.000	0.004	1	27.35	0.000
Trichloroethene	659.4	Narcosis	0.15	0	55.66	0.003	0.002	0	17.34	0.000	0.002	0	25.13	0.000	0.002	0	19.52	0.000	0.003	0	22.16	0.000
Xylenes	969.6	Narcosis	0.91	1	81.83	0.011	0.002	0	25.50	0.000	0.026	1	36.94	0.001	0.002	0	28.70	0.000	0.004	1	32.58	0.000
<b>Semi-Volatile Organic Compounds</b>																						
2-Chlorophenol	100.9	Conventional	0.18	0	8.51	0.021	0.03	0	2.65	0.011	0.17	0	3.84	0.044	0.031	0	2.99	0.010	0.033	0	3.39	0.010
4-Chloroaniline	260.6	Conventional	18	1	22.00	0.818	0.061	0	6.86	0.009	1.5	1	9.93	0.151	0.062	0	7.72	0.008	0.066	0	8.76	0.008
4-Methylphenol (P-Cresol)	28.8	Conventional	0.43	1	2.43	0.177	0.12	1	0.76	0.158	0.17	1	1.10	0.155	0.055	1	0.85	0.064	0.15	1	0.97	0.155
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	2.4	1	4478.31	0.001	0.12	0	1395.49	0.000	0.66	0	2021.60	0.000	0.12	0	1570.59	0.000	0.13	0	1782.83	0.000
Butyl Benzyl Phthalate	1088.3	Conventional	6	1	91.85	0.065	0.12	0	28.62	0.004	0.66	0	41.46	0.016	0.12	0	32.21	0.004	0.18	1	36.57	0.005
Carbazole	6.9	Conventional	0.18	0	0.58	0.311	0.036	1	0.18	0.199	0.17	0	0.26	0.650	0.031	0	0.20	0.153	0.033	1	0.23	0.143
Diethyl Phthalate	77.5	Conventional	0.74	0	6.54	0.113	0.12	0	2.04	0.059	0.66	0	2.95	0.224	0.12	0	2.29	0.052	0.13	0	2.60	0.050
Di-N-Butyl Phthalate	1191.2	Conventional	0.74	0	100.54	0.007	0.12	0	31.33	0.004	0.66	0	45.38	0.015	0.12	0	35.26	0.003	0.13	0	40.02	0.003
Nitrobenzene	156.5	Conventional	0.18	0	13.21	0.014	0.03	0	4.12	0.007	0.17	0	5.96	0.029	0.031	0	4.63	0.007	0.033	0	5.26	0.006
Phenol	5.5	Conventional	0.47	1	0.46	1.014	0.067	1	0.14	0.464	0.17	0	0.21	0.812	0.031	0	0.16	0.191	0.099	1	0.18	0.536
2-Methylnaphthalene	446.7	Narcosis	2.8	1	37.70	0.074	0.38	1	11.75	0.032	0.11	1	17.02	0.006	0.046	1	13.22	0.003	0.2	1	15.01	0.013
Acetophenone	965.7	Narcosis	0.18	0	81.50	0.002	0.03	0	25.40	0.001	0.17	0	36.79									

**Table D3**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	D16-BOR-14 0.00-0.50 11/1/2017				D16-BOR-14 0.50-1.00 11/1/2017				E16-BOR-02 0.00-0.50 3/28/2009				E16-BOR-02 0.50-1.00 3/26/2009				E16-BOR-03 0.00-0.50 11/2/2016			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																			
1,1,1-Trichlorotrifluoroethane	1471.5	Conventional	0.011	0	38.55	0.000	0.008	0	23.84	0.000	---	---	---	---	---	---	---	---	0.16	1	4.41	0.036
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	0.32	1	38.55	0.008	0.15	0	23.84	0.006	---	---	---	---	0.098	0	25.60	0.004	3.4	1	4.41	0.770
1,2-Dichloro-1,1,2-Trifluoroethane	922.7	Conventional	1.2	1	24.17	0.050	0.079	1	14.95	0.005	---	---	---	---	---	---	---	---	0.076	1	2.77	0.027
1,2-Dichloroethene	77.5	Conventional	0.15	0	2.03	0.074	0.075	0	1.25	0.060	---	---	---	---	---	---	---	---	0.065	0	0.23	0.280
1,2-Dichlorotetrafluoroethane	1184.2	Conventional	0.13	1	31.03	0.004	0.28	1	19.18	0.015	---	---	---	---	---	---	---	---	0.064	1	3.55	0.018
2,2-Dichloro-1,1,1-Trifluoroethane	922.7	Conventional	0.3	1	24.17	0.012	0.44	1	14.95	0.029	---	---	---	---	---	---	---	---	0.041	1	2.77	0.015
2-Chloro-1,1,1-Trifluoroethane	726.8	Conventional	0.3	0	19.04	0.016	0.15	0	11.77	0.013	---	---	---	---	---	---	---	---	0.13	0	2.18	0.060
4-Isopropyltoluene	730.9	Conventional	0.15	0	19.15	0.008	0.075	0	11.84	0.006	---	---	---	---	---	---	---	---	0.065	0	2.19	0.030
Carbon Disulfide	30.2	Conventional	0.15	0	0.79	0.190	0.075	0	0.49	0.153	---	---	---	---	0.049	0	0.52	0.093	0.065	0	0.09	0.718
CFC-1113	1415.9	Conventional	0.3	0	37.10	0.008	0.15	0	22.94	0.007	---	---	---	---	---	---	---	---	0.13	0	4.25	0.031
Chlorodifluoromethane	1324.5	Conventional	0.006	1	34.70	0.000	0.005	1	21.46	0.000	---	---	---	---	---	---	---	---	0.004	0	3.97	0.001
Chlorofluoromethane	881.3	Conventional	0.093	1	23.09	0.004	0.007	1	14.28	0.000	---	---	---	---	---	---	---	---	0.006	1	2.64	0.002
cis-1,2 Dichloroethene	77.5	Conventional	0.15	0	2.03	0.074	0.075	0	1.25	0.060	---	---	---	---	0.049	0	1.35	0.036	0.065	0	0.23	0.280
Dichlorofluoromethane	1065.9	Conventional	0.52	1	27.93	0.019	0.15	0	17.27	0.009	---	---	---	---	0.098	0	18.55	0.005	0.55	1	3.20	0.172
Trichlorofluoromethane	290.7	Conventional	0.3	0	7.62	0.039	0.15	0	4.71	0.032	---	---	---	---	0.098	0	5.06	0.019	4	1	0.87	<b>4.587</b>
Vinyl Chloride	76.3	Conventional	0.15	0	2.00	0.075	0.075	0	1.24	0.061	---	---	---	---	0.049	0	1.33	0.037	0.065	0	0.23	0.284
1,1-Dichloroethene	466.3	Narcosis	0.15	0	12.22	0.012	0.075	0	7.55	0.010	---	---	---	---	0.049	0	8.11	0.006	0.065	0	1.40	0.046
1,2,4-Trimethylbenzene	1148.7	Narcosis	0.15	0	30.10	0.005	0.075	0	18.61	0.004	---	---	---	---	---	---	---	---	0.065	0	3.45	0.019
1,2-Dichlorobenzene	785.8	Narcosis	2.4	1	20.59	0.117	5.2	1	12.73	0.408	2.2	1	13.67	0.161	---	---	---	---	5	1	2.36	<b>2.121</b>
1,3,5-Trimethylbenzene	1152.7	Narcosis	0.15	0	30.20	0.005	0.075	0	18.67	0.004	---	---	---	---	---	---	---	---	0.065	0	3.46	0.019
1,3-Dichlorobenzene	785.8	Narcosis	0.15	0	20.59	0.007	0.26	1	12.73	0.020	1	1	13.67	0.073	---	---	---	---	0.23	1	2.36	0.098
1,4-Dichlorobenzene	785.1	Narcosis	3.6	1	20.57	0.175	9.6	1	12.72	0.755	14	1	13.66	<b>1.025</b>	---	---	---	---	7.5	1	2.36	<b>3.184</b>
2-Chlorotoluene	1161.1	Narcosis	0.15	0	30.42	0.005	0.075	0	18.81	0.004	---	---	---	---	---	---	---	---	0.065	0	3.48	0.019
Acetone	3120.9	Narcosis	1.1	0	81.77	0.013	0.52	0	50.56	0.010	---	---	---	---	0.34	0	54.30	0.006	0.46	0	9.36	0.049
Benzene	653.6	Narcosis	0.46	1	17.12	0.027	0.25	1	10.59	0.024	---	---	---	---	0.37	1	11.37	0.033	0.033	0	1.96	0.017
Chlorobenzene	572.4	Narcosis	21	1	15.00	<b>1.400</b>	16	1	9.27	<b>1.725</b>	---	---	---	---	1.7	1	9.96	0.171	3.7	1	1.72	<b>2.155</b>
Chloroform	558.7	Narcosis	0.15	0	14.64	0.010	0.075	0	9.05	0.008	---	---	---	---	0.049	0	9.72	0.005	0.065	0	1.68	0.039
Cumene	1132.7	Narcosis	0.15	0	29.68	0.005	0.075	1	18.35	0.004	---	---	---	---	---	---	---	---	0.62	1	3.40	0.182
Ethylbenzene	970.4	Narcosis	0.15	0	25.43	0.006	0.075	0	15.72	0.005	---	---	---	---	0.063	1	16.89	0.004	0.065	0	2.91	0.022
Meta- And Para-Xylene	975.5	Narcosis	0.15	0	25.56	0.006	0.075	0	15.80	0.005	---	---	---	---	---	---	---	---	0.065	0	2.93	0.022
Methyl Ethyl Ketone	293.5	Narcosis	0.6	0	7.69	0.078	0.3	0	4.76	0.063	---	---	---	---	---	---	---	---	0.26	0	0.88	0.295
Methylene Chloride	372.9	Narcosis	0.3	0	9.77	0.031	0.15	0	6.04	0.025	---	---	---	---	0.098	0	6.49	0.015	0.13	0	1.12	0.116
Ortho-Xylene	966.2	Narcosis	0.15	0	25.31	0.006	0.075	0	15.65	0.005	---	---	---	---	---	---	---	---	0.065	0	2.90	0.022
Tetrachloroethene	829.4	Narcosis	1.1	1	21.73	0.051	0.78	1	13.44	0.058	---	---	---	---	0.049	0	14.43	0.003	0.85	1	2.49	0.342
Toluene	813.9	Narcosis	0.15	0	21.32	0.007	0.075	0	13.19	0.006	---	---	---	---	0.22	1	14.16	0.016	0.065	0	2.44	0.027
Trichloroethene	659.4	Narcosis	0.15	0	17.28	0.009	0.075	0	10.68	0.007	---	---	---	---	0.049	0	11.47	0.004	0.065	0	1.98	0.033
Xylenes	969.6	Narcosis	0.15	0	25.40	0.006	0.075	0	15.71	0.005	---	---	---	---	0.4	1	16.87	0.024	0.065	0	2.91	0.022
<b>Semi-Volatile Organic Compounds</b>																						
2-Chlorophenol	100.9	Conventional	0.076	1	2.64	0.029	0.066	1	1.63	0.040	0.3	0	1.76	0.171	---	---	---	---	0.024	0	0.30	0.079
4-Chloroaniline	260.6	Conventional	0.061	0	6.83	0.009	0.049	0	4.22	0.012	0.61	0	4.54	0.135	---	---	---	---	0.048	0	0.78	0.061
4-Methylphenol (P-Cresol)	28.8	Conventional	0.038	1	0.76	0.050	0.029	1	0.47	0.062	---	---	---	---	---	---	---	---	0.024	0	0.09	0.277
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.12	0	1390.18	0.000	0.13	1	859.58	0.000	0.61	0	923.25	0.001	---	---	---	---	0.095	0	159.18	0.001
Butyl Benzyl Phthalate	1088.3	Conventional	0.12	0	28.51	0.004	0.097	0	17.63	0.006	0.61	0	18.94	0.032	---	---	---	---	0.095	0	3.26	0.029
Carbazole	6.9	Conventional	0.031	0	0.18	0.172	0.15	1	0.11	<b>1.349</b>	0.3	0	0.12	<b>2.513</b>	---	---	---	---	0.027	1	0.02	<b>1.312</b>
Diethyl Phthalate	77.5	Conventional	0.12	0	2.03	0.059	0.097	0	1.26	0.077	0.61	0	1.35	0.453	---	---	---	---	0.095	0	0.23	0.409
Di-N-Butyl Phthalate	1191.2	Conventional	0.12	0	31.21	0.004	0.097	0	19.30	0.005	0.61	0	20.73	0.029	---	---	---	---	0.095	0	3.57	0.027
Nitrobenzene	156.5	Conventional	0.031	0	4.10	0.008	0.024	0	2.54	0.009	0.3	0	2.72	0.110	---	---	---	---	0.024	0	0.47	0.051
Phenol	5.5	Conventional	0.033	1	0.14	0.229	0.024	0	0.09	0.270	0.3	0	0.10	<b>3.138</b>	---	---	---	---	0.024	0	0.02	<b>1.456</b>
2-Methylnaphthalene	446.7	Narcosis	0.037	1	11.70	0.003	0.34	1	7.24	0.047	---	---	---	---	---	---	---	---	0.074	1	1.34	0.055
Acetophenone	965.7	Narcosis	0.031	0	25.30	0.001	0.024	0	15.64	0.002	---	---	---	---	---	---	---	---	0.045	1	2.90	0.016
Biphenyl	1507.8	Narcosis	0.031	0	39.50	0.001	0.14	1	24.43	0.006	---	---	---	---	---	---	---	---	0.036	1	4.52	0.008
Dibenzofuran	1616.0	Narcosis	0.031	0	42.34	0.001	0.36	1	26.18	0.014	---	---	---	---	---	---	---	---	0.053	1	4.85	0.011
Diphenyl Ether	1731.0	Narcosis	0.031	0	45.35	0.001	0.069	1	28.04	0.002	---	---	---	---	---	---	---	---	0.024	0	5.19	0.005
Hexachlorobenzene	3302.4	Narcosis	0.006	0	86.52	0.000	0.005	0	53.50	0.000	0.3	0	57.46	0.005	---	---	---	---	0.007	1	9.91	0.001
<b>Sediment Organic Carbon</b>																						
Black Carbon	NA	NA	---	---	NA	---	---	---	NA	---</												

**Table D3**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	E16-BOR-03 0.50-1.00 11/2/2016				E16-BOR-04 0.00-0.50 11/2/2016				E16-BOR-04 0.50-1.00 11/2/2016				E16-BOR-05 0.00-0.50 11/3/2016				E16-BOR-05 0.50-1.00 11/3/2016			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																			
1,1,1-Trichlorotrifluoroethane	1471.5	Conventional	0.024	1	3.83	0.006	0.38	1	7.49	0.051	1.3	1	82.11	0.016	0.025	1	5.03	0.005	0.011	1	32.81	0.000
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	0.19	1	3.83	0.050	1.3	1	7.49	0.174	670	1	82.11	<b>8.160</b>	1.5	1	5.03	0.298	0.074	1	32.81	0.002
1,2-Dichloro-1,1,2-Trifluoroethane	922.7	Conventional	0.003	1	2.40	0.001	0.029	1	4.70	0.006	0.032	1	51.48	0.001	0.012	1	3.16	0.004	0.002	0	20.58	0.000
1,2-Dichloroethene	77.5	Conventional	0.061	0	0.20	0.303	0.071	0	0.39	0.180	1.4	0	4.32	0.324	0.003	1	0.26	0.011	0.002	0	1.73	0.001
1,2-Dichlorotetrafluoroethane	1184.2	Conventional	0.008	1	3.08	0.003	0.12	1	6.03	0.020	0.39	1	66.08	0.006	0.008	1	4.05	0.002	0.005	1	26.41	0.000
2,2-Dichloro-1,1,1-Trifluoroethane	922.7	Conventional	0.003	1	2.40	0.001	0.11	1	4.70	0.023	0.21	1	51.48	0.004	0.006	1	3.16	0.002	0.002	0	20.58	0.000
2-Chloro-1,1,1-Trifluoroethane	726.8	Conventional	0.12	0	1.89	0.063	0.14	0	3.70	0.038	2.8	0	40.56	0.069	0.014	1	2.49	0.006	0.05	1	16.21	0.003
4-Isopropyltoluene	730.9	Conventional	0.061	0	1.90	0.032	0.071	0	3.72	0.019	1.4	0	40.79	0.034	0.002	0	2.50	0.001	0.002	1	16.30	0.000
Carbon Disulfide	30.2	Conventional	0.061	0	0.08	0.778	0.071	0	0.15	0.462	1.4	0	1.68	0.832	0.006	1	0.10	0.058	0.004	1	0.67	0.006
CFC-1113	1415.9	Conventional	0.12	0	3.68	0.033	0.14	0	7.21	0.019	2.8	0	79.01	0.035	0.051	1	4.84	0.011	0.072	1	31.57	0.002
Chlorodifluoromethane	1324.5	Conventional	0.002	0	3.44	0.001	0.003	0	6.74	0.000	0.004	0	73.91	0.000	0.004	0	4.53	0.001	0.004	0	29.54	0.000
Chlorofluoromethane	881.3	Conventional	0.001	0	2.29	0.000	0.013	1	4.49	0.003	0.009	1	49.17	0.000	0.009	1	3.01	0.003	0.032	1	19.65	0.002
cis-1,2 Dichloroethene	77.5	Conventional	0.061	0	0.20	0.303	0.071	0	0.39	0.180	1.4	0	4.32	0.324	0.003	1	0.26	0.011	0.002	0	1.73	0.001
Dichlorofluoromethane	1065.9	Conventional	0.12	0	2.77	0.043	0.25	1	5.43	0.046	4.2	1	59.48	0.071	0.035	1	3.65	0.010	0.005	1	23.77	0.000
Trichlorofluoromethane	290.7	Conventional	0.12	0	0.76	0.159	1.1	1	1.48	0.744	390	1	16.22	<b>24.047</b>	0.26	1	0.99	0.262	0.02	1	6.48	0.003
Vinyl Chloride	76.3	Conventional	0.061	0	0.20	0.308	0.071	0	0.39	0.183	1.4	0	4.26	0.329	0.002	0	0.26	0.008	0.009	1	1.70	0.005
1,1-Dichloroethene	466.3	Narcosis	0.061	0	1.21	0.050	0.071	0	2.37	0.030	1.9	1	26.02	0.073	0.002	0	1.59	0.001	0.002	0	10.40	0.000
1,2,4-Trimethylbenzene	1148.7	Narcosis	0.061	0	2.99	0.020	0.071	0	5.85	0.012	1.4	0	64.10	0.022	0.002	0	3.93	0.001	0.005	1	25.62	0.000
1,2-Dichlorobenzene	785.8	Narcosis	2.7	1	2.04	<b>1.322</b>	2.9	1	4.00	0.725	290	1	43.85	<b>6.614</b>	0.044	1	2.69	0.016	0.051	1	17.52	0.003
1,3,5-Trimethylbenzene	1152.7	Narcosis	0.061	0	3.00	0.020	0.071	0	5.87	0.012	1.4	0	64.32	0.022	0.002	0	3.94	0.001	0.003	1	25.71	0.000
1,3-Dichlorobenzene	785.8	Narcosis	0.12	1	2.04	0.059	0.071	0	4.00	0.018	1.4	0	43.85	0.032	0.002	1	2.69	0.001	0.003	1	17.52	0.000
1,4-Dichlorobenzene	785.1	Narcosis	4	1	2.04	<b>1.960</b>	0.95	1	4.00	0.238	40	1	43.81	0.913	0.01	1	2.68	0.004	0.01	1	17.51	0.001
2-Chlorotoluene	1161.1	Narcosis	0.061	0	3.02	0.020	0.071	0	5.91	0.012	1.4	0	64.79	0.022	0.002	0	3.97	0.001	0.004	1	25.89	0.000
Acetone	3120.9	Narcosis	0.43	0	8.11	0.053	0.5	0	15.89	0.031	10	1	174.15	0.057	0.071	1	10.67	0.007	0.12	1	69.60	0.002
Benzene	653.6	Narcosis	0.03	0	1.70	0.018	0.036	0	3.33	0.011	1.9	1	36.47	0.052	0.002	1	2.24	0.001	0.006	1	14.57	0.000
Chlorobenzene	572.4	Narcosis	1.2	1	1.49	0.806	1.5	1	2.91	0.515	89	1	31.94	<b>2.786</b>	0.033	1	1.96	0.017	0.088	1	12.76	0.007
Chloroform	558.7	Narcosis	0.061	0	1.45	0.042	0.071	0	2.84	0.025	2.4	1	31.17	0.077	0.02	1	1.91	0.010	0.002	1	12.46	0.000
Cumene	1132.7	Narcosis	0.23	1	2.95	0.078	0.071	0	5.77	0.012	1.4	1	63.21	0.022	0.002	0	3.87	0.001	0.003	1	25.26	0.000
Ethylbenzene	970.4	Narcosis	0.061	0	2.52	0.024	0.071	0	4.94	0.014	1.4	0	54.15	0.026	0.002	0	3.32	0.001	0.002	1	21.64	0.000
Meta- And Para-Xylene	975.5	Narcosis	0.061	0	2.54	0.024	0.071	0	4.97	0.014	1.4	0	54.43	0.026	0.002	1	3.34	0.001	0.022	1	21.75	0.001
Methyl Ethyl Ketone	293.5	Narcosis	0.24	0	0.76	0.314	0.28	0	1.49	0.187	5.5	0	16.38	0.336	0.007	1	1.00	0.007	0.017	1	6.55	0.003
Methylene Chloride	372.9	Narcosis	0.12	0	0.97	0.124	0.14	0	1.90	0.074	2.8	0	20.81	0.135	0.005	1	1.28	0.004	0.004	0	8.31	0.000
Ortho-Xylene	966.2	Narcosis	0.061	0	2.51	0.024	0.071	0	4.92	0.014	1.4	0	53.91	0.026	0.002	1	3.30	0.001	0.009	1	21.55	0.000
Tetrachloroethene	829.4	Narcosis	0.27	1	2.16	0.125	1.7	1	4.22	0.403	230	1	46.28	<b>4.970</b>	0.021	1	2.84	0.007	0.002	0	18.50	0.000
Toluene	813.9	Narcosis	0.061	0	2.12	0.029	0.071	0	4.14	0.017	1.4	0	45.42	0.031	0.004	1	2.78	0.001	0.016	1	18.15	0.001
Trichloroethene	659.4	Narcosis	0.061	0	1.71	0.036	0.071	0	3.36	0.021	1.4	0	36.80	0.038	0.002	1	2.26	0.001	0.002	0	14.71	0.000
Xylenes	969.6	Narcosis	0.061	0	2.52	0.024	0.071	0	4.94	0.014	1.4	0	54.10	0.026	0.004	1	3.32	0.001	0.031	1	21.62	0.001
<b>Semi-Volatile Organic Compounds</b>																						
2-Chlorophenol	100.9	Conventional	0.021	0	0.26	0.080	0.022	0	0.51	0.043	0.23	0	5.63	0.041	0.025	0	0.35	0.072	0.29	0	2.25	0.129
4-Chloroaniline	260.6	Conventional	0.043	0	0.68	0.063	0.043	0	1.33	0.032	0.45	0	14.54	0.031	0.098	1	0.89	0.110	0.62	1	5.81	0.107
4-Methylphenol (P-Cresol)	28.8	Conventional	0.021	0	0.07	0.280	0.022	0	0.15	0.150	0.23	0	1.61	0.143	0.028	1	0.10	0.284	0.48	1	0.64	0.747
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.085	0	137.96	0.001	0.086	0	270.08	0.000	0.9	0	2960.78	0.000	0.1	0	181.47	0.001	1.5	1	1183.25	0.001
Butyl Benzyl Phthalate	1088.3	Conventional	0.085	0	2.83	0.030	0.086	0	5.54	0.016	0.9	0	60.73	0.015	0.1	0	3.72	0.027	1.2	0	24.27	0.049
Carbazole	6.9	Conventional	0.028	1	0.02	<b>1.570</b>	0.022	1	0.03	0.630	0.93	1	0.38	<b>2.429</b>	0.025	0	0.02	<b>1.065</b>	0.29	0	0.15	<b>1.895</b>
Diethyl Phthalate	77.5	Conventional	0.085	0	0.20	0.422	0.086	0	0.39	0.218	0.9	0	4.32	0.208	0.1	0	0.26	0.377	1.2	0	1.73	0.695
Di-N-Butyl Phthalate	1191.2	Conventional	0.15	1	3.10	0.048	0.59	1	6.06	0.097	6.2	1	66.47	0.093	0.1	0	4.07	0.025	1.2	0	26.56	0.045
Nitrobenzene	156.5	Conventional	0.035	1	0.41	0.086	0.022	0	0.80	0.028	5.3	1	8.73	0.607	0.025	0	0.54	0.047	0.88	1	3.49	0.252
Phenol	5.5	Conventional	0.021	0	0.01	<b>1.470</b>	0.022	0	0.03	0.787	0.23	0	0.31	0.750	0.025	0	0.02	<b>1.331</b>	0.29	0	0.12	<b>2.367</b>
2-Methylnaphthalene	446.7	Narcosis	0.052	1	1.16	0.045	0.069	1	2.27	0.030	3.3	1	24.93	0.132	0.03	1	1.53	0.020	0.42	1	9.96	0.042
Acetophenone	965.7	Narcosis	0.03	1	2.51	0.012	0.029	1	4.92	0.006	0.24	1	53.88	0.004	0.025	0	3.30	0.008	0.29	0	21.53	0.013
Biphenyl	1507.8	N																				

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**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	E16-BOR-06 0.00-0.50 10/26/2016				E16-BOR-06 0.50-1.00 10/26/2016				E16-BOR-07 0.00-0.50 11/3/2017				E16-BOR-07 0.50-1.00 11/3/2017				E16-BOR-08 0.00-0.50 10/31/2017			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																			
1,1,1-Trichlorotrifluoroethane	1471.5	Conventional	0.026	0	22.81	0.001	0.21	1	0.34	0.610	0.012	0	37.96	0.000	0.006	0	13.45	0.000	0.012	0	47.97	0.000
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	0.32	0	22.81	0.014	0.89	1	0.34	<b>2.585</b>	3.1	1	37.96	0.082	5.6	1	13.45	0.416	0.005	0	47.97	0.000
1,2-Dichloro-1,1,2-Trifluoroethane	922.7	Conventional	0.49	1	14.30	0.034	0.061	1	0.22	0.283	1.6	1	23.80	0.067	0.004	1	8.43	0.000	0.002	0	30.08	0.000
1,2-Dichloroethene	77.5	Conventional	0.36	1	1.20	0.300	0.035	1	0.02	<b>1.931</b>	0.23	1	2.00	0.115	0.058	0	0.71	0.082	0.003	0	2.53	0.001
1,2-Dichlorotetrafluoroethane	1184.2	Conventional	0.96	1	18.36	0.052	0.28	1	0.28	<b>1.010</b>	0.21	1	30.55	0.007	0.044	1	10.82	0.004	0.005	0	38.60	0.000
2,2-Dichloro-1,1,1-Trifluoroethane	922.7	Conventional	1.3	1	14.30	0.091	1.3	1	0.22	<b>6.021</b>	0.11	1	23.80	0.005	0.014	1	8.43	0.002	0.002	0	30.08	0.000
2-Chloro-1,1,1-Trifluoroethane	726.8	Conventional	1	1	11.27	0.089	0.3	1	0.17	<b>1.764</b>	0.28	0	18.75	0.015	0.12	0	6.64	0.018	0.036	1	23.69	0.002
4-Isopropyltoluene	730.9	Conventional	0.16	0	11.33	0.014	0.0009	0	0.17	0.005	0.14	0	18.86	0.007	0.058	0	6.68	0.009	0.003	0	23.83	0.000
Carbon Disulfide	30.2	Conventional	0.16	0	0.47	0.342	0.011	1	0.01	<b>1.558</b>	0.14	0	0.78	0.180	0.058	0	0.28	0.210	0.003	0	0.98	0.003
CFC-1113	1415.9	Conventional	0.32	0	21.95	0.015	0.33	1	0.33	0.996	0.28	0	36.53	0.008	0.12	0	12.94	0.009	0.005	0	46.16	0.000
Chlorodifluoromethane	1324.5	Conventional	0.01	0	20.53	0.000	0.002	0	0.31	0.006	0.008	1	34.17	0.000	0.002	0	12.11	0.000	0.01	1	43.18	0.000
Chlorofluoromethane	881.3	Conventional	0.77	1	13.66	0.056	0.034	1	0.21	0.165	0.7	1	22.74	0.031	0.001	0	8.05	0.000	0.017	1	28.73	0.001
cis-1,2 Dichloroethene	77.5	Conventional	0.36	1	1.20	0.300	0.035	1	0.02	<b>1.931</b>	0.23	1	2.00	0.115	0.058	0	0.71	0.082	0.003	0	2.53	0.001
Dichlorofluoromethane	1065.9	Conventional	1	1	16.52	0.061	0.14	1	0.25	0.561	5.3	1	27.50	0.193	0.12	0	9.74	0.012	0.005	0	34.75	0.000
Trichlorofluoromethane	290.7	Conventional	0.32	0	4.51	0.071	1.1	1	0.07	<b>16.173</b>	1.5	1	7.50	0.200	1.6	1	2.66	0.602	0.005	0	9.48	0.001
Vinyl Chloride	76.3	Conventional	0.16	0	1.18	0.135	0.034	1	0.02	<b>1.905</b>	0.14	0	1.97	0.071	0.058	0	0.70	0.083	0.004	1	2.49	0.002
1,1-Dichloroethene	466.3	Narcosis	0.16	0	7.23	0.022	0.0009	0	0.11	0.008	0.14	0	12.03	0.012	0.058	0	4.26	0.014	0.003	0	15.20	0.000
1,2,4-Trimethylbenzene	1148.7	Narcosis	0.16	0	17.80	0.009	0.0009	0	0.27	0.003	0.14	0	29.64	0.005	0.058	0	10.50	0.006	0.003	0	37.45	0.000
1,2-Dichlorobenzene	785.8	Narcosis	11	1	12.18	0.903	0.88	1	0.18	<b>4.786</b>	11	1	20.27	0.543	2.9	1	7.18	0.404	0.029	1	25.62	0.001
1,3,5-Trimethylbenzene	1152.7	Narcosis	0.16	0	17.87	0.009	0.0009	0	0.27	0.003	0.14	0	29.74	0.005	0.058	0	10.54	0.006	0.003	0	37.58	0.000
1,3-Dichlorobenzene	785.8	Narcosis	0.16	0	12.18	0.013	0.0009	0	0.18	0.005	0.22	1	20.27	0.011	0.058	0	7.18	0.008	0.003	0	25.62	0.000
1,4-Dichlorobenzene	785.1	Narcosis	0.45	1	12.17	0.037	0.008	1	0.18	0.044	6	1	20.26	0.296	1.4	1	7.18	0.195	0.012	1	25.59	0.000
2-Chlorotoluene	1161.1	Narcosis	0.16	0	18.00	0.009	0.0009	0	0.27	0.003	0.14	0	29.96	0.005	0.058	0	10.61	0.005	0.003	0	37.85	0.000
Acetone	3120.9	Narcosis	1.1	0	48.37	0.023	0.074	1	0.73	0.101	0.97	0	80.52	0.012	0.4	0	28.52	0.014	0.13	1	101.74	0.001
Benzene	653.6	Narcosis	0.079	0	10.13	0.008	0.001	1	0.15	0.007	0.075	1	16.86	0.004	0.029	0	5.97	0.005	0.007	1	21.31	0.000
Chlorobenzene	572.4	Narcosis	0.45	1	8.87	0.051	0.036	1	0.13	0.269	3.8	1	14.77	0.257	0.85	1	5.23	0.162	0.017	1	18.66	0.001
Chloroform	558.7	Narcosis	0.16	0	8.66	0.018	0.082	1	0.13	0.627	0.14	0	14.41	0.010	0.058	0	5.11	0.011	0.003	0	18.21	0.000
Cumene	1132.7	Narcosis	0.16	0	17.56	0.009	0.0009	0	0.27	0.003	0.71	1	29.22	0.024	0.058	0	10.35	0.006	0.003	0	36.93	0.000
Ethylbenzene	970.4	Narcosis	0.16	0	15.04	0.011	0.0009	0	0.23	0.004	0.14	0	25.04	0.006	0.058	0	8.87	0.007	0.003	0	31.64	0.000
Meta- And Para-Xylene	975.5	Narcosis	0.16	0	15.12	0.011	0.002	1	0.23	0.009	0.14	0	25.17	0.006	0.058	0	8.92	0.007	0.003	0	31.80	0.000
Methyl Ethyl Ketone	293.5	Narcosis	0.63	0	4.55	0.138	0.004	0	0.07	0.058	0.55	0	7.57	0.073	0.23	0	2.68	0.086	0.012	1	9.57	0.001
Methylene Chloride	372.9	Narcosis	0.32	0	5.78	0.055	0.01	1	0.09	0.115	0.28	0	9.62	0.029	0.12	0	3.41	0.035	0.005	0	12.16	0.000
Ortho-Xylene	966.2	Narcosis	0.16	0	14.98	0.011	0.001	1	0.23	0.004	0.14	0	24.93	0.006	0.058	0	8.83	0.007	0.003	0	31.50	0.000
Tetrachloroethene	829.4	Narcosis	0.18	1	12.86	0.014	0.34	1	0.19	<b>1.752</b>	3.9	1	21.40	0.182	1.6	1	7.58	0.211	0.003	0	27.04	0.000
Toluene	813.9	Narcosis	0.16	0	12.62	0.013	0.002	1	0.19	0.011	0.14	0	21.00	0.007	0.058	0	7.44	0.008	0.01	1	26.53	0.000
Trichloroethene	659.4	Narcosis	0.45	1	10.22	0.044	0.046	1	0.15	0.298	0.19	1	17.01	0.011	0.058	0	6.03	0.010	0.003	0	21.50	0.000
Xylenes	969.6	Narcosis	0.16	0	15.03	0.011	0.003	1	0.23	0.013	0.14	0	25.02	0.006	0.058	0	8.86	0.007	0.003	0	31.61	0.000
<b>Semi-Volatile Organic Compounds</b>																						
2-Chlorophenol	100.9	Conventional	0.037	0	1.56	0.024	0.018	0	0.02	0.763	0.033	0	2.60	0.013	0.099	0	0.92	0.107	0.035	0	3.29	0.011
4-Chloroaniline	260.6	Conventional	0.075	0	4.04	0.019	0.036	0	0.06	0.590	0.066	0	6.72	0.010	0.2	0	2.38	0.084	0.069	0	8.50	0.008
4-Methylphenol (P-Cresol)	28.8	Conventional	0.051	1	0.45	0.114	0.018	0	0.01	<b>2.668</b>	0.047	1	0.74	0.063	0.099	0	0.26	0.376	0.038	1	0.94	0.040
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.15	0	822.44	0.000	0.073	0	12.42	0.006	0.13	0	1368.96	0.000	0.4	0	484.97	0.001	0.14	0	1729.77	0.000
Butyl Benzyl Phthalate	1088.3	Conventional	0.15	0	16.87	0.009	0.073	0	0.25	0.287	0.13	0	28.08	0.005	0.4	0	9.95	0.040	0.14	0	35.48	0.004
Carbazole	6.9	Conventional	0.037	0	0.11	0.348	0.018	0	0.00	<b>11.211</b>	0.033	0	0.18	0.186	0.35	1	0.06	<b>5.581</b>	0.035	0	0.22	0.156
Diethyl Phthalate	77.5	Conventional	0.15	0	1.20	0.125	0.073	0	0.02	<b>4.027</b>	0.13	0	2.00	0.065	0.4	0	0.71	0.565	0.14	0	2.53	0.055
Di-N-Butyl Phthalate	1191.2	Conventional	0.15	0	18.46	0.008	0.073	0	0.28	0.262	0.13	0	30.73	0.004	0.4	0	10.89	0.037	0.14	0	38.83	0.004
Nitrobenzene	156.5	Conventional	0.037	0	2.43	0.015	0.018	0	0.04	0.492	0.033	0	4.04	0.008	0.099	0	1.43	0.069	0.035	0	5.10	0.007
Phenol	5.5	Conventional	0.037	0	0.09	0.434	0.018	0	0.00	<b>14.001</b>	0.033	0	0.14	0.233	0.099	0	0.05	<b>1.972</b>	0.035	0	0.18	0.195
2-Methylnaphthalene	446.7	Narcosis	0.06	1	6.92	0.009	0.015	1	0.10	0.144	0.085	1	11.52	0.007	0.9	1	4.08	0.220	0.027	1	14.56	0.002
Acetophenone	965.7	Narcosis	0.037	0	14.97	0.002	0.018	0	0.23	0.080	0.034	1	24.91	0.001	0.12	1	8.83	0.014</				

**Table D3**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	E16-BOR-08			
			0.50-1.00			
			10/31/2017			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
<b>Volatile Organic Compounds</b>						
1,1,1-Trichlorotrifluoroethane	1471.5	Conventional	0.014	0	57.98	0.000
1,1,2-Trichlorotrifluoroethane	1471.5	Conventional	0.006	0	57.98	0.000
1,2-Dichloro-1,1,2-Trifluoroethane	922.7	Conventional	0.003	0	36.35	0.000
1,2-Dichloroethene	77.5	Conventional	0.003	0	3.05	0.001
1,2-Dichlorotetrafluoroethane	1184.2	Conventional	0.006	0	46.66	0.000
2,2-Dichloro-1,1,1-Trifluoroethane	922.7	Conventional	0.003	0	36.35	0.000
2-Chloro-1,1,1-Trifluoroethane	726.8	Conventional	0.052	1	28.64	0.002
4-Isopropyltoluene	730.9	Conventional	0.003	0	28.80	0.000
Carbon Disulfide	30.2	Conventional	0.003	0	1.19	0.003
CFC-1113	1415.9	Conventional	0.01	1	55.79	0.000
Chlorodifluoromethane	1324.5	Conventional	0.017	1	52.18	0.000
Chlorofluoromethane	881.3	Conventional	0.028	1	34.72	0.001
cis-1,2 Dichloroethene	77.5	Conventional	0.003	0	3.05	0.001
Dichlorofluoromethane	1065.9	Conventional	0.006	0	42.00	0.000
Trichlorofluoromethane	290.7	Conventional	0.006	0	11.45	0.001
Vinyl Chloride	76.3	Conventional	0.006	1	3.00	0.002
1,1-Dichloroethene	466.3	Narcosis	0.003	0	18.37	0.000
1,2,4-Trimethylbenzene	1148.7	Narcosis	0.003	0	45.26	0.000
1,2-Dichlorobenzene	785.8	Narcosis	0.012	1	30.96	0.000
1,3,5-Trimethylbenzene	1152.7	Narcosis	0.003	0	45.42	0.000
1,3-Dichlorobenzene	785.8	Narcosis	0.003	0	30.96	0.000
1,4-Dichlorobenzene	785.1	Narcosis	0.006	1	30.93	0.000
2-Chlorotoluene	1161.1	Narcosis	0.003	0	45.75	0.000
Acetone	3120.9	Narcosis	0.19	1	122.96	0.002
Benzene	653.6	Narcosis	0.006	1	25.75	0.000
Chlorobenzene	572.4	Narcosis	0.021	1	22.55	0.001
Chloroform	558.7	Narcosis	0.003	0	22.01	0.000
Cumene	1132.7	Narcosis	0.003	0	44.63	0.000
Ethylbenzene	970.4	Narcosis	0.003	0	38.23	0.000
Meta- And Para-Xylene	975.5	Narcosis	0.003	0	38.44	0.000
Methyl Ethyl Ketone	293.5	Narcosis	0.02	1	11.56	0.002
Methylene Chloride	372.9	Narcosis	0.006	0	14.69	0.000
Ortho-Xylene	966.2	Narcosis	0.003	0	38.07	0.000
Tetrachloroethene	829.4	Narcosis	0.003	0	32.68	0.000
Toluene	813.9	Narcosis	0.009	1	32.07	0.000
Trichloroethene	659.4	Narcosis	0.003	0	25.98	0.000
Xylenes	969.6	Narcosis	0.003	0	38.20	0.000
<b>Semi-Volatile Organic Compounds</b>						
2-Chlorophenol	100.9	Conventional	0.038	0	3.97	0.010
4-Chloroaniline	260.6	Conventional	0.077	0	10.27	0.007
4-Methylphenol (P-Cresol)	28.8	Conventional	0.32	1	1.14	0.282
Bis(2-Ethylhexyl)Phthalate	53060.5	Conventional	0.15	0	2090.58	0.000
Butyl Benzyl Phthalate	1088.3	Conventional	0.15	0	42.88	0.003
Carbazole	6.9	Conventional	0.038	0	0.27	0.141
Diethyl Phthalate	77.5	Conventional	0.15	0	3.05	0.049
Di-N-Butyl Phthalate	1191.2	Conventional	0.15	0	46.93	0.003
Nitrobenzene	156.5	Conventional	0.038	0	6.17	0.006
Phenol	5.5	Conventional	0.038	0	0.22	0.176
2-Methylnaphthalene	446.7	Narcosis	0.055	1	17.60	0.003
Acetophenone	965.7	Narcosis	0.038	0	38.05	0.001
Biphenyl	1507.8	Narcosis	0.038	0	59.41	0.001
Dibenzofuran	1616.0	Narcosis	0.038	0	63.67	0.001
Diphenyl Ether	1731.0	Narcosis	0.038	0	68.20	0.001
Hexachlorobenzene	3302.4	Narcosis	0.008	0	130.11	0.000
<b>Sediment Organic Carbon</b>						
Black Carbon	NA	NA	---	---	NA	---
Total Organic Carbon	NA	NA	39400	1	NA	---
<b>Sum of Narcotic ESBTUs:</b>						0.013

**Notes:**

ESBTU, Equilibrium partitioning sediment benchmark toxic unit

OC, Organic carbon

Sum of Narcotic ESBTUs, Sample-specific sum of ESBTU values for COPECs with a narcotic mode of toxicity.

**Table D4**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - SWMU 5/Henby Creek Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	SS-18 0.50-1.00 11/6/1997				SS-40 0.00-0.50 1/25/1999				SS-42 0.00-0.50 1/25/1999				SS-21 0.00-0.50 9/14/1998				5B-P3-10 0.00-0.50 4/24/2000																				
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU																	
			<b>Volatile Organic Compounds</b>																																				
Carbon Disulfide	30.2	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
Dichlorofluoromethane	1066	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
Trichlorofluoromethane	291	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
1,2-Dichlorobenzene	786	Narcosis	1.9	1	0.76	2.493	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
1,4-Dichlorobenzene	785	Narcosis	0.49	1	0.76	0.643	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
Acetone	3121	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
Chlorobenzene	572	Narcosis	0.5	1	0.56	0.901	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
<b>Semi-Volatile Organic Compounds</b>																																							
1-Naphthylamine	1211	Narcosis	2	1	1.17	1.703	0.083	0	1.00	0.083	0.099	0	1.03	0.096	0.081	0	0.69	0.117	---	---	---	---																	
2,4-Dinitrotoluene	40.47	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
2,6-Dinitrotoluene	40.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
4-Chloroaniline	261	Conventional	0.21	0	0.25	0.831	0.15	1	0.22	0.693	0.068	1	0.22	0.307	0.04	0	0.15	0.269	0.12	0	0.18	0.670																	
Di-N-Butyl Phthalate	1191	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
Nitrobenzene	156.5	Conventional	0.36	1	0.15	2.372	0.042	0	0.13	0.323	0.05	0	0.13	0.376	0.04	0	0.09	0.448	---	---	---	---																	
<b>Sediment Organic Carbon</b>																																							
Black Carbon	NA	NA	---	---	NA	---	---	---	NA	---	---	---	NA	---	---	---	NA	---	---	---	NA	---																	
Total Organic Carbon	NA	NA	970	1	NA	---	830	1	NA	---	850	1	NA	---	570	1	NA	---	687	---	NA	---																	
<b>Sum of Narcotic ESBTUs:</b>				5.740				<b>Sum of Narcotic ESBTUs:</b>				0.083				<b>Sum of Narcotic ESBTUs:</b>				0.096				<b>Sum of Narcotic ESBTUs:</b>				0.117				<b>Sum of Narcotic ESBTUs:</b>				0.000			

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	SS-26 0.00-0.50 9/17/1998				SS-32 0.00-0.50 9/17/1998				5B-P3-8 0.00-0.50 4/24/2000				5B-P3-9 0.00-0.50 4/24/2000				DER1-16 0.00-0.50 9/24/2009																				
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU																	
			<b>Volatile Organic Compounds</b>																																				
Carbon Disulfide	30.2	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
Dichlorofluoromethane	1066	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
Trichlorofluoromethane	291	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																	
1,2-Dichlorobenzene	786	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.073	1	4.22	0.017																
1,4-Dichlorobenzene	785	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.05	0	4.22	0.012																
Acetone	3121	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																
Chlorobenzene	572	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---																
<b>Semi-Volatile Organic Compounds</b>																																							
1-Naphthylamine	1211	Narcosis	0.08	0	0.65	0.122	0.082	0	0.44	0.188	---	---	---	---	---	---	---	---	0.25	0	6.50	0.038																	
2,4-Dinitrotoluene	40.47	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.1	0	0.22	0.460																	
2,6-Dinitrotoluene	40.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.05	0	0.22	0.230																	
4-Chloroaniline	261	Conventional	0.04	0	0.14	0.284	0.041	0	0.09	0.437	0.28	0	0.18	1.564	0.17	0	0.18	0.950	0.1	0	1.40	0.071																	
Di-N-Butyl Phthalate	1191	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.1	0	6.40	0.016																	
Nitrobenzene	156.5	Conventional	0.04	0	0.08	0.473	0.041	0	0.06	0.728	---	---	---	---	---	---	---	---	0.05	0	0.84	0.059																	
<b>Sediment Organic Carbon</b>																																							
Black Carbon	NA	NA	---	---	NA	---	---	---	NA	---	---	---	NA	---	---	---	NA	---	660	1	NA	---																	
Total Organic Carbon	NA	NA	540	1	NA	---	360	1	NA	---	687	---	NA	---	687	---	NA	---	5370	1	NA	---																	
<b>Sum of Narcotic ESBTUs:</b>				0.122				<b>Sum of Narcotic ESBTUs:</b>				0.188				<b>Sum of Narcotic ESBTUs:</b>				0.000				<b>Sum of Narcotic ESBTUs:</b>				0.000				<b>Sum of Narcotic ESBTUs:</b>				0.068			

**Table D4**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - SWMU 5/Henby Creek Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	5B-P3-11 0.00-0.50 4/24/2000				5B-P3-14 0.00-0.50 5/26/2000				5B-P3-17 0.00-0.50 5/31/2000				DER1-18 0.00-0.50 9/22/2009				DER1-18 0.50-1.00 9/22/2009			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																			
Carbon Disulfide	30.2	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.001	1	0.02	0.047
Dichlorofluoromethane	1066	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.002	0	0.75	0.003
Trichlorofluoromethane	291	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.002	0	0.20	0.010
1,2-Dichlorobenzene	786	Narcosis	---	---	---	---	---	---	---	---	---	---	---	0.041	0	0.81	0.051	---	---	---	---	---
1,4-Dichlorobenzene	785	Narcosis	---	---	---	---	---	---	---	---	---	---	---	0.041	0	0.80	0.051	---	---	---	---	---
Acetone	3121	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.009	1	2.20	0.004
Chlorobenzene	572	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.001	0	0.40	0.002
<b>Semi-Volatile Organic Compounds</b>																						
1-Naphthylamine	1211	Narcosis	---	---	---	---	---	---	---	---	---	---	---	0.21	0	1.24	0.169	---	---	---	---	---
2,4-Dinitrotoluene	40.47	Conventional	---	---	---	---	---	---	---	---	---	---	---	0.45	1	0.041	<b>10.849</b>	---	---	---	---	---
2,6-Dinitrotoluene	40.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	0.042	1	0.041	<b>1.013</b>	---	---	---	---	---
4-Chloroaniline	261	Conventional	0.13	0	0.18	0.726	0.088	0	0.18	0.492	0.21	1	0.179	<b>1.173</b>	0.083	0	0.27	0.311	---	---	---	---
Di-N-Butyl Phthalate	1191	Conventional	---	---	---	---	---	---	---	---	---	---	---	0.25	1	1.22	0.205	---	---	---	---	---
Nitrobenzene	156.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	0.041	0	0.16	0.256	---	---	---	---	---
<b>Sediment Organic Carbon</b>																						
Black Carbon	NA	NA	---	---	NA	---	---	---	NA	---	---	---	NA	---	1	NA	---	---	540	1	NA	---
Total Organic Carbon	NA	NA	687	---	NA	---	687	---	NA	---	687	---	NA	---	1025	1	NA	---	705	1	NA	---
<b>Sum of Narcotic ESBTUs:</b>			0.000				0.000				0.000				0.271				0.007			

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER1-16 0.50-1.00 9/24/2009				DER1-17 0.00-0.50 9/25/2009				DER1-17 0.50-1.00 9/25/2009				DER2-21-SD 0.00-0.50 5/4/2010				DER2-21-SD 0.50-1.00 5/4/2010			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																			
Carbon Disulfide	30.2	Conventional	0.001	0	0.02	0.062	---	---	---	---	0.008	1	0.82	0.010	---	---	---	---	0.001	0	0.05	0.018
Dichlorofluoromethane	1066	Conventional	0.002	0	0.57	0.004	---	---	---	---	0.005	0	29.05	0.000	---	---	---	---	0.003	1	1.92	0.002
Trichlorofluoromethane	291	Conventional	0.002	0	0.16	0.013	---	---	---	---	0.005	0	7.92	0.001	---	---	---	---	0.002	0	0.52	0.004
1,2-Dichlorobenzene	786	Narcosis	---	---	---	---	0.06	1	2.13	0.028	---	---	---	---	0.7	1	1.41	0.495	---	---	---	---
1,4-Dichlorobenzene	785	Narcosis	---	---	---	---	0.047	0	2.13	0.022	---	---	---	---	0.26	1	1.41	0.184	---	---	---	---
Acetone	3121	Narcosis	0.01	1	1.67	0.006	---	---	---	---	0.053	1	85.04	0.001	---	---	---	---	0.008	0	5.62	0.001
Chlorobenzene	572	Narcosis	0.001	0	0.31	0.003	---	---	---	---	0.002	0	15.60	0.000	---	---	---	---	0.032	1	1.03	0.031
<b>Semi-Volatile Organic Compounds</b>																						
1-Naphthylamine	1211	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	0.22	0	2.18	0.101	---	---	---	---
2,4-Dinitrotoluene	40.47	Conventional	---	---	---	---	0.095	0	0.11	0.866	---	---	---	---	0.088	0	0.07	<b>1.208</b>	---	---	---	---
2,6-Dinitrotoluene	40.5	Conventional	---	---	---	---	0.047	0	0.11	0.429	---	---	---	---	0.044	0	0.07	0.604	---	---	---	---
4-Chloroaniline	261	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	0.16	1	0.47	0.341	---	---	---	---
Di-N-Butyl Phthalate	1191	Conventional	---	---	---	---	0.29	1	3.23	0.090	---	---	---	---	0.088	0	2.14	0.041	---	---	---	---
Nitrobenzene	156.5	Conventional	---	---	---	---	0.047	0	0.42	0.111	---	---	---	---	0.044	0	0.28	0.156	---	---	---	---
<b>Sediment Organic Carbon</b>																						
Black Carbon	NA	NA	0	0	NA	---	600	1	NA	---	1400	1	NA	---	---	---	NA	---	---	---	NA	---
Total Organic Carbon	NA	NA	535	1	NA	---	2710	1	NA	---	27250	1	NA	---	1800	1	NA	---	1800	---	NA	---
<b>Sum of Narcotic ESBTUs:</b>			0.009				0.050				0.001				0.780				0.032			

**Table D4**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - SWMU 5/Henby Creek Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER1-19 0.00-0.50 9/25/2009				DER1-19 0.50-1.00 9/25/2009				DER2-23-SD 0.00-0.50 4/22/2010				DER2-23-SD 0.50-1.00 4/22/2010				DER2-24-SD 0.00-0.50 4/22/2010																			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU																
			<b>Volatile Organic Compounds</b>																																			
Carbon Disulfide	30.2	Conventional	---	---	---	---	0.005	1	0.02	0.211	---	---	---	---	0.003	1	0.74	0.004	---	---	---	---																
Dichlorofluoromethane	1066	Conventional	---	---	---	---	0.002	0	0.84	0.002	---	---	---	---	0.005	0	26.11	0.000	---	---	---	---																
Trichlorofluoromethane	291	Conventional	---	---	---	---	0.002	0	0.23	0.009	---	---	---	---	0.005	0	7.12	0.001	---	---	---	---																
1,2-Dichlorobenzene	786	Narcosis	0.043	0	0.70	0.061	---	---	---	---	2.2	1	16.50	0.133	---	---	---	---	0.053	1	1.83	0.029																
1,4-Dichlorobenzene	785	Narcosis	0.043	0	0.70	0.062	---	---	---	---	1	1	16.49	0.061	---	---	---	---	0.043	0	1.83	0.023																
Acetone	3121	Narcosis	---	---	---	---	0.012	1	2.45	0.005	---	---	---	---	0.029	1	76.46	0.000	---	---	---	---																
Chlorobenzene	572	Narcosis	---	---	---	---	0.001	0	0.45	0.002	---	---	---	---	0.002	0	14.02	0.000	---	---	---	---																
<b>Semi-Volatile Organic Compounds</b>																																						
1-Naphthylamine	1211	Narcosis	0.22	0	1.08	0.204	---	---	---	---	0.91	0	25.43	0.036	---	---	---	---	0.21	0	2.83	0.074																
2,4-Dinitrotoluene	40.47	Conventional	0.22	1	0.036	<b>6.108</b>	---	---	---	---	0.37	0	0.85	0.435	---	---	---	---	0.085	0	0.09	0.900																
2,6-Dinitrotoluene	40.5	Conventional	0.043	0	0.036	<b>1.194</b>	---	---	---	---	0.18	0	0.85	0.212	---	---	---	---	0.043	0	0.09	0.455																
4-Chloroaniline	261	Conventional	0.086	0	0.23	0.371	---	---	---	---	0.37	0	5.47	0.068	---	---	---	---	0.085	0	0.61	0.140																
Di-N-Butyl Phthalate	1191	Conventional	0.45	1	1.06	0.424	---	---	---	---	1	1	25.01	0.040	---	---	---	---	1.8	1	2.78	0.647																
Nitrobenzene	156.5	Conventional	0.043	0	0.14	0.309	---	---	---	---	0.18	0	3.29	0.055	---	---	---	---	0.064	1	0.37	0.175																
<b>Sediment Organic Carbon</b>																																						
Black Carbon	NA	NA	125	1	NA	---	835	1	NA	---	3200	1	NA	---	---	---	NA	---	1325	1	NA	---																
Total Organic Carbon	NA	NA	890	1	NA	---	785	1	NA	---	21000	1	NA	---	24500	1	NA	---	2335	1	NA	---																
<b>Sum of Narcotic ESBTUs:</b>			0.327				<b>Sum of Narcotic ESBTUs:</b>				0.007				<b>Sum of Narcotic ESBTUs:</b>				0.230				<b>Sum of Narcotic ESBTUs:</b>				0.001				<b>Sum of Narcotic ESBTUs:</b>				0.127			

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER2-22-SD 0.00-0.50 5/4/2010				DER2-22-SD 0.50-1.00 5/4/2010				DER2-25-SD 0.00-0.50 5/4/2010				DER2-25-SD 0.50-1.00 5/4/2010				DER3-13 0.00-0.50 11/18/2010																			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU																
			<b>Volatile Organic Compounds</b>																																			
Carbon Disulfide	30.2	Conventional	---	---	---	---	0.005	0	2.88	0.002	---	---	---	---	0.011	1	0.22	0.049	0.008	1	0.34	0.023																
Dichlorofluoromethane	1066	Conventional	---	---	---	---	0.011	0	101.63	0.000	---	---	---	---	0.003	0	7.95	0.000	0.008	1	12.10	0.001																
Trichlorofluoromethane	291	Conventional	---	---	---	---	0.011	0	27.71	0.000	---	---	---	---	0.003	0	2.17	0.001	0.007	0	3.30	0.002																
1,2-Dichlorobenzene	786	Narcosis	0.44	1	35.24	0.012	---	---	---	---	0.26	1	1.97	0.132	---	---	---	---	0.71	1	8.92	0.080																
1,4-Dichlorobenzene	785	Narcosis	0.24	1	35.21	0.007	---	---	---	---	0.34	1	1.97	0.173	---	---	---	---	0.37	1	8.91	0.042																
Acetone	3121	Narcosis	---	---	---	---	0.072	1	297.58	0.000	---	---	---	---	0.02	1	23.27	0.001	0.024	0	35.42	0.001																
Chlorobenzene	572	Narcosis	---	---	---	---	0.005	0	54.58	0.000	---	---	---	---	0.11	1	4.27	0.026	0.024	1	6.50	0.004																
<b>Semi-Volatile Organic Compounds</b>																																						
1-Naphthylamine	1211	Narcosis	0.64	0	54.30	0.012	---	---	---	---	0.23	0	3.03	0.076	---	---	---	---	1.2	0	13.74	0.087																
2,4-Dinitrotoluene	40.47	Conventional	0.26	0	1.81	0.143	---	---	---	---	0.093	0	0.10	0.917	---	---	---	---	0.5	0	0.46	<b>1.089</b>																
2,6-Dinitrotoluene	40.5	Conventional	0.13	0	1.81	0.072	---	---	---	---	0.046	0	0.10	0.454	---	---	---	---	0.25	0	0.46	0.544																
4-Chloroaniline	261	Conventional	0.26	0	11.69	0.022	---	---	---	---	0.093	0	0.65	0.142	---	---	---	---	0.5	0	2.96	0.169																
Di-N-Butyl Phthalate	1191	Conventional	0.26	0	53.42	0.005	---	---	---	---	0.093	0	2.98	0.031	---	---	---	---	0.5	0	13.52	0.037																
Nitrobenzene	156.5	Conventional	0.21	1	7.02	0.030	---	---	---	---	0.046	0	0.39	0.117	---	---	---	---	3	1	1.78	<b>1.689</b>																
<b>Sediment Organic Carbon</b>																																						
Black Carbon	NA	NA	5820	1	NA	---	---	---	NA	---	365	1	NA	---	---	---	NA	---	2170	1	NA	---																
Total Organic Carbon	NA	NA	44850	1	NA	---	95350	1	NA	---	2505	1	NA	---	7455	1	NA	---	11350	1	NA	---																
<b>Sum of Narcotic ESBTUs:</b>			0.031				<b>Sum of Narcotic ESBTUs:</b>				0.000				<b>Sum of Narcotic ESBTUs:</b>				0.381				<b>Sum of Narcotic ESBTUs:</b>				0.027				<b>Sum of Narcotic ESBTUs:</b>				0.213			

**Table D4**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - SWMU 5/Henby Creek Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER2-24-SD 0.50-1.00 4/22/2010				DER3-14 0.00-0.50 11/18/2010				DER3-14 0.50-1.00 11/18/2010				DER3-15 0.00-0.50 11/18/2010				DER3-15 0.50-1.00 11/18/2010			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																			
Carbon Disulfide	30.2	Conventional	0.004	1	0.18	0.023	0.002	1	0.23	0.009	0.008	1	0.23	0.034	0.005	1	0.39	0.013	0.028	1	0.39	0.072
Dichlorofluoromethane	1066	Conventional	0.002	0	6.20	0.000	0.003	0	8.21	0.000	0.003	0	8.21	0.000	0.005	0	13.70	0.000	0.016	0	13.70	0.001
Trichlorofluoromethane	291	Conventional	0.002	0	1.69	0.001	0.003	0	2.24	0.001	0.003	0	2.24	0.001	0.005	0	3.73	0.001	0.016	0	3.73	0.004
1,2-Dichlorobenzene	786	Narcosis	---	---	---	---	0.16	0	6.05	0.026	---	---	---	---	0.2	0	10.10	0.020	---	---	---	---
1,4-Dichlorobenzene	785	Narcosis	---	---	---	---	0.16	0	6.05	0.026	---	---	---	---	0.2	0	10.09	0.020	---	---	---	---
Acetone	3121	Narcosis	0.014	1	18.16	0.001	0.01	0	24.03	0.000	0.028	1	24.03	0.001	0.031	1	40.10	0.001	0.38	1	40.10	0.009
Chlorobenzene	572	Narcosis	0.032	1	3.33	0.010	0.001	0	4.41	0.000	0.002	0	4.41	0.000	0.002	0	7.36	0.000	0.57	1	7.36	0.077
<b>Semi-Volatile Organic Compounds</b>																						
1-Naphthylamine	1211	Narcosis	---	---	---	---	0.79	0	9.32	0.085	---	---	---	---	1	0	15.56	0.064	---	---	---	---
2,4-Dinitrotoluene	40.47	Conventional	---	---	---	---	0.32	0	0.31	<b>1.027</b>	---	---	---	---	0.41	0	0.52	0.788	---	---	---	---
2,6-Dinitrotoluene	40.5	Conventional	---	---	---	---	0.16	0	0.31	0.513	---	---	---	---	0.2	0	0.52	0.385	---	---	---	---
4-Chloroaniline	261	Conventional	---	---	---	---	0.32	0	2.01	0.159	---	---	---	---	0.41	0	3.35	0.122	---	---	---	---
Di-N-Butyl Phthalate	1191	Conventional	---	---	---	---	0.32	0	9.17	0.035	---	---	---	---	0.41	0	15.31	0.027	---	---	---	---
Nitrobenzene	156.5	Conventional	---	---	---	---	0.16	0	1.20	0.133	---	---	---	---	0.2	0	2.01	0.099	---	---	---	---
<b>Sediment Organic Carbon</b>																						
Black Carbon	NA	NA	---	---	NA	---	2240	1	NA	---	---	---	NA	---	1600	1	NA	---	---	---	NA	---
Total Organic Carbon	NA	NA	5820	1	NA	---	7700	1	NA	---	7700	---	NA	---	12850	1	NA	---	12850	---	NA	---
<b>Sum of Narcotic ESBTUs:</b>			0.010				0.138				0.002				0.105				0.087			

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER3-13 0.50-1.00 11/18/2010				DER3-16 0.50-1.00 11/16/2010				DER3-16 0.00-0.50 11/16/2010			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>											
Carbon Disulfide	30.2	Conventional	0.002	1	0.34	0.006	0.003	1	0.37	0.008	0.007	1	0.37	0.019
Dichlorofluoromethane	1066	Conventional	0.013	1	12.10	0.001	0.002	0	13.06	0.000	0.005	0	13.06	0.000
Trichlorofluoromethane	291	Conventional	0.031	1	3.30	0.009	0.002	0	3.56	0.001	0.005	0	3.56	0.001
1,2-Dichlorobenzene	786	Narcosis	---	---	---	---	---	---	---	---	0.063	0	9.63	0.007
1,4-Dichlorobenzene	785	Narcosis	---	---	---	---	---	---	---	---	0.063	0	9.62	0.007
Acetone	3121	Narcosis	0.009	1	35.42	0.000	0.015	1	38.23	0.000	0.023	1	38.23	0.001
Chlorobenzene	572	Narcosis	0.02	1	6.50	0.003	0.001	0	7.01	0.000	0.002	0	7.01	0.000
<b>Semi-Volatile Organic Compounds</b>														
1-Naphthylamine	1211	Narcosis	---	---	---	---	---	---	---	---	0.32	0	14.83	0.022
2,4-Dinitrotoluene	40.47	Conventional	---	---	---	---	---	---	---	---	0.13	0	0.50	0.262
2,6-Dinitrotoluene	40.5	Conventional	---	---	---	---	---	---	---	---	0.063	0	0.50	0.127
4-Chloroaniline	261	Conventional	---	---	---	---	---	---	---	---	0.13	0	3.19	0.041
Di-N-Butyl Phthalate	1191	Conventional	---	---	---	---	---	---	---	---	0.13	0	14.59	0.009
Nitrobenzene	156.5	Conventional	---	---	---	---	---	---	---	---	2	1	1.92	<b>1.043</b>
<b>Sediment Organic Carbon</b>														
Black Carbon	NA	NA	---	---	NA	---	---	---	NA	---	2380	1	NA	---
Total Organic Carbon	NA	NA	11350	---	NA	---	12250	---	NA	---	12250	1	NA	---
<b>Sum of Narcotic ESBTUs:</b>			0.003				0.001				0.036			

**Notes:**  
ESBTU, Equilibrium partitioning sediment benchmark toxic unit  
OC, Organic carbon  
Sum of Narcotic ESBTUs, Sample-specific sum of ESBTU values for COPECs with a narcotic mode of toxicity.

**Table D5**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Carneys Point Zone**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	52-R-1 0.00-0.50 10/31/2000				52-R-2 0.00-0.50 10/31/2000				52-R-3 0.00-0.50 10/31/2000				52-R-7 0.00-0.50 11/1/2000				DER1-21 0.50-1.00 9/25/2009			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																			
1,2-Dichlorobenzene	786	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
1,4-Dichlorobenzene	785	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
Acetone	3121	Narcosis	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	0.009	0	4.2	0.002
<b>Semi-Volatile Organic Compounds</b>																						
Bis(2-Ethylhexyl)Phthalate	53060	Conventional	0.082	0	45.6	0.002	0.084	0	76.4	0.001	0.084	0	174.6	0.0005	0.27	0	7216.2	0.0000	---	---	---	---
Nitrobenzene	156.5	Conventional	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
<b>Sediment Organic Carbon</b>																						
Black Carbon	NA	NA	---	---	NA	---	---	---	NA	---	---	---	NA	---	---	---	NA	---	515	1	NA	---
Total Organic Carbon	NA	NA	860	1	NA	---	1440	1	NA	---	3290	1	NA	---	136000	1	NA	---	1335	1	NA	---
			<b>Sum of Narcotic ESBTUs:</b> 0.000				<b>Sum of Narcotic ESBTUs:</b> 0.000				<b>Sum of Narcotic ESBTUs:</b> 0.000				<b>Sum of Narcotic ESBTUs:</b> 0.000				<b>Sum of Narcotic ESBTUs:</b> 0.002			

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	52-R-8 0.00-0.50 11/1/2000				DER1-20 0.00-0.50 9/23/2009				DER1-20 0.50-1.00 9/23/2009				DER1-21 0.00-0.50 9/25/2009				DER1-23 0.50-1.00 9/25/2009			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																			
1,2-Dichlorobenzene	786	Narcosis	---	---	---	---	0.083	0	15.2	0.005	---	---	---	---	0.056	0	3.8	0.015	---	---	---	---
1,4-Dichlorobenzene	785	Narcosis	---	---	---	---	0.083	0	15.2	0.005	---	---	---	---	0.056	0	3.8	0.015	---	---	---	---
Acetone	3121	Narcosis	---	---	---	---	---	---	---	---	0.88	1	84.6	0.010	---	---	---	---	0.013	1	2.2	0.006
<b>Semi-Volatile Organic Compounds</b>																						
Bis(2-Ethylhexyl)Phthalate	53060	Conventional	0.14	0	4748.9	0.000	0.17	0	1029.4	0.000	---	---	---	---	0.11	0	256.0	0.000	---	---	---	---
Nitrobenzene	156.5	Conventional	---	---	---	---	0.083	0	3.0	0.027	---	---	---	---	0.056	0	0.8	0.074	---	---	---	---
<b>Sediment Organic Carbon</b>																						
Black Carbon	NA	NA	---	---	NA	---	---	---	NA	---	---	---	NA	---	1470	1	NA	---	465	1	NA	---
Total Organic Carbon	NA	NA	89500	1	NA	---	19400	1	NA	---	27100	1	NA	---	4825	1	NA	---	715	1	NA	---
			<b>Sum of Narcotic ESBTUs:</b> 0.000				<b>Sum of Narcotic ESBTUs:</b> 0.011				<b>Sum of Narcotic ESBTUs:</b> 0.010				<b>Sum of Narcotic ESBTUs:</b> 0.030				<b>Sum of Narcotic ESBTUs:</b> 0.006			

**Table D5**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Carneys Point Zone**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER1-22 0.00-0.50 9/23/2009				DER1-22 0.50-1.00 9/23/2009				DER1-23 0.00-0.50 9/25/2009				DER1-25 0.50-1.00 9/23/2009				DER1-26 0.00-0.50 9/23/2009			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																			
1,2-Dichlorobenzene	786	Narcosis	0.057	0	4.5	0.013	---	---	---	---	0.046	0	3.2	0.014	---	---	---	---	0.059	0	2.8	0.021
1,4-Dichlorobenzene	785	Narcosis	0.057	0	4.5	0.013	---	---	---	---	0.046	0	3.2	0.014	---	---	---	---	0.059	0	2.8	0.021
Acetone	3121	Narcosis	---	---	---	---	0.019	1	5.6	0.003	---	---	---	---	0.02	1	1.8	0.011	---	---	---	---
<b>Semi-Volatile Organic Compounds</b>																						
Bis(2-Ethylhexyl)Phthalate	53060	Conventional	0.11	0	303.0	0.000	---	---	---	---	0.092	0	217.0	0.000	---	---	---	---	0.12	0	187.8	0.001
Nitrobenzene	156.5	Conventional	0.057	0	0.9	0.064	---	---	---	---	0.046	0	0.6	0.072	---	---	---	---	0.059	0	0.6	0.107
<b>Sediment Organic Carbon</b>																						
Black Carbon	NA	NA	---	---	NA	---	---	---	NA	---	910	1	NA	---	---	---	NA	---	---	---	NA	---
Total Organic Carbon	NA	NA	5710	1	NA	---	1790	1	NA	---	4090	1	NA	---	590	1	NA	---	3540	1	NA	---
			<b>Sum of Narcotic ESBTUs:</b> 0.025				<b>Sum of Narcotic ESBTUs:</b> 0.003				<b>Sum of Narcotic ESBTUs:</b> 0.029				<b>Sum of Narcotic ESBTUs:</b> 0.011				<b>Sum of Narcotic ESBTUs:</b> 0.042			

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER1-24 0.00-0.50 9/23/2009				DER1-24 0.50-1.00 9/23/2009				DER1-25 0.00-0.50 9/23/2009				DER1-27 0.50-1.00 9/23/2009				DER1-28 0.00-0.50 9/22/2009			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																			
1,2-Dichlorobenzene	786	Narcosis	0.046	0	2.1	0.022	---	---	---	---	0.055	0	1.5	0.037	---	---	---	---	0.065	0	5.6	0.012
1,4-Dichlorobenzene	785	Narcosis	0.046	0	2.1	0.022	---	---	---	---	0.055	0	1.5	0.037	---	---	---	---	0.065	0	5.6	0.012
Acetone	3121	Narcosis	---	---	---	---	0.016	1	2.2	0.007	---	---	---	---	0.062	1	10.7	0.006	---	---	---	---
<b>Semi-Volatile Organic Compounds</b>																						
Bis(2-Ethylhexyl)Phthalate	53060	Conventional	0.092	0	140.6	0.001	---	---	---	---	0.11	0	100.8	0.001	---	---	---	---	0.13	0	377.5	0.000
Nitrobenzene	156.5	Conventional	0.046	0	0.4	0.111	---	---	---	---	0.055	0	0.3	0.185	---	---	---	---	0.065	0	1.1	0.058
<b>Sediment Organic Carbon</b>																						
Black Carbon	NA	NA	---	---	NA	---	4925	1	NA	---												
Total Organic Carbon	NA	NA	2650	1	NA	---	700	1	NA	---	1900	1	NA	---	3420	1	NA	---	7115	1	NA	---
			<b>Sum of Narcotic ESBTUs:</b> 0.044				<b>Sum of Narcotic ESBTUs:</b> 0.007				<b>Sum of Narcotic ESBTUs:</b> 0.074				<b>Sum of Narcotic ESBTUs:</b> 0.006				<b>Sum of Narcotic ESBTUs:</b> 0.023			

**Table D5**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Carneys Point Zone**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER1-26 0.50-1.00 9/23/2009				DER1-27 0.00-0.50 9/23/2009				DER1-29 0.50-1.00 9/22/2009				DER2-26-SD 0.00-0.50 5/4/2010				DER2-26-SD 0.50-1.00 5/4/2010			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																			
1,2-Dichlorobenzene	786	Narcosis	---	---	---	---	0.1	0	2.0	0.049	---	---	---	---	0.1	1	10.7	0.009	---	---	---	---
1,4-Dichlorobenzene	785	Narcosis	---	---	---	---	0.1	0	2.0	0.049	---	---	---	---	0.15	1	10.7	0.014	---	---	---	---
Acetone	3121	Narcosis	0.019	1	1.0	0.018	---	---	---	---	0.039	1	7.6	0.005	---	---	---	---	0.023	1	43.4	0.001
<b>Semi-Volatile Organic Compounds</b>																						
Bis(2-Ethylhexyl)Phthalate	53060	Conventional	---	---	---	---	0.23	1	136.9	0.002	---	---	---	---	0.14	0	721.6	0.000	---	---	---	---
Nitrobenzene	156.5	Conventional	---	---	---	---	0.1	0	0.4	0.248	---	---	---	---	0.07	0	2.1	0.033	---	---	---	---
<b>Sediment Organic Carbon</b>																						
Black Carbon	NA	NA	---	---	NA	---	---	---	NA	---	645	1	NA	---	---	---	NA	---	---	---	NA	---
Total Organic Carbon	NA	NA	335	1	NA	---	2580	1	NA	---	2430	1	NA	---	13600	1	NA	---	13900	1	NA	---
			<b>Sum of Narcotic ESBTUs:</b> 0.018				<b>Sum of Narcotic ESBTUs:</b> 0.099				<b>Sum of Narcotic ESBTUs:</b> 0.005				<b>Sum of Narcotic ESBTUs:</b> 0.023				<b>Sum of Narcotic ESBTUs:</b> 0.001			

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER1-28 0.50-1.00 9/22/2009				DER1-29 0.00-0.50 9/22/2009				DER2-27-SD 0.50-1.00 5/4/2010				DER2-28-SD 0.00-0.50 4/22/2010				DER2-28-SD 0.50-1.00 4/22/2010			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
			<b>Volatile Organic Compounds</b>																			
1,2-Dichlorobenzene	786	Narcosis	---	---	---	---	0.046	0	1.5	0.030	---	---	---	---	0.21	0	8.4	0.025	---	---	---	---
1,4-Dichlorobenzene	785	Narcosis	---	---	---	---	0.046	0	1.5	0.030	---	---	---	---	0.21	0	8.4	0.025	---	---	---	---
Acetone	3121	Narcosis	0.015	1	2.4	0.006	---	---	---	---	0.093	1	274.5	0.0003	---	---	---	---	0.008	0	6.1	0.001
<b>Semi-Volatile Organic Compounds</b>																						
Bis(2-Ethylhexyl)Phthalate	53060	Conventional	---	---	---	---	0.093	0	104.0	0.001	---	---	---	---	0.42	0	570.4	0.001	---	---	---	---
Nitrobenzene	156.5	Conventional	---	---	---	---	0.046	0	0.3	0.150	---	---	---	---	0.21	0	1.7	0.125	---	---	---	---
<b>Sediment Organic Carbon</b>																						
Black Carbon	NA	NA	145	1	NA	---	475	1	NA	---	---	---	NA	---	---	---	NA	---	---	---	NA	---
Total Organic Carbon	NA	NA	780	1	NA	---	1960	1	NA	---	87950	1	NA	---	10750	1	NA	---	1965	1	NA	---
			<b>Sum of Narcotic ESBTUs:</b> 0.006				<b>Sum of Narcotic ESBTUs:</b> 0.060				<b>Sum of Narcotic ESBTUs:</b> 0.0003				<b>Sum of Narcotic ESBTUs:</b> 0.050				<b>Sum of Narcotic ESBTUs:</b> 0.001			

**Table D5**  
**Sample-Specific Comparisons to Refined Sediment Quality Benchmarks - Carneys Point Zone**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER2-27-SD 0.00-0.50				DER2-29-SD 0.50-1.00				DER3-17 0.00-0.50				DER3-17 0.50-1.00				DER3-18 0.00-0.50															
			5/4/2010				4/21/2010				11/15/2010				11/15/2010				11/15/2010															
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU												
<b>Volatile Organic Compounds</b>																																		
1,2-Dichlorobenzene	786	Narcosis	0.057	0	5.9	0.010	---	---	---	---	0.5	1	9.1	0.055	---	---	---	---	0.062	0	11.6	0.005												
1,4-Dichlorobenzene	785	Narcosis	0.057	0	5.9	0.010	---	---	---	---	0.14	1	9.1	0.015	---	---	---	---	0.062	0	11.6	0.005												
Acetone	3121	Narcosis	---	---	---	---	0.035	1	54.5	0.001	0.016	1	36.0	0.000	0.033	1	36.0	0.001	0.066	1	46.2	0.001												
<b>Semi-Volatile Organic Compounds</b>																																		
Bis(2-Ethylhexyl)Phthalate	53060	Conventional	0.11	0	398.0	0.000	---	---	---	---	0.14	0	612.8	0.000	---	---	---	---	0.12	0	785.3	0.000												
Nitrobenzene	156.5	Conventional	0.057	0	1.2	0.049	---	---	---	---	0.42	1	1.8	0.232	---	---	---	---	0.16	1	2.3	0.069												
<b>Sediment Organic Carbon</b>																																		
Black Carbon	NA	NA	---	---	NA	---	---	---	NA	---	4230	1	NA	---	---	---	NA	---	6850	1	NA	---												
Total Organic Carbon	NA	NA	7500	1	NA	---	17450	1	NA	---	11550	1	NA	---	11550	---	NA	---	14800	1	NA	---												
<b>Sum of Narcotic ESBTUs:</b>						0.019	<b>Sum of Narcotic ESBTUs:</b>						0.001	<b>Sum of Narcotic ESBTUs:</b>						0.071	<b>Sum of Narcotic ESBTUs:</b>						0.001	<b>Sum of Narcotic ESBTUs:</b>						0.012

Parameter Name	Refined Sediment Quality Benchmark (ESB) (mg/kg OC)	ESB Toxicological Basis	DER2-29-SD 0.00-0.50				DER3-18 0.50-1.00				DER3-27 0.00-0.50			
			4/21/2010				11/15/2010				11/16/2010			
			Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU	Result (mg/kg dw)	Detection	Refined ESB (mg/kg dw)	ESBTU
<b>Volatile Organic Compounds</b>														
1,2-Dichlorobenzene	786	Narcosis	0.5	1	14.6	0.034	---	---	---	---	---	---		
1,4-Dichlorobenzene	785	Narcosis	1.2	1	14.6	0.082	---	---	---	---	---	---		
Acetone	3121	Narcosis	---	---	---	---	0.036	1	46.2	0.001	0.15	1	50.9	0.003
<b>Semi-Volatile Organic Compounds</b>														
Bis(2-Ethylhexyl)Phthalate	53060	Conventional	0.41	1	984.3	0.000	---	---	---	---	---	---		
Nitrobenzene	156.5	Conventional	0.19	0	2.9	0.065	---	---	---	---	---	---		
<b>Sediment Organic Carbon</b>														
Black Carbon	NA	NA	2445	1	NA	---	---	---	NA	---	---	---		
Total Organic Carbon	NA	NA	18550	1	NA	---	14800	---	NA	---	16300	1	NA	---
<b>Sum of Narcotic ESBTUs:</b>				0.117	<b>Sum of Narcotic ESBTUs:</b>				0.001	<b>Sum of Narcotic ESBTUs:</b>				0.003

Notes:  
ESBTU, Equilibrium partitioning sediment benchmark toxic unit  
OC, Organic carbon  
Sum of Narcotic ESBTUs, Sample-specific sum of ESBTU values for COPECs with a narcotic mode of toxicity.

**Table D6**  
**One-Carbon EqP Model PAH  $\Sigma$ ESBTU Calculations - Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Station: Sampling Depth: Sampling Date:		DER1-01 0-0.5 9/21/2009			DER1-04 0-0.5 9/24/2009			DER1-05 0-0.5 9/21/2009			DER1-06 0-0.5 9/24/2009			DER1-11 0-0.5 9/21/2009		
	$C_{OC,PAH,FCVI}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Maxi}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$
Acenaphthene	491	33400	ND	ND	---												
Acenaphthylene	452	24000	ND	ND	---												
Anthracene	594	1300	ND	ND	---												
Benzo(A)Anthracene	841	4153	ND	ND	---	ND	ND	---	0.1	54.201	0.064	ND	ND	---	ND	ND	---
Benzo(A)Pyrene	965	3840	ND	ND	---	ND	ND	---	0.071	38.482	0.04	ND	ND	---	ND	ND	---
Benzo(B)Fluoranthene	979	2169	0.047	22.488	0.023	ND	ND	---	0.084	45.528	0.047	ND	ND	---	ND	ND	---
Benzo(K)Fluoranthene	981	1220	ND	ND	---												
Chrysene	844	826	0.044	21.053	0.025	ND	ND	---	0.13	70.461	0.083	ND	ND	---	ND	ND	---
Fluoranthene	707	23870	0.064	30.622	0.043	ND	ND	---	0.14	75.881	0.107	ND	ND	---	ND	ND	---
Fluorene	538	26000	ND	ND	---												
Naphthalene	385	61700	ND	ND	---												
Phenanthrene	596	34300	ND	ND	---	ND	ND	---	0.11	59.621	0.1	ND	ND	---	ND	ND	---
Pyrene	697	9090	0.059	28.23	0.041	ND	ND	---	0.22	119.241	0.171	0.05	16.639	0.024	ND	ND	---
			tPAH <sub>13</sub> = 0.214	$\Sigma ESBTU_{FCVI,13}$	0.132	tPAH <sub>13</sub> = ND	$\Sigma ESBTU_{FCVI,13}$	---	tPAH <sub>13</sub> = 0.855	$\Sigma ESBTU_{FCVI,13}$	0.612	tPAH <sub>13</sub> = 0.05	$\Sigma ESBTU_{FCVI,13}$	0.024	tPAH <sub>13</sub> = ND	$\Sigma ESBTU_{FCVI,13}$	---
				$\Sigma ESBTU_{FCVI,TOT}$	0.363		$\Sigma ESBTU_{FCVI,TOT}$	---		$\Sigma ESBTU_{FCVI,TOT}$	<b>1.683</b>		$\Sigma ESBTU_{FCVI,TOT}$	0.066		$\Sigma ESBTU_{FCVI,TOT}$	---

Analyte	Station: Sampling Depth: Sampling Date:		DER1-07 0-0.5 9/21/2009			DER1-08 0-0.5 9/24/2009			DER1-09 0-0.5 9/21/2009			DER1-10 0-0.5 9/24/2009			DER2-06-SD 0-0.5 4/23/2010		
	$C_{OC,PAH,FCVI}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Maxi}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$
Acenaphthene	491	33400	ND	ND	---	ND	ND	---	0.047	11.285	0.023	ND	ND	---	ND	ND	---
Acenaphthylene	452	24000	ND	ND	---	ND	ND	---									
Anthracene	594	1300	ND	ND	---	ND	ND	---	0.062	14.886	0.025	0.12	5.195	0.009	ND	ND	---
Benzo(A)Anthracene	841	4153	ND	ND	---	ND	ND	---	0.12	28.812	0.034	0.38	16.45	0.02	ND	ND	---
Benzo(A)Pyrene	965	3840	ND	ND	---	ND	ND	---	0.096	23.049	0.024	0.26	11.255	0.012	ND	ND	---
Benzo(B)Fluoranthene	979	2169	ND	ND	---	ND	ND	---	0.2	48.019	0.049	0.38	16.45	0.017	ND	ND	---
Benzo(K)Fluoranthene	981	1220	ND	ND	---	ND	ND	---	0.088	21.128	0.022	0.17	7.359	0.008	ND	ND	---
Chrysene	844	826	ND	ND	---	ND	ND	---	0.22	52.821	0.063	0.81	35.065	0.042	ND	ND	---
Fluoranthene	707	23870	ND	ND	---	ND	ND	---	0.7	168.067	0.238	0.73	31.602	0.045	ND	ND	---
Fluorene	538	26000	ND	ND	---	ND	ND	---	0.062	14.886	0.028	ND	ND	---	ND	ND	---
Naphthalene	385	61700	ND	ND	---	ND	ND	---									
Phenanthrene	596	34300	ND	ND	---	ND	ND	---	0.6	144.058	0.242	0.36	15.584	0.026	ND	ND	---
Pyrene	697	9090	ND	ND	---	ND	ND	---	0.58	139.256	0.2	0.8	34.632	0.05	ND	ND	---
			tPAH <sub>13</sub> = ND	$\Sigma ESBTU_{FCVI,13}$	---	tPAH <sub>13</sub> = ND	$\Sigma ESBTU_{FCVI,13}$	---	tPAH <sub>13</sub> = 2.775	$\Sigma ESBTU_{FCVI,13}$	0.948	tPAH <sub>13</sub> = 4.01	$\Sigma ESBTU_{FCVI,13}$	0.229	tPAH <sub>13</sub> = ND	$\Sigma ESBTU_{FCVI,13}$	---
				$\Sigma ESBTU_{FCVI,TOT}$	---		$\Sigma ESBTU_{FCVI,TOT}$	---		$\Sigma ESBTU_{FCVI,TOT}$	<b>2.607</b>		$\Sigma ESBTU_{FCVI,TOT}$	0.62975		$\Sigma ESBTU_{FCVI,TOT}$	---

**Table D6**  
**One-Carbon EqP Model PAH  $\Sigma$ ESBTU Calculations - Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Station: Sampling Depth: Sampling Date:		DER2-01-SD 0-0.5 4/21/2010			DER2-03-SD 0-0.5 4/22/2010			DER2-05-SD 0-0.5 4/27/2010			DER2-10-SD 0-0.5 4/20/2010			DER2-11-SD 0-0.5 4/20/2010		
	C <sub>OC,PAH,FCVI</sub> ( $\mu\text{g/g OC}$ )	C <sub>OC,PAH,Maxi</sub> ( $\mu\text{g/g OC}$ )	C <sub>dw</sub> ( $\mu\text{g/g dw}$ )	C <sub>OC</sub> ( $\mu\text{g/g OC}$ )	ESBTU <sub>FCVI,ND=0</sub>	C <sub>dw</sub> ( $\mu\text{g/g dw}$ )	C <sub>OC</sub> ( $\mu\text{g/g OC}$ )	ESBTU <sub>FCVI,ND=0</sub>	C <sub>dw</sub> ( $\mu\text{g/g dw}$ )	C <sub>OC</sub> ( $\mu\text{g/g OC}$ )	ESBTU <sub>FCVI,ND=0</sub>	C <sub>dw</sub> ( $\mu\text{g/g dw}$ )	C <sub>OC</sub> ( $\mu\text{g/g OC}$ )	ESBTU <sub>FCVI,ND=0</sub>	C <sub>dw</sub> ( $\mu\text{g/g dw}$ )	C <sub>OC</sub> ( $\mu\text{g/g OC}$ )	ESBTU <sub>FCVI,ND=0</sub>
Acenaphthene	491	33400	ND	ND	---												
Acenaphthylene	452	24000	ND	ND	---												
Anthracene	594	1300	ND	ND	---												
Benzo(A)Anthracene	841	4153	ND	ND	---	ND	ND	---	0.35	45.074	0.054	ND	ND	---	ND	ND	---
Benzo(A)Pyrene	965	3840	ND	ND	---	ND	ND	---	0.25	32.196	0.033	ND	ND	---	ND	ND	---
Benzo(B)Fluoranthene	979	2169	ND	ND	---	0.12	7.895	0.008	0.26	33.484	0.034	0.11	5.699	0.006	0.12	5.714	0.006
Benzo(K)Fluoranthene	981	1220	ND	ND	---												
Chrysene	844	826	ND	ND	---	0.096	6.316	0.007	0.52	66.967	0.079	0.1	5.181	0.006	ND	ND	---
Fluoranthene	707	23870	ND	ND	---	0.14	9.211	0.013	0.44	56.665	0.08	0.14	7.254	0.01	0.14	6.667	0.009
Fluorene	538	26000	ND	ND	---												
Naphthalene	385	61700	ND	ND	---	ND	ND	---	0.1	12.878	0.033	0.12	6.218	0.016	ND	ND	---
Phenanthrene	596	34300	ND	ND	---	ND	ND	---	0.12	15.454	0.026	0.12	6.154	0.01	0.1	4.762	0.008
Pyrene	697	9090	ND	ND	---	0.17	11.184	0.016	0.78	100.451	0.144	0.16	8.29	0.012	0.16	7.619	0.011
tPAH <sub>13</sub> = ND				$\Sigma$ ESBTU <sub>FCVI,13</sub>	---	tPAH <sub>13</sub> = 0.526	$\Sigma$ ESBTU <sub>FCVI,13</sub>	0.044	tPAH <sub>13</sub> = 2.82	$\Sigma$ ESBTU <sub>FCVI,13</sub>	0.483	tPAH <sub>13</sub> = 0.75	$\Sigma$ ESBTU <sub>FCVI,13</sub>	0.06	tPAH <sub>13</sub> = 0.52	$\Sigma$ ESBTU <sub>FCVI,13</sub>	0.034
				$\Sigma$ ESBTU <sub>FCVI,TOT</sub>	---		$\Sigma$ ESBTU <sub>FCVI,TOT</sub>	0.121		$\Sigma$ ESBTU <sub>FCVI,TOT</sub>	1.32825		$\Sigma$ ESBTU <sub>FCVI,TOT</sub>	0.165		$\Sigma$ ESBTU <sub>FCVI,TOT</sub>	0.0935

Analyte	Station: Sampling Depth: Sampling Date:		DER2-07-SD 0-0.5 4/22/2010			DER2-08-SD 0-0.5 4/23/2010			DER2-09-SD 0-0.5 4/21/2010			DER2-31-SD 0-0.5 4/27/2010			DER3-01 0-0.5 11/16/2010		
	C <sub>OC,PAH,FCVI</sub> ( $\mu\text{g/g OC}$ )	C <sub>OC,PAH,Maxi</sub> ( $\mu\text{g/g OC}$ )	C <sub>dw</sub> ( $\mu\text{g/g dw}$ )	C <sub>OC</sub> ( $\mu\text{g/g OC}$ )	ESBTU <sub>FCVI,ND=0</sub>	C <sub>dw</sub> ( $\mu\text{g/g dw}$ )	C <sub>OC</sub> ( $\mu\text{g/g OC}$ )	ESBTU <sub>FCVI,ND=0</sub>	C <sub>dw</sub> ( $\mu\text{g/g dw}$ )	C <sub>OC</sub> ( $\mu\text{g/g OC}$ )	ESBTU <sub>FCVI,ND=0</sub>	C <sub>dw</sub> ( $\mu\text{g/g dw}$ )	C <sub>OC</sub> ( $\mu\text{g/g OC}$ )	ESBTU <sub>FCVI,ND=0</sub>	C <sub>dw</sub> ( $\mu\text{g/g dw}$ )	C <sub>OC</sub> ( $\mu\text{g/g OC}$ )	ESBTU <sub>FCVI,ND=0</sub>
Acenaphthene	491	33400	ND	ND	---	ND	ND	---	ND	ND	---	0.63	79.545	0.162	ND	ND	---
Acenaphthylene	452	24000	ND	ND	---												
Anthracene	594	1300	ND	ND	---	ND	ND	---	ND	ND	---	0.24	30.303	0.051	ND	ND	---
Benzo(A)Anthracene	841	4153	0.3	21.898	0.026	ND	ND	---	0.16	7.033	0.008	0.11	13.889	0.017	ND	ND	---
Benzo(A)Pyrene	965	3840	0.24	17.518	0.018	ND	ND	---	0.17	7.473	0.008	0.13	16.414	0.017	ND	ND	---
Benzo(B)Fluoranthene	979	2169	0.28	20.438	0.021	ND	ND	---	0.23	10.11	0.01	ND	ND	---	ND	ND	---
Benzo(K)Fluoranthene	981	1220	ND	ND	---	ND	ND	---	0.11	4.835	0.005	ND	ND	---	ND	ND	---
Chrysene	844	826	0.24	17.518	0.021	ND	ND	---	0.24	10.549	0.012	0.13	16.414	0.019	ND	ND	---
Fluoranthene	707	23870	0.33	24.088	0.034	ND	ND	---	0.27	11.868	0.017	0.39	49.242	0.07	ND	ND	---
Fluorene	538	26000	ND	ND	---	ND	ND	---	ND	ND	---	0.4	50.505	0.094	ND	ND	---
Naphthalene	385	61700	ND	ND	---	ND	ND	---	0.12	5.275	0.014	0.63	79.545	0.207	ND	ND	---
Phenanthrene	596	34300	0.24	17.518	0.029	ND	ND	---	0.17	7.473	0.013	1.2	151.515	0.254	ND	ND	---
Pyrene	697	9090	0.39	28.467	0.041	ND	ND	---	0.32	14.066	0.02	0.39	49.242	0.071	ND	ND	---
tPAH <sub>13</sub> = 2.02				$\Sigma$ ESBTU <sub>FCVI,13</sub>	0.19	tPAH <sub>13</sub> = ND	$\Sigma$ ESBTU <sub>FCVI,13</sub>	---	tPAH <sub>13</sub> = 1.79	$\Sigma$ ESBTU <sub>FCVI,13</sub>	0.107	tPAH <sub>13</sub> = 4.25	$\Sigma$ ESBTU <sub>FCVI,13</sub>	0.962	tPAH <sub>13</sub> = ND	$\Sigma$ ESBTU <sub>FCVI,13</sub>	---
				$\Sigma$ ESBTU <sub>FCVI,TOT</sub>	0.5225		$\Sigma$ ESBTU <sub>FCVI,TOT</sub>	---		$\Sigma$ ESBTU <sub>FCVI,TOT</sub>	0.29425		$\Sigma$ ESBTU <sub>FCVI,TOT</sub>	2.6455		$\Sigma$ ESBTU <sub>FCVI,TOT</sub>	---

**Table D6**  
**One-Carbon EqP Model PAH  $\Sigma$ ESBTU Calculations - Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Station: Sampling Depth: Sampling Date:		DER2-12-SD 0-0.5 4/20/2010			DER2-30-SD 0-0.5 4/27/2010			DER3-04 0-0.5 11/15/2010			DER3-05 0-0.5 11/16/2010			DER3-06 0-0.5 11/15/2010		
	$C_{OC,PAH,FCVI}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Maxi}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$
Acenaphthene	491	33400	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND	---
Acenaphthylene	452	24000	ND	ND	---	ND	ND	---	0.049	2.874	0.006	ND	ND	---	ND	ND	---
Anthracene	594	1300	ND	ND	---	ND	ND	---	0.42	24.633	0.041	ND	ND	---	ND	ND	---
Benzo(A)Anthracene	841	4153	ND	ND	---	ND	ND	---	0.41	24.047	0.029	ND	ND	---	ND	ND	---
Benzo(A)Pyrene	965	3840	0.097	4.887	0.005	ND	ND	---	0.31	18.182	0.019	ND	ND	---	ND	ND	---
Benzo(B)Fluoranthene	979	2169	0.12	6.045	0.006	ND	ND	---	0.31	18.182	0.019	ND	ND	---	ND	ND	---
Benzo(K)Fluoranthene	981	1220	ND	ND	---	ND	ND	---	0.15	8.798	0.009	ND	ND	---	ND	ND	---
Chrysene	844	826	0.12	6.045	0.007	ND	ND	---	1	58.651	0.069	ND	ND	---	ND	ND	---
Fluoranthene	707	23870	0.15	7.557	0.011	ND	ND	---	0.4	23.46	0.033	ND	ND	---	ND	ND	---
Fluorene	538	26000	ND	ND	---	ND	ND	---	0.11	6.452	0.012	ND	ND	---	ND	ND	---
Naphthalene	385	61700	0.14	7.053	0.018	0.097	22.717	0.059	1.1	64.516	0.168	ND	ND	---	ND	ND	---
Phenanthrene	596	34300	0.16	8.06	0.014	ND	ND	---	0.24	14.076	0.024	ND	ND	---	ND	ND	---
Pyrene	697	9090	0.19	9.572	0.014	ND	ND	---	0.57	33.431	0.048	ND	ND	---	ND	ND	---
			tPAH <sub>13</sub> = 0.977	$\Sigma ESBTU_{FCVI,13}$	0.075	tPAH <sub>13</sub> = 0.097	$\Sigma ESBTU_{FCVI,13}$	0.059	tPAH <sub>13</sub> = 5.069	$\Sigma ESBTU_{FCVI,13}$	0.477	tPAH <sub>13</sub> = ND	$\Sigma ESBTU_{FCVI,13}$	---	tPAH <sub>13</sub> = ND	$\Sigma ESBTU_{FCVI,13}$	---
				$\Sigma ESBTU_{FCVI,TOT}$	0.20625		$\Sigma ESBTU_{FCVI,TOT}$	0.16225		$\Sigma ESBTU_{FCVI,TOT}$	1.31175		$\Sigma ESBTU_{FCVI,TOT}$	---		$\Sigma ESBTU_{FCVI,TOT}$	---

Analyte	Station: Sampling Depth: Sampling Date:		DER3-02 0-0.5 11/16/2010			DER3-03 0-0.5 11/16/2010			SC-229 0.5-0.8 8/24/2016			SC-229 0-0.5 8/24/2016			SC-230 0.5-1 8/25/2016		
	$C_{OC,PAH,FCVI}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Maxi}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$
Acenaphthene	491	33400	ND	ND	---	ND	ND	---	0.079	9.197	0.019	0.017	1.667	0.003	ND	ND	---
Acenaphthylene	452	24000	ND	ND	---	ND	ND	---	0.012	1.397	0.003	0.006	0.588	0.001	ND	ND	---
Anthracene	594	1300	ND	ND	---	ND	ND	---	0.068	7.916	0.013	0.027	2.647	0.004	ND	ND	---
Benzo(A)Anthracene	841	4153	ND	ND	---	ND	ND	---	0.14	16.298	0.019	0.083	8.137	0.01	0.007	19.391	0.023
Benzo(A)Pyrene	965	3840	ND	ND	---	ND	ND	---	0.15	17.462	0.018	0.056	5.49	0.006	0.005	13.85	0.014
Benzo(B)Fluoranthene	979	2169	ND	ND	---	ND	ND	---	0.21	24.447	0.025	0.085	8.333	0.009	0.008	22.161	0.023
Benzo(K)Fluoranthene	981	1220	ND	ND	---	ND	ND	---	0.076	8.847	0.009	0.035	3.431	0.003	0.004	11.08	0.011
Chrysene	844	826	ND	ND	---	ND	ND	---	0.15	17.462	0.021	0.094	9.216	0.011	0.007	19.391	0.023
Fluoranthene	707	23870	ND	ND	---	ND	ND	---	0.34	39.581	0.056	0.11	10.784	0.015	0.005	13.85	0.02
Fluorene	538	26000	ND	ND	---	ND	ND	---	0.035	4.075	0.008	0.012	1.176	0.002	ND	ND	---
Naphthalene	385	61700	ND	ND	---	ND	ND	---	0.077	8.964	0.023	0.024	2.353	0.006	ND	ND	---
Phenanthrene	596	34300	ND	ND	---	ND	ND	---	0.15	17.462	0.029	0.039	3.824	0.006	ND	ND	---
Pyrene	697	9090	ND	ND	---	ND	ND	---	0.31	36.088	0.052	0.12	11.765	0.017	0.011	30.471	0.044
			tPAH <sub>13</sub> = ND	$\Sigma ESBTU_{FCVI,13}$	---	tPAH <sub>13</sub> = ND	$\Sigma ESBTU_{FCVI,13}$	---	tPAH <sub>13</sub> = 1.797	$\Sigma ESBTU_{FCVI,13}$	0.295	tPAH <sub>13</sub> = 0.708	$\Sigma ESBTU_{FCVI,13}$	0.093	tPAH <sub>13</sub> = 0.047	$\Sigma ESBTU_{FCVI,13}$	0.158
				$\Sigma ESBTU_{FCVI,TOT}$	---		$\Sigma ESBTU_{FCVI,TOT}$	---		$\Sigma ESBTU_{FCVI,TOT}$	0.81125		$\Sigma ESBTU_{FCVI,TOT}$	0.25575		$\Sigma ESBTU_{FCVI,TOT}$	0.4345

**Table D6**  
**One-Carbon EqP Model PAH  $\Sigma$ ESBTU Calculations - Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Station: Sampling Depth: Sampling Date:		DER3-07 0-0.5 11/16/2010			SC-231 0.5-1 8/25/2016			SC-231 0-0.5 8/25/2016			SC-232 0.5-1 8/25/2016			SC-232 0-0.5 8/25/2016		
	$C_{OC,PAH,FCVI}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Maxi}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$
Acenaphthene	491	33400	ND	ND	---	0.068	2.208	0.004	0.091	3.555	0.007	ND	ND	---	0.035	3.465	0.007
Acenaphthylene	452	24000	ND	ND	---	ND	ND	---	0.034	1.328	0.003	0.004	0.95	0.002	0.032	3.168	0.007
Anthracene	594	1300	ND	ND	---	0.073	2.37	0.004	0.11	4.297	0.007	0.008	1.9	0.003	0.14	13.861	0.023
Benzo(A)Anthracene	841	4153	ND	ND	---	0.08	2.597	0.003	0.093	3.633	0.004	0.012	2.85	0.003	0.36	35.644	0.042
Benzo(A)Pyrene	965	3840	ND	ND	---	0.065	2.11	0.002	0.085	3.32	0.003	0.011	2.613	0.003	0.29	28.713	0.03
Benzo(B)Fluoranthene	979	2169	ND	ND	---	0.1	3.247	0.003	0.12	4.688	0.005	0.012	2.85	0.003	0.21	20.792	0.021
Benzo(K)Fluoranthene	981	1220	ND	ND	---	0.039	1.266	0.001	0.054	2.109	0.002	ND	ND	---	0.055	5.446	0.006
Chrysene	844	826	ND	ND	---	0.11	3.571	0.004	0.18	7.031	0.008	0.012	2.85	0.003	0.53	52.475	0.062
Fluoranthene	707	23870	ND	ND	---	0.19	6.169	0.009	0.23	8.984	0.013	0.01	2.375	0.003	0.15	14.851	0.021
Fluorene	538	26000	ND	ND	---	0.047	1.526	0.003	0.064	2.5	0.005	0.005	1.188	0.002	0.079	7.822	0.015
Naphthalene	385	61700	ND	ND	---	0.12	3.896	0.01	1.5	58.594	0.152	0.021	4.988	0.013	0.16	15.842	0.041
Phenanthrene	596	34300	ND	ND	---	0.12	3.896	0.007	0.19	7.422	0.012	0.013	3.088	0.005	0.27	26.733	0.045
Pyrene	697	9090	0.11	6.471	0.009	0.27	8.766	0.013	0.35	13.672	0.02	0.024	5.701	0.008	1.2	118.812	0.17
			tPAH <sub>13</sub> = 0.11	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.009	tPAH <sub>13</sub> = 1.282	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.063	tPAH <sub>13</sub> = 3.101	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.241	tPAH <sub>13</sub> = 0.132	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.048	tPAH <sub>13</sub> = 3.511	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.49
				$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.02475		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.17325		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.66275		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.132		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	1.3475

Analyte	Station: Sampling Depth: Sampling Date:		SC-230 0-0.5 8/25/2016			SC-233 0.5-1 8/25/2016			SC-233 0-0.5 8/25/2016			SC-234 0.5-1 8/24/2016			SC-234 0-0.5 8/24/2016		
	$C_{OC,PAH,FCVI}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Maxi}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$
Acenaphthene	491	33400	ND	ND	---												
Acenaphthylene	452	24000	0.005	25.641	0.057	ND	ND	---	ND	ND	---	ND	ND	---	0.004	1.274	0.003
Anthracene	594	1300	0.007	35.897	0.06	ND	ND	---	ND	ND	---	ND	ND	---	0.009	2.866	0.005
Benzo(A)Anthracene	841	4153	0.019	97.436	0.116	ND	ND	---	0.054	13.043	0.016	0.005	3.289	0.004	0.028	8.917	0.011
Benzo(A)Pyrene	965	3840	0.043	220.513	0.229	ND	ND	---	0.051	12.319	0.013	0.004	2.632	0.003	0.021	6.688	0.007
Benzo(B)Fluoranthene	979	2169	0.052	266.667	0.272	0.005	30.488	0.031	0.077	18.599	0.019	0.004	2.632	0.003	0.033	10.51	0.011
Benzo(K)Fluoranthene	981	1220	0.021	107.692	0.11	ND	ND	---	0.039	9.42	0.01	ND	ND	---	0.014	4.459	0.005
Chrysene	844	826	0.04	205.128	0.243	ND	ND	---	0.071	17.15	0.02	ND	ND	---	0.034	10.828	0.013
Fluoranthene	707	23870	0.008	41.026	0.058	ND	ND	---	0.1	24.155	0.034	0.005	3.289	0.005	0.048	15.287	0.022
Fluorene	538	26000	ND	ND	---	0.004	1.274	0.002									
Naphthalene	385	61700	ND	ND	---	ND	ND	---	ND	ND	---	0.006	3.947	0.01	0.017	5.414	0.014
Phenanthrene	596	34300	0.006	30.769	0.052	ND	ND	---	0.046	11.111	0.019	0.004	2.632	0.004	0.018	5.732	0.01
Pyrene	697	9090	0.012	61.538	0.088	0.007	42.683	0.061	0.13	31.401	0.045	0.009	5.921	0.008	0.06	19.108	0.027
			tPAH <sub>13</sub> = 0.213	$\Sigma$ ESBTU <sub>FCV,13</sub>	1.285	tPAH <sub>13</sub> = 0.012	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.092	tPAH <sub>13</sub> = 0.568	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.176	tPAH <sub>13</sub> = 0.037	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.037	tPAH <sub>13</sub> = 0.29	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.13
				$\Sigma$ ESBTU <sub>FCV,TOT</sub>	3.53375		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.253		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.484		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.10175		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.3575

**Table D6**  
**One-Carbon EqP Model PAH  $\Sigma$ ESBTU Calculations - Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Station: Sampling Depth: Sampling Date:		SC-235 0.5-1 8/25/2016			SC-235 0-0.5 8/25/2016			SC-236 0.5-1 8/25/2016			SC-236 0-0.5 8/25/2016		
	$C_{OC,PAH,FCVI}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Maxi}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$
Acenaphthene	491	33400	ND	ND	---	0.017	9.091	0.019	0.15	5.66	0.012	0.12	9.231	0.019
Acenaphthylene	452	24000	ND	ND	---									
Anthracene	594	1300	0.007	1.383	0.002	0.023	12.299	0.021	0.51	19.245	0.032	0.98	75.385	0.127
Benzo(A)Anthracene	841	4153	0.034	6.719	0.008	0.051	27.273	0.032	1.3	49.057	0.058	2.3	176.923	0.21
Benzo(A)Pyrene	965	3840	0.028	5.534	0.006	0.037	19.786	0.021	0.9	33.962	0.035	2	153.846	0.159
Benzo(B)Fluoranthene	979	2169	0.05	9.881	0.01	0.058	31.016	0.032	1.2	45.283	0.046	2.3	176.923	0.181
Benzo(K)Fluoranthene	981	1220	0.019	3.755	0.004	0.032	17.112	0.017	0.6	22.642	0.023	1.3	100	0.102
Chrysene	844	826	0.045	8.893	0.011	0.058	31.016	0.037	1.1	41.509	0.049	2	153.846	0.182
Fluoranthene	707	23870	0.034	6.719	0.01	0.12	64.171	0.091	3.3	124.528	0.176	5.5	423.077	0.598
Fluorene	538	26000	ND	ND	---	0.016	8.556	0.016	0.22	8.302	0.015	0.23	17.692	0.033
Naphthalene	385	61700	0.01	1.976	0.005	0.016	8.556	0.022	0.19	7.17	0.019	0.039	3	0.008
Phenanthrene	596	34300	0.013	2.569	0.004	0.079	42.246	0.071	1.8	67.925	0.114	2.1	161.538	0.271
Pyrene	697	9090	0.034	6.719	0.01	0.098	52.406	0.075	2.5	94.34	0.135	4	307.692	0.441
			$tPAH_{13} = 0.274$	$\Sigma ESBTU_{FCVI,13}$	0.07	$tPAH_{13} = 0.605$	$\Sigma ESBTU_{FCVI,13}$	0.454	$tPAH_{13} = 13.77$	$\Sigma ESBTU_{FCVI,13}$	0.714	$tPAH_{13} = 22.869$	$\Sigma ESBTU_{FCVI,13}$	<b>2.331</b>
				$\Sigma ESBTU_{FCVI,TOT}$	0.1925		$\Sigma ESBTU_{FCVI,TOT}$	<b>1.2485</b>		$\Sigma ESBTU_{FCVI,TOT}$	<b>1.9635</b>		$\Sigma ESBTU_{FCVI,TOT}$	<b>6.41025</b>

Analyte	Station: Sampling Depth: Sampling Date:		SC-237 0.5-1 8/24/2016			SC-237 0-0.5 8/24/2016		
	$C_{OC,PAH,FCVI}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Maxi}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$
Acenaphthene	491	33400	ND	ND	---	0.019	94.059	0.192
Acenaphthylene	452	24000	ND	ND	---	0.27	1336.634	2.957
Anthracene	594	1300	0.011	59.14	0.1	0.17	841.584	1.417
Benzo(A)Anthracene	841	4153	0.017	91.398	0.109	0.59	2920.792	3.473
Benzo(A)Pyrene	965	3840	0.015	80.645	0.084	0.54	2673.267	2.77
Benzo(B)Fluoranthene	979	2169	0.023	123.656	0.126	0.55	2722.772	2.216
Benzo(K)Fluoranthene	981	1220	0.01	53.763	0.055	0.27	1336.634	1.244
Chrysene	844	826	0.026	139.785	0.166	0.55	2722.772	0.979
Fluoranthene	707	23870	0.013	69.892	0.099	0.45	2227.723	3.151
Fluorene	538	26000	ND	ND	---	0.038	188.119	0.35
Naphthalene	385	61700	0.019	102.151	0.265	0.006	29.703	0.077
Phenanthrene	596	34300	0.011	59.14	0.099	0.078	386.139	0.648
Pyrene	697	9090	0.077	413.978	0.594	0.69	3415.842	4.901
			$tPAH_{13} = 0.222$	$\Sigma ESBTU_{FCVI,13}$	<b>1.697</b>	$tPAH_{13} = 4.221$	$\Sigma ESBTU_{FCVI,13}$	<b>24.375</b>
				$\Sigma ESBTU_{FCVI,TOT}$	<b>4.66675</b>		$\Sigma ESBTU_{FCVI,TOT}$	<b>67.03125</b>

**Notes:**

- $C_{OC,PAH,FCVI}$ : Critical concentration of a PAH in sediment that is related to the final chronic value (FCV) derived following the EqP method
- $C_{OC,PAH,Maxi}$ : Concentration in sediment organic carbon that is in equilibrium with the interstitial water at the aqueous solubility
- $\Sigma ESBTU_{FCVI,13}$ : Sum of toxic units bases on 13 PAH compounds analyzed in the sample
- $\Sigma ESBTU_{FCVI,TOT}$ : Estimated sum of toxic units of total PAH mixture based on 34 PAH compounds; an UF of 2.75 is applied to  $\Sigma ESBTU_{FCVI,13}$  to estimate  $\Sigma ESBTU_{FCVI,TOT}$
- $tPAH_{13}$ : Sum of concentrations of 13 PAH samples analyzed in the sample
- ND, Concentration of PAH compound was below the limit of detection
- , Value not calculated because PAH compound was below the limit of detection
- $C_{dw}$ : Concentration of PAH compound on a dry weight basis ( $\mu\text{g/g dw}$ )
- $C_{OC}$ : Concentration of PAH compound normalized to sample-specific fraction of organic carbon ( $\mu\text{g/g organic carbon}$ )

**Table D7**  
**One-Carbon EqP Model PAH  $\Sigma$ ESBTU Calculations - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Station: Sampling Depth: Sampling Date:		D15-BOR-01 0-0.5 3/28/2009			D15-BOR-02 0-0.5 3/28/2009			D15-BOR-03 0-0.5 3/28/2009			D15-BOR-04 0.5-1 3/25/2009			D15-BOR-10 0.5-1 3/26/2009		
	$C_{OC,PAH,FCVI}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Maxi}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$
Acenaphthene	491	33400	ND	ND	---												
Acenaphthylene	452	24000	ND	ND	---												
Anthracene	594	1300	ND	ND	---	ND	ND	---	ND	ND	---	0.069	352.041	0.593	ND	ND	---
Benzo(A)Anthracene	841	4153	ND	ND	---	ND	ND	---	ND	ND	---	0.14	714.286	0.849	ND	ND	---
Benzo(A)Pyrene	965	3840	ND	ND	---	ND	ND	---	ND	ND	---	0.089	454.082	0.471	ND	ND	---
Benzo(B)Fluoranthene	979	2169	ND	ND	---	ND	ND	---	ND	ND	---	0.1	510.204	0.521	ND	ND	---
Benzo(K)Fluoranthene	981	1220	ND	ND	---												
Chrysene	844	826	ND	ND	---	ND	ND	---	ND	ND	---	0.21	1071.429	0.979	0.047	185.771	0.22
Fluoranthene	707	23870	ND	ND	---	ND	ND	---	ND	ND	---	0.25	1275.51	1.804	ND	ND	---
Fluorene	538	26000	ND	ND	---												
Naphthalene	385	61700	ND	ND	---	ND	ND	---	ND	ND	---	0.21	1071.429	2.783	ND	ND	---
Phenanthrene	596	34300	ND	ND	---	ND	ND	---	ND	ND	---	0.18	918.367	1.541	ND	ND	---
Pyrene	697	9090	ND	ND	---	ND	ND	---	ND	ND	---	0.29	1479.592	2.123	0.078	308.3	0.442
			tPAH <sub>13</sub> = ND	$\Sigma ESBTU_{FCVI,13}$	---	tPAH <sub>13</sub> = ND	$\Sigma ESBTU_{FCVI,13}$	---	tPAH <sub>13</sub> = ND	$\Sigma ESBTU_{FCVI,13}$	---	tPAH <sub>13</sub> = 1.538	$\Sigma ESBTU_{FCVI,13}$	<b>11.664</b>	tPAH <sub>13</sub> = 0.125	$\Sigma ESBTU_{FCVI,13}$	0.662
				$\Sigma ESBTU_{FCVI,TOT}$	---		$\Sigma ESBTU_{FCVI,TOT}$	---		$\Sigma ESBTU_{FCVI,TOT}$	---		$\Sigma ESBTU_{FCVI,TOT}$	<b>32.076</b>		$\Sigma ESBTU_{FCVI,TOT}$	<b>1.8205</b>

Analyte	Station: Sampling Depth: Sampling Date:		D15-BOR-06 0.5-1 3/25/2009			D15-BOR-07 0.5-1 3/25/2009			D15-BOR-07 0-0.5 3/28/2009			D15-BOR-09 0.5-1 3/26/2009			D15-BOR-15 0.5-1 10/27/2016		
	$C_{OC,PAH,FCVI}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Maxi}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$
Acenaphthene	491	33400	ND	ND	---	ND	ND	---									
Acenaphthylene	452	24000	ND	ND	---	ND	ND	---									
Anthracene	594	1300	ND	ND	---	0.052	1.864	0.003	ND	ND	---	ND	ND	---	ND	ND	---
Benzo(A)Anthracene	841	4153	0.1	520.833	0.619	0.097	3.477	0.004	ND	ND	---	ND	ND	---	ND	ND	---
Benzo(A)Pyrene	965	3840	0.076	395.833	0.41	0.059	2.115	0.002	ND	ND	---	ND	ND	---	ND	ND	---
Benzo(B)Fluoranthene	979	2169	0.098	510.417	0.521	0.062	2.222	0.002	ND	ND	---	ND	ND	---	ND	ND	---
Benzo(K)Fluoranthene	981	1220	ND	ND	---	ND	ND	---									
Chrysene	844	826	0.11	572.917	0.679	0.15	5.376	0.006	ND	ND	---	ND	ND	---	ND	ND	---
Fluoranthene	707	23870	0.14	729.167	1.031	0.14	5.018	0.007	ND	ND	---	ND	ND	---	ND	ND	---
Fluorene	538	26000	ND	ND	---	0.006	27.027	0.05									
Naphthalene	385	61700	0.12	625	1.623	0.075	2.688	0.007	ND	ND	---	ND	ND	---	0.023	103.604	0.269
Phenanthrene	596	34300	ND	ND	---	0.12	4.301	0.007	ND	ND	---	ND	ND	---	0.011	49.55	0.083
Pyrene	697	9090	0.15	781.25	1.121	0.19	6.81	0.01	ND	ND	---	ND	ND	---	ND	ND	---
			tPAH <sub>13</sub> = 0.794	$\Sigma ESBTU_{FCVI,13}$	<b>6.004</b>	tPAH <sub>13</sub> = 0.945	$\Sigma ESBTU_{FCVI,13}$	0.048	tPAH <sub>13</sub> = ND	$\Sigma ESBTU_{FCVI,13}$	---	tPAH <sub>13</sub> = ND	$\Sigma ESBTU_{FCVI,13}$	---	tPAH <sub>13</sub> = 0.04	$\Sigma ESBTU_{FCVI,13}$	0.402
				$\Sigma ESBTU_{FCVI,TOT}$	<b>16.511</b>		$\Sigma ESBTU_{FCVI,TOT}$	0.132		$\Sigma ESBTU_{FCVI,TOT}$	---		$\Sigma ESBTU_{FCVI,TOT}$	---		$\Sigma ESBTU_{FCVI,TOT}$	<b>1.1055</b>

**Table D7**  
**One-Carbon EqP Model PAH  $\Sigma$ ESBTU Calculations - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Station: Sampling Depth: Sampling Date:		D15-BOR-11 0-0.5 3/28/2009			D15-BOR-14 0.5-1 10/26/2016			D15-BOR-14 0-0.5 10/26/2016			D15-BOR-17 0.5-1 10/31/2016			D15-BOR-17 0-0.5 10/31/2016		
	$C_{OC,PAH,FCVI}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Maxi}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$
Acenaphthene	491	33400	ND	ND	---	ND	ND	---	ND	ND	---	0.007	36.458	0.074	0.022	0.863	0.002
Acenaphthylene	452	24000	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND	---	0.007	0.275	0.001
Anthracene	594	1300	ND	ND	---	ND	ND	---	ND	ND	---	0.01	52.083	0.088	0.021	0.824	0.001
Benzo(A)Anthracene	841	4153	ND	ND	---	ND	ND	---	0.009	30	0.036	0.013	67.708	0.081	0.018	0.706	0.001
Benzo(A)Pyrene	965	3840	ND	ND	---	ND	ND	---	0.008	26.667	0.028	0.014	72.917	0.076	0.025	0.98	0.001
Benzo(B)Fluoranthene	979	2169	ND	ND	---	0.005	18.797	0.019	0.012	40	0.041	0.017	88.542	0.09	0.032	1.255	0.001
Benzo(K)Fluoranthene	981	1220	ND	ND	---	ND	ND	---	0.009	30	0.031	0.007	36.458	0.037	0.014	0.549	0.001
Chrysene	844	826	ND	ND	---	0.004	15.038	0.018	0.014	46.667	0.055	0.021	109.375	0.13	0.047	1.843	0.002
Fluoranthene	707	23870	ND	ND	---	ND	ND	---	0.008	26.667	0.038	0.02	104.167	0.147	0.042	1.647	0.002
Fluorene	538	26000	ND	ND	---	0.004	15.038	0.028	0.016	53.333	0.099	0.011	57.292	0.106	0.02	0.784	0.001
Naphthalene	385	61700	ND	ND	---	0.059	221.805	0.576	0.18	600	1.558	0.1	520.833	1.353	0.69	27.059	0.07
Phenanthrene	596	34300	ND	ND	---	0.009	33.835	0.057	0.034	113.333	0.19	0.016	83.333	0.14	0.041	1.608	0.003
Pyrene	697	9090	ND	ND	---	ND	ND	---	0.01	33.333	0.048	0.024	125	0.179	0.048	1.882	0.003
			tPAH <sub>13</sub> = ND	$\Sigma ESBTU_{FCVI,13}$	---	tPAH <sub>13</sub> = 0.081	$\Sigma ESBTU_{FCVI,13}$	0.698	tPAH <sub>13</sub> = 0.3	$\Sigma ESBTU_{FCVI,13}$	2.124	tPAH <sub>13</sub> = 0.26	$\Sigma ESBTU_{FCVI,13}$	2.501	tPAH <sub>13</sub> = 1.027	$\Sigma ESBTU_{FCVI,13}$	0.089
				$\Sigma ESBTU_{FCVI,TOT}$	---		$\Sigma ESBTU_{FCVI,TOT}$	1.9195		$\Sigma ESBTU_{FCVI,TOT}$	5.841		$\Sigma ESBTU_{FCVI,TOT}$	6.87775		$\Sigma ESBTU_{FCVI,TOT}$	0.24475

Analyte	Station: Sampling Depth: Sampling Date:		D15-BOR-15 0-0.5 10/27/2016			D15-BOR-16 0.5-1 11/1/2016			D15-BOR-16 0-0.5 11/1/2016			D15-BOR-19 0.5-1 10/29/2016			D15-BOR-19 0-0.5 10/29/2016		
	$C_{OC,PAH,FCVI}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Maxi}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$
Acenaphthene	491	33400	0.02	6.309	0.013	ND	ND	---	0.014	4.746	0.01	ND	ND	---	ND	ND	---
Acenaphthylene	452	24000	0.007	2.208	0.005	ND	ND	---	0.012	4.068	0.009	ND	ND	---	ND	ND	---
Anthracene	594	1300	0.016	5.047	0.008	0.006	23.715	0.04	0.027	9.153	0.015	ND	ND	---	ND	ND	---
Benzo(A)Anthracene	841	4153	0.04	12.618	0.015	0.01	39.526	0.047	0.065	22.034	0.026	ND	ND	---	ND	ND	---
Benzo(A)Pyrene	965	3840	0.046	14.511	0.015	0.012	47.431	0.049	0.068	23.051	0.024	ND	ND	---	ND	ND	---
Benzo(B)Fluoranthene	979	2169	0.062	19.558	0.02	0.011	43.478	0.044	0.08	27.119	0.028	ND	ND	---	ND	ND	---
Benzo(K)Fluoranthene	981	1220	0.026	8.202	0.008	0.007	27.668	0.028	0.034	11.525	0.012	ND	ND	---	ND	ND	---
Chrysene	844	826	0.071	22.397	0.027	0.015	59.289	0.07	0.12	40.678	0.048	ND	ND	---	ND	ND	---
Fluoranthene	707	23870	0.059	18.612	0.026	0.011	43.478	0.061	0.076	25.763	0.036	ND	ND	---	ND	ND	---
Fluorene	538	26000	0.046	14.511	0.027	ND	ND	---	0.021	7.119	0.013	ND	ND	---	ND	ND	---
Naphthalene	385	61700	0.64	201.893	0.524	0.041	162.055	0.421	0.14	47.458	0.123	ND	ND	---	0.007	26.616	0.069
Phenanthrene	596	34300	0.081	25.552	0.043	0.005	19.763	0.033	0.041	13.898	0.023	ND	ND	---	ND	ND	---
Pyrene	697	9090	0.061	19.243	0.028	0.019	75.099	0.108	0.1	33.898	0.049	ND	ND	---	ND	ND	---
			tPAH <sub>13</sub> = 1.175	$\Sigma ESBTU_{FCVI,13}$	0.759	tPAH <sub>13</sub> = 0.137	$\Sigma ESBTU_{FCVI,13}$	0.901	tPAH <sub>13</sub> = 0.798	$\Sigma ESBTU_{FCVI,13}$	0.416	tPAH <sub>13</sub> = ND	$\Sigma ESBTU_{FCVI,13}$	---	tPAH <sub>13</sub> = 0.007	$\Sigma ESBTU_{FCVI,13}$	0.069
				$\Sigma ESBTU_{FCVI,TOT}$	2.08725		$\Sigma ESBTU_{FCVI,TOT}$	2.47775		$\Sigma ESBTU_{FCVI,TOT}$	1.144		$\Sigma ESBTU_{FCVI,TOT}$	---		$\Sigma ESBTU_{FCVI,TOT}$	0.18975

**Table D7**  
**One-Carbon EqP Model PAH  $\Sigma$ ESBTU Calculations - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Station: Sampling Depth: Sampling Date:		D15-BOR-18 0.5-1 10/27/2016			D15-BOR-18 0-0.5 10/27/2016			D15-BOR-23 0.5-1 11/3/2017			D15-BOR-23 0-0.5 11/3/2017			D15-BOR-24 0.5-1 11/1/2017		
	$C_{OC,PAH,FCVI}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Maxi}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$
Acenaphthene	491	33400	ND	ND	---	0.008	39.409	0.08	0.04	5.083	0.01	0.051	1.765	0.004	0.018	0.853	0.002
Acenaphthylene	452	24000	ND	ND	---	ND	ND	---	0.01	1.271	0.003	0.024	0.83	0.002	0.025	1.185	0.003
Anthracene	594	1300	ND	ND	---	0.009	44.335	0.075	0.03	3.812	0.006	0.069	2.388	0.004	0.042	1.991	0.003
Benzo(A)Anthracene	841	4153	ND	ND	---	0.01	49.261	0.059	0.051	6.48	0.008	0.12	4.152	0.005	0.12	5.687	0.007
Benzo(A)Pyrene	965	3840	ND	ND	---	0.01	49.261	0.051	0.043	5.464	0.006	0.1	3.46	0.004	0.12	5.687	0.006
Benzo(B)Fluoranthene	979	2169	ND	ND	---	0.01	49.261	0.05	0.074	9.403	0.01	0.13	4.498	0.005	0.16	7.583	0.008
Benzo(K)Fluoranthene	981	1220	ND	ND	---	0.004	19.704	0.02	0.026	3.304	0.003	0.082	2.837	0.003	0.074	3.507	0.004
Chrysene	844	826	ND	ND	---	0.018	88.67	0.105	0.16	20.33	0.024	0.18	6.228	0.007	0.16	7.583	0.009
Fluoranthene	707	23870	0.018	91.371	0.129	0.041	201.97	0.286	0.066	8.386	0.012	0.21	7.266	0.01	0.16	7.583	0.011
Fluorene	538	26000	ND	ND	---	0.011	54.187	0.101	0.048	6.099	0.011	0.053	1.834	0.003	0.02	0.948	0.002
Naphthalene	385	61700	ND	ND	---	0.01	49.261	0.128	0.19	24.142	0.063	0.25	8.651	0.022	0.15	7.109	0.018
Phenanthrene	596	34300	0.006	30.457	0.051	0.022	108.374	0.182	0.045	5.718	0.01	0.18	6.228	0.01	0.068	3.223	0.005
Pyrene	697	9090	0.025	126.904	0.182	0.051	251.232	0.36	0.074	9.403	0.013	0.21	7.266	0.01	0.18	8.531	0.012
			tPAH <sub>13</sub> = 0.049	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.362	tPAH <sub>13</sub> = 0.204	$\Sigma$ ESBTU <sub>FCV,13</sub>	1.497	tPAH <sub>13</sub> = 0.857	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.179	tPAH <sub>13</sub> = 1.659	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.089	tPAH <sub>13</sub> = 1.297	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.09
				$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.9955		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	4.11675		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.49225		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.24475		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.2475

Analyte	Station: Sampling Depth: Sampling Date:		D15-BOR-22 0.5-1 11/3/2017			D15-BOR-22 0-0.5 11/3/2017			D16-BOR-02 0.5-1 11/1/2016			D16-BOR-02 0-0.5 11/1/2016			D16-BOR-03 0.5-1 11/1/2016		
	$C_{OC,PAH,FCVI}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Maxi}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$
Acenaphthene	491	33400	0.005	9.091	0.019	0.17	8.416	0.017	0.038	8.879	0.018	0.065	9.393	0.019	0.049	2.402	0.005
Acenaphthylene	452	24000	ND	ND	---	0.024	1.188	0.003	0.011	2.57	0.006	0.014	2.023	0.004	0.035	1.716	0.004
Anthracene	594	1300	ND	ND	---	0.059	2.921	0.005	0.016	3.738	0.006	0.033	4.769	0.008	0.066	3.235	0.005
Benzo(A)Anthracene	841	4153	ND	ND	---	0.1	4.95	0.006	0.037	8.645	0.01	0.08	11.561	0.014	0.17	8.333	0.01
Benzo(A)Pyrene	965	3840	ND	ND	---	0.086	4.257	0.004	0.036	8.411	0.009	0.07	10.116	0.01	0.16	7.843	0.008
Benzo(B)Fluoranthene	979	2169	ND	ND	---	0.098	4.851	0.005	0.047	10.981	0.011	0.1	14.451	0.015	0.23	11.275	0.012
Benzo(K)Fluoranthene	981	1220	ND	ND	---	0.049	2.426	0.002	0.019	4.439	0.005	0.041	5.925	0.006	0.11	5.392	0.005
Chrysene	844	826	ND	ND	---	0.2	9.901	0.012	0.08	18.692	0.022	0.14	20.231	0.024	0.27	13.235	0.016
Fluoranthene	707	23870	ND	ND	---	0.15	7.426	0.011	0.053	12.383	0.018	0.13	18.786	0.027	0.28	13.725	0.019
Fluorene	538	26000	0.016	29.091	0.054	0.26	12.871	0.024	0.032	7.477	0.014	0.058	8.382	0.016	0.056	2.745	0.005
Naphthalene	385	61700	0.024	43.636	0.113	0.43	21.287	0.055	0.3	70.093	0.182	0.37	53.468	0.139	0.22	10.784	0.028
Phenanthrene	596	34300	0.055	100	0.168	1	49.505	0.083	0.072	16.822	0.028	0.14	20.231	0.034	0.2	9.804	0.016
Pyrene	697	9090	ND	ND	---	0.16	7.921	0.011	0.062	14.486	0.021	0.13	18.786	0.027	0.31	15.196	0.022
			tPAH <sub>13</sub> = 0.1	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.354	tPAH <sub>13</sub> = 2.786	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.238	tPAH <sub>13</sub> = 0.803	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.35	tPAH <sub>13</sub> = 1.371	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.343	tPAH <sub>13</sub> = 2.156	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.155
				$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.9735		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.6545		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.9625		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.94325		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.42625

**Table D7**  
**One-Carbon EqP Model PAH  $\Sigma$ ESBTU Calculations - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Station: Sampling Depth: Sampling Date:		D15-BOR-24 0-0.5 11/1/2017			D16-BOR-04 0.5-1 10/31/2016			D16-BOR-04 0-0.5 10/31/2016			D16-BOR-05 0.5-1 11/2/2016			D16-BOR-05 0-0.5 11/2/2016		
	$C_{OC,PAH,FCVI}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Maxi}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$
Acenaphthene	491	33400	0.016	3.39	0.007	0.035	5.418	0.011	0.043	12.392	0.025	0.17	8.095	0.016	0.046	2.473	0.005
Acenaphthylene	452	24000	0.038	8.051	0.018	0.012	1.858	0.004	0.012	3.458	0.008	0.029	1.381	0.003	0.025	1.344	0.003
Anthracene	594	1300	0.03	6.356	0.011	0.036	5.573	0.009	0.041	11.816	0.02	0.071	3.381	0.006	0.1	5.376	0.009
Benzo(A)Anthracene	841	4153	0.066	13.983	0.017	0.057	8.824	0.01	0.078	22.478	0.027	0.073	3.476	0.004	0.2	10.753	0.013
Benzo(A)Pyrene	965	3840	0.089	18.856	0.02	0.049	7.585	0.008	0.071	20.461	0.021	0.076	3.619	0.004	0.21	11.29	0.012
Benzo(B)Fluoranthene	979	2169	0.077	16.314	0.017	0.056	8.669	0.009	0.077	22.19	0.023	0.11	5.238	0.005	0.31	16.667	0.017
Benzo(K)Fluoranthene	981	1220	0.04	8.475	0.009	0.021	3.251	0.003	0.033	9.51	0.01	0.044	2.095	0.002	0.11	5.914	0.006
Chrysene	844	826	0.1	21.186	0.025	0.098	15.17	0.018	0.2	57.637	0.068	0.12	5.714	0.007	0.34	18.28	0.022
Fluoranthene	707	23870	0.055	11.653	0.016	0.087	13.467	0.019	0.11	31.7	0.045	0.17	8.095	0.011	0.36	19.355	0.027
Fluorene	538	26000	0.016	3.39	0.006	0.041	6.347	0.012	0.039	11.239	0.021	0.11	5.238	0.01	0.055	2.957	0.005
Naphthalene	385	61700	0.27	57.203	0.149	0.067	10.372	0.027	0.093	26.801	0.07	0.86	40.952	0.106	0.13	6.989	0.018
Phenanthrene	596	34300	0.022	4.661	0.008	0.071	10.991	0.018	0.091	26.225	0.044	0.21	10	0.017	0.21	11.29	0.019
Pyrene	697	9090	0.084	17.797	0.026	0.12	18.576	0.027	0.12	34.582	0.05	0.18	8.571	0.012	0.39	20.968	0.03
			tPAH <sub>13</sub> = 0.903	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.329	tPAH <sub>13</sub> = 0.75	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.175	tPAH <sub>13</sub> = 1.008	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.432	tPAH <sub>13</sub> = 2.223	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.203	tPAH <sub>13</sub> = 2.486	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.186
				$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.90475		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.48125		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	1.188		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.55825		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.5115

Analyte	Station: Sampling Depth: Sampling Date:		D16-BOR-03 0-0.5 11/1/2016			D16-BOR-06 0.5-1 10/25/2016			D16-BOR-06 0-0.5 10/25/2016			D16-BOR-09 0.5-1 11/6/2017			D16-BOR-09 0-0.5 11/6/2017		
	$C_{OC,PAH,FCVI}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Maxi}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$
Acenaphthene	491	33400	0.097	3.452	0.007	0.06	2.135	0.004	0.02	1.026	0.002	0.051	1.433	0.003	0.59	24.082	0.049
Acenaphthylene	452	24000	0.07	2.491	0.006	0.034	1.21	0.003	0.024	1.231	0.003	0.024	0.674	0.001	0.031	1.265	0.003
Anthracene	594	1300	0.25	8.897	0.015	0.11	3.915	0.007	0.16	8.205	0.014	0.064	1.798	0.003	0.068	2.776	0.005
Benzo(A)Anthracene	841	4153	0.97	34.52	0.041	0.18	6.406	0.008	0.12	6.154	0.007	0.072	2.022	0.002	0.13	5.306	0.006
Benzo(A)Pyrene	965	3840	0.62	22.064	0.023	0.16	5.694	0.006	0.12	6.154	0.006	0.066	1.854	0.002	0.11	4.49	0.005
Benzo(B)Fluoranthene	979	2169	0.73	25.979	0.027	0.2	7.117	0.007	0.18	9.231	0.009	0.09	2.528	0.003	0.14	5.714	0.006
Benzo(K)Fluoranthene	981	1220	0.35	12.456	0.013	0.087	3.096	0.003	0.068	3.487	0.004	0.033	0.927	0.001	0.05	2.041	0.002
Chrysene	844	826	1.6	56.94	0.067	0.29	10.32	0.012	0.15	7.692	0.009	0.13	3.652	0.004	0.24	9.796	0.012
Fluoranthene	707	23870	1.1	39.146	0.055	0.29	10.32	0.015	0.23	11.795	0.017	0.11	3.09	0.004	0.24	9.796	0.014
Fluorene	538	26000	0.13	4.626	0.009	0.085	3.025	0.006	0.031	1.59	0.003	0.048	1.348	0.003	0.34	13.878	0.026
Naphthalene	385	61700	7.4	263.345	0.684	0.28	9.964	0.026	0.11	5.641	0.015	0.19	5.337	0.014	0.33	13.469	0.035
Phenanthrene	596	34300	0.85	30.249	0.051	0.33	11.744	0.02	0.12	6.154	0.01	0.14	3.933	0.007	0.15	6.122	0.01
Pyrene	697	9090	1.2	42.705	0.061	0.32	11.388	0.016	0.23	11.795	0.017	0.14	3.933	0.006	0.24	9.796	0.014
			tPAH <sub>13</sub> = 15.367	$\Sigma$ ESBTU <sub>FCV,13</sub>	1.059	tPAH <sub>13</sub> = 2.426	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.133	tPAH <sub>13</sub> = 1.563	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.116	tPAH <sub>13</sub> = 1.158	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.053	tPAH <sub>13</sub> = 2.659	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.187
				$\Sigma$ ESBTU <sub>FCV,TOT</sub>	2.91225		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.36575		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.319		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.14575		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.51425

**Table D7**  
**One-Carbon EqP Model PAH  $\Sigma$ ESBTU Calculations - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Station: Sampling Depth: Sampling Date:		D16-BOR-10 0.5-1 11/7/2017			D16-BOR-10 0-0.5 11/7/2017			D16-BOR-11 0.5-1 11/7/2017			D16-BOR-11 0-0.5 11/7/2017			D16-BOR-14 0.5-1 11/1/2017		
	$C_{OC,PAH,FCVI}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Maxi}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$
Acenaphthene	491	33400	0.2	4.357	0.009	0.018	0.581	0.001	2.3	27.251	0.056	0.054	2.455	0.005	0.23	14.198	0.029
Acenaphthylene	452	24000	0.085	1.852	0.004	0.014	0.452	0.001	0.45	5.332	0.012	0.049	2.227	0.005	0.021	1.296	0.003
Anthracene	594	1300	0.15	3.268	0.006	0.043	1.387	0.002	1.1	13.033	0.022	0.091	4.136	0.007	0.098	6.049	0.01
Benzo(A)Anthracene	841	4153	0.15	3.268	0.004	0.05	1.613	0.002	0.67	7.938	0.009	0.18	8.182	0.01	0.098	6.049	0.007
Benzo(A)Pyrene	965	3840	0.12	2.614	0.003	0.044	1.419	0.001	0.29	3.436	0.004	0.14	6.364	0.007	0.078	4.815	0.005
Benzo(B)Fluoranthene	979	2169	0.16	3.486	0.004	0.065	2.097	0.002	0.41	4.858	0.005	0.18	8.182	0.008	0.12	7.407	0.008
Benzo(K)Fluoranthene	981	1220	0.086	1.874	0.002	0.03	0.968	0.001	0.13	1.54	0.002	0.11	5	0.005	0.051	3.148	0.003
Chrysene	844	826	0.22	4.793	0.006	0.069	2.226	0.003	1.2	14.218	0.017	0.36	16.364	0.019	0.16	9.877	0.012
Fluoranthene	707	23870	0.33	7.19	0.01	0.13	4.194	0.006	1.7	20.142	0.028	0.29	13.182	0.019	0.28	17.284	0.024
Fluorene	538	26000	0.2	4.357	0.008	0.037	1.194	0.002	1.6	18.957	0.035	0.059	2.682	0.005	0.42	25.926	0.048
Naphthalene	385	61700	1.1	23.965	0.062	0.14	4.516	0.012	2.1	24.882	0.065	0.25	11.364	0.03	0.52	32.099	0.083
Phenanthrene	596	34300	0.46	10.022	0.017	0.12	3.871	0.006	3.7	43.839	0.074	0.18	8.182	0.014	0.84	51.852	0.087
Pyrene	697	9090	0.37	8.061	0.012	0.14	4.516	0.006	1.6	18.957	0.027	0.3	13.636	0.02	0.27	16.667	0.024
			tPAH <sub>13</sub> = 3.631	$\Sigma ESBTU_{FCVI,13}$	0.147	tPAH <sub>13</sub> = 0.9	$\Sigma ESBTU_{FCVI,13}$	0.045	tPAH <sub>13</sub> = 17.25	$\Sigma ESBTU_{FCVI,13}$	0.356	tPAH <sub>13</sub> = 2.243	$\Sigma ESBTU_{FCVI,13}$	0.154	tPAH <sub>13</sub> = 3.186	$\Sigma ESBTU_{FCVI,13}$	0.343
				$\Sigma ESBTU_{FCVI,TOT}$	0.40425		$\Sigma ESBTU_{FCVI,TOT}$	0.12375		$\Sigma ESBTU_{FCVI,TOT}$	0.979		$\Sigma ESBTU_{FCVI,TOT}$	0.4235		$\Sigma ESBTU_{FCVI,TOT}$	0.94325

Analyte	Station: Sampling Depth: Sampling Date:		D16-BOR-12 0.5-1 11/6/2017			D16-BOR-12 0-0.5 11/6/2017			D16-BOR-13 0.5-1 11/6/2017			D16-BOR-13 0-0.5 11/6/2017			DER1-14 0-0.5 9/22/2009		
	$C_{OC,PAH,FCVI}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Maxi}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$
Acenaphthene	491	33400	0.038	0.997	0.002	0.29	11.027	0.022	0.044	1.31	0.003	0.028	0.946	0.002	0.091	288.889	0.588
Acenaphthylene	452	24000	ND	ND	---	0.03	1.141	0.003	0.024	0.714	0.002	0.013	0.439	0.001	0.19	603.175	1.334
Anthracene	594	1300	0.065	1.706	0.003	0.088	3.346	0.006	0.051	1.518	0.003	0.058	1.959	0.003	0.42	1333.333	2.189
Benzo(A)Anthracene	841	4153	0.096	2.52	0.003	0.14	5.323	0.006	0.054	1.607	0.002	0.13	4.392	0.005	1.6	5079.365	4.938
Benzo(A)Pyrene	965	3840	0.1	2.625	0.003	0.15	5.703	0.006	0.071	2.113	0.002	0.096	3.243	0.003	1.4	4444.444	3.979
Benzo(B)Fluoranthene	979	2169	0.12	3.15	0.003	0.18	6.844	0.007	0.098	2.917	0.003	0.13	4.392	0.004	2	6349.206	2.216
Benzo(K)Fluoranthene	981	1220	0.059	1.549	0.002	0.083	3.156	0.003	0.043	1.28	0.001	0.065	2.196	0.002	0.82	2603.175	1.244
Chrysene	844	826	0.17	4.462	0.005	0.22	8.365	0.01	0.085	2.53	0.003	0.26	8.784	0.01	2.2	6984.127	0.979
Fluoranthene	707	23870	0.17	4.462	0.006	0.31	11.787	0.017	0.13	3.869	0.005	0.24	8.108	0.011	3.2	10158.73	14.369
Fluorene	538	26000	0.057	1.496	0.003	0.29	11.027	0.02	0.044	1.31	0.002	0.03	1.014	0.002	0.11	349.206	0.649
Naphthalene	385	61700	0.21	5.512	0.014	0.51	19.392	0.05	0.31	9.226	0.024	0.072	2.432	0.006	0.13	412.698	1.072
Phenanthrene	596	34300	0.14	3.675	0.006	0.27	10.266	0.017	0.11	3.274	0.005	0.18	6.081	0.01	0.9	2857.143	4.794
Pyrene	697	9090	0.18	4.724	0.007	0.31	11.787	0.017	0.13	3.869	0.006	0.2	6.757	0.01	3.3	10476.19	13.042
			tPAH <sub>13</sub> = 1.405	$\Sigma ESBTU_{FCVI,13}$	0.057	tPAH <sub>13</sub> = 2.871	$\Sigma ESBTU_{FCVI,13}$	0.184	tPAH <sub>13</sub> = 1.194	$\Sigma ESBTU_{FCVI,13}$	0.061	tPAH <sub>13</sub> = 1.502	$\Sigma ESBTU_{FCVI,13}$	0.069	tPAH <sub>13</sub> = 16.361	$\Sigma ESBTU_{FCVI,13}$	<b>51.393</b>
				$\Sigma ESBTU_{FCVI,TOT}$	0.15675		$\Sigma ESBTU_{FCVI,TOT}$	0.506		$\Sigma ESBTU_{FCVI,TOT}$	0.16775		$\Sigma ESBTU_{FCVI,TOT}$	0.18975		$\Sigma ESBTU_{FCVI,TOT}$	<b>141.33075</b>

**Table D7**  
**One-Carbon EqP Model PAH  $\Sigma$ ESBTU Calculations - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Station: Sampling Depth: Sampling Date:		D16-BOR-14 0-0.5 11/1/2017			DER1-12 0-0.5 9/24/2009			DER1-13 0-0.5 9/22/2009			DER2-15-SD 0-0.5 4/23/2010			DER2-16-SD 0-0.5 4/20/2010		
	$C_{OC,PAH,FCVI}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Maxi}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$
Acenaphthene	491	33400	0.038	1.45	0.003	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND	---
Acenaphthylene	452	24000	0.016	0.611	0.001	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND	---
Anthracene	594	1300	0.067	2.557	0.004	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND	---
Benzo(A)Anthracene	841	4153	0.12	4.58	0.005	ND	ND	---	0.22	20.952	0.025	0.23	15.282	0.018	0.096	4.729	0.006
Benzo(A)Pyrene	965	3840	0.13	4.962	0.005	ND	ND	---	0.24	22.857	0.024	ND	ND	---	0.098	4.828	0.005
Benzo(B)Fluoranthene	979	2169	0.17	6.489	0.007	ND	ND	---	0.31	29.524	0.03	0.31	21.754	0.022	0.14	6.897	0.007
Benzo(K)Fluoranthene	981	1220	0.073	2.786	0.003	ND	ND	---	0.16	15.238	0.016	ND	ND	---	ND	ND	---
Chrysene	844	826	0.19	7.252	0.009	ND	ND	---	0.31	29.524	0.035	0.25	16.611	0.02	0.15	7.389	0.009
Fluoranthene	707	23870	0.28	10.687	0.015	0.068	10.478	0.015	0.33	31.429	0.044	0.33	23.158	0.033	0.17	8.374	0.012
Fluorene	538	26000	0.043	1.641	0.003	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND	---
Naphthalene	385	61700	0.14	5.344	0.014	ND	ND	---	ND	ND	---	ND	ND	---	0.15	7.389	0.019
Phenanthrene	596	34300	0.19	7.252	0.012	ND	ND	---	0.19	18.095	0.03	0.26	17.276	0.029	0.13	6.404	0.011
Pyrene	697	9090	0.26	9.924	0.014	0.064	9.861	0.014	0.42	40	0.057	0.43	28.571	0.041	0.19	9.36	0.013
			tPAH <sub>13</sub> = 1.717	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.095	tPAH <sub>13</sub> = 0.132	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.029	tPAH <sub>13</sub> = 2.18	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.261	tPAH <sub>13</sub> = 1.81	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.163	tPAH <sub>13</sub> = 1.124	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.082
				$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.26125		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.07975		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.71775		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.44825		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.2255

Analyte	Station: Sampling Depth: Sampling Date:		DER1-15 0-0.5 9/22/2009			DER2-13-SD 0-0.5 4/23/2010			DER2-14-SD 0-0.5 4/23/2010			DER2-19-SD 0-0.5 4/27/2010			DER2-20-SD 0-0.5 5/4/2010		
	$C_{OC,PAH,FCVI}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Maxi}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$
Acenaphthene	491	33400	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND	---	0.73	54.275	0.111
Acenaphthylene	452	24000	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND	---	0.14	10.409	0.023
Anthracene	594	1300	ND	ND	---	ND	ND	---	ND	ND	---	0.28	8.791	0.015	1.9	141.264	0.238
Benzo(A)Anthracene	841	4153	0.068	22.186	0.026	0.32	23.529	0.028	0.33	28.085	0.033	0.46	14.443	0.017	5.3	394.052	0.469
Benzo(A)Pyrene	965	3840	0.081	26.427	0.027	0.24	17.647	0.018	0.26	22.128	0.023	0.29	9.105	0.009	4	297.398	0.308
Benzo(B)Fluoranthene	979	2169	0.079	25.775	0.026	0.34	25	0.026	0.34	28.936	0.03	0.47	14.757	0.015	4.5	334.572	0.342
Benzo(K)Fluoranthene	981	1220	ND	ND	---	ND	ND	---	ND	ND	---	0.17	5.338	0.005	1.7	126.394	0.129
Chrysene	844	826	0.15	48.94	0.058	0.42	30.882	0.037	0.61	51.915	0.062	0.75	23.548	0.028	9.5	706.32	0.837
Fluoranthene	707	23870	0.056	18.271	0.026	0.7	51.471	0.073	0.5	42.553	0.06	1	31.397	0.044	6.3	468.401	0.663
Fluorene	538	26000	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND	---	0.64	47.584	0.088
Naphthalene	385	61700	0.13	42.414	0.11	ND	ND	---	ND	ND	---	0.55	17.268	0.045	1.1	81.784	0.212
Phenanthrene	596	34300	0.063	20.555	0.034	0.37	27.206	0.046	0.27	22.979	0.039	0.68	21.35	0.036	4.5	334.572	0.561
Pyrene	697	9090	0.095	30.995	0.044	0.77	56.618	0.081	0.63	53.617	0.077	1.1	34.537	0.05	6.7	498.141	0.715
			tPAH <sub>13</sub> = 0.722	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.351	tPAH <sub>13</sub> = 3.16	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.309	tPAH <sub>13</sub> = 2.94	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.324	tPAH <sub>13</sub> = 5.75	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.264	tPAH <sub>13</sub> = 47.01	$\Sigma$ ESBTU <sub>FCV,13</sub>	<b>4.696</b>
				$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.96525		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.84975		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.891		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.726		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	<b>12.914</b>

**Table D7**  
**One-Carbon EqP Model PAH  $\Sigma$ ESBTU Calculations - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Station: Sampling Depth: Sampling Date:		DER2-17-SD 0-0.5 4/27/2010			DER2-18-SD 0-0.5 4/27/2010			DER3-10 0-0.5 11/18/2010			DER3-11 0-0.5 11/18/2010			DER3-12 0-0.5 11/18/2010		
	$C_{OC,PAH,FCVI}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Maxi}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$
Acenaphthene	491	33400	ND	ND	---	0.29	13.303	0.027	ND	ND	---	ND	ND	---	ND	ND	---
Acenaphthylene	452	24000	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND	---
Anthracene	594	1300	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND	---
Benzo(A)Anthracene	841	4153	ND	ND	---	0.21	9.633	0.011	0.22	19.91	0.024	ND	ND	---	0.29	34.442	0.041
Benzo(A)Pyrene	965	3840	ND	ND	---	ND	ND	---	0.21	19.005	0.02	ND	ND	---	0.33	39.192	0.041
Benzo(B)Fluoranthene	979	2169	ND	ND	---	0.2	9.174	0.009	0.22	19.91	0.02	ND	ND	---	0.36	42.755	0.044
Benzo(K)Fluoranthene	981	1220	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND	---
Chrysene	844	826	0.13	10.236	0.012	0.31	14.22	0.017	0.22	19.91	0.024	ND	ND	---	0.28	33.254	0.039
Fluoranthene	707	23870	0.14	11.024	0.016	0.37	16.972	0.024	0.21	19.005	0.027	ND	ND	---	0.39	46.318	0.066
Fluorene	538	26000	ND	ND	---	0.21	9.633	0.018	ND	ND	---	ND	ND	---	ND	ND	---
Naphthalene	385	61700	0.18	14.173	0.037	0.67	30.734	0.08	ND	ND	---	ND	ND	---	ND	ND	---
Phenanthrene	596	34300	ND	ND	---	0.37	16.972	0.028	ND	ND	---	ND	ND	---	0.21	24.941	0.042
Pyrene	697	9090	0.16	12.598	0.018	0.47	21.56	0.031	0.23	20.814	0.03	0.2	15.267	0.022	0.42	49.881	0.072
			tPAH <sub>13</sub> = 0.61	$\Sigma ESBTU_{FCVI,13}$	0.083	tPAH <sub>13</sub> = 3.1	$\Sigma ESBTU_{FCVI,13}$	0.245	tPAH <sub>13</sub> = 1.31	$\Sigma ESBTU_{FCVI,13}$	0.145	tPAH <sub>13</sub> = 0.2	$\Sigma ESBTU_{FCVI,13}$	0.022	tPAH <sub>13</sub> = 2.28	$\Sigma ESBTU_{FCVI,13}$	0.345
				$\Sigma ESBTU_{FCVI,TOT}$	0.22825		$\Sigma ESBTU_{FCVI,TOT}$	0.67375		$\Sigma ESBTU_{FCVI,TOT}$	0.39875		$\Sigma ESBTU_{FCVI,TOT}$	0.0605		$\Sigma ESBTU_{FCVI,TOT}$	0.94875

Analyte	Station: Sampling Depth: Sampling Date:		DER3-08 0-0.5 11/16/2010			DER3-09 0-0.5 11/16/2010			E16-BOR-03 0.5-1 11/2/2016			E16-BOR-03 0-0.5 11/2/2016			E16-BOR-04 0.5-1 11/2/2016		
	$C_{OC,PAH,FCVI}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Maxi}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$
Acenaphthene	491	33400	ND	ND	---	ND	ND	---	0.048	18.462	0.038	0.057	19	0.039	3.7	66.308	0.135
Acenaphthylene	452	24000	ND	ND	---	0.064	7.248	0.016	0.015	5.769	0.013	0.011	3.667	0.008	0.89	15.95	0.035
Anthracene	594	1300	ND	ND	---	0.14	15.855	0.027	0.048	18.462	0.031	0.021	7	0.012	4.4	78.853	0.133
Benzo(A)Anthracene	841	4153	0.093	5.054	0.006	0.51	57.758	0.069	0.11	42.308	0.05	0.04	13.333	0.016	25	448.029	0.533
Benzo(A)Pyrene	965	3840	0.085	4.62	0.005	0.45	50.963	0.053	0.096	36.923	0.038	0.046	15.333	0.016	15	268.817	0.279
Benzo(B)Fluoranthene	979	2169	0.12	6.522	0.007	0.57	64.553	0.066	0.12	46.154	0.047	0.072	24	0.025	16	286.738	0.293
Benzo(K)Fluoranthene	981	1220	ND	ND	---	0.27	30.578	0.031	0.069	26.538	0.027	0.026	8.667	0.009	8.3	148.746	0.152
Chrysene	844	826	0.092	5	0.006	0.57	64.553	0.076	0.18	69.231	0.082	0.077	25.667	0.03	84	1505.376	0.979
Fluoranthene	707	23870	0.15	8.152	0.012	0.62	70.215	0.099	0.2	76.923	0.109	0.079	26.333	0.037	22	394.265	0.558
Fluorene	538	26000	ND	ND	---	ND	ND	---	0.049	18.846	0.035	0.052	17.333	0.032	4.3	77.061	0.143
Naphthalene	385	61700	0.16	8.696	0.023	0.14	15.855	0.041	0.23	88.462	0.23	0.26	86.667	0.225	6.1	109.319	0.284
Phenanthrene	596	34300	0.1	5.435	0.009	0.26	29.445	0.049	0.19	73.077	0.123	0.12	40	0.067	22	394.265	0.662
Pyrene	697	9090	0.19	10.326	0.015	0.8	90.6	0.13	0.18	69.231	0.099	0.077	25.667	0.037	29	519.713	0.746
			tPAH <sub>13</sub> = 0.99	$\Sigma ESBTU_{FCVI,13}$	0.083	tPAH <sub>13</sub> = 4.394	$\Sigma ESBTU_{FCVI,13}$	0.657	tPAH <sub>13</sub> = 1.535	$\Sigma ESBTU_{FCVI,13}$	0.922	tPAH <sub>13</sub> = 0.938	$\Sigma ESBTU_{FCVI,13}$	0.553	tPAH <sub>13</sub> = 240.69	$\Sigma ESBTU_{FCVI,13}$	<b>4.932</b>
				$\Sigma ESBTU_{FCVI,TOT}$	0.22825		$\Sigma ESBTU_{FCVI,TOT}$	<b>1.80675</b>		$\Sigma ESBTU_{FCVI,TOT}$	<b>2.5355</b>		$\Sigma ESBTU_{FCVI,TOT}$	<b>1.52075</b>		$\Sigma ESBTU_{FCVI,TOT}$	<b>13.563</b>

**Table D7**  
**One-Carbon EqP Model PAH  $\Sigma$ ESBTU Calculations - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Station: Sampling Depth: Sampling Date:		E16-BOR-02 0-0.5 3/28/2009			E16-BOR-05 0.5-1 11/3/2016			E16-BOR-05 0-0.5 11/3/2016			E16-BOR-06 0.5-1 10/26/2016			E16-BOR-06 0-0.5 10/26/2016		
	$C_{OC,PAH,FCV}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Max}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCV,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCV,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCV,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCV,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCV,ND=0}$
Acenaphthene	491	33400	ND	ND	---	0.25	11.211	0.023	0.027	7.895	0.016	0.016	68.376	0.139	0.041	2.645	0.005
Acenaphthylene	452	24000	ND	ND	---	0.09	4.036	0.009	0.016	4.678	0.01	ND	ND	---	0.02	1.29	0.003
Anthracene	594	1300	ND	ND	---	0.41	18.386	0.031	0.051	14.912	0.025	0.014	59.829	0.101	0.042	2.71	0.005
Benzo(A)Anthracene	841	4153	ND	ND	---	0.36	16.143	0.019	0.086	25.146	0.03	0.03	128.205	0.152	0.11	7.097	0.008
Benzo(A)Pyrene	965	3840	ND	ND	---	0.33	14.798	0.015	0.076	22.222	0.023	0.023	98.291	0.102	0.11	7.097	0.007
Benzo(B)Fluoranthene	979	2169	ND	ND	---	0.38	17.04	0.017	0.11	32.164	0.033	0.025	106.838	0.109	0.15	9.677	0.01
Benzo(K)Fluoranthene	981	1220	ND	ND	---	0.19	8.52	0.009	0.046	13.45	0.014	0.011	47.009	0.048	0.062	4	0.004
Chrysene	844	826	0.36	20.69	0.025	0.71	31.839	0.038	0.14	40.936	0.049	0.1	427.35	0.506	0.17	10.968	0.013
Fluoranthene	707	23870	0.49	28.161	0.04	0.67	30.045	0.042	0.16	46.784	0.066	0.025	106.838	0.151	0.16	10.323	0.015
Fluorene	538	26000	ND	ND	---	0.37	16.592	0.031	0.039	11.404	0.021	0.02	85.47	0.159	0.037	2.387	0.004
Naphthalene	385	61700	ND	ND	---	0.82	36.771	0.096	0.065	19.006	0.049	0.036	153.846	0.4	0.52	33.548	0.087
Phenanthrene	596	34300	ND	ND	---	0.93	41.704	0.07	0.14	40.936	0.069	0.054	230.769	0.387	0.11	7.097	0.012
Pyrene	697	9090	0.44	25.287	0.036	0.81	36.323	0.052	0.15	43.86	0.063	0.026	111.111	0.159	0.18	11.613	0.017
			tPAH <sub>13</sub> = 1.29	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.101	tPAH <sub>13</sub> = 6.32	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.452	tPAH <sub>13</sub> = 1.106	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.468	tPAH <sub>13</sub> = 0.38	$\Sigma$ ESBTU <sub>FCV,13</sub>	2.413	tPAH <sub>13</sub> = 1.712	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.19
				$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.27775		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	1.243		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	1.287		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	6.63575		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.5225

Analyte	Station: Sampling Depth: Sampling Date:		E16-BOR-04 0-0.5 11/2/2016			E16-BOR-07 0.5-1 11/3/2017			E16-BOR-07 0-0.5 11/3/2017			E16-BOR-08 0.5-1 10/31/2017			E16-BOR-08 0-0.5 10/31/2017		
	$C_{OC,PAH,FCV}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Max}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCV,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCV,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCV,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCV,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCV,ND=0}$
Acenaphthene	491	33400	0.066	12.967	0.026	0.93	101.751	0.207	0.044	1.705	0.003	0.021	0.533	0.001	0.011	0.337	0.001
Acenaphthylene	452	24000	0.005	0.982	0.002	0.13	14.223	0.031	0.02	0.775	0.002	0.021	0.533	0.001	0.014	0.429	0.001
Anthracene	594	1300	0.015	2.947	0.005	0.12	13.129	0.022	0.035	1.357	0.002	0.039	0.99	0.002	0.022	0.675	0.001
Benzo(A)Anthracene	841	4153	0.045	8.841	0.011	0.49	53.611	0.064	0.094	3.643	0.004	0.085	2.157	0.003	0.043	1.319	0.002
Benzo(A)Pyrene	965	3840	0.031	6.09	0.006	0.25	27.352	0.028	0.084	3.256	0.003	0.082	2.081	0.002	0.044	1.35	0.001
Benzo(B)Fluoranthene	979	2169	0.049	9.627	0.01	0.86	94.092	0.096	0.12	4.651	0.005	0.094	2.386	0.002	0.069	2.117	0.002
Benzo(K)Fluoranthene	981	1220	0.017	3.34	0.003	0.29	31.729	0.032	0.043	1.667	0.002	0.062	1.574	0.002	0.038	1.166	0.001
Chrysene	844	826	0.13	25.54	0.03	1.8	196.937	0.233	0.18	6.977	0.008	0.12	3.046	0.004	0.055	1.687	0.002
Fluoranthene	707	23870	0.086	16.896	0.024	0.47	51.422	0.073	0.14	5.426	0.008	0.14	3.553	0.005	0.083	2.546	0.004
Fluorene	538	26000	0.045	8.841	0.016	0.99	108.315	0.201	0.034	1.318	0.002	0.025	0.635	0.001	0.015	0.46	0.001
Naphthalene	385	61700	0.13	25.54	0.066	2	218.818	0.568	0.33	12.791	0.033	0.13	3.299	0.009	0.066	2.025	0.005
Phenanthrene	596	34300	0.084	16.503	0.028	2.6	284.464	0.477	0.085	3.295	0.006	0.11	2.792	0.005	0.057	1.748	0.003
Pyrene	697	9090	0.083	16.306	0.023	0.52	56.893	0.082	0.14	5.426	0.008	0.14	3.553	0.005	0.083	2.546	0.004
			tPAH <sub>13</sub> = 0.786	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.25	tPAH <sub>13</sub> = 11.45	$\Sigma$ ESBTU <sub>FCV,13</sub>	2.114	tPAH <sub>13</sub> = 1.349	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.086	tPAH <sub>13</sub> = 1.069	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.042	tPAH <sub>13</sub> = 0.6	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.028
				$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.6875		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	5.8135		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.2365		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.1155		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.077

**Notes:**

- $C_{OC,PAH,FCV}$ : Critical concentration of a PAH in sediment that is related to the final chronic value (FCV) derived following the EqP method
- $C_{OC,PAH,Max}$ : Concentration in sediment organic carbon that is in equilibrium with the interstitial water at the aqueous solubility
- $\Sigma$ ESBTU<sub>FCV,13</sub>: Sum of toxic units based on 13 PAH compounds analyzed in the sample
- $\Sigma$ ESBTU<sub>FCV,TOT</sub>: Estimated sum of toxic units of total PAH mixture based on 34 PAH compounds; an UF of 2.75 is applied to  $\Sigma$ ESBTU<sub>FCV,13</sub> to estimate  $\Sigma$ ESBTU<sub>FCV,TOT</sub>
- tPAH<sub>13</sub>: Sum of concentrations of 13 PAH samples analyzed in the sample
- ND: Concentration of PAH compound was below the limit of detection
- : Value not calculated because PAH compound was below the limit of detection
- $C_{dw}$ : Concentration of PAH compound on a dry weight basis ( $\mu\text{g/g dw}$ )
- $C_{OC}$ : Concentration of PAH compound normalized to sample-specific fraction of organic carbon ( $\mu\text{g/g organic carbon}$ )

**Table D8**  
**One-Carbon EqP Model PAH  $\Sigma$ ESBTU Calculations - SWMU 5/Henby Creek Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Station: Sampling Depth: Sampling Date:		DER1-16 0-0.5 9/24/2009			DER1-17 0-0.5 9/25/2009			DER1-18 0-0.5 9/22/2009			DER1-19 0-0.5 9/25/2009		
	$C_{OC,PAH,FCVI}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Maxi}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$
	Acenaphthene	491	33400	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND
Acenaphthylene	452	24000	ND	ND	---									
Anthracene	594	1300	ND	ND	---									
Benzo(A)Anthracene	841	4153	0.077	14.339	0.017	0.15	55.351	0.066	0.087	84.878	0.101	0.11	123.596	0.147
Benzo(A)Pyrene	965	3840	0.064	11.918	0.012	0.15	55.351	0.057	0.076	74.146	0.077	0.096	107.865	0.112
Benzo(B)Fluoranthene	979	2169	0.066	12.291	0.013	0.17	62.731	0.064	0.093	90.732	0.093	0.093	104.494	0.107
Benzo(K)Fluoranthene	981	1220	ND	ND	---	0.057	21.033	0.021	0.042	40.976	0.042	0.052	58.427	0.06
Chrysene	844	826	0.2	37.244	0.044	0.2	73.801	0.087	0.14	136.585	0.162	0.11	123.596	0.146
Fluoranthene	707	23870	0.075	13.966	0.02	0.15	55.351	0.078	0.1	97.561	0.138	0.18	202.247	0.286
Fluorene	538	26000	ND	ND	---									
Naphthalene	385	61700	ND	ND	---									
Phenanthrene	596	34300	0.053	9.87	0.017	0.11	40.59	0.068	0.057	55.61	0.093	0.12	134.831	0.226
Pyrene	697	9090	0.099	18.436	0.026	0.27	99.631	0.143	0.13	126.829	0.182	0.2	224.719	0.322
			$tPAH_{13} = 0.634$	$\Sigma ESBTU_{FCVI,13}$	0.149	$tPAH_{13} = 1.257$	$\Sigma ESBTU_{FCVI,13}$	0.584	$tPAH_{13} = 0.725$	$\Sigma ESBTU_{FCVI,13}$	0.888	$tPAH_{13} = 0.961$	$\Sigma ESBTU_{FCVI,13}$	<b>1.406</b>
				$\Sigma ESBTU_{FCVI,TOT}$	0.40975		$\Sigma ESBTU_{FCVI,TOT}$	<b>1.606</b>		$\Sigma ESBTU_{FCVI,TOT}$	<b>2.442</b>		$\Sigma ESBTU_{FCVI,TOT}$	<b>3.8665</b>

Analyte	Station: Sampling Depth: Sampling Date:		DER2-21-SD 0-0.5 5/4/2010			DER2-22-SD 0-0.5 5/4/2010			DER2-23-SD 0-0.5 4/22/2010			DER2-24-SD 0-0.5 4/22/2010		
	$C_{OC,PAH,FCVI}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Maxi}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$
	Acenaphthene	491	33400	0.073	29.444	0.06	ND	ND	---	0.46	21.905	0.045	ND	ND
Acenaphthylene	452	24000	0.051	8.507	0.019	ND	ND	---	ND	ND	---	ND	ND	---
Anthracene	594	1300	0.15	83.333	0.14	ND	ND	---	2.7	128.571	0.216	ND	ND	---
Benzo(A)Anthracene	841	4153	0.54	283.333	0.337	ND	ND	---	4.6	219.048	0.26	ND	ND	---
Benzo(A)Pyrene	965	3840	0.39	216.667	0.225	ND	ND	---	3.1	147.619	0.153	ND	ND	---
Benzo(B)Fluoranthene	979	2169	0.44	188.889	0.193	ND	ND	---	2.4	114.286	0.117	0.054	23.126	0.024
Benzo(K)Fluoranthene	981	1220	0.13	72.222	0.074	ND	ND	---	1.1	52.381	0.053	ND	ND	---
Chrysene	844	826	1.1	411.111	0.487	ND	ND	---	7.4	352.381	0.418	0.057	24.411	0.029
Fluoranthene	707	23870	0.47	261.111	0.369	ND	ND	---	4	190.476	0.269	ND	ND	---
Fluorene	538	26000	0.081	28.889	0.054	ND	ND	---	1	47.619	0.089	ND	ND	---
Naphthalene	385	61700	0.15	61.111	0.159	ND	ND	---	1.9	90.476	0.235	ND	ND	---
Phenanthrene	596	34300	0.29	116.667	0.196	ND	ND	---	7.6	361.905	0.607	ND	ND	---
Pyrene	697	9090	1	555.556	0.797	0.14	3.122	0.004	7.3	347.619	0.499	0.054	23.126	0.033
			$tPAH_{13} = 4.865$	$\Sigma ESBTU_{FCVI,13}$	<b>3.11</b>	$tPAH_{13} = 0.14$	$\Sigma ESBTU_{FCVI,13}$	0.004	$tPAH_{13} = 43.56$	$\Sigma ESBTU_{FCVI,13}$	<b>2.961</b>	$tPAH_{13} = 0.165$	$\Sigma ESBTU_{FCVI,13}$	0.086
				$\Sigma ESBTU_{FCVI,TOT}$	<b>8.5525</b>		$\Sigma ESBTU_{FCVI,TOT}$	0.011		$\Sigma ESBTU_{FCVI,TOT}$	<b>8.14275</b>		$\Sigma ESBTU_{FCVI,TOT}$	0.2365

**Table D8**  
**One-Carbon EqP Model PAH  $\Sigma$ ESBTU Calculations - SWMU 5/Henby Creek Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Station: Sampling Depth: Sampling Date:		DER2-25-SD 0-0.5 5/4/2010			DER3-13 0-0.5 11/18/2010			DER3-14 0-0.5 11/18/2010			DER3-15 0-0.5 11/18/2010		
	$C_{OC,PAH,FCVI}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Maxi}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$
	Acenaphthene	491	33400	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND
Acenaphthylene	452	24000	ND	ND	---									
Anthracene	594	1300	0.15	59.88	0.101	ND	ND	---	ND	ND	---	ND	ND	---
Benzo(A)Anthracene	841	4153	0.17	67.864	0.081	0.36	31.718	0.038	0.21	27.273	0.032	0.21	16.342	0.019
Benzo(A)Pyrene	965	3840	0.13	51.896	0.054	0.26	22.907	0.024	0.3	38.961	0.04	ND	ND	---
Benzo(B)Fluoranthene	979	2169	0.16	63.872	0.065	0.39	34.361	0.035	0.36	46.753	0.048	0.27	21.012	0.021
Benzo(K)Fluoranthene	981	1220	0.049	19.561	0.02	ND	ND	---	ND	ND	---	ND	ND	---
Chrysene	844	826	0.24	95.808	0.114	1.5	132.159	0.157	0.25	32.468	0.038	ND	ND	---
Fluoranthene	707	23870	0.42	167.665	0.237	0.3	26.432	0.037	0.27	35.065	0.05	0.34	26.459	0.037
Fluorene	538	26000	ND	ND	---									
Naphthalene	385	61700	0.15	59.88	0.156	ND	ND	---	ND	ND	---	ND	ND	---
Phenanthrene	596	34300	0.089	35.529	0.06	0.25	22.026	0.037	ND	ND	---	ND	ND	---
Pyrene	697	9090	0.5	199.601	0.286	0.43	37.885	0.054	0.31	40.26	0.058	0.33	25.681	0.037
			$tPAH_{13} = 2.058$	$\Sigma ESBTU_{FCV,13}$	<b>1.174</b>	$tPAH_{13} = 3.49$	$\Sigma ESBTU_{FCV,13}$	0.382	$tPAH_{13} = 1.7$	$\Sigma ESBTU_{FCV,13}$	0.266	$tPAH_{13} = 1.15$	$\Sigma ESBTU_{FCV,13}$	0.114
				$\Sigma ESBTU_{FCV,TOT}$	<b>3.2285</b>		$\Sigma ESBTU_{FCV,TOT}$	<b>1.0505</b>		$\Sigma ESBTU_{FCV,TOT}$	0.7315		$\Sigma ESBTU_{FCV,TOT}$	0.3135

Analyte	Station: Sampling Depth: Sampling Date:		DER3-16 0-0.5 11/16/2010		
	$C_{OC,PAH,FCVI}$ ( $\mu\text{g/g OC}$ )	$C_{OC,PAH,Maxi}$ ( $\mu\text{g/g OC}$ )	$C_{dw}$ ( $\mu\text{g/g dw}$ )	$C_{OC}$ ( $\mu\text{g/g OC}$ )	$ESBTU_{FCVI,ND=0}$
	Acenaphthene	491	33400	ND	ND
Acenaphthylene	452	24000	ND	ND	---
Anthracene	594	1300	ND	ND	---
Benzo(A)Anthracene	841	4153	0.07	5.714	0.007
Benzo(A)Pyrene	965	3840	0.073	5.959	0.006
Benzo(B)Fluoranthene	979	2169	0.12	9.796	0.01
Benzo(K)Fluoranthene	981	1220	ND	ND	---
Chrysene	844	826	0.1	8.163	0.01
Fluoranthene	707	23870	0.12	9.796	0.014
Fluorene	538	26000	ND	ND	---
Naphthalene	385	61700	0.1	8.163	0.021
Phenanthrene	596	34300	0.091	7.429	0.012
Pyrene	697	9090	0.16	13.061	0.019
			$tPAH_{13} = 0.834$	$\Sigma ESBTU_{FCV,13}$	0.099
				$\Sigma ESBTU_{FCV,TOT}$	<b>0.27225</b>

**Notes:**

- $C_{OC,PAH,FCVI}$ : Critical concentration of a PAH in sediment that is related to the final chronic value (FCV) derived following the EqP method
- $C_{OC,PAH,Maxi}$ : Concentration in sediment organic carbon that is in equilibrium with the interstitial water at the aqueous solubility
- $\Sigma ESBTU_{FCV,13}$ : Sum of toxic units bases on 13 PAH compounds analyzed in the sample
- $\Sigma ESBTU_{FCV,TOT}$ : Estimated sum of toxic units of total PAH mixture based on 34 PAH compounds; an UF of 2.75 is applied to  $\Sigma ESBTU_{FCV,13}$  to estimate  $\Sigma ESBTU_{FCV,TOT}$
- $tPAH_{13}$ : Sum of concentrations of 13 PAH samples analyzed in the sample
- ND, Concentration of PAH compound was below the limit of detection
- , Value not calculated because PAH compound was below the limit of detection
- $C_{dw}$ : Concentration of PAH compound on a dry weight basis ( $\mu\text{g/g dw}$ )
- $C_{OC}$ : Concentration of PAH compound normalized to sample-specific fraction of organic carbon ( $\mu\text{g/g organic carbon}$ )

**Table D9**  
**One-Carbon EqP Model PAH  $\Sigma$ ESBTU Calculations - Carneys Point Zone**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Station: Sampling Depth: Sampling Date:		DER1-20 0-0.5 9/23/2009			DER1-21 0-0.5 9/25/2009			DER1-22 0-0.5 9/23/2009			DER1-23 0-0.5 9/25/2009		
	C <sub>OC,PAH,FCVI</sub> ( $\mu\text{g/g OC}$ )	C <sub>OC,PAH,Maxi</sub> ( $\mu\text{g/g OC}$ )	C <sub>dw</sub> ( $\mu\text{g/g dw}$ )	C <sub>OC</sub> ( $\mu\text{g/g OC}$ )	ESBTU <sub>FCVI,ND=0</sub>	C <sub>dw</sub> ( $\mu\text{g/g dw}$ )	C <sub>OC</sub> ( $\mu\text{g/g OC}$ )	ESBTU <sub>FCVI,ND=0</sub>	C <sub>dw</sub> ( $\mu\text{g/g dw}$ )	C <sub>OC</sub> ( $\mu\text{g/g OC}$ )	ESBTU <sub>FCVI,ND=0</sub>	C <sub>dw</sub> ( $\mu\text{g/g dw}$ )	C <sub>OC</sub> ( $\mu\text{g/g OC}$ )	ESBTU <sub>FCVI,ND=0</sub>
Acenaphthene	491	33400	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND	---
Acenaphthylene	452	24000	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND	---
Anthracene	594	1300	ND	ND	---	ND	ND	---	0.082	14.361	0.024	ND	ND	---
Benzo(A)Anthracene	841	4153	ND	ND	---	ND	ND	---	0.34	59.545	0.071	ND	ND	---
Benzo(A)Pyrene	965	3840	ND	ND	---	ND	ND	---	0.27	47.285	0.049	ND	ND	---
Benzo(B)Fluoranthene	979	2169	ND	ND	---	ND	ND	---	0.35	61.296	0.063	ND	ND	---
Benzo(K)Fluoranthene	981	1220	ND	ND	---	ND	ND	---	0.14	24.518	0.025	ND	ND	---
Chrysene	844	826	ND	ND	---	ND	ND	---	0.37	64.799	0.077	ND	ND	---
Fluoranthene	707	23870	ND	ND	---	ND	ND	---	0.66	115.587	0.163	ND	ND	---
Fluorene	538	26000	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND	---
Naphthalene	385	61700	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND	---
Phenanthrene	596	34300	ND	ND	---	ND	ND	---	0.24	42.032	0.071	ND	ND	---
Pyrene	697	9090	ND	ND	---	ND	ND	---	0.53	92.82	0.133	0.061	14.914	0.021
			tPAH <sub>13</sub> = ND	$\Sigma$ ESBTU <sub>FCV,13</sub>	---	tPAH <sub>13</sub> = ND	$\Sigma$ ESBTU <sub>FCV,13</sub>	---	tPAH <sub>13</sub> = 2.982	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.676	tPAH <sub>13</sub> = 0.061	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.021
				$\Sigma$ ESBTU <sub>FCV,TOT</sub>	---		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	---		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	<b>1.859</b>		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.05775

Analyte	Station: Sampling Depth: Sampling Date:		DER1-24 0-0.5 9/23/2009			DER1-25 0-0.5 9/23/2009			DER1-26 0-0.5 9/23/2009			DER1-27 0-0.5 9/23/2009		
	C <sub>OC,PAH,FCVI</sub> ( $\mu\text{g/g OC}$ )	C <sub>OC,PAH,Maxi</sub> ( $\mu\text{g/g OC}$ )	C <sub>dw</sub> ( $\mu\text{g/g dw}$ )	C <sub>OC</sub> ( $\mu\text{g/g OC}$ )	ESBTU <sub>FCVI,ND=0</sub>	C <sub>dw</sub> ( $\mu\text{g/g dw}$ )	C <sub>OC</sub> ( $\mu\text{g/g OC}$ )	ESBTU <sub>FCVI,ND=0</sub>	C <sub>dw</sub> ( $\mu\text{g/g dw}$ )	C <sub>OC</sub> ( $\mu\text{g/g OC}$ )	ESBTU <sub>FCVI,ND=0</sub>	C <sub>dw</sub> ( $\mu\text{g/g dw}$ )	C <sub>OC</sub> ( $\mu\text{g/g OC}$ )	ESBTU <sub>FCVI,ND=0</sub>
Acenaphthene	491	33400	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND	---
Acenaphthylene	452	24000	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND	---
Anthracene	594	1300	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND	---
Benzo(A)Anthracene	841	4153	ND	ND	---	ND	ND	---	ND	ND	---	0.15	58.14	0.069
Benzo(A)Pyrene	965	3840	ND	ND	---	ND	ND	---	ND	ND	---	0.15	58.14	0.06
Benzo(B)Fluoranthene	979	2169	ND	ND	---	ND	ND	---	0.066	18.644	0.019	0.21	81.395	0.083
Benzo(K)Fluoranthene	981	1220	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND	---
Chrysene	844	826	ND	ND	---	ND	ND	---	ND	ND	---	0.17	65.891	0.078
Fluoranthene	707	23870	ND	ND	---	ND	ND	---	0.086	24.294	0.034	0.26	100.775	0.143
Fluorene	538	26000	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND	---
Naphthalene	385	61700	ND	ND	---	ND	ND	---	ND	ND	---	ND	ND	---
Phenanthrene	596	34300	ND	ND	---	ND	ND	---	ND	ND	---	0.11	42.636	0.072
Pyrene	697	9090	ND	ND	---	ND	ND	---	0.081	22.881	0.033	0.26	100.775	0.145
			tPAH <sub>13</sub> = ND	$\Sigma$ ESBTU <sub>FCV,13</sub>	---	tPAH <sub>13</sub> = ND	$\Sigma$ ESBTU <sub>FCV,13</sub>	---	tPAH <sub>13</sub> = 0.233	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.086	tPAH <sub>13</sub> = 1.31	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.65
				$\Sigma$ ESBTU <sub>FCV,TOT</sub>	---		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	---		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.2365		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	<b>1.7875</b>

**Table D9**  
**One-Carbon EqP Model PAH  $\Sigma$ ESBTU Calculations - Carneys Point Zone**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Station: Sampling Depth: Sampling Date:		DER1-28 0-0.5 9/22/2009			DER1-29 0-0.5 9/22/2009			DER2-26-SD 0-0.5 5/4/2010			DER2-27-SD 0-0.5 5/4/2010		
	C <sub>OC,PAH,FCVI</sub> ( $\mu\text{g/g OC}$ )	C <sub>OC,PAH,Maxi</sub> ( $\mu\text{g/g OC}$ )	C <sub>dw</sub> ( $\mu\text{g/g dw}$ )	C <sub>OC</sub> ( $\mu\text{g/g OC}$ )	ESBTU <sub>FCVI,ND=0</sub>	C <sub>dw</sub> ( $\mu\text{g/g dw}$ )	C <sub>OC</sub> ( $\mu\text{g/g OC}$ )	ESBTU <sub>FCVI,ND=0</sub>	C <sub>dw</sub> ( $\mu\text{g/g dw}$ )	C <sub>OC</sub> ( $\mu\text{g/g OC}$ )	ESBTU <sub>FCVI,ND=0</sub>	C <sub>dw</sub> ( $\mu\text{g/g dw}$ )	C <sub>OC</sub> ( $\mu\text{g/g OC}$ )	ESBTU <sub>FCVI,ND=0</sub>
Acenaphthene	491	33400	ND	ND	---									
Acenaphthylene	452	24000	ND	ND	---	ND	ND	---	0.099	7.279	0.016	ND	ND	---
Anthracene	594	1300	ND	ND	---									
Benzo(A)Anthracene	841	4153	0.12	16.866	0.02	0.099	50.51	0.06	0.11	8.088	0.01	0.059	7.867	0.009
Benzo(A)Pyrene	965	3840	0.15	21.082	0.022	0.096	48.98	0.051	0.18	13.235	0.014	0.061	8.133	0.008
Benzo(B)Fluoranthene	979	2169	0.19	26.704	0.027	0.11	56.122	0.057	0.17	12.5	0.013	0.072	9.6	0.01
Benzo(K)Fluoranthene	981	1220	0.086	12.087	0.012	0.051	26.02	0.027	0.077	5.662	0.006	ND	ND	---
Chrysene	844	826	0.16	22.488	0.027	0.097	49.49	0.059	0.16	11.765	0.014	0.064	8.533	0.01
Fluoranthene	707	23870	0.23	32.326	0.046	0.11	56.122	0.079	0.17	12.5	0.018	0.083	11.067	0.016
Fluorene	538	26000	ND	ND	---									
Naphthalene	385	61700	ND	ND	---	ND	ND	---	0.089	6.544	0.017	ND	ND	---
Phenanthrene	596	34300	0.14	19.677	0.033	0.061	31.122	0.052	0.11	8.088	0.014	ND	ND	---
Pyrene	697	9090	0.27	37.948	0.054	0.12	61.224	0.088	0.2	14.706	0.021	0.11	14.667	0.021
			tPAH <sub>13</sub> = 1.346	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.241	tPAH <sub>13</sub> = 0.744	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.473	tPAH <sub>13</sub> = 1.365	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.143	tPAH <sub>13</sub> = 0.449	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.074
				$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.66275		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	1.30075		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.39325		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.2035

Analyte	Station: Sampling Depth: Sampling Date:		DER2-28-SD 0-0.5 4/22/2010			DER2-29-SD 0-0.5 4/21/2010			DER3-17 0-0.5 11/15/2010			DER3-18 0-0.5 11/15/2010		
	C <sub>OC,PAH,FCVI</sub> ( $\mu\text{g/g OC}$ )	C <sub>OC,PAH,Maxi</sub> ( $\mu\text{g/g OC}$ )	C <sub>dw</sub> ( $\mu\text{g/g dw}$ )	C <sub>OC</sub> ( $\mu\text{g/g OC}$ )	ESBTU <sub>FCVI,ND=0</sub>	C <sub>dw</sub> ( $\mu\text{g/g dw}$ )	C <sub>OC</sub> ( $\mu\text{g/g OC}$ )	ESBTU <sub>FCVI,ND=0</sub>	C <sub>dw</sub> ( $\mu\text{g/g dw}$ )	C <sub>OC</sub> ( $\mu\text{g/g OC}$ )	ESBTU <sub>FCVI,ND=0</sub>	C <sub>dw</sub> ( $\mu\text{g/g dw}$ )	C <sub>OC</sub> ( $\mu\text{g/g OC}$ )	ESBTU <sub>FCVI,ND=0</sub>
Acenaphthene	491	33400	ND	ND	---									
Acenaphthylene	452	24000	ND	ND	---									
Anthracene	594	1300	ND	ND	---									
Benzo(A)Anthracene	841	4153	ND	ND	---	0.21	11.321	0.013	ND	ND	---	0.082	5.541	0.007
Benzo(A)Pyrene	965	3840	ND	ND	---	0.24	12.938	0.013	ND	ND	---	0.092	6.216	0.006
Benzo(B)Fluoranthene	979	2169	ND	ND	---	0.31	16.712	0.017	0.086	7.446	0.008	0.14	9.459	0.01
Benzo(K)Fluoranthene	981	1220	ND	ND	---									
Chrysene	844	826	ND	ND	---	0.27	14.555	0.017	ND	ND	---	0.094	6.351	0.008
Fluoranthene	707	23870	0.21	19.535	0.028	0.38	20.485	0.029	0.097	8.398	0.012	0.13	8.784	0.012
Fluorene	538	26000	ND	ND	---									
Naphthalene	385	61700	ND	ND	---	ND	ND	---	0.09	7.792	0.02	0.12	8.108	0.021
Phenanthrene	596	34300	ND	ND	---	0.21	11.321	0.019	ND	ND	---	0.089	6.014	0.01
Pyrene	697	9090	0.25	23.256	0.033	0.43	23.181	0.033	0.12	10.39	0.015	0.16	10.811	0.016
			tPAH <sub>13</sub> = 0.46	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.061	tPAH <sub>13</sub> = 2.05	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.141	tPAH <sub>13</sub> = 0.393	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.055	tPAH <sub>13</sub> = 0.907	$\Sigma$ ESBTU <sub>FCV,13</sub>	0.09
				$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.16775		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.38775		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.15125		$\Sigma$ ESBTU <sub>FCV,TOT</sub>	0.2475

**Notes:**

- C<sub>OC,PAH,FCVI</sub>, Critical concentration of a PAH in sediment that is related to the final chronic value (FCV) derived following the EqP method
- C<sub>OC,PAH,Maxi</sub>, Concentration in sediment organic carbon that is in equilibrium with the interstitial water at the aqueous solubility
- $\Sigma$ ESBTU<sub>FCV,13</sub>, Sum of toxic units bases on 13 PAH compounds analyzed in the sample
- $\Sigma$ ESBTU<sub>FCV,TOT</sub>, Estimated sum of toxic units of total PAH mixture based on 34 PAH compounds; an UF of 2.75 is applied to  $\Sigma$ ESBTU<sub>FCV,13</sub> to estimate  $\Sigma$ ESBTU<sub>FCV,TOT</sub>
- tPAH<sub>13</sub>, Sum of concentrations of 13 PAH samples analyzed in the sample
- ND, Concentration of PAH compound was below the limit of detection
- , Value not calculated because PAH compound was below the limit of detection
- C<sub>dw</sub>, Concentration of PAH compound on a dry weight basis ( $\mu\text{g/g dw}$ )
- C<sub>OC</sub>, Concentration of PAH compound normalized to sample-specific fraction of organic carbon ( $\mu\text{g/g organic carbon}$ )

**Table D10**  
**Two-Carbon EqP Model PAH  $\Sigma$ IWTU Calculations - Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Station: Sampling Depth: Sampling Date:				DER1-01 0.00-0.50 9/21/2009				DER1-04 0.00-0.50 9/24/2009				DER1-05 0.00-0.50 9/21/2009				DER1-07 0.00-0.50 9/21/2009				DER2-01-SD 0.00-0.50 4/21/2010			
					$f_{OC} = 0.00209$ $f_{BC} = 0.00072$ $f_{NSOC} = 0.00137$				$f_{OC} = 0.001205$ $f_{BC} = 0.00027$ $f_{NSOC} = 0.000935$				$f_{OC} = 0.001845$ $f_{BC} = 0.0006$ $f_{NSOC} = 0.001245$				$f_{OC} = 0.00251$ $f_{BC} = 0.00208$ $f_{NSOC} = 0.00043$				$f_{OC} = 0.0016$ $f_{BC} = 0.000155$ $f_{NSOC} = 0.001445$			
	IWTU <sub>FCVI</sub> ( $\mu$ g/L)	log K <sub>OC</sub> (L/kg NSOC)	log K <sub>BC</sub> (L/kg BC)		C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAH</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAH</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAH</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAH</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAH</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>
Acenaphthene	55.85	3.944	5.59	39	18660	0.1335	0.002	40	33195	0.3532	0.006	39	21138	0.1596	0.003	45	17928	0.0554	0.001	41	25625	0.5616	0.010	
Acenaphthylene	306.9	3.168	5.16	39	18660	0.3676	0.001	40	33195	0.9900	0.003	39	21138	0.4404	0.001	45	17928	0.1494	0.000	41	25625	1.6713	0.005	
Anthracene	20.73	4.457	5.88	39	18660	0.0666	0.003	40	33195	0.1727	0.008	39	21138	0.0795	0.004	45	17928	0.0283	0.001	41	25625	0.2579	0.012	
Benzo(A)Anthracene	2.227	5.577	6.5	39	18660	0.0140	0.006	40	33195	0.0331	0.015	100	54201	0.0422	0.019	45	17928	0.0067	0.003	41	25625	0.0396	0.018	
Benzo(B)Fluoranthene	0.6774	6.16	6.82	47	22488	0.0070	0.010	40	33195	0.0128	0.019	84	45528	0.0146	0.022	45	17928	0.0031	0.005	41	25625	0.0132	0.019	
Benzo(K)Fluoranthene	0.6415	6.184	6.83	39	18660	0.0056	0.009	40	33195	0.0123	0.019	39	21138	0.0065	0.010	45	17928	0.0031	0.005	41	25625	0.0126	0.020	
Benzo(A)Pyrene	0.9573	6.003	6.73	39	18660	0.0074	0.008	40	33195	0.0167	0.017	71	38482	0.0159	0.017	45	17928	0.0039	0.004	41	25625	0.0179	0.019	
Chrysene	2.042	5.616	6.52	44	21053	0.0149	0.007	40	33195	0.0312	0.015	130	70461	0.0520	0.025	45	17928	0.0064	0.003	41	25625	0.0369	0.018	
Dibenz(A,H)Anthracene	0.2825	6.599	7.06	39	18660	0.0028	0.010	40	33195	0.0059	0.021	39	21138	0.0033	0.012	45	17928	0.0018	0.006	41	25625	0.0055	0.019	
Fluoranthene	7.109	4.998	6.18	64	30622	0.0522	0.007	40	33195	0.0797	0.011	140	75881	0.1357	0.019	45	17928	0.0141	0.002	41	25625	0.1083	0.015	
Fluorene	39.3	4.137	5.7	39	18660	0.1027	0.003	40	33195	0.2700	0.007	39	21138	0.1227	0.003	45	17928	0.0429	0.001	41	25625	0.4205	0.011	
Indeno (1,2,3-CD) Pyrene	0.275	6.608	7.07	39	18660	0.0028	0.010	40	33195	0.0057	0.021	40	21680	0.0033	0.012	45	17928	0.0017	0.006	41	25625	0.0053	0.019	
Naphthalene	193.55	3.299	5.24	39	18660	0.3050	0.002	40	33195	0.8200	0.004	39	21138	0.3654	0.002	45	17928	0.1242	0.001	41	25625	1.3753	0.007	
Phenanthrene	19.13	4.494	5.9	39	18660	0.0635	0.003	40	33195	0.1642	0.009	110	59621	0.2134	0.011	45	17928	0.0270	0.001	41	25625	0.2438	0.013	
Pyrene	10.11	4.839	6.09	59	28230	0.0602	0.006	40	33195	0.1008	0.010	220	119241	0.2670	0.026	45	17928	0.0174	0.002	41	25625	0.1412	0.014	
				682		$\Sigma$ IWTU <sub>FCV,15</sub>	0.088	640		$\Sigma$ IWTU <sub>FCV,15</sub>	0.186	1212		$\Sigma$ IWTU <sub>FCV,15</sub>	0.186	720		$\Sigma$ IWTU <sub>FCV,15</sub>	0.042	656		$\Sigma$ IWTU <sub>FCV,15</sub>	0.220	
						$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.242			$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.512			$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.512			$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.115			$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.605	

Analyte	Station: Sampling Depth: Sampling Date:				DER1-08 0.00-0.50 9/24/2009				DER1-09 0.00-0.50 9/21/2009				DER1-10 0.00-0.50 9/24/2009				DER1-11 0.00-0.50 9/21/2009				DER2-07-SD 0.00-0.50 4/22/2010			
					$f_{OC} = 0.00465$ $f_{BC} = 0.00224$ $f_{NSOC} = 0.00241$				$f_{OC} = 0.004165$ $f_{BC} = 0.00044$ $f_{NSOC} = 0.003725$				$f_{OC} = 0.0231$ $f_{BC} = 0.00159$ $f_{NSOC} = 0.02151$				$f_{OC} = 0.01865$ $f_{BC} = 0.00163$ $f_{NSOC} = 0.01702$				$f_{OC} = 0.0137$ $f_{BC} = 0.000665$ $f_{NSOC} = 0.013035$			
	IWTU <sub>FCVI</sub> ( $\mu$ g/L)	log K <sub>OC</sub> (L/kg NSOC)	log K <sub>BC</sub> (L/kg BC)		C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAH</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAH</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAH</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAH</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAH</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>
Acenaphthene	55.85	3.944	5.59	48	10323	0.0538	0.001	47	11285	0.2305	0.004	96	4156	0.1189	0.002	72	3861	0.0919	0.002	190	13869	0.5090	0.009	
Acenaphthylene	306.9	3.168	5.16	48	10323	0.1466	0.000	46	11044	0.6659	0.002	96	4156	0.3671	0.001	72	3861	0.2762	0.001	190	13869	1.6477	0.005	
Anthracene	20.73	4.457	5.88	48	10323	0.0271	0.001	62	14886	0.1408	0.007	120	5195	0.0659	0.003	72	3861	0.0418	0.002	190	13869	0.2165	0.010	
Benzo(A)Anthracene	2.227	5.577	6.5	48	10323	0.0060	0.003	120	28812	0.0429	0.019	380	16450	0.0289	0.013	72	3861	0.0062	0.003	300	21898	0.0427	0.019	
Benzo(B)Fluoranthene	0.6774	6.16	6.82	48	10323	0.0026	0.004	200	48019	0.0241	0.036	380	16450	0.0091	0.013	72	3861	0.0020	0.003	280	20438	0.0121	0.018	
Benzo(K)Fluoranthene	0.6415	6.184	6.83	48	10323	0.0025	0.004	88	21128	0.0102	0.016	170	7359	0.0039	0.006	72	3861	0.0019	0.003	190	13869	0.0078	0.012	
Benzo(A)Pyrene	0.9573	6.003	6.73	48	10323	0.0033	0.003	96	23049	0.0157	0.016	260	11255	0.0086	0.009	72	3861	0.0028	0.003	240	17518	0.0144	0.015	
Chrysene	2.042	5.616	6.52	48	10323	0.0057	0.003	220	52821	0.0734	0.036	810	35065	0.0572	0.028	72	3861	0.0058	0.003	240	17518	0.0316	0.015	
Dibenz(A,H)Anthracene	0.2825	6.599	7.06	48	10323	0.0014	0.005	46	11044	0.0023	0.008	96	4156	0.0009	0.003	72	3861	0.0008	0.003	190	13869	0.0032	0.011	
Fluoranthene	7.109	4.998	6.18	48	10323	0.0132	0.002	700	168067	0.6752	0.095	730	31602	0.1605	0.023	72	3861	0.0173	0.002	330	24088	0.1432	0.020	
Fluorene	39.3	4.137	5.7	48	10323	0.0415	0.001	62	14886	0.2283	0.006	96	4156	0.0879	0.002	72	3861	0.0686	0.002	190	13869	0.3711	0.009	
Indeno (1,2,3-CD) Pyrene	0.275	6.608	7.07	48	10323	0.0013	0.005	61	14646	0.0030	0.011	140	3861	0.0013	0.005	72	3861	0.0008	0.003	190	13869	0.0031	0.011	
Naphthalene	193.55	3.299	5.24	48	10323	0.1218	0.001	46	11044	0.5484	0.003	96	4156	0.3008	0.002	72	3861	0.2270	0.001	190	13869	1.3426	0.007	
Phenanthrene	19.13	4.494	5.9	48	10323	0.0259	0.001	600	144058	1.2884	0.067	360	15584	0.1862	0.010	72	3861	0.0394	0.002	240	17518	0.2567	0.013	
Pyrene	10.11	4.839	6.09	48	10323	0.0164	0.002	580	139256	0.7264	0.072	800	34632	0.2325	0.023	72	3861	0.0226	0.002	390	28467	0.2270	0.022	
				768		$\Sigma$ IWTU <sub>FCV,15</sub>	0.036	3050		$\Sigma$ IWTU <sub>FCV,15</sub>	0.398	4790		$\Sigma$ IWTU <sub>FCV,15</sub>	0.143	1152		$\Sigma$ IWTU <sub>FCV,15</sub>	0.035	3730		$\Sigma$ IWTU <sub>FCV,15</sub>	0.200	
						$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.098			$\Sigma$ IWTU <sub>FCV,Tot</sub>	1.095			$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.394			$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.095			$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.549	

**Table D10**  
**Two-Carbon EqP Model PAH  $\Sigma$ IWTU Calculations - Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Station: Sampling Depth: Sampling Date:				DER2-03-SD 0.00-0.50 4/22/2010				DER2-05-SD 0.00-0.50 4/27/2010				DER2-06-SD 0.00-0.50 4/23/2010				DER2-11-SD 0.00-0.50 4/20/2010				DER2-12-SD 0.00-0.50 4/20/2010			
	$f_{OC} = 0.0152$ $f_{BC} = 0.000565$ $f_{NSOC} = 0.014635$				$f_{OC} = 0.007765$ $f_{BC} = 0.00687$ $f_{NSOC} = 0.000895$				$f_{OC} = 0.00928$ $f_{BC} = 0.000505$ $f_{NSOC} = 0.008775$				$f_{OC} = 0.021$ $f_{BC} = 0.002215$ $f_{NSOC} = 0.018785$				$f_{OC} = 0.01985$ $f_{BC} = 0.003855$ $f_{NSOC} = 0.015995$							
	IWTU <sub>FCVI</sub> ( $\mu$ g/L)	log K <sub>OC</sub> (L/kg NSOC)	log K <sub>BC</sub> (L/kg BC)	$C_{dw}$ ( $\mu$ g/kg <sub>dw</sub> )	$C_{OC}$ ( $\mu$ g/kg <sub>OC</sub> )	$C_{d, PAH}$ ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	$C_{dw}$ ( $\mu$ g/kg <sub>dw</sub> )	$C_{OC}$ ( $\mu$ g/kg <sub>OC</sub> )	$C_{d, PAH}$ ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	$C_{dw}$ ( $\mu$ g/kg <sub>dw</sub> )	$C_{OC}$ ( $\mu$ g/kg <sub>OC</sub> )	$C_{d, PAH}$ ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	$C_{dw}$ ( $\mu$ g/kg <sub>dw</sub> )	$C_{OC}$ ( $\mu$ g/kg <sub>OC</sub> )	$C_{d, PAH}$ ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	$C_{dw}$ ( $\mu$ g/kg <sub>dw</sub> )	$C_{OC}$ ( $\mu$ g/kg <sub>OC</sub> )	$C_{d, PAH}$ ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	
Acenaphthene	55.85	3.944	5.59	90	5921	0.2583	0.005	90	11590	0.0336	0.001	180	19397	0.6579	0.012	100	4762	0.0974	0.002	95	4786	0.0579	0.001	
Acenaphthylene	306.9	3.168	5.16	90	5921	0.8720	0.003	90	11590	0.0905	0.000	180	19397	2.0951	0.007	100	4762	0.2875	0.001	95	4786	0.1636	0.001	
Anthracene	20.73	4.457	5.88	90	5921	0.1062	0.005	90	11590	0.0172	0.001	180	19397	0.2837	0.014	100	4762	0.0451	0.002	95	4786	0.0281	0.001	
Benzo(A)Anthracene	2.227	5.577	6.5	90	5921	0.0123	0.006	350	45074	0.0159	0.007	180	19397	0.0367	0.016	100	4762	0.0071	0.003	95	4786	0.0052	0.002	
Benzo(B)Fluoranthene	0.6774	6.16	6.82	120	7895	0.0048	0.007	260	33484	0.0056	0.008	180	19397	0.0112	0.017	120	5714	0.0029	0.004	120	6045	0.0025	0.004	
Benzo(K)Fluoranthene	0.6415	6.184	6.83	90	5921	0.0034	0.005	90	11590	0.0019	0.003	180	19397	0.0107	0.017	100	4762	0.0023	0.004	95	4786	0.0019	0.003	
Benzo(A)Pyrene	0.9573	6.003	6.73	90	5921	0.0051	0.005	250	32196	0.0066	0.007	180	19397	0.0156	0.016	100	4762	0.0032	0.003	97	4887	0.0026	0.003	
Chrysene	2.042	5.616	6.52	96	6316	0.0121	0.006	520	66967	0.0225	0.011	180	19397	0.0340	0.017	100	4762	0.0066	0.003	120	6045	0.0062	0.003	
Dibenz(A,H)Anthracene	0.2825	6.599	7.06	90	5921	0.0014	0.005	90	11590	0.0011	0.004	180	19397	0.0044	0.016	100	4762	0.0010	0.004	95	4786	0.0009	0.003	
Fluoranthene	7.109	4.998	6.18	140	9211	0.0606	0.009	440	56665	0.0420	0.006	180	19397	0.1099	0.015	140	6667	0.0268	0.004	150	7557	0.0202	0.003	
Fluorene	39.3	4.137	5.7	90	5921	0.1860	0.005	90	11590	0.0260	0.001	180	19397	0.4821	0.012	100	4762	0.0731	0.002	95	4786	0.0442	0.001	
Indeno (1,2,3-CD) Pyrene	0.275	6.608	7.07	90	5921	0.0014	0.005	93	11977	0.0011	0.004	180	19397	0.0043	0.016	100	4762	0.0010	0.004	95	4786	0.0009	0.003	
Naphthalene	193.55	3.299	5.24	90	5921	0.7069	0.004	100	12878	0.0836	0.000	180	19397	1.7106	0.009	100	4762	0.2368	0.001	140	7053	0.1995	0.001	
Phenanthrene	19.13	4.494	5.9	90	5921	0.0994	0.005	120	15454	0.0219	0.001	180	19397	0.2667	0.014	100	4762	0.0426	0.002	160	8060	0.0449	0.002	
Pyrene	10.11	4.839	6.09	170	11184	0.0997	0.010	780	100451	0.0916	0.009	180	19397	0.1467	0.015	160	7619	0.0398	0.004	190	9572	0.0325	0.003	
				1606		$\Sigma$ IWTU <sub>FCV,15</sub>	0.084	3593		$\Sigma$ IWTU <sub>FCV,15</sub>	0.063	2880		$\Sigma$ IWTU <sub>FCV,15</sub>	0.211	1720		$\Sigma$ IWTU <sub>FCV,15</sub>	0.043	1832		$\Sigma$ IWTU <sub>FCV,15</sub>	0.034	
						$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.230			$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.173			$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.581			$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.117			$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.095	

Analyte	Station: Sampling Depth: Sampling Date:				DER2-08-SD 0.00-0.50 4/23/2010				DER2-09-SD 0.00-0.50 4/21/2010				DER2-10-SD 0.00-0.50 4/20/2010				DER3-01 0.00-0.50 11/16/2010				DER3-02 0.00-0.50 11/16/2010			
	$f_{OC} = 0.01895$ $f_{BC} = 0.00103$ $f_{NSOC} = 0.01792$				$f_{OC} = 0.02275$ $f_{BC} = 0.00195$ $f_{NSOC} = 0.0208$				$f_{OC} = 0.0195$ $f_{BC} = 0.004025$ $f_{NSOC} = 0.015475$				$f_{OC} = 0.0072$ $f_{BC} = 0.00736$ $f_{NSOC} = 0$				$f_{OC} = 0.00112$ $f_{BC} = 0.00033$ $f_{NSOC} = 0.00079$							
	IWTU <sub>FCVI</sub> ( $\mu$ g/L)	log K <sub>OC</sub> (L/kg NSOC)	log K <sub>BC</sub> (L/kg BC)	$C_{dw}$ ( $\mu$ g/kg <sub>dw</sub> )	$C_{OC}$ ( $\mu$ g/kg <sub>OC</sub> )	$C_{d, PAH}$ ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	$C_{dw}$ ( $\mu$ g/kg <sub>dw</sub> )	$C_{OC}$ ( $\mu$ g/kg <sub>OC</sub> )	$C_{d, PAH}$ ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	$C_{dw}$ ( $\mu$ g/kg <sub>dw</sub> )	$C_{OC}$ ( $\mu$ g/kg <sub>OC</sub> )	$C_{d, PAH}$ ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	$C_{dw}$ ( $\mu$ g/kg <sub>dw</sub> )	$C_{OC}$ ( $\mu$ g/kg <sub>OC</sub> )	$C_{d, PAH}$ ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	$C_{dw}$ ( $\mu$ g/kg <sub>dw</sub> )	$C_{OC}$ ( $\mu$ g/kg <sub>OC</sub> )	$C_{d, PAH}$ ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	
Acenaphthene	55.85	3.944	5.59	300	15831	0.5374	0.010	110	4835	0.1168	0.002	85	4359	0.0499	0.001	94	13056	0.0328	0.001	43	38393	0.3177	0.006	
Acenaphthylene	306.9	3.168	5.16	300	15831	1.7117	0.006	110	4835	0.3520	0.001	85	4359	0.1406	0.000	94	13056	0.0884	0.000	43	38393	0.8800	0.003	
Anthracene	20.73	4.457	5.88	300	15831	0.2317	0.011	110	4835	0.0530	0.003	85	4359	0.0243	0.001	94	13056	0.0168	0.001	43	38393	0.1575	0.008	
Benzo(A)Anthracene	2.227	5.577	6.5	300	15831	0.0299	0.013	160	7033	0.0114	0.005	85	4359	0.0046	0.002	94	13056	0.0040	0.002	43	38393	0.0320	0.014	
Benzo(B)Fluoranthene	0.6774	6.16	6.82	300	15831	0.0092	0.014	230	10110	0.0054	0.008	110	5641	0.0022	0.003	94	13056	0.0019	0.003	43	38393	0.0129	0.019	
Benzo(K)Fluoranthene	0.6415	6.184	6.83	300	15831	0.0087	0.014	110	4835	0.0024	0.004	85	4359	0.0017	0.003	94	13056	0.0019	0.003	43	38393	0.0125	0.019	
Benzo(A)Pyrene	0.9573	6.003	6.73	300	15831	0.0127	0.013	170	7473	0.0054	0.006	85	4359	0.0023	0.002	94	13056	0.0024	0.002	43	38393	0.0167	0.017	
Chrysene	2.042	5.616	6.52	300	15831	0.0277	0.014	240	10549	0.0159	0.008	85	4359	0.0043	0.002	94	13056	0.0039	0.002	43	38393	0.0303	0.015	
Dibenz(A,H)Anthracene	0.2825	6.599	7.06	300	15831	0.0036	0.013	110	4835	0.0010	0.004	85	4359	0.0008	0.003	94	13056	0.0011	0.004	43	38393	0.0062	0.022	
Fluoranthene	7.109	4.998	6.18	300	15831	0.0897	0.013	270	11868	0.0538	0.008	130	6667	0.0170	0.002	94	13056	0.0084	0.001	43	38393	0.0744	0.010	
Fluorene	39.3	4.137	5.7	300	15831	0.3938	0.010	110	4835	0.0871	0.002	85	4359	0.0381	0.001	94	13056	0.0255	0.001	43	38393	0.2440	0.006	
Indeno (1,2,3-CD) Pyrene	0.275	6.608	7.07	300	15831	0.0035	0.013	110	4835	0.0010	0.004	85	4359	0.0008	0.003	94	13056	0.0011	0.004	43	38393	0.0061	0.022	
Naphthalene	193.55	3.299	5.24	300	15831	1.3975	0.007	120	5275	0.3156	0.002	100	5128	0.1369	0.001	94	13056	0.0735	0.000	43	38393	0.7298	0.004	
Phenanthrene	19.13	4.494	5.9	300	15831	0.2179	0.011	170	7473	0.0774	0.004	120	6154	0.0326	0.002	94	13056	0.0161	0.001	43	38393	0.1499	0.008	
Pyrene	10.11	4.839	6.09	300	15831	0.1198	0.012	320	14066	0.0834	0.008	150	7692	0.0249	0.002	94	13056	0.0104	0.001	43	38393	0.0934	0.009	
				4800		$\Sigma$ IWTU <sub>FCV,15</sub>	0.173	2560		$\Sigma$ IWTU <sub>FCV,15</sub>	0.067	1545		$\Sigma$ IWTU <sub>FCV,15</sub>	0.029	1504		$\Sigma$ IWTU <sub>FCV,15</sub>	0.026	688		$\Sigma$ IWTU <sub>FCV,15</sub>	0.183	
						$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.475			$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.185			$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.079			$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.071			$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.503	

**Table D10**  
**Two-Carbon EqP Model PAH  $\Sigma$ IWTU Calculations - Jackson Labs/TEL Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Station: Sampling Depth: Sampling Date:			DER2-30-SD 0.00-0.50 4/27/2010				DER2-31-SD 0.00-0.50 4/27/2010				DER3-05 0.00-0.50 11/16/2010				DER3-06 0.00-0.50 11/15/2010			
	IWTU <sub>FCVI</sub> ( $\mu$ g/L)	log K <sub>OC</sub> (L/kg NSOC)	log K <sub>BC</sub> (L/kg BC)	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAH</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAH</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAH</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAH</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>
Acenaphthene	55.85	3.944	5.59	45	10539	0.2081	0.004	630	79545	0.5985	0.011	96	6358	0.0960	0.002	58	8555	0.0961	0.002
Acenaphthylene	306.9	3.168	5.16	45	10539	0.6120	0.002	110	13889	0.2883	0.001	96	6358	0.2755	0.001	58	8555	0.2703	0.001
Anthracene	20.73	4.457	5.88	45	10539	0.0967	0.005	240	30303	0.1135	0.005	96	6358	0.0458	0.002	58	8555	0.0468	0.002
Benzo(A)Anthracene	2.227	5.577	6.5	45	10539	0.0154	0.007	110	13889	0.0108	0.005	96	6358	0.0080	0.004	58	8555	0.0089	0.004
Benzo(B)Fluoranthene	0.6774	6.16	6.82	45	10539	0.0052	0.008	110	13889	0.0044	0.007	96	6358	0.0029	0.004	58	8555	0.0034	0.005
Benzo(K)Fluoranthene	0.6415	6.184	6.83	45	10539	0.0050	0.008	110	13889	0.0043	0.007	96	6358	0.0027	0.004	58	8555	0.0033	0.005
Benzo(A)Pyrene	0.9573	6.003	6.73	45	10539	0.0071	0.007	130	16414	0.0068	0.007	96	6358	0.0038	0.004	58	8555	0.0044	0.005
Chrysene	2.042	5.616	6.52	45	10539	0.0144	0.007	130	16414	0.0121	0.006	96	6358	0.0075	0.004	58	8555	0.0084	0.004
Dibenz(A,H)Anthracene	0.2825	6.599	7.06	45	10539	0.0022	0.008	110	13889	0.0022	0.008	96	6358	0.0012	0.004	58	8555	0.0015	0.005
Fluoranthene	7.109	4.998	6.18	45	10539	0.0413	0.006	390	49242	0.0878	0.012	96	6358	0.0203	0.003	58	8555	0.0215	0.003
Fluorene	39.3	4.137	5.7	45	10539	0.1564	0.004	400	50505	0.2922	0.007	96	6358	0.0728	0.002	58	8555	0.0734	0.002
Indeno (1,2,3-CD) Pyrene	0.275	6.608	7.07	45	10539	0.0021	0.008	110	13889	0.0021	0.008	96	6358	0.0012	0.004	58	8555	0.0015	0.005
Naphthalene	193.55	3.299	5.24	97	22717	1.0869	0.006	630	79545	1.3700	0.007	96	6358	0.2276	0.001	58	8555	0.2238	0.001
Phenanthrene	19.13	4.494	5.9	45	10539	0.0915	0.005	1200	151515	0.5406	0.028	96	6358	0.0434	0.002	58	8555	0.0445	0.002
Pyrene	10.11	4.839	6.09	45	10539	0.0535	0.005	390	49242	0.1099	0.011	96	6358	0.0260	0.003	58	8555	0.0272	0.003
				772		$\Sigma$ IWTU <sub>FCV,15</sub>	0.088	4910		$\Sigma$ IWTU <sub>FCV,15</sub>	0.130	1536		$\Sigma$ IWTU <sub>FCV,15</sub>	0.044	928		$\Sigma$ IWTU <sub>FCV,15</sub>	0.050
						$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.243			$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.356			$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.121			$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.136

Analyte	Station: Sampling Depth: Sampling Date:			DER3-03 0.00-0.50 11/16/2010				DER3-04 0.00-0.50 11/15/2010				DER3-07 0.00-0.50 11/16/2010			
	IWTU <sub>FCVI</sub> ( $\mu$ g/L)	log K <sub>OC</sub> (L/kg NSOC)	log K <sub>BC</sub> (L/kg BC)	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAH</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAH</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAH</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>
Acenaphthene	55.85	3.944	5.59	90	5099	0.0583	0.001	41	2405	0.0301	0.001	89	5235	0.0586	0.001
Acenaphthylene	306.9	3.168	5.16	90	5099	0.1642	0.001	49	2874	0.1018	0.000	89	5235	0.1648	0.001
Anthracene	20.73	4.457	5.88	90	5099	0.0284	0.001	420	24633	0.1491	0.007	89	5235	0.0286	0.001
Benzo(A)Anthracene	2.227	5.577	6.5	90	5099	0.0053	0.002	410	24047	0.0268	0.012	89	5235	0.0054	0.002
Benzo(B)Fluoranthene	0.6774	6.16	6.82	90	5099	0.0020	0.003	310	18182	0.0075	0.011	89	5235	0.0021	0.003
Benzo(K)Fluoranthene	0.6415	6.184	6.83	90	5099	0.0020	0.003	150	8798	0.0035	0.005	89	5235	0.0020	0.003
Benzo(A)Pyrene	0.9573	6.003	6.73	90	5099	0.0027	0.003	310	18182	0.0100	0.010	89	5235	0.0027	0.003
Chrysene	2.042	5.616	6.52	90	5099	0.0050	0.002	1000	58651	0.0614	0.030	89	5235	0.0051	0.002
Dibenz(A,H)Anthracene	0.2825	6.599	7.06	90	5099	0.0009	0.003	59	3460	0.0006	0.002	89	5235	0.0009	0.003
Fluoranthene	7.109	4.998	6.18	90	5099	0.0130	0.002	400	23460	0.0644	0.009	89	5235	0.0131	0.002
Fluorene	39.3	4.137	5.7	90	5099	0.0445	0.001	110	6452	0.0615	0.002	89	5235	0.0448	0.001
Indeno (1,2,3-CD) Pyrene	0.275	6.608	7.07	90	5099	0.0009	0.003	150	8798	0.0016	0.006	89	5235	0.0009	0.003
Naphthalene	193.55	3.299	5.24	90	5099	0.1359	0.001	1100	64516	1.8902	0.010	89	5235	0.1364	0.001
Phenanthrene	19.13	4.494	5.9	90	5099	0.0270	0.001	240	14076	0.0809	0.004	89	5235	0.0272	0.001
Pyrene	10.11	4.839	6.09	90	5099	0.0165	0.002	570	33431	0.1168	0.012	110	6471	0.0205	0.002
				1440		$\Sigma$ IWTU <sub>FCV,15</sub>	0.030	5499		$\Sigma$ IWTU <sub>FCV,15</sub>	0.121	1445		$\Sigma$ IWTU <sub>FCV,15</sub>	0.031
						$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.082			$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.334			$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.084

**Notes:**  
C<sub>OC,PAH,FCVI</sub>: Critical concentration of a PAH in sediment that is related to the final chronic value (FCV) derived following the EqP method  
C<sub>OC,PAH,Max</sub>: Concentration in sediment organic carbon that is in equilibrium with the interstitial water at the aqueous solubility  
 $\Sigma$ IWTU<sub>FCV,15</sub>: Sum of toxic units bases on 15 PAH compounds analyzed in the sample  
 $\Sigma$ IWTU<sub>FCV,TOT</sub>: Estimated sum of toxic units of total PAH mixture based on 34 PAH compounds; an UF of 2.75 is applied to  $\Sigma$ IWTU<sub>FCV,15</sub> to estimate  $\Sigma$ IWTU<sub>FCV,TOT</sub>  
Concentration of PAH compounds below the limit of detection were conservatively estimated at the detection limit in IWTU calculations  
C<sub>dw</sub>: Concentration of PAH compound on a dry weight basis ( $\mu$ g/g dw)  
C<sub>OC</sub>: Concentration of PAH compound normalized to sample-specific fraction of organic carbon ( $\mu$ g/g organic carbon)  
C<sub>d,PAH</sub>: Estimated concentration of freely dissolved PAH compound in pore water based on the two-carbon EqP model  
f<sub>OC</sub>: Sample-specific fraction of total organic carbon  
f<sub>BC</sub>: Sample-specific fraction of black carbon  
f<sub>NSOC</sub>: Sample-specific fraction of natural sedimentary organic carbon; estimated as the difference between f<sub>OC</sub> and f<sub>BC</sub>  
IWTU<sub>FCVI</sub>: Final chronic value (FCV) of PAH compound protective of chronic aqueous exposure to benthic organisms  
K<sub>OC</sub>: Organic carbon-water partitioning coefficient  
K<sub>BC</sub>: Black carbon-water partitioning coefficient

**Table D11**  
**Two-Carbon EqP Model PAH  $\Sigma$ IWTU Calculations - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Station: Sampling Depth: Sampling Date:			DER1-14 0.00-0.50 9/22/2009				DER1-15 0.00-0.50 9/22/2009				DER2-13-SD 0.00-0.50 4/23/2010				DER2-14-SD 0.00-0.50 4/23/2010				DER2-19-SD 0.00-0.50 4/27/2010			
				$f_{OC} = 0.000315$ $f_{BC} = 0.00231$ $f_{NSOC} = 0$				$f_{OC} = 0.003065$ $f_{BC} = 0.000185$ $f_{NSOC} = 0.00288$				$f_{OC} = 0.0136$ $f_{BC} = 0.001505$ $f_{NSOC} = 0.012095$				$f_{OC} = 0.01175$ $f_{BC} = 0.00218$ $f_{NSOC} = 0.00957$				$f_{OC} = 0.03185$ $f_{BC} = 0.00807$ $f_{NSOC} = 0.02378$			
	IWTU <sub>FCVI</sub> ( $\mu$ g/L)	log K <sub>OC</sub> (L/kg NSOC)	log K <sub>BC</sub> (L/kg BC)	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>
Acenaphthene	55.85	3.944	5.59	91	288889	0.1013	0.002	47	15334	0.4831	0.009	190	13971	0.2746	0.005	200	17021	0.2145	0.004	160	5024	0.0478	0.001
Acenaphthylene	306.9	3.168	5.16	190	603175	0.5690	0.002	47	15334	1.5171	0.005	190	13971	0.8073	0.003	200	17021	0.6075	0.002	160	5024	0.1332	0.000
Anthracene	20.73	4.457	5.88	420	1333333	0.2397	0.012	47	15334	0.2109	0.010	190	13971	0.1277	0.006	200	17021	0.1037	0.005	280	8791	0.0412	0.002
Benzo(A)Anthracene	2.227	5.577	6.5	1600	5079365	0.2190	0.098	68	22186	0.0407	0.018	320	23529	0.0343	0.015	330	28085	0.0314	0.014	460	14443	0.0133	0.006
Benzo(B)Fluoranthene	0.6774	6.16	6.82	2000	6349206	0.1310	0.193	79	25775	0.0147	0.022	340	25000	0.0124	0.018	340	28936	0.0120	0.018	470	14757	0.0054	0.008
Benzo(K)Fluoranthene	0.6415	6.184	6.83	820	2603175	0.0525	0.082	47	15334	0.0083	0.013	190	13971	0.0066	0.010	200	17021	0.0068	0.011	170	5338	0.0019	0.003
Benzo(A)Pyrene	0.9573	6.003	6.73	1400	4444444	0.1129	0.118	81	26427	0.0208	0.022	240	17647	0.0118	0.012	260	22128	0.0122	0.013	290	9105	0.0043	0.005
Chrysene	2.042	5.616	6.52	2200	6984127	0.2876	0.141	150	48940	0.0832	0.041	420	30882	0.0421	0.021	610	51915	0.0546	0.027	750	23548	0.0205	0.010
Dibenz(A,H)Anthracene	0.2825	6.599	7.06	220	698413	0.0083	0.029	47	15334	0.0035	0.012	190	13971	0.0029	0.010	200	17021	0.0032	0.011	160	5024	0.0009	0.003
Fluoranthene	7.109	4.998	6.18	3200	10158730	0.9152	0.129	56	18271	0.0988	0.014	700	51471	0.2010	0.028	500	42553	0.1176	0.017	1000	31397	0.0686	0.010
Fluorene	39.3	4.137	5.7	110	349206	0.0950	0.002	47	15334	0.3555	0.009	190	13971	0.2065	0.005	200	17021	0.1634	0.004	160	5024	0.0366	0.001
Indeno (1,2,3-CD) Pyrene	0.275	6.608	7.07	640	2031746	0.0236	0.086	47	15334	0.0034	0.012	190	13971	0.0028	0.010	200	17021	0.0031	0.011	170	5338	0.0009	0.003
Naphthalene	193.55	3.299	5.24	130	412698	0.3238	0.002	130	42414	3.4317	0.018	190	13971	0.6652	0.003	200	17021	0.5026	0.003	550	17268	0.3794	0.002
Phenanthrene	19.13	4.494	5.9	900	2857143	0.4905	0.026	63	20555	0.2661	0.014	370	27206	0.2353	0.012	270	22979	0.1330	0.007	680	21350	0.0951	0.005
Pyrene	10.11	4.839	6.09	3300	10476190	1.1612	0.115	95	30995	0.2228	0.022	770	56618	0.2866	0.028	630	53617	0.1885	0.019	1100	34537	0.0951	0.009
				17881		$\Sigma$ IWTU <sub>FCV,15</sub> =	1.036	1101		$\Sigma$ IWTU <sub>FCV,15</sub> =	0.240	4870		$\Sigma$ IWTU <sub>FCV,15</sub> =	0.189	4740		$\Sigma$ IWTU <sub>FCV,15</sub> =	0.164	6770		$\Sigma$ IWTU <sub>FCV,15</sub> =	0.068
						$\Sigma$ IWTU <sub>FCV,Tot</sub> =	2.849			$\Sigma$ IWTU <sub>FCV,Tot</sub> =	0.661			$\Sigma$ IWTU <sub>FCV,Tot</sub> =	0.520			$\Sigma$ IWTU <sub>FCV,Tot</sub> =	0.452			$\Sigma$ IWTU <sub>FCV,Tot</sub> =	0.186

Analyte	Station: Sampling Depth: Sampling Date:			DER2-15-SD 0.00-0.50 4/23/2010				DER2-16-SD 0.00-0.50 4/20/2010				DER2-17-SD 0.00-0.50 4/27/2010				DER2-18-SD 0.00-0.50 4/27/2010				DER3-10 0.00-0.50 11/18/2010			
				$f_{OC} = 0.01505$ $f_{BC} = 0.00234$ $f_{NSOC} = 0.01271$				$f_{OC} = 0.0203$ $f_{BC} = 0.002005$ $f_{NSOC} = 0.018295$				$f_{OC} = 0.0127$ $f_{BC} = 0.00199$ $f_{NSOC} = 0.01071$				$f_{OC} = 0.0218$ $f_{BC} = 0.009$ $f_{NSOC} = 0.0128$				$f_{OC} = 0.01105$ $f_{BC} = 0.00217$ $f_{NSOC} = 0.00888$			
	IWTU <sub>FCVI</sub> ( $\mu$ g/L)	log K <sub>OC</sub> (L/kg NSOC)	log K <sub>BC</sub> (L/kg BC)	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>
Acenaphthene	55.85	3.944	5.59	230	15282	0.2250	0.004	83	4089	0.0882	0.002	130	10236	0.1497	0.003	290	13303	0.0802	0.001	150	13575	0.1626	0.003
Acenaphthylene	306.9	3.168	5.16	230	15282	0.6444	0.002	83	4089	0.2620	0.001	130	10236	0.4285	0.001	170	7798	0.1288	0.000	150	13575	0.4591	0.001
Anthracene	20.73	4.457	5.88	230	15282	0.1075	0.005	83	4089	0.0406	0.002	130	10236	0.0716	0.003	170	7798	0.0236	0.001	150	13575	0.0789	0.004
Benzo(A)Anthracene	2.227	5.577	6.5	230	15282	0.0189	0.008	96	4729	0.0072	0.003	130	10236	0.0126	0.006	210	9633	0.0063	0.003	220	19910	0.0215	0.010
Benzo(B)Fluoranthene	0.6774	6.16	6.82	270	17940	0.0080	0.012	140	6897	0.0035	0.005	130	10236	0.0045	0.007	200	9174	0.0026	0.004	220	19910	0.0081	0.012
Benzo(K)Fluoranthene	0.6415	6.184	6.83	230	15282	0.0065	0.010	83	4089	0.0020	0.003	130	10236	0.0044	0.007	170	7798	0.0021	0.003	150	13575	0.0053	0.008
Benzo(A)Pyrene	0.9573	6.003	6.73	230	15282	0.0091	0.009	98	4828	0.0034	0.004	130	10236	0.0061	0.006	170	7798	0.0028	0.003	210	19005	0.0102	0.011
Chrysene	2.042	5.616	6.52	250	16611	0.0192	0.009	150	7389	0.0106	0.005	130	10236	0.0118	0.006	310	14220	0.0088	0.004	220	19910	0.0203	0.010
Dibenz(A,H)Anthracene	0.2825	6.599	7.06	230	15282	0.0030	0.011	83	4089	0.0009	0.003	130	10236	0.0020	0.007	170	7798	0.0011	0.004	150	13575	0.0025	0.009
Fluoranthene	7.109	4.998	6.18	320	21262	0.0666	0.009	170	8374	0.0350	0.005	140	11024	0.0343	0.005	370	16972	0.0248	0.003	210	19005	0.0504	0.007
Fluorene	39.3	4.137	5.7	230	15282	0.1707	0.004	83	4089	0.0661	0.002	130	10236	0.1136	0.003	210	9633	0.0448	0.001	150	13575	0.1240	0.003
Indeno (1,2,3-CD) Pyrene	0.275	6.608	7.07	230	15282	0.0029	0.011	83	4089	0.0008	0.003	130	10236	0.0019	0.007	170	7798	0.0011	0.004	150	13575	0.0024	0.009
Naphthalene	193.55	3.299	5.24	230	15282	0.5325	0.003	150	7389	0.3898	0.002	180	14173	0.4903	0.003	670	30734	0.4215	0.002	150	13575	0.3800	0.002
Phenanthrene	19.13	4.494	5.9	260	17276	0.1153	0.006	130	6404	0.0601	0.003	130	10236	0.0679	0.004	370	16972	0.0490	0.003	150	13575	0.0750	0.004
Pyrene	10.11	4.839	6.09	430	28571	0.1145	0.011	190	9360	0.0509	0.005	160	12598	0.0502	0.005	470	21560	0.0393	0.004	230	20814	0.0701	0.007
				4060		$\Sigma$ IWTU <sub>FCV,15</sub> =	0.116	1788		$\Sigma$ IWTU <sub>FCV,15</sub> =	0.048	2170		$\Sigma$ IWTU <sub>FCV,15</sub> =	0.072	4290		$\Sigma$ IWTU <sub>FCV,15</sub> =	0.041	2810		$\Sigma$ IWTU <sub>FCV,15</sub> =	0.099
						$\Sigma$ IWTU <sub>FCV,Tot</sub> =	0.318			$\Sigma$ IWTU <sub>FCV,Tot</sub> =	0.131			$\Sigma$ IWTU <sub>FCV,Tot</sub> =	0.197			$\Sigma$ IWTU <sub>FCV,Tot</sub> =	0.113			$\Sigma$ IWTU <sub>FCV,Tot</sub> =	0.273

**Table D11**  
**Two-Carbon EqP Model PAH  $\Sigma$ IWTU Calculations - Fluoroproducts Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Station: Sampling Depth: Sampling Date:			DER2-20-SD 0.00-0.50 5/4/2010				DER3-08 0.00-0.50 11/16/2010				DER3-09 0.00-0.50 11/16/2010			
				$f_{OC} = 0.01345$ $f_{BC} = 0.003585$ $f_{NSOC} = 0.009865$				$f_{OC} = 0.0184$ $f_{BC} = 0.0046$ $f_{NSOC} = 0.0138$				$f_{OC} = 0.00883$ $f_{BC} = 0.00522$ $f_{NSOC} = 0.00361$			
	IWTU <sub>FCVI</sub> ( $\mu$ g/L)	log K <sub>OC</sub> (L/kg NSOC)	log K <sub>BC</sub> (L/kg BC)	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAH</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAH</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAH</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>
Acenaphthene	55.85	3.944	5.59	730	54275	0.4928	0.009	83	4511	0.0434	0.001	56	6342	0.0272	0.000
Acenaphthylene	306.9	3.168	5.16	140	10409	0.2628	0.001	83	4511	0.1211	0.000	64	7248	0.0842	0.000
Anthracene	20.73	4.457	5.88	1900	141264	0.6329	0.031	83	4511	0.0214	0.001	140	15855	0.0345	0.002
Benzo(A)Anthracene	2.227	5.577	6.5	5300	394052	0.3519	0.158	93	5054	0.0047	0.002	510	57758	0.0285	0.013
Benzo(B)Fluoranthene	0.6774	6.16	6.82	4500	334572	0.1186	0.175	120	6522	0.0024	0.004	570	64553	0.0144	0.021
Benzo(K)Fluoranthene	0.6415	6.184	6.83	1700	126394	0.0432	0.067	83	4511	0.0016	0.002	270	30578	0.0066	0.010
Benzo(A)Pyrene	0.9573	6.003	6.73	4000	297398	0.1371	0.143	85	4620	0.0022	0.002	450	50963	0.0142	0.015
Chrysene	2.042	5.616	6.52	9500	706320	0.5958	0.292	92	5000	0.0044	0.002	570	64553	0.0304	0.015
Dibenz(A,H)Anthracene	0.2825	6.599	7.06	660	49071	0.0082	0.029	83	4511	0.0008	0.003	78	8834	0.0011	0.004
Fluoranthene	7.109	4.998	6.18	6300	468401	0.9831	0.138	150	8152	0.0180	0.003	620	70215	0.0751	0.011
Fluorene	39.3	4.137	5.7	640	47584	0.3313	0.008	83	4511	0.0333	0.001	56	6342	0.0210	0.001
Indeno (1,2,3-CD) Pyrene	0.275	6.608	7.07	1700	126394	0.0207	0.075	83	4511	0.0008	0.003	230	26048	0.0030	0.011
Naphthalene	193.55	3.299	5.24	1100	81784	1.7117	0.009	160	8696	0.1935	0.001	140	15855	0.1531	0.001
Phenanthrene	19.13	4.494	5.9	4500	334572	1.4262	0.075	100	5435	0.0245	0.001	260	29445	0.0610	0.003
Pyrene	10.11	4.839	6.09	6700	498141	1.3159	0.130	190	10326	0.0287	0.003	800	90600	0.1199	0.012
				51170		$\Sigma$ IWTU <sub>FCV,15</sub> =	1.340	1654		$\Sigma$ IWTU <sub>FCV,15</sub> =	0.029	5064		$\Sigma$ IWTU <sub>FCV,15</sub> =	0.118
						$\Sigma$ IWTU <sub>FCV,Tot</sub> =	3.686			$\Sigma$ IWTU <sub>FCV,Tot</sub> =	0.079			$\Sigma$ IWTU <sub>FCV,Tot</sub> =	0.325

Analyte	Station: Sampling Depth: Sampling Date:			DER3-11 0.00-0.50 11/18/2010				DER3-12 0.00-0.50 11/18/2010			
				$f_{OC} = 0.0131$ $f_{BC} = 0.00242$ $f_{NSOC} = 0.01068$				$f_{OC} = 0.00842$ $f_{BC} = 0.00292$ $f_{NSOC} = 0.0055$			
	IWTU <sub>FCVI</sub> ( $\mu$ g/L)	log K <sub>OC</sub> (L/kg NSOC)	log K <sub>BC</sub> (L/kg BC)	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAH</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAH</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>
Acenaphthene	55.85	3.944	5.59	190	14504	0.1835	0.003	180	21378	0.1520	0.003
Acenaphthylene	306.9	3.168	5.16	190	14504	0.5198	0.002	180	21378	0.4184	0.001
Anthracene	20.73	4.457	5.88	190	14504	0.0887	0.004	180	21378	0.0759	0.004
Benzo(A)Anthracene	2.227	5.577	6.5	190	14504	0.0163	0.007	290	34442	0.0256	0.012
Benzo(B)Fluoranthene	0.6774	6.16	6.82	190	14504	0.0060	0.009	360	42755	0.0132	0.020
Benzo(K)Fluoranthene	0.6415	6.184	6.83	190	14504	0.0058	0.009	180	21378	0.0064	0.010
Benzo(A)Pyrene	0.9573	6.003	6.73	190	14504	0.0080	0.008	330	39192	0.0156	0.016
Chrysene	2.042	5.616	6.52	190	14504	0.0153	0.007	280	33254	0.0234	0.011
Dibenz(A,H)Anthracene	0.2825	6.599	7.06	190	14504	0.0027	0.010	180	21378	0.0033	0.012
Fluoranthene	7.109	4.998	6.18	190	14504	0.0402	0.006	390	46318	0.0785	0.011
Fluorene	39.3	4.137	5.7	190	14504	0.1398	0.004	180	21378	0.1170	0.003
Indeno (1,2,3-CD) Pyrene	0.275	6.608	7.07	190	14504	0.0026	0.010	180	21378	0.0032	0.012
Naphthalene	193.55	3.299	5.24	190	14504	0.4301	0.002	180	21378	0.3472	0.002
Phenanthrene	19.13	4.494	5.9	190	14504	0.0842	0.004	210	24941	0.0843	0.004
Pyrene	10.11	4.839	6.09	200	15267	0.0538	0.005	420	49881	0.1057	0.010
				3050		$\Sigma$ IWTU <sub>FCV,15</sub> =	0.091	3900		$\Sigma$ IWTU <sub>FCV,15</sub> =	0.130
						$\Sigma$ IWTU <sub>FCV,Tot</sub> =	0.250			$\Sigma$ IWTU <sub>FCV,Tot</sub> =	0.358

**Notes:**

- C<sub>OC,PAH,FCVI</sub>: Critical concentration of a PAH in sediment that is related to the final chronic value (FCV) derived following the EqP method
- C<sub>OC,PAH,Mix</sub>: Concentration in sediment organic carbon that is in equilibrium with the interstitial water at the aqueous solubility
- $\Sigma$ IWTU<sub>FCV,15</sub>: Sum of toxic units bases on 15 PAH compounds analyzed in the sample
- $\Sigma$ IWTU<sub>FCV,TOT</sub>: Estimated sum of toxic units of total PAH mixture based on 34 PAH compounds; an UF of 2.75 is applied to  $\Sigma$ IWTU<sub>FCV,15</sub> to estimate  $\Sigma$ IWTU<sub>FCV,TOT</sub>
- Concentration of PAH compounds below the limit of detection were conservatively estimated at the detection limit in IWTU calculations
- C<sub>dw</sub>: Concentration of PAH compound on a dry weight basis ( $\mu$ g/g dw)
- C<sub>OC</sub>: Concentration of PAH compound normalized to sample-specific fraction of organic carbon ( $\mu$ g/g organic carbon)
- C<sub>d,PAH</sub>: Estimated concentration of freely dissolved PAH compound in pore water based on the two-carbon EqP model
- f<sub>OC</sub>: Sample-specific fraction of total organic carbon
- f<sub>BC</sub>: Sample-specific fraction of black carbon
- f<sub>NSOC</sub>: Sample-specific fraction of natural sedimentary organic carbon; estimated as the difference between f<sub>OC</sub> and f<sub>BC</sub>
- IWTU<sub>FCVI</sub>: Final chronic value (FCV) of PAH compound protective of chronic aqueous exposure to benthic organisms
- K<sub>OC</sub>: Organic carbon-water partitioning coefficient
- K<sub>BC</sub>: Black carbon-water partitioning coefficient

**Table D12**  
**Two-Carbon EqP Model PAH  $\Sigma$ IWTU Calculations - SWMU 5/Henby Creek Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Station: Sampling Depth: Sampling Date:			DER1-16 0.00-0.50 9/24/2009				DER1-17 0.00-0.50 9/25/2009				DER1-18 0.00-0.50 9/22/2009				DER1-19 0.00-0.50 9/25/2009				DER3-13 0.00-0.50 11/18/2010			
				$f_{OC} = 0.0054$ $f_{BC} = 0.0007$ $f_{NSOC} = 0.0047$				$f_{OC} = 0.0027$ $f_{BC} = 0.0006$ $f_{NSOC} = 0.0021$				$f_{OC} = 0.0010$ $f_{BC} = 0.0002$ $f_{NSOC} = 0.0008$				$f_{OC} = 0.0009$ $f_{BC} = 0.0001$ $f_{NSOC} = 0.0008$				$f_{OC} = 0.0114$ $f_{BC} = 0.0022$ $f_{NSOC} = 0.0092$			
	IWTU <sub>FCVI</sub> ( $\mu$ g/L)	log K <sub>OC</sub> (L/kg NSOC)	log K <sub>BC</sub> (L/kg BC)	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>
Acenaphthene	55.85	3.944	5.59	50	9311	0.1677	0.003	47	17343	0.1865	0.003	41	40000	0.4930	0.009	43	48315	0.7768	0.014	250	22026	0.2703	0.005
Acenaphthylene	306.9	3.168	5.16	50	9311	0.4886	0.002	47	17343	0.5232	0.002	41	40000	1.3942	0.005	43	48315	2.2402	0.007	250	22026	0.7641	0.002
Anthracene	20.73	4.457	5.88	50	9311	0.0787	0.004	47	17343	0.0912	0.004	41	40000	0.2388	0.012	43	48315	0.3684	0.018	250	22026	0.1310	0.006
Benzo(A)Anthracene	2.227	5.577	6.5	77	14339	0.0199	0.009	150	55351	0.0557	0.025	87	84878	0.0935	0.042	110	123596	0.1608	0.072	360	31718	0.0349	0.016
Benzo(B)Fluoranthene	0.6774	6.16	6.82	66	12291	0.0059	0.009	170	62731	0.0242	0.036	93	90732	0.0374	0.055	93	104494	0.0481	0.071	390	34361	0.0141	0.021
Benzo(K)Fluoranthene	0.6415	6.184	6.83	50	9311	0.0043	0.007	57	21033	0.0078	0.012	42	40976	0.0162	0.025	52	58427	0.0258	0.040	250	22026	0.0087	0.014
Benzo(A)Pyrene	0.9573	6.003	6.73	64	11918	0.0077	0.008	150	55351	0.0281	0.029	76	74146	0.0404	0.042	96	107865	0.0666	0.070	260	22907	0.0124	0.013
Chrysene	2.042	5.616	6.52	200	37244	0.0484	0.024	200	73801	0.0700	0.034	140	136585	0.1416	0.069	110	123596	0.1507	0.074	1500	132159	0.1366	0.067
Dibenz(A,H)Anthracene	0.2825	6.599	7.06	50	9311	0.0019	0.007	47	17343	0.0031	0.011	41	40000	0.0074	0.026	43	48315	0.0096	0.034	250	22026	0.0041	0.014
Fluoranthene	7.109	4.998	6.18	75	13966	0.0511	0.007	150	55351	0.1341	0.019	100	97561	0.2647	0.037	180	202247	0.6784	0.095	300	26432	0.0715	0.010
Fluorene	39.3	4.137	5.7	50	9311	0.1265	0.003	47	17343	0.1426	0.004	41	40000	0.3758	0.010	43	48315	0.5879	0.015	250	22026	0.2060	0.005
Indeno (1,2,3-CD) Pyrene	0.275	6.608	7.07	50	9311	0.0019	0.007	75	27675	0.0048	0.017	43	41951	0.0076	0.028	52	58427	0.0114	0.041	250	22026	0.0040	0.014
Naphthalene	193.55	3.299	5.24	50	9311	0.4030	0.002	47	17343	0.4333	0.002	41	40000	1.1536	0.006	43	48315	1.8498	0.010	250	22026	0.6323	0.003
Phenanthrene	19.13	4.494	5.9	53	9870	0.0790	0.004	110	40590	0.2028	0.011	57	55610	0.3153	0.016	120	134831	0.9744	0.051	250	22026	0.1244	0.007
Pyrene	10.11	4.839	6.09	99	18436	0.0871	0.009	270	99631	0.3055	0.030	130	126829	0.4374	0.043	200	224719	0.9681	0.096	430	37885	0.1302	0.013
				1084		$\Sigma$ IWTU <sub>FCVI,15</sub> =	0.103	1707		$\Sigma$ IWTU <sub>FCVI,15</sub> =	0.240	1061		$\Sigma$ IWTU <sub>FCVI,15</sub> =	0.425	1326		$\Sigma$ IWTU <sub>FCVI,15</sub> =	0.708	5740		$\Sigma$ IWTU <sub>FCVI,15</sub> =	0.211
						$\Sigma$ IWTU <sub>FCVI,Tot</sub> =	0.284			$\Sigma$ IWTU <sub>FCVI,Tot</sub> =	0.660			$\Sigma$ IWTU <sub>FCVI,Tot</sub> =	1.170			$\Sigma$ IWTU <sub>FCVI,Tot</sub> =	1.947			$\Sigma$ IWTU <sub>FCVI,Tot</sub> =	0.579

Analyte	Station: Sampling Depth: Sampling Date:			DER2-22-SD 0.00-0.50 5/4/2010				DER2-23-SD 0.00-0.50 4/22/2010				DER2-24-SD 0.00-0.50 4/22/2010				DER2-25-SD 0.00-0.50 5/4/2010				DER3-15 0.00-0.50 11/18/2010			
				$f_{OC} = 0.0449$ $f_{BC} = 0.0058$ $f_{NSOC} = 0.0390$				$f_{OC} = 0.0210$ $f_{BC} = 0.0032$ $f_{NSOC} = 0.0178$				$f_{OC} = 0.0023$ $f_{BC} = 0.0013$ $f_{NSOC} = 0.0010$				$f_{OC} = 0.0025$ $f_{BC} = 0.0004$ $f_{NSOC} = 0.0021$				$f_{OC} = 0.0129$ $f_{BC} = 0.0016$ $f_{NSOC} = 0.0113$			
	IWTU <sub>FCVI</sub> ( $\mu$ g/L)	log K <sub>OC</sub> (L/kg NSOC)	log K <sub>BC</sub> (L/kg BC)	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>
Acenaphthene	55.85	3.944	5.59	130	2899	0.0499	0.001	460	21905	0.3282	0.006	43	18415	0.0820	0.001	46	18363	0.2860	0.005	200	15564	0.2773	0.005
Acenaphthylene	306.9	3.168	5.16	130	2899	0.1447	0.000	180	8571	0.3683	0.001	43	18415	0.2228	0.001	46	18363	0.8228	0.003	200	15564	0.8070	0.003
Anthracene	20.73	4.457	5.88	130	2899	0.0235	0.001	2700	128571	0.9192	0.044	43	18415	0.0416	0.002	150	59880	0.4436	0.021	200	15564	0.1302	0.006
Benzo(A)Anthracene	2.227	5.577	6.5	130	2899	0.0039	0.002	4600	219048	0.2732	0.123	43	18415	0.0094	0.004	170	67864	0.0866	0.039	210	16342	0.0226	0.010
Benzo(B)Fluoranthene	0.6774	6.16	6.82	130	2899	0.0014	0.002	2400	114286	0.0512	0.076	54	23126	0.0053	0.008	160	63872	0.0291	0.043	270	21012	0.0101	0.015
Benzo(K)Fluoranthene	0.6415	6.184	6.83	130	2899	0.0013	0.002	1100	52381	0.0225	0.035	43	18415	0.0041	0.006	49	19561	0.0085	0.013	200	15564	0.0071	0.011
Benzo(A)Pyrene	0.9573	6.003	6.73	130	2899	0.0018	0.002	3100	147619	0.0883	0.092	43	18415	0.0053	0.006	130	51896	0.0316	0.033	200	15564	0.0100	0.010
Chrysene	2.042	5.616	6.52	130	2899	0.0037	0.002	7400	352381	0.4123	0.202	57	24411	0.0119	0.006	240	95808	0.1147	0.056	200	15564	0.0201	0.010
Dibenz(A,H)Anthracene	0.2825	6.599	7.06	130	2899	0.0006	0.002	180	8571	0.0017	0.006	43	18415	0.0022	0.008	46	18363	0.0036	0.013	200	15564	0.0032	0.011
Fluoranthene	7.109	4.998	6.18	130	2899	0.0102	0.001	4000	190476	0.6047	0.085	43	18415	0.0204	0.003	420	167665	0.5487	0.077	340	26459	0.0960	0.014
Fluorene	39.3	4.137	5.7	130	2899	0.0377	0.001	1000	47619	0.5412	0.014	43	18415	0.0634	0.002	46	18363	0.2167	0.006	200	15564	0.2092	0.005
Indeno (1,2,3-CD) Pyrene	0.275	6.608	7.07	130	2899	0.0006	0.002	940	44762	0.0086	0.031	43	18415	0.0022	0.008	56	22355	0.0043	0.016	200	15564	0.0031	0.011
Naphthalene	193.55	3.299	5.24	130	2899	0.1194	0.001	1900	90476	3.2120	0.017	43	18415	0.1851	0.001	150	59880	2.2160	0.011	200	15564	0.6657	0.003
Phenanthrene	19.13	4.494	5.9	130	2899	0.0223	0.001	7600	361905	2.4540	0.128	43	18415	0.0397	0.002	89	35529	0.2495	0.013	200	15564	0.1233	0.006
Pyrene	10.11	4.839	6.09	140	3122	0.0142	0.001	7300	347619	1.4132	0.140	54	23126	0.0318	0.003	500	199601	0.8379	0.083	330	25681	0.1202	0.012
				2090		$\Sigma$ IWTU <sub>FCVI,15</sub> =	0.022	46060		$\Sigma$ IWTU <sub>FCVI,15</sub> =	0.999	724		$\Sigma$ IWTU <sub>FCVI,15</sub> =	0.060	2361		$\Sigma$ IWTU <sub>FCVI,15</sub> =	0.432	3560		$\Sigma$ IWTU <sub>FCVI,15</sub> =	0.133
						$\Sigma$ IWTU <sub>FCVI,Tot</sub> =	0.060	46060		$\Sigma$ IWTU <sub>FCVI,Tot</sub> =	2.749			$\Sigma$ IWTU <sub>FCVI,Tot</sub> =	0.166			$\Sigma$ IWTU <sub>FCVI,Tot</sub> =	1.188			$\Sigma$ IWTU <sub>FCVI,Tot</sub> =	0.367

**Table D12**  
**Two-Carbon EqP Model PAH  $\Sigma$ IWTU Calculations - SWMU 5/Henby Creek Area**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Station: DER3-14			0.00-0.50			
	Sampling Depth: 0.00-0.50			11/18/2010			
				$f_{OC} = 0.0077$ $f_{BC} = 0.0022$ $f_{NSOC} = 0.0055$			
	IWTU <sub>FCVI</sub> ( $\mu\text{g/L}$ )	log K <sub>OC</sub> (L/kg NSOC)	log K <sub>BC</sub> (L/kg BC)	C <sub>dw</sub> ( $\mu\text{g/kg}_{dw}$ )	C <sub>OC</sub> ( $\mu\text{g/kg}_{OC}$ )	C <sub>d, PAH</sub> ( $\mu\text{g/L}$ )	IWTU <sub>FCVI</sub>
Acenaphthene	55.85	3.944	5.59	160	20779	0.1740	0.003
Acenaphthylene	306.9	3.168	5.16	160	20779	0.4822	0.002
Anthracene	20.73	4.457	5.88	160	20779	0.0862	0.004
Benzo(A)Anthracene	2.227	5.577	6.5	210	27273	0.0230	0.010
Benzo(B)Fluoranthene	0.6774	6.16	6.82	360	46753	0.0159	0.023
Benzo(K)Fluoranthene	0.6415	6.184	6.83	160	20779	0.0068	0.011
Benzo(A)Pyrene	0.9573	6.003	6.73	300	38961	0.0171	0.018
Chrysene	2.042	5.616	6.52	250	32468	0.0258	0.013
Dibenz(A,H)Anthracene	0.2825	6.599	7.06	160	20779	0.0034	0.012
Fluoranthene	7.109	4.998	6.18	270	35065	0.0686	0.010
Fluorene	39.3	4.137	5.7	160	20779	0.1336	0.003
Indeno (1,2,3-CD) Pyrene	0.275	6.608	7.07	180	23377	0.0037	0.014
Naphthalene	193.55	3.299	5.24	160	20779	0.3999	0.002
Phenanthrene	19.13	4.494	5.9	160	20779	0.0821	0.004
Pyrene	10.11	4.839	6.09	310	40260	0.0990	0.010
				3360		$\Sigma$ IWTU <sub>FCVI,15</sub>	0.138
						$\Sigma$ IWTU <sub>FCVI,Tot</sub>	0.381

Analyte	Station: DER3-16			0.00-0.50			
	Sampling Depth: 0.00-0.50			11/16/2010			
				$f_{OC} = 0.0123$ $f_{BC} = 0.0024$ $f_{NSOC} = 0.0099$			
	IWTU <sub>FCVI</sub> ( $\mu\text{g/L}$ )	log K <sub>OC</sub> (L/kg NSOC)	log K <sub>BC</sub> (L/kg BC)	C <sub>dw</sub> ( $\mu\text{g/kg}_{dw}$ )	C <sub>OC</sub> ( $\mu\text{g/kg}_{OC}$ )	C <sub>d, PAH</sub> ( $\mu\text{g/L}$ )	IWTU <sub>FCVI</sub>
Acenaphthene	55.85	3.944	5.59	63	5143	0.0622	0.001
Acenaphthylene	306.9	3.168	5.16	63	5143	0.1757	0.001
Anthracene	20.73	4.457	5.88	63	5143	0.0302	0.001
Benzo(A)Anthracene	2.227	5.577	6.5	70	5714	0.0062	0.003
Benzo(B)Fluoranthene	0.6774	6.16	6.82	120	9796	0.0040	0.006
Benzo(K)Fluoranthene	0.6415	6.184	6.83	63	5143	0.0020	0.003
Benzo(A)Pyrene	0.9573	6.003	6.73	73	5959	0.0032	0.003
Chrysene	2.042	5.616	6.52	100	8163	0.0084	0.004
Dibenz(A,H)Anthracene	0.2825	6.599	7.06	63	5143	0.0009	0.003
Fluoranthene	7.109	4.998	6.18	120	9796	0.0262	0.004
Fluorene	39.3	4.137	5.7	63	5143	0.0474	0.001
Indeno (1,2,3-CD) Pyrene	0.275	6.608	7.07	63	5143	0.0009	0.003
Naphthalene	193.55	3.299	5.24	100	8163	0.2308	0.001
Phenanthrene	19.13	4.494	5.9	91	7429	0.0414	0.002
Pyrene	10.11	4.839	6.09	160	13061	0.0443	0.004
				1342		$\Sigma$ IWTU <sub>FCVI,15</sub>	0.042
						$\Sigma$ IWTU <sub>FCVI,Tot</sub>	0.115

**Notes:**

- C<sub>OC,PAH,FCVI</sub>: Critical concentration of a PAH in sediment that is related to the final chronic value (FCV) derived following the EqP method
- C<sub>OC,PAH,Max</sub>: Concentration in sediment organic carbon that is in equilibrium with the interstitial water at the aqueous solubility
- $\Sigma$ IWTU<sub>FCVI,15</sub>: Sum of toxic units based on 15 PAH compounds analyzed in the sample
- $\Sigma$ IWTU<sub>FCVI,TOT</sub>: Estimated sum of toxic units of total PAH mixture based on 34 PAH compounds; an UF of 2.75 is applied to  $\Sigma$ IWTU<sub>FCVI,15</sub> to estimate  $\Sigma$ IWTU<sub>FCVI,TOT</sub>
- C<sub>dw</sub>: Concentration of PAH compound on a dry weight basis ( $\mu\text{g/g}_{dw}$ )
- C<sub>OC</sub>: Concentration of PAH compound normalized to sample-specific fraction of organic carbon ( $\mu\text{g/g}_{OC}$ )
- C<sub>d,PAH</sub>: Estimated concentration of freely dissolved PAH compound in pore water based on the two-carbon EqP model
- f<sub>OC</sub>: Sample-specific fraction of total organic carbon
- f<sub>BC</sub>: Sample-specific fraction of black carbon
- f<sub>NSOC</sub>: Sample-specific fraction of natural sedimentary organic carbon; estimated as the difference between f<sub>OC</sub> and f<sub>BC</sub>
- IWTU<sub>FCVI</sub>: Final chronic value (FCV) of PAH compound protective of chronic aqueous exposure to benthic organisms
- K<sub>OC</sub>: Organic carbon-water partitioning coefficient
- K<sub>BC</sub>: Black carbon-water partitioning coefficient

**Table D13**  
**Two-Carbon EqP Model PAH  $\Sigma$ IWTU Calculations - Carneys Point Zone**  
**Delaware River Screening-Level Ecological Risk Assessment**  
**Chemours Chambers Works**  
**Deepwater, New Jersey**

Analyte	Station: Sampling Depth: Sampling Date:			DER1-21 0.00-0.50 9/25/2009				DER1-23 0.00-0.50 9/25/2009				DER1-28 0.00-0.50 9/22/2009				DER1-29 0.00-0.50 9/22/2009			
				$f_{OC} = 0.004825$ $f_{BC} = 0.00147$ $f_{NSOC} = 0.003355$				$f_{OC} = 0.00409$ $f_{BC} = 0.00091$ $f_{NSOC} = 0.00318$				$f_{OC} = 0.007115$ $f_{BC} = 0.004925$ $f_{NSOC} = 0.00219$				$f_{OC} = 0.00196$ $f_{BC} = 0.000475$ $f_{NSOC} = 0.001485$			
	IWTU <sub>FCVI</sub> ( $\mu$ g/L)	log K <sub>OC</sub> (L/kg NSOC)	log K <sub>BC</sub> (L/kg BC)	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>
Acenaphthene	55.85	3.944	5.59	56	11606	0.0931	0.002	46	11247	0.1204	0.002	65	9136	0.0336	0.001	46	23469	0.2325	0.004
Acenaphthylene	306.9	3.168	5.16	56	11606	0.2576	0.001	46	11247	0.3377	0.001	65	9136	0.0909	0.000	46	23469	0.6493	0.002
Anthracene	20.73	4.457	5.88	56	11606	0.0462	0.002	46	11247	0.0589	0.003	65	9136	0.0171	0.001	46	23469	0.1142	0.006
Benzo(A)Anthracene	2.227	5.577	6.5	56	11606	0.0095	0.004	46	11247	0.0113	0.005	120	16866	0.0073	0.003	99	50510	0.0480	0.022
Benzo(B)Fluoranthene	0.6774	6.16	6.82	56	11606	0.0038	0.006	46	11247	0.0043	0.006	190	26704	0.0053	0.008	110	56122	0.0208	0.031
Benzo(K)Fluoranthene	0.6415	6.184	6.83	56	11606	0.0037	0.006	46	11247	0.0042	0.007	86	12087	0.0023	0.004	51	26020	0.0093	0.015
Benzo(A)Pyrene	0.9573	6.003	6.73	56	11606	0.0050	0.005	46	11247	0.0057	0.006	150	21082	0.0052	0.005	96	48980	0.0237	0.025
Chrysene	2.042	5.616	6.52	56	11606	0.0090	0.004	46	11247	0.0106	0.005	160	22488	0.0093	0.005	97	49490	0.0444	0.022
Dibenz(A,H)Anthracene	0.2825	6.599	7.06	56	11606	0.0019	0.007	46	11247	0.0020	0.007	65	9136	0.0010	0.004	46	23469	0.0041	0.014
Fluoranthene	7.109	4.998	6.18	56	11606	0.0219	0.003	46	11247	0.0272	0.004	230	32326	0.0300	0.004	110	56122	0.1269	0.018
Fluorene	39.3	4.137	5.7	56	11606	0.0715	0.002	46	11247	0.0921	0.002	65	9136	0.0260	0.001	46	23469	0.1780	0.005
Indeno (1,2,3-CD) Pyrene	0.275	6.608	7.07	56	11606	0.0018	0.007	46	11247	0.0020	0.007	77	10822	0.0012	0.004	46	23469	0.0040	0.014
Naphthalene	193.55	3.299	5.24	56	11606	0.2136	0.001	46	11247	0.2797	0.001	65	9136	0.0756	0.000	46	23469	0.5380	0.003
Phenanthrene	19.13	4.494	5.9	56	11606	0.0440	0.002	46	11247	0.0560	0.003	140	19677	0.0352	0.002	61	31122	0.1440	0.008
Pyrene	10.11	4.839	6.09	56	11606	0.0275	0.003	61	14914	0.0456	0.005	270	37948	0.0435	0.004	120	61224	0.1747	0.017
				896		$\Sigma$ IWTU <sub>FCV,15</sub>	0.054	751		$\Sigma$ IWTU <sub>FCV,15</sub>	0.064	1905		$\Sigma$ IWTU <sub>FCV,15</sub>	0.046	1119		$\Sigma$ IWTU <sub>FCV,15</sub>	0.204
						$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.149			$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.177			$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.126			$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.560

Analyte	Station: Sampling Depth: Sampling Date:			DER2-29-SD 0.00-0.50 4/21/2010				DER3-17 0.00-0.50 11/15/2010				DER1-12 0.00-0.50 9/24/2009				DER1-13 0.00-0.50 9/22/2009			
				$f_{OC} = 0.01855$ $f_{BC} = 0.002445$ $f_{NSOC} = 0.016105$				$f_{OC} = 0.01155$ $f_{BC} = 0.00423$ $f_{NSOC} = 0.00732$				$f_{OC} = 0.00649$ $f_{BC} = 0.001885$ $f_{NSOC} = 0.004605$				$f_{OC} = 0.0105$ $f_{BC} = 0.000885$ $f_{NSOC} = 0.009615$			
	IWTU <sub>FCVI</sub> ( $\mu$ g/L)	log K <sub>OC</sub> (L/kg NSOC)	log K <sub>BC</sub> (L/kg BC)	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>	C <sub>dw</sub> ( $\mu$ g/kg <sub>dw</sub> )	C <sub>OC</sub> ( $\mu$ g/kg <sub>OC</sub> )	C <sub>d, PAHI</sub> ( $\mu$ g/L)	IWTU <sub>FCVI</sub>
Acenaphthene	55.85	3.944	5.59	190	10243	0.1739	0.003	72	6234	0.0421	0.001	52	8012	0.0672	0.001	93	8857	0.2169	0.004
Acenaphthylene	306.9	3.168	5.16	190	10243	0.5038	0.002	72	6234	0.1157	0.000	52	8012	0.1862	0.001	93	8857	0.6546	0.002
Anthracene	20.73	4.457	5.88	190	10243	0.0820	0.004	72	6234	0.0211	0.001	52	8012	0.0333	0.002	93	8857	0.0982	0.005
Benzo(A)Anthracene	2.227	5.577	6.5	210	11321	0.0152	0.007	72	6234	0.0045	0.002	52	8012	0.0068	0.003	220	20952	0.0342	0.015
Benzo(B)Fluoranthene	0.6774	6.16	6.82	310	16712	0.0079	0.012	86	7446	0.0022	0.003	52	8012	0.0027	0.004	310	29524	0.0157	0.023
Benzo(K)Fluoranthene	0.6415	6.184	6.83	190	10243	0.0046	0.007	72	6234	0.0018	0.003	52	8012	0.0026	0.004	160	15238	0.0077	0.012
Benzo(A)Pyrene	0.9573	6.003	6.73	240	12938	0.0082	0.009	72	6234	0.0024	0.002	52	8012	0.0035	0.004	240	22857	0.0166	0.017
Chrysene	2.042	5.616	6.52	270	14555	0.0183	0.009	72	6234	0.0042	0.002	52	8012	0.0064	0.003	310	29524	0.0449	0.022
Dibenz(A,H)Anthracene	0.2825	6.599	7.06	190	10243	0.0021	0.007	72	6234	0.0009	0.003	52	8012	0.0013	0.005	93	8857	0.0019	0.007
Fluoranthene	7.109	4.998	6.18	380	20485	0.0716	0.010	97	8398	0.0136	0.002	68	10478	0.0205	0.003	330	31429	0.1437	0.020
Fluorene	39.3	4.137	5.7	190	10243	0.1314	0.003	72	6234	0.0324	0.001	52	8012	0.0516	0.001	93	8857	0.1616	0.004
Indeno (1,2,3-CD) Pyrene	0.275	6.608	7.07	190	10243	0.0020	0.007	72	6234	0.0009	0.003	52	8012	0.0013	0.005	150	14286	0.0030	0.011
Naphthalene	193.55	3.299	5.24	190	10243	0.4158	0.002	90	7792	0.1201	0.001	52	8012	0.1544	0.001	93	8857	0.5378	0.003
Phenanthrene	19.13	4.494	5.9	210	11321	0.0859	0.004	72	6234	0.0201	0.001	52	8012	0.0317	0.002	190	18095	0.1895	0.010
Pyrene	10.11	4.839	6.09	430	23181	0.1044	0.010	120	10390	0.0210	0.002	64	9861	0.0243	0.002	420	40000	0.2397	0.024
				3760		$\Sigma$ IWTU <sub>FCV,15</sub>	0.097	1257		$\Sigma$ IWTU <sub>FCV,15</sub>	0.028	860		$\Sigma$ IWTU <sub>FCV,15</sub>	0.040	3068		$\Sigma$ IWTU <sub>FCV,15</sub>	0.179
						$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.266			$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.077			$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.109			$\Sigma$ IWTU <sub>FCV,Tot</sub>	0.493

Notes:  
C<sub>OC,PAH,FCVI</sub>: Critical concentration of a PAH in sediment that is related to the final chronic value (FCV) derived following the EqP method  
C<sub>OC,PAH,Max</sub>: Concentration in sediment organic carbon that is in equilibrium with the interstitial water at the aqueous solubility  
 $\Sigma$ IWTU<sub>FCV,15</sub>: Sum of toxic units bases on 15 PAH compounds analyzed in the sample  
 $\Sigma$ IWTU<sub>FCV,Tot</sub>: Estimated sum of toxic units of total PAH mixture based on 34 PAH compounds; an UF of 2.75 is applied to  $\Sigma$ IWTU<sub>FCV,15</sub> to estimate  $\Sigma$ IWTU<sub>FCV,Tot</sub>  
Concentration of PAH compounds below the limit of detection were conservatively estimated at the detection limit in IWTU calculations  
C<sub>dw</sub>: Concentration of PAH compound on a dry weight basis ( $\mu$ g/g dw)  
C<sub>OC</sub>: Concentration of PAH compound normalized to sample-specific fraction of organic carbon ( $\mu$ g/g organic carbon)  
C<sub>d,PAH</sub>: Estimated concentration of freely dissolved PAH compound in pore water based on the two-carbon EqP model  
f<sub>OC</sub>: Sample-specific fraction of total organic carbon  
f<sub>BC</sub>: Sample-specific fraction of black carbon  
f<sub>NSOC</sub>: Sample-specific fraction of natural sedimentary organic carbon; estimated as the difference between f<sub>OC</sub> and f<sub>BC</sub>  
IWTU<sub>FCVI</sub>: Final chronic value (FCV) of PAH compound protective of chronic aqueous exposure to benthic organisms  
K<sub>OC</sub>: Organic carbon-water partitioning coefficient  
K<sub>BC</sub>: Black carbon-water partitioning coefficient