TOXIC SUBSTANCES CONTROL ACT – NEW AND EXISTING CHEMICALS PROGRAM

COMPLIANCE MONITORING INSPECTION REPORT

The Chemours Company

Washington Works
8480 DuPont Road
Washington, WV 26181

Report Date: **July 31, 2018**

Report Prepared By:
Lauren O. Davis
U.S. Environmental Protection Agency, Region 3
Toxics Programs Branch
1650 Arch Street
Philadelphia, PA 19103

Inspectors:

Lauren O. Davis	**EPA Region 3, Lead Inspector**
Verne George	**EPA Region 4, Inspector**
Daryl Hudson	**Eastern Research Group, Contractor to EPA**
Dan-Tam Nguyen	**Eastern Research Group, Contractor to EPA**

Inspection Dates: **October 17-18, 2017**

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ACRONYMS

[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
CASRN	Chemical Abstracts Service Registration Number
CBI	Confidential Business Information
CDR	Chemical Data Reporting
d	Day
[redacted]	[redacted]
DCO	Document Control Officer
DMR	Discharge Monitoring Report
EPA	U.S. Environmental Protection Agency
ERG	Eastern Research Group, Inc., Contractors to EPA
[redacted]	[redacted]
[redacted]	[redacted]
gal	Gallons
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
kg	Kilogram
L	Liter
µg	Micrograms
NCEL	New Chemical Exposure Limit
NIOSH	National Institute for Occupational Safety and Health
PAIR	Preliminary Assessment Information Rule
PBT	Persist in the environment/could bio-accumulate/toxic to people, wild mammals, & birds
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]
[redacted]	[redacted]

PFOA	Perfluorooctanoic acid
PFOS	Perfluorooctane sulfonate
PMN	Pre-manufacture Notice
[redacted]	[redacted]
ppb	Parts Per Billion
PPE	Personal Protective Equipment
[redacted]	[redacted]
[redacted]	[redacted]
SNUN	Significant New Use Notice
SNUR	Significant New Use Rule
[redacted]	[redacted]
TSCA	Toxic Substances Control Act
yr	Year

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SUMMARY

The Chemours Company FC, LLC (Chemours) is a chemical manufacturer, processor and exporter as defined under the Toxic Substances Control Act (TSCA), 5 U.S.C. Section 2601 *et. seq.* On October 17-18, 2017, a TSCA compliance monitoring inspection was conducted by the U.S. Environmental Protection Agency (EPA) at the Chemours plant site located at 8480 DuPont Road Washington, WV 26181 (Washington Works Facility), pursuant to Section 11(a) of TSCA, 15 U.S.C. Section 2610 (a). The inspection was conducted as a follow-up to the Region IV inspection of Chemours Fayetteville Works located in Fayetteville, North Carolina (Fayetteville Works Facility). Region IV conducted this inspection due to community concerns with the reported release of potentially harmful chemicals, associated with Chemours' GenX process, into the Cape Fear River, a source of drinking water supply for numerous counties in North Carolina.

GenX technology was developed by E. I. du Pont de Nemours and Company (DuPont) and now used by Chemours to manufacture high-performance fluoropolymers without the use of perfluorooctanoic acid (PFOA).

Based upon inspection observations and the review of records provided by Chemours, the Washington Works Facility: (1) manufactured, processed, exported and/or distributed in commerce, several chemical substances that are subject to TSCA;

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1.0 INTRODUCTION

EPA became aware of community concerns about the alleged release of potentially harmful chemicals into the Cape Fear River by Chemours' Fayetteville Works Facility in June 2017. The chemicals of concern were associated with Chemours' GenX process. Chemours stated that GenX was a technology developed by E. I. du Pont de Nemours and Company (DuPont) and is now used by Chemours to manufacture high-performance fluoropolymers without the use of perfluorooctanoic acid (PFOA).

[redacted], the EPA received [redacted] PMNs from DuPont. The notices were submitted pursuant to Section 5 of TSCA. The PMN number [redacted] was assigned to the chemical substance with a generic chemical identity, perfluorinated aliphatic carboxylic acid (Chemical Abstracts Service Registration Number [redacted], and PMN number [redacted] was assigned to the chemical substance with a generic chemical identity, [redacted]. In the PMN submission, DuPont claimed the specific chemical identities and the CASRNs of the chemical substances as TSCA Confidential Business Information (CBI).

[redacted], the EPA and DuPont entered into a TSCA Section 5(e) Consent Order (the Consent Order) governing the manufacture, processing, use, distribution in commerce, release and disposal of the PMN substances [redacted]. The EPA concluded, [redacted]

The Consent Order indicates that EPA's concerns were based on data collected on the PMN substances, analogs to the PMN substances, perfluorooctanoic acid (PFOA), [redacted] PFOA and PFOS were both under review by EPA for similar PBT concerns. Due to the possibility that the PMN substances were likely to be used as a substitute for PFOA, the Consent Order states, "more information is needed on the toxicity and pharmacokinetics of the PMN substance [redacted] that will be applied to the characterization of both PMN substances" and also noted the "high concern for possible environmental effects over the long-term." Due to EPA's concerns, the Consent Order authorized the manufacture of the PMN substances provided that DuPont "shall recover and capture (destroy) or recycle the PMN substances at an overall efficiency of 99% from all effluent process streams and air emissions (point source and fugitive)."

The effective date of Chemours spinoff from DuPont was [redacted]. The Consent Order provides for Successor of Liability of Transfer of Rights to manufacture the PMN substances.

2.0 INSPECTION

2.1 Inspection Notice

To determine Chemours' compliance with the Consent Order for the PMN substances and with other TSCA requirements, the EPA determined that an on-site TSCA compliance monitoring inspection at the Washington Works Facility was warranted pursuant to Section 11(a) of TSCA. The inspection team consisted of Lauren O. Davis EPA Region III, lead TSCA inspector, Verne George EPA Region IV, TSCA inspector, Daryl Hudson and Dan-Tam Nguyen, Eastern Research Group, Inc., (ERG) (contractors to EPA with EPA TSCA inspection credentials), and Scott Rice Region III TSCA inspector-in-training.

On September 27, 2017, Ms. Lauren O. Davis contacted Ms. Heather J. Shore to schedule a targeted inspection at Washington Works to determine compliance with TSCA Sections 4, 5, 8, 12, and 13. Based on the discussions with Ms. Shore, the inspection was scheduled for October 17-18, 2017.

On September 27, 2017, the Toxics Programs Branch mailed an inspection notice to the Washington Works Facility confirming the inspection date and requesting that certain records be made available for review during the inspection. A copy of the letter was also emailed to Ms. Shore on September 27, 2017 (See Exhibit: A0 Notice of Inspection Letter).

2.2 Inspection Entry

The final inspection team included all the planned inspection team members as follows:

Lauren O. Davis	TSCA Lead Inspector (EPA Region III)
Scott Rice	TSCA Co-inspector (EPA Region III)
Verne George	TSCA Co-inspector (EPA Region IV)
Daryl Hudson	TSCA Co-inspector (ERG)
Dan-Tam Nguyen	TSCA Co-inspector (ERG)

On October 17, 2017, the inspection team arrived at the facility security office at approximately 8:50 am. The inspection team signed in and was provided with facility identity badges. The security office called Ms. Shore who shortly arrived at the security office to guide the inspection team to the main office building.

The inspection team was escorted to a conference room. As the first step of the opening conference, each inspection team member presented their EPA credentials to the following Chemours representatives:

Bob Fehrenbacher	Washington Works Plant Manager;
Laura Korte	Global Product Manager;
Misti D. McCullough	Washington Works Environmental, Health & Safety Manager;
Heather J. Shore	Washington Works Health & Safety Manager and;
Richard L. Chalfant	Industrial Hygiene & Ergonomics Lead

2.3 Opening Conference

2.3.1 Introduction

Ms. Davis informed Chemours representatives that the inspection was being conducted pursuant to Section 11(a) of TSCA to determine compliance with Sections 4, 5, 8, 12, and 13 of TSCA. Ms. Shore signed a TSCA Notice of Inspection form (Form 7740-3) and a Confidentiality Notice form (Form 7740-4). Two copies of each form were signed by Chemours' representatives and a copy of each form was provided to the EPA (See Exhibits A1: Notice of Inspection Form and A2: TSCA Inspection Confidentiality Notice).

Ms. Davis explained that the inspection would consist of: an opening conference with the facility staff about the company, the nature of the company's business, chemical imports/exports and production processes, a tour of the Washington Works Facility, and a closing conference with Chemours representatives.

Ms. Davis explained the TSCA Inspection Confidentiality Notice and stated that to ensure confidentiality of documents provided by Washington Works Facility, Chemours must make a TSCA CBI claim as documents are provided to EPA. Ms. Davis also stated that no documents claimed by Chemours to contain TSCA CBI would be taken by the inspectors at the conclusion of the inspection. Non-CBI documents were collected by the inspectors and listed on the TSCA Receipt for Samples and Documents (EPA Form 7740-1) (See Exhibit: A3: TSCA Receipt for Samples and Documents). CBI documents requested by the inspectors were sent to the attention of the Region III Document Control Officer (DCO) per the instructions provided in the Notice of Inspection. Chemours was also instructed to mail, in the same manner, copies of the documents to the ERG contractor's TSCA CBI DCO at the ERG address provided in the Notice of Inspection.

Ms. Shore explained that the subject matter experts for Washington Works different process areas would come to the conference room throughout the day to explain their process areas. The presenters included: Ken Kelch, [redacted]; John Powers, [redacted]; Chris Ashley, [redacted]; Dave Ruffin, [redacted]; Bob Harper, [redacted] John Logue, [redacted] and Courtney Sterrick, [redacted].

2.3.2 Summary

An overview of the Washington Works Facility was provided by Ms. McCullough in a slide show presentation. A hard copy of the slide show presentation was provided to the inspection team (See Exhibit A4: Presentation, Washington Works Overview). In summary:

Chemours owns the entire Washington Works industrial site. This is the largest manufacturing facility owned by Chemours. Lucite International (contract production), DowDuPont, and Kuraray also operate at this location. Chemours also owns the historic Blennerhassett Island and it is leased back to the state of West Virginia as a State Park. Fluoropolymer production began in 1950.

- The Washington Works Facility consists of 721 acres with 172 acres within the fence line and is situated along the Ohio River.

- At this site there are approximately 680 full service employees, 180 contract "partners" and 50-500 contractors who work on a part-time and part-year basis.

- Chemours was a wholly owned subsidiary of DuPont when it acquired the Washington Works Facility from DuPont on February 1, 2015. Chemours later spun off from DuPont on July 1, 2015.

- The Fluoro Enterprise Operations consist of: (1) TFE and HFP Monomers, (2) Telomers, (3) TEFLON™ PFA resin & dispersions, (4) TEFLON™ FEP resin & dispersions, (5) TEFLON™ PTFE resin & dispersions and (6) TEFLON™ PTFE granular molding resins.

2.4 Washington Works Facility Tour

2.4.1 Introduction

As requested, Chemours gave the inspection team a tour of the Washington Works Facility. The tour mainly focused on process areas using [redacted]. Chemours provided the EPA inspectors with fire resistant jump-suits and rubber gloves. The inspectors used their own hard hats, safety shoes, safety glasses and hearing protection. The inspection team requested the tour to gain a general perspective and knowledge of the production areas, to supplement the review of summary flow charts, process diagrams and other information concerning operations at the Washington Works Facility.

2.4.2 Summary

The focus of the plant tour included process areas using or capturing/recovering [redacted] The inspection team toured the PFA, FEP and [redacted] process areas. A portion of the [redacted] requires persons in that area to wear respirators as required in the TSCA Consent Order. However, scheduled maintenance work was being performed on the [redacted] so there was no manufacturing activity in this part of the plant.

2.5 Closing Conference

The inspection team concluded the first inspection day, October 17, 2017, at approximately 5 pm and scheduled the closing conference for the next day. The inspection team arrived at the main office building at approximately 8:50 am on October 18, 2017. Ms. Shore assisted the inspection team in obtaining facility badges and escorted the team to the conference room. The inspection team held an inspection team only private meeting to discuss topics needing further clarification.

The inspection team provided Chemours with a list of information that needed further clarification. The inspection team requested such information to be sent to the EPA and ERG after the inspection. Lastly, the inspection team discussed with Chemours the need for further information that may be required upon review of the information provided by Chemours to EPA and ERG before and during the inspection. The inspection concluded at approximately 12:30 pm.

3.0 FINDINGS

3.1. Introduction

The findings discussed below are based on statements and observations made during the inspection and based on information provided by Chemours before and after the inspection. Additional background information about Chemours claimed as CBI by Chemours can be found in Exhibit B0: Response to Notice of Inspection (See Exhibit B0: Response to Notice of Inspection).

3.2 TSCA Section 4

Based on Chemours' list of raw materials, Chemours purchased [redacted] from a domestic supplier (See Exhibit B1: List 4-List of Raw Materials). This chemical substance, [redacted], is subject to a test rule. The sunset date to test this chemical is [redacted]. The [redacted] is processed at the Washington Works Facility in the production of PTFE. [redacted] is used to clean the polymer solids from the reactor in the [redacted] See Exhibit B11: [redacted] Process Description).

3.3 TSCA Section 5

The Washington Works Facility does not and has not toll manufactured or contract manufactured raw materials or intermediates for the product lines reviewed during the inspection. The Washington Works Facility does contract [redacted] (See Exhibit B0: Response to Notice of Inspection).

3.3.1 GenX Evaluation: [redacted]

The Washington Works Facility processes the [redacted] GenX for commercial purposes. There are three versions of the [redacted] collectively referred to as [redacted] (See Exhibit B1: List 4- List of Raw Materials). [redacted] is supplied by Chemours Fayetteville Works (See Exhibit B1: List 4- List of Raw Materials). [redacted] is processed in three of Washington Works product lines: [redacted]. It is recovered in the [redacted]. The amount of [redacted] in each product line is provided in Exhibit B2 (See Exhibit B2: [redacted].

3.3.1.1 [redacted] *Process Discussion*

[redacted] is a Teflon® product manufactured in the [redacted]. Production consists of [redacted] key steps: [redacted] (See Exhibit B3: [redacted]). [redacted] is processed in the [redacted] and is used [redacted] (See Exhibit B4: [redacted]). The [redacted] packed [redacted] and sent offsite or to [redacted]. The majority of the [redacted] product from the [redacted]

During the , the . The which yields The . In the phase, These are either directed to packout or sent to In the hase, This provides for certain customers (See Exhibit B5: .

There are final products from the which are made in

was commenced by E.I. DuPont de Nemours & Co. Inc. on . supplied by (See Exhibit B1: List 4- List of Raw Materials). It was commenced by E.I. DuPont de Nemours & Co. Inc. on . is also supplied by (See Exhibit B1: List 4- List of Raw Materials).

3.3.1.2 Process Discussion

are manufactured for (See Exhibit B7:). The raw materials Some also contain . Other raw materials include is manufactured in (See Exhibit B8:). It is products are formed

3.3.1.3 [redacted] *Process Discussion*

The [redacted] process consists of [redacted]

[redacted]

[redacted] (See Exhibit B10: [redacted] Detail).

[redacted] pursuant to the Title V Permit [redacted] The contents of the [redacted] The product is sampled [redacted]

The [redacted] (See Exhibit B11: [redacted] Description and B12: [redacted] Flow Diagram).

[redacted]

The [redacted] (See Exhibit B11: [redacted] Description). [redacted] (See Exhibit B13: [redacted]).

In [redacted] (See: Exhibit B14: TSCA Information Request Letter).

[redacted] at the Washington Works Facility: [redacted] (See Exhibit B15: [redacted] Description). [redacted] (See Exhibit B16: [redacted]). [redacted] (See Exhibit B17: [redacted]). [redacted] (See Exhibit B1: List 4- List of Raw Materials). [redacted] (See Exhibit B18: [redacted]).

3.3.1.4. [redacted] *Process Discussion*

[redacted] *Description*

[redacted] See Exhibit B19: [redacted] Description). [redacted]

[redacted]

[redacted]

[redacted] *Process Description*

[redacted] (See Exhibit B21: [redacted]).

[redacted] *Process Equipment Description*

[redacted] (See Exhibit B22: [redacted]).

[redacted]

[redacted] *Process Description*

[redacted]

(See Exhibit B23:).

(See Exhibit B24: List of

3.3.2 Non-GenX Evaluation: Monomers and Telomers

3.3.2.1 Monomers

Two monomers manufactured at Washington Works are TFE and HFP. TFE is manufactured from (See Exhibit: B25: Monomer Process Description).

(See Exhibit B26:).

. HFP synthesis occurs . to HFP (See Exhibit B27: HFP Synthesis Area).

(See Exhibit B28:).

(See Exhibit B29:).

[redacted] (See Exhibit B30: [redacted] Flow Diagram). [redacted].

[redacted] (See Exhibit B31: [redacted] (See Exhibit B32: [redacted]

3.3.2.2. Telomers

[redacted] (See Exhibit B33: Telomers Process Description). [redacted] (See Exhibit B34: [redacted] Flow Diagram). The [redacted]

[redacted]

[redacted]

[redacted]

3.3.3 TSCA Section 5 Exemptions and Significant New Use Notice

3.3.3.1 TSCA Section 5 Exemptions

Research and Development Exemption
Based on the information provided, Washington Works did not engage in any research and development activities associated with any new chemical substance since this plant became a Chemours site on July1, 2015.

Test Market Exemption
Based on the information provided, Washington Works did not submit a test market exemption application to EPA since this plant became a Chemours facility on July1, 2015.

Polymer Exemption
Based on the information provided, Washington Works did not submit a polymer exemption application to EPA since this plant became a Chemours facility on July1, 2015.

Low Volume Exemption
Based on the information provided, Washington Works did not submit a low volume exemption application to EPA since this plant became a Chemours facility on July1, 2015.

Low Release and Exposure Exemption
Based on the information provided, Washington Works did not submit a low release and exposure exemption application to EPA since this plant became a Chemours facility on July 1, 2015.

Instant Photographic and Peel-apart Film Articles
Based on the information provided Washington Works did not submit an instant photographic and peel-apart film article notice to EPA since this plant became a Chemours facility on July 1, 2015.

3.3.3.2 Significant New Use Rule Notices (SNUN)

In the [redacted], three manufactured chemicals are subject to SNUNs ([redacted]). They are:

[redacted]

- Chemical abbreviation: [redacted]
- SNUN: According to 40 CFR Section 721 [redacted]

[redacted]

- Chemical abbreviation: [redacted]
- SNUN: According to 40 CFR Section 721 [redacted]

[redacted]

- Chemical abbreviation: [redacted]
- SNUN: : According to 40 CFR Section 721 [redacted]

Included in Chemours List of Chemical Substances Manufactured (See Exhibit B6: List1- List of Chemical Substances Manufactured) are two chemicals that have Significant New Use Notices. They are:

[redacted]

- Chemical abbreviation: [redacted]
- SNUN: According to 40 CFR Section 721 [redacted]

[redacted]

- Chemical abbreviation: [redacted]
- SNUN: According to 40 CFR Section 721 [redacted]

3.4 TSCA Section 8 Evaluation

3.4.1 Preliminary Assessment Information Rule (PAIR)

Based on the records provided to EPA, Washington Works did not manufacture, import, or use any chemical substance that was subject to reporting under PAIR.

3.4.2 Allegation of Significant Adverse Reaction

Based on the discussions with Chemours representatives, Washington Works has no allegations of significant adverse reaction on file for the chemical substances manufactured, imported, processed, distributed, or exported.

3.4.3 Health and Safety Studies

Based on the discussions with Chemours representatives, Washington Works has no health and safety studies on file for the chemical substances manufactured, imported, processed, distributed, or exported.

3.4.4 Substantial Risk to Human Health/Environment

Based on the discussions with Chemours representatives regarding health and safety studies, Washington Works does not handle 8(e) reporting. This is done by the corporate office in Delaware. Washington Works did not include any health and safety studies in their response.

3.4.5 Chemical Data Reporting (CDR)

Washington Works reported its 2016 CDR on September 20, 2016. It was revised on October 16, 2017 for the following chemicals:

[redacted]

Below is a table of the original and revised CDR data:

CASRN	September 20, 2016	October 16, 2017
[redacted]	[redacted]	[redacted]
[redacted]	[redacted]	[redacted]

Chemours justification for this revision is provided in Exhibit B35 (See Exhibit B35: [redacted]). Several chemicals were manufactured by Washington Works. Not all the chemicals manufactured met the reporting thresholds (See Exhibit B6: List 1-List of Chemical Substances Manufactured). The original and revised versions of the CDR were provided during the inspection (Exhibits B36 Chemical Data Report, September 20, 2016: and B37: Chemical Data Report, October 16, 2017).

3.5 TSCA Section 12 Evaluation

Based upon the information provided, Washington Works does export chemicals (See Exhibit B38: List of

Chemical Substances Exported). [redacted]

3.6 TSCA Section 13 Evaluation

The Washington Works site does not import any chemicals. Imports are handled by The Chemours Company, LLC headquarters office in Wilmington, DE.

3.7 TSCA 5(e)/(f) Consent Order Evaluation

3.7.1 Terms

Prohibition

Based on the Consent Order, DuPont/Chemours was prohibited from manufacturing or importing [redacted] beyond the production limits as referenced in the Consent Order unless they (DuPont/Chemours) conducted the studies referenced in the Consent Order and submit all the final reports. On or about [redacted], DuPont submitted to the EPA, the final reports for the trigger testing requirements as referenced in Section II (d) of the Consent Order. On [redacted], DuPont submitted the [redacted]. On or about August 1, 2011, the EPA acknowledged the receipt of the studies and determined that [redacted] The EPA's letter also indicated that DuPont had fulfilled its obligations under the Consent Order for [redacted] Documentation of this information can be found in Exhibits B13 through B15 of the TSCA NEC Inspection Report for The Chemours Company – Fayetteville Works, dated April 24, 2018, prepared by U.S. Environmental Protection Agency, Region 4.

Testing

TSCA Section 8(e) Reporting: Based on the Consent Order, any information on the PMN substances ([redacted]) which reasonably supports the conclusion that the PMN substances present a substantial risk of injury to health or the environment is required to be reported under the TSCA Section 8(e) policy statement found at 43 Federal Register 11110 (March 16, 1978), as amended at 52 Federal Register 20083 (May 29, 1987), shall reference the appropriate PMN identification number for the substance and shall contain a statement that the substance is subject to a consent order. Chemours representatives indicated Chemours corporate office in Delaware (not the Washington Works facility) is responsible for all reporting under TSCA Section 8(e). See *Section 3.4.4* above.

Protection in the Workplace

Chemours has the following dermal protective items for use in the process areas using [redacted]: gloves; full-body chemical protective clothing; chemical goggles or equivalent eye protection; and clothing which covers other exposed area of the arms, legs and torso. Chemours provided a summary qualitative exposure assessment for tasks involving work with [redacted] (See Exhibit B39: Qualitative Exposure Assessment). This document outlines typical route of exposure for tasks and provides required personal protective equipment (PPE) for each task where exposure to [redacted] may occur. Note: Chemours did not provide any chemical permeation testing on the equipment list provided. However, EPA cross-referenced the equipment used at Washington Works with information from EPA Region 4's inspection of Chemours Fayetteville Works and determined the gloves used are the same at both facilities. Chemours did provide [redacted] testing information to the Region 4 inspectors.

Respiratory Protection: Initially, for any process area associated with [redacted], the Consent Order required the use, at a minimum, of a [redacted] On August 20, 2009, DuPont requested the EPA's approval to use [redacted]. On February 1, 2010, the EPA modified the Consent Order in response to Dupont's request by authorizing: [redacted] In the February 1, 2010, letter, the EPA also approved DuPont's request to use [redacted] Documentation of this information can be found in Exhibits B17 through B18 of the TSCA NEC Inspection Report for The Chemours Company – Fayetteville Works, dated April 24, 2018, prepared by U.S. Environmental Protection Agency, Region 4.

3.7.2 New Chemical Exposure Limit (NCEL)

The NCEL section of the Consent Order details an [redacted]. In order to deviate from the respirator requirements, certain criteria must be met:

[redacted]

As stated in the Protection in the Workplace, Respiratory Protection discussion above, the EPA reviewed DuPont's request and stated the use of [redacted] met the Selection of Appropriate Respiratory Protection for measured concentrations less than or equal to [redacted] NCEL.

Chemours provided a summary qualitative exposure assessment for tasks involving work with [redacted] (See Exhibit B39: Qualitative Exposure Assessment). This document outlines typical route of exposure for tasks

and provides required personal protective equipment (PPE) for each task where exposure to [redacted] may occur. In areas where the [redacted] may be present (given that under certain conditions [redacted]

Manufacturing

According to the Consent Order, DuPont/Chemours shall not cause, encourage, or suggest the manufacture or import of the PMN substances by any other person. This prohibition shall expire 75 days after promulgation of a final Significant New Use Rule (SNUR) governing the [redacted] and [redacted] under Section 5(a)(2) of TSCA unless DuPont/Chemours is notified on or before a Federal Court action occurs seeking judicial review of the SNUR. Once this prohibition expires, DuPont/Chemours shall notify each person whom it causes, encourages or suggests to manufacture or import the [redacted] of the existence of the SNUR. To date, no SNUR has been promulgated for either chemical EPA identifies as [redacted].

Control of Effluent and Emissions (During the Use of the [redacted]

The Consent Order states that DuPont/Chemours "shall recover and capture (destroy) or recycle" the [redacted] "at an overall efficiency of 99% from all the effluent process streams and air emissions (point source and fugitive)."

Based on the Process Flow Diagrams for production lines using [redacted] wastes are collected and shipped offsite for incineration, or are sent to [redacted] and ultimately to [redacted] Chemours has a consent order with the State of West Virginia to monitor/discharge the [redacted] from the facility through [redacted]. Results of this monitoring are sent monthly to the West Virginia Department of Environmental Protection as part of the site's discharge monitoring reports (DMRs). Chemours provided DMRs (dated July 1, 2015 through September 30, 2017) for [redacted], which is the discharge point from [redacted]. The DMR reports indicated there were no exceedances of the limits set for the [redacted] (See Exhibit A5: Electronic DMR Data). The following presents calculated release amounts based on information obtained from the DMRs.

Results from daily grab samples (averages reported) ranged from [redacted]. Using [redacted] and the corresponding reported average flowrate [redacted] equates to a release of approximately [redacted]. [redacted]

In comparison, the maximums reported from daily grab samples ranged from [redacted]. Using [redacted] and the corresponding reported maximum flowrate [redacted] equates to a release of approximately [redacted]

Comparing the calculated releases to [redacted] usage in [redacted] (see Exhibit B2: [redacted]), shows a range of calculated [redacted] released per amount used (as a percentage) from approximately [redacted]. Calculations:

[redacted]

Note: the [redacted] calculation assumes the maximum effluent concentration and maximum daily flow rate coincide (which may or may not be the case). Both calculations assume a consistent use rate over 365 days/yr of operation.

No information was provided regarding air releases of the [redacted] from this facility. EPA assumes releases of the [redacted]. The amount of [redacted] that may be released to air ([redacted]) is unknown.

Distribution

The Consent Order states DuPont/Chemours shall distribute the [redacted] only to a person who has agreed in writing (prior to distribution) to:

1. Comply with the same requirements and restrictions stated in the Protection in the Workplace and the NCEL sections of the Consent Order;
2. Distribute the [redacted] and [redacted] only to a person who will either recover and capture (destroy) or recycle the [redacted] and [redacted] from all effluent process streams and air emissions (point source and fugitive) at an overall efficiency of 99%; and
3. Distribute the [redacted] in aqueous dispersion of the polymer product or on a heat treated solid product such that the contents polymer residual [redacted] and [redacted] total (anion peak in the MS/MS) are below [redacted] level using the Accelerated Solvent Extraction (ASE) method.

DuPont/Chemours may distribute the [redacted] and [redacted] outside of DuPont/Chemours for temporary transport and storage. No information was obtained during or following the inspection that any of the PMN substances were temporary transported and stored. Neither PMN substance was exported from Washington Works; however, products made using [redacted] were exported to foreign countries. See *Section 3.5* above for a discussion of substances exported to foreign countries.

Review of safety data sheets for the [redacted] indicate distribution to be in aqueous dispersion form. A visual inspection of the [redacted] raw materials storage area by the Region 3 Inspection Team found only containers with aqueous products.

3.7.3 Recordkeeping

The Consent Order states that DuPont/Chemours "shall maintain records until 5 years after the date created and shall make them available for inspection and copying by the EPA in accordance with Section 11 of TSCA." The records associated with Chemours compliance with the Consent Order and other sections of TSCA were requested during the inspection and were either provided during the inspection or following the

inspection. The records provided to the EPA covered activities that occurred on or after July 1, 2015 (the date Chemours spun off from DuPont).

3.7.4 Request for Pre-inspection Information

The Consent Order states that the EPA may conduct compliance inspections of DuPont/Chemours facilities and conveyances associated with the [redacted] and [redacted], and that the EPA may contact DuPont/Chemours "in advance to request information pertinent to the scheduling and contact of such inspections." Prior to the inspection, the EPA did contact Chemours to schedule the inspection and provided information requests as part of the NOI letter. Chemours provided most of the information requested in the NOI letter during the inspection. Information that was not readily available to Chemours during the inspection was provided to the inspectors following the inspection. Subsequent to the inspection, Region 3 submitted an information requests to Chemours and Chemours responded to the request.

3.7.5 Successors Liability Upon Transfer of Consent Order

On or about February 6, 2015, DuPont submitted a TSCA Notice of Transfer to the EPA regarding the manufacturing rights and liabilities associated with [redacted] and [redacted]. On or about July 1, 2015, Chemours spun off from DuPont.

4.0 REPORT APPROVAL

4.1 Report – Primary Author

Lauren O. Davis Lead TSCA Inspector U.S. EPA, Region 3 Land and Chemicals Division Toxics Programs Branch	Date

4.2 Report - Co-Author

Daryl Hudson TSCA Inspector (Contractor to EPA) Eastern Research Group, Inc.	Date

4.3 Report – Technical Reviewer

Craig Yussen Chemical Engineer U.S. EPA, Region 3 Land and Chemicals Division Toxics Programs Branch	Date

4.5 Report - Approver

Stacie Pratt Chief U.S. EPA, Region 3 Land and Chemicals Division Toxics Programs Branch	Date

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EXHIBIT A0: Notice of Inspection Letter

EXHIBIT A1: Notice of Inspection Form (EPA Form 7740-3)

EXHIBIT A2: TSCA Inspection Confidentiality Notice (EPA Form 7740-4)

EXHIBIT A3: TSCA Receipt for Samples and Documents (EPA Form 7740-1)

EXHIBIT A4: Presentation, Washington Works Overview

EXHIBIT A5: Electronic DMR Data

EXHIBIT B0: Response to Notice of Inspection

EXHIBIT B1: List of Raw Materials

EXHIBIT B2: [redacted]

EXHIBIT B3: [redacted]

EXHIBIT B4: [redacted] Flow Diagram

EXHIBIT B5: [redacted]

EXHIBIT B6: List of Chemical Substances Manufactured

EXHIBIT B7: [redacted] Process Overview

EXHIBIT B8: [redacted] Flow Diagram

EXHIBIT B9: [redacted] Flow Diagram

EXHIBIT B10: [redacted] Detail

EXHIBIT B11: [redacted] Description

EXHIBIT B12: [redacted] Flow Diagram

EXHIBIT B13: [redacted] Flow Diagram

EXHIBIT B14: TSCA Information Request Letter

EXHIBIT B15: [redacted] Description

EXHIBIT B16: [redacted]

EXHIBIT B17: [redacted]

EXHIBIT B18: Response to Information Request Letter and [redacted] Documentation

EXHIBIT B19: [redacted] Description

EXHIBIT B20: [redacted]

EXHIBIT B21: [redacted]

EXHIBIT B22: [redacted]

EXHIBIT B23: [redacted]

EXHIBIT B24: List of [redacted]

EXHIBIT B25: [redacted]

EXHIBIT B26: [redacted]

EXHIBIT B27: [redacted]

EXHIBIT B28: [redacted]

EXHIBIT B29: [redacted]

EXHIBIT B30: [redacted] Flow Diagram

EXHIBIT B31: [redacted]

EXHIBIT B32: [redacted]

EXHIBIT B33: [redacted]

EXHIBIT B34: [redacted] Flow Diagram

EXHIBIT B35: [redacted]

EXHIBIT B36: Chemical Data Report, September 20, 2016

EXHIBIT B37: Chemical Data Report, October 16, 2017

EXHIBIT B38: List 5-List of Chemical Substances Exported

EXHIBIT B39: Qualitative Exposure Assessment