



U.S. Environmental Protection Agency
Office of Compliance and Enforcement
1200 Pennsylvania Avenue, NW
Washington, DC 20460

**CHEMOURS PARLIN FACILITY
CLEAN WATER ACT (CWA)
INSPECTION**

**Parlin,
New Jersey**

Report Date: September 6, 2019 (Revised 5/8/2023)

Inspection Activities: July 24, 2019

Signature Page

Michelle Spiezio Digitally signed by Michelle Spiezio
Date: 2023.05.17 07:41:26 -04'00'

Michelle Spiezio, ERG (EPA Contractor), Lead Inspector Date

KAITLYN BENDIK Digitally signed by KAITLYN BENDIK
Date: 2023.05.17 17:36:30 -04'00'

Kaitlyn Bendik, U.S. EPA HQ – OCE – WED, EPA Inspector Date

BENJAMIN BAHK Digitally signed by BENJAMIN BAHK
Date: 2023.05.17 13:22:45 -04'00'

Benjamin Bahk, U.S. EPA HQ – OCE, EPA Management Date

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Note: All Confidential Business Information (CBI) has been removed from this report.

1.0 Introduction

On July 24, 2019, representatives from the U.S. Environmental Protection Agency (EPA) Headquarters, along with EPA contractors Eastern Research Group, Inc. (ERG) and PG Environmental (PG) (hereinafter, collectively, the Inspection Team), conducted a Clean Water Act (CWA) inspection at Chemours' Parlin facility (hereinafter, facility or Parlin), located in Parlin, NJ. The Inspection Team was not joined by a state representative. Note that the facility is located on property leased from E. I. du Pont de Nemours and Company (hereinafter, DuPont). The Inspection Team separately inspected DuPont operations during the same week, information from which is included in a separate inspection report.

The Inspection Team gathered information by interviewing facility representatives, conducting walk-throughs of facility process and storage areas, and collecting and reviewing relevant documentation. The Inspection Team did not conduct sampling at the Chemours Parlin facility. The following are the primary representatives who participated in the inspection, organized by the Inspection Team and key facility personnel that participated in the inspection. The sign-in sheet is included as Appendix A: Sign-In Sheet.

<u>Inspection Team:</u>	Danny O'Connell, PG, Inspector Michelle Spiezio, ERG, Inspector Kaitlyn Bendik, EPA Headquarters, Office of Civil Enforcement – Water Enforcement Division Trent Rainey, EPA National Enforcement Investigations Center (NEIC) Daren Vanlerberghe, EPA NEIC
<u>Key Facility Representatives:</u>	Scott Northey, Chemours, Site Environmental Manager Brian Coll, Chemours, Manufacturing Technical (MT) Manager Mike Ohm, Chemours, Site Safety and Occupational Health Leader Charles Kurland, Chemours, Senior MT Engineer Rick Chalfant, Chemours, Industrial Hygiene Lead Meghan Randall, Chemours, Operations Leader Thomas Ostroski, Chemours, Area Manager Allison Rumsey, Arnold & Porter, Attorney Larry Culleen, Arnold & Porter, Attorney

1.1 Purpose of the Inspection

The facility is located on property leased from DuPont. Non-contact cooling water (NCCW) and stormwater runoff originating from the Chemours Parlin facility are captured and discharged through DuPont-owned outfalls, which are covered under National Pollutant Discharge Elimination System (NPDES) permit number NJ0000159, issued by New Jersey Department of Environmental Protection (NJDEP) on November 27, 2017. DuPont is the only permit holder. The Chemours Parlin facility does not discharge any process wastewater; all process wastewater is incinerated off-site. The purpose of the inspection was to evaluate Chemours' compliance with the CWA and DuPont's NPDES permit, as specified in a Service Level Agreement (SLA)

between DuPont and Chemours (refer to Section 1.2 for additional information). The potential areas of concern observed during the inspection are presented in Section 3.0.

Due to detections by NJDEP of per- and poly-fluoroalkyl substances (PFAS) in the groundwater surrounding the industrial area, the Inspection Team evaluated the facility for PFAS sampling opportunities. However, as discussed above, the facility only discharges NCCW and stormwater (under DuPont's NPDES permit) and does not discharge any process wastewater. Due to dry weather, there were no stormwater discharges at the time of the inspection. Therefore, the Inspection Team did not take any samples at the facility.

A Toxic Substances Control Act (TSCA) inspection was performed concurrently with the CWA inspection. TSCA inspection activities and findings are not included in this report. Individuals on the sign-in sheet included in Appendix A: Sign-In Sheet who only participated in the TSCA inspection are not included in the list of representatives in Section 1.0.

1.2 Background

Chemours' Parlin facility is a coating manufacturing facility. The facility blends components to produce liquid and powder coatings that are sold to customers for application onto final articles, which include specialty industrial parts, automotive parts, and other articles. The facility does not produce the coating components but receives them from other facilities and blends them to produce the coating products. The coating components include PFAS, particularly fluoropolymers, that are produced at other Chemours locations. The Chemours Parlin facility does not discharge any process wastewater; all process wastewater is incinerated off-site. Refer to Section 2.0 for additional process information.

The facility is part of an industrial complex that is owned by DuPont. The industrial complex houses DuPont operations and operations of multiple tenants, including operations owned and operated by Chemours, General Electric, Hitachi DuPont MicroSystems LLC, Tangent Energy Solutions, and Industrial Summit Technology (IST). The scope of the Inspection Team's activities only included operations owned by Chemours. The Inspection Team separately inspected DuPont operations during the same week, information from which is included in a separate inspection report. A diagram distinguishing the Chemours operations at the industrial complex is included as Appendix B: Site Diagram.

The Chemours Company was spun off by DuPont on July 1, 2015. However, the operations at the Parlin industrial complex that are currently managed by Chemours were previously owned by DuPont and sold to Chemours on July 1, 2018. The Inspection Team separately inspected the DuPont operations at the Parlin industrial complex on July 23 – 25, 2019. This report does not contain information from the inspection of DuPont operations; information from the inspection of DuPont is included in a separate inspection report.

Chemours and DuPont have an SLA in which DuPont provides services and utilities to Chemours. Specifically, the SLA includes the following:

- DuPont provides steam, electricity, nitrogen, compressed air, fire water, and process and sanitary water (DuPont provides this water from Parlin through the Middlesex Water Company) to Chemours.

- DuPont provides the following services: maintenance, security, emergency response, non-hazardous material movements, and garage services.
- Chemours provides analytical laboratory services for DuPont’s Electronics operations, including analyses for percent solids, viscosity, pH, weight, phenolic resin solubility, and Fourier Transform Infrared (FTIR) spectroscopy testing (used to detect the presence of organic, polymeric, and some inorganic materials) of heat exchanger water and a tank farm containment pit.
- Chemours can discharge through DuPont’s NPDES permit NJ0000159 (see Section 1.3 Permitting and Compliance below).
 - The SLA specifies in Article 12.1(b) that “...the Parties shall each ensure that they comply with all applicable requirements of such Environmental Permits and not do or fail to do anything which may prejudice the continuance or terms of such Environmental Permit. In those cases where the Environmental Permit is held in the name of one of the Parties only (the “**Permit Holder**”), the other Party must follow the reasonable instructions and submit to the reasonable supervision of the Permit Holder in relation to such Environmental Permit.”
- Chemours can discharge sanitary wastewater through DuPont’s sanitary sewer connection.

1.3 *Permitting and Compliance*

The entire industrial complex is permitted for discharges under one NPDES permit, permit number NJ0000159, for which DuPont is the sole permittee. The NPDES permit includes coverage for discharges of Chemours stormwater and NCCW. The permit does not include discharges of process wastewater from any operations. In addition, DuPont owns and operates a groundwater treatment facility, which pumps and treats groundwater from underneath the industrial complex and discharges it through Outfall DSN 001A to South River via Pond Creek and Outfall DSN 003A to Rapid Infiltration Basins and ultimately the groundwater aquifer.

DuPont has three surface water outfalls listed in the permit. The permit does not specify which outfall discharges Chemours stormwater and NCCW; however, DuPont facility representatives indicated that Chemours stormwater and NCCW are discharged through Outfall DSN 002A. Table 1-1 lists each outfall listed in the permit, with a description of the type of discharge, notes on which outfall receives stormwater and NCCW from Chemours, and associated treatment technology.

Sanitary wastewater from the industrial complex, including Chemours, is managed through a separate permit for which DuPont is the sole permittee.

Table 1-1. NPDES Permit Number NJ0000159 Permitted Outfalls and Contributions from Chemours Parlin

Outfall	Type of Discharge	Treatment	Receives water from Chemours Parlin? ^a
DSN 001A	• NCCW • Stormwater	The outfall receives groundwater treated through DuPont’s groundwater	No

Table 1-1. NPDES Permit Number NJ0000159 Permitted Outfalls and Contributions from Chemours Parlin

Outfall	Type of Discharge	Treatment	Receives water from Chemours Parlin? ^a
	• Treated groundwater	treatment facility. NCCW and stormwater do not receive treatment.	
DSN 002A	• NCCW • Stormwater	None – discharges are sent through an equalization pond before discharge through Outfall DSN 002A.	Yes – this outfall receives stormwater and steam condensate (Liquid Finishes, see Section 2.1) from Chemours
DSN 003A	• Treated groundwater	The outfall only receives groundwater treated through DuPont’s groundwater treatment facility.	No

a – This information is not listed in the permit and is according to representatives of the permit holder, DuPont.

2.0 Observations by Process Area

The Inspection Team interviewed the applicable facility personnel about the facility’s two process operations, Liquid Finishes and Powder Coatings. Following the interviews, the Inspection Team visited these process areas.

The following subsections summarize the interviews and visits to these process areas, including the following information:

- Overview of operations.
- Summary of wastes produced and how they are treated or disposed. The summary focuses on liquid wastes, but also includes air emissions and solid wastes where the Inspection Team observed or discussed such waste.
- Observations made during walk-throughs of the process areas, including areas of concern.

The facility also has an on-site laboratory where analyses are performed both for Chemours and DuPont (per the SLA described in Section 1.2). The Inspection Team did not visit the laboratory. In addition, the facility receives support functions provided by personnel from the Chemours Chambers Works facility, which is located in Deepwater, New Jersey. Support functions include research and development support and environmental, health, and safety support and do not comprise a physical process area at the facility.

2.1 Liquid Finishes

Mr. Charles Kurland, Senior MT Engineer, and Mr. Brian Coll, MT Manager, explained the operations and answered questions from the Inspection Team about this process area.

Overview of Operations

[CBI redacted]

Wastes Generation and Disposal

[CBI redacted]

Observations During Walk-Through

The Inspection Team's observations regarding this process area are organized into the following sections:

- Chemical storage area;
- Liquid waste storage;
- Self-inspection records;
- Floor drains; and,
- Spill response.

Chemical Storage Area

The Inspection Team observed the chemical unloading and storage area, which was an outdoor concrete-bermed structure housing storage tanks for NMP and other chemicals, and a truck unloading area. Air emissions from the chemical unloading process or storage tanks are routed through carbon drums before venting to the atmosphere; the facility representatives indicated these air emissions are uncommon and would only occur in the event of a pressure buildup in the storage vessels.

The facility representatives explained that stormwater runoff from the concrete-bermed structure is routed to a trench drain and then to an adjacent sump, which is normally locked such that no flow can leave the sump. The facility representatives explained that while the sump is primarily designed to capture stormwater runoff, it will also capture chemicals in the event of a spill occurring in the bermed area. Once the sump fills up, the facility will sample the contents to determine via FTIR spectroscopy testing if there are any chemical contaminants present. If the sample results indicate that the sump contains water with no chemical contamination, the facility will discharge the contents of the sump through DuPont's sanitary sewer connection. If the sample results indicate the presence of chemicals, the facility will pump the contents of the sump into containers to be hauled off-site for incineration.

The following observations are also highlighted in Area of Concern 1:

The Inspection Team observed evidence of sheet flow toward and around the sump in this area. Specifically, sediment had built up around the outside of the sump up to the top of the sump wall on one end of the sump structure. The Inspection Team observed that the sump had a cover over the top grating and did not observe evidence of sediment deposition into the sump. However, the buildup of sediment reduces the freeboard between the ground and top of the sump wall, beyond which were additional Liquid Finishes process areas. This reduces the capacity of the sump wall to function as designed, which is to maximize solids settling in stormwater runoff and prevent solids/sediment from entering the sump.

Liquid Waste Storage

The Inspection Team walked through the Liquid Finishes operations. The facility representatives explained that all waste in the process area is captured and hauled off-site for incineration.

Liquid waste is collected in one of a few waste accumulation containers (formerly collected in truck trailers as described below), including two 1,000-gallon containment tanks (emptied into totes when full) and one tote (replaced when full). The Inspection Team reviewed waste manifests for these liquid waste containers for the two months preceding the inspection (June and July 2019). The reviewed waste manifests indicate waste is sent to Veolia Environmental Services in Middlesex, New Jersey.

The Inspection Team observed a waste trailer truck loading area adjacent to the chemical storage tanks. The facility representatives explained that this area is used for loading liquid waste from the Liquid Finishes operations into trucks to be hauled off-site for incineration. The Inspection Team observed a truck trailer (i.e., tanker trailer) parked in this loading area; the facility was not actively loading the truck trailer at the time of the inspection. The facility representatives explained that the facility has historically used truck trailers for hauling liquid waste from the Liquid Coatings processes; however, the facility now uses totes to dispose of these wastes. The facility provided records for the last shipment of waste via truck trailer, which occurred on July 11, 2018, and was sent to Heritage Thermal Services in East Liverpool, Ohio.

Self-Inspection Records

The facility representatives explained that the chemical storage area containment sump, waste truck trailer level, and liquid waste containers are routinely checked. The Inspection Team reviewed the facility's self-inspection records for these areas. The reviewed records included:

- Weekly inspections of the waste truck trailer level (year of 2018)
 - The records indicate inspections in May 2018, locking out (e.g., closing the trailer so no more waste can be accepted) of the trailer at the end of May 2018, inspections in August through October 2018, and locking out of the trailer in October 2018.
- Daily inventory checks of the tank farm (e.g., chemical storage area described above) (June – July 2019)
 - The inventory checks include inspecting containment sump level, checking tank levels, ensuring tank pressure is within a specific range, and checking for leaks.
 - No issues were recorded on the reviewed documentation.
- Quarterly inspections of the tank farm equipment (June 2019)
 - The inspections include visual inspection of equipment, inspection for leaks, ensuring spill control materials are readily available, ensuring walkways are unobstructed, ensuring emergency procedures and safety data sheets (SDSs) are readily available, and checking all valves, pumps, flanges, connections, and equipment numbering. The inspection forms also include documentation of notifications to supervisors for failures and corrective actions.
 - No issues were recorded on the June 2019 quarterly inspection form.
- Weekly inspections of the tank farm (June – July 2019)
 - The inspections include inspection of secondary containment, inspection of sump level, checking the position and condition of valves and piping, and other equipment and area checks.
 - No issues or corrective actions were recorded on the reviewed forms.
- Weekly inspections of the process and storage areas (including liquid waste containers) (June – July 2019)

- The inspections include checking container integrity and secondary containment, checking for leaks, ensuring spill control materials and protocols and SDSs are available, and ensuring liquids are stored in the designated areas. The inspection forms also include documentation of notifications to supervisors of failures and corrective actions.
- No issues or corrective actions were recorded on the reviewed forms.

Floor Drains

The Inspection Team observed a sink in the Liquid Finishes process area; the facility representatives indicated the sink was closed-off from any discharge lines and surface water outfalls, and any accumulated liquid waste is normally pumped to the waste tank truck near the NMP and MIBK storage area.

The Inspection Team also observed numerous floor drains in the building housing these operations. The facility representatives explained that all the drains lead to one of the three liquid waste tanks and showed the Inspection Team a polyvinyl chloride (PVC) pipe leading from a floor drain to the liquid waste tote. The Inspection Team observed some floor drains had writing stating: "DUMP NO WASTE" and "DRAINS TO WATER WAYS." The facility representatives indicated that the drains have been re-routed to the liquid waste containers since 2015.

The following observations are also highlighted in Area of Concern 2:

The Inspection Team could not definitively verify the discharge location of all floor drains in the process area. The Inspection Team requested piping diagrams for the Liquid Finishes building, and the facility provided isometric drawings showing the piping from this building going to the liquid waste containers. These isometric drawings were hand drawn by a Chemours employee who conducted a survey of the piping. The Inspection Team asked whether there were any additional diagrams or engineering drawings of the piping, including those from before and after the piping was reconfigured to route the floor drains to the liquid waste containers. The facility representatives explained that these diagrams would have been created before Chemours' ownership of the operations in this building (July 1, 2018) and could not be provided.

The Inspection Team requested this information from DuPont. DuPont indicated that they did not have records of when the floor drains were sealed off or routed; however, DuPont did provide a piping diagram that indicates most drains and pipes associated with Chemours Liquid Finishes are blocked, abandoned, or connected to a container as opposed to a discharge conveyance. However, the diagram also contained a limited number of sewer connections that the Inspection Team was unable to verify the ultimate disposition of.

Spill Response

The Inspection Team asked facility representatives about how spill response was handled in this area of the facility. The facility representatives explained that the facility has procedures for cleaning up smaller spills and an SLA for DuPont to provide emergency spill response for larger spills. The Inspection Team reviewed the facility's operation procedures for spill response and

the SLA with DuPont to provide emergency services. The Inspection Team requested documentation for spills over the past year or for the last spill, if no spills occurred over the last year. The facility provided a summary of incidents, accidents, and safety reporting, including seven report entries, one of which was a leaking drum. The facility provided an incident investigation report for this leak, which includes information related to the environmental impact, material and quantity released, action items, and reporting requirements. The report identified the leaking material as polymeric reactive material (e.g., oxidizer, initiator) and states that 140 kilograms of the material were captured in secondary containment.

2.2 Powder Coatings

Mr. Charles Kurland, Senior MT Engineer, explained the operations and answered questions from the Inspection Team about this process area.

Overview of Operations

[CBI redacted]

Wastes Generation and Disposal

[CBI redacted]

Observations During Walk-Through

[CBI redacted]

The facility representatives indicated that the facility has vacuum pick-up wands to collect dust that falls on the floor. The Inspection Team also observed local exhaust ventilation and general building ventilation. The facility representatives explained that dust captured from the vacuums, local exhaust ventilation air, and general building ventilation air are sent to a dust collector. The contents of the dust collector are disposed of via off-site incineration.

The Inspection Team observed waste collection drums throughout the process area for gloves, sample cups (paper cups used to sample products), wipes, and other solid waste, which are disposed of via off-site incineration. Finally, the Inspection Team observed the thermal oxidizer used for effluent gas from the spray dryer, clears baghouse, and fines baghouse. The facility explained that the thermal oxidizer operates at 400 degrees Celsius.

The Inspection Team did not observe floor drains, conveyances to sewers or sumps, or any liquid waste generation or collection in this process area.

3.0 Areas of Concern

The potential CWA Areas of Concern referred to in the narrative of this report are summarized as follows:

Area of Concern 1

The Inspection Team observed evidence of sheet flow toward and around the sump for the outdoor chemical unloading and storage area for the Liquid Finishes process area, resulting in sediment buildup around the outside of the sump up to the top of the sump

wall. The Inspection Team observed that the sump had a cover over the top grating and did not observe evidence of sediment deposition into the sump. The buildup of sediment around the outside of the sump reduces the freeboard between the ground and top of the sump wall, beyond which were additional Liquid Finishes process areas. This reduces the capacity of the sump wall to function as designed, which is to maximize solids settling in stormwater runoff and prevent solids/sediment from entering the sump.

Area of Concern 2

The Inspection Team was unable to verify the ultimate discharge location of all floor drains in the Liquid Finishes process area. The Inspection Team observed some floor drains in the Liquid Finishes process area that had writing stating: "DUMP NO WASTE" and "DRAINS TO WATER WAYS." The facility representatives indicated that the drains have been re-routed to the liquid waste containers since 2015. The Inspection Team requested piping diagrams for this building to verify this information. The facility provided isometric drawings showing the piping from this building going to the liquid waste containers. The isometric drawings were hand drawn by a Chemours employee who conducted a survey of the piping. The Inspection Team asked whether there were any additional diagrams or engineering drawings of the piping, including those from before and after the piping configuration of the buildings was changed to route floor drains to the liquid waste containers.

The facility representatives explained that the floor drain diagrams would have been created before Chemours' ownership of the operations in this building (July 1, 2018) and they could not be provided. Without this documentation, the Inspection Team could not verify when and by whom the floor drain configuration was changed nor verify that every drain was routed to the liquid waste containers. The Inspection Team requested this information from DuPont. DuPont indicated that they did not have records of when the floor drains were sealed off or routed; however, DuPont did provide a piping diagram that indicates most drains and pipes associated with Chemours Liquid Finishes are blocked, abandoned, or connected to a container as opposed to a discharge conveyance. However, the diagram also contained a limited number of sewer connections that the Inspection Team was unable to verify the ultimate disposition of.

Appendix A: Sign-In Sheet

Date: 7/24/2019

EPA INSPECTION
Chemours - Parlin, New Jersey

NAME	ORGANIZATION	TITLE	PHONE NUMBER/EMAIL
Kathryn Bendik	US EPA	Enforcement Officer/Physical Scientist	202-564-6397 bendik.kathryn@epa.gov
Michelle Spira	ERG	Chemical Engineer	703-633-1709 Michelle.Spira@ERG.com
Danny O'Connell	PB Contractor/EPA	Compliance	760-987-8032 danny.oconnell@pbm.com
Allison Rumsey	Arnold/Porter	Attorney	202-942-5095 allison.rumsey@arnoldporter.com
Brian Cou	CHEMOURS	Manufacturing Tech. Mgr.	856-540-3418 Brian.Cou@chemours.com
Charles Kurland	Chemours	Sr. Manufacturing Tech. Engineer	732-554-1720 charles.kurland@chemours.com
Rick Chalfant	Chemours	Industrial Hygiene Lead	856-540-4200 rick.chalfant@chemours.com
Joseph Varco	US EPA	Scientist	202-564-1791 Varco.Joseph@epa.gov
Meghan Randall	Chemours	Operations Leader	(609) 302-9960 meghan.j.randall@chemours.com
Thomas Ostroski	Chemours	Area Manager	732-554-1716 Thomas.ostroski@chemours.com
Trent Rainey	USEPA-UEIC	Envt. Engineer	303-462-9309 trent.rainey@epa.gov
Daren Winkler	U.S. EPA-UEIC	Environmental Engineer	203-462-9261 daren.winkler@epa.gov
MIKE BLM	CHEMOURS	SAFETY & OCCUP. HEALTH LEAD	856-540-2676 michael.b.blm@chemours.com
Scott Northey	Chemours	Env. Mgr.	856-540-2012 scott.northy@chemours.com
Sean Layton	ERG	Chemical Engineer	856-981-3574 Sean.Layton@erg.com
LARRY CULLEN	ATP	PARLIN	202/942-5477 laurence.cullen@arnoldporter.com

Appendix B: Site Diagram

[CBI redacted]