



Louisville Metro Air Pollution Control District  
701 West Ormsby Avenue, Suite 303  
Louisville, Kentucky 40203-3137



**MM DD, YYYY**

## **Title V Permit O-0062-23-V Statement of Basis**

**Source:** The Chemours Company FC, LLC      **Owner:** The Chemours Company FC, LLC  
4200 Camp Ground Road      1007 North Market Street  
Louisville, KY 40216      Wilmington, DE 19898

Application Documents:      See Table I-9      Administratively Complete:      09/06/2023  
Draft Permit:      March 17, 2025      Proposed Permit:      March 17, 2025  
Permitting Engineer:      Blake Clark  
Plant ID:      0062      SIC:      2819 and 2869      NAICS:      325199

### **Introduction:**

This permit will be issued pursuant to: (1) Regulation 2.16, (2) Title 40 of the Code of Federal Regulations Part 70, and (3) Title V of the Clean Air Act Amendments of 1990. Its purpose is to identify and consolidate existing District and Federal air requirements and to provide methods of determining continued compliance with these requirements.

This permit action renews the operating permit for a five-year term and revises the permit to become an area source for HAPs. The permit is also adding previously constructed equipment.

Jefferson County is classified as an attainment area for lead (Pb), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), particulate matter less than 10 microns (PM<sub>10</sub>), particulate matter less than 2.5 microns (PM<sub>2.5</sub>), and sulfur dioxide (SO<sub>2</sub>). Jefferson County is classified as a nonattainment area for ozone (O<sub>3</sub>).

### **Permit Application Type:**

☐ Initial issuance      Permit Revision      ☒ Permit renewal  
☐ Administrative  
☐ Minor  
☒ Significant

### **Compliance Summary:**

☒ Compliance certification signed      ☐ Compliance schedule included  
☐ Source is out of compliance      ☒ Source is operating in compliance

## I Source Information

### 1. Process Description:

The Chemours Company FC, LLC manufactures chlorodifluoromethane (Freon™ 22, HCFC-22, or F-22), trifluoromethane (Freon™ 23, HFC-23 or F-23), and hydrochloric acid (HCl). Two natural gas fired boilers supply steam to Chemours's chemical manufacturing units. A gasoline dispensing facility is operated for company vehicles.

### 2. Site Determination:

E.I. du Pont de Nemours and Company, Inc. split into two separate companies. The majority of the processes were retained by the Chemours Company FC, LLC and E.I. du Pont retained Emission Unit U6, VF Process. Chemours owns all of the property bounded by the current E.I. du Pont site and E.I. du Pont leases the portion of the property where Emission Unit U6 is located. Chemours and E.I. du Pont are their own independent companies and do not share any common ownership. Each facility's operations are conducted by its own employees, with its own equipment, under its own permits, and in compliance with its own corporate directions and policies.

### 3. Emission Unit Summary:

Emission Unit	Equipment Description
U1– Powerhouse	Two natural gas boilers equipped with low NOx burners
U2 – Chloroform Tanks	Chloroform Storage equipped with rental de-watering adsorbers with associated trailer-mounted scrubber and two carbon beds and associated fugitive piping.
U3 – Freon™ 22/ Freon™ 23 Process	Freon® production (HCFC-22 and HFC-23 Processes: chloroform is pumped to a reactor and reacted with hydrogen fluoride to produce chlorodifluoromethane (F22) as the primary product and trifluoromethane (F23) and anhydrous hydrogen chloride as byproducts. The products and byproducts are separated and the F22 and F23 are stored until loaded and shipped.)
U4 – HCl	HCl production (anhydrous hydrogen chloride gas, from the Freon 22/F23 process is absorbed in water to produce hydrochloric acid, stored in fixed roof tanks)
U5 – Gasoline Dispensing	A gasoline refueling operation for vehicles used onsite
IA1, IA2, and IA3	Emergency Generator and Fire Pumps
IA4	Cold Solvent Parts Cleaners

**4. Environmental Justice Analysis:**

According to U.S. EPA's EJScreen 2.0, the area within a one-mile radius of this facility is comprised of 69% People of Color (POC) and 73% low-income. The state of Kentucky is comprised of 16% POC and 37% low-income. The approximate population within this area is 1,158.

**5. Fugitive Sources:**

Fugitive emissions of VOCs from the Freon™ 22/ Freon™ 23 process are regulated by 40 CFR 63 Subpart VVa Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry.

**6. Permit Revisions:**

Permit No.	Public Notice Date	Issue Date	Change Type	Description/Scope
160-97-TV	09/24/2000, 12/10/2000, 01/28/2001	08/30/2002	Initial	Initial Permit Issuance
160-97-TV (R1)	03/02/2013	04/23/2013	Renewal	Regular Renewal; Incorporate STAR requirements, Construction Permits 394-05-C, 344-08-C, 345-08-C, 81-09-C, 82-09-C and 133-09-C
O-0062-16-V	10/27/2016	12/19/2016	Signif	Name change and removing Emission Unit U6 except Emission Point 6005 and Control Device SB-301. Added three Emission Units IA1, IA2, and IA3; added 40 CFR 60 Subpart III, 40 CFR 63 Subpart ZZZZ and 40 CFR 63 Subpart CCCCCC
O-0062-16-V (R1)	--	09/12/2017	Admin	Correcting effective date due to typographic error
O-0062-18-V	11/18/2018	01/03/2019	Renewal	Permit Renewal
O-0062-23-V	03/17/2025- 04/16/2025	MM/DD/20 25	Signif/ Renewal	Incorporating Construction Permit C-0062-0032-21-V, C-0062-0009-20-V, and C-0062-24-0010-V, becoming an area source for HAPs, TV Permit Renewal

The changes to Permit O-0062-23-V are detailed in the following table.

EU	Description of Change/Scope
Plantwide	Addition of limits of 10 tons for single HAP and 25 tons for total HAP
U1: Powerhouse – Two Natural Gas Boilers	Removal of applicability of 40 CFR 63, Subpart DDDDD, <i>National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters</i>
U2: Chloroform Tanks	<ul style="list-style-type: none"> <li>• Addition of EU</li> <li>• Chloroform De-Watering Project added</li> <li>• VVa updated to VVb</li> </ul>
U3: Freon® 22/Freon® 23 Process	<ul style="list-style-type: none"> <li>• Removal of applicability of the HON (Hazardous Organic NESHAP): <ul style="list-style-type: none"> <li>○ 40 CFR 63 Subpart F, <i>National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks</i></li> <li>○ 40 CFR 63 Subpart G, <i>National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks</i></li> <li>○ 40 CFR 63 Subpart H, <i>National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks</i></li> </ul> </li> <li>• Addition of applicability of 40 CFR 63 Subpart VVVVVV, <i>National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources</i>, and incorporation of 40 CFR 60 Subpart VVa, <i>Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry</i></li> <li>• Addition of HCl control efficiency testing for SB-301</li> </ul>
U4: HCl	<ul style="list-style-type: none"> <li>• Removal of applicability of 40 CFR 63, Subpart NNNNN, <i>National Emission Standards for Hazardous Air Pollutants for Major Sources: Hydrochloric Acid Production</i></li> <li>• Addition of HCl control efficiency testing for SB-17</li> </ul>
U5: Gasoline Dispensing	Addition of applicability of 40 CFR 63, Subpart CCCCCC, <i>National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities</i>
IA1: Emergency Generator	No change
IA2: New Fire Pump	No change
IA3: Existing Fire Pumps	No change
IA4: Parts Washers	No change

**7. Construction Permit History:**

Permit No.	Effective Date	Description
657-94-C (R1) <sup>1</sup>	10/28/2014	Two (2) Natural Gas 174 MMBtu/hr Babcock and Wilcox Boilers equipped with low NOx burners
0062-0009-20-V	10/14/2020	Two (2) storage tanks and associated piping components at the facility to store raw material chloroform.
C-0062-0032-21-V	03/01/2022	Installing a pressurized chloroform feed tank, a HFC-23 recovery tower including a vent condenser; an HCl stripping column with an associated flash tank; aqueous HCl pump tank and graphite heat exchangers; and a vacuum pump for the HFC-23 dryers, along with associated piping components.
C-0062-24-0010-V	07/03/2024	Rental de-watering adsorbers with associated trailer-mounted scrubber and two carbon beds and associated fugitive piping

**8. Application and Related Documents**

Document Number	Date	Description
75871	03/14/2014	‘Certificate of Existence’
91796	05/01/2018	CAM Plan
156972	07/15/2020	Application for two chloroform storage tanks and associated piping components.
253355	08/31/2021	Application 100A Construction/Operating
253368	08/31/2021	Public Application
253370	08/31/2021	Public Appendix A PTE
603407	08/02/2023	Confidential TV Renewal Application
606111	08/07/2023	Confidential Company PTE

<sup>1</sup> Netting was performed for CO and it “netted out”. Construction Permit 657-94-C was revised to remove the CO emission limit of 97 tpy.

**9. Emission Summary**

<b>Pollutant</b>	<b>District Calculated Actual Emissions (tpy) 2022 Data</b>	<b>Pollutant that triggered Major Source Status (based on PTE)</b>
CO	34.96	Yes
NO <sub>x</sub>	19.79	Yes
SO <sub>2</sub>	0.18	No
PM <sub>10</sub>	0.16	No
PM <sub>2.5</sub>	0.13	No
VOC	1.82	No
Total HAPs	2.30	No**
Single HAP > 1 tpy		
Hydrochloric Acid	1.43	No**
Greenhouse Gas	2,116,995* CO <sub>2</sub> e	Yes

\* This data was obtained from EPA 2020 Greenhouse Gas Emissions (ghgdata.epa.gov).

\*\* The source has accepted synthetic minor limits for these pollutants.

**10. Applicable Requirements**

<input checked="" type="checkbox"/> 40 CFR 60	<input checked="" type="checkbox"/> SIP	<input checked="" type="checkbox"/> 40 CFR 63
<input type="checkbox"/> 40 CFR 61	<input checked="" type="checkbox"/> District Origin	<input checked="" type="checkbox"/> Other

**11. Referenced Federal Regulations:**

40 CFR 60 Subpart Db – Standards of Performance for Industrial Commercial Institutional Steam Generating Units

40 CFR 60 Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines

40 CFR 60 Subpart VVa – Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006, and on or Before April 25, 2023

40 CFR 60 Subpart VVb—Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After April 25, 2023

Subpart CCCCCC – National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities

40 CFR 63 Subpart WW – National Emission Standards for Storage Vessels (Tanks) - Control Level 2

40 CFR 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines

40 CFR 63 Subpart VVVVVV – National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources

40 CFR 64 – Compliance Assurance Monitoring

40 CFR 68 – Chemical Accident Prevention Provisions

40 CFR 82 – Protection of Stratospheric Ozone

**12. Non-Applicable Regulations:**

40 CFR 63 Subparts F, G and H (HON Rule), 40 CFR 63 Subpart NNNNN (HCl Production MACT) and 40 CFR 63 Subpart DDDDD (Boiler MACT) no longer apply since Chemours is now an area source of HAPs.

40 CFR 63 Subpart VVVVVV does not apply to EU U4 because it is considered an ancillary activity as that unit of equipment deals with the HCl created as a byproduct of the main chemical manufacturing process.

**II Regulatory Analysis**

**1. Acid Rain Requirements:**

The Chemours Company FC, LLC is not subject to the Acid Rain Program.

**2. Stratospheric Ozone Protection Requirements:**

Title VI of the CAAA regulates ozone depleting substances and requires a phase-out of their use. This rule applies to any facility that manufactures, sells, distributes, or otherwise uses any of the listed chemicals. The Chemours Company FC, LLC does not manufacture, sell, or distribute any of the listed chemicals. The source's use of listed chemicals is that in fire extinguishers, chillers, air conditioners and other HVAC equipment.

**3. Prevention of Accidental Releases 112(r):**

The Chemours Company FC, LLC stores and processes chloroform in excess of the 20,000-pound threshold quantity, chlorine in excess of the 2,500-pound threshold quantity, and hydrogen fluoride (at greater than 50% concentration) in excess of the

1,000-pound threshold quantity, and therefore is required to comply with 40 CFR 68, Subpart G Chemical Accident Prevention Provisions Risk Management Plan and Regulation 5.15 Chemical Accident Prevention Provisions.

#### 4. 40 CFR Part 64 Applicability Determination:

The Chemours Company FC, LLC is subject to 40 CFR Part 64 - *Compliance Assurance Monitoring*.

#### 5. Basis of Regulation Applicability

##### a. Applicable Regulations

Regulation	Title	Basis
5.15	Chemical Accident Prevention Provisions	Implements the provisions of 40 CFR Part 68 as required by the Act, §112(r)
6.18	Standards of Performance for Solvent Metal Cleaning Equipment	Applies to cold cleaners.
6.24	Standards of Performance for Existing Sources Using Organic Materials	Applies to an affected facility using any organic materials which was in being prior to June 13, 1979.
6.42	Reasonably Available Control Technology Requirements for Major Volatile Organic Compound and Nitrogen Oxides Emitting Facilities	Applies to the NOx emissions from all NOx-emitting facilities located at all major NOx-emitting stationary sources.
7.06	Standards of Performance for New Indirect Heat Exchangers	Applies to each indirect heat exchanger having input capacity of more than one million BTU per hour commenced after September 1, 1976.
7.12	Standard of Performance for New Storage Vessels for Volatile Organic Compounds	Applies to storage tanks with a capacity greater than 250 gallons constructed after April 19, 1972.
7.15	Standards of Performance for Gasoline Transfer to New Service Station Storage Tanks (Stage I Vapor Recovery)	Applies to the transfer of VOC from transport tanks into storage tanks constructed after June 13, 1979.
40 CFR 60 Subpart Db	Standards of Performance for Industrial Commercial Institutional Steam Generating Units	Applies to steam generating units for which construction or modification is commenced after June 19, 1984 and that have a maximum design heat



Regulation	Title	Basis
		input capacity greater than 100 MMBtu/hr.
40 CFR 60 Subpart Kb	Standards of Performance for Volatile Organic Liquid Storage Vessels	Applies to each storage vessel with a capacity greater than or equal to 75 cubic meters (m <sup>3</sup> ) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984.
40 CFR 60 Subpart VVa	Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006, and on or Before April 25, 2023	Applies to affected facilities in the synthetic organic chemicals manufacturing industry construction after November 7 and on or Before April 25, 2023.
40 CFR 60 Subpart VVb	Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After April 25, 2023	Applies to affected facilities in the synthetic organic chemicals manufacturing industry construction after April 25, 2023
40 CFR 60 Subpart IIII	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	Applies to facilities with stationary compression ignition internal combustion engines.
40 CFR 63 Subpart CCCCCC	National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities	Establishes emission limits and management practices for HAP emissions from the loading of gasoline storage tanks at gasoline dispensing facilities.
40 CFR 63 Subpart WW	National Emission Standards for Storage Vessels (Tanks) - Control Level 2	Applies to the control of air emissions from storage vessels for which another subpart references the use of this subpart for such air emission control.
40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	Applies to existing, new, and reconstructed stationary engines located at a major source of HAP emissions.

Regulation	Title	Basis
40 CFR 63 Subpart VVVVVV	National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources	Applies if you own or operate a chemical manufacturing process unit (CMPU) that is in an area source of HAPs.
40 CFR 64	Compliance Assurance Monitoring	Applies to each pollutant specific emission unit that is subject to an emission limitation or standard; uses a control device to achieve compliance; and has pre- control emissions that exceed or are equivalent to the major source threshold.
40 CFR 68	Chemical Accident Prevention Provisions	
40 CFR 82	Protection of Stratospheric Ozone	

**b. Plantwide**

- i. The Chemours Company FC, LLC is a major source for CO and NO<sub>x</sub>. Regulation 2.16 - *Title V Operating Permits* establishes requirements for major sources.
- ii. Chemours is requesting source wide limits of 10 TPY for each individual HAP and 25 TPY for combined HAPs to be an area source for HAPs.
- iii. Regulations 5.00 5.20, 5.21, and 5.23 (STAR Program) establish requirements for environmental acceptability of toxic air contaminants (TACs) and the requirement to comply with all applicable emission standards.
- iv. The Chemours Company FC, LLC submitted a TAC Environmental Acceptability Demonstration to the District on August 31, 2021. Compliance with the STAR EA Goals was demonstrated in the source's EA Demonstrations. Based on AERMOD, the maximum off-site HQ for all process/process equipment is less than 1.0 and the maximum off-site R<sub>C</sub> is less than 3.8 for the plantwide cumulative risk. The carcinogenic risk for all processes is below 7.5 for non-industrial property and below 75.0 for industrial property, the source has demonstrated compliance with the EA Goals for each TAC. The following table demonstrates that the plantwide risk values presented in the source's EA Demonstration comply with the STAR EA goals required in Regulation 5.21.

### Cancer Risk – Single Process/Single TAC (Chloroform and Chlorine)

Emission Point	TAC	Risk		HQ	
		Non-Adjusted	Industrial	Non-Adjusted	Industrial
		$EAG_C \leq 1.0$	$EAG_C \leq 10.0$	$EAG_{NC} \leq 1.0$	$EAG_{NC} \leq 3.0$
U2, EP 2001 - Chloroform Storage Tanks TS-31 and TS-32	Chloroform (CHCl <sub>3</sub> )	0.35	1.66	4.99E-05	2.38E-04
U2, EPN 2002 - Chloroform Tank Fugitives	Chloroform	0.46	4.34	6.62E-05	6.22E-04
U3, EP 3001 - Vaporizers (to Scrubber SB-8)	Chlorine	-	-	0.46	1.95
U3, 3003 - HFC-23 Recovery Tower Vent Condenser	Chloroform	0.16	0.61	2.34E-05	8.69E-05
U3, 3009 - HCFC-22 Process Unit Fugitives	Chloroform	0.43	1.48	6.10E-05	2.12E-04
	Chlorine	-	-	1.40E-01	0.50
<b>Plantwide R<sub>C</sub> for new Processes</b>	-	0.82 (≤3.8)	5.56 (≤38)	-	-
<b>Plantwide R<sub>C</sub> for all Processes:<sup>2</sup></b>	-	0.95 (≤7.5)	5.73 (≤75)	-	-
<b>R<sub>NC</sub> for all Processes:</b>	-	-	-	Chloroform 0.000144 Chlorine 0.6	Chloroform 0.00082 Chlorine 2.45

### Cumulative Cancer Risk – All new/Modified and Existing Processes/All TAC (Chloroform)

Source ID	Description	Risk	
		Residential	Industrial
New All <sup>3</sup>	New Processes	0.82 (7.5)	5.56 (75)
Exist All	All Existing Processes	0.39	1.48
All	All Processes	0.95	5.73

*Note: The results for All processes new and existing is not additive because the modeling maximum does not occur at the same receptor*

<sup>2</sup> Value from ChemR06-2-21.isc and ChemR06-2021ni.isc.

<sup>3</sup> Value from ChemR06-2-21.isc and ChemR06-2021ni.isc.

**Cumulative Cancer Risk – All New/Modified Processes/All TAC (Chloroform)**

Source ID	Description	Risk	
		Residential	Industrial
New All <sup>12</sup>	New Processes	0.82 (3.8)	5.56 (38)

- v. Regulation 2.16, sections 4.1.9.1 and 4.1.9.2 require monitoring and record keeping to assure ongoing compliance with the terms and conditions of the permit. The owner or operator shall maintain all the required records for a minimum of 5 years and make the records readily available to the District upon request.
- vi. Regulation 2.16, section 4.3.5, requires stationary sources for which a Title V is issued shall submit an annual compliance certification by April 15 of the following calendar year. In addition, as required by Regulation 2.16, section 4.1.9.3, the source shall submit compliance reports at least every six months to show compliance with the permit. Compliance reports and compliance certifications shall be signed by a responsible official and shall include a certification statement per Regulation 2.16, section 3.5.11.

**c. Emission Unit U1 – Powerhouse – Two Natural Gas Boilers**

EP	Description	Applicable Regulations	Control ID
1000 <sup>4,5</sup>	Natural Gas-Fired 174 MMBtu/hr Babcock and Wilcox Boiler	STAR, 6.42, 7.06, 40 CFR 60 Subpart Db	NA
1001 <sup>4</sup>	Natural Gas-Fired 174 MMBtu/hr Babcock and Wilcox Boiler		NA

**i. Standards**

**(1) NO<sub>x</sub>**

- (a) Regulation 6.42, section 4.3 requires the permit applicant for NO<sub>x</sub> emitting facilities to propose RACT emission limiting standards and RACT emission control technology. The source shall comply with the NO<sub>x</sub> RACT plan that was adopted by Board Order on November 8, 1999.
- (b) From 40 CFR 60 Subpart Db, since the fuel/steam generating unit type is high heat release rate, the emission limit is 0.2 lb/MMBtu.

<sup>4</sup> Netting was performed for CO and it “netted out”. Construction Permit 657-94-C was revised to remove the CO emission limit of 97 tpy.

<sup>5</sup> All criteria pollutants potential emissions were less than the significant levels for PSD/Nonattainment NSR except for SO<sub>2</sub>, NO<sub>x</sub>, and CO. [Construction Permit 657-94-C]

- (c) Regulation 7.06 applies to these boilers, however since they are each less than 250 million-BTU per hour, there is no applicable standard.

**(2) Opacity**

Regulation 7.06, section 4.2 establishes opacity standards for the boilers.

**(3) PM**

In accordance with Regulation 7.06, section 4, the PM emission standard for each boiler is 0.10 lb/MMBtu.

**(4) SO<sub>2</sub>**

In accordance with Regulation 7.06, section 5, the emission standard for each boiler for SO<sub>2</sub> is 0.80 lb/MMBtu.

**d. Emission Unit U2 – Chloroform Tanks**

EP	Description	Applicable Regulations	Control ID
2001	Chloroform Raw Material Storage Tank TS-31 and TS-32, 632,452 gallons each	STAR, 7.12, 40 CFR 60 Subpart Kb, 40 CFR 63 Subparts VVVVVV	AD-3 and AD-4
2002a	Existing Fugitive Piping Components	STAR, 40 CFR 60 Subpart VVa, 40 CFR 63 VVVVVV	NA
2002b	New Fugitive Piping Components	STAR, 40 CFR 60 Subpart VVb, 40 CFR 63 VVVVVV	NA
2003	Two (2) Rental De-watering Adsorber Dryers, in series <sup>6</sup>		CS-1 AD-5 AD-6

Control ID	Description	Control Efficiency
AD-3 and AD-4	Carbon Adsorber with two carbon beds	98%
AD-5 and AD-6	Carbon Adsorber with two carbon beds, in series	99.99% <sup>7</sup>
CS-1 <sup>8</sup>	Trailer Mounted Packed Bed Scrubber, with Bio-Scrub X or similar scrubbing liquid	--

<sup>6</sup> Vacuuming the adsorber material will emit VOC. However, the potential emissions are less than 5 tpy. Therefore, Regulation 7.25, Standard of Performance for New Sources Using Volatile Organic Compounds, does not apply.

<sup>7</sup> A manufacturer's guarantee was submitted with the construction application on 02/16/2024.

<sup>8</sup> Offsite disposal of spent scrubber liquid will be handled by rental company.

**i. Standards**

**(1) Chemical Accident Prevention and Risk Management Discussion of Applicability Plan (Regulation 5.15 and 40 CFR Part 68, Subpart G)**

Chemours stores and processes chloroform in excess of the 20,000-pound threshold quantity, chlorine in excess of the 2,500-pound threshold quantity, and hydrogen fluoride (at greater than 50% concentration) in excess of the 1,000-pound threshold quantity, and therefore is required to comply with 40 CFR 68, Subpart G Chemical Accident Prevention Provisions Risk Management Plan and Regulation 5.15 Chemical Accident Prevention Provisions.

**(2) HAP**

40 CFR 63, Subparts VVa, VVb, and VVVVVV establish HAP standards.

**(3) VOC**

- (a) For Emission Point 2001 (storage tanks TS-31 and TS-32), Regulation 7.12, section 3.1 requires a floating roof and submerged fill.
- (b) For Emission Points 2002a and 2002b, Regulation 40 CFR 63, Subparts VVa and VVb require valves and pumps to be monitored monthly to detect leaks.
- (c) For Emission Points 2002a and 2002b, Regulation 40 CFR 63, Subparts VVa and VVb require pumps to be checked for visual indicators of liquids dripping from pump seals weekly.
- (d) For Emission Points 2002a and 2002b, Regulation 40 CFR 63, Subparts VVa and VVb require open-ended valves or lines to be equipped with a cap, blind flange, plug or second valve.

**(4) TAC**

The owner or operator shall utilize the control devices at all times an associated process is in operation and shall maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.

e. **Emission Unit U3 – Freon® 22/Freon® 23 Process**

EP	Description	Applicable Regulations	Control ID
TF-5	Pressurized Chloroform Feed Tank, 9,000 gallons <sup>9</sup>	40 CFR 60 Subpart VVa, 40 CFR 63 Subpart VVVVVV	NA
TR-4	HFC-23 Recovery Tower <sup>10</sup>	40 CFR 63 Subpart VVVVVV	NA
EPN 3003	Chloroform Vent Condenser, VC-1	STAR, 40 CFR 63 Subpart VVVVVV	NA
3001	Vaporizer V-1 and V-2	STAR	SB-8
3002	Reactors #1 and #2 and Refining Equipment for Manufacturing Freon® 22 and Freon® 23; Tank TR-8 and Tank TW-1	STAR, 6.24, 40 CFR 63 VVVVVV	SB-5 & SB-7
3009	Fugitive Emissions (pumps, connectors, valves)	STAR, 40 CFR Part 60 Subpart VVa, 40 CFR 63 VVVVVV	NA
HF-6005 <sup>11</sup>	HF Unloading, 13,000 lb/hr	STAR	SB-5, SB-7 & SB-301 or SB-403 <sup>12</sup>

Control ID	Description	Control Efficiency
AD-3 and AD-4	Carbon Adsorber with two carbon beds in series	98%

i. **Standards****(1) Chemical Accident Prevention and Risk Management Discussion of Applicability Plan (Regulation 5.15 and 40 CFR Part 68, Subpart G)**

Chemours stores and processes chloroform in excess of the 20,000-pound threshold quantity, chlorine in excess of the 2,500-pound threshold quantity, and hydrogen fluoride (at greater than 50% concentration) in excess of the 1,000-

<sup>9</sup> Vented to the recovery tower.

<sup>10</sup> Vented to the vent condenser.

<sup>11</sup> In the event that all Control Devices SB-301, SB-5 and SB-7 have been taken off-line, Emission Point HF-6005 can be vented to Control Device SB-403 on DuPont's facility ID #1912.

<sup>12</sup> E.I. du Pont's Scrubber (Plant ID 1912)

pound threshold quantity, and therefore is required to comply with 40 CFR 68, Subpart G Chemical Accident Prevention Provisions Risk Management Plan and Regulation 5.15 Chemical Accident Prevention Provisions.

**(2) HAP**

40 CFR 63, Subparts VVa and VVVVVV establish HAP standards.

**(3) VOC**

For Emission Point 3002, Regulation 6.24 limits the pound per hour and pound per day emission of Class III Solvents. Class III Solvent means any organic material which is not classified as a Class I or a Class II solvent. A one-time compliance demonstration was performed, and the standard cannot be exceeded uncontrolled.

**(4) TAC**

- (a) For Emission Point 3001 an emissions limit of 200 pounds per 12-consecutive month period for chlorine was established by modeling performed on 07/09/2020. The modeling used the emission rate of 200 pounds per year for Chlorine and was EA.
- (b) For Emission Point 3009, an emission limit for chloroform of 224 pounds per 12-consecutive month period was established by modeling performed on 07/09/2020. The modeling used the emission rate of 224 pounds per year for chloroform and was EA.
- (c) For Emission Point 3009, an emission limit for chlorine of 352 pounds per 12-consecutive month period was established by modeling performed on 07/09/2020. The modeling used the emission rate of 352 pounds per year for chlorine and was EA.

**f. Emission Unit U4 – HCl**

EP	Description	Applicable Regulations	Control ID
4000	HCl Stripping, Storage and Loading	STAR, 40 CFR 68	SB-17
4001	Fugitive Emissions, HCl		NA

Control ID	Description	Control Efficiency
SB-17	Wet Scrubber	99%



**i. Standards****(1) Chemical Accident Prevention and Risk Management Discussion of Applicability Plan (Regulation 5.15 and 40 CFR Part 68, Subpart G)**

Chemours stores and processes chloroform in excess of the 20,000-pound threshold quantity, chlorine in excess of the 2,500-pound threshold quantity, and hydrogen fluoride (at greater than 50% concentration) in excess of the 1,000-pound threshold quantity, and therefore is required to comply with 40 CFR 68, Subpart G Chemical Accident Prevention Provisions Risk Management Plan and Regulation 5.15 Chemical Accident Prevention Provisions.

**(2) TAC**

For Emission Point 4000, the owner or operator shall utilize Control Device SB-17 (wet scrubber) at all times when HCl stripping, storage and loading are in operation and shall maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.

**g. Emission Unit U5 – Gasoline Dispensing**

EP	Description	Applicable Regulations	Control ID
5000	Gasoline Dispensing, 1000-gallon unleaded gasoline storage tank	STAR, 7.15, 40 CFR 63 Subpart CCCCCC	NA

**i. Standards****(1) VOC**

Regulation 7.15 establishes work practice standards for the gasoline storage tank.

**(2) HAP**

40 CFR Subpart CCCCCC establishes operating and recordkeeping standards for the loading of gasoline storage tanks at gasoline dispensing facilities.

**h. Emission Unit IA1, IA2, IA3, and IA4 – Emergency Generators and Fire Pumps**

EP	Description	Applicable Regulations	Control ID
IA1-GEN	Diesel emergency generator (14P54- GEN), make Cummins,	40 CFR 60 IIII, 40 CFR 63 ZZZZ	NA

EP	Description	Applicable Regulations	Control ID
	model QSX15- G9 NR2, capacity of 563 kW (765 hp)		
IA2-FP1	Diesel Fire Pump (#2 Diesel Drive Powers 11251P), make Clark Fire Protection Products, Inc., model JU6H-UFADW8, capacity of 210 kW (285 hp)	40 CFR 60 IIII, 40 CFR 63 ZZZZ	NA
IA3-FP2 <sup>13</sup>	Diesel Emergency Fire Pump (#1 Fire Pump House – East Diesel Powers 11220P) 348 hp	40 CFR 63 ZZZZ	NA
IA3-FP3 <sup>10</sup>	Diesel Emergency Fire Pump (#1 Fire Pump House – West Diesel Powers 11221P) 348 hp	40 CFR 63 ZZZZ	NA

**i. Standards**

**(1) HAP**

NESHAP 40 CFR 63, Subpart ZZZZ specifies the allowable emissions of HAPs from covered engines. For engines of the size in this permit, this regulation states that meeting the NSPS requirements of 40 CFR 60, Subpart IIII will assure compliance with these HAP requirements.

**(1) Unit Operation**

Federal New Source Performance Standard 40 CFR 60, Subpart IIII sets forth requirements for operators of reciprocating engines

**(2) TAC**

TAC emissions from emergency engines are defined to be de minimis in Regulation 5.21, section 2.3.

**i. Emission Unit IA4 – Cold Solvent Parts Cleaners**

EP	Description	Applicable Regulations	Control ID
IA4	Two (2) Non-Halogenated Cold Solvent Parts Cleaners	6.18	NA

**i. Standards**

**VOC**

The parts washers under this unit meet the definition of insignificant activities per Regulation 2.16, section 1.23. However, Regulation 6.18 applies to each cold cleaner that use VOC to remove soluble

<sup>13</sup> Per 40 CFR 60 Subpart IIII Section 60.4200, engines IA3-FP2 and IA3-FP3 do not meet the applicability dates to be subject to this regulation.

impurities from metal surfaces. Regulation 6.18 establishes standards for cold cleaner that use VOCs to remove soluble impurities from metal surfaces.

### III Other Requirements

#### 1. Temporary Sources:

The source did not request to operate any temporary facilities.

#### 2. Short Term Activities:

The source did not report any short term activities.

#### 3. Emissions Trading:

The source is not subject to emission trading.

#### 4. Alternative Operating Scenarios:

The source did not request any alternative operating scenarios.

#### 5. Compliance History:

Date	Regulation Violated	Settlement
06/04/1993	6.39 pursuant to 40 CFR 60 Subpart VV	Settled
07/01/1998	40 CFR 60 Subpart Db	Settled
01/27/2000	40 CFR 60 Subpart Db	Settled
09/03/2009	40 CFR 63 Subpart H and 40 CFR 63 Subpart NNNNN	Settled
06/30/2011	1.07 and 1.7	Settled
05/06/2014	1.05	Settled

#### 6. Calculation Methodology or Other Approved Method:

See Attachment A on page 98 of the operating permit O-0062-23-V.

#### 7. Insignificant Activities

Equipment	Qty	PTE (ton/yr)	Regulation Basis
Above-Ground Diesel Storage Tank	5	VOC = 0.00036	Regulation 1.02, Appendix A, Section 3.92
Emergency Relief Vents, Stacks and Ventilating Systems	307	NA	Regulation 1.02, Appendix A, Section 3.10
On-Site Quality Control Laboratories	2	VOC = 0.90	Regulation 1.02, Appendix A, Section 3.11

Equipment	Qty	PTE (ton/yr)	Regulation Basis
Soil or Groundwater Contamination Remediation Projects	1	NA	Regulation 1.02, Appendix A, Section 3.21
Portable diesel fuel storage tank	1	VOC - Negligible	Regulation 1.02, Appendix A, Section 3.23
Jet Exhaust Condenser	1	HAP = 0.0053	Regulation 1.02 Section 1.38.1.2
Cooling Tower <sup>14</sup>	1	PM = 0.12	Regulation 1.02, Appendix A, Section 1.38

1. Insignificant activities identified in District Regulation 1.02, Appendix A, may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16, section 3.5.4.1.4.
2. Insignificant activities identified in District Regulation 1.02, Appendix A shall comply with generally applicable requirements as required by Regulation 2.16, section 4.1.9.4.
3. The Insignificant Activities Table is correct as of the date the permit was proposed for review by U.S. EPA, Region 4.
4. Emissions from Insignificant Activities shall be reported in conjunction with the reporting of annual emissions of the facility as required by the District.
5. The owner or operator shall submit an updated list of insignificant activities that occurred during the preceding year pursuant to Regulation 2.16, section 4.3.5.3.6.
6. The owner or operator may elect to monitor actual throughputs for each of the insignificant activities and calculate actual annual emissions, or use Potential to Emit (PTE) to be reported on the annual emission inventory.
7. The District has determined pursuant to Regulation 2.16, section 4.1.9.4 that no monitoring, record keeping, or reporting requirements apply to the insignificant activities listed, except for the equipment that has an applicable regulation and permitted under an insignificant activity (IA) Basis of Regulation Applicability for IA units.

<sup>14</sup> 40 CFR 63 Subpart VVVVVV applies to the cooling tower because it meets the definition of §63.101. However, the cooling tower does not have any standards because the flowrate is less than 8,000 gal/min.