



Louisville Metro Air Pollution Control District  
 701 West Ormsby Avenue, Suite 303  
 Louisville, Kentucky 40203-2624



**Xx xx 2016**

**Title V Statement of Basis**

**Company:** The Chemours Company FC, LLC

**Plant Location:** 4200 Camp Ground Road, Louisville, Kentucky 40216

**Date Application Received:** 08/26/2015

**Date Admin Complete:** 10/26/2015

**Date of Public Notice:** 10/27/2016

**Date of Proposed Permit:** 10/27/2016

**District Engineer:** Shannon Hosey

**Permit No:** O-0062-16-V

**Plant ID:** 0062

**SIC Code:** 2869 & 2819

**NAICS:** 325188 & 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.

Jefferson County is classified as an attainment area for lead (Pb), nitrogen dioxide (NO<sub>2</sub>), carbon monoxide (CO), 1 hr and 8 hr ozone (O<sub>3</sub>), and particulate matter less than 10 microns (PM<sub>10</sub>); and is a non-attainment area for the 1997 standard for particulate matter less than 2.5 microns (PM<sub>2.5</sub>), unclassifiable for the 2012 standard for particulate matter less than 2.5 microns (PM<sub>2.5</sub>) and partial non-attainment area for sulfur dioxide (SO<sub>2</sub>).

**Application Type/Permit Activity:**

Initial Issuance

Permit Revision

Administrative

Minor

Significant

Permit Renewal

**Compliance Summary:**

Compliance certification signed

Compliance schedule included

Source is out of compliance

Source is operating in compliance

**I. Source Information**

1. **Product Description:** The Chemours Company FC, LLC manufactures refrigerant gases.
2. **Process Description:** Two natural gas fired boilers supply steam to Chemours's chemical manufacturing units. A gasoline dispensing facility is operated for company vehicles.
3. **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 will lease 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 will be conducted by its own employees, with its own equipment, under its own permits, and in compliance with its own corporate directions and policies.
4. **Emission Unit Summary:**

Emission Unit	Equipment Description
U1- Powerhouse	Two natural gas boilers equipped with low NO <sub>x</sub> burners.
U3 - Freon® 22/ Freon® 23 Process	Freon® production
U4 - HCL	HCL production
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

5. **Fugitive Sources:** Fugitive emissions of VOCs from the Freon® 22/ Freon® 23 process are regulated by 40 CFR 63 Subpart H National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks.
6. **Permit Revisions:**

Revision No.	Permit No.	Issue Date	Public Notice Date	Change Type	Change Scope	Description
Initial	160-97-TV	08/30/2002	9/24/00, 12/10/00, 1/28/01	Initial	Entire Permit	Initial Permit Issuance

Revision No.	Permit No.	Issue Date	Public Notice Date	Change Type	Change Scope	Description
R1	160-97-TV (R1)	04/23/13	03/02/13	Renewal	Entire Permit	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
NA	O-0062-16 -V	Xx/xx/16	10/27/16	Significant	Entire Permit	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 CCCCC

**7. Construction Permit History:**

Permit No.	Issue Date	Description
657-94-C (R1)	10/28/2014	Two (2) Natural Gas 174 MMBtu/hr Babcock and Wilcox Boilers equipped with low NOx burners

**8. Applications:**

Document Number	Date Received	Description
74652	8/26/2015	AP-100A Application to Separate Permit 160-97-TV (R1) E.I. du Pont de Nemours and Company, Inc. and The Chemours Company PC, LLC.
75072	2/2/2016	Company response to STAR EA Demo and Application to Separate Permit 160-97-TV (R1)
75871	3/14/2014	'Certificate of Existence'
78783 and 77911	8/5/2016	Lease Agreement between Chemours and DuPont and additional information

Document Number	Date Received	Description
79518	8/26/2016	Company's informal comments on draft renewal permit
79519	9/15/2016	Correspondence from the informal comments meeting on 9/1/2016

**9. Emission Summary:**

Pollutant	District Calculated Actual Emissions (tpy) 2014 Data	Pollutant that triggered Major Source Status (based on PTE)
CO	15.58	Yes
NO <sub>x</sub>	30.77	Yes
SO <sub>2</sub>	0.19	No
PM <sub>10</sub>	20.88	No
VOC	2.06	No
Total HAPs	2.67	No
Single HAP > 1 tpy		
Hydrochloric Acid	1.36	Yes
Greenhouse Gas	5,062,230* CO <sub>2</sub> e	Yes

\* This data was obtained from EPA 2013 Greenhouse Gas Emissions (ghgdata.epa.gov) and is for combined emissions from Chemours and DuPont.

**10. Applicable Requirements:**

PSD       40 CFR 60       SIP       40 CFR 63  
 NSR       40 CFR 61       District-Origin       Other

**11. Referenced Federal Regulations in Permit:**

40 CFR 63 Subpart F      National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry

40 CFR 63 Subpart G      National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater

40 CFR 63 Subpart H	National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks
40 CFR 63 Subpart ZZZZ	National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
40 CFR 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters
40 CFR 63 Subpart NNNNN	National Emission Standards for Hazardous Air Pollutants: Hydrochloric Acid Production
40 CFR 63, Subpart CCCCCC	National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities
40 CFR 60 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 68 40 CFR 82	Chemical Accident Prevention Provisions Protection of Stratospheric Ozone

## II. Regulatory Analysis

- 1. Acid Rain Requirements:** The source 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 source that manufactures, sells, distributes, or otherwise uses any of the listed chemicals. Chemours produces chlorodifluoromethane (R22) and currently uses chlorodifluoromethane and SUVA® 134a as refrigerants in process refrigeration machines. Chlorodifluoromethane is a Class II refrigerant under Title VI and the source shall comply with all applicable Title VI requirements of 40 CFR Part 82 Protection of Stratospheric Ozone Subpart A, Production and Consumption Controls and 40 CFR 82 Protection of Stratospheric Ozone Subpart F, Recycling and Emissions Reduction. SUVA® 134a is not a Class II or Class I refrigerant and

is not regulated by Title VI. The District does not have Title VI authority.

3. **Prevention of Accidental Releases 112(r):** 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. A plan was received on September 30, 2010

4. **Basis of Regulation Applicability**

- a. **Plant-wide**

The Chemours Company FC, LLC is a major source for CO, NO<sub>x</sub> and HCL. Regulation 2.16 - *Title V Operating Permits* establishes requirements for major sources.

Regulations 5.00, 5.01, 5.20, 5.21, 5.22 and 5.23 (STAR Program) establishes requirements for environmental acceptability of toxic air contaminants (TACs) and the requirement to comply with all applicable emission standards. Chemours submitted their Category 1 and Category 2 TAC Environmental Acceptability Demonstration to the District on December 29, 2006, May 25, 2007, April 1, 2008 and April 8, 2009.

Regulation 2.16, section 4.1.9.1 and 4.1.9.2 requires monitoring and record keeping to ensure 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.

Chemours submitted the TAC Environmental Acceptability Demonstration to the District in April 2008 and April 2009. Compliance with the STAR Environmental Acceptability Goals was demonstrated in the source's EA Demonstrations. Based on Tier 4 ISC3 refined air modeling, the carcinogenic risk ( $R_C$ ) for each Category 1 and Category 2 TAC is below 1.0 for non-industrial property and below 10.0 for industrial property when utilizing the vapor recovery system on the chloroform storage tanks for each process. The carcinogenic risk for all Category 1 and Category 2 TACs for all processes are below 7.5 for non-industrial property and below 75.0 for industrial property. Since the maximum off-site non-cancerous risk ( $R_{NC}$ ) for all process/process equipment is less than 1.0 and the maximum off-site  $R_C$  is less than 7.5 for the plant-wide cumulative risk, the source has demonstrate compliance with the EA Goals for each TAC.

<b>TAC</b>	<b>Risk from all processes on non-industrial property</b>	<b>Risk from all processes on industrial property</b>
Chloroform	0.43	5.81
Hydrochloric Acid (HCL)	0.0636	0.0636
Chlorine	0.325	0.325
<b>Total</b>	<b>0.82</b>	<b>6.77</b>

The TAC emissions from the combustion of natural gas are considered to be “*de minimis* emissions” by the District. This includes all of the emissions from a process or process equipment for which the only emissions are the products of combustion of natural gas, such as from a natural gas-fired boiler or turbine, but does not include the other emissions from a process or process equipment that are not the products of the combustion of natural gas.

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.

**b. Applicable Regulations**

<b>Regulation</b>	<b>Title</b>	<b>Type</b>
2.16	Title V Operating Permits	SIP
5.00	Standards for Toxic Air Contaminants and Hazardous air Pollutants, Definitions	Local
5.01	General Provisions	Local
5.02	Adoption and Incorporation by Reference of National Emissions Standards for Hazardous Air Pollutants	Local
5.14	Hazardous Air Pollutants and Source Categories	Local
5.15	Chemical Accident Prevention Provisions	Local
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant	Local
5.21	Environmental Acceptability for Toxic Air Contaminants	Local
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant	Local
5.23	Categories of Toxic Air Contaminants	Local

<b>Regulation</b>	<b>Title</b>	<b>Type</b>
6.18	Solvent Metal Cleaning Equipment	SIP
6.24	Standard of Performance for Existing Sources Using Organic Materials	SIP
6.40	Standard of Performance for Gasoline Transfer to Motor Vehicles (Stage II Vapor Recovery and Control)	SIP
6.42	Reasonably Available Control Technology Requirements for Major Volatile Organic Compound and Nitrogen Oxides Emitting Facilities	SIP
7.02	Adoption of Federal New Source Performance Standards	SIP
7.06	Standards of Performance for New Indirect Heat Exchangers	SIP
7.15	Standards of Performance for Gasoline Transfer to New Service Station Storage Tanks (Stage I Vapor Recovery)	SIP
7.25	Standards of Performance for New Sources Using Volatile Organic Compounds	SIP
40 CFR 60 Subpart A	General Provisions	Federal
40 CFR 60 Subpart Db	Standards of Performance for Industrial Commercial Institutional Steam Generating Units	Federal
40 CFR 63 Subpart A	General Provisions	Federal
40 CFR 63 Subpart F	National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry	Federal
40 CFR 63 Subpart G	National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations and Wastewater	Federal
40 CFR 63 Subpart H	National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks	Federal
40 CFR 63 Subpart NNNNN	National Emission Standards for Hazardous Air Pollutants: Hydrochloric Acid Production	Federal
40 CFR 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters	Federal
40 CFR 63	National Emissions Standards for Hazardous Air Pollutants	Federal

Regulation	Title	Type
Subpart ZZZZ	for Stationary Reciprocating Internal Combustion Engines	
40 CFR 63 Subpart CCCCC	National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities	Federal
40 CFR 60 Subpart III	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	Federal
40 CFR 68	Chemical Accident Prevention Provisions	Federal
40 CFR 82	Protection of Stratospheric Ozone	Federal

c. **Basis for Applicability**

Regulation	Basis for Applicability
2.16	Title V source
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants
5.14	Hazardous Air Pollutants and Source Categories
5.15	Chemical Accident Prevention Provisions
5.21	Establishes the criteria for determining the environmental acceptability of emissions of toxic air contaminants.
6.18	Applies to each cold cleaners, open top vapor degreasers, and conveyORIZED degreasers that use volatile organic compounds (VOCs) to remove soluble impurities from metal surfaces.
6.24	Any affected facility using any organic materials which was in being prior to June 13, 1979.
6.40	Applies to the refueling of motor vehicles at a gasoline dispensing Facility.
6.42	Applies to the VOC and NOx emissions from all VOC and NOx -emitting facilities located at all major VOC and NOx -emitting stationary sources.
7.02	Adoption of Federal New Source Performance Standards
7.06	Establishes emission standards for indirect heat exchangers constructed after April 9, 1972 with a heat input capacity of less than 250 MMBtu/hr.
7.15	Applies to the transfer of VOC from transport tanks into storage tanks constructed after June 13, 1979.
7.25	Affected facility constructed after June 13, 1979 for VOC. The core winders use an adhesive which contains VOC, therefore is subject to Regulation 7.25.
40 CFR 60 Subpart A	General Provisions
40 CFR 60	Subpart Db applies to steam generating units for which construction

<b>Regulation</b>	<b>Basis for Applicability</b>
Subpart Db	or modification is commenced after June 19, 1984 and that have a maximum design heat input capacity greater than 100 MMBtu/hr.
40 CFR 63 Subpart A	These standards regulate specific categories of stationary sources that emit (or have the potential to emit) one or more hazardous air pollutants.
40 CFR 63 Subpart F	Applies to Synthetic Organic Chemical Manufacturing Industry
40 CFR 63 Subpart G	Applies to Synthetic Organic Chemical Manufacturing Industry Process Vents, Storage Vessels, Transfer Operations, and Wastewater
40 CFR 63 Subpart H	Applies to facilities with Organic Hazardous Air Pollutants for Equipment Leaks
40 CFR 63 Subpart NNNNN	Applies to facilities that produce Hydrochloric Acid
40 CFR 63 Subpart DDDDD	Applies to facilities with Industrial, Commercial, and Institutional Boilers and Process Heaters located at a major source
40 CFR 63 Subpart ZZZZ	Applies to facilities with Stationary Reciprocating Internal Combustion Engines
40 CFR 63 Subpart CCCCC	Establishes national emission limitations and management practices for hazardous air pollutants (HAP) emitted from the loading of gasoline storage tanks at gasoline dispensing facilities (GDF).
40 CFR 60 Subpart IIII	Applies to facilities with Stationary Compression Ignition Internal Combustion Engines
40 CFR 68	Chemical Accident Prevention Provisions
40 CFR 82	Protection of Stratospheric Ozone

d. **Emission Unit U1 - Powerhouse – Two Natural Gas Boilers**

i. **Equipment:**

<b>Emission Point</b>	<b>Description</b>	<b>Installation Date</b>	<b>Applicable Regulation</b>
1000	174 MMBtu/hr Babcock and Wilcox Boiler	1994	6.42, 7.06 40 CFR 60 Subpart Db, 40 CFR 63 Subpart DDDDD, STAR
1001	174 MMBtu/hr Babcock and Wilcox Boiler		

ii. **Standards/Operating Limits**

1) **PM**

a) In accordance with Regulation 7.06, section 4, the PM

emission standard is 0.10 lb/MMBtu.

- b) A one-time PM compliance demonstration for the boiler, using AP-42 emission factors and combusting natural gas, has been performed and the emission standards for PM cannot be exceeded.

2) **Opacity**

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

3) **SO<sub>2</sub>**

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

4) **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.

- 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.

5) **HAP**

40 CFR 63.7495, 7500, and 7505 establish emission limits, work practice standards, and operating limits for new and existing boilers.

6) **TAC**

- a) Regulation 5.20, 5.21, 5.22, and 5.23 established requirements for Group I sources to demonstrate environmental acceptability.

- b) According to Regulation 5.21, section 2.7, TAC

emissions from natural gas fired boilers are *de minimis*.

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

i. **Equipment:**

<b>Emission Point</b>	<b>Description</b>	<b>Installation Date</b>	<b>Applicable Regulation</b>
3000	Storage Tank (TS-3)	1954	STAR, 6.13, 40 CFR 63 Subpart F, G, H
	Storage Tank (TS-18)		
3001	Vaporizer (V-1)	1966	STAR
	Vaporizer (V-2)		
3002	Reactor #1	1986	STAR, 6.24 40 CFR 63 Subpart F, G, H
	Reactor #2	1991	
	Tank (TR-8)	1982	
	Tank (TW-1)	1955	
3009	Fugitive Emissions	Unknown	40 CFR 63 Subpart F, G
HF-6005	Unloading	1980	STAR

ii. **Standards/Operating Limits**

1) **VOC**

- a) For Emission Point 3000, Regulation 6.13, section 3.1 requires a vapor recovery system.
- b) 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.

2) **HAP**

- a) 40 CFR 63, Subpart F, 40 CFR 63, Subpart G and 40 CFR 60, Subpart H establishes HAP standards.
- b) Regulation 6.39 does not apply to affected facilities that are also subject to 40 CFR 63 Subpart H where such standards are applicable to the affected facility either directly or through incorporation by reference into another standard promulgated under 40 CFR 63.

3) **Chemical Accident Prevention and Risk Management Plan (Regulation 5.15 and 40 CFR Part 68, Subpart G)**

The source shall comply with the Risk Management Plan submitted on September 30, 2010.

4) **TAC**

Regulation 5.20, 5.21, 5.22, and 5.23 established requirements for Group I sources to demonstrate environmental acceptability.

f. **Emission Unit U4 – HCL**

i. **Equipment:**

<b>Emission Point</b>	<b>Description</b>	<b>Installation Date</b>	<b>Applicable Regulation</b>
4000	HCL Stripping, Storage and Loading	1977	STAR, 40 CFR Part 63 Subpart NNNNN
4001	Fugitive Emissions, HCL	N/A	

ii. **Standards/Operating Limits**

1) **HAP**

40 CFR 63, Subpart NNNNN establishes HAP standards.

2) **Chemical Accident Prevention and Risk Management Plan (Regulation 5.15 and 40 CFR Part 68, Subpart G)**

The source shall comply with the Risk Management Plan submitted on September 30, 2010.

3) **TAC**

Regulation 5.20, 5.21, 5.22, and 5.23 established requirements for Group I sources to demonstrate environmental acceptability.

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

i. **Equipment:**

<b>Emission Point</b>	<b>Description</b>	<b>Installation Date</b>	<b>Applicable Regulation</b>
5000	Gasoline Dispensing, 1000 gallon unleaded gasoline storage tank	1992	6.40 7.15

ii. **Standards/Operating Limits**

1) **VOC**

- a) Regulation 6.40 and 7.15 establishes work practice standards for the gasoline storage tank.
- b) Regulation 6.40 requires that the source does not exceed 10,000 gallons of throughput per month, in order to be exempt.

2) **TAC**

Regulation 5.20, 5.21, 5.22, and 5.23 established requirements for Group I sources to demonstrate environmental acceptability.

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

i. **Equipment**

<b>Emission Point</b>	<b>Description</b>	<b>Installation Date</b>	<b>Applicable Regulation</b>
IA1-GEN	Diesel emergency generator (14P54-GEN), make Cummins, model QSX15-G9 NR2, capacity of 563 kW (765 hp)	2007	5.02, 7.02, 40 CFR 60 Subpart III, 40 CFR 63 Subpart <i>ZZZZ</i>
IA2-FP1	Diesel Fire Pump (#2 Diesel Drive Powers 11251P), make Clark Fie Protection Products, Inc., model JU6H-UFADW8, capacity of 210 kW (285 hp)	2014	7.02, 40 CFR 60 Subpart III
IA3-FP2	Diesel Emergency Fire Pumps (#1 Fire Pump House – East Diesel Powers 11220P) 352 hp	2000	5.02, 40 CFR 63 Subpart <i>ZZZZ</i>
IA3-FP3	Diesel Emergency Fire Pumps (#1 Fire Pump House – West	2000	5.02, 40 CFR 63 Subpart <i>ZZZZ</i>

Emission Point	Description	Installation Date	Applicable Regulation
	Diesel Powers 11221P) 352 hp		

ii. **Standards/Operating Limits**

1) **Unit Operation**

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

2) **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.

3) **TAC**

TAC emissions from emergency engines are defined to be *de minimis* in Regulation 5.21.

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

i. **Equipment**

Emission Point	Description	Applicable Regulation
IA4	Two (2) Non-Halogenated Cold Solvent Parts Cleaners	6.18

ii. **Standards/Operating Limits**

**VOC**

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

b) 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 impurities from metal surfaces. These parts washers shall meet the requirements under Regulation 6.18.

**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:** N/A
4. **Operational Flexibility:** The source did not request any operational flexibility scenario in its Title V application.
5. **Compliance History:**

Incident Date(s)	Regulation Violated	Result
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

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

The emission calculations for the various pieces of equipment are derived from stack test results, AP-42 emission factors, EPA guidance documents, CEMs, mass balances and engineering judgments.

**Table 1 Unit U1: Powerhouse**

Equipment	Emission Point	Control Device	Emission Factor	Determination Method
Two (2) 174 MMBtu/hr Babcock and Wilcox Natural Gas Boilers	1000 and 1001	N/A	NOx uses CEMS, PM and SO <sub>2</sub> uses AP-42 Section 1.4 Emission Factors (Natural Gas)	

**Table 2 Unit U3: Freon<sup>®</sup> 22/Freon<sup>®</sup> 23 Process**

Equipment	Emission Point	Control Device	Emission Factor	Determination Method
Two (2) Chloroform Storage Tanks TS-3 and TS-18. Greater than 74,600 gallons each	3000	C-16	Stack Emissions from Storage Tank Emissions after Condenser. When the chloroform storage tanks, TS-3 and TS-18 are filled, the head space is displaced with chloroform vapor.	
Vaporizers V-1 and V-2	3001	SB-8	Emissions are based upon the number of times the caustic scrubber is changed.	

Reactors #1 and #2 and Refining Equipment for Manufacturing Freon <sup>®</sup> 22 and Freon <sup>®</sup> 23; Tank TR-8 and Tank TW-1	3002	SB-5 SB-7	Emissions are based upon the number of reactor vent-downs.	
Fugitive Emissions	3009	N/A	Actual measurements are taken using LDAR leak methods. Counts of various pumps, connectors flanges and valves are multiplied by the emission factors.	
Unloading	HF-6005	SB-5 SB-7 SB-301	HF Scrubber control efficiency is 99%	
<b>U3 Control Devices</b>				
<b>Emission Point</b>	<b>Equipment</b>		<b>Efficiency</b>	<b>Basis</b>
C-16	Condenser		85%	Temperature
SB-8	Wet Scrubber		> 8% Caustic Concentration	Caustic is changed out when the % NaOH drops below 8%
SB-5 and SB-7	East Wet Scrubber (Backup) West Wet Scrubber		< 5% Acid	Acid Strength
SB-301	Wet Scrubber		25 gallons/min	Minimum Flow Rate

**Table 3 Unit U4: HCL**

Equipment	Emission Point	Control Device	Emission Factor	Determination Method
HCL Stripping, Storage and Loading	4000	SB-17		Emissions result from the tanks, emissions from shipments and reductions from the scrubber.
Fugitive Emissions, HCL	4001	N/A		Counts of various pumps, connectors flanges and valves are multiplied by emission factors.
<b>U4 Control Devices</b>				
Emission Point	Equipment		Basis	
SB-17	Wet Scrubber		Temperature (Stack Test 3/24/2010)	

**Table 4 Unit U5: Gasoline Dispensing**

Equipment	Emission Point	Control Device	Emission Factor	Determination Method
Gasoline Dispensing, 1000 gallon unleaded gasoline storage tank	5000	N/A		Emissions calculated using Tanks 4.0

## 7. Insignificant Activities

Equipment	Quantity	Regulation Basis
Fixed or mobile internal combustion engines and vehicles used for transport of passengers or freight, unless regulated elsewhere	30	Regulation 1.02, Appendix A, Section 2
Brazing, soldering or welding equipment	5	Regulation 1.02, Appendix A, Section 3.4
Equipment commonly used in wood-working operations, except for conveying, hogging or burning of sawdust or wood waste	8	Regulation 1.02, Appendix A, Section 3.5
Containers, reservoirs, or tanks used exclusively for storage of lubricating oils or fuel oils with a vapor pressure of less than 10 mmHg at conditions of 20°C and 760 mmHg.	7	Regulation 1.02, Appendix A, Section 3.9.2
Emergency relief vents, stacks and ventilating systems.	295	Regulation 1.02, Appendix A, Section 3.10
Laboratory ventilating and exhausting systems which are not used for radioactive air contaminants.	5	Regulation 1.02, Appendix A, Section 3.11
Blast cleaning equipment using a suspension of abrasives in water.	2	Regulation 1.02, Appendix A, Section 3.13
Soil or ground water contamination remediation projects that are entirely passive or entail the total removal of the contaminated substrate for disposal in a certified landfill.	1	Regulation 1.02, Appendix A, Section 3.20
Dust or particulate collectors that are located in-doors, vent directly indoors into the work space, collect no more than one ton of material per year.	5	Regulation 1.02, Appendix A, Section 3.21
Portable diesel or gasoline storage tanks with a maximum capacity of less than 500 gallons.	5	Regulation 1.02, Appendix A, Section 3.23
Storage vessels for VOCs with a maximum capacity of 250 gallons or less. List materials stored: Various	7	Regulation 1.02, Appendix A, Section 3.24
Can Puncturing Device	3	Regulation 1.02. 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.

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) unit.