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

January 3, 2019

Title V Statement of Basis

Source: The Chemours Company FC, LLC
4200 Camp Ground Road
Louisville, KY 40216

Owner: The Chemours Company FC, LLC
4200 Camp Ground Road
Louisville, KY 40216

Application Documents:	See Table 8	**Administratively Complete:**	01/19/2018
Draft Permit:	11/18/2018	**Proposed Permit:**	11/18/2018
Permitting Engineer:	Shannon Hosey	**Permit Number:**	O-0062-18-V
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 Title V Operating Permit.

Jefferson County is classified as an attainment area for lead (Pb), nitrogen dioxide (NO_2), carbon monoxide (CO), particulate matter less than 10 microns (PM_{10}), and unclassifiable for particulate matter less than 2.5 microns (PM2.5). The county is a nonattainment area for Ozone (O_3). This facility is located in the portion of the country that is an attainment area for sulfur dioxide (SO2)

Permit Application Type:

☐ Initial issuance

Permit Revision
- ☐ Administrative
- ☐ Minor
- ☐ Significant

☒ Permit renewal

Compliance Summary:

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

4. Emission Unit Summary:

Emission Unit	Equipment Description
U1- Powerhouse	Two natural gas boilers equipped with low NOx 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:

Permit No.	Public Notice Date	Issue Date	Change Type	Description/Scope
160-97-TV	9/24/00, 12/10/00, 1/28/01	08/30/2002	Initial	Initial Permit Issuance
160-97-TV (R1)	03/02/2013	04/23/2013	Renewal	Regular Renewal; Incorporate STAR requirements, Construction

Permit No.	Public Notice Date	Issue Date	Change Type	Description/Scope
				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

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. Permit Renewal-Related Documents

Document Number	Date Received	Description
75871	3/14/2014	'Certificate of Existence'
89360	11/30/2017	Title V Renewal Application - Public Copy
89359	11/30/2017	Title V Renewal Application - Confidential Copy
91796	05/01/2018	CAM Plan

9. Emission Summary:

Pollutant	District Calculated Actual Emissions (tpy) 2016 Data	Pollutant that triggered Major Source Status (based on PTE)
CO	25.219	Yes
NO_x	23.653	Yes
SO_2	0.198	No
PM_{10}	10.533	No
VOC	1.729	No
Total HAPs	2.43	Yes
Single HAP		
Hydrochloric Acid	1.35	Yes
Hydrogen Fluoride	0.25	Yes
Chloroform	0.13	Yes
Chlorine	0.19	Yes
Greenhouse Gas	2,823,971* CO_2e	Yes

* This data was obtained from EPA 2016 Greenhouse Gas Emissions (ghgdata.epa.gov).

10. Applicable Requirements:

[ ] PSD [X] 40 CFR 60 [X] SIP [X] 40 CFR 63

[ ] NSR [ ] 40 CFR 61 [X] District-Origin [ ] Other

11. Referenced Federal Regulations:

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 63 Subpart F	National Emissions 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 64	Compliance Assurance Monitoring
40 CFR 68	Chemical Accident Prevention Provisions
40 CFR 82	Protection of Stratospheric Ozone

12. Regulations Not Applicable:

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.

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 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 March 28, 2018.

4. **40 CFR Part 64 Applicability Determination:** Chemours is subject to 40 CFR Part 64 - *Compliance Assurance Monitoring for Major Stationary Sources*.

5. **Basis of Regulation Applicability**

Plantwide

The Chemours Company FC, LLC is a major source for CO, NO_X, HCl and Total HAP. Regulation 2.16 - *Title V Operating Permits* establishes requirements for major sources.

Regulations 5.00 5.20, 5.21, 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.

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 (EA) Demonstration to the District on April 24, 2018 and June 20, 2018. Compliance with the STAR EA Goals was demonstrated in the source's EA Demonstrations. Based on Tier 4 ISC3 refined air modeling, the carcinogenic risk for each Category 1 and Category 2 TAC are below 1.0 for non-industrial property and below 10.0 for industrial property utilizing control devices for each process. The carcinogenic risk for all Category 1 and Category 2 TACs for all processes is below 7.5 for non-industrial property and below 75.0 for industrial property. Since the

maximum R_{NC} for all process/process equipment is less than 1.0 and the maximum R_C is less than 7.5 for the plantwide cumulative risk, the source has demonstrated compliance with the EA Goals for each TAC.

Emission Point	TAC	Risk (EAG_C)		HQ (EAG_{NC})	
		Residential	Industrial	Non-Industrial	Industrial
		$EAG_C \leq 1.0$	$EAG_C \leq 10.0$	$EAG_C \leq 1.0$	$EAG_C \leq 3.0$
U3, EP 3000 - Freon Unit Tank Brine Condenser	Chloroform	0.67	7.57	-	-
U3, EP 3009 - Fugitives	Chloroform	0.66	5.65	-	-
U4, EP 4000 - Vaporizer	Hydrochloric Acid (HCl)	-	-	0.0196	0.087
U3, EP 3000 - Freon Unit Tank Brine Condenser	Chloroform	-	-	0.0001	0.0011
U3, EP 3001 - Freon Unit Vaporizer Scrubber	Chlorine	-	-	0.112	1.09
U4, EP 4001 - Fugitive Emissions	Hydrochloric Acid (HCl)	-		0.0188	0.080
U3, EP 3009 - Fugitives	Chloroform	-	-	0.0001	0.0008
U3, EP 3009 - Fugitives	Chlorine	-		0.024	0.208
Plantwide R_C for all Processes:		1.33 (≤ 7.5)	13.22 (≤ 75)	-	-
Plantwide R_{NC} for all Processes:		-	-	Chloroform 0.0002 HCl 0.0384 Chlorine 0.136	Chloroform 0.0018 HCl 0.167 Chlorine 1.298

Regulation	Basis for Applicability
5.00	Establishes definitions of terms used in the Strategic Toxic Air Reduction Program.
5.01	Establishes general provisions for process equipment from which a toxic air contaminant is or may be emitted.
5.02	Adopts and Incorporates by Reference of National Emission Standards for Hazardous Air Pollutants
5.15	Chemical Accident Prevention Provisions
5.20	Establishes the methodology for determining the benchmark ambient concentration of a toxic air contaminant.
5.21	Establishes the criteria for determining the environmental acceptability of emissions of toxic air contaminants.

Regulation	Basis for Applicability
5.22	Establishes the procedures for determining the maximum ambient concentration of a toxic air contaminant.
5.23	Establishes categories of toxic air contaminants.
6.09	Applies to each process operation that is not otherwise regulated by any other portion of Regulation 6 and was in existence or had a construction permit issued by the District by September 1, 1976.
6.13	Applies to each affected facility which means each storage vessel for volatile organic compounds which was in being or commenced construction, modification, or reconstruction on or before April 19, 1972, and that has a storage capacity greater than 250 gallons and true vapor pressure of the VOCs as stored equal to or greater than 78 mm Hg (1.5 psia).
6.18	Applies to cold cleaners.
6.24	Applies to an affected facility using any organic materials which was in being prior to June 13, 1979.
6.42	Applies to the NOx emissions from all NOx-emitting facilities located at all major NOx-emitting stationary sources.
7.01	Applies to new facilities
7.02	Adopts of Federal New Source Performance Standards
7.06	Applies to each indirect heat exchanger having input capacity of more than one million BTU per hour commenced after September 1, 1976.
7.08	Applies to equipment installed after September 1, 1976 subject to the PM emission standard.
7.12	Applies to storage tanks with a capacity greater than 250 gallons constructed after April 19, 1972
7.15	Applies to the transfer of VOC from transport tanks into storage tanks constructed after June 13, 1979
7.25	Applies to an affected facility constructed after June 13, 1979 for VOC.
40 CFR 60 Subpart A	General Provisions
40 CFR 60 Subpart Db	Applies to steam generating units for which construction 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	Regulates 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 ZZZZ	Applies to existing, new, and reconstructed stationary engines located at a major source of HAP emissions.
40 CFR 63 Subpart DDDDD	Establishes national emission limits and work practice standards for HAP emitted from industrial, commercial, and institutional boilers and process heaters.
40 CFR 63 Subpart	Applies to facilities that produce hydrochloric acid

Regulation	Basis for Applicability
NNNNN	
40 CFR 60 Subpart IIII	Applies to facilities with stationary compression ignition internal combustion engines
40 CFR 64	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

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

i. **Equipment:**

Emission Point	Description	Install Date	Applicable Regulation
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	1994	

ii. **Standards/Operating Limits**

1) **HAP**

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

2) **NOx**

(a) Regulation 6.42, section 4.3 requires the permit applicant for NOx emitting facilities to propose RACT emission limiting standards and RACT emission control technology. The source shall comply with the NOx 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.

3) **Opacity**

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

4) **PM**

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

5) **SO_2**

In accordance with Regulation 7.06, section 5, the emission standard for each boiler for SO_2 is 0.80 lb/MMBtu.

6) **TAC**

According to Regulation 5.21, section 2.7, TAC emissions from natural gas fired boilers are *de minimis*.

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

i. **Equipment**

Emission Point	Description	Install Date	Applicable Regulation
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) **Chemical Accident Prevention and Risk Management**

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. The source shall comply with the Risk Management Plan submitted on March 28, 2018.

2) **HAP**

40 CFR 63, Subparts F, G and H (LDAR) establish HAP standards for chloroform and hydrochloric acid.

3) **VOC**

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

(b) 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 3000:

(1) Chloroform shall not equal or exceed 1685 pounds per 12-consecutive month period.

(2) Control Device C-16 (vapor recovery system) shall have a control efficency of 90%.

(b) For Emission Point 3001, chlorine shall not equal or exceed 225 pounds per 12-consecutive month period.

(c) For Emission Point 3009, chloroform shall not equal or exceed 224 pounds per 12-consecutive month period.

(d) For Emission Point 3009, shall not equal or exceed 352 pounds per 12-consecutive month period.

c. **Emission Unit U4 –** HCl

i. **Equipment**

Emission Point	Description	Install Date	Applicable Regulation
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) **Chemical Accident Prevention and Risk Management 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. The source shall comply with the Risk Management Plan submitted on March 28, 2018.

2) **HAP**

40 CFR 63, Subpart NNNNN establishes HAP standards for HAP emitted from hydrochloric acid (HCl) production.

3) **TAC**

For Emission Point 4000, chlorine shall not equal or exceed 10,702 pounds per 12-consecutive month period.

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

i. **Equipment**

Emission Point	Description	Install Date	Applicable Regulation
5000	Gasoline Dispensing, 1000 gallon unleaded gasoline storage tank	1992	7.15

ii. **Standards/Operating Limits**

VOC

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

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

ii. **Equipment**

Emission Point	Description	Install Date	Applicable Regulation
IA1-GEN	Diesel emergency generator (14P54-GEN), make Cummins, model QSX15-G9 NR2, capacity of 563 kW (765 hp)	2007	40 CFR 60 Subpart IIII, 40 CFR 63 Subpart ZZZZ
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	40 CFR 60 Subpart IIII
IA3-FP2	Diesel Emergency Fire Pumps (#1 Fire Pump House – East Diesel Powers 11220P) 352 hp	2000	40 CFR 63 Subpart ZZZZ
IA4-FP3	Diesel Emergency Fire Pumps (#1 Fire Pump House – West Diesel Powers 11221P) 352 hp	2000	40 CFR 63 Subpart ZZZZ

i. **Standards/Operating Limits**

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.

2) **Unit Operation**

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

3) **TAC**

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

f. **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

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. 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: N/A

4. Alternative Operating Scenarios: The source did not request any alternative operating scenarios.

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

Emission Point	Equipment	Emission Factor
1000 and 1001	Two (2) 174 MMBtu/hr Babcock and Wilcox Natural Gas Boilers	AP-42 Chapter 1.4 , except NOx uses CEMS

Table 2 - Unit U3: Freon® 22/Freon® 23 Process

Emission Point	Equipment	Emission Factor
3000	Two (2) Chloroform Storage Tanks TS-3 and TS-18, 74,600 Gallons Each	AP-42 Chapter 7.1
3001	Vaporizers V-1 and V-2	Chlorine is emitted when the caustic scrubber is changed - 47.06 lb of Cl per change.
3002	Reactors #1 and #2 and Refining Equipment for Manufacturing Freon® 22 and Freon® 23; Tank TR-8 and Tank TW-1	0.166 lbs $CHCl_3$/Reactor Vent
3009	Fugitive Emissions	LDAR leak methods (LeakDAS)
HF-6005	Unloading	[0.44 lb HF/tank car unloaded (Based on Ideal Gas Law) + 32.1 lb HF/tank car vented] x (100 – Scrubber Eff.%)

Table 3 - Unit U4: HCl

Emission Point	Equipment	Emission Factor
4000	HCl Stripping, Storage and Loading	Combined emissions from the tanks, emissions from shipments and reductions from the scrubber are used to calculate emissions. Flow to scrubber = lb/mole/min * y(HCl vapor in air) * lb

Emission Point	Equipment	Emission Factor
		HCl/lbmole * 60 min/hr * production hours
4001	Fugitive Emissions, HCl	LDAR leak methods (LeakDAS)

Table 4 - Unit U5: Gasoline Dispensing

Emission Point	Equipment	Emission Factor
5000	Gasoline Dispensing, 1000 gallon unleaded gasoline storage tank	AP-42 Chapter 7.1

Table 5 - Unit IA1, IA2, and IA3: Emergency Generators and Fire Pumps

Emission Point	Emission Point	Emission Factor
IA1-GEN	Diesel emergency generator (14P54-GEN), make Cummins, capacity of 563 kW (765 hp)	AP-42 Chapter 3.4
IA2-FP1	Diesel Fire Pump (#2 Diesel Drive Powers 11251P), make Clark Fie Protection Products, Inc., capacity of 210 kW (285 hp)	AP-42 Chapter 3.3
IA3-FP2	Diesel Emergency Fire Pumps (#1 Fire Pump House – East Diesel Powers 11220P) 352 hp	AP-42 Chapter 3.3
IA3-FP3	Diesel Emergency Fire Pumps (#1 Fire Pump House – West Diesel Powers 11221P) 352 hp	AP-42 Chapter 3.3

Table 6 - Unit IA4: Parts Washers

Emission Point	Equipment	Emission Factor
IA4	Two (2) Non-Halogenated Cold Solvent Parts Cleaners	Mass Balance

7. Insignificant Activities

Equipment	Qty.	PTE (ton/yr)	Regulation Basis
Above-Ground Diesel Storage Tank	1	VOC = 0.08	Regulation 1.02, Appendix A, Section 3.92
Emergency Relief Vents, Stacks and Ventilating Systems	295	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
Blast Cleaning	1	PM = 4.13	Regulation 1.02, Appendix A, Section 3.13
Soil or Groundwater Contamination Remediation Projects	1	NA	Regulation 1.02, Appendix A, Section 3.21
Dust or Particulate Collectors that are located in-doors	3	$PM/PM_{10}/PM_{2.5} < 1$	Regulation 1.02, Appendix A, Section 3.21

Equipment	Qty.	PTE (ton/yr)	Regulation Basis
Aerosol Can Puncturing Device	3	VOC = 0.82	Regulation 1.02, Appendix A, Section 1.38
Cooling Tower	1	PM = 0.087	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) unit.