



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



Title V Operating Permit

Permit No.: O-1912-16-V

Plant ID: 1912

Effective Date: 8/31/2016

Expiration Date: 8/31/2021

Permission is hereby given by the Louisville Metro Air Pollution Control District to operate the process(es) and equipment described herein which are located at:

Source: E.I. du Pont de Nemours and Company
Owner: E.I. du Pont de Nemours and Company
4250 Camp Ground Road
Louisville, Kentucky 40216

The applicable procedures of District Regulation 2.16 regarding review by the U.S. EPA and public participation have been followed in the issuance of this permit. Based on review of the application on file with the District, permission is given to operate under the conditions stipulated herein. If a renewal permit is not issued prior to the expiration date, the owner or operator may continue to operate in accordance with the terms and conditions of this permit beyond the expiration date, provided that a complete renewal application is submitted to the District no earlier than eighteen (18) months and no later than six (6) months prior to the expiration date.

Application No.: 73204
10554

Application Received: 08/25/2015
03/02/2007

Permit Writer: Shannon Hosey

Administratively Complete: 10/24/2015

Date of Public Notice: 07/10/2016

Date of Proposed Permit: 07/10/2016

Paul G. And
[Stamp: filed by Paul G. And with a question mark]

Air Pollution Control Officer
August 31, 2016

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Title V Permit Revisions/Changes

Revision No.	Permit No.	Issue Date	Public Notice Date	Change Type	Change Scope	Description
Initial	O-1912-16-V	08/31/2016	07/10/2016	Initial	Entire Permit	Initial Permit Issuance. E.I. du Pont's processes were split off from a larger operation which is now Chemours.

Abbreviations and Acronyms

AP-42	- AP-42, <i>Compilation of Air Pollutant Emission Factors, published by U.S.EPA</i>
APCD	- Louisville Metro Air Pollution Control District
BAC	- Benchmark Ambient Concentration
BACT	- Best Available Control Technology
Btu	- British thermal unit
CEMS	- Continuous Emission Monitoring System
CFR	- Code of Federal Regulations
CO	- Carbon monoxide
District	- Louisville Metro Air Pollution Control District
EA	- Environmental Acceptability
gal	- U.S. fluid gallons
GHG	- Greenhouse Gas
HAP	- Hazardous Air Pollutant
HCl	- Hydrogen chloride
Hg	- Mercury
hr	- Hour
in.	- Inches
lbs	- Pounds
l	- Liter
LMAPCD	- Louisville Metro Air Pollution Control District
mmHg	- Millimeters of mercury column height
MM	- Million
NAICS	- North American Industry Classification System
NO _x	- Nitrogen oxides
PM	- Particulate Matter
PM ₁₀	- Particulate Matter less than 10 microns
PM _{2.5}	- Particulate Matter less than 2.5 microns
ppm	- parts per million
PSD	- Prevention of Significant Deterioration
psia	- Pounds per square inch absolute
QA	- Quality Assurance
RACT	- Reasonably Available Control Technology
SIC	- Standard Industrial Classification
SIP	- State Implementation Plan
SO ₂	- Sulfur dioxide
STAR	- Strategic Toxic Air Reduction
TAC	- Toxic Air Contaminant
UTM	- Universal Transverse Mercator
VOC	- Volatile Organic Compound
w.c.	- Water column
year	- Any period of twelve consecutive months, unless "calendar year" is specified
yr	- Year, or any 12 consecutive-month period, as determined by context

Preamble

Title V of the Clean Air Act Amendments of 1990 (the Act) required EPA to create an operating permit program for implementation by state or local air permitting authorities. The purposes of this program are: (1) to require an affected company to assume full responsibility for demonstrating compliance with applicable regulations; (2) to capture all of the regulatory information pertaining to an affected company in a single document; and (3) to make permits more consistent with each other.

A company is subject to the Title V program if it meets any of several criteria related to the nature or amount of its emissions. The Title V operating permit specifies what the affected company is, how it may operate, what its applicable regulations are, how it will demonstrate compliance, and what is required if compliance is not achieved. In Jefferson County, Kentucky, the Louisville Metro Air Pollution Control District (LMAPCD or APCD) is responsible for issuing Title V permits to affected companies and enforcing local regulations and delegated federal and state regulations. EPA may enforce federal regulations but not "District Only Enforceable Regulations."

Title V offers the public an opportunity to review and comment on a company's draft permit. It is intended to help the public understand the company's compliance responsibility under the Clean Air Act. Additionally, the Title V process provides a mechanism to incorporate new applicable requirements. Such requirements are available to the public for review and comment before they are adopted.

Title V Permit General Conditions define requirements that are generally applicable to all Title V companies under the jurisdiction of LMAPCD. This avoids repeating these requirements in every section of the company's Title V permit. Company-specific conditions augment the General Conditions as necessary; these appear in the sections of the permit addressing individual emission units or emission points.

The General Conditions include references to regulatory requirements that may not currently apply to the company, but which provide guidance for potential changes at the company or in the regulations during the life of the permit. Such requirements may become applicable if the company makes certain modifications or a new applicable requirement is adopted.

When the applicability of a section or subpart of a regulation is unclear, a clarifying citation will be made in the company's Title V permit at the emission unit/point level. Comments may also be added at the emission unit/point level to give further clarification or explanation.

The owner or operator's Title V permit may include a current table of "insignificant activities."

Insignificant activities are defined in District Regulation 2.16 section 1.23, as of the date the permit was proposed for review by U.S. EPA, Region 4.

Insignificant activities identified in District Regulation 1.02, section 1.38, and Appendix A may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16 section 3.5.4.1.4.

Insignificant activities identified in District Regulation 1.02, section 1.38, and Appendix A shall comply with generally applicable requirements as required by Regulation 2.16 section 4.1.9.4.

General Conditions

1. **Compliance** - The owner or operator shall comply with all applicable requirements and with all terms and conditions of this permit. Any noncompliance shall constitute a violation of the Act, State, and District regulations and shall cause the source to be subject to enforcement actions including, but not limited to, the termination, revocation and reissuance, or revision of this permit, or denial of a permit application to renew this permit. Notwithstanding any other provision in the Jefferson County portion of the Kentucky SIP approved by EPA, any credible evidence may be used for the purpose of establishing whether the owner or operator is in compliance with, has violated, or is in violation of any such plan. [Regulation 2.16, sections 4.1.3, 4.1.13.1, and 4.1.13.7]
2. **Compliance Certification** - The owner or operator shall certify, annually, or more frequently if required in applicable regulations, compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall meet the requirements of Regulation 2.16, sections 3.5.11 and 4.3.5. The owner or operator shall submit the annual compliance certification (Form 9400-O) directly to the EPA and to the District, as set forth in Regulation 2.16, section 4.3.5.4, at the following addresses:

*US EPA - Region IV
Air Enforcement Branch
Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-8960*

*Air Pollution Control District
701 West Ormsby Avenue, Suite 303
Louisville, KY 40203-2624*

This certification must be postmarked by 15 April of the year following the year for which the certification is being submitted, or other such due date as required by another applicable regulation.

3. **Compliance Schedule** - The owner or operator shall submit a schedule of compliance for each emission unit that is not in compliance with all applicable requirements. A compliance schedule must meet the requirements of Regulation 2.16, section 3.5.9.5. A schedule of compliance shall be supplemental to, and shall not condone noncompliance with, the applicable requirements on which it is based. For each schedule of compliance, the owner or operator shall submit certified progress reports at least semi-annually, or at a more frequent period if specified in an applicable requirement or by the District in accordance with Regulation 2.16 section 4.3.4. The progress reports shall contain:
 - a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when activities, milestones, or compliance were achieved.
 - b. An explanation of why dates in the schedule of compliance were not or will not be met, and preventive or corrective measures adopted.
4. **Duty to Supplement or Correct Application** - If the owner or operator fails to submit relevant facts or has submitted incorrect information in the permit application, they shall, upon discovery of the occurrence, promptly submit the supplementary facts or corrected information in accordance with Regulation 2.16, section 3.4.

5. **Emergency Provision**

- a. An emergency shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emission limitations if the conditions in Regulation 2.16 are met. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - i. An emergency occurred and that the owner or operator can identify the cause of the emergency;
 - ii. The permitted facility was at the time being properly operated;
 - iii. During the period of the emergency the owner or operator expeditiously took all reasonable steps, consistent with safe operating practices, to minimize levels of emissions that exceeded the emission standards or other requirements in this permit; and
 - iv. The owner or operator submitted notice meeting the requirements of Regulation 1.07 of the time when emissions limitations were exceeded because of the emergency. This notice must fulfill the requirement of this condition, and must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- b. In an enforcement proceeding, the owner or operator seeking to establish the occurrence of an emergency has the burden of proof.
- c. This condition is in addition to any emergency or upset provision contained in an applicable requirement. [Regulation 2.16, sections 4.7.1 through 4.7.4]

6. **Emission Fees Payment Requirements** - The owner or operator shall pay annual emission fees in accordance with Regulation 2.08, section 12.3. Failure to pay the emissions fees when due shall constitute a violation of District Regulations. Such failure is subject to penalties and an increase in the fee of an additional 5% per month up to a maximum of 25% of the original amount due. In addition, failure to pay emissions fees within 60 days of the due date shall automatically suspend this permit to operate until the fee is paid or a schedule for payment acceptable to the District has been established. [Regulation 2.08, section 12.2.4]

7. **Emission Offset Requirements** - The owner or operator shall comply with the requirements of Regulation 2.04.

8. **Enforceability Requirements** - Except for the conditions that are specifically designated as District-Only Enforceable Conditions, all terms and conditions of this permit, including any provisions designed to limit a source's potential to emit, are enforceable by EPA and citizens as specified under the Act. [Regulation 2.16, sections 4.2.1 and 4.2.2]

9. **Enforcement Action Defense**

- a. It shall not be a defense for the owner or operator in an enforcement action that it would have been necessary for the owner or operator to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

- b. The owner or operator's failure to halt or reduce activity may be a mitigating factor in assessing penalties for noncompliance if the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operation.
[Regulation 2.16, sections 4.1.13.2 and 4.1.13.3]
10. **Hazardous Air Pollutants and Sources Categories** - The owner or operator shall comply with the applicable requirements of Regulations 5.02 and 5.14.
11. **Information Requests** - The owner or operator shall furnish to the District, within a reasonable time, information requested in writing by the District, to determine whether cause exists for revising, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The owner or operator shall also furnish, upon request, copies of records required to be kept by this permit.
[Regulation 2.16, section 4.1.13.6]
- If information is submitted to the District under a claim of confidentiality, the source shall submit a copy of the confidential information directly to EPA at the address shown in General Condition 35.b. [Regulation 2.07, section 10.2]
12. **Insignificant Activities** - The owner or operator shall:
- a. Notify the District in a timely manner of any proposed change to an insignificant activity that would require a permit revision. [Regulation 2.16, section 5]
- b. Submit a current list of insignificant activities by April 15 of each year with the annual compliance certification, including an identification of the additions and removals of insignificant activities that occurred during the preceding year.
[Regulation 2.16, section 4.3.5.3.6]
13. **Inspection and Entry** - Upon presentation of credentials and other documents as required by law, the owner or operator shall allow the District or an authorized representative to perform the following during reasonable hours:
[Regulation 2.16, section 4.3.2]
- a. Enter the premises to inspect any emissions-related activity or records required in this permit.
- b. Have access to and copy records required by this permit.
- c. Inspect facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required by this permit.
- d. Sample or monitor substances or parameters to assure compliance with this permit or any applicable requirements.
14. **Monitoring and Related Record Keeping and Reporting Requirement** - The owner or operator shall comply with the requirements of Regulation 2.16, section 4.1.9. Unless specified elsewhere in this permit, the owner or operator shall complete required monthly record keeping within 30 days following the end of each calendar month. The owner or operator shall submit all required monitoring reports at least once every six months, unless more frequent reporting is required by an applicable requirement. The reporting period shall be 1 January through 30 June and 1 July through 31 December of each

calendar year. All reports shall be sent to the District at the address shown in paragraph 2 of these General Conditions and must be postmarked by the 60th day following the end of each reporting period, unless specified elsewhere in this permit. If surrogate operating parameters are monitored and recorded in lieu of emission monitoring, then an exceedance of multiple parameters may be deemed a single violation by the District for enforcement purposes. All reports shall include the company name, plant ID number, and the beginning and ending date of the reporting period. The compliance reports shall clearly identify any deviation from a permit requirement or a declaration that there were no such deviations. All semi-annual compliance reports shall include the statement "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete" and the signature and title of a responsible official of the company.

The semi-annual compliance reports are due on or before the following dates of each calendar year:

<u>Reporting Period</u>	<u>Report Due Date</u>
January 1 - June 30	August 29
July 1 - December 31	March 1 of the following year

If a change in the responsible official (RO) occurs during the term of this permit, or if an RO is added, the owner or operator shall provide written notification (Form AP-100A) to the District within 30 calendar days of such change or addition.

15. **Off-permit Documents** - Any applicable requirements, including emission limitations, control technology requirements, or work practice standards, contained in an off-permit document cannot be changed without undergoing the permit revision procedures in Regulation 2.16, section 5. [Regulation 2.16, section 4.1.5]
16. **Operational Flexibility** - The owner or operator may make changes without permit revision in accordance with Regulation 2.16, section 5.8.
17. **Permit Amendments (Administrative)** - This permit can be administratively amended by the District in accordance with Regulation 2.16, section 5.4.
18. **Permit Application Submittal** - The owner or operator shall submit a timely and complete application for permit renewal or significant revision. If the owner or operator submits a timely and complete application then the owner or operator's failure to have a permit is not a violation until the District takes formal action on this permit application. This protection shall cease to apply if, subsequent to completeness determination, the owner or operator fails to submit, by the deadline specified in writing by the District, additional information required to process the application as required by Regulation 2.16, sections 3 and 5.2.
19. **Permit Duration** - This permit is issued for a fixed term of 5 years, in accordance with Regulation 2.16, section 4.1.8.3.
20. **Permit Renewal, Expiration and Application** - Permit renewal, expiration and application procedural requirements shall be in accordance with Regulation 2.16, sections 4.1.8.2 and 5.3. This permit may only be renewed in accordance with section 5.3.

21. **Permit Revisions** - No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit. [Regulation 2.16, section 4.1.16]
22. **Permit Revision Procedures (Minor)** - Except as provided in 40 CFR Part 72, the Acid Rain Program, this permit may be revised in accordance with Regulation 2.16, section 5.5.
23. **Permit Revision Procedures (Significant)** - A source seeking to make a significant permit revision shall meet all the Title V requirements for permit applications, issuance and Permit renewal, in accordance with Regulation 2.16, section 5.7, and all other applicable District Regulations.
24. **Permit Termination and Revocation by the District** - The District may terminate this permit only upon written request of the owner or operator. The District may revoke a permit for cause, in accordance with Regulation 2.16, section 5.11.1 through 5.11.6. For purposes of section 5.11.1, substantial or unresolved noncompliance includes, but is not limited to:
 - a. Knowingly operating process or air pollution control equipment in a manner not allowed by an applicable requirement or that results in excess emissions of a regulated air pollutant that would endanger the public or the environment;
 - b. Failure or neglect to furnish information, analyses, plans, or specifications required by the District;
 - c. Knowingly making any false statement in any permit application;
 - d. Noncompliance with Regulation 1.07, section 4.2; or
 - e. Noncompliance with KRS Chapter 77.
25. **Permit Shield** - The permit shield shall apply in accordance with Regulation 2.16, section 4.6.1.
26. **Prevention of Significant Deterioration of Air Quality** - The owner or operator shall comply with the requirements of Regulation 2.05.
27. **Property Rights** - This permit shall not convey property rights of any sort or grant exclusive privileges in accordance with Regulation 2.16, section 4.1.13.5.
28. **Public Participation** - Except for modifications qualifying for administrative permit amendments or minor permit revision procedures, all permit proceedings shall meet the requirements of Regulations 2.07, section 1; and 2.16, sections 5.1.1.2 and 5.5.4.
29. **Reopening For Cause** - This permit shall be reopened and revised by the District in accordance with Regulation 2.16 section 5.9.
30. **Reopening for Cause by EPA** - This permit may be revised, revoked and reissued or terminated for cause by EPA in accordance with Regulation 2.16 section 5.10.
31. **Risk Management Plan (112(r))** - For each process subject to section 112(r) of the Act, the owner or operator shall comply with 40 CFR Part 68 and Regulation 5.15.
32. **Severability Clause** - The conditions of this permit are severable. Therefore, if any condition of this permit, or the application of any condition of this permit to any specific

circumstance, is determined to be invalid, the application of the condition in question to other circumstances, as well as the remainder of this permit's conditions, shall not be affected. [Regulation 2.16, section 4.1.12]

- 33. **Stack Height Considerations** - The owner or operator shall comply with the requirements of Regulation 2.10.
- 34. **Startups, Shutdowns, and Upset Conditions Requirements** - The owner or operator shall comply with the requirements of Regulation 1.07.
- 35. **Submittal of Reports, Data, Notifications, and Applications**
 - a. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit as set forth in Regulation 2.16 sections 3.1, 3.3, 3.4, 3.5, 4.1.13.6, 5.8.5 and 5.12 shall be submitted to:

***Air Pollution Control District
701 West Ormsby Avenue, Suite 303
Louisville, KY 40203-3137***
 - b. Documents that are specifically required to be submitted to EPA, as set forth in Regulation 2.16 sections 3.3 and 5.8.5 shall be mailed to EPA at:

***US EPA - Region IV
APTMD - 12th floor
Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-3104***
- 36. **Other Applicable Regulations** - The owner or operator shall comply with all applicable requirements of the following:

Regulation	Title
1.01	General Application of Regulations and Standards
1.02	Definitions
1.03	Abbreviations and Acronyms
1.04	Performance Tests
1.05	Compliance With Emissions Standards And Maintenance Requirements
1.06	Source Self-Monitoring, Emission Inventory Development and Reporting
1.07	Excess Emissions During Startups, Shutdowns, and Upset Conditions
1.08	Administrative Procedures
1.09	Prohibition of Air Pollution
1.10	Circumvention
1.11	Control of Open Burning
1.14	Control of Fugitive Particulate Emissions
2.01	General Application (Permit Requirements)
2.02	Air Pollution Regulation Requirements and Exemptions
2.03	Authorization to Construct or Operate; Demolition/Renovation Notices and Permit Requirements

Regulation	Title
2.07	Public Notification for Title V, PSD, and Other Offset Permits; SIP Revisions; and Use of Emission Reduction Credits
2.09	Causes for Permit Modification, Revocation, or Suspension
2.10	Stack Height Considerations
2.11	Air Quality Model Usage
2.16	Title V Operating Permits
4.01	General Provisions for Emergency Episodes
4.02	Episode Criteria
4.03	General Abatement Requirements
4.07	Episode Reporting Requirements
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants
6.01	General Provisions (Existing Affected Facilities)
6.02	Emission Monitoring for Existing Sources
7.01	General Provisions (New Affected Facilities)
7.02	Adoption and Incorporation by Reference of Federal New Source Performance Standards

District Only Enforceable Regulations:

Regulation	Title
1.12	Control of Nuisances
1.13	Control of Objectionable Odors
2.08	Emission Fee, Permit Fees and Permit Renewal Procedures
5.00	Definitions
5.01	General Provisions
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant
5.21	Environmental Acceptability for Toxic Air Contaminants
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant
5.23	Categories of Toxic Air Contaminants

37. **Stratospheric Ozone Protection Requirements** - Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts A, B, and F. Those requirements include the following restrictions:

- a. Any facility having any refrigeration equipment that normally contains fifty (50) pounds of refrigerant or more must keep servicing records documenting the date and type of all service and the quantity of any refrigerant added, according to 40 CFR 82.166;

- b. No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air conditioner unless the person has been properly trained and certified as provided in 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved according to 40 CFR 82.36 and 40 CFR 82.38, and complies with 40 CFR 82.42;
- c. No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or II substance in 40 CFR 82, Subpart A, Appendices A and B, except in compliance with 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166;
- d. No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or II substance used as a refrigerant in such equipment and no other person may open appliances (except MVACs as defined in 40 CFR 82.152) for service, maintenance, or repair unless the person has been properly trained and certified according to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance according to 40 CFR 82.158 and unless the person observes the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;
- e. No person may dispose of appliances (except small appliances, as defined in 40 CFR 82.152) without using equipment certified for that type of appliance according to 40 CFR 82.158 and without observing the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;
- f. No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined in 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82 Subpart F;
- g. If the permittee manufactures, transforms, imports, or exports, a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), the permittee is subject to all requirements as specified in 40 CFR 82 Subpart A, Production and Consumption Controls. [Regulation 2.16, section 4.1.5]

Emission Unit U6: VF Process**U6 Applicable Regulations:**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.24	Standard of Performance for Existing Sources Using Organic Materials	1 through 7
7.25	Standards of Performance for New Sources Using Volatile Organic Compounds	1 through 5
40 CFR 68	Chemical Accident Prevention Provisions	Subparts A - H
40 CFR 63 Subpart FFFF	National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing	63.2430, 2435, 2440, 2450, 2525 and 2465

DISTRICT ONLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.00	Definitions (STAR)	1 & 2
5.01	General Provisions (STAR)	1 & 2
5.15	Chemical Accident Prevention Provisions	1
5.20	Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant (STAR)	1, 2, 3, 4 & 5
5.21	Environmental Acceptability for Toxic Air Contaminants (STAR)	1, 2, 3, 4 & 5
5.22	Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant (STAR)	1, 2, 3, 4, 5 & 6
5.23	Categories of Toxic Air Contaminants (STAR)	1, 2, 3, 4, 5 & 6

U6 Equipment:

Unit U6000 Emission Points				
ID	Description	Applicable Regulation(s)	Control Device	Stack ID
CL-405	HF Recycle Distillation Column with Condenser (C-405) and Reboiler (BR-405) 2009	STAR, 5.15, 7.25, 40 CFR 63 Subpart FFFF	Main/Emergency Scrubber (SB-403)	S-14
CL-406	DFE Recycle Distillation Column with Condenser (C-406) and Reboiler (BR-406) 2009			
CL-500	Distillation Column with Process Condenser (C-500) and Reboiler (BR-500) 2003	STAR, 40 CFR 63 Subpart FFFF ¹	Main/Emergency Scrubber (SB-403)	S-14
CL-503	Tar Distillation Column with Condenser (C-302) 2003 and Tar Concentrator (TR-302) 1962			

¹ This emission point from Unit U6000 Emission Points' table does not contain VOCs.

Unit U6000 Emission Points				
CO-410	VF Reactor Outlet Cooler 2008	STAR, 5.15, 7.25	Main/Emergency Scrubber (SB-403)	S-14
CO-411	VF Crude (Recycle) Cooler 2009			
F-416	Reactor Outlet Filter 2008	STAR, 5.15, 7.25	Main/Emergency Scrubber (SB-403)	S-14
F-419	VF Crude Gas (1 st Stage) Filter 2009			
H-405N	(Process/Process) Heat Exchanger 2008			
H-405S	(Process/Process) Heat Exchanger 2008			
H-406	Salt Heat Exchanger 2008			
RE-301	Recovered HF Process Tank 1993	STAR, 40 CFR 63 Subpart FFFF ⁵	Main/Emergency Scrubber (SB-403)	S-14
RE-401	VF Reactor 1964	STAR, 5.15, 6.24, 40 CFR 63 Subpart FFFF	Main/Emergency Scrubber (SB-403)	S-14
RE-402	VF Reactor 2008	STAR, 5.15, 7.25, 40 CFR 63 Subpart FFFF	Main/Emergency Scrubber (SB-403)	S-14
S-402	DFE Vapor Liquid Separator 2008	STAR, 5.15, 7.25	Main/Emergency Scrubber (SB-403)	S-14
T-403	VF Crude Process Tank 2009			
TR-303	Receiver 2009	NA	NA	NA
TR-304	Receiver 2009	NA	NA	NA
TS-401	HF Recycle Process Tank 1961	STAR, 40 CFR 63 Subpart FFFF ⁵	Main/Emergency Scrubber (SB-403)	S-14
V-301	Vent Reactor with Condenser 1994 to Vessel with Condenser (C-303) 2006			
V-402	DFR Recycle Vaporizer 2008	STAR, 5.15, 7.25, 40 CFR 63 Subpart FFFF	Main/Emergency Scrubber (SB-403)	S-14
8275CP	VF Crude (1 st Stage) Compressor 2009	STAR, 5.15, 7.25	Main/Emergency Scrubber (SB-403)	S-14

Unit U6001 Emission Points				
ID	Description	Applicable Regulation(s)	Control Device	Stack ID
CL-407	VF Pure Distillation Column with Process Condenser (C-407) and Reboiler (BR-407) 2009	STAR, 5.15, 7.25 40 CFR 63 Subpart FFFF	NA	NA
CO-413 a & b	Shell and Tube Cooler 2009 (VF Trailer Loading)			
F-409	Pure Column Filter 1994			
F-410	Pure Column Filter 1994			
TR-402	VF Product Receiver Tank 1964	STAR, 5.15, 6.24	NA	NA
TR-403	VF Product Receiver Tank 1964	STAR, 5.15, 6.24	NA	NA

Unit U6001 Emission Points				
ID	Description	Applicable Regulation(s)	Control Device	Stack ID
TR-404	VF Product Receiver Tank 1964	STAR, 5.15, 6.24	NA	NA
8850CP	VF Loading Compressor 2003	STAR, 5.15, 7.25 40 CFR 63 Subpart FFFF	NA	NA
8880CP	VF Loading Compressor 2009	STAR, 5.15, 7.25 40 CFR 63 Subpart FFFF	NA	NA
AB-400	HF Adsorbers 1962	STAR, 40 CFR 63 Subpart FFFF ²	Main/Emergency Scrubber (SB-403)	S-14
AB-401	HF Adsorbers 1962			

Unit U6002 Emission Point				
ID	Description	Applicable Regulation(s)	Control Device	Stack ID
C-408	VF Sphere Compressor Vent	40 CFR 63 Subpart FFFF	Main/Emergency Scrubber (SB-403)	S-14

Unit U6003 Emission Points				
ID	Description	Applicable Regulation(s)	Control Device	Stack ID
NA	HF Pumps, connections, valves	STAR	NA	NA
NA	VF Pumps, connections, gas valves, liquid valves	STAR	NA	NA

U6 Control Devices

U6 Control Devices:			
ID	Description	Performance Indicator	Stack ID
SB-403 ³	Wet Scrubber	Pressure Drop	S-14

² This emission point from Unit U6001 Emission Points' table does not contain VOCs.

³ In the event when both CD-302 and CD-303 from Chemours, Facility ID #62, have been taken off-line, the emissions from Chemours will vent to SB-403.

U6 Specific Conditions

S1. Standards (Regulation 2.16 Section 4.1.1)

a. VOC⁴

- i. For Emission Points S-402, V-402, H-406, H-405N, H-405S, RE-402, F-416, CO-410, F-419, 8275CP, CO-411, CL-405, T-403 and CL-406, the owner or operator shall limit the combined VOC emissions to 3,029 pounds or less per 12 consecutive month period, based on the BACT analysis dated February 2, 2009.⁵ (Regulation 7.25, section 3.1)
- ii. For Emission Points CO-413 a & b, CL-407, F-409, F-410, 8850CP and 8880CP, the owner or operator shall not allow or cause VOC emissions, including all coatings, additives, catalysts, solvents, thinners, and cleaners to equal or exceed 5 tons during any 12 consecutive month period, unless a BACT is submitted and approved by the District. (Regulation 7.25, section 2.1 and 3.1)
- iii. For Emission Points RE-401, TR-402, TR-403, TR-404, the owner or operator shall not discharge into the atmosphere more than 3,000 pounds of organic materials in any one day, nor more than 450 pounds in any one hour, from any existing affected facility in which any Class III solvent or any material containing such solvent is employed or applied unless the discharge has been reduced by at least 85% by weight.⁶ (Regulation 6.24, section 3.3)

b. HAP

- i. The owner or operator shall reduce the collective hydrogen-halide and halogen-HAP emissions by 99 percent by weight, or to an outlet concentration of 20 ppm, by venting through one or more closed-vent systems to any combination of control devices; (40 CFR 63.2465(a) and 40 CFR 63, Table 3.1.a.)
- ii. The owner or operator shall operate the Main/Emergency Scrubber (SB-403) at all times when emissions are vented to it. (40 CFR 63.994(a)(2) as referenced by 40 CFR 63.2465(c))
- iii. The owner or operator shall operate the Main/Emergency Scrubber (SB-403) by continuously monitoring pH with a flow meter capable of providing a continuous record, which shall be located at the scrubber influent. . (40 CFR 63.994(c)(1)(ii)).

⁴ The potential VOC increase for Phase 1 through 4 was 24.92 tpy. Incorporating the revised maximum potential emission from Emission Point 6001, the potential VOC increase for Phases 1 through 4 is now 27.04 tpy which is below the 40 ton/yr significant level for PSD/Non-Attainment NSR.

⁵ The BACT analysis, required by Regulation 7.25, dated February 2, 2009 demonstrated that there were no controls economically feasible for the potential combined VOC emissions of 1.51 tons per year.

⁶ The source cannot exceed the pound per day or pound per hour limits in Regulation 6.24 for Class III solvents.

- c. **TAC**⁷
- i. The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be *de minimis*. (Regulations 5.00 and 5.21)
 - ii. For Emission Points vented to the Main/Emergency Scrubber (SB-403), (Regulation 5.21, section 4.7)
 - 1) The owner or operator shall operate the Main/Emergency Scrubber (SB-403) at all times that any of the process equipment is in operation.
 - 2) The Main/Emergency Scrubber (SB-403) shall have a minimum control efficiency of 91.4%.
- d. **Chemical Accident Prevention and Risk Management Plan**⁸ (Regulation 5.15 and 40 CFR Part 68, Subpart G)

The owner or operator shall comply with the requirements specified in Regulation 5.15, including the requirement to submit a Risk Management Plan in a method and format specified by the District and EPA. (See Off-Permit Documents Section of this permit.)

S2. **Monitoring and Record Keeping (Regulation 2.16 Section 4.1.9.1 and 4.1.9.2)**

- a. **VOC**
- i. The owner or operator shall monitor and keep a record of the following:
 - 1) Each Reactor (RE-402) Fluorination;
 - 2) Each Vent Reactor (V-301) Purge;
 - 3) Each maintenance evacuation of the Acidic Eductor Vent (maintenance) (S-402; V-402; H-406; H-405N & H-405S; CO-410, F-419, 8275CP, CO- 411; CL-405, C-405, BR-405; T-403; CL-406, C-406, BR-406);
 - 4) Each Column (CL-407) Purge.
 - ii. For Emission Points S-402, V-402, H-406, H-405N, H-405S, RE-402, F-416, CO-410, F-419, 8275CP, CO-411, CL-405, T-403 and CL-406, the owner or operator shall monthly calculate and record the monthly and 12 consecutive month VOC emissions for each month.
 - iii. For Emission Points CO-413 a & b, CL-407, F-409, F-410, 8850CP and

⁷ The potential uncontrolled Hydrogen Fluoride (Category 2 TAC) emissions are less than the *de minimis* rate of 7.6 pounds per hour. The potential controlled Hydrogen Fluoride emissions are less than the *de minimis* rate of 6,720 pounds per year.

⁸ 1,1-Difluoroethane (DFE) is not a VOC, HAP, or TAC. DFE is regulated by Regulation 5.15 (40 CFR 68 Subpart G).

8880CP, the owner or operator shall monthly calculate and record the monthly and 12 consecutive month VOC emissions for each month.

b. HAP

The owner or operator shall comply with the following monitoring requirements from 40 CFR 63.994(c) as referenced by 40 CFR 63.2450(e)(3):

- i. A pH monitoring device capable of providing a continuous record shall be installed to monitor the pH of the scrubber effluent. (40 CFR 63.994(c)(1)(i) as referenced by 40 CFR 63.2450(e)(3))
- ii. As an alternative to continuously measuring and recording pH as specified in §63.994(c)(1)(i), owner or operator may elect to continuously monitor and record the caustic strength of the effluent. (40 CFR 63.2450(k)(3))
- iii. A flow meter capable of providing a continuous record shall be located at the scrubber influent for liquid flow. (40 CFR 63.994(c)(1)(ii) as referenced by 40 CFR 63.2450(e)(3))
- iv. Gas stream flow shall be determined using one of the following procedures (40 CFR 63.994(c)(1)(ii) as referenced by 40 CFR 63.2450(e)(3)):
 - 1) The owner or operator may determine gas stream flow using the design blower capacity, with appropriate adjustments for pressure drop. (40 CFR 63.994(c)(1)(ii)(A) as referenced by 40 CFR 63.2450(e)(3))
 - 2) The owner or operator may measure the gas stream flow at the scrubber inlet. (40 CFR 63.994(c)(1)(ii)(B) as referenced by 40 CFR 63.2450(e)(3))
 - 3) The owner or operator may prepare and implement a gas stream flow determination plan that documents an appropriate method that will be used to determine the gas stream flow. The plan shall require determination of gas stream flow by a method that will at least provide a value for either a representative or the highest gas stream flow anticipated in the scrubber during representative operating conditions other than start-ups, shutdowns, or malfunctions. The plan shall include a description of the methodology to be followed and an explanation of how the selected methodology will reliably determine the gas stream flow, and a description of the records that will be maintained to document the determination of gas stream flow. The owner or operator shall maintain the plan as specified in a referencing subpart. (40 CFR 63.994(c)(1)(ii)(D) as referenced by 40 CFR 63.2450(e)(3))
- v. Records of the results of each Continuous Parameter Monitoring System (CPMS) calibration check and the maintenance performed, as specified in §63.2450(k)(1), which cites §63.998(c)(1)(ii)(A). (40 CFR 63.2525(g))

- 1) The date and time of completion of calibration and preventive maintenance of the CPMS. (§63.998(c)(1)(ii)(A) as referenced by 40 CFR 63.2450(k)(1))
 - 2) The “as found” and “as left” CPMS readings, whenever an adjustment is made that affects the CPMS reading and a “no adjustment” statement otherwise. (§63.998(c)(1)(ii)(B) as referenced by 40 CFR 63.2450(k)(1))
 - 3) The start time and duration or start and stop times of any periods when the CPMS is inoperative. (§63.998(c)(1)(ii)(C) as referenced by 40 CFR 63.2450(k)(1))
 - 4) Records of the occurrence and duration of each start-up, shutdown, and malfunction of CPMS used to comply with this subpart during which excess emissions occur. (§63.998(c)(1)(ii)(D) as referenced by 40 CFR 63.2450(k)(1))
 - 5) For each start-up, shutdown, and malfunction during which excess emissions as defined in a referencing subpart occur, records whether the procedures specified in the source’s start-up, shutdown, and malfunction plan were followed, and documentation of actions taken that are not consistent with the plan. These records may take the form of a “checklist,” or other form of recordkeeping that confirms conformance with the start-up, shutdown, and malfunction plan for the event. (§63.998(c)(1)(ii)(E) as referenced by 40 CFR 63.2450(k)(1))
 - 6) Records documenting each start-up, shutdown, and malfunction event. (§63.998(c)(1)(ii)(F) as referenced by 40 CFR 63.2450(k)(1))
 - 7) Records of CPMS start-up, shutdown, and malfunction event that specify that there were no excess emissions during the event, as applicable. (§63.998(c)(1)(ii)(G) as referenced by 40 CFR 63.2450(k)(1))
 - 8) Records of the total duration of operating time. §63.998(c)(1)(ii)(H) as referenced by 40 CFR 63.2450(k)(1))
- vi. Records of each operating scenario specified as follows: (40 CFR 63.2525(b))
- 1) A description of the process and the type of process equipment used. (§63.2525(b)(1))
 - 2) An identification of related process vents, wastewater point of determination (POD); storage tanks; and transfer racks. (§63.2525(b)(2))
 - 3) The applicable control requirements of this subpart, including the level of required control, and for vents, the level of control for each vent. (§63.2525(b)(3))

- 4) The control device or treatment process used, as applicable, including a description of operating and/or testing conditions for any associated control device. (§63.2525(b)(4))
- 5) The process vents, wastewater POD, transfer racks, and storage tanks (including those from other processes) that are simultaneously routed to the control device or treatment process(s). (§63.2525(b)(5))
- 6) The applicable monitoring requirements (S2.c) of this subpart and any parametric level that assures compliance for all emissions routed to the control device or treatment process. (§63.2525(b)(6))
- 7) Calculations and engineering analyses required to demonstrate compliance. (§63.2525(b)(7))
- 8) For reporting purposes, a change to any of these elements not previously reported, except for S3.c.i.5), constitutes a new operating scenario. (§63.2525(b)(8))

c. **TAC**

- i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to MSDS, analysis of emissions, and modeling results.
- ii. The owner or operator shall re-evaluate the environmental acceptability and document the environmentally-acceptable emissions if a new TAC is introduced or the content of a TAC in a raw material increases above *de minimis* at the time of the change.
- iii. Identification of all periods of bypassing the wet scrubber (SB-403) while in operation during a reporting period. The report shall include the following:
 - 1) The date;
 - 2) The duration (including start and stop time) of each bypass event;
 - 3) The total lb/hr emissions of each TAC during each bypass event;
 - 4) Summary information on the cause or reason for each bypass event;
 - 5) Corrective action taken to minimize the extent and duration of each bypass event; and
 - 6) Measures implemented to prevent reoccurrence of the situation that resulted in bypassing any of the wet scrubbers. If there are no periods of bypassing any of the wet scrubbers during a reporting period, the owner or operator shall submit a negative declaration for the reporting period.

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

The owner or operator shall monitor the processes and keep records required by Regulation 5.15.

S3. **Reporting (Regulation 2.16 Section 4.1.1)**

The owner or operator shall submit a semi-annual compliance report that includes the information in this section. (See General Condition 14)

a. **VOC**

- i. Emission Unit ID number, Stack ID number, and/or Emission Point ID number;
- ii. The beginning and ending date of the reporting period;
- iii. For Emission Points S-402, V-402, H-406, H-405N, H-405S, RE-402, F-416, CO-410, F-419, 8275CP, CO-411, CL-405, T-403 and CL-406, the monthly and 12 consecutive month VOC emissions for each month.
- iv. For Emission Points CO-413 a & b, CL-407, F-409, F-410, 8850CP, and 8880CP, the monthly and 12 consecutive month VOC emissions for each month.

b. **HAP**

- i. Company name and address (§63.2520(e)(1))
- ii. Statement by a responsible official with that official's name, title, and signature, certifying the accuracy of the content of the report. (§63.2520(e)(2))
- iii. Date of report and beginning and ending dates of the reporting period. (§63.2520(e)(3))
- iv. For each startup, shutdown, or malfunction (SSM) during which excess emissions occur, the compliance report must include records that the procedures specified in your startup, shutdown, and malfunction plan (SSMP) were followed or documentation of actions taken that are not consistent with the SSMP, and include a brief description of each malfunction. (§63.2520(e)(4))
- v. The compliance report must contain the information on deviations, as defined in §63.2550, according to the following: (§63.2520(e)(5))
 - 1) If there are no deviations from any emission limit, operation limit or work practice standard specified in this subpart, include a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period. (§63.2520(e)(5)(i))
 - 2) For each deviation from an emission limit, operating limit, and work practice standard that occurs at an affected source where you are not using a continuous monitoring system (CMS) to comply

- with the emission limit or work practice standard in this subpart, you must include the information in the following: (This includes periods of SSM) (§63.2520(e)(5)(ii))
- (a) The total operating time of the affected source during the reporting period. (§63.2520(e)(5)(ii)(A))
 - (b) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken. (§63.2520(e)(5)(ii)(B)).
- vi. Include each new operating scenario which has been operating since the time period covered by the last compliance report and has not been submitted in the notification of compliance status report or a previous compliance report. For each new operating scenario, you must provide verification that the operating conditions for any associated control or treat device have not been exceeded and that any required calculations and engineering analyses have been performed. For the purposes of this paragraph, a revised operating scenario for an existing process is considered to be a new operating scenario. (§63.2520(e)(7))
- vii. Notification of process change. (§63.2520(e)(10))
- 1) Except as specified in S4.c.vii.2), whenever you make a process change, or change any of the information submitted in the notification of compliance status report or a previous compliance report, that is not within the scope of an existing operating scenario, you must document the change in your compliance report. A process change does not include moving within a range of conditions identified in the standard batch, and a nonstandard batch does not constitute a process change. The notification must include all of the information in paragraphs (a) through (c) of this section. (§63.2520(e)(10)(i))
 - (a) A description of the process change. (§63.2520(e)(10)(i)(A))
 - (b) Revisions to any of the information reported in the original notification of compliance status report. (§63.2520(e)(10)(i)(B))
 - (c) Information required by the notification of compliance status report for changes involving the addition of processes or equipment at the affected source. (§63.2520(e)(10)(i)(C))
 - 2) You must submit a report 60 days before the scheduled implementation date of any of the changes identified in paragraph (a) or (b) of this section. (§63.2520(e)(10)(ii))

- (a) Any change to the information contained in the precompliance report. (§63.2520(e)(10)(ii)(A))
- (b) A change in the status of a control device from small to large. (§63.2520(e)(10)(ii)(B))

c. **TAC**

- i. For the Main/Emergency Scrubber (SB-403),
 - 1) Emission unit ID number and emission point ID number
 - 2) The beginning and ending date of the reporting period
 - 3) Identification of all periods where the flow rate of water is below the limit.
 - 4) The total lb/hr emissions of each TAC during each bypass event;
 - 5) The monthly bypass hours for each month and the year to date total
 - 6) Description of any corrective action taken for each exceedance
- ii. The owner or operator shall report any conditions that were inconsistent with those conditions analyzed in the most recent Environmental Acceptability Demonstration or a negative declaration stating that operations were within the conditions analyzed. This includes, but is not limited to, control device upset conditions.
- iii. For any conditions outside the analysis, the owner or operator shall re-analyze to determine whether these conditions comply with the STAR program. Changes to the air dispersion modeling program or meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to re-analyze. (Regulation 5.21 sections 4.22 – 4.24)
- iv. The owner or operator shall submit the re-evaluated EA demonstration to the District within 6 months of a change of a raw material as described in S2.c.ii.

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

The owner or operator shall comply with the reporting requirements specified in Regulation 5.15, including the requirement to submit a Risk Management Plan in a method and format as specified by the District and EPA.

S4. **Testing (Regulation 2.16 Section 4.1.1)**

a. **VOC**

There are no testing requirements for this pollutant.

b. HAP

Once during the permit term, the owner or operator shall perform the following performance test⁹:

- i. The owner or operator shall perform an EPA Reference Method 26A performance test for Hydrogen Fluoride on the inlet and outlet of the control device (SB-403) or emission point. The test shall be performed at 90% or higher of maximum capacity, or allowable/permitted capacity, or at a level of capacity which results in the greatest emissions and is representative of the operations. Failure to perform the test at maximum capacity, allowable/permitted capacity, or at a level of capacity which resulted in the greatest emissions, may necessitate a re-test or a revision of the allowable/permitted capacity of the process equipment.
- ii. The owner or operator shall submit written compliance test plans (protocol) for the control efficiency. They shall include the EPA test methods that will be used for Hydrogen Fluoride compliance testing, the process operating parameters that will be monitored during the performance test, and the control device performance indicators (*e.g.* pressure drop, minimum combustion chamber temperature) that will be monitored during the performance test. The compliance test plans shall be furnished to the District at least 30 days prior to the actual date of the performance test. Attachment B - Protocol Checklist for a Performance Test includes the information to be submitted in the protocol.
- iii. The owner or operator shall provide the District at least 10 days prior notice of any performance test to afford the District the opportunity to have an observer present.
- iv. The owner or operator shall furnish the District with a written report of the results of the performance test within 60 days following the actual date of completion of the performance test.

c. TAC

Hydrogen Fluoride (HF) testing requirements are described in the section for HAPs. There are no additional testing requirements for HF as a TAC.

⁹ Scrubber SB-403 was last tested on June 22, 2011 and the test demonstrated a hydrogen fluoride (HF) removal efficiency in excess of 99.2%.

Permit Shield

The owner or operator is hereby granted a permit shield that shall apply as long as the owner or operator demonstrates ongoing compliance with all conditions of this permit. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements of the regulations cited in this permit as of the date of issuance, pursuant to Regulation 2.16, section 4.6.1.

Off-Permit Documents

<u>Document</u>	<u>Date</u>
1.18 Rule Effectiveness Plan	20 September 1994
Risk Management Plan	8 September 2015

Alternative Operating Scenario

The company requested no alternative operating scenario in its Title V application.

Insignificant Activities

Equipment	Quantity	Regulation Basis
Fixed or mobile internal combustion engines and vehicles used for transport of passengers or freight, unless regulated elsewhere	15	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	1	Regulation 1.02, Appendix A, Section 3.5
Emergency relief vents, stacks and ventilating systems.	92	Regulation 1.02, Appendix A, Section 3.10
Blast cleaning equipment using a suspension of abrasives in water.	1	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.	1	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	2	Regulation 1.02, Appendix A, Section 3.24

Equipment	Quantity	Regulation Basis
All pressurized VOC storage vessels. List materials stored: Various	5	Regulation 1.02, Appendix A, Section 3.26
Can Puncturing Device	1	Regulation 1.02 Appendix A, Section 1.38
VF Salt Furnace (Insignificant Activity)	1	Regulation 1.02 Appendix A, Section 1.38
Non-Halogenated Cold Solvent Parts Cleaners (See IA1)	1	Regulation 1.02 Appendix A, Section 3.22

- 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.

Emission Unit IA1: Cold Solvent Parts Cleaner

IA1 Applicable Regulations:

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
6.18	Standards of Performance for Solvent Metal Cleaning Equipment	1, 2, 3, 4.1, 4.2

IA1 Equipment:

Emission Process	Description	Applicable Regulation	Control ID
IA1	One (1) Non-Halogenated Cold Solvent Parts Cleaners	6.18	N/A

IA1 Control Devices:

There are no control devices associated with Emission Unit IA1.

IA1 Specific Conditions**S1. Standards (Regulation 2.16, section 4.1.1)****VOC**

- i. The owner or operator shall install, maintain, and operate the control equipment as follows: (Regulation 6.18, section 4)
 - 1) The cold cleaner shall be equipped with a tightly fitting cover that is free of cracks, holes, or other defects. If the solvent is agitated or heated, then the cover shall be designed so that it can be easily operated with 1 hand. (Regulation 6.18, section 4.1.1)
 - 2) The cold cleaner shall be equipped with a drainage facility that is designed so that the solvent that drains off parts removed from the cleaner will return to the cold cleaner. The drainage facility may be external if the District determines that an internal type cannot fit into the cleaning system. (Regulation 6.18, section 4.1.2)
 - 3) A permanent, conspicuous label summarizing the operating requirements specified in Specific Condition S1.a.ii. shall be installed on or near the cold cleaner. (Regulation 6.18, section 4.1.3)
 - 4) If used, the solvent spray shall be a fluid stream, not a fine, atomized, or shower type spray, at a pressure that does not cause excessive splashing. Flushing of parts using a flexible hose or other flushing device shall be performed only within the freeboard area of the cold cleaner. Solvent flow shall be directed downward to avoid turbulence at the air-solvent interface and to prevent solvent from splashing outside of the cold cleaner. (Regulation 6.18, section 4.1.4)
 - 5) Work area fans shall be located and positioned so that they do not blow across the opening of the cold cleaner. (Regulation 6.18, section 4.1.6)
 - 6) The solvent-containing portion of the cold cleaner shall be free of all liquid leaks. Auxiliary cold cleaner equipment such as pumps, water separators, steam traps, or distillation units shall not have any visible liquid leaks, visible tears, or cracks. (Regulation 6.18, section 4.1.8)
- ii. The owner or operator shall observe at all times the following operating requirements: (Regulation 6.18, section 4.2)
 - 1) Waste solvent shall neither be disposed of nor transferred to another party in a manner such that more than 20% by weight of the waste solvent can evaporate. Waste solvent shall be stored only in a covered container. A covered container may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container. (Regulation 6.18, section 4.2.1)
 - 2) The solvent level in the cold cleaner shall not exceed the fill line. (Regulation 6.18, section 4.2.2)

- 3) The cold cleaner cover shall be closed whenever a part is not being handled in the cold cleaner. (Regulation 6.18, section 4.2.3)
 - 4) Parts to be cleaned shall be racked or placed into the cold cleaner in a manner that will minimize drag-out losses. (Regulation 6.18, section 4.2.4)
 - 5) Cleaned parts shall be drained for at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping, or rotating, the parts shall be positioned so that the solvent drains directly back to the cold cleaner. (Regulation 6.18, section 4.2.5)
 - 6) A spill during solvent transfer shall be cleaned immediately, and the wipe rags or other sorbent material shall be immediately stored in a covered container for disposal or recycling, unless enclosed storage of these items is not allowed by fire protection authorities. (Regulation 6.18, section 4.2.6)
 - 7) Sponges, fabric, wood, leather, paper products, and other absorbent material shall not be cleaned in a cold cleaner. (Regulation 6.18, section 4.2.7)
- iii. The owner or operator shall not operate a cold cleaner using a solvent with a vapor pressure that exceeds 1.0 mm Hg (0.019 psi) measured at 20°C (68°F). (Regulation 6.18, section 4.3.2)

S2. Monitoring and Record Keeping (Regulation 2.16, sections 4.1.9.1 and 4.1.9.2)

The owner or operator shall maintain the required records for a minimum of 5 years and make the records readily available to the District upon request.

VOC

The owner or operator shall maintain records that include the following for each purchase: (Regulation 6.18, section 4.4.2)

- 1) The name and address of the solvent supplier,
- 2) The date of the purchase,
- 3) The type of the solvent, and
- 4) The vapor pressure of the solvent measured in mm Hg at 20°C (68°F).

All records required in Specific Condition S2.a.i. shall be retained for 5 years and made available to the District upon request. (Regulation 6.18, section 4.4.3)

S3. Reporting (Regulation 2.16, section 4.1.9.3)

VOC

There are no routine compliance reporting requirements for Regulation 6.18.

Attachment A - Default Emission Factors, Calculation Methodologies, & Stack Tests

Generally, emissions are calculated by multiplying the throughput (ton, MMCF, gallons, etc.) or hours of operation of the equipment by the appropriate emission factor and accounting for any control devices, unless otherwise approved in writing by the District.

Unit U6: VF Process

Equipment	Emission Point	Control Device	Emission Factor and Determination Method
VF Reactor and Refining Equipment	6000	SB-403 ¹⁰	<p>Purges through the K-Jet Vent (various vessels); Fluorination catalyst Purges, material from Analyzers and V-301 Reactor vent purging.</p> <p>Emissions VF Catalyst Fluorination Purge: Emissions = No. of catalyst purges [4950 lbs of HF used per purge] (evacuations/yr)*(49.51 lb HF emitted per purge)</p> <p>Emissions for each vessel during the maintenance of the K-Jet Vent: Emissions = (total volume ft³)(avg. density lb/ft³)(pollutant mass fraction) = lb pollutant/evacuation</p> <p>VF Reactor Catalyst Shutdown Purge: Emission = (lb mol vented) *(pollutant mass fraction)</p>
VF Tank Truck Loading	6001	N/A	<p>VF density (vap))(volume of pipe vented/trailer)(#trailers)/(2000 lb/ton = (0.2539 lb/ft³)(0.873 ft³)(#trailers)/(2000 lb/ton)</p> <p>$1.1 \times 10^{-4} * \text{\#trailers} = \text{tons VF vented}$</p>
VF Loading Compressor Vent	6002	N/A	<p>VF Sphere Venting: Total amount vented = (hours the valve is open)(standard vent rate)(% valve is open)</p>
Fugitive Emissions	6003	N/A	<p>Leaks from pumps, connections, and valves multiplied by an emission factor and the % uptime</p> <p>Fugitive Emissions = component count * # hr/year * DuPont factor</p>
VF Salt Furnace (IA)	6004	N/A	AP-42 Section 1.4 Emission Factors (Natural Gas)

¹⁰ Scrubber SB-403 was last tested on June 22, 2011 and the test demonstrated a hydrogen fluoride (HF) removal efficiency in excess of 99.2%

Attachment B - Protocol Checklist for a Performance Test

A completed protocol should include the following information:

- 1. Facility name, location, and ID #;
- 2. Responsible Official and environmental contact names;
- 3. Permit numbers that are requiring the test to be conducted;
- 4. Test methods to be used (i.e. EPA Method 1, 2, 3, 4, and 5);
- 5. Alternative test methods or description of modifications to the test methods to be used;
- 6. Purpose of the test including equipment and pollutant to be tested; the purpose may be described in the permit that requires the test to be conducted or may be to show compliance with a federal regulation or emission standard;
- 7. Proposed test dates (These may change but the District will need final notice at least 10 days in advance of the actual test dates in order to arrange for observation.);
- 8. Maximum rated production capacity of the system;
- 9. Production-rate goal planned during the performance test for demonstration of compliance (if appropriate, based on limits);
- 10. Method to be used for determining rate of production during the performance test;
- 11. Method to be used for determining rate of production during subsequent operations of the process equipment to demonstrate compliance;
- 12. Description of normal operation cycles;
- 13. Discussion of operating conditions that tend to cause worse case emissions; it is especially important to clarify this if worst case emissions do not come from the maximum production rate;
- 14. Process flow diagram;
- 15. The type and manufacturer of the control equipment, if any;
- 16. The control equipment (baghouse, scrubber, condenser, etc.) parameter to be monitored and recorded during the performance test. Note that this data will be used to ensure representative operation during subsequent operations. These parameters can include pressure drops, flow rates, pH, and temperature. The values achieved during the test may be required during subsequent operations to describe what pressure drops, etcetera, are indicative of good operating performance; and
- 17. How quality assurance and accuracy of the data will be maintained, including;
 - Sample identification and chain-of-custody procedures
 - If audit samples are required for this test method, audit sample provider and number of audit samples to be used
- 18. Pipe, duct, stack, or flue diameter to be tested;
- 19. Distances from the testing sample ports to the nearest upstream and downstream flow disturbances such as bends, valves, constrictions, expansions, and exit points for outlet and additionally for inlet;
- 20. Determine number of traverse points to be tested at the outlet and for the inlet, if required, using Appendix A-1 to 40 CFR Part 60:
 - Method 1 if stack diameter is >12"
 - Method 1a if stack diameter is greater than or equal to 4" and less than 12"
 - Alternate method of determination for stack diameter <4"
 - If a sample location at least two stack or duct diameters downstream and half a diameter upstream from any flow disturbance is not available then an alternative procedure is available for determining the acceptability of a measurement location. This procedure described in Method 1, Section 11.5, allows for the determination of gas flow angles at the sampling points and comparison of the measured results with acceptability criteria.
- 21. The Stack Test Review fee shall be submitted with each stack test protocol.