



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



Title V Operating Permit

Permit No.: O-0062-23-V

Plant ID: 0062

Effective Date: MM/DD/2025

Expiration Date: MM/DD/YYYY

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

Owner: The Chemours Company FC, LLC
1007 North Market Street
Wilmington, DE 19898

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 months and no later than six months prior to the expiration date.

Application No.: See **Application and Related Documents** table.

Administratively Complete Date: 09/06/2023
Public Notice Date: 03/17/2025
Proposed Permit Date: 03/17/2025

Permit writer: Blake Clark

Air Pollution Control Officer
{date1}

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Permit Revisions and Changes

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

Construction Permit Summary

| 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 |
| C-0062-0009-20-V | 10/14/2020 | Two (2) storage tanks and associated piping components at the facility to store raw material chloroform. |

| Permit No. | Issue Date | Description |
|------------------|------------|---|
| C-0062-0032-21-V | 03/01/2022 | Installing a pressurized chloroform feed tank, an HFC-23 recovery tower including a vent condenser; a hydrogen chloride (HCl) stripping column with an associated flash tank; aqueous HCl pump tank and graphite heat exchangers; and a vacuum pump for the HFC-23 dryers, along with associated piping components. |
| C-0062-24-0010-V | 07/03/2024 | Rental de-watering adsorbers with associated trailer-mounted scrubber and two carbon beds and associated fugitive piping |

Application and Related Documents

| Document Number | Date | Description |
|--------------------------------|------------|--|
| 75871 | 03/14/2014 | 'Certificate of Existence' |
| 91796 | 05/01/2018 | CAM Plan |
| 156972 | 07/15/2020 | Application for two chloroform storage tanks and associated piping components. |
| 253355 | 08/31/2021 | Application 100A Construction/Operating |
| 253368 | 08/31/2021 | Public Application |
| 253370 | 08/31/2021 | Public Appendix A PTE |
| 603408, 601646, 601649, 601648 | 08/02/2023 | Public TV Renewal Application |
| 603407 | 08/02/2023 | Confidential TV Renewal Application |
| 606111 | 08/07/2023 | Confidential Company PTE |
| 727828 | 02/16/2024 | Construction Application 100A |

Abbreviations and Acronyms

| | |
|-------------------|--|
| AP-42 | - AP-42, <i>Compilation of Air Pollutant Emission Factors</i> , published by U.S.EPA |
| 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 |
| 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 |
| (M)SDS | - (Material) Safety Data Sheet |
| 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

- G1. **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]

- G2. **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 W. Ormsby Avenue, Suite 303
Louisville, Kentucky 40203-3137*

The owner or operator shall submit the Compliance Certification on or before April 15 of each year, or other such due date as required by another applicable regulation.

- G3. **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.
- G4. **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.
- G5. **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]
- G6. **Emission Fees Payment Requirements** - The owner or operator shall pay annual emission fees in accordance with Regulation 2.08, section 1.3. Failure to pay the emissions fees when due is a violation of District Regulations. Such failure may be subject to penalties in addition to a late fee of 10% of the original amount due. In addition, failure to pay emissions fees within 60 days of the due date may result in suspension of the stationary source's permit or other authorization to operate. [Regulation 2.08, section 1.2.5]
- G7. **Emission Offset Requirements** - The owner or operator shall comply with the requirements of Regulation 2.04.
- G8. **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]
- G9. **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]
- G10. **Hazardous Air Pollutants and Sources Categories** - The owner or operator shall comply with the applicable requirements of Regulations 5.02 and 5.14.
- G11. **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]

G12. **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]

G13. **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.

G14. **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 submitted 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:

Reporting Period

January 1 - June 30

July 1 - December 31

Report Due Date

August 29

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.

- G15. **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]
- G16. **Operational Flexibility** - The owner or operator may make changes without permit revision in accordance with Regulation 2.16, section 5.8.
- G17. **Permit Amendments (Administrative)** - This permit can be administratively amended by the District in accordance with Regulation 2.16, section 5.4.
- G18. **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.
- G19. **Permit Duration** - This permit is issued for a fixed term of 5 years, in accordance with Regulation 2.16, section 4.1.8.3.
- G20. **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.
- G21. **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]
- G22. **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.
- G23. **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.
- G24. **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.

- G25. **Permit Shield** - The permit shield shall apply in accordance with Regulation 2.16, section 4.6.1.
- G26. **Prevention of Significant Deterioration of Air Quality** - The owner or operator shall comply with the requirements of Regulation 2.05.
- G27. **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.
- G28. **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.
- G29. **Reopening for Cause** - This permit shall be reopened and revised by the District in accordance with Regulation 2.16, section 5.9.
- G30. **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.
- G31. **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.
- G32. **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]
- G33. **Stack Height Considerations** - The owner or operator shall comply with the requirements of Regulation 2.10.
- G34. **Startups, Shutdowns, and Upset Conditions Requirements** - The owner or operator shall comply with the requirements of Regulation 1.07.
- G35. **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, Kentucky 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 4
Sam Nunn Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, GA 30303-8960*

- G36. **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 |
| 1.18 | Rule Effectiveness |
| 1.19 | Administrative Hearings |
| 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 |
| 2.04 | Construction or Modification of Major Sources in or Impacting Upon Non-Attainment Areas (Emission Offset Requirements) |
| 2.05 | Prevention of Significant Deterioration |
| 2.06 | Permit Requirements – Other Sources |
| 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 |
| 3.01 | Ambient Air Quality Standards |
| 4.01 | General Provisions for Emergency Episodes |
| 4.02 | Episode Criteria |
| 4.03 | General Abatement Requirements |
| 4.04 | Particulate and Sulfur Dioxide Reduction Requirements |
| 4.05 | Hydrocarbon and Nitrogen Oxides Reduction Requirements |
| 4.06 | Carbon Monoxide Reduction Requirements |
| 4.07 | Episode Reporting Requirements |
| 6.01 | General Provisions (Existing Affected Facilities) |
| 6.02 | Emission Monitoring for Existing Sources |
| 7.01 | General Provisions (New Affected Facilities) |

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 |
| 2.16 | Title V Operating Permits |
| 5.00 | Definitions |
| 5.01 | General Provisions |
| 5.02 | Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants |
| 5.14 | Hazardous Air Pollutants and Source Categories |
| 5.15 | Chemical Accident Prevention Provisions |
| 5.20 | 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 |
| 7.02 | Adoption and Incorporation by Reference of Federal New Source Performance Standards |

G37. **Stratospheric Ozone Protection Requirements** - Any facility having refrigeration equipment, including air conditioning equipment, which uses Class I or II Controlled Substances (listed in 40 CFR 82, Subpart A, Appendices A and B) or non-exempt substitutes, 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 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 Controlled 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 Controlled 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]

Plantwide Requirements

Facility Description

Chemical manufacturing facility that produces Freon™ 22 (chemical intermediate for the Chemours Fluorochemical and Fluoropolymer product lines), Freon™ 23 (fire extinguishing agent), and Hydrochloric Acid (HCl).

Applicable Regulations

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

Plantwide Specific Conditions

S1. Standards

[Regulation 2.16, section 4.1.1]

a. HAP

- i. The owner or operator shall not allow or cause the plantwide emissions of any single HAP to equal or exceed 10 tons during any consecutive 12-month period. [Regulation 2.16, section 4.1.1]
- ii. The owner or operator shall not allow or cause the plantwide total HAP emissions to equal or exceed 25 tons during any consecutive 12-month period. [Regulation 2.16, section 4.1.1]

b. TAC

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. (See Comment 1.) [Regulations 5.00 and 5.21]

c. District Regulation 5.15 Regulated Substance [40 CFR Part 68, Subpart G]

If any toxic substances listed in Tables 1 through 4 to 40 CFR 68.130 are present at the stationary source in an amount greater than the threshold quantity specified in Regulation 5.15, the owner or operator shall comply with the requirements specified in Regulation 5.15. [Regulation 5.15, Section 2]

S2. Monitoring and Record Keeping

[Regulation 2.16, section 4.1.9.1 and 4.1.9.2]

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

a. HAP

The owner or operator shall, monthly, calculate and record the plantwide consecutive 12-month emissions of each single HAP and total HAP for each month in the reporting period. The determination must include all Emission Points. Where appropriate, the specific Emission Point control efficiencies and/or emission factors shall be applied. The determination shall be performed as follows unless otherwise approved in writing by the District:

$$HAP_A = \sum_1^X \{[U_x \times (1 - C_{Conx})]\}$$

Where:

HAP_A = Total plantwide emissions of an individual HAP (A)

U_x = Uncontrolled HAP emission from each Emission Point (x)

C_{Conx} = Control Efficiency of each control device for each Emission Point (x)

b. TAC

The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to, SDS, analysis of emissions, and/or modeling results.

c. District Regulation 5.15 Regulated Substance [40 CFR Part 68, Subpart G]

If any toxic substances listed in Tables 1 through 4 of 40 CFR 68.130 are present at the stationary source in an amount greater than the threshold quantity specified in Regulation 5.15, the owner or operator shall monitor the processes and keep records required by Regulation 5.15.

S3. Reporting

[Regulation 2.16, section 4.1.9.3]

The owner or operator shall report the following information, as required by General Condition G14:

a. HAP

- i. The owner or operator shall report the consecutive 12-month plantwide emissions of each individual HAP for each month in the reporting period.
- ii. The owner or operator shall report the consecutive 12-month plantwide emissions of total HAP for each month in the reporting period.

b. TAC

- i. The owner or operator shall submit a new EA Demonstration or de minimis determination-at the time that: [Regulation 5.21, section 4.22]
 - (1) An application to construct or modify a process or process equipment is submitted to the District pursuant to Regulation 2.03,

2.04 or 2.05. The EA demonstration shall be submitted with the construction permit application. [Regulation 5.21, section 4.22.1]

- (2) A modification of any physical modeling parameter, such as fence lines or building heights, that are not otherwise subject to the permit requirements for that facility that affects the demonstration of compliance, occurs. The EA demonstration shall be submitted with the operating permit renewal application.
[Regulation 5.21, section 4.22.2]
- (3) A change in a process or process equipment, including raw material or fuel type substitution before making the change. Prior approval by District is not required if the change does not result in emissions that exceed an EA goal, does not cause emissions of a TAC to no longer be de minimis, and a permit modification is not required. In this case, the new EA Demonstration shall be submitted within 6 months of the change. [Regulation 5.21, section 4.22.3]

c. District Regulation 5.15 Regulated Substance [40 CFR Part 68, Subpart G]

If any toxic or flammable substances listed in Tables 1 through 4 of 40 CFR 68.130 are present at the stationary source in an amount greater than the threshold quantity specified in Regulation 5.15, the owner or operator shall comply with the reporting requirements specified in Regulation 5.15.

Plantwide Comments

- The facility submitted the TAC EA Demonstration to the District on August 31, 2021. Based on American Meteorological Society (AMS)/EPA Regulatory Model (AERMOD), the maximum off-site hazard quotient (HQ) for all process/process equipment is less than 1.0. The maximum off-site non-industrial R_C is less than 3.8 and the industrial R_C is less than 38 for the plantwide cumulative risk from new processes. The carcinogenic risk for all processes is below 7.5 for non-industrial property and below 75.0 for industrial property, the source has demonstrated compliance with the EA goals for each TAC.

Cancer and Non-Cancer Risk – Chloroform and Chlorine

| Emission Point | TAC | Risk | | HQ | |
|--|---------------------------------|---------------------|--------------------|---|---|
| | | Non-Adjusted | Industrial | Non-Adjusted | Industrial |
| | | $EAG_C \leq 1.0$ | $EAG_C \leq 10.0$ | $EAG_{NC} \leq 1.0$ | $EAG_{NC} \leq 3.0$ |
| U2, EP 2001 - Chloroform Storage Tanks TS-31 and TS-32 | Chloroform (CHCl ₃) | 0.35 | 1.66 | 4.99E-05 | 2.38E-04 |
| U2, EPN 2002 - Chloroform Tank Fugitives | Chloroform | 0.46 | 4.34 | 6.62E-05 | 6.22E-04 |
| U3, EP 3001 - Vaporizers (to Scrubber SB-8) | Chlorine | - | - | 0.46 | 1.95 |
| U3, 3003 - HFC-23 Recovery Tower Vent Condenser | Chloroform | 0.16 | 0.61 | 2.34E-05 | 8.69E-05 |
| U3, 3009 - HCFC-22 Process Unit Fugitives | Chloroform | 0.43 | 1.48 | 6.10E-05 | 2.12E-04 |
| | Chlorine | - | - | 1.40E-01 | 0.50 |
| Plantwide R_C for new Processes | - | 0.82 (≤ 3.8) | 5.56 (≤ 38) | - | - |
| Plantwide R_C for all Processes:¹ | - | 0.95 (≤ 7.5) | 5.73 (≤ 75) | - | - |
| R_{NC} for all Processes: | - | - | - | Chloroform 0.000144 Chlorine 0.6 | Chloroform 0.00082 Chlorine 2.45 |

Note: The risks (R_C and R_{NC}) for all processes (new and existing) are not additive because the modeling maximum does not occur at the same receptor.

¹ Value from ChemR06-2-21.isc and ChemR06-2021ni.isc.

Emission Unit U1: Powerhouse – Two Natural Gas Boilers**Applicable Regulations**

| FEDERALLY ENFORCEABLE REGULATIONS | | |
|--|--|--|
| Regulation | Title | Applicable Sections |
| 6.42 | Reasonably Available Control Technology Requirements for Major Volatile Organic Compound and Nitrogen Oxides Emitting Facilities | 1, 2, 3, 4.3, 5.3 and 5.4 |
| 7.06 | Standards of Performance for New Indirect Heat Exchangers | 1 through 5 |
| 40 CFR 60 Subpart Db | Standards of Performance for Industrial Commercial Institutional Steam Generating Units | 60.40b (a) and (g), 60.41b, 60.42b (a), (e), (g) and (j), 60.43b (f) and (g), 60.44b (a)(1)(ii), (h) and (i), 60.45b (a) and (j), 60.46b (a through (d) and (e)(4), 60.47b (f), 60.48b (a) through (d), (e), (e)(2), (f), (g)(1), 60.49b (a), (b), (d), (f) through (i), (o) and (r) |

| DISTRICT ONLY ENFORCEABLE REGULATIONS | | |
|---|---|----------------------------|
| Regulation | Title | Applicable Sections |
| 5.00 | Definitions | 1, 2 |
| 5.01 | General Provisions | 1 through 2 |
| 5.20 | Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant | 1 through 6 |
| 5.21 | Environmental Acceptability for Toxic Air Contaminants | 1 through 5 |
| 5.22 | Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant | 1 through 5 |
| 5.23 | Categories of Toxic Air Contaminants | 1 through 6 |
| STAR regulations are 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23 | | |

Equipment

| Emission Point | Description | Install Date | Applicable Regulations | Control ID | Release ID |
|-----------------------|--|---------------------|--|-------------------|-------------------|
| 1000 ² | Natural Gas-Fired 174 MMBtu/hr Babcock and Wilcox Boiler | 1994 | STAR, 6.42, 7.06, 40 CFR 60 Subpart Db | NA | S1 |
| 1001 | Natural Gas-Fired 174 MMBtu/hr Babcock and Wilcox Boiler | | | | |

² Construction Permit 657-94-C, issued on February 14, 1994, was revised to remove the CO emission limit of 97 tpy, because netting was performed for CO and it “netted out.”

U1 Specific Conditions

S1. Standards

[Regulation 2.16, section 4.1.1]

a. HAP

See Plantwide HAP Standards.³

b. NO_x

- i. The owner or operator shall not cause to be discharged into the atmosphere from that affected facility any gases which contain nitrous oxides in excess of 0.2 pounds per million BTU actual total heat input for combustion of natural gas. [40 CFR 60.44b(a)(1)(ii)]
- ii. The owner or operator shall comply with the NO_x RACT plan that was adopted by Board Order on November 8, 1999.⁴
[See NO_x RACT Attachment B] [Regulation 6.42, section 4.3]
- iii. The owner or operator shall not allow or cause the plantwide NO_x emissions to equal or exceed 203.2 tons during any consecutive 12-month period.⁵
[Construction permit 657-94-C (R1)]

c. Opacity

The owner or operator shall not cause to be discharged into the atmosphere from any affected facility particulate matter emissions which exhibit greater than 20% opacity.⁶ [Regulation 7.06, section 4.2]

d. PM

The owner or operator shall not cause to be discharged into the atmosphere from each boiler particulate matter in excess of 0.10 pounds per million BTU actual total heat input.⁷ [Regulation 7.06, section 4.1.4]

³ 40 CFR 63 Subpart JJJJJ does not apply to gas-fired boilers at area sources per 40 CFR 63.11195(e).

⁴ The replacement of 3 large existing coal boiler to the current 2 natural gas boilers, along with the Board Order dated of November 8, 1999, constitute the NO_x RACT plan, per Regulation 6.42, section 4.3 for this source.
[See NO_x RACT Attachment B]

⁵ The potential NO_x emissions combusting natural gas are 203.2 tpy. Netting was performed for NO_x and it “netted out”. The construction permit was revised to lower the NO_x from 242.5 tpy to the potential NO_x emissions of 203.2 tpy. [Construction Permit 657-94-C (R1) Effective 10/28/2014]

⁶ A determination has been made that a natural gas-fired boiler should meet the opacity standard.

⁷ Using AP-42 emission factors, the potential PM and SO₂ emissions do not exceed the emission standards when combusting natural gas.

e. SO₂

The owner or operator shall not cause to be discharged into the atmosphere from each boiler any gases which contain sulfur dioxide in excess of 0.80 pounds per million BTU actual total heat input for combustion of liquid and gaseous fuels.⁵
[Regulation 7.06, section 5.1.2]

f. TAC⁸

See Plantwide TAC Standards.

S2. Monitoring and Record Keeping

[Regulation 2.16, section 4.1.9.1 and 4.1.9.2]

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

a. HAP

See Plantwide HAP Monitoring and Record Keeping.

b. NO_x

- i. The owner or operator shall install, calibrate, maintain, and operate a continuous emission monitoring systems (CEMS) for measuring the NO_x emissions discharged to the atmosphere and record the output of the system.
[40 CFR 60.48b]
- ii. The owner or operator shall maintain records of the following information for each steam generating-unit operating day: [40 CFR 60.49b(g)]
 - (1) Calendar date; [40 CFR 60.49b(g)(1)]
 - (2) The average hourly nitrogen oxides emission rates (expressed as NO₂) (ng/J or lb/million-Btu heat input) measured or predicted;
[40 CFR 60.49b(g)(2)]
 - (3) The 30-day average nitrogen oxides emission rates (ng/J or lb/million-Btu heat input) calculated at the end of each steam generating-unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating-unit operating days; [40 CFR 60.49b(g)(3)]

⁸ The TAC emissions from the combustion of natural gas are considered to be “de minimis emissions” by the District. This includes all of the emissions from a process or process equipment for which the only emissions are the products of combustion of natural gas, such as from a natural gas-fired boiler or turbine, but does not include the other emissions from a process or process equipment that are not the products of the combustion of natural gas.
[Regulation 5.21, section 2.7]

- (4) Identification of the steam generating-unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emissions standards under 40 CFR 60.44(b), with the reasons for such excess emissions as well as a description of corrective actions taken; [40 CFR 60.49b(g)(4)]
 - (5) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken; [40 CFR 60.49b(g)(5)]
 - (6) Identification of the times when emissions data have been excluded from the calculation of average emission rates and the reason for excluding data; and description of corrective action taken; [40 CFR 60.49b(g)(6)]
 - (7) Identification of F factor used for calculations, method of determination, and type of fuel combusted; [40 CFR 60.49b(g)(7)]
 - (8) Identification of times when hourly averages have been obtained based on manual sampling methods; [40 CFR 60.49b(k)(7)]
 - (9) Identification of the times when the pollutant concentration exceeded full span of the CEMS; [40 CFR 60.49b(g)(8)]
 - (10) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3; [40 CFR 60.49b(g)(9)]
 - (11) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1. [40 CFR 60.49b(g)(10)]
- iii. The owner or operator shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of the boilers or any periods during which a continuous monitoring system is inoperative. [40 CFR 60.7(b)]

c. Opacity/PM/SO₂

There are no monitoring or record keeping requirements for this equipment.

d. TAC

See Plantwide TAC Monitoring and Record Keeping.

S3. Reporting

[Regulation 2.16, section 4.1.9.3]

The owner or operator shall report the following information, as required by General Condition G14:

a. HAP

See Plantwide HAP Reporting.

b. NO_x

- i. Emission Unit ID number, Release ID number, and/or Emission Point ID number;
- ii. The beginning and ending date of the reporting period;
- iii. Identification of all periods of exceedance of the emission limit;
- iv. Information recorded under 40 CFR 60.49b(g); and
- v. Description of any corrective action taken for each exceedance.
- vi. The owner or operator is required to submit excess emission reports for any excess emissions that occurred during the reporting period.
[40 CFR 60.49b(h)(2)]

c. Opacity/PM/SO₂

There are no reporting requirements for this equipment.

d. TAC

See Plantwide TAC Reporting.

Emission Unit U2: Chloroform Tanks

Applicable Regulations

| FEDERALLY ENFORCEABLE REGULATIONS | | |
|-------------------------------------|---|--|
| Regulation | Title | Applicable Sections |
| 1.05 | Compliance with Emission Standards and Maintenance Requirements | 5 |
| 7.12 | Standard of Performance for New Storage Vessels for Volatile Organic Compounds | 1 through 3 |
| 40 CFR 60 Subpart Kb ⁹ | Standards of Performance for Volatile Organic Liquid Storage Vessels | §60.110b(e)(5) |
| 40 CFR 60 Subpart VVa ¹⁰ | Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006, and on or Before April 25, 2023 | §60.482-2a, §60.482-7a, §60.486a(a)(3) |
| 40 CFR 60 Subpart VVb ¹¹ | Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After April 25, 2023 | §60.482-2b, §60.482-7b, §60.482-11b, §60.486b(a)(3) |
| 40 CFR 63 Subpart WW | National Emission Standards for Storage Vessels (Tanks) - Control Level 2 | §63.1062(a)(1), §63.1063, §63.1065, §63.1066 |
| 40 CFR 63 Subpart VVVVVV | National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources | §63.11495(3) |
| 40 CFR 68 | Chemical Accident Prevention Provisions | Subparts A – H |

⁹ In accordance with 40 CFR Part 60.110b(e)(5) (Subpart Kb), owners and operators can choose to comply with 40 CFR Part 63 Subpart WW instead of 40 CFR Part 60 Subpart Kb. Since Chemours is already going to be required to comply with Subpart WW (via Subpart VVVVVV), Chemours has elected to comply with Subpart WW for purposes of Subpart Kb.

¹⁰ 40 CFR 60 Subpart VVa applies to the group of fugitive piping components in VOC service (both new and existing) constructed, reconstructed or modified after November 7, 2006, and on or before April 25, 2023, within a process unit producing a chemical listed in 40 CFR 60.489. The HCFC-22 / HFC-23 process unit meets the Subpart VVa definition of a “process unit” (§60.481a) because the unit produces HCFC-22 (chlorodifluoromethane) which is a chemical listed in 40 CFR 60.489.

¹¹ 40 CFR 60 Subpart VVb applies to the group of fugitive piping components in VOC service (both new and existing) constructed, reconstructed, or modified after April 25, 2023, within a process unit producing a chemical listed in 40 CFR 60.489. The de-watering adsorbers meets the Subpart VVb definition of a “process unit” (§60.481b) because they produce chloroform which is a chemical listed in 40 CFR 60.489.

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

Equipment

| Emission Point | Description | Install Date | Applicable Regulations | Control ID | Release ID |
|-----------------------|---|---------------------|--|----------------------|-------------------|
| 2001 | Chloroform Raw Material Storage Tank TS-31 and Storage Tank TS-32, 632,452 gallons each | 2020 | STAR, 1.05, 7.12, 40 CFR 63 Subpart WW, 40 CFR 63 Subpart VVVVVV | AD-3 and AD-4 | S-6 |
| 2002 a | Fugitive Piping Components (Not associated with the Rental De-watering Equipment) | Pre-April 25, 2023 | STAR, 40 CFR 60 Subpart VVa, 40 CFR 63 Subpart VVVVVV | NA | F-3 |
| 2002 b | Fugitive Piping Components associated with the Rental De-watering Equipment | Post-April 25, 2023 | STAR, 40 CFR 60 Subpart VVb, 40 CFR 63 Subpart VVVVVV | NA | F-3 |
| 2003 | Two (2) Rental De-watering Adsorber Dryers, in series ¹² | New | | CS-1 AD-5 AD-6 | NA |

¹² Vacuuming the adsorber material will emit VOC. However, the potential emissions are less than 5 tpy. Therefore, Regulation 7.25, Standard of Performance for New Sources Using Volatile Organic Compounds, does not apply.

Control Devices

| Control ID | Description | Control Efficiency |
|--------------------|---|---------------------------|
| AD-3 and AD-4 | Carbon Adsorber with two carbon beds, in series | 98% |
| AD-5 and AD-6 | Carbon Adsorber with two carbon beds, in series | 99.99% ¹³ |
| CS-1 ¹⁴ | Trailer Mounted Packed Bed Scrubber, with Bio-Scrub X or similar scrubbing liquid | -- |

¹³ A manufacturer's guarantee was submitted with the construction application on 02/16/2024.

¹⁴ Offsite disposal of spent scrubber liquid will be handled by rental company.

U2 Specific Conditions

S1. Standards

[Regulation 2.16, section 4.1.1]

a. HAP

- i. See Plantwide HAP Standards.
- ii. Management practices. The owner or operator shall comply with the following paragraphs. [40 CFR 63 Subpart VVVVVV §63.11495(a)]
 - (1) You must use any of the methods listed in §63.11495(a)(2)(i) through (iv) to control total organic HAP emissions from transfer of liquids containing Table 1 organic HAP to tank trucks or railcars. You are not required to comply with this paragraph (a)(2) if you have notified the Administrator in your initial notification that a material is reactive or resinous, and you will not be able to comply with any of the methods in §63.11495(a)(2)(i) through (iv) for the transfer of such material.
[40 CFR 63 Subpart VVVVVV §63.11495(a)(2)]
 - (a) Use submerged loading or bottom loading. [40 CFR 63 Subpart VVVVVV §63.11495(a)(2)(i)]
 - (b) Route emissions to a fuel gas system or process in accordance with §63.982(d) of subpart SS. [40 CFR 63 Subpart VVVVVV §63.11495(a)(2)(ii)]
 - (c) Vapor balance back to the storage tank or another storage tank connected by a common header. [40 CFR 63 Subpart VVVVVV §63.11495(a)(2)(iii)]
 - (d) Vent through a closed-vent system to a control device. [40 CFR 63 Subpart VVVVVV §63.11495(a)(2)(iv)]
 - (2) You must conduct inspections of process vessels and equipment for each CMPU in organic HAP service, as specified in §63.11495(a)(3)(i) through (v), to demonstrate compliance with §63.11495(a)(1) and to determine that the process vessels and equipment are sound and free of leaks. Alternatively, inspections may be conducted while the subject process vessels and equipment are in VOC service, provided that leaks can be detected when in VOC service. [40 CFR 63.11495(a)(3)]
 - (a) Inspections must be conducted at least quarterly.¹⁵

¹⁵ Pursuant to §63.11500(a)(1), if any part of a CMPU that is subject to the provisions of this subpart is also subject to the provisions of subpart VV in 40 CFR part 60, then compliance with any of the requirements in 40 CFR part 60, subpart VV that are at least as stringent as the corresponding requirements in this subpart VVVVVV constitutes compliance with this subpart VVVVVV. Subpart VVa requires monthly inspections.

[40 CFR 63.11495(a)(3)(i)]

- (b) For these inspections, detection methods incorporating sight, sound, or smell are acceptable. Indications of a leak identified using such methods constitute a leak unless you demonstrate that the indications of a leak are due to a condition other than loss of HAP. If indications of a leak are determined not to be HAP in one quarterly monitoring period, you must still perform the inspection and demonstration in the next quarterly monitoring period.

[40 CFR 63.11495(a)(3)(ii)]

- (c) As an alternative to conducting inspections, as specified in paragraph (a)(3)(ii) of §63.11495, you may use Method 21 of 40 CFR part 60, appendix A-7, with a leak definition of 500 ppmv to detect leaks. You may also use Method 21 with a leak definition of 500 ppmv to determine if indications of a leak identified during an inspection conducted in accordance with §63.11495(a)(3)(ii) are due to a condition other than loss of HAP. [40 CFR 63.11495(a)(3)(iii)]

- (d) Inspections must be conducted while the subject CMPU is operating. [40 CFR 63.11495(a)(3)(iv)]

- (e) No inspection is required in a calendar quarter during which the subject CMPU does not operate for the entire calendar quarter and is not in organic HAP service. If the CMPU operates at all during a calendar quarter, an inspection is required. [40 CFR 63.11495(a)(3)(v)]

- (3) You must repair any leak within 15 calendar days after detection of the leak, or document the reason for any delay of repair. For the purposes of this paragraph (a)(4), a leak will be considered “repaired” if a condition specified in paragraph (a)(4)(i), (ii), or (iii) of §63.11495 is met. [40 CFR 63.11495(a)(4)]

- (a) The visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated, or

[40 CFR 63.11495(a)(4)(i)]

- (b) No bubbles are observed at potential leak sites during a leak check using soap solution, or [40 CFR 63.11495(a)(4)(ii)]

- (c) The system will hold a test pressure.

[40 CFR 63.11495(a)(4)(iii)]

- iii. General duty. At all times, you must operate and maintain any affected CMPU, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be

based on information available to the District, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the CMPU. [40 CFR 63.11495(d)]

- iv. Rim Seals. For Emission Point 2001, Tanks TS-31 and TS-32, the internal floating roof shall be equipped with one of the following rim seal configurations.¹⁶ [40 CFR 63.1063(a)(1)(i)]
 - (1) A liquid-mounted seal. [40 CFR 63.1063(a)(1)(i)(A)]
 - (2) A mechanical shoe seal. [40 CFR 63.1063(a)(1)(i)(B)]
 - (3) Two seals mounted one above the other. The lower seal may be vapor-mounted. [40 CFR 63.1063(a)(1)(i)(C)]
- v. Deck fittings. For Emission Point 2001, Tanks TS-31 and TS-32, openings through the deck of the floating roof shall be equipped as follows: [40 CFR 63.1063(a)(2)]
 - (1) Each opening except those for automatic bleeder vents (vacuum breaker vents) and rim space vents shall have its lower edge below the surface of the stored liquid. [40 CFR 63.1063(a)(2)(i)]
 - (2) Each opening except those for automatic bleeder vents (vacuum breaker vents), rim space vents, leg sleeves, and deck drains shall be equipped with a deck cover. The deck cover shall be equipped with a gasket between the cover and the deck. [40 CFR 63.1063(a)(2)(ii)]
 - (3) Each automatic bleeder vent (vacuum breaker vent) and rim space vent shall be equipped with a gasketed lid, pallet, flapper, or other closure device. [40 CFR 63.1063(a)(2)(iii)]
 - (4) Each opening for a fixed roof support column may be equipped with a flexible fabric sleeve seal instead of a deck cover. [40 CFR 63.1063(a)(2)(iv)]
 - (5) Each opening for a sample well or deck drain (that empties into the stored liquid) may be equipped with a slit fabric seal or similar device that covers at least 90 percent of the opening, instead of a deck cover. [40 CFR 63.1063(a)(2)(v)]
 - (6) Each cover on access hatches and gauge float wells shall be designed to be bolted or fastened when closed. [40 CFR 63.1063(a)(2)(vi)]
 - (7) Each opening for an unslotted guidepole shall be equipped with a pole wiper, and each unslotted guidepole shall be equipped with a gasketed cap on the top of the guidepole. [40 CFR 63.1063(a)(2)(vii)]

¹⁶ Tanks 1 and 2 have dual seals, a mechanical shoe primary seal and a rim-mounted secondary seal.

- (8) Each opening for a slotted guidepole shall be equipped with one of the control device configurations specified in paragraphs (a)(2)(viii)(A) and (a)(2)(viii)(B) of §63.1063.
[40 CFR 63.1063(a)(2)(viii)]
 - (a) A pole wiper and a pole float. The wiper or seal of the pole float shall be at or above the height of the pole wiper.
[40 CFR 63.1063(a)(2)(viii)(A)]
 - (b) A pole wiper and a pole sleeve.
[40 CFR 63.1063(a)(2)(viii)(B)]
- (9) If the floating roof does not meet the requirements listed in paragraphs (a)(2)(i) through (a)(2)(viii) of this section as of the proposal date of the referencing subpart, these requirements do not apply until the next time the vessel is completely emptied and degassed, or 10 years after the promulgation date of the referencing subpart, whichever occurs first. [40 CFR 63.1063(a)(2)(ix)]

b. TAC

- i. See Plantwide TAC Standards.
- ii. For Tanks TS-31 and TS-32, the owner or operator shall not allow chloroform emissions to exceed 110 pounds per 12-consecutive month period, total.¹⁷
- iii. The owner or operator shall, to the extent practicable, operate and maintain the control device AD-3, AD-4, AD-5, AD-6, and CS-1 at all times an associated emission point is in operation, including periods of startup, shutdown, and malfunction, in a manner consistent with good air pollution control practice for minimizing emissions. [Regulation 1.05, Section 5]
- iv. For Emission Point 2002a, the owner or operator shall not allow chloroform emissions to exceed 140 pounds per 12-consecutive month period.¹⁸
- v. For Emission Point 2002b, the owner or operator shall not allow chloroform emissions to exceed de minimis.¹⁹
- vi. The owner or operator shall route the emissions directly to the alternate carbon bed when breakthrough in the exhaust from the lead carbon bed is detected. Records shall be maintained of the dates of breakthrough and the replacement of a carbon bed.

¹⁷ Modeling was submitted to the district on 07/09/2020 which used the controlled emission rate of 110 pounds per 12-consecutive month period for Chloroform and was EA.

¹⁸ Modeling was performed on 07/09/2020 which used the emission rate of 140 pounds per 12-consecutive month period for Chloroform and was EA.

¹⁹ At the time of permit issuance, the de minimis values for chloroform are 20.64 lb/yr and 0.023 lb/hr.

c. VOC

- i. The owner or operator shall equip Emission Point 2001 (storage tanks TS-31 and TS-32) with a floating roof.²⁰ [Regulation 7.12, section 3.1]
- ii. The owner or operator shall equip Emission Point 2001 (storage tanks TS-31 and TS-32) with a permanent submerged fill pipe.²¹ [Regulation 7.12, section 3.3]
- iii. *Option to comply with 40 CFR part 63, subpart WW.* Except as specified in §§60.110b (e)(5)(i) through (iv), owners or operators may choose to comply with 40 CFR part 63, subpart WW, to satisfy the requirements of §§60.112b through 60.117b for TS-31 and TS-32. [40 CFR 60.110b(e)(5)]²²
 - (1) The general provisions in subpart A of 40 CFR part 60 apply instead of the general provisions in subpart A of 40 CFR part 63. [40 CFR 60.110b(e)(5)(i)]
 - (2) Where terms are defined in 40 CFR part 60, Subpart Kb, and 40 CFR part 63, subpart WW, the definitions in Subpart Kb apply. [40 CFR 60.110b(e)(5)(ii)]
- iv. For Emission Point 2002a:
 - (1) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal, except as provided in §60.482-1a(f). [40 CFR 60.482-2a(a)(2)]
 - (2) The instrument reading that defines a leak is specified in paragraphs (b)(1)(i) and (ii) of §60.482-2a. [40 CFR 60.482-2a(b)(1)]
 - (a) 5,000 parts per million (ppm) or greater for pumps handling polymerizing monomers; [40 CFR 60.482-2a(b)(1)(i)]
 - (b) 2,000 ppm or greater for all other pumps. [40 CFR 60.482-2a(b)(1)(ii)]
 - (3) Standards: Sampling connection systems. Each sampling connection system shall be equipped with a closed-purge, closedloop, or closed-vent system and comply with §60.482-5a(b), except as provided in §60.482-1a(c) and §60.482-5a(c). [40 CFR 60.482-5a(a)]
 - (4) Standards: Open-ended valves or lines. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in §60.482-1a(c) and §60.482-6a(d) and

²⁰ The two chloroform storage tanks are equipped with internal floating roofs and are controlled by a carbon adsorber.

²¹ The two chloroform storage tanks are equipped with submerged fill.

²² In accordance with 60.110b(e)(5), Chemours is complying with 40 CFR 63 Subpart WW instead of 40 CFR 60 Subpart Kb.

(e); and the cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

[40 CFR 60.482-6a(a)(1) and (2)]

- (5) Standards: Valves in gas/vapor service and in light liquid service. Each valve shall be monitored monthly to detect leaks by the methods specified in §60.485a(b) and shall comply with §60.482-7a(b) through (e), except as provided in paragraphs (f), (g), and (h), §60.482-1a(c) and (f), and §§60.483-1a and 60.483-2a.

[40 CFR 60.482-7a(a)(1)]

v. For Emission Point 2002b:

- (1) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal, except as provided in §60.482-1b(f).
- [40 CFR 60.482-2b(a)(2)]
- (2) The instrument reading that defines a leak is specified in paragraphs (b)(1)(i) and (ii) of §60.482-2b. [40 CFR 60.482-2b(b)(1)]
- (a) 5,000 ppm or greater for pumps handling polymerizing monomers; [40 CFR 60.482-2b(b)(1)(i)]
- (b) 2,000 ppm or greater for all other pumps. [40 CFR 60.482-2b(b)(1)(ii)]
- (3) Standards: Sampling connection systems. Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system, except as provided in §60.482-1b(c) and §60.482-5b(c) [40 CFR 60.482-5b(a)]
- (4) Standards: Open-ended valves or lines. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in §60.482-1b(c) and §60.482-6b(d) and (e), and the cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. [40 CFR 60.482-6b(a)(1) and (2)]
- (5) Standards: Valves in gas/vapor service and in light liquid service. Each valve shall be monitored monthly to detect leaks by the methods specified in §60.485b(b) and shall comply with §60.482-7b(b) through (e), except as provided in paragraphs §60.482-7b(f), (g), and (h), §60.482-1b(c) and (f), and §60.483-1b and 60.483-2b.
- [40 CFR 60.482-7b(a)(1)]
- (6) Standards: Connectors in gas/vapor service and in light liquid service. The owner or operator shall initially monitor all connectors in the process unit for leaks by the later of either 12 months after the compliance date or 12 months after initial startup. If all connectors

in the process unit have been monitored for leaks prior to the compliance date, no initial monitoring is required provided either no process changes have been made since the monitoring or the owner or operator can determine that the results of the monitoring, with or without adjustments, reliably demonstrate compliance despite process changes. If required to monitor because of a process change, the owner or operator is required to monitor only those connectors involved in the process change. [40 CFR 60.482-11b(a)]

- (a) When a leak is detected pursuant to §60.482-11b(a) and (b), it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482-9b. A first attempt at repair as defined in this subpart shall be made no later than 5 calendar days after the leak is detected. [40 CFR 60.482-11b(d)]

S2. Monitoring and Record Keeping

[Regulation 2.16, section 4.1.9.1 and 4.1.9.2]

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

a. HAP

- i. See Plantwide HAP Monitoring and Record Keeping.
- ii. The owner or operator who elects to use a floating roof to comply with the requirements of §63.1062 shall comply with the requirements in paragraphs (a) through (e) of §63.1063. [40 CFR 63.1063]
- iii. Operational requirements. For Emission Point 2001, Tanks TS-31 and TS-32, shall be operated as follows: [40 CFR 63.1063(b)]
 - (1) The floating roof shall float on the stored liquid surface at all times, except when the floating roof is supported by its leg supports or other support devices (e.g., hangers from the fixed roof). [40 CFR 63.1063(b)(1)]
 - (2) When the storage vessel is storing liquid, but the liquid depth is insufficient to float the floating roof, the process of refloating the floating roof shall be continuous and shall be performed as soon as practical. [40 CFR 63.1063(b)(2)]
 - (3) Each cover over an opening in the floating roof, except for automatic bleeder vents (vacuum breaker vents) and rim space vents, shall be closed at all times, except when the cover must be open for access. [40 CFR 63.1063(b)(3)]
 - (4) Each automatic bleeder vent (vacuum breaker vent) and rim space vent shall be closed at all times, except when required to be open to

- relieve excess pressure or vacuum, in accordance with the manufacturer's design. [40 CFR 63.1063(b)(4)]
- (5) Each unslotted guidepole cap shall be closed at all times except when gauging the liquid level or taking liquid samples. [40 CFR 63.1063(b)(5)]
- iv. Inspection frequency requirements - Internal floating roofs. Internal floating roofs shall be inspected as specified in §63.1063(d)(1) before the initial filling of the storage vessel. Subsequent inspections shall be performed as specified in §63.1063(c)(1)(i) or (c)(1)(ii). [40 CFR 63.1063(c)(1)]
- (1) Internal floating roofs shall be inspected as specified in paragraphs (c)(1)(i)(A) and (c)(1)(i)(B) of §63.1063. [40 CFR 63.1063(c)(1)(i)]
- (a) At least once per year the IFR shall be inspected as specified in paragraph (d)(2) of §63.1063. [40 CFR 63.1063(c)(1)(i)(A)]
- (b) Each time the storage vessel is completely emptied and degassed, or every 10 years, whichever occurs first, the IFR shall be inspected as specified in paragraph (d)(1) of §63.1063. [40 CFR 63.1063(c)(1)(i)(B)]
- (2) Instead of the inspection frequency specified in paragraph (c)(1)(i) of §63.1063, internal floating roofs with two rim seals may be inspected as specified in paragraph (d)(1) of §63.1063 each time the storage vessel is completely emptied and degassed, or every 5 years, whichever occurs first. [40 CFR 63.1063(c)(1)(ii)]
- v. Inspection procedure requirements. Floating roof inspections shall be conducted as specified in paragraphs (d)(1) and (d)(2) of §63.1063, as applicable. If a floating roof fails an inspection, the owner or operator shall comply with the repair requirements of §63.1063(e). [40 CFR 63.1063(d)]
- vi. Repair requirements. Conditions causing inspection failures under §63.1063(d) shall be repaired as specified in paragraph (e)(1) or (e)(2) of §63.1063. [40 CFR 63.1063(e)]
- (1) If the inspection is performed while the storage vessel is not storing liquid, repairs shall be completed before the refilling of the storage vessel with liquid. [40 CFR 63.1063(e)(1)]
- (2) If the inspection is performed while the storage vessel is storing liquid, repairs shall be completed or the vessel removed from service within 45 days. If a repair cannot be completed and the vessel cannot be emptied within 45 days, the owner or operator may use up to 2 extensions of up to 30 additional days each. Documentation of a decision to use an extension shall include a description of the failure, shall document that alternate storage capacity is unavailable, and

shall specify a schedule of actions that will ensure that the control equipment will be repaired or the vessel will be completely emptied as soon as practical. [40 CFR 63.1063(e)(2)]

- vii. The owner or operator shall keep the records required in §63.1065(a) for as long as liquid is stored. Records required in paragraphs (b), (c) and (d) of §63.1065 shall be kept for at least 5 years. Records shall be kept in such a manner that they can be readily accessed within 24 hours. Records may be kept in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche. [40 CFR 63.1065]
- (1) Vessel dimensions and capacity. A record shall be kept of the dimensions of the storage vessel, an analysis of the capacity of the storage vessel, and an identification of the liquid stored. [40 CFR 63.1065(a)]
 - (2) Inspection results. Records of floating roof inspection results shall be kept as specified in §63.1065(b)(1). [40 CFR 63.1065(b)]
 - (a) If the floating roof passes inspection, a record shall be kept that includes the information specified in paragraphs (b)(1)(i) and (b)(1)(ii) of §63.1065. If the floating roof fails inspection, a record shall be kept that includes the information specified in paragraphs (b)(1)(i) through (b)(1)(v) of §63.1065. [40 CFR 63.1065(b)(1)]
 - (i) Identification of the storage vessel that was inspected. [40 CFR 63.1065(b)(1)(i)]
 - (ii) (The date of the inspection. [40 CFR 63.1065(b)(1)(ii)]
 - (iii) A description of all inspection failures. [40 CFR 63.1065(b)(1)(iii)]
 - (iv) A description of all repairs and the dates they were made. [40 CFR 63.1065(b)(1)(iv)]
 - (v) The date the storage vessel was removed from service, if applicable. [40 CFR 63.1065(b)(1)(v)]
 - (3) Floating roof landings. The owner or operator shall keep a record of the date when a floating roof is set on its legs or other support devices. The owner or operator shall also keep a record of the date when the roof was refloated, and the record shall indicate whether the process of refloating was continuous. [40 CFR 63.1065(c)]
 - (4) An owner or operator who elects to use an extension in accordance with §63.1063(e)(2) shall keep the documentation required by those paragraphs. [40 CFR 63.1065(d)]

- viii. For each CMPU subject to 40 CFR 63 Subpart VVVVVV, you must keep the records specified in paragraphs (c)(1)(i) through (viii) of §63.11501. [40 CFR 63.11501(c)(1)]
- (1) Records of management practice inspections, repairs, and reasons for any delay of repair, as specified in §63.11495(a)(5). [40 CFR 63.11501(c)(1)(i)]
 - (2) Records of the date, time, and duration of each malfunction of operation of process equipment, control devices, recovery devices, or continuous monitoring systems used to comply with this subpart that causes a failure to meet a standard. The record must include a list of the affected sources or equipment, an estimate of the volume of each regulated pollutant emitted over the standard, and a description of the method used to estimate the emissions. [40 CFR 63.11501(c)(1)(vii)]
 - (3) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.11495(d), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.11501(c)(1)(viii)]

b. TAC

- i. See Plantwide TAC Monitoring and Record Keeping.
- ii. The owner or operator shall monthly perform a visual inspection of the structural and mechanical integrity of control devices AD-3, AD-4, AD-5, AD-6, and CS-1) for signs of damage, air leakage, corrosion, or other equipment defects when the associated process is in use. The owner or operator shall repair and/or replace defective components as needed. The owner or operator shall maintain monthly records of the results.
- iii. The owner or operator shall monitor the concentration of chloroform in the exhaust of the lead carbon bed for breakthrough daily. Once breakthrough in the exhaust of the lead carbon bed is detected, the owner or operator shall route the emissions from the tanks to the alternate bed. Records shall be maintained of the dates of breakthrough.
- iv. For Tanks TS-31 and TS-32, the owner or operator shall, monthly, maintain records, including calculations, which show the total chloroform emissions during each 12-consecutive month period.
- v. For Emission Point 2002a and 2002b, the owner or operator shall, monthly, maintain records, including calculations, which show the total chloroform emissions during each 12-consecutive month period.

vi. The owner or operator shall maintain daily records that identify all periods of bypassing the control devices while an associated process is in operation, or a declaration entered into the records that the control devices operated at all times the processes were in operation for a given day. The records shall include the following:

- (1) The date;
- (2) The duration (including start and stop time) of each bypass event;
- (3) Identification of the control device and process equipment in operation;
- (4) The total lb/event emissions of each TAC during each bypass event;
- (5) Summary information on the cause or reason for each control device bypass event;
- (6) Corrective action taken to minimize the extent and duration of each bypass event; and
- (7) Measures implemented to prevent reoccurrence of the situation that resulted in bypassing the control devices.

c. VOC

i. See U2 HAP Monitoring and Record Keeping S2.a.ii. through ix.

ii. For Emission Point 2002a:

- (1) Standards: Pumps in light liquid service. Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in §60.485a(b), except as provided in §60.482-1a(c) and (f) and §60.482-2a(d), (e), and (f). A pump that begins operation in light liquid service after the initial startup date for the process unit must be monitored for the first time within 30 days after the end of its startup period, except for a pump that replaces a leaking pump and except as provided in §60.482-1a(c) and §60.482-2a(d), (e), and (f) of. [40 CFR 60.482-2a(a)(1)]
- (2) The owner or operator shall record the information specified in paragraphs (a)(3)(i) through (v) of §60.486a for each monitoring event required by §§60.482-2a, 60.482-7a, 60.482-8a, and 60.483-2a. [40 CFR 60.486a(a)(3)]
 - (a) Monitoring instrument identification. [40 CFR 60.486a(a)(3)(i)]
 - (b) Operator identification. [40 CFR 60.486a(a)(3)(ii)]
 - (c) Equipment identification. [40 CFR 60.486a(a)(3)(iii)]
 - (d) Date of monitoring. [40 CFR 60.486a(a)(3)(iv)]
 - (e) Instrument reading. [40 CFR 60.486a(a)(3)(v)]

- (3) When each leak is detected as specified in §§60.482-2a, 60.482-7a, 60.482-8a, and 60.483-2a, the following requirements apply: [40 CFR 60.486a(b)]
- (a) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment. [40 CFR 60.486a(b)(1)]
 - (b) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in §60.482-7a(c) and no leak has been detected during those 2 months. [40 CFR 60.486a(b)(2)]
 - (c) The identification on equipment, except on a valve or connector, may be removed after it has been repaired. [40 CFR 60.486a(b)(4)]
- (4) When each leak is detected as specified in §§60.482-2a, 60.482-7a, 60.482-8a, and 60.483-2a, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location: [40 CFR 60.486a(c)]
- (a) The instrument and operator identification numbers and the equipment identification number, except when indications of liquids dripping from a pump are designated as a leak. [40 CFR 60.486a(c)(1)]
 - (b) The date the leak was detected and the dates of each attempt to repair the leak. [40 CFR 60.486a(c)(2)]
 - (c) Repair methods applied in each attempt to repair the leak. [40 CFR 60.486a(c)(3)]
 - (d) Maximum instrument reading measured by Method 21 of appendix A-7 of this part at the time the leak is successfully repaired or determined to be nonrepairable, except when a pump is repaired by eliminating indications of liquids dripping. [40 CFR 60.486a(c)(4)]
 - (e) “Repair delayed” and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak. [40 CFR 60.486a(c)(5)]
 - (f) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown. [40 CFR 60.486a(c)(6)]
 - (g) The expected date of successful repair of the leak if a leak is not repaired within 15 days. [40 CFR 60.486a(c)(7)]

- (h) Dates of process unit shutdowns that occur while the equipment is unrepaired. [40 CFR 60.486a(c)(8)]
- (i) The date of successful repair of the leak. [40 CFR 60.486a(c)(9)]

iii. For Emission Point 2002b:

- (1) Standards: Pumps in light liquid service. Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in §60.485b(b), except as provided in §60.482-1b(c) and (f) and §60.482-2b(d), (e), and (f). A pump that begins operation in light liquid service after the initial startup date for the process unit must be monitored for the first time within 30 days after the end of its startup period, except for a pump that replaces a leaking pump and except as provided in §60.482-1b(c) and §60.482-2b(d), (e), and (f). [40 CFR 60.482-2b(a)(1)]
- (2) The owner or operator shall record the information specified in §60.486b(a)(3)(i), (ii), (iii), (iv), and (v) for each monitoring event required by §60.482-2b, §60.482-3b, §60.482-7b, §60.482-8b, §60.482-11b, and §60.483-2b. [40 CFR 60.486b(a)(3)]
 - (a) Monitoring instrument identification. [40 CFR 60.486b(a)(3)(i)]
 - (b) Operator identification. [40 CFR 60.486b(a)(3)(ii)]
 - (c) Equipment identification. [40 CFR 60.486b(a)(3)(iii)]
 - (d) Date of monitoring. [40 CFR 60.486b(a)(3)(iv)]
 - (e) Instrument reading. [40 CFR 60.486b(a)(3)(v)]
- (3) When each leak is detected as specified in §60.482-2b, §60.482-3b, §60.482-7b, §60.482-8b, §60.482-11b, and §60.483-2b, the following requirements apply: [40 CFR 60.486b(b)]
 - (a) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment. [40 CFR 60.486b(b)(1)]
 - (b) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in §60.482-7b(c) and no leak has been detected during those 2 months. [40 CFR 60.486b(b)(2)]
 - (c) The identification on a connector may be removed after it has been monitored as specified in § 60.482-11b(b)(3)(iv) and no leak has been detected during that monitoring. [40 CFR 60.486b(b)(3)]
 - (d) The identification on equipment, except on a valve or connector, may be removed after it has been repaired. [40

CFR 60.486b(b)(4)]

- (4) When each leak is detected as specified in §60.482-2b, §60.482-3b, §60.482-7b, §60.482-8b, §60.482-11b, and §60.483-2b, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location: [40 CFR 60.486b(c)]
- (a) The instrument and operator identification numbers and the equipment identification number, except when indications of liquids dripping from a pump are designated as a leak. [40 CFR 60.486b(c)(1)]
 - (b) The date the leak was detected and the dates of each attempt to repair the leak. [40 CFR 60.486b(c)(2)]
 - (c) Repair methods applied in each attempt to repair the leak. [40 CFR 60.486b(c)(3)]
 - (d) Maximum instrument reading measured by Method 21 of appendix A-7 of this part at the time the leak is successfully repaired or determined to be nonrepairable, except when a pump is repaired by eliminating indications of liquids dripping. [40 CFR 60.486b(c)(4)]
 - (e) “Repair delayed” and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak. [40 CFR 60.486b(c)(5)]
 - (f) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown. [40 CFR 60.486b(c)(6)]
 - (g) The expected date of successful repair of the leak if a leak is not repaired within 15 days. [40 CFR 60.486b(c)(7)]
 - (h) Dates of process unit shutdowns that occur while the equipment is unrepaired. [40 CFR 60.486b(c)(8)]
 - (i) The date of successful repair of the leak. [40 CFR 60.486b(c)(9)]
- iv. The owner or operator shall for Emission Point 2001 (storage tanks TS-31 and TS-32) ensure that there shall be no visible holes, tears, or other openings in the seal or any seal fabric. [Regulation 7.12, section 4.1]
- v. The owner or operator shall for Emission Point 2001 (storage tanks TS-31 and TS-32) ensure that all openings, except stub drains, shall be equipped with covers, lids, or seals such that: [Regulation 7.12, section 4.2]
- (1) The cover, lid, or seal is in the closed position at all times except when in actual use;
 - (2) Automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports; and

- (3) Rim vents are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.

S3. Reporting

[Regulation 2.16, section 4.1.9.3]

The owner or operator shall report the following information, as required by General Condition G14:

a. HAP

- i. See Plantwide HAP Reporting.
- ii. Periodic reports. Report the information specified in paragraphs (b)(1) through (b)(4) of §63.1066, as applicable, in the periodic report specified in the referencing subpart. [40 CFR 63.1066(b)]
 - (1) Notification of inspection. To provide the District the opportunity to have an observer present, the owner or operator shall notify the District at least 30 days before an inspection required by §§63.1063(d)(1) or (d)(3). If an inspection is unplanned and the owner or operator could not have known about the inspection 30 days in advance, then the owner or operator shall notify the District at least 7 days before the inspection. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, the notification including the written documentation may be made in writing and sent so that it is received by the District at least 7 days before the inspection. If a delegated State or local agency is notified, the owner or operator is not required to notify the District. A delegated State or local agency may waive the requirement for notification of inspections. [40 CFR 63.1066(b)(1)]
 - (2) Inspection results. The owner or operator shall submit a copy of the inspection record (required in §63.1065) when inspection failures occur.²³ [40 CFR 63.1066(b)(2)]
 - (3) Requests for alternate devices. The owner or operator requesting the use of an alternate control device shall submit a written application including emissions test results and an analysis demonstrating that the alternate device has an emission factor that is less than or equal to the device specified in §63.1063. [40 CFR 63.1066(b)(3)]
 - (4) Requests for extensions. An owner or operator who elects to use an extension in accordance with §63.1063(e)(2) or

²³ Per 40 CFR 60.110b(e)(5)(iv)(F)(2) [Subpart Kb], the reference in §63.1066(b)(2) to periodic reports “when inspection failures occur” means to submit inspections results within 60 days of the initial gap measurements required by § 63.1063(c)(2)(i) and within 30 days of all other inspections required by § 63.1063(c)(1) and (2).

§63.1063(c)(2)(iv)(B) shall submit the documentation required by those paragraphs. [40 CFR 63.1066(b)(4)]

b. TAC

- i. See Plantwide TAC Reporting.
- ii. Dates that breakthrough occurred.
- iii. For Tanks TS-31 and TS-32, the total chloroform emissions during each 12-consecutive month period.
- iv. For EP 2002a, the total chloroform emissions during each 12-consecutive month period.
- v. The owner or operator shall report all periods of bypassing the control devices while an associated process was in operation, or a declaration that the control devices operated at all times the processes were in operation. The records shall include the information recorded in S2.b.vi.

c. VOC

- i. See U2 HAP Reporting S3.a.ii.
- ii. For each TS-31 and TS-32, the owner or operator must notify the District at least 30 days before the first inspection is conducted under 40 CFR part 63, subpart WW. After this notification is submitted to the District, the owner or operator must continue to comply with the alternative standard described in §60.110b(e)(5) until the owner or operator submits another notification to the District indicating the affected facility is using the requirements of §§60.112b through 60.117b instead of the alternative standard described in §60.110b(e)(5). The compliance schedule for events does not reset upon switching between compliance with 40 CFR part 60, Subpart Kb, and 40 CFR part 63, subpart WW. [40 CFR 60.110b(e)(5)(iv)(A)]
- iii. For Emission Point 2002a:
 - (1) Each owner or operator subject to 40 CFR 60 Subpart VVa shall submit semiannual reports to the District beginning 6 months after the initial startup date. Beginning on July 15, 2025, or once the report template for this subpart has been available on the CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/cedri>) for 1 year, whichever date is later, for reports to U.S. EPA, submit all subsequent reports using the appropriate electronic report template on the CEDRI website for this subpart and following the procedure specified in §60.487(g). The date report templates become available will be listed on the CEDRI website. Unless the Administrator or delegated state agency or other

authority has approved a different schedule for submission of reports, the report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted. [40 CFR 60.487a(a)]

- (2) The initial semiannual report to the District shall include the following information in §60.487a(b)(1) through (4):
[40 CFR 60.487a(b)]
 - (a) Process unit identification. [40 CFR 60.487a(b)(1)]
 - (b) Number of valves subject to the requirements of §60.482-7a, excluding those valves designated for no detectable emissions under the provisions of §60.482-7a(f).
[40 CFR 60.487a(b)(2)]
 - (c) Number of pumps subject to the requirements of §60.482-2a, excluding those pumps designated for no detectable emissions under the provisions of §60.482-2a(e) and those pumps complying with §60.482-2a(f).
[40 CFR 60.487a(b)(3)]
- (3) All semiannual reports to the District shall include the following information, summarized from the information in §60.486a:
[40 CFR 60.487a(c)]
 - (a) Process unit identification. [40 CFR 60.487a(c)(1)]
 - (b) For each month during the semiannual reporting period,
[40 CFR 60.487a(c)(2)]
 - (i) Number of valves for which leaks were detected as described in §60.482-7a(b) or §60.483-2a(b) or §60.483-2a,, [40 CFR 60.487a(c)(2)(i)]
 - (ii) Number of valves for which leaks were not repaired as required in §60.482-7a(d)(1),
[40 CFR 60.487a(c)(2)(ii)]
 - (iii) Number of pumps for which leaks were detected as described in §60.482-2a(b), (d)(4)(ii)(A) or (B), or (d)(5)(iii), [40 CFR 60.487a(c)(2)(iii)]
 - (iv) Number of pumps for which leaks were not repaired as required in §60.482-2a(c)(1) and (d)(6),
[40 CFR 60.487a(c)(2)(iv)]
 - (v) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible. [40 CFR 60.487a(c)(2)(xi)]
 - (c) Revisions to items reported according to §60.487a(b) if changes have occurred since the initial report or subsequent revisions to the initial report. [40 CFR 60.487a(c)(4)]

iv. For Emission Point 2002b:

- (1) Each owner or operator subject to 40 CFR 60 Subpart VVb shall submit semiannual reports to the District beginning 6 months after the initial startup date. Beginning on July 15, 2024, or once the report template for this subpart has been available on the CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/cedri>) for 1 year, whichever date is later, for reports to U.S.EPA, submit all subsequent reports using the appropriate electronic report template on the CEDRI website for this subpart and following the procedure specified in 40 CFR 60.487b(g).
[40 CFR 60.487b(a)]
- (2) The initial semiannual report to the District shall include the following information: [40 CFR 60.487b(b)]
 - (a) Process unit identification. [40 CFR 60.487b(b)(1)]
 - (b) Number of valves subject to the requirements of §60.482-7b, excluding those valves designated for no detectable emissions under the provisions of §60.482-7b(f).
[40 CFR 60.487b(b)(2)]
 - (c) Number of pumps subject to the requirements of §60.482-2b, excluding those pumps designated for no detectable emissions under the provisions of §60.482-2b(e) and those pumps complying with §60.482-2b(f).
[40 CFR 60.487b(b)(3)]
 - (d) Number of connectors subject to the requirements of §60.482-11b. [40 CFR 60.487b(b)(5)]
- (3) All semiannual reports to the District shall include the following information, summarized from the information in §60.486b:
[40 CFR 60.487b(c)]
 - (a) Process unit identification. [40 CFR 60.487b(c)(1)]
 - (b) For each month during the semiannual reporting period, [40 CFR 60.487b(c)(2)]
 - (i) Number of valves for which leaks were detected as described in §60.482-7b(b) or §60.483-2b,
[40 CFR 60.487b(c)(2)(i)]
 - (ii) Number of valves for which leaks were not repaired as required in §60.482-7b(d)(1),
[40 CFR 60.487b(c)(2)(ii)]
 - (iii) Number of pumps for which leaks were detected as described in §60.482-2b(b), (d)(4)(ii)(A) or (B), or (d)(5)(iii), [40 CFR 60.487b(c)(2)(iii)]
 - (iv) Number of pumps for which leaks were not repaired

- as required in §60.482-2b(c)(1) and (d)(6),
[40 CFR 60.487b(c)(2)(iv)]
- (v) Number of connectors for which leaks were detected as described in §60.482-11b(b)
[40 CFR 60.487b(c)(2)(vii)]
 - (vi) Number of connectors for which leaks were not repaired as required in §60.482-11b(d), and
[40 CFR 60.487b(c)(2)(viii)]
 - (vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible. [40 CFR 60.487b(c)(2)(xi)]
- (c) Revisions to items reported according to §60.487b(b) if changes have occurred since the initial report or subsequent revisions to the initial report. [40 CFR 60.487b(c)(4)]

Emission Unit U3: Freon™ 22/Freon™ 23 Process**Applicable Regulations**

| FEDERALLY ENFORCEABLE REGULATIONS | | |
|--|---|--|
| Regulation | Title | Applicable Sections |
| 6.24 | Standards of Performance for Existing Sources Using Organic Materials | 1, 2, 3.2, 4.1 and 5.2 |
| 40 CFR 60 Subpart VVa | Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006, and on or Before April 25, 2023 Source:72 FR 64883, Nov. 16, 2007 | §60.482-2a, §60.486a(a)(3) |
| 40 CFR 63 Subpart VVVVVV | National Emission Standards for Hazardous Air Pollutants for Chemical Manufacturing Area Sources | §63.11495(3), §63.11496(h), §63.11496(b), (b)(2), §63.9(b) |
| 40 CFR 68 | Chemical Accident Prevention Provisions | Subparts A - H |

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

Equipment

| Emission Point | Description | Install Date | Applicable Regulations | Control ID | Release ID |
|-----------------------|---|---------------------------|---|---|--------------------------------------|
| TF-5 | Pressurized Chloroform Feed Tank, 9,000 gallons ²⁴ | 2022 | 40 CFR 60 Subpart VVa, 40 CFR 63 Subpart VVVVVV | NA | NA |
| TR-4 | HFC-23 Recovery Tower ²⁵ | 2022 | 40 CFR 63 Subpart VVVVVV | NA | NA |
| 3001 | Vaporizers V-1 and V-2, 4290 lbs | 1968 | STAR | SB-8 | S-4 |
| 3002 | Reactors #1 and #2 and Refining Equipment for Manufacturing Freon™ 22 and Freon™ 23; Tank TR-8 and Tank TW-1, 27,500 lb/hr Freon™ 22 production | Reactor 1984 Tank 1955 | STAR, 6.24, 40 CFR 63 Subpart VVVVVV | SB-5 & SB-7 | S-5 |
| 3003 | HFC-23 Recovery Tower Chloroform Vent Condenser, VC-1 | 2022 | STAR, 40 CFR 63 Subpart VVVVVV | NA | S-VC-1 |
| 3009 ²⁶ | Fugitive components (pumps, connectors, valves) | NA | STAR, 40 CFR 60 Subpart VVa, 40 CFR 63 Subpart VVVVVV | NA | F-1 |
| HF-6005 ²⁷ | HF Unloading, 13,000 lb/hr | 1980 | STAR | SB-5, SB-7 & SB-301 or SB-403 ²⁸ | S-5 S-16 or S-14 ²⁹ |

²⁴ Vented to the recovery tower.²⁵ Vented to the vent condenser.²⁶ All fugitive components are subject to STAR. Fugitive components in chloroform service are also subject to 40 CFR 60 Subpart VVa and 40 CFR 63 VVVVVV.²⁷ In the event that all Control Devices SB-301, SB-5 and SB-7 have been taken off-line, Emission Point HF-6005 can be vented to Control Device SB-403 on DuPont's facility ID #1912.²⁸ E.I. du Pont's Scrubber (Plant ID 1912)²⁹ E.I. du Pont's Scrubber Release ID (Plant ID 1912)

Control Devices

| Control ID | Description | Control Efficiency |
|------------|--|--------------------|
| SB-301 | Wet Scrubber | 99% |
| SB-8 | Wet Scrubber | 99% |
| SB-5 | East Wet Scrubber (Backup) | 99% |
| SB-7 | West Wet Scrubber | 99% |
| SB-403 | Wet Scrubber (located on E.I. du Pont's facility, Plant ID 1912) | 99% ³⁰ |

Equipment Not Regulated³¹

| Emission Point | Description |
|----------------|--|
| HFC-23 | Vacuum Pump ³² |
| SP-1 | HCl Stripping Column ³³ |
| TF-4 | Aqueous HCl Pump Tank ³⁴ |
| KP-1 | HCl Flash Tank ³⁵ |
| CO-2 and CO-3 | Graphite Heat Exchangers ³⁶ |

³⁰ The scrubber was tested on July 13, 2021, resulting in an average control efficiency of 99.993%.

³¹ This equipment has no emissions.

³² On the outlet of the HFC-23 dryers, routed to F-23 Purification Process.

³³ Added to the HCl absorption process. This column will serve to strip out HFC-23 from the existing HCl Column/Condenser's HFC-23/HCl process gas stream before it enters the existing HCl Cooler Absorbers.

³⁴ Routes liquid from the HCl Cooler Absorbers to the HCl Stripping Column.

³⁵ Will receive liquid from the HCl Stripping Column.

³⁶ Will receive liquid from the Flash Tank and route it to the existing HCl Air Stripper.

U3 Specific Conditions

S1. Standards

[Regulation 2.16, section 4.1.1]

a. HAP

- i. See Plantwide HAP Standards.
- ii. Management practices. The owner or operator shall comply with the following paragraphs. [40 CFR 63 Subpart VVVVVV]
 - (1) You must conduct inspections of process vessels and equipment for each CMPU in organic HAP service, as specified in paragraphs (a)(3)(i) through (v) of §63.11495, to demonstrate compliance with paragraph (a)(1) of §63.11495 and to determine that the process vessels and equipment are sound and free of leaks. Alternatively, inspections may be conducted while the subject process vessels and equipment are in VOC service, provided that leaks can be detected when in VOC service. [40 CFR 63.11495(a)(3)]
 - (a) Inspections must be conducted at least quarterly.³⁷
[40 CFR 63.11495(3)(i)]
 - (b) For these inspections, detection methods incorporating sight, sound, or smell are acceptable. Indications of a leak identified using such methods constitute a leak unless you demonstrate that the indications of a leak are due to a condition other than loss of HAP. If indications of a leak are determined not to be HAP in one quarterly monitoring period, you must still perform the inspection and demonstration in the next quarterly monitoring period.
[40 CFR 63.11495(3)(ii)]
 - (c) As an alternative to conducting inspections, as specified in paragraph (a)(3)(ii) of §63.11495, you may use Method 21 of 40 CFR part 60, appendix A-7, with a leak definition of 500 ppmv to detect leaks. You may also use Method 21 with a leak definition of 500 ppmv to determine if indications of a leak identified during an inspection conducted in accordance with paragraph (a)(3)(ii) of §63.11495 are due to a condition other than loss of HAP.
[40 CFR 63.11495(3)(iii)]

³⁷ Pursuant to §63.11500(a)(1), if any part of a CMPU that is subject to the provisions of this subpart is also subject to the provisions of subpart VV in 40 CFR part 60, then compliance with any of the requirements in 40 CFR part 60, subpart VV that are at least as stringent as the corresponding requirements in this subpart VVVVVV constitutes compliance with this subpart VVVVVV. Subpart VVa requires monthly inspections.

- (d) Inspections must be conducted while the subject CMPU is operating. [40 CFR 63.11495(3)(iv)]
 - (e) No inspection is required in a calendar quarter during which the subject CMPU does not operate for the entire calendar quarter and is not in organic HAP service. If the CMPU operates at all during a calendar quarter, an inspection is required. [40 CFR 63.11495(3)(v)]
- (2) You must repair any leak within 15 calendar days after detection of the leak, or document the reason for any delay of repair. For the purposes of this paragraph (a)(4), a leak will be considered “repaired” if a condition specified in paragraph (a)(4)(i), (ii), or (iii) of §63.11495 is met. [40 CFR 63.11495(a)(4)]
 - (a) The visual, audible, olfactory, or other indications of a leak to the atmosphere have been eliminated, or [40 CFR 63.11495(a)(4)(i)]
 - (b) No bubbles are observed at potential leak sites during a leak check using soap solution, or [40 CFR 63.11495(a)(4)(ii)]
 - (c) The system will hold a test pressure. [40 CFR 63.11495(a)(4)(iii)]
- iii. General duty. At all times, you must operate and maintain any affected CMPU, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the District, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the CMPU. [40 CFR 63.11495(d)]
- iv. Emission Point 3002 meets the definition of a batch process vent, defined in §63.11502. Organic HAP emissions from batch process vents. You must comply with the requirements in paragraphs (a)(1) through (4) of §63.11496 for organic HAP emissions from your batch process vents for each CMPU using Table 1 organic HAP. If uncontrolled organic HAP emissions from all batch process vents from a CMPU subject to §63.11496 are equal to or greater than 10,000 pounds per year (lb/yr), you must also comply with the emission limits and other requirements in Table 2 to 40 CFR Subpart VVVVVV. [40 CFR 63.11496(a)]
 - (1) You must determine the sum of actual organic HAP emissions from all of your batch process vents within a CMPU subject to this subpart using process knowledge, engineering assessment, or test data. Emissions for a standard batch in a process may be used to represent actual emissions from each batch in that process. You

must maintain records of the calculations. Calculations of annual emissions are not required if you meet the emission standards for batch process vents in Table 2 to 40 CFR Subpart VVVVVV.³⁸

[40 CFR 63.11496(a)(1)]

- ii. Emission Point TF-5 meets the definition of a surge control vessel, defined in §63.2550. For each surge control vessel and bottoms receiver that meets the applicability criteria for storage tanks specified in Table 5 to §63.11496, you must meet the emission limits and control requirements specified in Table 5 to §63.11496.³⁹ [40 CFR 63.11496(h)]
- iii. Emission Point EPN 3003 meets the definition of a continuous process vent, defined in §63.101. Organic HAP emissions from continuous process vents must comply with the requirements in §63.11496(b)(1) through (3) for each CMPU subject to this subpart using Table 1 organic HAP.⁴⁰
[40 CFR 63.11496(b)]
 - (1) If the current TRE index value is greater than 1, you must recalculate the TRE index value before you make any process or operational change that affects parameters in the calculation. If the recalculated TRE is less than or equal to 1.0, then you must comply with one of the compliance options for continuous process vents in Table 3 to 40 CFR Subpart VVVVVV before operating under the new operating conditions. You must maintain records of all TRE calculations. [40 CFR 63.11496(b)(2)]

b. TAC

- i. See Plantwide TAC Standards.
- ii. For Emission Point 3001:
 - (1) The owner or operator shall utilize Control Device SB-8 (wet scrubber) at all times Vaporizers V-1 and V-2 are in operation and shall maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.
[Regulation 5.21. section 4.2.3.1]
 - (2) The owner or operator shall not allow chlorine emissions to exceed 200 pounds per 12-consecutive month period.⁴¹

³⁸ The uncontrolled organic HAP emissions from all batch process vents are less than 10,000 lb and not subject to the requirements of Table 2.

³⁹ As a surge control vessel, the Pressurized Chloroform Feed Tank does not have any requirements listed in Table 5 since its storage capacity is less than 20,000 gallons.

⁴⁰ Since the TRE is greater than 4.0 (76.40), the emission limits and other requirements of Table 3 of Subpart VVVVVV, as well as the requirements of 63.11496(b)(3), will not apply.

⁴¹ Modeling was performed on 07/09/2020 which used the emission rate of 200 pounds per year for Chlorine and was EA.

- iii. For Emission Point 3009, the owner or operator shall not allow chloroform emissions to exceed 224 pounds per 12-consecutive month period.⁴²
- iv. For Emission Point 3009, the owner or operator shall not allow chlorine emissions to exceed 352 pounds per 12-consecutive month period.⁴²
- v. For Emission Point 3002, the owner or operator shall not allow chloroform emissions to exceed de minimis.⁴³
- vi. For Emission Point HF-6005, the owner or operator shall not allow HF emissions to exceed de minimis.⁴³
- vii. For Emission Point HF-6005, the owner or operator shall utilize Control Device SB-301 (wet scrubber), SB-7 (wet scrubber), SB-5 (back up wet scrubber) or SB-403⁴⁴ (DuPont's wet scrubber) at all times unloading is in operation and shall maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions.⁴⁵
[Regulation 5.21, section 4.2.3.1]

c. VOC

- i. For Emission Point TF-5 and 3009:
 - (1) Standards: Pumps in light liquid service. Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in §60.485a(b), except as provided in §60.482-1a(c) and (f) and §60.482-2a(d), (e), and (f). A pump that begins operation in light liquid service after the initial startup date for the process unit must be monitored for the first time within 30 days after the end of its startup period, except for a pump that replaces a leaking pump and except as provided in §60.482-1a(c) and §60.482-2a(d), (e), and (f) of §60.482-2a. [40 CFR 60.482-2a(a)(1)]
 - (2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal, except as provided in §60.482-1a(f).
[40 CFR 60.482-2a(a)(2)]

⁴² Modeling was performed on 07/09/2020 which used the emission rate of 224 pounds per year for chloroform and 352 pounds per year for chlorine and was EA.

⁴³ At the time of permit issuance, the de minimis values for hydrofluoric acid (HF) are 6,720 lb/yr and 7.56 lb/hr and the de minimis values for chloroform are 20.64 lb/yr and 0.023 lb/hr.

⁴⁴ SB-403 will be used for instances when all Control Devices SB-301, SB-5 and SB-7 have been taken off-line. E.I. du Pont (ID 1912) shall report the emissions when Control Device SB-403 is used.

⁴⁵ The maximum controlled potential HF emissions are 233.697 lb/yr and 0.027 lbs/hr. These maximum controlled potential emissions levels are below the HF de minimis of 6,720 lb/yr and 7.56 lb/hr.

- (3) The instrument reading that defines a leak is specified in paragraphs (b)(1)(i) and (ii) of §60.482-2a. [40 CFR 60.482-2a(b)(1)]⁴⁶
 - (a) 5,000 ppm or greater for pumps handling polymerizing monomers; [40 CFR 60.482-2a(b)(1)(i)]
 - (b) 2,000 ppm or greater for all other pumps. [40 CFR 60.482-2a(b)(1)(ii)]
 - (4) Standards: Sampling connection systems. Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system and comply with §60.482-5a(b), except as provided in §60.482-1a(c) and §60.482-5a(c). [40 CFR 60.482-5a(a)]
 - (5) Standards: Open-ended valves or lines. Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in §60.482-1a(c) and §60.482-6a(d) and (e), and the cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line. [40 CFR 60.482-6a(a)(1) and (2)]
 - (6) Standards: Valves in gas/vapor service and in light liquid service. Each valve shall be monitored monthly to detect leaks by the methods specified in §60.485a(b) and shall comply with §60.482-7a(b) through (e), except as provided in paragraphs (f), (g), and (h), §60.482-1a(c) and (f), and §§60.483-1a and 60.483-2a. [40 CFR 60.482-7a(a)(1)]
 - (7) Standards: Pressure relief devices in gas/vapor service. After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in §60.482-9a. [40 CFR 60.482-4a(d)(2)]
- ii. The owner or operator shall limit VOC emissions to 3,000 lb/day and 450 lb/hr from Emission Point 3002.⁴⁷ [Regulation 6.24, section 3.3]

⁴⁶ Pursuant to §63.11500(a)(1), if any part of a CPMU that is subject to the provisions of this subpart is also subject to the provisions of subpart VV in 40 CFR part 60, then compliance with any of the requirements in 40 CFR part 60, subpart VV that are at least as stringent as the corresponding requirements in this subpart VVVVVV constitutes compliance with this subpart VVVVVV. Subpart VVVVVV defines a leak at 500 ppmv.

⁴⁷ A compliance demonstration was performed on March 2, 2007, and showed the standard cannot be exceeded uncontrolled.

d. District Regulation 5.15 Regulated Substance [40 CFR Part 68, Subpart G]

See Plantwide Regulation 5.15 Standards.

S2. Monitoring and Record Keeping

[Regulation 2.16, section 4.1.9.1 and 4.1.9.2]

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

a. HAP

See Plantwide HAP Monitoring and Record Keeping.

b. TAC

- i. See Plantwide TAC Monitoring and Record Keeping.
- ii. The owner or operator shall monitor and record the Control Device (SB-301, SB-5, SB-7, SB-8, or SB-403) that is being utilized during the reporting period.
- iii. For Emission Point 3001, the owner or operator shall, monthly, maintain records, including calculations, which show the total chlorine emissions during each consecutive 12-month period.
- iv. For Emission Point 3009, the owner or operator shall, monthly, maintain records, including calculations, which show the chloroform and chlorine emissions during each consecutive 12-month period.
- v. For Emission Point 3001, the owner or operator shall maintain daily records that identify all periods of bypassing the required wet scrubber (SB-8) while unloading is in operation or a declaration entered into the records that the wet scrubber operated at all times while unloading was in operation for a given day. The records shall include the following:
 - (1) The date;
 - (2) The duration (including start and stop time) of each bypass event;
 - (3) Identification of the control device and process equipment in operation;
 - (4) The total lb/event emissions of each TAC during each bypass event;
 - (5) Summary information on the cause or reason for each control device bypass event;
 - (6) Corrective action taken to minimize the extent and duration of each bypass event; and

- (7) Measures implemented to prevent reoccurrence of the situation that resulted in bypassing the vapor recovery system.
- vi. For Emission Point 6005, the owner or operator shall maintain daily records that identify all periods of bypassing any of the required wet scrubbers (SB-301, SB-5, SB-7, SB-8, and SB-403) while unloading is in operation or a declaration entered into the records that the wet scrubber operated at all times while unloading was in operation for a given day. The records shall include the following:
 - (1) The date;
 - (2) The duration (including start and stop time) of each bypass event;
 - (3) Identification of the control device and process equipment in operation;
 - (4) The total lb/event emissions of each TAC during each bypass event;
 - (5) Summary information on the cause or reason for each control device bypass event;
 - (6) Corrective action taken to minimize the extent and duration of each bypass event.
 - (7) Measures implemented to prevent reoccurrence of the situation that resulted in bypassing the wet scrubbers or any other control devices.
 - (8) For Control Device SB-301 (Wet Scrubber), the owner or operator shall electronically monitor and record the flow rate to ensure the 24-hour average flow rate is equal to or greater than 25 gallons per minute or the minimum flowrate established during the most recent performance test.
- vii. For Control Device SB-8 (Wet Scrubber), the owner or operator shall monitor and record the NaOH concentration weekly to ensure that it is equal to or greater than 8%.
- viii. For Control Device SB-5 and SB-7 (Wet Scrubbers), the owner or operator for each wet scrubber shall monitor and record the acid concentration in the water weekly to ensure that it is less than 5% acid.

c. VOC

- i. For Emission Points TF-5 and 3009, The owner or operator shall record the information specified in paragraphs (a)(3)(i) through (v) of §60.486a for each monitoring event required by §§60.482-2a, 60.482-7a, 60.482-8a, and 60.483-2a. [40 CFR 60.486a(a)(3)]:
 - (1) Monitoring instrument identification.
[40 CFR 60.486a(a)(3)(i)]
 - (2) Operator identification. [40 CFR 60.486a(a)(3)(ii)]

- (3) Equipment identification. [40 CFR 60.486a(a)(3)(iii)]
 - (4) Date of monitoring. [40 CFR 60.486a(a)(3)(iv)]
 - (5) Instrument reading. [40 CFR 60.486a(a)(3)(v)]
- ii. When each leak is detected as specified in §§60.482-2a, 60.482-7a, 60.482-8a, and 60.483-2a, the following requirements apply:
[40 CFR 60.486a(b)]
- (1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment. [40 CFR 60.486a(b)(1)]
 - (2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in §60.482-7a(c) and no leak has been detected during those 2 months.
[40 CFR 60.486a(b)(2)]
 - (3) The identification on equipment, except on a valve or connector, may be removed after it has been repaired.
[40 CFR 60.486a(b)(4)]
- iii. When each leak is detected as specified in §§60.482-2a, 60.482-7a, 60.482-8a, and 60.483-2a, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:
[40 CFR 60.486(c)]
- (1) The instrument and operator identification numbers and the equipment identification number, except when indications of liquids dripping from a pump are designated as a leak.
[40 CFR 60.486(c)(1)]
 - (2) The date the leak was detected and the dates of each attempt to repair the leak. [40 CFR 60.486(c)(2)]
 - (3) Repair methods applied in each attempt to repair the leak.
[40 CFR 60.486(c)(3)]
 - (4) Maximum instrument reading measured by Method 21 of appendix A-7 of this part at the time the leak is successfully repaired or determined to be nonrepairable, except when a pump is repaired by eliminating indications of liquids dripping. [40 CFR 60.486(c)(4)]
 - (5) “Repair delayed” and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
[40 CFR 60.486(c)(5)]
 - (6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.
[40 CFR 60.486(c)(6)]
 - (7) The expected date of successful repair of the leak if a leak is not repaired within 15 days. [40 CFR 60.486(c)(7)]

- (8) Dates of process unit shutdowns that occur while the equipment is unrepaired. [40 CFR 60.486(c)(8)]
- (9) The date of successful repair of the leak. [40 CFR 60.486(c)(9)]

S3. Reporting

[Regulation 2.16, section 4.1.9.3]

The owner or operator shall report the following information, as required by General Condition G14:

a. HAP

See Plantwide HAP Reporting.

b. TAC

- i. See Plantwide TAC Reporting.
- ii. For Emission Point 3001, total chlorine emissions during each consecutive 12-month period.
- iii. For Emission Point 3009, total chloroform and chlorine emissions during each consecutive 12-month period.
- iv. Identification of all periods of bypassing any of the required control devices (SB-301, SB-5, SB-7, SB-8, and SB-403) while the process was 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) Identification of the control device and process equipment in operation;
 - (4) The total lbs/event emissions of each TAC during each bypass event;
 - (5) Summary information on the cause or reason for each bypass event;
 - (6) Corrective action taken to minimize the extent and duration of each bypass event; and
 - (7) Measures implemented to prevent reoccurrence of the situation that resulted in bypassing the control devices.

c. VOC

- i. For Emission Point TF-5 and 3009:

- (1) Each owner or operator subject to 40 CFR 60 Subpart VVa shall submit semiannual reports to the District beginning 6 months after the initial startup date. Beginning on July 15, 2025, or once the report template for this subpart has been available on the CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/cedri>) for 1 year, whichever date is later, for reports to U.S. EPA, submit all subsequent reports using the appropriate electronic report template on the CEDRI website for this subpart and following the procedure specified in §60.487a (g). The date report templates become available will be listed on the CEDRI website. Unless the Administrator or delegated state agency or other authority has approved a different schedule for submission of reports, the report must be submitted by the deadline specified in this subpart, regardless of the method in which the report is submitted. [40 CFR 60.487a(a)]
- (2) The initial semiannual report to the District shall include the following information in §60.487a(b)(1) through (3):
[40 CFR 60.487a(b)]
 - (a) Process unit identification. [40 CFR 60.487a(b)(1)]
 - (b) Number of valves subject to the requirements of §60.482-7a, excluding those valves designated for no detectable emissions under the provisions of §60.482-7a(f).
[40 CFR 60.487a(b)(2)]
 - (c) Number of pumps subject to the requirements of §60.482-2a, excluding those pumps designated for no detectable emissions under the provisions of §60.482-2a(e) and those pumps complying with §60.482-2a(f).
[40 CFR 60.487a(b)(3)]
- (3) All semiannual reports to the District shall include the following information, summarized from the information in §60.486a:
[40 CFR 60.487a(c)]
 - (a) Process unit identification. [40 CFR 60.487a(c)(1)]
 - (b) For each month during the semiannual reporting period,
[40 CFR 60.487a(c)(2)]
 - (i) Number of valves for which leaks were detected as described in §60.482-7a(b) or §60.483-2a,
[40 CFR 60.487a(c)(2)(i)]
 - (ii) Number of valves for which leaks were not repaired as required in §60.482-7a(d)(1),
[40 CFR 60.487a(c)(2)(ii)]
 - (iii) Number of pumps for which leaks were detected as described in §60.482-2a(b), (d)(4)(ii)(A) or (B), or (d)(5)(iii), [40 CFR 60.487a(c)(2)(iii)]

- (iv) Number of pumps for which leaks were not repaired as required in §60.482-2a(c)(1) and (d)(6), [40 CFR 60.487a(c)(2)(iv)]
- (v) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible. [40 CFR 60.487a(c)(2)(xi)]
- (c) Dates of process unit shutdowns which occurred within the semiannual reporting period. [40 CFR 60.487a(c)(3)]
- (d) Revisions to items reported according to §60.487a(b) if changes have occurred since the initial report or subsequent revisions to the initial report. [40 CFR 60.487a(c)(4)]

S4. Testing

[Regulation 2.16, section 4.3.1]

a. HAP

- i. Within two years of the effective date of this permit, the owner or operator shall perform an EPA Reference Method 26 performance test, on the inlet and outlet of the wet scrubber (SB-301) to determine the control efficiency. 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 necessitate a revision of the allowable/permitted capacity of the process equipment depending upon the difference between the testing results and the limit.
- ii. Before conducting a performance test, the owner or operator shall submit a written performance test plan (stack test protocol). The plan shall include the EPA test methods that will be used for testing, the process operating parameters that will be monitored during the performance test, and the control device performance indicators (including, but not limited to, liquid flow rate) that will be monitored during the performance test. The test plans shall be furnished to the District at least 30 calendar days prior to the actual date of the performance test. The Protocol Checklist for a Performance Test is attached to this permit. This checklist provides information that must be provided in the protocol.
- iii. The owner or operator shall provide the District at least 10 working 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 calendar days following the actual date of completion of the performance test.

Emission Unit U4: HCl⁴⁸**Applicable Regulations**

| FEDERALLY ENFORCEABLE REGULATIONS | | |
|--|---|----------------------------|
| Regulation | Title | Applicable Sections |
| 40 CFR 68 | Chemical Accident Prevention Provisions | Subparts A - H |

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

⁴⁸ Anhydrous hydrogen chloride gas from the Freon™ 22/Freon™ 23 process is absorbed in water to produce hydrochloric acid.

Equipment

| Emission Point | Description | Install Date | Applicable Regulations | Control ID | Release ID |
|-----------------------|--|---------------------|-------------------------------|-------------------|-------------------|
| 4000 | HCl Stripping, Storage and Loading | | | | |
| | TS-26, 75,000 Gallons | 1977 | STAR | SB-17 | S-12 |
| | TS-25, 170,000 Gallons | 1985 | | SB-17 | S-12 |
| | HCl Storage Tanks, TS-28 and TS-29, 500,000 Gallons each | 1989, 1992 | | SB-17 | S-12 |
| | Loading Spots (Railcar and Tank Truck) | NA | | SB-17 | S-12 |
| | Process Throughput, 72,446 lb/hr 32% HCl Process Feed | 1986 | | SB-17 | S-12 |
| 4001 | Fugitive Emissions, HCl | NA | | NA | F-2 |

Control Devices

| Control ID | Description | Control Efficiency |
|-------------------|--------------------|---------------------------|
| SB-17 | Wet Scrubber | 99% ⁴⁹ |

⁴⁹ The scrubber was tested on 03/24/2010.

U4 Specific Conditions

S1. Standards

[Regulation 2.16, section 4.1.1]

a. HAP

- i. See Plantwide HAP Standards.

b. TAC

- i. See Plantwide TAC Standards.
- ii. For Emission Point 4000:
 - (1) The owner or operator shall not allow HCl emissions to exceed de minimis.⁵⁰ [Regulations 5.00 and 5.21]
 - (2) The owner or operator shall utilize Control Device SB-17 (wet scrubber) at all times when HCl stripping, storage and loading are in operation and shall maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. [Regulation 5.21. section 4.2.3.1]

S2. Monitoring and Record Keeping

[Regulation 2.16, section 4.1.9.1 and 4.1.9.2]

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

a. HAP

- i. See Plantwide HAP Monitoring and Record Keeping.

b. TAC

- i. See Plantwide TAC Monitoring and Record Keeping.
- ii. For Emission Point 4000, the owner or operator shall, monthly, maintain records, including calculations, which show the HCl emissions during each consecutive 12-month period.
- iii. For Emission Point 4000, the owner or operator shall maintain daily records that identify all periods of bypassing the required control device (SB-17)

⁵⁰ At the time of permit issuance, the de minimis values for HCl are 10.8 lb/hr and 9600 lb/yr.

while the process was 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/event 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 the control devices.

S3. Reporting

[Regulation 2.16, section 4.1.9.3]

The owner or operator shall report the following information, as required by General Condition G14:

a. HAP

- i. See Plantwide HAP Reporting.

b. TAC

- i. See Plantwide TAC Reporting
- ii. Identification of all periods of bypassing the required control device (SB-17) while the process was 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/event 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 the control devices.

S4. Testing

[Regulation 2.16, section 4.3.1]

a. HAP

- i. Within two years of the effective date of this permit, the owner or operator shall perform an EPA Reference Method 26 performance test, on the inlet and outlet of the wet scrubber (SB-17) to determine the emissions and the control efficiency. 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 necessitate a revision of the allowable/permitted capacity of the process equipment depending upon the difference between the testing results and the limit.
- ii. Before conducting a performance test, the owner or operator shall submit a written performance test plan (stack test protocol). The plan shall include the EPA test methods that will be used for testing, the process operating parameters that will be monitored during the performance test, and the control device performance indicators that will be monitored during the performance test. The test plans shall be furnished to the District at least 30 calendar days prior to the actual date of the performance test. The Protocol Checklist for a Performance Test is attached to this permit. This checklist provides information that must be provided in the protocol.
- iii. The owner or operator shall provide the District at least 10 working 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 calendar days following the actual date of completion of the performance test.

Emission Unit U5: Gasoline Dispensing**Applicable Regulations**

| FEDERALLY ENFORCEABLE REGULATIONS | | |
|--|--|--|
| Regulation | Title | Applicable Sections |
| 7.15 | Standards of Performance for Gasoline Transfer to New Service Station Storage Tanks (Stage I Vapor Recovery) | 1, 2, 3.1, 3.3, 3.4, 3.6, 3.7, 3.8 and 5 |
| 40 CFR 63 Subpart CCCCCC | National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities | §63.1111 and §63.1116 |

| DISTRICT ONLY ENFORCEABLE REGULATIONS | | |
|---|---|----------------------------|
| Regulation | Title | Applicable Sections |
| 5.00 | Definitions | 1, 2 |
| 5.01 | General Provisions | 1 through 2 |
| 5.20 | Methodology for Determining Benchmark Ambient Concentration of a Toxic Air Contaminant | 1 through 6 |
| 5.21 | Environmental Acceptability for Toxic Air Contaminants | 1 through 5 |
| 5.22 | Procedures for Determining the Maximum Ambient Concentration of a Toxic Air Contaminant | 1 through 5 |
| 5.23 | Categories of Toxic Air Contaminants | 1 through 6 |
| STAR regulations are 5.00, 5.01, 5.20, 5.21, 5.22, and 5.23 | | |

Equipment

| Emission Point | Description | Install Date | Applicable Regulations | Control ID | Release ID |
|-----------------------|--|---------------------|--------------------------------------|-------------------|-------------------|
| 5000 | Gasoline Dispensing, 1,000-gallon unleaded gasoline storage tank | 1992 | STAR, 7.15, 40 CFR 63 Subpart CCCCCC | NA | S-13 |

U5 Specific Conditions

S1. Standards

[Regulation 2.16, section 4.1.1]

a. HAP

- i. See Plantwide HAP Standards.
- ii. You must, at all times, operate and maintain any affected source including associated air pollution control equipment⁵¹ and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the District which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.
[40 CFR 63.11115(a)]
- iii. The owner or operator shall comply with §63.11116 requirements for facilities with monthly throughput of less than 10,000 gallons of gasoline.
[40 CFR 63.11116]
- iv. You must not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following: [40 CFR 63.11116(a)]
 - (1) Minimize gasoline spills; [40 CFR 63.11116(a)(1)]
 - (2) Clean up spills as expeditiously as practicable;
[40 CFR 63.11116(a)(2)]
 - (3) Cover all open gasoline containers and all gasoline storage tank fillpipes with a gasketed seal when not in use; [40 CFR 63.11116(a)(3)]
 - (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators. [40 CFR 63.11116(a)(4)]

b. TAC

- i. See Plantwide TAC Standards.⁵²
- ii. The owner or operator shall take measures to ensure that gasoline is not handled in a manner that would result in vapor releases to the atmosphere

⁵¹ Emission Point 5000 does not have any air pollution control equipment associated with it.

⁵² The emissions from a motor vehicle fueling or refueling process and process equipment for gasoline and other liquid fuels are de minimis under STAR. [Regulation 5.21, section 2.6]

for an extended period of time. These measures shall include, but not be limited to: [40 CFR 63.11116(a)]

- (1) Minimize gasoline spills; [40 CFR 63.11116(a)(1)]
- (2) Clean up spills as expeditiously as practicable; [40 CFR 63.11116(a)(2)]
- (3) Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use; [40 CFR 63.11116(a)(3)]
- (4) Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators. [40 CFR 63.11116(a)(4)]

- iii. The owner or operator shall, at all times, operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.11115(a)]

c. VOC

- i. The owner or operator shall install, maintain and operate the storage tank with a submerged fill pipe, vent line restrictions, a vapor balance system, and vapor tight connections on the liquid fill and vapor return hoses.⁵³ [Regulation 7.15, section 3.1]
- ii. The owner or operator shall not allow delivery of fuel to the storage tanks until the vapor balance system is properly connected. [Regulation 7.15, section 3.3]
- iii. The owner or operator shall not allow delivery of gasoline to a service station without connecting the vapor return hose between the tank of the truck and the storage tank receiving the product. [Regulation 7.15, section 3.4]
- iv. The owner or operator shall maintain all above ground tanks with dry break. [Regulation 7.15, section 3.7]
- v. The owner or operator shall operate and maintain equipment with no defects and all fill tubes shall be equipped with vapor-tight covers including gaskets; all hoses, fittings and couplings shall be in vapor-tight condition;

⁵³ This tank is equipped with submerged fill.

and all dry breaks shall have vapor tight seals and shall be equipped with vapor tight covers or dust covers. [Regulation 7.15, section 3.8]

S2. Monitoring and Record Keeping

[Regulation 2.16, section 4.1.9.1 and 4.1.9.2]

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

a. HAP

- i. See Plantwide HAP Monitoring and Record Keeping.
- ii. The owner or operator shall monitor and document the monthly throughput of gasoline. Records required under this paragraph shall be kept for a period of 5 years. [40 CFR 63.11111(e)]
- iii. You are not required to submit notifications or reports as specified in §63.11125, §63.11126, or subpart A of this part, but you must have records available within 24 hours of a request by the District to document your gasoline throughput. [40 CFR 63.11116 (b)]
- iv. The owner or operator shall keep records of actions taken during periods of malfunction to minimize emissions in accordance with §63.11115(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.11125(d)(2)]

b. TAC

See Plantwide TAC Monitoring and Record Keeping.

c. VOC

There are no monitoring or record keeping requirements for this equipment.

S3. Reporting

[Regulation 2.16, section 4.1.9.3]

The owner or operator shall report the following information, as required by General Condition G14:

a. HAP

- i. See Plantwide HAP Reporting.
- ii. The owner or operator shall report, by March 15 of each year, the number, duration, and a brief description of each type of malfunction which occurred during the previous calendar year and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with §63.11115(a), including actions taken to correct a malfunction. No report is necessary for a calendar year in which no malfunctions occurred.
[40 CFR 63.11126(b)]

b. TAC

See Plantwide TAC Reporting.

c. VOC

There are no reporting requirements for this equipment.

Emission Unit IA1: Emergency Generator**Applicable Regulations**

| FEDERALLY ENFORCEABLE REGULATIONS | | |
|--|--|------------------------------------|
| Regulation | Title | Applicable Sections |
| 40 CFR 63 Subpart ZZZZ | National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines | 63.6580 through 63.6675 |
| 40 CFR 60 Subpart IIII | Standards of Performance for Stationary Compression Ignition Internal Combustion Engines | 60.4205, 60.4207, 60.4209, 60.4211 |

Equipment⁵⁴

| Emission Point | Description | Install Date | Applicable Regulations | Control ID | Release ID |
|-----------------------|--|---------------------|-----------------------------------|-------------------|-------------------|
| IA1- GEN | Diesel emergency generator (14P54- GEN), make Cummins, model QSX15- G9 NR2, capacity of 563 kW (755 bhp) | 2007 | 40 CFR 60 IIII, 40 CFR 63 ZZZZ | NA | NA |

⁵⁴ Per 40 CFR 63.6590(b), an emergency engine that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year does not have to meet the requirements of Subpart ZZZZ except for the initial notification requirements of 40 CFR 63.6645(f). The initial notification was submitted on June 28, 2010.

UIA1 Specific Conditions

S1. Standards

[Regulation 2.16, section 4.1.1]

a. HAP

See Plantwide HAP Standards.

b. Fuel Requirements

The owner or operator of a stationary CI ICE subject to 40 CFR 60 Subpart IIII with a displacement of less than 30 liters per cylinder that uses diesel fuel shall use diesel fuel that meets the requirements of 40 CFR 80.510(b) for non-road diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted: [40 CFR 60.4207(b)]

- i. Sulfur content: 15 ppm maximum for NR diesel fuel.
[40 CFR 1090.305(b)]
- ii. A minimum cetane index of 40; or [40 CFR 1090.305(c)(1)]
- iii. A maximum aromatic content of 35 volume percent.
[40 CFR 1090.305(c)(2)]

c. Unit Operations

- i. For Emission points IA1-GEN, the owner or operator of 2007 model year or later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in 40 CFR 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.
[40 CFR 60.4205(b)]
- ii. Engine manufacturers shall certify the engines with the exhaust emission standards in the following table. In lieu of the NO_x standards, nonmethane hydrocarbons (NMHC) + NO_x standards, and PM standards, manufacturers may elect to include engine families in the averaging, banking, and trading program. The manufacturer must set a family emission limit (FEL) not to exceed the levels contained in the following table:⁵⁵
[40 CFR 60.4202(a)(2) refers to 40 CFR 89.112]

⁵⁵ The source submitted the document on September 15, 2016 demonstrating that the engine model of this emergency generator is certified to the emission standards in §60.4202(a)(1)(ii) and the standards are met.

Table 1 to 40 CFR 89 Subpart B Section 89.112(a) and Table 2 to 40 CFR 89 Subpart B Section 89.112(b)

| Engine Capacity: 563 kW | Emission Standards (g/KW-hr) | | | | |
|---|------------------------------|-----|-----------------------|-----|------|
| | NO _x | HC | NMHC+ NO _x | CO | PM |
| Emission Standards (Table 1 to 40 CFR 89.112(a)) | N/A | N/A | 6.4 | 3.5 | 0.2 |
| Family Emission Limits (Table 2 to 40 CFR 89.112(d)) | N/A | N/A | 10.5 | N/A | 0.54 |

- iii. The owner or operator must operate and maintain stationary CI ICE that achieves the emission standards as required in 40 CFR 60.4205 over the entire life of the engine. [40 CFR 60.4206]
- iv. The owner or operator that is required comply with the emission standards specified in 40 CFR 60 Subpart IIII shall do all of the following:
[40 CFR 60.4211(a)]
 - (1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emissionrelated written instructions; [40 CFR 60.4211(a)(1)]
 - (2) Change only those emission-related settings that are permitted by the manufacturer; [40 CFR 60.4211(a)(2)]
- v. The owner or operator shall purchase an engine certified to the emission standards in 40 CFR 60.4205(b), as applicable for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications. [40 CFR 60.4211(c)]
- vi. In order for the engine to be considered an emergency stationary ICE under 40 CFR 60 Subpart IIII, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3) of 40 CFR 60 Subpart IIII, is prohibited. If the owner or operator does not operate the engine according to the requirements below, the engine will not be considered an emergency engine under 40 CFR 60 Subpart IIII and shall meet all requirements for non-emergency engines. [40 CFR 60.4211(f)]
 - (1) There is no time limit on the use of emergency stationary ICE in emergency situations. [40 CFR 60.4211(f)(1)]
 - (2) The owner or operator may operate the emergency stationary ICE for any combination of the purposes specified in 60 CFR 60.4211(f)(2)(i) through (iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as

allowed by 60 CFR 60.4211(f)(3) counts as part of the 100 hours per calendar year allowed by this paragraph. [40 CFR 60.4211(f)(2)].

- (a) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the District for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. [40 CFR 60.4211(f)(2)(i)]
 - (b) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. [40 CFR 60.4211(f)(2)(iii)]
- vii. For stationary CI internal combustion engines greater than 500 HP; if you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission related written instructions, or within 1 year after you change emission related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. [40 CFR 60.4211(g)(3)]

S2. Monitoring and Record Keeping

[Regulation 2.16, section 4.1.9.1 and 4.1.9.2]

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

a. HAP

See Plantwide HAP Monitoring and Record Keeping.

b. Fuel Requirements

The owner or operator shall maintain records of the fuel SDS sheets and receipts showing dates, amounts of fuel purchased, sulfur content of fuel purchased and supplier's name and address.

c. Unit Operations

- i. The owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines shall install a non-resettable hour meter prior to startup of the engine. [40 CFR 60.4209(a)]
- ii. The owner or operator is not required to submit an initial notification. If the emergency engine does not meet the standards applicable to nonemergency engines in the applicable model year, the owner or operator shall keep records of the operation of the engine in emergency and nonemergency service that are recorded through the non-resettable hour meter. The owner shall record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214(b)]

S3. Reporting

[Regulation 2.16, section 4.1.9.3]

The owner or operator shall report the following information, as required by General Condition G14:

a. HAP

See Plantwide HAP Reporting.

b. Fuel Requirements

There are no reporting requirements for this equipment.

c. Unit Operations

There are no reporting requirements for this equipment except for the initial notification requirements of 40 CFR 63.6645(f).⁵⁶

⁵⁶ The initial notification was submitted on June 28, 2010.

Emission Unit IA2: New Fire Pump**Applicable Regulations**

| FEDERALLY ENFORCEABLE REGULATIONS | | |
|--|--|------------------------------------|
| Regulation | Title | Applicable Sections |
| 40 CFR 63 Subpart ZZZZ | National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines | 63.6580 through 63.6675 |
| 40 CFR 60 Subpart IIII | Standards of Performance for Stationary Compression Ignition Internal Combustion Engines | 60.4205, 60.4207, 60.4209, 60.4211 |

Equipment⁵⁷

| Emission Point | Description | Install Date | Applicable Regulations | Control ID | Release ID |
|-----------------------|--|---------------------|--|-------------------|-------------------|
| IA2-FP1 | Diesel Fire Pump (#2 Diesel Drive Powers 11251P), make Clark Fire Protection Products, Inc., model JU6H-UFADW8, capacity of 235 kW (282 bhp) | 2014 | 40 CFR 60 Subpart IIII, 40 CFR 63 Subpart ZZZZ | NA | NA |

⁵⁷ Per 40 CFR 63 63.6590(b), an emergency engine that does not operate or is not contractually obligated to be available for more than 15 hours per calendar year does not have to meet the requirements of Subpart ZZZZ except for the initial notification requirements of 40 CFR 63.6645(f). The initial notification was submitted on June 28, 2010. This source is subject to 40 CFR 63 Subpart ZZZZ, NESHAP for Stationary Reciprocating Internal Combustion Engines, because it is a stationary reciprocating internal combustion engine (RICE) located at an area source of HAP emissions. Pursuant to 40 CFR 63.6590(c)(1), the source must meet the requirements of 40 CFR 63 Subpart ZZZZ by meeting requirements of 40 CFR part 60 subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

UIA2 Specific Conditions

S1. Standards

[Regulation 2.16, section 4.1.1]

a. HAP

See Plantwide HAP Standards.

b. Fuel Requirements

The owner or operator of a stationary CI ICE subject to 40 CFR 60 Subpart IIII with a displacement of less than 30 liters per cylinder that uses diesel fuel shall use diesel fuel that meets the requirements of 40 CFR 80.510(b) for non-road diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted: [40 CFR 60.4207(b)]

- i. Sulfur content: 15 ppm maximum for NR diesel fuel.
[40 CFR 1090.305(b)]
- ii. A minimum cetane index of 40; or [40 CFR 1090.305(c)(1)]
- iii. A maximum aromatic content of 35 volume percent.
[40 CFR 1090.305(c)(2)]

c. Unit Operations

- i. The owner or operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in in the following table:
[40 CFR 60.4205(c) and Table 4 to Subpart IIII of Part 60]

Table 4 to 40 CFR 60 Subpart IIII

| Engine Capacity: 235 kW | Emission Standards (g/KW-hr) | | |
|--|------------------------------|----|-----|
| | NMHC+ NO _x | CO | PM |
| Emission Standards (Table 4 to Subpart IIII of Part 60) | 6.4 | - | 0.2 |

- ii. The owner or operator must operate and maintain stationary CI ICE that achieves the emission standards as required in 40 CFR 60.4205 over the entire life of the engine. [40 CFR 60.4206]
- iii. The owner or operator that is required comply with the emission standards specified in 40 CFR 60 Subpart IIII shall do all of the following:
[40 CFR 60.4211(a)]

- (1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; [40 CFR 60.4211(a)(1)]
 - (2) Change only those emission-related settings that are permitted by the manufacturer; [40 CFR 60.4211(a)(2)]
- iv. The owner or operator shall purchase an engine certified to the emission standards in 40 CFR 60.4205(b), as applicable for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications. [40 CFR 60.4211(c)]
- v. In order for the engine to be considered an emergency stationary ICE under 40 CFR 60 Subpart IIII, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (3) of 40 CFR 60 Subpart IIII, is prohibited. If the owner or operator does not operate the engine according to the requirements below, the engine will not be considered an emergency engine under 40 CFR 60 Subpart IIII and shall meet all requirements for non-emergency engines. [40 CFR 60.4211(f)]
 - (1) There is no time limit on the use of emergency stationary ICE in emergency situations. [40 CFR 60.4211(f)(1)]
 - (2) The owner or operator may operate the emergency stationary ICE for any combination of the purposes specified in 60 CFR 60.4211(f)(2)(i) through (iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 60 CFR 60.4211(f)(3) counts as part of the 100 hours per calendar year allowed by this paragraph. [40 CFR 60.4211(f)(2)].
 - (a) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the District for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. [40 CFR 60.4211(f)(2)(i)]
 - (b) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. [40 CFR 60.4211(f)(2)(iii)]

- vi. For stationary CI internal combustion engines greater than 500 HP; if you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission related written instructions, or within 1 year after you change emission related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. [40 CFR 60.4211(g)(3)]

S2. Monitoring and Record Keeping

[Regulation 2.16, section 4.1.9.1 and 4.1.9.2]

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

a. HAP

See Plantwide HAP Monitoring and Record Keeping

b. Fuel Requirements

The owner or operator shall maintain records of the fuel SDS sheets and receipts showing dates, amounts of fuel purchased, sulfur content of fuel purchased and supplier's name and address.

c. Unit Operations

- i. The owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines shall install a non-resettable hour meter prior to startup of the engine. [40 CFR 60.4209(a)]
- ii. The owner or operator is not required to submit an initial notification. If the emergency engine does not meet the standards applicable to nonemergency engines in the applicable model year, the owner or operator shall keep records of the operation of the engine in emergency and nonemergency service that are recorded through the non-resettable hour meter. The owner

shall record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214(b)]

S3. Reporting

[Regulation 2.16, section 4.1.9.3]

The owner or operator shall report the following information, as required by General Condition G14:

a. HAP

See Plantwide HAP Reporting

b. Fuel Requirements

There are no reporting requirements for this equipment.

c. Unit Operations

The owner or operator is not required to submit an initial notification.
[40 CFR 60.4214(b)]

Emission Unit IA3: Existing Fire Pumps**Applicable Regulations**

| FEDERALLY ENFORCEABLE REGULATIONS | | |
|--|--|----------------------------|
| Regulation | Title | Applicable Sections |
| 40 CFR 63 Subpart ZZZZ | National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines | 63.6580 through 63.6675 |

Equipment

| Emission Point | Description | Install Date | Applicable Regulations | Control ID | Release ID |
|-----------------------|--|---------------------|-------------------------------|-------------------|-------------------|
| IA3-FP2 ⁵⁸ | Diesel Emergency Fire Pump (#1 Fire Pump House – East Diesel Powers 11220P) 348 hp | 2000 | 40 CFR 63 Subpart ZZZZ | NA | NA |
| IA3-FP3 ⁵⁸ | Diesel Emergency Fire Pump (#1 Fire Pump House – West Diesel Powers 11221P) 348 hp | | | | |

⁵⁸ Per 40 CFR 60 Subpart IIII Section 60.4200, engines IA3-FP2 and IA3-FP3 do not meet the applicability dates to be subject to this regulation.

UIA3 Specific Conditions

S1. Standards

[Regulation 2.16, section 4.1.1]

a. HAP

- i. See Plantwide HAP Standards.
- ii. For an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a area source of HAP emissions, the owner or operator shall comply with the applicable emission limitations, operating limitations, and other requirements no later than May 3, 2013.
[40 CFR 63.6595(a)(1)]
- iii. The owner or operator of an existing emergency use stationary RICE with a site rating of equal to or less than 500 brake HP located at a area source of HAP emissions, must comply with the limitations in Table 2d to 40 CFR 63 Subpart ZZZZ as follows: [40 CFR 63.6603]
 - (1) The owner or operator shall change the oil and filter every 500 hours of operation or annually, whichever comes first. The owner or operator has the option to utilize an oil analysis program as described in 40 CFR 63.6625(i) or (j) in order to extend the specified oil change requirement in Table 2d of 40 CFR 63 Subpart ZZZZ. [40 CFR 63, Subpart ZZZZ, Table 2d (4)(a)]
 - (2) The owner or operator shall inspect the air cleaners every 1,000 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63, Subpart ZZZZ, Table 2d (4)(b)]
 - (3) The owner or operator shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63, Subpart ZZZZ, Table 2d (4)(c)]
- iv. Beginning January 1, 2015, if you own or operate an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), you must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted. [40 CFR 63.6604(b)]
 - (1) Sulfur content: 15 ppm maximum for NR diesel fuel. [40 CFR 80.510(b)(1)(i)]
 - (2) A minimum cetane index of 40; or [40 CFR 80.510(b)(2)(i)]

- (3) A maximum aromatic content of 35 volume percent. [40 CFR 80.510(b)(2)(ii)]
- v. General requirements for complying with 40 CFR 63, Subpart ZZZZ:
 - (1) The owner or operator shall be in compliance with the emission limitations, operating limitations, and other requirements in this subpart that apply to the RICE at all times. [40 CFR 63.6605(a)]
 - (2) At all times the owner or operator shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the District which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.6605(b)]
- vi. The owner or operator shall demonstrate continuous compliance with each emission limitation, operating limitation, and other applicable requirements in Tables 2c to 40 CFR 63 Subpart ZZZZ. [40 CFR 63.6640(a)]
- vii. The owner or operator shall report each instance in which you did not meet each emission limitation or operating limitation in Tables 1a and 1b, Tables 2a and 2b, Table 2c, and Table 2d to 40 CFR 63 Subpart ZZZZ that apply to you. These instances are deviations from the emission and operating limitations in 40 CFR 63 Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650. If you change your catalyst, you must reestablish the values of the operating parameters measured during the initial performance test. When you reestablish the values of your operating parameters, you must also conduct a performance test to demonstrate that you are meeting the required emission limitation applicable to your stationary RICE. [40 CFR 63.6640(b)]
- viii. The owner or operator shall operate the emergency stationary RICE according to the requirements in 40 CFR 63.6640(f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 63.6640(f)(1) through (4), is prohibited. If the owner or operator does not operate the engine according to the requirements in 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR 63

Subpart ZZZZ and must meet all requirements for non-emergency engines. [40 CFR 63.6640(f)]

- (1) There is no time limit on the use of the emergency stationary RICE in emergency situations. [40 CFR 63.6640(f)(1)]
- (2) The owner or operator may operate the emergency stationary RICE for any combination of the purposes specified in 40 CFR 63.6640 (f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) and (4) counts as part of the 100 hours per calendar year allowed by 40 CFR 63.6640(f)(2). [40 CFR 63.6640(f)(2)]
 - (a) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the District for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. [40 CFR 63.6640(f)(2)(i)]
- (3) Emergency stationary RICE located at area sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in 40 CFR 63.6640(f)(2). Except as provided in paragraphs (f)(4)(i) and (ii) of 40 CFR 63.6640, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 63.6640(f)(4)]

S2. Monitoring and Record Keeping

[Regulation 2.16, section 4.1.9.1 and 4.1.9.2]

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

a. HAP

- i. See Plantwide HAP Monitoring and Record Keeping.

- ii. Monitoring, installation, collection, operation, and maintenance requirements: [40 CFR 63.6625].
 - (1) The owner or operator shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR 63.6625(e)]
 - (2) The owner or operator shall install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]
 - (3) The owner or operator shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup. [40 CFR 63.6625(h)]
 - (4) The owner or operator has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in Tables 2d to 40 CFR 63, Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2d to 40 CFR 63, Subpart ZZZZ. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 business days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63.6625(i)]
- iii. Recordkeeping requirements: [40 CFR 63.6655]
 - (1) The owner or operator shall keep the following records that apply to your RICE: [40 CFR 63.6655(a)]

- (a) A copy of each notification and report that you submitted to comply with 40 CFR 63, Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.6655(a)(1)]
 - (b) Records of the occurrence and duration of each malfunction of operation (i.e. process equipment) or the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(2)]
 - (c) Records of performance tests (if stack test is required) and performance evaluations as required in 40 CFR 63.10(b)(2)(viii). [40 CFR 63.6655(a)(3)]
 - (d) Records of all required maintenance performed on the air pollution control and monitoring equipment. [40 CFR 63.6655(a)(4)]
 - (e) Records of actions taken during periods of malfunction to minimize emissions in accordance with §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6655(a)(5)]
- (2) The owner or operator shall keep the records required in Table 6 of 40 CFR 63 Subpart ZZZZ to show continuous compliance with each emission or operating limitation that applies to the RICE. [40 CFR 63.6655(d)]
 - (3) The owner or operator shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to your own maintenance plan. [40 CFR 63.6655(e)]
 - (4) The owner or operator shall keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for nonemergency operation. If the engine is used for the purposes specified in §63.6640(f)(2)(ii) or (iii) or §63.6640(f)(4)(ii), the owner or operator must keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. [40 CFR 63.6655(f)]

S3. Reporting

[Regulation 2.16, section 4.1.9.3]

The owner or operator shall report the following information, as required by General Condition G14:

a. HAP

- i. See Plantwide HAP Reporting.
- ii. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements on the schedule required in Table 2d of 40 CFR 63.6640, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the management practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable.
[40 CFR 63 Subpart ZZZZ, Footnote 1 of Table 2d]

Emission Unit IA4: Parts Washers**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 |

Equipment

| Emission Point | Description | Applicable Regulations | Control ID | Release ID |
|-----------------------|---|-------------------------------|-------------------|-------------------|
| IA4 | Two (2) Non-Halogenated Cold Solvent Parts Cleaners | 6.18 | NA | NA |

UIA4 Specific Conditions

S1. Standards

[Regulation 2.16, section 4.1.1]

a. 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 Regulation 6.18, section 4.2 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, section 4.1.9.1 and 4.1.9.2]

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

a. VOC

- i. 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).
- ii. All records required in Regulation 6.18, section 4.42 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]

The owner or operator shall report the following information, as required by General Condition G14:

a. VOC

There are no routine compliance reporting requirements for Regulation 6.18

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

Risk Management Plan

8 September 2020

Alternative Operating Scenario

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

Insignificant Activities

| Equipment | Qty. | PTE (ton/yr) | Regulation Basis |
|--|------|------------------|--|
| Above-Ground Diesel Storage Tank | 5 | VOC = 0.00036 | Regulation 1.02, Appendix A, Section 3.9.2 |
| Emergency Relief Vents, Stacks and Ventilating Systems | 307 | NA | Regulation 1.02, Appendix A, Section 3.10 |
| On-Site Quality Control Laboratories | 2 | VOC = 0.90 | Regulation 1.02, Appendix A, Section 3.11 |
| Soil or Groundwater Contamination Remediation Projects | 1 | NA | Regulation 1.02, Appendix A, Section 3.21 |
| Portable diesel fuel storage tank | 1 | VOC - Negligible | Regulation 1.02, Appendix A, Section 3.23 |
| Jet Exhaust Condenser | 1 | HAP = 0.0053 | Regulation 1.02 Section 1.38.1.2 |
| Cooling Tower ⁵⁹ | 1 | PM = 0.12 | Regulation 1.02, Appendix A, Section 1.38 |

1. Insignificant activities identified in District Regulation 1.02, Appendix A, may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16, section 3.5.4.1.4.
2. Insignificant activities identified in District Regulation 1.02, Appendix A shall comply with generally applicable requirements as required by Regulation 2.16, section 4.1.9.4.

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

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.

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

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

| EP | 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 U2: Chloroform Tanks

| EP | Equipment | Control Device | Emission Factor |
|-------|---|----------------------|---|
| 2001 | Chloroform Raw Material Storage Tanks TS-31 and TS-32, 632,452 gallons each | AD-3 and AD-4 | AP-42 Chapter 7.1 and 98% control efficiency (manufacturer spec.) |
| 2002a | Existing Fugitive Piping Components | NA | <i>EPA Protocol for Equipment Leak Emission Estimates</i> , Nov. 1995 Screening Value Correlation - 10,000 ppmv Screening Value Emission Factor or LDAR Leak Methods (LeakDAS) |
| 2002b | New Fugitive Piping Components | NA | |
| 2003 | Rental De-watering Adsorbers | CS-1 AD-5 AD-6 | $\text{Emissions per hour} = \frac{\text{ppm} \times \text{MW Chloroform} \times \text{Flowrate (cfm)} \times 60 \frac{\text{min}}{\text{hr}}}{\text{molar volume} \left(\frac{\text{cf}}{\text{lb-mole}} \right) \times 1,000,000}$ |

Table 3 Unit U3: Freon® 22/Freon® 23 Process

| EP | Equipment | Control Device | Emission Factor |
|--------|--|----------------------------------|--|
| 3001 | Vaporizers V-1 and V-2 | SB-8 | 25 lb of Cl per vaporizer vent down |
| 3002 | Reactors #1 and #2 and Refining Equipment for Manufacturing Freon® 22 and Freon® 23; Tank TR-8 and Tank TW-1 | SB-5 SB-7 | 0.166 lbs CHCl ₃ /reactor vent down |
| 3003 | Chloroform Vent Condenser, VC-1 | NA | (Hourly mass flow) x (actual operating hours of the Freon 22 process in a given time period) |
| 3009 | Fugitive Emissions | NA | LDAR leak methods (LeakDAS) |
| HF6005 | Unloading | SB-5 SB-7 SB-301 SB-403 | [0.44 lb HF/tank car unloaded (Based on Ideal Gas Law) + 31 lb HF/tank car vented] x (100 – Scrubber Eff. %) |

Table 4 Unit U4: HCL

| EP | Equipment | Control Device | Emission Factor |
|------|------------------------------------|----------------|--|
| 4000 | HCl Stripping, Storage and Loading | SB-17 | Flow to scrubber = lb/mole/min * y(HCl vapor in air) * lb HCl/lbmole * 60 min/hr * production hours |
| 4001 | Fugitive Emissions, HCl | NA | EPA Protocol for Equipment Leak Emission Estimates, Nov. 1995 Screening Value Correlation - 10,000 ppmv Screening Value Emission Factor or LDAR leak methods (LeakDAS) |

Table 5 Unit U5: Gasoline Dispensing

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

Table 6 Unit IA1, IA2, and IA3: Emergency Generators and Fire Pumps

| EP | Equipment | Emission Factor |
|---------|---|-------------------|
| IA1-GEN | Diesel emergency generator, make Cummins, 563 kW (765 hp) | AP-42 Chapter 3.4 |
| IA2-FP1 | Diesel Fire Pump, make Clark Fie Protection Products, Inc., 210 kW (285 hp) | AP-42 Chapter 3.3 |
| IA3-FP2 | Diesel Emergency Fire Pumps, 352 hp | AP-42 Chapter 3.3 |
| IA3-FP3 | Diesel Emergency Fire Pumps, 352 hp | AP-42 Chapter 3.3 |

Table 7 Unit IA4

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

Attachment B – NO_x RACT Plan⁶⁰

1. The oxides of nitrogen (NO_x, expressed as NO₂) emission from each boiler shall not exceed 0.20 pounds per million-Btu of heat input, based upon a 30-day rolling average. This limit applies at all times, including periods of startup, shutdown, or malfunction.
2. E.I. du Pont de Nemours & Company (DuPont) shall install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS), and record the output of the system, for measuring NO_x emissions from each boiler. The following requirements apply to each CEMS:
 - A. A CEMS shall be operated and data recorded during all periods of operation of each boiler except for CEMS breakdowns and repairs. Data shall be recorded during calibration checks and zero and span adjustments,
 - B. The 1-hour average NO_x emission rates measured by a CEMS shall be expressed in pounds per million-Btu heat input and shall be used to calculate the average emission rates under NO_x RACT Plan Element (Element) No. 1,
 - C. The 1-hour averages shall be calculated using the data points required under 40 CFR 60.13(b). At least 2 data points shall be used to calculate each 1-hour average,
 - D. The procedures under 40 CFR §60.13 shall be followed for installation, evaluation, and operation of a CEMS,
 - E. The span value for NO_x is 500, and
 - F. When NO_x emission data are not obtained because of CEMS breakdowns, repairs, calibration checks and zero and span adjustments, emission data shall be obtained by using standby monitoring systems, Method 7, Method 7a, or other reference methods approved by the District to provide emission data for a minimum of 75% of the operating hours in each boiler operating day, in at least 22 out of 30 successive boiler operating days.
3. By January 1, 2000, DuPont shall submit to the District the performance evaluation of the CEMS using the applicable performance specifications in 40 CFR Part 60 Appendix B.
4. DuPont shall maintain the records listed in 40 CFR §60.49b(g) with the following clarifications:
 - A. The NO_x emission rates shall be expressed in pounds per million Btu heat input measured, and
 - B. The applicable NO_x emission limit is contained in Element No. 1. Each record shall be maintained for a minimum of 5 years and made available to the District upon request.
5. DuPont shall submit to the District the following reports:
 - A. Excess emission reports for any excess emissions that occurred during the reporting

⁶⁰ This NO_x RACT Plan now applies to Chemours since E.I. du Pont split into two separate companies. Chemours now owns and operators the boilers that were in the original NO_x RACT Plan for the former E.I. du Pont.

period. "Excess emissions" means any calculated 30-day rolling average NO_x emission rated, as determined under Element No. 2, that exceeds the emission limit contained in Element No. 1, and

- B. Reports containing the information required to be recorded by Element No. 4
- 6. The reports required to be submitted by Element No. 5 shall reflect the preceding semi-annual period. Semi-annual periods shall run from January 1 to June 30 and July 1 to December 31. If no deviation occurred during the semi-annual period, the report shall contain a negative declaration. Each report shall be submitted within 60 days following the end of the semi-annual period.
 - 7. In lieu of the requirements in this NO_x RACT Plan, DuPont may comply with alternative requirements regarding emission limitations, equipment operation, test methods, monitoring, record keeping, or reporting, provided the following conditions are met:
 - A. The alternative requirements are established and incorporated into an operating permit pursuant to a Title V Operating Permit issuance, renewal, or significant permit revision process as established in Regulation 2.16.
 - B. The alternative requirements are consistent with the streamlining procedures and guidelines set forth in section II.A. of *White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program*, March 5, 1996, U.S. Environmental Protection Agency, Office of Air Quality Planning and Standards.

The overall effect of compliance with alternative requirements shall consider the effect on an intrinsic basis, such as pounds per million Btu,
 - C. The EPA has not objected to the issuance, renewal, or revision of the Title V Operating Permit, and either
 - D. If the public comment period preceded the EPA review period, then the District had transmitted any public comments concerning the alternative requirements to the EPA with the proposed permit, or
 - E. If the EPA and public comment periods ran concurrently, then the District had transmitted any public comments concerning the alternative requirements to EPA no later than 5 working days after the end of the public comment period.
 - 8. The District's determination of approval of any alternative requirements is not binding on EPA. Noncompliance with any alternative requirement established pursuant to the Title V Operating Permit process constitutes a violation of the NO_x RACT Plan.

Attachment C – Protocol Checklist for a Performance Test

A complete protocol must include the following information

1. Facility name, location, and Plant ID number.
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 it may be to show compliance with a federal regulation or emission standard.)
7. Tentative test dates. (These may change but final notice is required 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) and justification of the planned production rate, if less than the maximum rate.
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, if applicable.
13. Discussion of operating conditions that tend to cause worst case emissions. This is especially important to clarify if worst case emissions do not result from the maximum production rate.
14. Process flow diagram.
15. The type and manufacturer of the control equipment, if any.
16. The process and/or control equipment parameters to be monitored and recorded during the performance test. These parameters may include pressure drops, flow rates, pH, temperature, *etc.* The values achieved during the test may be required during subsequent operations to describe the operating parameters that are indicative of good operating performance.
17. How quality assurance and accuracy of the data will be maintained, including sample identification and chain-of-custody procedures, audit sample provider, and number of audit samples to be used, if applicable.
18. Diameter of the pipe, duct, stack, or flue 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. The number of traverse points to be tested for the outlet and the inlet if required, using Method 1 in Appendix A-1 to 40 CFR Part 60.

The Stack Test Review fee must be submitted with each stack test protocol.

The current fee is listed on the APCD website (louisvilleky.gov/APCD)