



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



Title V Operating Permit

Permit No.: O-0062-18-V

Plant ID: 0062

Effective Date: 01/03/2019

Expiration Date: 01/31/2024

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

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

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

Administratively Complete Date:	01/19/2018
Public Notice Date:	11/18/2018
Proposed Permit Date:	11/18/2018

A handwritten signature in blue ink, appearing to read "Matt K.", written over a white background.

Permit writer: Shannon Hosey

Air Pollution Control Officer
1/3/2019

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Permit Revisions and Changes

Permit No.	Public Notice Date	Issue Date	Change Type	Description/Scope
160-97-TV	9/24/2000, 12/10/2000, 1/28/2001	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

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

Application and Related Documents

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

Abbreviations and Acronyms

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

Preamble

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

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

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

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

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

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

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

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

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

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

General Conditions

1. **Compliance** - The owner or operator shall comply with all applicable requirements and with all terms and conditions of this permit. Any noncompliance shall constitute a violation of the Act, State, and District regulations and shall cause the source to be subject to enforcement actions including, but not limited to, the termination, revocation and reissuance, or revision of this permit, or denial of a permit application to renew this permit. Notwithstanding any other provision in the Jefferson County portion of the Kentucky SIP approved by EPA, any credible evidence may be used for the purpose of establishing whether the owner or operator is in compliance with, has violated, or is in violation of any such plan.
[Regulation 2.16, sections 4.1.3, 4.1.13.1, and 4.1.13.7]

2. **Compliance Certification** - The owner or operator shall certify, annually, or more frequently if required in applicable regulations, compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. This certification shall meet the requirements of Regulation 2.16, sections 3.5.11 and 4.3.5. The owner or operator shall submit the annual compliance certification (Form 9400-O) directly to the EPA and to the District, as set forth in Regulation 2.16, section 4.3.5.4, at the following addresses:

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

*Air Pollution Control District
701 W. Ormsby Avenue, Suite 303
Louisville, Kentucky 40203-3137*

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

3. **Compliance Schedule** - The owner or operator shall submit a schedule of compliance for each emission unit that is not in compliance with all applicable requirements. A compliance schedule must meet the requirements of Regulation 2.16, section 3.5.9.5. A schedule of compliance shall be supplemental to, and shall not condone noncompliance with, the applicable requirements on which it is based. For each schedule of compliance, the owner or operator shall submit certified progress reports at least semi-annually, or at a more frequent period if specified in an applicable requirement or by the District in accordance with Regulation 2.16 section 4.3.4. The progress reports shall contain:

- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when activities, milestones, or compliance were achieved.
- b. An explanation of why dates in the schedule of compliance were not or will not be met, and preventive or corrective measures adopted.

4. **Duty to Supplement or Correct Application** - If the owner or operator fails to submit relevant facts or has submitted incorrect information in the permit application, they shall, upon discovery of the occurrence, promptly submit the supplementary facts or corrected information in accordance with Regulation 2.16, section 3.4.

5. **Emergency Provision**

- a. An emergency shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emission limitations if the conditions in Regulation 2.16 are met. The affirmative defense of emergency shall be demonstrated

through properly signed, contemporaneous operating logs, or other relevant evidence that:

- i. An emergency occurred and that the owner or operator can identify the cause of the emergency;
 - ii. The permitted facility was at the time being properly operated;
 - iii. During the period of the emergency the owner or operator expeditiously took all reasonable steps, consistent with safe operating practices, to minimize levels of emissions that exceeded the emission standards or other requirements in this permit; and
 - iv. The owner or operator submitted notice meeting the requirements of Regulation 1.07 of the time when emissions limitations were exceeded because of the emergency. This notice must fulfill the requirement of this condition, and must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
 - b. In an enforcement proceeding, the owner or operator seeking to establish the occurrence of an emergency has the burden of proof.
 - c. This condition is in addition to any emergency or upset provision contained in an applicable requirement. [Regulation 2.16, sections 4.7.1 through 4.7.4]
6. **Emission Fees Payment Requirements** - The owner or operator shall pay annual emission fees in accordance with Regulation 2.08, section 1.3. Failure to pay the emissions fees when due shall constitute a violation of District Regulations. Such failure is subject to penalties and an increase in the fee of an additional 5% per month up to a maximum of 25% of the original amount due. In addition, failure to pay emissions fees within 60 days of the due date shall automatically suspend this permit to operate until the fee is paid or a schedule for payment acceptable to the District has been established. [Regulation 2.08, section 1.2.5]
7. **Emission Offset Requirements** - The owner or operator shall comply with the requirements of Regulation 2.04.
8. **Enforceability Requirements** - Except for the conditions that are specifically designated as District-Only Enforceable Conditions, all terms and conditions of this permit, including any provisions designed to limit a source's potential to emit, are enforceable by EPA and citizens as specified under the Act. [Regulation 2.16, sections 4.2.1 and 4.2.2]
9. **Enforcement Action Defense**
- a. It shall not be a defense for the owner or operator in an enforcement action that it would have been necessary for the owner or operator to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.
 - b. The owner or operator's failure to halt or reduce activity may be a mitigating factor in assessing penalties for noncompliance if the health, safety or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operation. [Regulation 2.16, sections 4.1.13.2 and 4.1.13.3]
10. **Hazardous Air Pollutants and Sources Categories** - The owner or operator shall comply with the applicable requirements of Regulations 5.02 and 5.14.
11. **Information Requests** - The owner or operator shall furnish to the District, within a reasonable time, information requested in writing by the District, to determine whether cause exists for revising, revoking and reissuing, or terminating this permit, or to determine compliance with this

permit. The owner or operator shall also furnish, upon request, copies of records required to be kept by this permit. [Regulation 2.16, section 4.1.13.6]

If information is submitted to the District under a claim of confidentiality, the source shall submit a copy of the confidential information directly to EPA at the address shown in General Condition 35.b. [Regulation 2.07, section 10.2]

12. **Insignificant Activities** - The owner or operator shall:

- a. Notify the District in a timely manner of any proposed change to an insignificant activity that would require a permit revision. [Regulation 2.16, section 5]
- b. Submit a current list of insignificant activities by April 15 of each year with the annual compliance certification, including an identification of the additions and removals of insignificant activities that occurred during the preceding year. [Regulation 2.16, section 4.3.5.3.6]

13. **Inspection and Entry** - Upon presentation of credentials and other documents as required by law, the owner or operator shall allow the District or an authorized representative to perform the following during reasonable hours: [Regulation 2.16, section 4.3.2]

- a. Enter the premises to inspect any emissions-related activity or records required in this permit.
- b. Have access to and copy records required by this permit.
- c. Inspect facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required by this permit.
- d. Sample or monitor substances or parameters to assure compliance with this permit or any applicable requirements.

14. **Monitoring and Related Record Keeping and Reporting Requirement** - The owner or operator shall comply with the requirements of Regulation 2.16, section 4.1.9. Unless specified elsewhere in this permit, the owner or operator shall complete required monthly record keeping within 30 days following the end of each calendar month. The owner or operator shall submit all required monitoring reports at least once every six months, unless more frequent reporting is required by an applicable requirement. The reporting period shall be 1 January through 30 June and 1 July through 31 December of each calendar year. All reports shall be sent to the District at the address shown in paragraph 2 of these General Conditions and must be postmarked by the 60th day following the end of each reporting period, unless specified elsewhere in this permit. If surrogate operating parameters are monitored and recorded in lieu of emission monitoring, then an exceedance of multiple parameters may be deemed a single violation by the District for enforcement purposes. All reports shall include the company name, plant ID number, and the beginning and ending date of the reporting period. The compliance reports shall clearly identify any deviation from a permit requirement or a declaration that there were no such deviations. All semi-annual compliance reports shall include the statement "Based on information and belief formed after reasonable inquiry, I certify that the statements and information in this document are true, accurate, and complete" and the signature and title of a responsible official of the company.

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

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

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

15. **Off-permit Documents** - Any applicable requirements, including emission limitations, control technology requirements, or work practice standards, contained in an off-permit document cannot be changed without undergoing the permit revision procedures in Regulation 2.16, section 5. [Regulation 2.16, section 4.1.5]
16. **Operational Flexibility** - The owner or operator may make changes without permit revision in accordance with Regulation 2.16, section 5.8.
17. **Permit Amendments (Administrative)** - This permit can be administratively amended by the District in accordance with Regulation 2.16, section 5.4.
18. **Permit Application Submittal** - The owner or operator shall submit a timely and complete application for permit renewal or significant revision. If the owner or operator submits a timely and complete application then the owner or operator's failure to have a permit is not a violation until the District takes formal action on this permit application. This protection shall cease to apply if, subsequent to completeness determination, the owner or operator fails to submit, by the deadline specified in writing by the District, additional information required to process the application as required by Regulation 2.16, sections 3 and 5.2.
19. **Permit Duration** - This permit is issued for a fixed term of 5 years, in accordance with Regulation 2.16, section 4.1.8.3.
20. **Permit Renewal, Expiration and Application** - Permit renewal, expiration and application procedural requirements shall be in accordance with Regulation 2.16, sections 4.1.8.2 and 5.3. This permit may only be renewed in accordance with section 5.3.
21. **Permit Revisions** - No permit revision shall be required under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes that are provided for in the permit. [Regulation 2.16, section 4.1.16]
22. **Permit Revision Procedures (Minor)** - Except as provided in 40 CFR Part 72, the Acid Rain Program, this permit may be revised in accordance with Regulation 2.16, section 5.5.
23. **Permit Revision Procedures (Significant)** - A source seeking to make a significant permit revision shall meet all the Title V requirements for permit applications, issuance and Permit renewal, in accordance with Regulation 2.16, section 5.7, and all other applicable District Regulations.
24. **Permit Termination and Revocation by the District** - The District may terminate this permit only upon written request of the owner or operator. The District may revoke a permit for cause, in accordance with Regulation 2.16, section 5.11.1 through 5.11.6. For purposes of section 5.11.1, substantial or unresolved noncompliance includes, but is not limited to:
 - a. Knowingly operating process or air pollution control equipment in a manner not allowed by an applicable requirement or that results in excess emissions of a regulated air pollutant that would endanger the public or the environment;
 - b. Failure or neglect to furnish information, analyses, plans, or specifications required by the District;
 - c. Knowingly making any false statement in any permit application;
 - d. Noncompliance with Regulation 1.07, section 4.2; or
 - e. Noncompliance with KRS Chapter 77.

25. **Permit Shield** - The permit shield shall apply in accordance with Regulation 2.16, section 4.6.1.
26. **Prevention of Significant Deterioration of Air Quality** - The owner or operator shall comply with the requirements of Regulation 2.05.
27. **Property Rights** - This permit shall not convey property rights of any sort or grant exclusive privileges in accordance with Regulation 2.16, section 4.1.13.5.
28. **Public Participation** - Except for modifications qualifying for administrative permit amendments or minor permit revision procedures, all permit proceedings shall meet the requirements of Regulations 2.07, section 1; and 2.16, sections 5.1.1.2 and 5.5.4.
29. **Reopening For Cause** - This permit shall be reopened and revised by the District in accordance with Regulation 2.16 section 5.9.
30. **Reopening for Cause by EPA** - This permit may be revised, revoked and reissued or terminated for cause by EPA in accordance with Regulation 2.16 section 5.10.
31. **Risk Management Plan [112(r)]** - For each process subject to section 112(r) of the Act, the owner or operator shall comply with 40 CFR Part 68 and Regulation 5.15.
32. **Severability Clause** - The conditions of this permit are severable. Therefore, if any condition of this permit, or the application of any condition of this permit to any specific circumstance, is determined to be invalid, the application of the condition in question to other circumstances, as well as the remainder of this permit's conditions, shall not be affected.
[Regulation 2.16, section 4.1.12]
33. **Stack Height Considerations** - The owner or operator shall comply with the requirements of Regulation 2.10.
34. **Startups, Shutdowns, and Upset Conditions Requirements** - The owner or operator shall comply with the requirements of Regulation 1.07.
35. **Submittal of Reports, Data, Notifications, and Applications**
 - a. Applications, reports, test data, monitoring data, compliance certifications, and any other document required by this permit as set forth in Regulation 2.16 sections 3.1, 3.3, 3.4, 3.5, 4.1.13.6, 5.8.5 and 5.12 shall be submitted to:
*Air Pollution Control District
701 West Ormsby Avenue, Suite 303
Louisville, 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 IV
APTMD - 12th floor
Atlanta Federal Center
61 Forsyth Street
Atlanta, GA 30303-3104*

36. **Other Applicable Regulations** - The owner or operator shall comply with all applicable requirements of the following:

Regulation	Title
1.01	General Application of Regulations and Standards
1.02	Definitions
1.03	Abbreviations and Acronyms
1.04	Performance Tests
1.05	Compliance With Emissions Standards And Maintenance Requirements
1.06	Source Self-Monitoring, Emission Inventory Development and Reporting
1.07	Excess Emissions During Startups, Shutdowns, and Upset Conditions
1.08	Administrative Procedures
1.09	Prohibition of Air Pollution
1.10	Circumvention
1.11	Control of Open Burning
1.14	Control of Fugitive Particulate Emissions
2.01	General Application (Permit Requirements)
2.02	Air Pollution Regulation Requirements and Exemptions
2.03	Authorization to Construct or Operate; Demolition/Renovation Notices and Permit Requirements
2.07	Public Notification for Title V, PSD, and Other Offset Permits; SIP Revisions; and Use of Emission Reduction Credits
2.09	Causes for Permit Modification, Revocation, or Suspension
2.10	Stack Height Considerations
2.11	Air Quality Model Usage
2.16	Title V Operating Permits
4.01	General Provisions for Emergency Episodes
4.02	Episode Criteria
4.03	General Abatement Requirements
4.07	Episode Reporting Requirements
5.02	Adoption and Incorporation by Reference of National Emission Standards for Hazardous Air Pollutants
6.01	General Provisions (Existing Affected Facilities)
6.02	Emission Monitoring for Existing Sources
7.01	General Provisions (New Affected Facilities)
7.02	Adoption and Incorporation by Reference of Federal New Source Performance Standards

District Only Enforceable Regulations:

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

37. **Stratospheric Ozone Protection Requirements** - Any facility having refrigeration equipment, including air conditioning equipment, which uses a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), and any facility which maintains, services, or repairs motor vehicles using a Class I or II substance as refrigerant must comply with all requirements of 40 CFR 82, Subparts A, B, and F. Those requirements include the following restrictions:
- a. Any facility having any refrigeration equipment that normally contains fifty pounds of refrigerant or more must keep servicing records documenting the date and type of all service and the quantity of any refrigerant added, according to 40 CFR 82.166;
 - b. No person repairing or servicing a motor vehicle may perform any service on a motor vehicle air conditioner (MVAC) involving the refrigerant for such air conditioner unless the person has been properly trained and certified as provided in 40 CFR 82.34 and 40 CFR 82.40, and properly uses equipment approved according to 40 CFR 82.36 and 40 CFR 82.38, and complies with 40 CFR 82.42;
 - c. No person may sell or distribute, or offer for sale or distribution, any substance listed as a Class I or II substance in 40 CFR 82, Subpart A, Appendices A and B, except in compliance with 40 CFR 82.34(b), 40 CFR 82.42, and/or 40 CFR 82.166;
 - d. No person maintaining, servicing, repairing, or disposing of appliances may knowingly vent or otherwise release into the atmosphere any Class I or II substance used as a refrigerant in such equipment and no other person may open appliances (except MVACs as defined in 40 CFR 82.152) for service, maintenance, or repair unless the person has been properly trained and certified according to 40 CFR 82.161 and unless the person uses equipment certified for that type of appliance according to 40 CFR 82.158 and unless the person observes the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;

- e. No person may dispose of appliances (except small appliances, as defined in 40 CFR 82.152) without using equipment certified for that type of appliance according to 40 CFR 82.158 and without observing the practices set forth in 40 CFR 82.156 and 40 CFR 82.166;
- f. No person may recover refrigerant from small appliances, MVACs and MVAC-like appliances (as defined in 40 CFR 82.152), except in compliance with the requirements of 40 CFR 82 Subpart F;
- g. If the permittee manufactures, transforms, imports, or exports, a Class I or II substance (listed in 40 CFR 82, Subpart A, Appendices A and B), the permittee is subject to all requirements as specified in 40 CFR 82 Subpart A, Production and Consumption Controls. [Regulation 2.16, section 4.1.5]

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).

Plantwide 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. TAC

- i. The owner or operator shall not allow emissions of any TAC to exceed environmentally acceptable (EA) levels, whether specifically established by modeling or determined by the District to be *de minimis*.
[Regulations 5.00 and 5.21]
- ii. The owner or operator shall submit a STAR EA demonstration with the application for construction for any new or modified emission unit. The STAR EA demonstration must demonstrate compliance for all Category 1 through Category 4 TACs emitted from that emission unit as well as compliance with all other STAR goals. [Regulation 5.21, section 4.22.1]
- iii. For any conditions outside the environmental acceptability analysis, including if a new TAC is introduced or the content of a TAC in a raw material increases above *de minimis*, the owner or operator shall verify and document the environmental acceptability of the revised emissions at the time of the change. Prior approval by the District is not required for a change pursuant to Regulation 5.21, section 4.22.3 if the requirements of 4.23.1 through 4.23.4 are met. Changes to the air dispersion modeling program or meteorological data used in the most recent Environmental Acceptability Demonstration do not trigger the requirement to re-analyze.
[Regulation 5.21, Section 4]
- iv. If the TAC does not have an established BAC or *de minimis* value, the owner or operator shall calculate and report these values. The form, located in Attachment B, may be used for determining BAC and *de minimis* values. [Regulation 5.20, Sections 3 and 4]

b. 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, including the requirement to submit a Risk Management Plan in a method and format as specified by the District and EPA. (See Off-Permit Documents Section of this permit) [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. TAC

- i. The owner or operator shall maintain records sufficient to demonstrate environmental acceptability, including, but not limited to, (M)SDS, analysis of emissions, and/or modeling results.
- ii. If a new TAC is introduced or the content of a TAC in a raw material increases above *de minimis*, the owner or operator shall verify and document the environmental acceptability of the revised emissions, at the time of the change.

b. 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 4.1.1]

The owner or operator shall report the following information, as required by General Condition 14:

a. TAC

- i. Any conditions that were inconsistent with those conditions analyzed in the most recent Environmental Acceptability Demonstration. This includes, but is not limited to, control device upset conditions.
- ii. The re-evaluated EA demonstration to the District within 6 months after a change of a raw material.

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

Comments

1. The facility submitted the TAC Environmental Acceptability (EA) Demonstration to the District on April 24, 2018. Compliance with the STAR EA Goals was demonstrated in the source's EA Demonstration. Based on Tier 4 ISC3 refined air modeling, the carcinogenic risk for each Category 1 and Category 2 TAC is below 1.0 for non-industrial property and below 10.0 for industrial property utilizing control devices for each process. The carcinogenic risk for all Category 1 and Category 2 TACs for all processes is below 7.5 for non-industrial property and below 75.0 for industrial property. Since the maximum R_{NC} for all process/process equipment is less than 1.0 and the maximum R_C is less than 7.5 for the plantwide cumulative risk, the source has demonstrated compliance with the EA Goals for each TAC.

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

Emission Unit U1: Powerhouse – Two Natural Gas Boilers**EU U1 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 A	General Provisions	60.1 through 60.19
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)
40 CFR 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters	63.7480 through 63.7575

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		

EU U1 Equipment

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
1000 ^{1,2}	Natural Gas-Fired 174 MMBtu/hr Babcock and Wilcox Boiler	1994	STAR, 6.42, 7.06, 40 CFR 60 Subpart Db, and 40 CFR 63 Subpart DDDDD	N/A	S1
1001 ¹	Natural Gas-Fired 174 MMBtu/hr Babcock and Wilcox Boiler	1994	STAR, 6.42, 7.06, 40 CFR 60 Subpart Db, and 40 CFR 63 Subpart DDDDD	N/A	S1

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

² All criteria pollutants potential emissions were less than the significant levels for PSD/Nonattainment NSR except for SO₂, NO_x, and CO. [Construction Permit 657-94-C]

EU U1 Specific Conditions

S1. Standards

[Regulation 2.16 Section 4.1.1]

a. HAP

You must meet each work practice standard in Table 3 to 40 CFR 63 Subpart DDDDD that applies to your boiler (EP 1000 and EP 1001), for each boiler at your source. [40 CFR 63.7500(a)(1)]

Table 3 to Subpart DDDDD of Part 63 - Work Practice Standards

If your unit is....	You must meet the following...
An existing boiler (EP 1000 and EP 1001) with a continuous oxygen trim system that maintains an optimum air to fuel ratio ³	Conduct a tune-up of the boiler or process heater every 5 years as specified in § 63.7540.
An existing boiler located at a major source facility	Must have a one-time energy assessment ⁴ performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements in this table, satisfies the energy assessment requirement. The energy assessment must include the following with extent of the evaluation for items a. to e. appropriate for the on-site technical hours listed in § 63.7575:
	a. A visual inspection of the boiler or process heater system.
	b. An evaluation of operating characteristics of the boiler or process heater systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints.
	c. An inventory of major energy use systems consuming energy from affected boilers and process heaters and which are under the control of the boiler/process heater owner/operator.
	d. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage.
	e. A review of the facility's energy management program and provide recommendations for improvements consistent with the definition of energy management program, if identified.
	f. A list of cost-effective energy conservation measures that are within the facility's control.
	g. A list of the energy savings potential of the energy conservation measures identified.
	h. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

³ The boilers are equipped with a continuous oxygen trim system that maintains an optimum air to fuel ratio, therefore the tune-up only needs to be conducted once every 5 years.

⁴ A one-time Energy Assessment was performed according to 40 CFR 63.7530(e).

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 NOX RACT plan that was adopted by Board Order on November 8, 1999.⁵
[See NOX RACT Attachment] [Regulation 6.42, section 4.3]
- iii. The owner or operator shall not allow or cause the plantwide NOX emissions to equal or exceed 203.2 tons during any consecutive 12-month period.⁶ [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. [Regulation 7.06, section 4.2]⁷

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.⁸ [Regulation 7.06, section 4.1.4]

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.⁶
[Regulation 7.06, section 5.1.2]

⁵ The replacement of 3 large existing coal boiler to the current 2 gas/oil boilers, along with the Board Order dated of November 8, 1999 constitute the NOX RACT plan, per Regulation 6.42, section 4.3 for this source. [See NOX RACT Attachment]

⁶ The potential NOx emissions combusting natural gas are 203.2 tpy. Netting was performed for NOx and it “netted out”. The construction permit was revised to lower the NOx from 242.5 tpy to the potential NOx emissions of 203.2 tpy. [Construction Permit 657-94-C (R1) Effective 10/28/2014]

⁷ A determination has been made that a natural gas-fired boiler should inherently meet the opacity standard.

⁸ A one-time PM and SO₂ compliance demonstration has been performed using AP-42 emission factors. The emission standards cannot be exceeded when combusting natural gas. Therefore, there are no additional monitoring, recordkeeping, or reporting requirements with respect to PM and SO₂ for natural gas.

f. TAC⁹

See Plantwide STAR Requirements.

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. For affected sources subject to the work practice standard, you must conduct an performance tune-up every 5 years according to §63.7540(a)(12). Each 5 year tune-up specified in §63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up.
[40 CFR 63.7515(d)]
- ii. The 5 year boiler tune-up specified 40 CFR 63.7515(d) must meet the following minimum requirements: [40 CFR 63.7540(a)(10)]
 - (1) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may delay the burner inspection until the next scheduled unit shut down, but you must inspect each burner at least once every 36 months).
[40 CFR 63.7540 (a)(10)(i)]
 - (2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
[40 CFR 63.7540 (a)(10)(ii)]
 - (3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly.
[40 CFR 63.7540(a)(10)(iii)]
 - (4) Optimize total emissions of carbon monoxide. This optimization should be consistent with the manufacturer's specifications, if available. [40 CFR 63.7540(a)(10)(iv)]
 - (5) Measure the concentrations in the effluent stream of carbon monoxide in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements

⁹ 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)

may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made).

[40 CFR 63.7540(a)(10)(v)]

- (6) Maintain onsite and submit, if requested by the Administrator, annual report containing the information §§63.7540(a)(10)(vi)(A) through (a)(10)(vi)(C). [40 CFR 63.7540(a)(10)(vi)]
 - (a) The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured before and after the tune-up of the boiler. [40 CFR 63.7540(a)(10)(vi)(A)]
 - (b) A description of any corrective actions taken as a part of the tune-up of the boiler. [40 CFR 63.7540(a)(10)(vi)(B)]
 - (c) The type and amount of fuel used over the 12 months prior to the tune-up of the boiler if the unit was physically and legally capable of using more than one type of fuel. (Units sharing a fuel meter may estimate the fuel use by each unit. [40 CFR 63.7540(a)(10)(vi)(C)]

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.
 - (2) The average hourly nitrogen oxides emission rates (expressed as NO₂) (ng/J or lb/million-Btu heat input) measured or predicted.
 - (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.
 - (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.
 - (5) Identification of the times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and description of corrective action

taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.

- (6) Identification of F factor used for calculations, method of determination, and type of fuel combusted.
- (7) Identification of times when hourly averages have been obtained based on manual sampling methods.
- (8) Identification of the times when the pollutant concentration exceeded full span of the CEMS.
- (9) Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3.
- (10) Results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1.

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

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

d. PM

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

e. SO₂

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

f. TAC

See Plantwide STAR Requirements.

S3. Reporting

[Regulation 2.16 Section 4.1.1]

The owner or operator shall report the following information, as required by General Condition 14:

a. HAP

- i. For boilers that are subject only to a requirement to conduct an 5 year tune-up according to §63.7540(a)(12), and not subject to emission limits or operating limits, you may submit only an annual compliance report as applicable, as specified in §63.7550(b)(1) through (5), instead of a semi-annual compliance report. [40 CFR 63.7550(b)]
- ii. The compliance report must contain the information required below:
[40 CFR 63.7550(c)]
 - (1) Company name and address. [40 CFR 63.7550(c)(5)(i)]
 - (2) Statement by a responsible official, with the official's name, title, and signature, certifying the truth, accuracy and completeness of the report. [40 CFR 63.7550(c)(5)(xvii)]
 - (3) Date of report and beginning and ending dates of the reporting period. [40 CFR 63.7550(c)(5)(iii)]
 - (4) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an 5 year tune-up according to §63.7540(a)(12). Include the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled unit shutdown. [40 CFR 63.7550(c)(5)(xiv)]

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

There are no reporting requirements for this equipment.

d. PM

There are no reporting requirements for this equipment.

e. SO₂

There are no reporting requirements for this equipment.

f. TAC

See Plantwide STAR Requirements.

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

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
1.18	Rule Effectiveness	1, 2 and 3
5.15	Chemical Accident Prevention Provisions	1
6.13	Standards of Performance for Existing Storage Vessels for Volatile Organic Substances	1, 2, 3.1 and 4
6.24	Standards of Performance for Existing Sources Using Organic Materials	1, 2, 3.2, 4.1 and 5.2
40 CFR 64	Compliance Assurance Monitoring	§64.1 – 10
40 CFR 63 Subpart A	General Provisions	§63.1 – 16
40 CFR 63 Subpart F	National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry	§63.100 – 106
40 CFR 63 Subpart G	National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations and Wastewater	§§63.110 – 123, 126 – 149, 151 and 152
40 CFR 63 Subpart H	National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks	§§63.160 – 163, 168, 175, 176, 180 - 182
40 CFR 68	Chemical Accident Prevention Provisions	Subparts A - H
40 CFR 82	Protection of Stratospheric Ozone	N/A

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		

EU U3 Equipment

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
3000	Two (2) Chloroform Storage Tanks TS-3 and TS-18, 74,600 gallons each	1954	STAR, 6.13, 40 CFR 63 Subparts F, G, H	C-16	S-3
3001	Vaporizers V-1 and V-2	1968	STAR, 40 CFR 64	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	Reactor 1984 Tank 1955	STAR, 6.24, 40 CFR 63 Subparts F, G, H	SB-5 & SB-7	S-5
3009	Fugitive Emissions (pumps, connectors, valves)	N/A	STAR, 40 CFR 63 Subparts F and H	N/A	F-1
HF-6005 ¹⁰	HF Unloading, 13,000 lb/hr	1980	STAR, 40 CFR 64	SB-5, SB-7 & SB-301 or SB-403 ¹¹	S-5 S-16 S-14 ¹²

EU U3 Control Devices

Control ID	Description	Control Efficiency	Performance Indicator
SB-301	Wet Scrubber	99%	Minimum Flow Rate 25 gallons/min
C-16	Condenser (vapor recovery system)	90%	Temperature
SB-8	Wet Scrubber	99%	Caustic concentration is analyzed weekly. Caustic is changed out when the NaOH % drops below 8%
SB-5	East Wet Scrubber (Backup)	99%	Acid Strength < 5%
SB-7	West Wet Scrubber	99%	Acid Strength < 5%
SB-403	Wet Scrubber (located on E.I. du Pont's facility, Plant ID 1912)	99% ¹³	Pressure

¹⁰ 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.

¹¹ E.I. du Pont's Scrubber (Plant ID 1912)

¹² E.I. du Pont's Scrubber Release ID (Plant ID 1912)

¹³ Scrubber SB-403 was last tested on June 22, 2011 and the test demonstrated a hydrogen fluoride (HF) removal efficiency in excess of 99.2%.

EU U3 Specific Conditions

S1. Standards

[Regulation 2.16 Section 4.1.1]

a. Chemical Accident Prevention and Risk Management Plan [Regulation 5.15 and 40 CFR Part 68 Subpart G]

See Plantwide Regulation 5.15 Requirements.

b. HAP [non LDAR] [40 CFR 63 Subpart F, 40 CFR 63 Subpart G]

- i. The owner or operator shall prepare maintenance procedures for management of wastewaters generated from the emptying and purging of equipment in the process during temporary shutdowns for inspections, maintenance, and repair. [40 CFR 63.105(b)]
 - (1) Specify the process equipment or maintenance tasks that are anticipated to create wastewater during maintenance activities. [40 CFR 63.105(b)(1)]
 - (2) Specify the procedures that will be followed to properly manage the wastewater and control organic HAP emissions to the atmosphere. [40 CFR 63.105(b)(2)]
 - (3) Specify the procedures to be followed when clearing materials from process equipment. [40 CFR 63.105(b)(3)]
- ii. The owner or operator shall modify and update the information required as needed following each maintenance procedure based on the actions taken and the wastewaters generated in the preceding maintenance procedure. [40 CFR 63.105(c)]
- iii. The owner or operator shall operate a closed vent system and a control device on the two storage tanks in Emission Point 3000. The control device shall comply with the following: [40 CFR 63.119(a)(2)]
 - (1) The control device shall be designed and operated to reduce inlet emissions of total organic HAP by 90% or greater. [40 CFR 63.119(e)(2)]
 - (2) Periods of planned or routine maintenance of the control device, during which the control device does not meet the specifications, shall not exceed 240 hours per year. [40 CFR 63.119(e)(3)]

c. HAP [LDAR] [40 CFR 63 Subpart H¹⁴]

- i. For pumps in light liquid service, the instrument reading, as determined by the method as specified in §63.180(b), that defines a leak of the standard is 1000 parts per million or greater. [40 CFR 63.163(b)(2)(iii)(C)]
- ii. For pumps to which a 1000 parts per million leak definition applies, repair is not required unless an instrument reading of 2000 parts per million or greater is detected. [40 CFR 63.163(c)(3)]
- iii. For connectors in light liquid service, if an instrument reading greater than or equal to 500 ppm is measured, a leak is detected. [63.174(a)(2)]
- iv. For valves in light liquid service, if an instrument reading greater than or equal to 500 ppm is measured, a leak is detected. [63.168(b)(2)(iii)]

d. TAC¹⁵

- i. See Plantwide STAR Requirements.
- ii. For Emission Point 3000:
 - (1) The owner or operator shall utilize Control Device C-16 (vapor recovery system) at all times the chloroform storage tanks are in operation except for periods of planned or routine maintenance of the control device, during which the control device does not meet the specifications, shall not exceed 240 hours per year. The owner or operator 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 4.7]
 - (2) The owner or operator shall not allow chloroform emissions to exceed 2026 pounds per 12-consecutive month period.
 - (3) Control Device C-16 (vapor recovery system) shall have a control efficiency of 90%.
- iii. 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

¹⁴ Regulation 6.39 does not apply to affected facilities that are also subject to 40 CFR Part 63 Subpart H where such standards are applicable to the affected facility either directly or through incorporation by reference into another standard promulgated under 40 CFR Part 63.

¹⁵ For Emission Point 3002, the uncontrolled potential emissions are less than *de minimis*.

with good air pollution control practice for minimizing emissions. [Regulation 5.12, section 4.7]

- (2) The owner or operator shall not allow chlorine emissions to exceed 225 pounds per 12-consecutive month period.
- iv. For Emission Point 3009, the owner or operator shall not allow chloroform emissions to exceed 224 pounds per 12-consecutive month period.¹⁶
- v. For Emission Point 3009, the owner or operator shall not allow chlorine emissions to exceed 352 pounds per 12-consecutive month period.¹⁷
- vi. For Emission Point HF-6005¹⁷:
 - (1) The owner or operator shall utilize Control Device SB-301 (wet scrubber), Control Device SB-7 (wet scrubber), SB-5 (back up wet scrubber) or SB-403¹⁸ (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. [Regulation 5.21, section 4.7]
 - (2) The owner or operator shall not allow hydrofluoric acid to exceed de minimis levels.

e. VOC

- i. The owner or operator shall use a vapor recovery system on Emission Point 3000 and ensure that the control efficiency is greater than 85%. [Regulation 6.13, section 3.1]
- ii. The owner or operator shall limit VOC emissions to 3000 lb/day and 450 lb/hr from Emission Point 3002.¹⁹ [Regulation 6.24, section 3.3]

¹⁶ Modeling was performed using the emission rate of 224 pounds per 12-consecutive month period for Chloroform and 352 pounds per 12-consecutive month period for Chlorine and was environmentally acceptable.

¹⁷ The maximum controlled potential hydrofluoric acid (HF) emissions are 233.697 lb/yr and the hourly maximum controlled emissions are 0.027 lbs. These maximum controlled potential emissions levels are below the HF *de minimis* of 6,720 lb/yr and 7.56 lb/hr.

¹⁸ 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.

¹⁹ A one-time compliance demonstration that showed the standard cannot be exceeded uncontrolled was performed on March 2, 2007.

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. Chemical Accident Prevention and Risk Management Plan [Regulation 5.15 and 40 CFR Part 68 Subpart G]

- i. See Plantwide Regulation 5.15 Requirements.

b. HAP [non LDAR] [40 CFR 63 Subpart F, 40 CFR 63 Subpart G]

- i. The owner or operator shall either prepare a design evaluation, which includes the information specified in §63.120(d)(1)(i), or submit the results of a performance test as described in §63.120(d)(1)(ii). [40 CFR 63.120(d)(1)]
 - (1) The design evaluation shall include documentation demonstrating that the control device being used achieves the required control efficiency during reasonably expected maximum filling rate. This documentation is to include a description of the gas stream which enters the control device, including flow and organic HAP content under varying liquid level conditions, and the information specified in §63.120(d)(1)(i)(A) and §63.120(d)(1)(i)(E), as applicable. [40 CFR 63.120(d)(1)(i)]
 - (a) If the control device receives vapors, gases or liquids, other than fuels, from emission points other than storage vessels subject to this subpart the efficiency demonstration is to include consideration of all vapors, gases, and liquids, other than fuels, received by the control device. [40 CFR 63.120(d)(1)(i)(A)]
 - (b) For condensers, the design evaluation shall include the final temperature of the organic HAP vapors, the type of condenser, and the design flow rate of the organic HAP emission stream. [40 CFR 63.120(d)(1)(i)(E)]
- ii. The owner or operator shall keep a record of the dimensions and capacity of each storage vessel in emission point 3000. [40 CFR 63.123(a)]
- iii. An owner or operator who elects to comply with §63.119(e) of 40 CFR 63 Subpart G shall keep the records specified in the following paragraphs in a readily accessible location. [40 CFR 63.123(f)]
 - (1) A record of the measured values of the parameters monitored in accordance with §63.120(d)(5). [40 CFR 63.123(f)(1)]

- (2) A record of the planned routine maintenance performed on the control device, including the duration of each time the control device does not meet the specification of §63.119(e)(1) or (e)(2), as applicable, due to the planned routine maintenance. Such a record shall include the information specified in the following paragraphs. [40 CFR 63.123(f)(2)]
 - (a) The first time of day and date the requirements of §63.119(e)(1) or (e)(2), as applicable, were not met at the beginning of the planned routine maintenance, and [40 CFR 63.123(f)(2)(i)]
 - (b) The first time of day and date the requirements of §63.119(e)(1) or (e)(2), as applicable, were met at the conclusion of the planned routine maintenance. [40 CFR 63.123(f)(2)(ii)]
- iv. The owner or operator shall keep records of the occurrence and duration of each start up, shutdown, and malfunction of operation of process equipment or of air pollution control equipment or continuous monitoring systems used to comply with subparts F, G, or H during which excess emissions occur. [40 CFR 63.103(c)(2)(i)]
- v. The owner or operator shall keep records for each start up, shut down or malfunction during which excess emissions occur, to demonstrate that the procedures specified in the source's start up, shut down, and malfunction plan were followed, and documentation of actions that are not consistent with the plan that were taken. [40 CFR 63.103(c)(2)(ii)]

c. HAP [LDAR] [40 CFR 63 Subpart H]

- i. The owner or operator of a process unit subject to this subpart shall monitor each pump monthly to detect leaks by the method specified in §63.180(b) and shall comply with the requirements of §63.163(a) through (d), except as provided in §63.162(b) of Subpart H and §63.163(e) through (j). [40 CFR 63.163(b)(1)]
- ii. Each pump shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal. If there are indications of liquids dripping from the pump seal, a leak is detected. [40 CFR 63.163(b)(3)]
 - (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §63.163(c)(3) or §63.171 . [40 CFR 63.163(c)(1)]
 - (2) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. First attempts at repair include, but are

- not limited to, the following practices where practicable. [40 CFR 63.163(c)(2)]
- (a) Tightening of packing gland nuts. [40 CFR 63.163(c)(2)(i)]
 - (b) Ensuring that the seal flush is operating at design pressure and temperature. [40 CFR 63.163(c)(2)(ii)]
- iii. Any pressure relief device that is equipped with a disk upstream of the pressure relief device is exempt from the requirements of paragraphs (a) and (b) in §63.165, provided the owner or operator complies with the requirements in §63.165(d)(2). [40 CFR 63.165(d)(1)]
- (1) After each pressure release, a 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 §63.171. [40 CFR 63.165(d)(2)]
- iv. The owner or operator of a source subject shall monitor all valves, except as provided in §63.162(b) and (h) and (i), at the intervals specified in (c) and (d) and shall comply with all other provisions of this section, except as provided in §63.171, §63.177, §63.178, and §63.179. [40 CFR 63.168(b)]
- (1) The valves shall be monitored to detect leaks by the method specified in §63.180(b). [40 CFR 63.168(b)(1)]
 - (2) The owner or operator shall monitor valves for leaks at the intervals specified in §63.168(d). [40 CFR 63.168(d)]
- v. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §63.171. [40 CFR 63.168(f)(1)]
- (1) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected. [40 CFR 63.168(f)(2)]
 - (2) When a leak has been repaired, the valve shall be monitored at least once within the first 3 months after its repair. [40 CFR 63.168(f)(3)]
- vi. First attempts at repair include, but are not limited to, the practices listed in §63.168(g) where practicable. [40 CFR 63.168(g)]
- (1) Tightening of bonnet bolts,
 - (2) Replacement of bonnet bolts,
 - (3) Tightening of packing gland nuts, and
 - (4) Injection of lubricant into lubricated packing.
- vii. The owner or operator of a process unit subject to this subpart shall monitor all connectors in gas/vapor and light liquid service, except as

provided in §63.162(b), and in §63.174(f) through §63.174(h), at the intervals specified in §63.174(b). [40 CFR 63.174(a)]

- viii. The connectors shall be monitored to detect leaks by the method specified in §63.180(b). [40 CFR 63.174(a)(1)]
- ix. When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in §63.174(g) and in §63.171. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. [40 CFR 63.174(d)]
- x. A list of identification numbers for equipment (except connectors exempt from monitoring and recordkeeping identified in §63.174 and instrumentation systems) subject to the requirements of 40 CFR 63 Subpart H shall be recorded. Connectors need not be individually identified if all connectors in a designated area or length of pipe subject to the provisions of this subpart are identified as a group, and the number of connectors subject is indicated. With respect to connectors, the list shall be complete no later than the completion of the initial survey required by §63.174(b)(1) or (b)(2) of 40 CFR 63 Subpart H. [40 CFR 63.181(b)(1)(i)]
- xi. A schedule by process unit for monitoring connectors subject to the provisions of §63.174(a) and valves subject to the provisions of §63.168(d) shall be recorded.
[40 CFR 63.181(b)(1)(ii)]
- xii. Equipment subject to the provisions of 40 CFR 63 Subpart H may be identified on a plant site plan, in log entries, or by other appropriate methods. [40 CFR 63.181(b)(1)(iii)]
- xiii. A list of identification numbers for equipment that the owner or operator elects to equip with a closed-vent system and control device, under the provisions of §63.163(g), §63.164(h), §63.165(c), or §63.173(f) shall be recorded. [40 CFR 63.181(b)(2)(i)]
- xiv. Identification of screwed connectors subject to the requirements of §63.174(c)(2) shall be recorded. Identification can be by area or grouping as long as the total number within each group or area is recorded.
[40 CFR 63.181(b)(5)]
- xv. The following information pertaining to all pumps subject to the provisions of §63.163(j) and valves subject to the provisions of §63.168(h) and (i) shall be recorded: [40 CFR 63.181(b)(7)]
 - (1) Identification of equipment designated as unsafe to monitor, difficult to monitor, or unsafe to inspect and the plan for monitoring or inspecting this equipment. [40 CFR 63.181(b)(7)(i)]

- (2) A list of identification numbers for the equipment that is designated as difficult to monitor, an explanation of why the equipment is difficult to monitor, and the planned schedule for monitoring this equipment. [40 CFR 63.181(b)(7)(ii)]
 - (3) A list of identification numbers for connectors that are designated as unsafe to repair and an explanation why the connector is unsafe to repair. [40 CFR 63.181(b)(7)(iii)]
- xvi. A list of valves removed from and added to the process unit, as described in §63.168(e)(1) shall be recorded, if the net credits for removed valves is expected to be used. [40 CFR 63.181(b)(8)(i)]
- xvii. For visual inspections of equipment subject to the provisions of 40 CFR 63 Subpart H [e.g., §63.163(b)(3), §63.163(e)(4)(i)], the owner or operator shall document that the inspection was conducted and the date of the inspection. The owner or operator shall maintain records as specified in §63.181(d) for leaking equipment identified in this inspection, except as provided in §63.181(e). These records shall be retained for 5 years. [40 CFR 63.181(c)]
- xviii. When each leak is detected as specified in §§63.163 and 63.164; §§63.168 and 63.169; and §§63.172 through 63.174 of 40 CFR 63 Subpart H, the following information shall be recorded and kept for 5 years: [40 CFR 63.181(d)]
- (1) The instrument and the equipment identification number and the operator name, initials, or identification number. [40 CFR 63.181(d)(1)]
 - (2) The date the leak was detected and the date of first attempt to repair the leak. [40 CFR 63.181(d)(2)]
 - (3) The date of successful repair of the leak. [40 CFR 63.181(d)(3)]
 - (4) Maximum instrument reading measured by Method 21 of 40 CFR part 60, appendix A after it is successfully repaired or determined to be nonrepairable. [40 CFR 63.181(d)(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 63.181(d)(5)]
 - (a) The owner or operator may develop a written procedure that identifies the conditions that justify a delay of repair. The written procedures may be included as part of the startup/shutdown/malfunction plan, required by §63.6(e)(3), for the source or may be part of a separate document that is maintained at the plant site. In such cases, reasons for delay of repair may be documented by citing

- the relevant sections of the written procedure.
[40 CFR 63.181(d)(5)(i)]
- (b) If delay of repair was caused by depletion of stocked parts, there must be documentation that the spare parts were sufficiently stocked on-site before depletion and the reason for depletion. [40 CFR 63.181(d)(5)(ii)]
- (6) Dates of process unit shutdowns that occur while the equipment is unrepaired. [40 CFR 63.181(d)(6)]
- (7) Identification, either by list, location (area or grouping), or tagging of connectors that have been opened or otherwise had the seal broken since the last monitoring period required in §63.174(b) of 40 CFR 63 Subpart H, as described in §63.174(c)(1) of 40 CFR 63 Subpart H, unless the owner or operator elects to comply with the provisions of §63.174(c)(1)(ii) of 40 CFR 63 Subpart H. [40 CFR 63.181(d)(7)(i)]
- (8) The date and results of monitoring as required in §63.174(c) of 40 CFR 63 Subpart H. If identification of connectors that have been opened or otherwise had the seal broken is made by location under paragraph (d)(7)(i) of Subpart H, then all connectors within the designated location shall be monitored. [40 CFR 63.181(d)(7)(ii)]
- (9) Copies of the periodic reports as specified in §63.178(b) of 40 CFR 63 Subpart H, if records are not maintained on a computerized database capable of generating summary reports from the records. [40 CFR 63.181(d)(9)]
- xix. Each owner or operator of a process unit subject to the requirements of §§63.175 and 63.176 of 40 CFR 63 Subpart H shall maintain the records specified in paragraphs (h)(1) through (h)(9) of Subpart H for the period of the quality improvement program for the process unit. [40 CFR 63.181(h)]
- (1) For owners or operators who elect to use a reasonable further progress quality improvement program, as specified in §63.175(d) of 40 CFR 63 Subpart H: [40 CFR 63.181(h)(1)]
- (a) All data required in §63.175(d)(2) of 40 CFR 63 Subpart H. [40 CFR 63.181(h)(1)(i)]
- (b) The percent leaking valves observed each quarter and the rolling average percent reduction observed in each quarter. [40 CFR 63.181(h)(1)(ii)]
- (c) The beginning and ending dates while meeting the requirements of §63.175(d). [40 CFR 63.181(h)(1)(iii)]
- (2) For owners or operators who elect to use a quality improvement program of technology review and improvement, as specified in §63.175(e): [40 CFR 63.181(h)(2)]

- (a) All data required in §63.175(e)(2) of 40 CFR 63 Subpart H. [40 CFR 63.181(h)(2)(i)]
 - (b) The percent leaking valves observed each quarter. [40 CFR 63.181(h)(2)(ii)]
 - (c) Documentation of all inspections conducted under the requirements of §63.175(e)(4) H, and any recommendations for design or specification changes to reduce leak frequency. [40 CFR 63.181(h)(2)(iii)]
 - (d) The beginning and ending dates while meeting the requirements of §63.175(e). [40 CFR 63.181(h)(2)(iv)]
- (3) For owners or operators subject to the requirements of the pump quality improvement program as specified in §63.176: [40 CFR 63.181(h)(3)]
- (a) All data required in §63.176(d)(2) of 40 CFR 63 Subpart H. [40 CFR 63.181(h)(3)(i)]
 - (b) The rolling average percent leaking pumps. [40 CFR 63.181(h)(3)(ii)]
 - (c) Documentation of all inspections conducted under the requirements of §63.176(d)(4) of 40 CFR 63 Subpart H, and any recommendations for design or specification changes to reduce leak frequency. [40 CFR 63.181(h)(3)(iii)]
 - (d) The beginning and ending dates while meeting the requirements of §63.176(d). [40 CFR 63.181(h)(3)(iv)]
- (4) If a leak is not repaired within 15 calendar days after discovery of the leak, the reason for the delay and the expected date of successful repair. [40 CFR 63.181(h)(4)]
- (5) Records of all analyses required in §63.175(e) and §63.176(d) of 40 CFR 63 Subpart H. The records will include the following: [40 CFR 63.181(h)(5)]
- (a) A list identifying areas associated with poorer than average performance and the associated service characteristics of the stream, the operating conditions and maintenance practices. [40 CFR 63.181(h)(5)(i)]
 - (b) The reasons for rejecting specific candidate superior emission performing valve or pump technology from performance trials. [40 CFR 63.181(h)(5)(ii)]
 - (c) The list of candidate superior emission performing valve or pump technologies, and documentation of the performance

trial program items required under §63.175(e)(6)(iii) and §63.176(d)(6)(iii) of 40 CFR 63 Subpart H.
[40 CFR 63.181(h)(5)(iii)]

- (d) The beginning date and duration of performance trials of each candidate superior emission performing technology.
[40 CFR 63.181(h)(5)(iv)]
- (6) All records documenting the quality assurance program for valves or pumps as specified in §63.175(e)(7) and §63.176(d)(7) of 40 CFR 63 Subpart H. [40 CFR 63.181(h)(6)]
- (7) Records indicating that all valves or pumps replaced or modified during the period of the quality improvement program are in compliance with the quality assurance requirements in §63.175(e)(7) and §63.176(d)(7) of 40 CFR 63 Subpart H.
[40 CFR 63.181(h)(7)]
- (8) Records documenting compliance with the 20 percent or greater annual replacement rate for pumps as specified in §63.176(d)(8) of 40 CFR 63 Subpart H. [40 CFR 63.181(h)(8)]
- xx. Identification, either by list, location (area or group) of equipment in organic HAP service less than 300 hours per year within a process unit subject to the provisions of 40 CFR 63 Subpart H under §63.160 of 40 CFR 63 Subpart H shall be recorded. [40 CFR 63.181(j)]

d. TAC

- i. See Plantwide STAR Requirements.
- ii. The owner or operator shall monitor and record the Control Device (SB-301, C-16, SB-5, SB-7, SB-8, or SB-403) that is being utilized during the reporting period.
- iii. For Emission Point 3000, the owner or operator shall, monthly, maintain records, including calculations, which show the total chloroform emissions during each consecutive 12-month period.
- iv. 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.
- v. 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.
- vi. For Emission Point 3000, the owner or operator shall maintain daily records that identify all periods of bypassing the vapor recovery system (C-16) while the chloroform tanks are in operation or a declaration entered

into the records that the vapor recovery system operated at all times the tanks were in operation for a given day. The records shall include the following:²⁰

- (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/hr 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.
- vii. 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/hr 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.
- viii. 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:

²⁰ Bypass hours include the 240 hours of planned or routine maintenance allowed by 40 CFR 63.119(e)(3).

- (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/hr 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.
- ix. For Control Device SB-301 (Wet Scrubber), the owner or operator shall monitor and record the flow rate weekly to ensure that it is at least 25 gallons per minute.
- x. For Control Device SB-8 (Wet Scrubber), the owner or operator shall monitor and record the chlorine concentration weekly to ensure that it does not drop below 8%.
- xi. 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.

e. VOC

- i. The owner or operator shall maintain records, weekly, of any periods of time where EP 3000 was operating and the vapor recovery system (C-16) was not operating, including 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) reason for each bypass event;
 - (5) any corrective action taken, and
 - (6) Measures implemented to prevent reoccurrence of the situation that resulted in the bypassing the control device.
- ii. For Control Device C-16 (Condenser), the owner or operator shall monitor and record the temperature weekly to ensure that the control efficiency is at 85% or greater.

S3. Reporting

[Regulation 2.16 Section 4.1.1]

The owner or operator shall report the following information, as required by General Condition 14:

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

See Plantwide Regulation 5.15 Requirements.

b. HAP (non LDAR) (40 CFR 63 Subpart F, 40 CFR 63 Subpart G)

- i. As required by §63.120(d)(4) and §63.120(e)(3) of Subpart G, the Periodic Report shall include the information specified in paragraphs (g)(1)(i) and (g)(1)(ii) of 40 CFR 63 for those planned routine maintenance operations that would require the control device not to meet the requirements of §63.119(e)(1) or (e)(2), as applicable. [40 CFR 63.122(g)(1)]
 - (1) A description of the planned routine maintenance that is anticipated to be performed for the control device during the next 6 months. This description shall include the type of maintenance necessary, planned frequency of maintenance, and lengths of maintenance periods. [40 CFR 63.122(g)(1)(i)]
 - (2) A description of the planned routine maintenance that was performed for the control device during the previous 6 months. This description shall include the type of maintenance performed and the total number of hours during those 6 months that the control device did not meet the requirements of §63.119(e)(1) or (e)(2), as applicable, due to planned routine maintenance. [40 CFR 63.122(g)(1)(ii)]
- ii. The Periodic Report shall describe each occurrence when the monitored parameters were outside of the parameter ranges documented in the Notification of Compliance Status in accordance with §63.120(d)(3)(i). The description shall include the information specified in §§63.122(g)(2)(i) and (g)(2)(ii). [40 CFR 63.122(g)(2)]
 - (1) Identification of the control device for which the measured parameters were outside of the established ranges. [40 CFR 63.122(g)(2)(i)]
 - (2) Cause for the measured parameters to be outside of the established ranges. [40 CFR 63.122(g)(2)(ii)]

c. HAP (LDAR) (40 CFR Subpart H)

- i. The number of valves for which leaks were detected as described in §63.168(b) of 40 CFR 63 Subpart H, the percent leakers, and the total number of valves monitored. [40 CFR 63.182(d)(2)(i)]
- ii. The number of valves for which leaks were not repaired as required in §63.168(f), identifying the number of those that are determined nonrepairable. [40 CFR 63.182(d)(2)(ii)]
- iii. The number of pumps for which leaks were detected as described in §63.163(b) of 40 CFR 63 Subpart H, the percent leakers, and the total number of pumps monitored. [40 CFR 63.182(d)(2)(iii)]
- iv. The number of pumps for which leaks were not repaired as required in §63.163(c) of 40 CFR 63 Subpart H. [40 CFR 63.182(d)(2)(iv)]
- v. The number of connectors for which leaks were detected as described in §63.174(a) of 40 CFR 63 Subpart H, the percent of connectors leaking, and the total number of connectors monitored. [40 CFR 63.182(d)(2)(ix)]
- vi. The number of connectors for which leaks were not repaired as required in §63.174(d) of 40 CFR 63 Subpart H, identifying the number of those that are determined nonrepairable. [40 CFR 63.182(d)(2)(xi)]
- vii. The facts that explain any delay of repairs and, where appropriate, why a process unit shutdown was technically infeasible. [40 CFR 63.182(d)(2)(xiii)]
- viii. If applicable, the initiation of a monthly monitoring program under §63.168(d)(1)(i) of 40 CFR 63 Subpart H, or a quality improvement program under either §63.175 or §63.176. [40 CFR 63.182(d)(2)(xv)]
- ix. If applicable, notification of a change in connector monitoring alternatives as described in §63.174(c)(1) of 40 CFR 63 Subpart H. [40 CFR 63.182(d)(2)(xvi)]

d. TAC

- i. See Plantwide STAR Requirements.
- ii. Identification of all periods of bypassing any of the required control devices (C-16, SB-301, SB-5, SB-7 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 lb/hr 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.

e. VOC

Identification of all periods of bypassing the vapor recovery system (C-16) while EP 3000 was in operation during a reporting period. The report shall include the following:

- i. The date;
- ii. The duration (including start and stop time) of each bypass event;
- iii. Identification of the control device and process equipment in operation;
- iv. Summary information on the cause or reason for each bypass event;
- v. Corrective action taken to minimize the extent and duration of each bypass event; and
- vi. Measures implemented to prevent reoccurrence of the situation that resulted in the bypassing the control device.

Emission Unit U4: HCl²¹**EU U4 Applicable Regulations**

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
5.15	Chemical Accident Prevention Provisions	1
40 CFR 64	Compliance Assurance Monitoring	§64.1 – 10
40 CFR 63 Subpart NNNNN	National Emission Standards for Hazardous Air Pollutants: Hydrochloric Acid Production	§§63.8980, 8985, 8990, 9000, 9035, 9040 and 9050
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
5.20	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		

²¹ Anhydrous hydrogen chloride gas from the Freon® 22/Freon® 23 process is absorbed in water to produce hydrochloric acid.

EU U4 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, 40 CFR 64, 40 CFR 63 Subpart NNNNN	SB-17	S-12
	HCl Stripping, Storage and Loading – TS-25, 170,000 Gallons	1985		SB-17	S-12
	HCl Stripping, Storage and Loading – TS-28 and TS-29, 500,000 Gallons Each	1989, 1992		SB-17	S-12
	HCl Stripping, Storage and Loading – Loading Spots	NA		SB-17	S-12
	HCl Stripping, Storage and Loading – Process Throughput, 72,446 lb/hr 32% HCl Process Feed	1986		SB-17	S-12
4001	Fugitive Emissions, HCl	NA		NA	F-2

EU U4 Control Devices

Control ID	Description	Performance Indicator	
SB-17 ²²	Wet Scrubber	Temperature and Flow Rate	60° C (maximum liquid runoff temperature) and 5,000 lb water per hour (minimum flow)

²² Emission testing was conducted on the wet scrubber SB-17 on 10/11/2006 to demonstrate compliance with 40 CFR 63 Subpart NNNNN. The scrubber must achieve an outlet concentration of 20 ppm by volume or less. The average was 2.8 ppm by volume.

EU U4 Specific Conditions

S1. Standards

[Regulation 2.16 Section 4.1.1]

a. Chemical Accident Prevention and Risk Management Plan [Regulation 5.15 and 40 CFR Part 68 Subpart G]

See Plantwide Regulation 5.15 Requirements.

b. HAP [40 CFR 63 Subpart NNNNN]

i. The owner or operator must comply with the following emission limits and work practice standards for each emission stream that is part of an affected source for each: [40 CFR 63.9000(a)]

(1) For an emission stream from an HCl process vent: [Table 1 to Subpart NNNNN, Item 1]

(a) Reduce HCl emissions by 99% or achieve an outlet concentration of 20 ppm or less by volume; [Table 1 to Subpart NNNNN Item 1 (a)]

(b) Reduce Cl₂ emissions by 99% or greater or achieve an outlet concentration of 100 ppm by volume or less. [Table 1 to Subpart NNNNN Item 1 (b)]

(2) For an emission stream from an HCl storage tank, reduce HCl emissions by 99% or greater or achieve an outlet concentration of 120 ppm by volume or less. [Table 1 to Subpart NNNNN Item 2]

(3) For an emission stream from an HCl transfer operation, reduce HCl emissions by 99% or greater or achieve an outlet concentration of 120 ppm by volume or less. [Table 1 to Subpart NNNNN Item 3]

(4) For an emission stream from leaking equipment in HCl service, [Table 1 to Subpart NNNNN Item 4]

(a) Prepare and operate at all times according to an equipment LDAR plan that describes in detail the measures that will be put in place to detect leaks and repair them in a timely fashion; and [Table 1 to Subpart NNNNN Item 4 (a)]

(b) Submit the plan to the District for comment only with your Notification of Compliance Status; and [Table 1 to Subpart NNNNN Item 4 (b)]

(c) You may incorporate by reference in such plan existing manuals that describe the measures in place to control leaking equipment emissions required as part of other federally enforceable requirements, provided that all

manuals that are incorporated by reference are submitted to the District. [Table 1 to Subpart NNNNN Item 4 (c)]

- ii. The owner or operator must comply with the following operating limits for each emission stream that is part of an affected source that is vented to a control device: [40 CFR 63.9000(b)]
 - (1) For each caustic scrubber or water scrubber/absorber, you must maintain the daily average scrubber inlet liquid or recirculating liquid flow rate greater than 5,000 lbs per hour;²³ and [Table 2 to Subpart NNNNN Item 1 (a)]
 - (2) Maintain the daily average scrubber temperature at 60° C.²⁴ [Table 2 to Subpart NNNNN Item 1 (c)]
- iii. The emission limits for HCl storage tanks listed in this HAP section do not apply during periods of planned routine maintenance of HCl storage tank control devices. Periods of planned routine maintenance of each HCl storage tank control device, during which the control device does not meet the emission limits specified in in this HAP section shall not exceed 240 hours per year. [40 CFR 63.9000(d)]

c. TAC

- i. See Plantwide STAR Requirements.
- ii. For Emission Point 4000:
 - (1) 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 5.12. section 4.7]
 - (2) The owner or operator shall not allow hydrochloric acid emissions to exceed 10,662 pounds per 12-consecutive month period.

²³ Based on a stack test performed in 2010, the limits for SB-17 are 60° C (maximum liquid runoff temperature) and 5,000 lbs per hour water (minimum flow).

²⁴ A request was made to EPA to monitor temperature as an alternative monitoring method in lieu of pH on July 13 and October 5, 2005. On April 6, 2006 EPA approved the monitoring of the alternative operating limit parameters by monitoring temperature to meet the requirements in 40 CFR 63.9025(b) and 40 CFR 63.8(f).

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. Chemical Accident Prevention and Risk Management Plan [Regulation 5.15 and 40 CFR Part 68 Subpart G]

See Plantwide Regulation 5.15 Requirements.

b. HAP [40 CFR 63 Subpart NNNNN]

i. The owner or operator must comply with the following requirements to demonstrate continuous compliance with the applicable emission limitations for each of the affected source using a caustic scrubber or water scrubber: [40 CFR 63.9040(b)]

(1) Conducting monitoring according to your monitoring plan established under §63.8(f) in accordance with §63.9025(c); and [Table 5, item 2.a.i. and 40 CFR 64.3(a)(1)]

(2) Collecting the parameter data according to your monitoring plan established under §63.8(f); and [Table 5, item 2.a.ii. and 40 CFR 64.3(a)(2)]

(3) Reducing the data to 1-hour and daily block averages according to the requirements in §63.9025; and [Table 5, item 2.a.iii. and 40 CFR 64.3(b)]

(4) Maintaining the daily average temperature less than 60°C and the inlet water flowrate greater than 5 MPPH, as established according to your monitoring plan established under §63.8(f). [Table 5, item 2.a.iv. and 40 CFR 64.6(c)]

ii. The owner or operator must comply with the following requirements to demonstrate continuous compliance with the applicable emission limitations for leaking equipment: [40 CFR 63.9040(b)]

(1) Verify that you continue to use the LDAR plan prepared; and

(2) Report any instances where you deviated from the plan and the corrective actions taken.

iii. The owner or operator must keep the following records to support the compliance demonstration. [40 CFR 63.9035(b)]

(1) Records of daily average scrubber inlet liquid flow rate.

(2) Records of the daily average scrubber temperature.

iv. The owner or operator must keep:

- (1) A copy of each notification and report that was submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status.²⁵
[40 CFR 63.9055(a)]
- (2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction. [40 CFR 63.9055(b)(1)]
- (3) Records of performance tests as required in §63.10(b)(2)(viii).
[40 CFR 63.9055(b)(2)]
- (4) Records of operating parameters values that are consistent with the monitoring plan. [40 CFR 63.9055(b)(3)]
- (5) Records of the date and time that each deviation started and stopped and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.
[40 CFR 63.9055(b)(4)]
- (6) Copies of the current versions of the site-specific monitoring plan and the equipment LDAR plan. You also must submit copies of these plans and any revisions or updates to the District only (not for approval). [40 CFR 63.9055(b)(5)]
- (7) Records of the planned routine maintenance performed on each HCl storage tank control device (SB-17) including the duration of each time the control device does not meet the emission limits in Table 1 to Subpart NNNNN, as applicable, due to planned routine maintenance. Such a record shall include the information specified in §63.9055(b)(6)(i) and (ii). [40 CFR 63.9055(b)(6)]
 - (a) The first time of day and date the emission limits in Table 1 to 40 CFR 63 Subpart NNNNN, as applicable, were not met at the beginning of the planned routine maintenance, and [40 CFR 63.9040(b)(6)(i)]
 - (b) The first time of day and date the emission limits in Table 1 to 40 CFR 63 Subpart NNNNN, as applicable, were met at the conclusion of the planned routine maintenance.
[40 CFR 63.9040(b)(6)(ii)]

c. TAC

- i. See Plantwide STAR Requirements.
- 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.

²⁵ The initial notification for 40 CFR 63 Subpart NNNNN was submitted on September 11, 2003.

- iii. The owner or operator shall maintain daily records that identify all periods of bypassing Control Device SB-17 (wet scrubber) while HCl stripping, storage and loading are in operation. 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/hr 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 wet scrubber.

S3. Reporting

[Regulation 2.16 Section 4.1.1]

The owner or operator shall report the following information, as required by General Condition 14:

a. Chemical Accident Prevention and Risk Management Plan [Regulation 5.15 and 40 CFR Part 68 Subpart G]

See Plantwide Regulation 5.15 Requirements.

b. HAP [40 CFR 63 Subpart NNNNN]

- i. The compliance report must contain the following information in 40 CFR 63 Subpart NNNNN. [40 CFR 63.9050(c)]
 - (1) Company name and address. [40 CFR 63.9050(c)(1)]
 - (2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. [40 CFR 63.9050(c)(2)]
 - (3) Date of report and beginning and ending dates of the reporting period. [40 CFR 63.9050(c)(3)]
 - (4) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in § 63.10(d)(5)(i). [40 CFR 63.9050(c)(4)]

- (5) If there were no deviations from any emission limitation that apply to you; include a statement to that effect; [40 CFR 63.9050(c)(5)]
 - (6) If there were no periods during which the operating parameter monitoring systems were out-of-control in accordance with the monitoring plan include a statement to that effect; [40 CFR 63.9050(c)(6)]
 - (7) Verification that you continue to use the equipment LDAR plan and information that explains any periods when the procedures in the plan were not followed and the corrective actions that were taken; [40 CFR 63.9050(c)(7)]
- ii. If there was a deviation from any emission limitation during the reporting period, include the information in §63.9050(d); [40 CFR 63 Subpart NNNNNN, Table 6, Item 3]
 - iii. If there were periods during which the operating parameter monitoring systems were out-of-control in accordance with the monitoring plan include the information in §63.9050(d); [40 CFR 63 Subpart NNNNNN, Table 6, Item 4]
 - iv. For each startup, shutdown, or malfunction (SSM) during the reporting period that is not consistent with your SSM plan, you must submit an immediate startup, shutdown and malfunction report. Unless the District has approved a different schedule for submission of reports under §63.10(a), you must submit each report according to §63.9050(f)(1) and (2); [40 CFR 63.9050(f)]
 - v. A description of the planned routine maintenance that was performed for each HCl storage tank control device during the reporting period. This description shall include the type of maintenance performed and the total number of hours during the reporting period that the HCl storage tank control device did not meet the emission limits, due to planned routine maintenance. [40 CFR 63.9050(c)(10)(i)]

c. TAC

- i. See Plantwide STAR Requirements.
- 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/hr emissions of each TAC during each bypass event;

- (4) Summary information on the cause or reason for each bypass event;
- (5) Corrective action taken to minimize the extent and duration of each bypass event; and
- (6) Measures implemented to prevent reoccurrence of the situation that resulted in bypassing the control devices.

Emission Unit U5: Gasoline Dispensing**EU U5 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

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		

EU U5 Equipment

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
5000	Gasoline Dispensing, 1000 gallon unleaded gasoline storage tank	1992	STAR and 7.15	N/A	S-13

EU U5 Specific Conditions

S1. Standards

[Regulation 2.16 Section 4.1.1]

a. TAC

See Plantwide STAR Requirements.²⁶

b. VOC [Regulation 7.15, section 3]

- 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.²⁷ [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; 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.

²⁶ 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)

²⁷ This tank is equipped with submerged fill.

a. TAC

See Plantwide STAR Requirements.

b. VOC

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

S3. Reporting

[Regulation 2.16 Section 4.1.1]

The owner or operator shall report the following information, as required by General Condition 14:

a. TAC

See Plantwide STAR Requirements.

b. VOC

There are no reporting requirements for this equipment.

Emission Unit IA1: Emergency Generator

EU IA1 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

EU IA1 Equipment²⁸

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 (765 hp)	2007	40 CFR 60 IIII and 40 CFR 63 ZZZZ	N/A	N/A

²⁸ 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 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.

EU IA1 Specific Conditions

S1. Standards

[Regulation 2.16 Section 4.1.1]

a. 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 parts per million (ppm) maximum for NR diesel fuel. [40 CFR 80.510(b)(1)(i)]
- ii. A minimum cetane index of 40; or [40 CFR 80.510(b)(2)(i)]
- iii. A maximum aromatic content of 35 volume percent. [40 CFR 80.510(b)(2)(ii)]

b. Unit Operation

- 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 NOX standards, NMHC + NOX 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:²⁹
[40 CFR 60.4202(a)(2) refers to 40 CFR 89.112]

²⁹ 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 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)]
- 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 Administrator 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. 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.

b. Unit Operation

- 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 non-emergency engines in the applicable model year, the owner or operator shall keep records of the operation of the engine in emergency and non-emergency 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 4.1.1]

The owner or operator shall report the following information, as required by General Condition 14:

a. Fuel Requirements

There are no reporting requirements for this equipment.

b. Unit Operation

There are no reporting requirements for this equipment except for the initial notification requirements of 40 CFR 63.6645(f).³⁰

³⁰ The initial notification was submitted on June 28, 2010.

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

FEDERALLY ENFORCEABLE REGULATIONS		
Regulation	Title	Applicable Sections
40 CFR 63 Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	
40 CFR 60 Subpart III	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	60.4205, 60.4207, 60.4209, 60.4211

EU IA2 Equipment³¹

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 210 kW (285 hp)	2014	40 CFR 60 III and 40 CFR 63 ZZZZ	N/A	N/A

³¹ This source is subject to 40 CFR 63 Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, because it is a stationary reciprocating internal combustion engine (RICE) located at a major 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 III, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

EU IA2 Specific Conditions

S1. Standards

[Regulation 2.16 Section 4.1.1]

a. Fuel Requirements

The owner or operator of a stationary CI ICE subject to 40 CFR 60 Subpart III 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 parts per million (ppm) maximum for NR diesel fuel. [40 CFR 80.510(b)(1)(i)]
- ii. A minimum cetane index of 40; or [40 CFR 80.510(b)(2)(i)]
- iii. A maximum aromatic content of 35 volume percent. [40 CFR 80.510(b)(2)(ii)]

b. Unit Operation

- 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 the following table: [40 CFR 60.4205(c) and Table 4 to Subpart III of Part 60]

Table 4 to 40 CFR 60 Subpart III

Engine Capacity: 210 kW	Emission Standards (g/KW-hr)		
	NMHC+ NO _x	CO	PM
Emission Standards (Table 4 to Subpart III of Part 60)	4.0	-	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 III 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 III, 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 III, 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 III 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 Administrator 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. 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.

b. Unit Operation

- 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 non-emergency engines in the applicable model year, the owner or operator shall keep records of the operation of the engine in emergency and non-emergency 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 4.1.1]

The owner or operator shall report the following information, as required by General Condition 14:

a. Fuel Requirements

There are no reporting requirements for this equipment.

b. Unit Operation

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

Emission Unit IA3: Existing Fire Pumps

EU IA3 Applicable Regulations

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

EU IA3 Equipment

Emission Point	Description	Install Date	Applicable Regulations	Control ID	Release ID
IA3-FP2 ³²	Diesel Emergency Fire Pump (#1 Fire Pump House – East Diesel Powers 11220P) 348 hp	2000	40 CFR 63 ZZZZ	N/A	N/A
IA3-FP3 ³³	Diesel Emergency Fire Pump (#1 Fire Pump House – West Diesel Powers 11221P) 348 hp	2000	40 CFR 63 ZZZZ	N/A	N/A

³² Per 40 CFR 60 Subpart III Section 60.4200, engines IA3-FP2 and IA3-FP3 do not meet the applicability dates to be subject to this regulation.

EU IA3 Specific Conditions

S1. Standards

[Regulation 2.16 Section 4.1.1]

a. HAP

- i. For an existing stationary CI RICE with a site rating of less than or equal to 500 brake HP located at a major 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)]
- ii. 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 major source of HAP emissions, must comply with the limitations in Table 2c to 40 CFR 63 Subpart ZZZZ as follows: [40 CFR 63.6602]
 - (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 2c (1)(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 2c (1)(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 2c (1)(c)]
- iii. 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 parts per million (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)]
- iv. 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 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 63.6605(b)]
- v. 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)]
- vi. 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)]
- vii. 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 Administrator 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 major 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). 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 supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 63.6640(f)(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

- i. 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 2c to 40 CFR 63, Subpart ZZZZ. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c 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)]
- ii. 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 non-emergency 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 4.1.1]

The owner or operator shall report the following information, as required by General Condition 14:

a. HAP

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 2c 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 2c]

Emission Unit IA4: Cold Solvent Parts Cleaners**EU IA4 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

EU IA4 Equipment

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

EU IA4 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 4.1.1]

The owner or operator shall report the following information, as required by General Condition 14:

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

<u>Document</u>	<u>Date</u>
1.18 Rule Effectiveness Plan	20 September 1994
Risk Management Plan	28 March 2018

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	1	VOC = 0.08	Regulation 1.02, Appendix A, Section 3.92
Emergency Relief Vents, Stacks and Ventilating Systems	295	NA	Regulation 1.02, Appendix A, Section 3.10
On-Site Quality Control Laboratories	2	VOC = 0.90	Regulation 1.02, Appendix A, Section 3.11
Blast Cleaning	1	PM = 4.13	Regulation 1.02, Appendix A, Section 3.13
Soil or Groundwater Contamination Remediation Projects	1	NA	Regulation 1.02, Appendix A, Section 3.21
Dust or Particulate Collectors that are located in-doors	3	PM/PM ₁₀ / PM _{2.5} < 1	Regulation 1.02, Appendix A, Section 3.21
Aerosol Can Puncturing Device	3	VOC = 0.82	Regulation 1.02, Appendix A, Section 1.38
Cooling Tower	1	PM = 0.087	

1. Insignificant activities identified in District Regulation 1.02, Appendix A, may be subject to size or production rate disclosure requirements pursuant to Regulation 2.16 section 3.5.4.1.4.
2. Insignificant activities identified in District Regulation 1.02, Appendix A shall comply with generally applicable requirements as required by Regulation 2.16 section 4.1.9.4.
3. The Insignificant Activities Table is correct as of the date the permit was proposed for review by U.S. EPA, Region 4.
4. Emissions from Insignificant Activities shall be reported in conjunction with the reporting of annual emissions of the facility as required by the District.
5. The owner or operator shall submit an updated list of insignificant activities that occurred during the preceding year pursuant to Regulation 2.16 section 4.3.5.3.6.

6. The owner or operator may elect to monitor actual throughputs for each of the insignificant activities and calculate actual annual emissions, or use Potential to Emit (PTE) to be reported on the annual emission inventory.
7. The District has determined pursuant to Regulation 2.16 section 4.1.9.4 that no monitoring, record keeping, or reporting requirements apply to the insignificant activities listed, except for the equipment that has an applicable regulation and permitted under an insignificant activity (IA) unit.

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 U3: Freon® 22/Freon® 23 Process

EP	Equipment	Control Device	Emission Factor
3000	Two (2) Chloroform Storage Tanks TS-3 and TS-18, 74,600 Gallons Each	C-16	AP-42 Chapter 7.1
3001	Vaporizers V-1 and V-2	SB-8	47.06 lb of Cl per caustic scrubber change
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
3009	Fugitive Emissions	NA	LDAR leak methods (LeakDAS)
HF-6005	Unloading	SB-5 SB-7 SB-301 SB-403	[0.44 lb HF/tank car unloaded (Based on Ideal Gas Law) + 32.1 lb HF/tank car vented] x (100 – Scrubber Eff. %)

Table 3 Unit U4: HCl

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	LDAR leak methods (LeakDAS)

Table 4 Unit U5: Gasoline Dispensing

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

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

EP	Emission Point	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 6 Unit IA4: Parts Washers

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

Attachment B – Compliance Assurance Monitoring (CAM) Plan

Emission Unit	Emission Points	Applicable Pollutant	Control Device
U3	3001	Chlorine (HAP)	SB-8
U4	4000	HCl (HAP)	SB-17
U3	6005	HF (HAP)	SB-301

Monitoring Approach: The key elements of the monitoring approach are presented in the below Table.

Emission Point	Control Device	Applicable Pollutant	Monitored Indicator(s)	Monitoring Frequency and Acceptable Range	Permit Conditions
3001	SB-8	Chlorine (HAP)	NaOH Concentration	Weekly Sample - Greater than 8% NaOH	Unit 3, S2.d.x
4000	SB-17	HCl (HAP)	Inlet water flowrate	Daily Average - Greater than 5,000 lb per hour	Unit 4, S1.b.ii.1 Unit 4, S2.b.i.(2)
			Temperature	Daily Average - Less than 60°C	Unit 4, S1.b.ii.2 Unit 4, S2.b.i.(4)
6005	SB-301	HF (HAP)	Flow	Weekly Average - Greater than 25 GPM	Unit 3, S2.d.ix.

Attachment C – Determination of Benchmark Ambient Concentration (BAC)

Category _____ Number _____

Compound name _____ CAS No. _____

Molecular weight _____

BAC_C = _____ μg/m³, annual
de minimis _____ lb/hr; _____ lb/_____; _____ lb/year

BAC_{NC} = _____ μg/m³, _____ (avg period)

I. Carcinogen Risk - BAC_C (annual averaging period)

Carcinogen YES NO

1. IRIS 10⁻⁶ risk = _____ μg/m³ URE = _____ (μg/m³)⁻¹ Date _____
2. Cal 10⁻⁶ risk = _____ μg/m³ IUR = _____ (μg/m³)⁻¹ Date _____
3. Mich 10⁻⁶ risk = _____ μg/m³ Date _____
4. NTP Part A YES NO Part B YES NO
5. IARC Group 1 YES NO Group 2A YES NO Group 2B YES NO
6. ATSDR
7. Sec. 3.3.4 Method # _____ 10⁻⁶ risk = _____ μg/m³ Date _____
8. Default 0.0004 μg/m³

II. Chronic Noncancer Risk - BAC_{NC} (averaging period as specified)

1. IRIS RfC = _____ μg/m³, annual Date _____
2. Cal REL = _____ μg/m³, annual Date _____
3. IRIS [1] RfD = _____ μg/kg/day × (70/20) = _____ μg/m³, annual Date _____
4. Mich ITSL = _____ μg/m³, _____ averaging period Date _____
5. TLV NIOSH = _____ μg/m³ × 0.01 = _____ μg/m³, 8-hour Date _____
6. RTECS [1] _____ = _____ μg/m³, annual Date _____
 (describe calculation from Reg 5.20, sections 4.6 - 4.10)
7. Default 0.004 μg/m³

[1] To use data based upon an oral route of exposure, the District must make an affirmative determination that data are not available to indicate that oral-route to inhalation-route extrapolation is inappropriate.

III. De minimis calculations

1. Carcinogen BAC_C _____ μg/m³ × 0.54 = _____ lb/hour
 BAC_C _____ μg/m³ × 480 = _____ lb/year
2. Chronic Noncancer Risk _____ (averaging period)
 BAC_{NC} _____ μg/m³ × F factor = _____ lb/(avg period)

BAC averaging period	F factor for avg period			
	Annual	24 hour	8 hour	1 hour
Annual	480			0.54
24 hours		0.12		0.05
8 hours			0.02	0.02
1 hour				0.001

[Regulation 5.22, table 1]

Prepared by _____ Date _____