

**MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY  
AIR QUALITY DIVISION**

EFFECTIVE DATE: January 16, 2024

ISSUED TO

**The Dow Chemical Company (hereinafter “Dow”)**

State Registration Number (SRN): A4033

LOCATED AT

1790 Building, Washington Street, Midland, Midland County, Michigan 48674

**RENEWABLE OPERATING PERMIT**

Permit Number: MI-ROP-A4033-2024

Expiration Date: January 16, 2029

Administratively Complete ROP Renewal Application Due Between  
July 16, 2027 and July 16, 2028

This Renewable Operating Permit (ROP) is issued in accordance with and subject to Section 5506(3) of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). Pursuant to Rule 210(1) of the administrative rules promulgated under Act 451, this ROP constitutes the permittee’s authority to operate the stationary source identified above in accordance with the general conditions, special conditions and attachments contained herein. Operation of the stationary source and all emission units listed in the permit are subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

**SOURCE-WIDE PERMIT TO INSTALL**

Permit Number: MI-PTI-A4033-2024

This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(1) of Act 451. Pursuant to Rule 214a of the administrative rules promulgated under Act 451, the terms and conditions herein, identified by the underlying applicable requirement citation of Rule 201(1)(a), constitute a federally enforceable PTI. The PTI terms and conditions do not expire and remain in effect unless the criteria of Rule 201(6) are met. Operation of all emission units identified in the PTI is subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

Michigan Department of Environment, Great Lakes, and Energy

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Chris Hare, Bay City District Supervisor

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## AUTHORITY AND ENFORCEABILITY

For the purpose of this permit, the **permittee** is defined as any person who owns or operates an emission unit at a stationary source for which this permit has been issued. The **department** is defined in Rule 104(d) as the Director of the Michigan Department of Environment, Great Lakes, and Energy (EGLE) or his or her designee.

The permittee shall comply with all specific details in the permit terms and conditions and the cited underlying applicable requirements. All terms and conditions in this ROP are both federally enforceable and state enforceable unless otherwise footnoted. Certain terms and conditions are applicable to most stationary sources for which an ROP has been issued. These general conditions are included in Part A of this ROP. Other terms and conditions may apply to a specific emission unit, several emission units which are represented as a flexible group, or the entire stationary source which is represented as a Source-Wide group. Special conditions are identified in Parts B, C, D and/or the appendices.

In accordance with Rule 213(2)(a), all underlying applicable requirements are identified for each ROP term or condition. All terms and conditions that are included in a PTI are streamlined, subsumed and/or is state-only enforceable will be noted as such.

In accordance with Section 5507 of Act 451, the permittee has included in the ROP application a compliance certification, a schedule of compliance, and a compliance plan. For applicable requirements with which the source is in compliance, the source will continue to comply with these requirements. For applicable requirements with which the source is not in compliance, the source will comply with the detailed schedule of compliance requirements that are incorporated as an appendix in this ROP. Furthermore, for any applicable requirements effective after the date of issuance of this ROP, the stationary source will meet the requirements on a timely basis, unless the underlying applicable requirement requires a more detailed schedule of compliance.

Issuance of this permit does not obviate the necessity of obtaining such permits or approvals from other units of government as required by law.

## A. GENERAL CONDITIONS

### Permit Enforceability

- All conditions in this permit are both federally enforceable and state enforceable unless otherwise noted. **(R 336.1213(5))**
- Those conditions that are hereby incorporated in a state-only enforceable Source-Wide PTI pursuant to Rule 201(2)(d) are designated by footnote one. **(R 336.1213(5)(a), R 336.1214a(5))**
- Those conditions that are hereby incorporated in a federally enforceable Source-Wide PTI pursuant to Rule 201(2)(c) are designated by footnote two. **(R 336.1213(5)(b), R 336.1214a(3))**

### General Provisions

1. The permittee shall comply with all conditions of this ROP. Any ROP noncompliance constitutes a violation of Act 451, and is grounds for enforcement action, for ROP revocation or revision, or for denial of the renewal of the ROP. All terms and conditions of this ROP that are designated as federally enforceable are enforceable by the Administrator of the United States Environmental Protection Agency (USEPA) and by citizens under the provisions of the federal Clean Air Act (CAA). Any terms and conditions based on applicable requirements which are designated as "state-only" are not enforceable by the USEPA or citizens pursuant to the CAA. **(R 336.1213(1)(a))**
2. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this ROP. **(R 336.1213(1)(b))**
3. This ROP may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any ROP term or condition. This does not supersede or affect the ability of the permittee to make changes, at the permittee's own risk, pursuant to Rule 215 and Rule 216. **(R 336.1213(1)(c))**
4. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities: **(R 336.1213(1)(d))**
  - a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the ROP.
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the ROP.
  - c. Inspect, at reasonable times, any of the following:
    - i. Any stationary source.
    - ii. Any emission unit.
    - iii. Any equipment, including monitoring and air pollution control equipment.
    - iv. Any work practices or operations regulated or required under the ROP.
  - d. As authorized by Section 5526 of Act 451, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the ROP or applicable requirements.
5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information which is claimed by the permittee to be confidential, consistent with the requirements of the 1976 PA 442, MCL §15.231 et seq., and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the USEPA together with a claim of confidentiality. **(R 336.1213(1)(e))**

6. A challenge by any person, the Administrator of the USEPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. **(R 336.1213(1)(f))**
7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. **(R 336.1213(1)(g))**
8. This ROP does not convey any property rights or any exclusive privilege. **(R 336.1213(1)(h))**

### Equipment & Design

9. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2).<sup>2</sup> **(R 336.1370)**
10. Any air cleaning device shall be installed, maintained, and operated in a satisfactory manner and in accordance with the Michigan Air Pollution Control rules and existing law. **(R 336.1910)**

### Emission Limits

11. Unless otherwise specified in this ROP, the permittee shall comply with Rule 301, which states, in part, "Except as provided in Subrules 2, 3, and 4 of this rule, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following:"<sup>2</sup> **(R 336.1301(1))**
  - a. A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
  - b. A limit specified by an applicable federal new source performance standard.

The grading of visible emissions shall be determined in accordance with Rule 303.

12. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
  - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.<sup>1</sup> **(R 336.1901(a))**
  - b. Unreasonable interference with the comfortable enjoyment of life and property.<sup>1</sup> **(R 336.1901(b))**

### Testing/Sampling

13. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1).<sup>2</sup> **(R 336.2001)**
14. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. **(R 336.2001(2), R 336.2001(3), R 336.2003(1))**
15. Any required test results shall be submitted to the Air Quality Division (AQD) in the format prescribed by the applicable reference test method within 60 days following the last date of the test. **(R 336.2001(5))**

## Monitoring/Recordkeeping

16. Records of any periodic emission or parametric monitoring required in this ROP shall include the following information specified in Rule 213(3)(b)(i), where appropriate. **(R 336.1213(3)(b))**
  - a. The date, location, time, and method of sampling or measurements.
  - b. The dates the analyses of the samples were performed.
  - c. The company or entity that performed the analyses of the samples.
  - d. The analytical techniques or methods used.
  - e. The results of the analyses.
  - f. The related process operating conditions or parameters that existed at the time of sampling or measurement.
17. All required monitoring data, support information and all reports, including reports of all instances of deviation from permit requirements, shall be kept and furnished to the department upon request for a period of not less than 5 years from the date of the monitoring sample, measurement, report or application. Support information includes all calibration and maintenance records and all original strip-chart recordings, or other original data records, for continuous monitoring instrumentation and copies of all reports required by the ROP. **(R 336.1213(1)(e), R 336.1213(3)(b)(ii))**

## Certification & Reporting

18. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a Responsible Official which state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**
19. A Responsible Official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. **(R 336.1213(4)(c))**
20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. **(R 336.1213(3)(c))**
  - a. For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
  - b. For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
  - c. For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following: **(R 336.1213(3)(c))**
  - a. Submitting a certification by a Responsible Official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
  - b. Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the ROP were submitted to the department pursuant to Rule 213(3)(c)(ii), a certification by a Responsible Official which states that; “based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete.” The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to Rule 213(3)(c)(ii) that will be certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.
23. Semiannually for the term of the ROP as detailed in the special conditions, or more frequently if specified, the permittee shall submit certified reports of any required monitoring to the appropriate AQD District Office. All instances of deviations from ROP requirements during the reporting period shall be clearly identified in the reports. **(R 336.1213(3)(c)(i))**
24. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department. **(R 336.1212(6))**
25. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the appropriate AQD District Office. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate AQD District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a Responsible Official in a manner consistent with the CAA.<sup>2</sup> **(R 336.1912)**

## Permit Shield

26. Compliance with the conditions of the ROP shall be considered compliance with any applicable requirements as of the date of ROP issuance if either of the following provisions is satisfied. **(R 336.1213(6)(a)(i), R 336.1213(6)(a)(ii))**
  - a. The applicable requirements are included and are specifically identified in the ROP.
  - b. The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.

Any requirements identified in Part E of this ROP have been identified as non-applicable to this ROP and are included in the permit shield.

27. Nothing in this ROP shall alter or affect any of the following:
  - a. The provisions of Section 303 of the CAA, emergency orders, including the authority of the USEPA under Section 303 of the CAA. **(R 336.1213(6)(b)(i))**
  - b. The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this ROP issuance. **(R 336.1213(6)(b)(ii))**
  - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**



- d. The ability of the USEPA to obtain information from a source pursuant to Section 114 of the CAA. **(R 336.1213(6)(b)(iv))**
28. The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
- a. Operational flexibility changes made pursuant to Rule 215. **(R 336.1215(5))**
  - b. Administrative Amendments made pursuant to Rule 216(1)(a)(i)-(iv). **(R 336.1216(1)(b)(iii))**
  - c. Administrative Amendments made pursuant to Rule 216(1)(a)(v) until the amendment has been approved by the department. **(R 336.1216(1)(c)(iii))**
  - d. Minor Permit Modifications made pursuant to Rule 216(2). **(R 336.1216(2)(f))**
  - e. State-Only Modifications made pursuant to Rule 216(4) until the changes have been approved by the department. **(R 336.1216(4)(e))**
29. Expiration of this ROP results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months, before the expiration date of the ROP, but the department fails to take final action before the end of the ROP term, the existing ROP does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original ROP term until the department takes final action. **(R 336.1217(1)(c), R 336.1217(1)(a))**

## Revisions

30. For changes to any process or process equipment covered by this ROP that do not require a revision of the ROP pursuant to Rule 216, the permittee must comply with Rule 215. **(R 336.1215, R 336.1216)**
31. A change in ownership or operational control of a stationary source covered by this ROP shall be made pursuant to Rule 216(1). **(R 336.1219(2))**
32. For revisions to this ROP, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in Rule 216. **(R 336.1210(10))**
33. Pursuant to Rule 216(1)(b)(iii), Rule 216(2)(d) and Rule 216(4)(d), after a change has been made, and until the department takes final action, the permittee shall comply with both the applicable requirements governing the change and the ROP terms and conditions proposed in the application for the modification. During this time period, the permittee may choose to not comply with the existing ROP terms and conditions that the application seeks to change. However, if the permittee fails to comply with the ROP terms and conditions proposed in the application during this time period, the terms and conditions in the ROP are enforceable. **(R 336.1216(1)(c)(iii), R 336.1216(2)(d), R 336.1216(4)(d))**

## Reopenings

34. A ROP shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
- a. If additional requirements become applicable to this stationary source with three or more years remaining in the term of the ROP, but not if the effective date of the new applicable requirement is later than the ROP expiration date. **(R 336.1217(2)(a)(i))**
  - b. If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. **(R 336.1217(2)(a)(ii))**
  - c. If the department determines that the ROP contains a material mistake, information required by any applicable requirement was omitted, or inaccurate statements were made in establishing emission limits or the terms or conditions of the ROP. **(R 336.1217(2)(a)(iii))**
  - d. If the department determines that the ROP must be revised to ensure compliance with the applicable requirements. **(R 336.1217(2)(a)(iv))**

## Renewals

35. For renewal of this ROP, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the ROP. **(R 336.1210(9))**

## Stratospheric Ozone Protection

36. If the permittee is subject to Title 40 of the Code of Federal Regulations (CFR), Part 82 and services, maintains, or repairs appliances except for motor vehicle air conditioners (MVAC), or disposes of appliances containing refrigerant, including MVAC and small appliances, or if the permittee is a refrigerant reclaimer, appliance owner or a manufacturer of appliances or recycling and recovery equipment, the permittee shall comply with all applicable standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F.
37. If the permittee is subject to 40 CFR Part 82 and performs a service on motor (fleet) vehicles when this service involves refrigerant in the MVAC, the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed by the original equipment manufacturer. The term MVAC as used in Subpart B does not include the air-tight sealed refrigeration system used for refrigerated cargo or an air conditioning system on passenger buses using Hydrochlorofluorocarbon-22 refrigerant.

## Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).
39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of 40 CFR Part 68, no later than the latest of the following dates as provided in 40 CFR 68.10(a):
- June 21, 1999,
  - Three years after the date on which a regulated substance is first listed under 40 CFR 68.130, or
  - The date on which a regulated substance is first present above a threshold quantity in a process.
40. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.
41. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c)). **(40 CFR Part 68)**

## Emission Trading

42. Emission averaging and emission reduction credit trading are allowed pursuant to any applicable interstate or regional emission trading program that has been approved by the Administrator of the USEPA as a part of Michigan's State Implementation Plan. Such activities must comply with Rule 215 and Rule 216. **(R 336.1213(12))**

## Permit to Install (PTI)

43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule.<sup>2</sup> **(R 336.1201(1))**
44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA.<sup>2</sup> **(R 336.1201(8), Section 5510 of Act 451)**
45. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by Subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, EGLE.<sup>2</sup> **(R 336.1219)**
46. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months of the original PTI issuance date, or has been interrupted for 18 months, the applicable terms and conditions from that PTI, as incorporated into the ROP, shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, EGLE, AQD, P. O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI.<sup>2</sup> **(R 336.1201(4))**

### Footnotes:

<sup>1</sup>This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

<sup>2</sup>This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

## **B. SOURCE-WIDE CONDITIONS**

Part B outlines the Source-Wide Terms and Conditions that apply to this stationary source. The permittee is subject to these special conditions for the stationary source in addition to the general conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply to this source, NA (not applicable) has been used in the table. If there are no Source-Wide Conditions, this section will be left blank.

## SOURCE-WIDE CONDITIONS

### DESCRIPTION

The stationary source consists of Corteva Agriscience LLC (SRN P1028), Clean Harbors Industrial Services (P1028), DDP Specialty Electronic Materials US, Inc. (SRN P1027), Nutrition & Biosciences USA 1, LLC (P1027), The Dow Chemical Company (SRN A4033), Dow Silicones Corporation (SRN A4043), and Trinseo, LLC (SRN P1025). All process equipment at the stationary source including equipment covered by other permits, grandfathered equipment, and exempt equipment.

### POLLUTION CONTROL EQUIPMENT

NA

#### I. EMISSION LIMIT(S)

NA

#### II. MATERIAL LIMIT(S)

NA

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

#### IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

#### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

#### VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. For any condition specified in the ROP which requires the permittee to monitor and record an operational parameter (e.g., flow rate, pH, pressure drop, etc.) on a "continuous basis" pursuant to Rule 213(3), monitoring and recording of data "on a continuous basis" is defined as an instantaneous data point recorded at least once every 15 minutes for at least 90% of the operating time during an operating calendar day. In the event the permittee collects more than one data point during the 15-minute period, the data point recorded may be the average (rolling or block) of all data points collected during the 15-minute period. Any response to an excursion of the corresponding operational parameter set point or range specified in the ROP pursuant to R 336.1213(3), shall be based upon these 15-minute values. Unless otherwise noted in the ROP, the permittee is not required to monitor and record operational parameter data during periods of non-operation of the device resulting in cessation of the emissions to which the monitoring applies. **(R 336.1213(3))**
2. The permittee shall maintain waste shipment records for all asbestos-containing waste material transported off-site as per 40 CFR 61.150(d). The permittee's Salzburg Landfill is an on-site facility and shipments to that facility are not subject to this condition. **(40 CFR 61.150(d))**

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall follow the applicable notification requirements in 40 CFR 61.145(b) prior to any applicable demolition or renovation activity. **(40 CFR 61.145(b))**
5. The permittee shall file a report any time a copy of the waste shipment record, signed by the off-site waste disposal site, is not received in a timely manner, in accordance with 40 CFR 61.150(d)(4). **(40 CFR 61.150(d)(4))**
6. An Initial Report shall be filed, according to the requirements of 40 CFR 61.153, within 90 days of startup for any new source subject to 40 CFR 61.154. **(40 CFR 61.154)**

See Appendix 8

## **VIII. STACK/VENT RESTRICTION(S)**

NA

## **IX. OTHER REQUIREMENT(S)**

1. For any emission unit in the ROP subject to the applicable sections of 40 CFR Part 63, Subpart A (General Provisions) that require a startup, shutdown and malfunction plan, the owner or operator shall adopt a startup, shutdown, and malfunction plan which conforms to the provisions of Part 63. The owner or operator shall operate and maintain the source in accordance with the procedures specified in the current startup, shutdown, and malfunction plan. Any revisions made to the startup, shutdown, and malfunction plan in accordance with the procedures established by Part 63 shall not be deemed to constitute permit revisions under Part 70. **(40 CFR Part 63, Subpart A, 40 CFR 63.6(e)(3)(ix))**
2. The permittee shall comply with the applicable provisions of 1994 PA 451, Section 324.5524 (Fugitive dust sources or emissions) and with the provisions of the most-recently approved operating program received by the AQD, Bay City District Office. The operating program shall be amended by the permittee so that the operating program is current and reflects any significant change in the fugitive dust source or fugitive dust emissions. An amendment to an operating program shall be consistent with the requirements of Section 324.5524 and shall be submitted to the department for its review and approval. **(1994 PA 451, Section 324.5524)**
3. The permittee shall comply with the applicable requirements of the National Emission Standard for Asbestos, as specified in 40 CFR Part 61, Subparts A and M. The applicable sections may include: **(40 CFR Part 61, Subparts A and M)**
  - a. 61.140 Applicability
  - b. 61.141 Definitions
  - c. 61.145 Standard for demolition and renovation
  - d. 61.148 Standard for insulating materials
  - e. 61.150 Standard for waste disposal for manufacturing, fabricating, demolition, renovation and spraying operations
  - f. 61.152 Air cleaning
  - g. 61.153 Reporting

- h. 61.154 Standard for active waste disposal sites
  - i. 61.156 Cross-reference to other asbestos regulations
  - j. Appendix A (Interpretive Rule Governing Roof Removal Operations)
4. The permittee shall follow the applicable procedures for asbestos emission control in 40 CFR 61.145(c) during any demolition or renovation activity. **(40 CFR 61.145)**
  5. The permittee may install or reinstall on a facility component any insulating materials that contain commercial asbestos if the materials are either molded and friable or wet-applied and friable after drying. The provisions of 40 CFR 61.148 do not apply to spray-applied insulating materials regulated under 40 CFR 61.146. **(40 CFR 61.148)**
  6. The permittee shall follow the applicable waste disposal requirements in 40 CFR 61.150 for any asbestos removed during demolition or renovation activities. **(40 CFR 61.150)**
  7. The permittee shall follow the applicable requirements of 40 CFR 61.152 if air cleaning is used as part of the method of compliance with 40 CFR 61.145 or 61.150. **(40 CFR 61.152)**
  8. The permittee shall comply with any other applicable asbestos regulation listed in 40 CFR 61.156. **(40 CFR 61.156)**
  9. The permittee shall comply with the applicable requirements of Appendix A in 40 CFR Part 61, Subpart M for any regulated roof removal operation. **(40 CFR Part 61, Subpart M, Appendix A)**
  10. The permittee shall comply with the applicable requirements of 40 CFR Part 82, Subpart A, 40 CFR 82.13 (Protection of Stratospheric Ozone, Production and Consumption Controls). **(40 CFR 82.13)**
  11. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart GGGGG (Site Remediation NESHAP). **(40 CFR Part 63, Subparts A and GGGGG)**

**Footnotes:**

<sup>1</sup>This condition is state-only enforceable and was established pursuant to Rule 201(1)(b).

<sup>2</sup>This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

### C. EMISSION UNIT SPECIAL CONDITIONS

Part C outlines terms and conditions that are specific to individual emission units listed in the Emission Unit Summary Table. The permittee is subject to the special conditions for each emission unit in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no conditions specific to individual emission units, this section will be left blank.

#### EMISSION UNIT SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU82	<p>Equipment in 588 Building used to produce both vinyl benzyl chloride (VBC) and benzocyclobutene (BCB). EU82 is subject to the MON (40 CFR Part 63, Subpart FFFF). By virtue of being subject to Subpart FFFF, this emission unit is also subject to the equipment leak provisions of 40 CFR Part 63, Subpart H.</p> <p>This emission unit was permitted in PTI 4-04.</p>	04-19-2005	FG963THROX (See DDP ROP No. MI-ROP-P1027-2020a or any subsequent revisions) FGMONMACT FGHONFUGITIVES
EU1353	<p>Silicone Sealants and Adhesives production in the 1353 Building facility. This emission unit includes the 3210 Myers 10 Mixer, a trailer unloading station, a solids loading unit, and a packaging area for final intermediates. Emissions are controlled by the DC3211 dust collector (SV1353-007) and the E3213B chilled water condenser (SV1353-004). The facility is subject to the requirements of 40 CFR Part 63, Subparts A, EEEE, FFFF, and the equipment leak provisions of 40 CFR Part 63, Subpart UU (National Emission Standards for Equipment Leaks - Control level 2 Standards).</p> <p>This emission unit was permitted in PTI 87-17C.</p>	09-20-2017 02-13-2018 08-03-2020 01-26-2021	FGMONMACT FGOLDMACT
EUB7	<p>Incineration complex tank farm in the environmental operations plant. Emission group consists of 10 tanks (described below) and a carbon adsorption unit for backup control.</p>	01-01-1984 04-29-2004	FGHONFUGITIVES FGOSWRO



Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
	<p>Emissions accounted for in this permit include those emissions from the Carbon bed and tank nos. V-101 and V-601.</p> <p>Tank V-301, V-302, V-303, V-401, V-402, V-403 &amp; V-404: These tanks store liquid hazardous waste burned at the 32 incinerator. Tank emissions and truck vapor space emissions are vented through the vent header to the 32 incinerator secondary combustion chamber (SCC) or the carbon bed unit as backup control.</p> <p>Tank V-701: Although this tank can receive liquid hazardous waste, this tank is generally used to manage water from various sumps. This tank also serves as a receiving tank for the carbon bed unit accumulator. Product stored in this tank is burned at the 32 incinerator. Emissions are vented through the vent header to the 32 incinerator secondary combustion chamber (SCC) or the carbon bed unit as backup control.</p> <p>Tank V-101 &amp; V-601: These tanks are used to manage water from various sumps throughout the facility. Water stored in these tanks is burned at the 32 incinerator. Tanks vent to atmosphere. De minimis quantities of organics may be present in the water. There may be times for safety reasons the tanks may be used for short periods of time to manage an unforeseen spill to a dike. The material would be placed into another vessel as soon as possible. This emission unit is subject to the requirements of 40 CFR Part 63, Subparts A and DD. In addition, by virtue of being subject to Subpart DD, EUB7 is also subject to the equipment leak provisions of the HON (i.e., 40 CFR Part 63, Subpart H). EUB7 is a CAM subject emission unit subject to the requirements of 40 CFR Part 64.</p> <p>This emission unit was permitted in PTI 678-83A.</p>		
EU32INCINERATOR	32 rotary kiln hazardous waste incinerator including kiln, secondary combustion chamber and the air pollution control system.	2001 2002 2008 07-26-2016	FGOSWRO FGHONFUGITIVES FGMERCURY

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
	<p>This emission unit is subject to the requirements of 40 CFR Part 63, Subparts A and DD. In addition, by virtue of being subject to Subpart DD, EU32INCINERATOR is also subject to the equipment leak provisions of the HON (i.e., 40 CFR Part 63, Subpart H).</p> <p>This emission unit is subject to the requirements of 40 CFR Part 61, Subparts A and E and 40 CFR Part 63, Subparts A and EEE. It is an existing source under the provisions of the 40 CFR Part 63, Subpart EEE, replacement standard.</p> <p>This emission unit was permitted in PTI 226-15.</p>		
EUC3	<p>Wastewater treatment plant (WWTP) including the wastewater sludge drying process located in 1005 Building. The wastewater sludge drying process includes the following major equipment and other associated equipment: north and south WWTP sludge belt filter press, pressed sludge dryer, venturi scrubber, packed tower scrubber, and two silos for dried solids storage. The wastewater sludge drying process shall be referred to as the "process" in this table.</p> <p>The transfer of dried solids from the two silos to the EU32INCINERATOR complex is not part of the EUC3 wastewater sludge drying process.</p> <p>The wastewater sludge drying process utilizes equipment that the facility has documented as exempt under R 336.1285(m) for Wastewater Treatment Plant exempt equipment. R 336.1285(m) covers process water treatment equipment, wastewater treatment equipment, and sewage treatment equipment. This equipment includes the sludge feed tank (V-1405) and the auxiliary filter process (plate presses FK-420A, FL-420B, FL-420C and filtrate tank V-TK-422), and it is not covered by this permit.</p>	1996 06-17-2003	FGOSWRO

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
	<p>This emission unit is subject to the requirements of 40 CFR Part 63, Subparts A and DD.</p> <p>This emission unit was permitted in PTI 129-06.</p>		
EU1353-02	Silicone Sealants and Adhesives production in the 1353 Building facility. Subject to 40 CFR Part 63, Subpart FFFF. Emissions are controlled by a carbon bed. EU1353-02 is also subject to the equipment leak provisions of the HON (i.e., 40 CFR Part 63, Subpart H).	04-05-2021	FGRULE290 FGMONMACT FGHONFUGITIVES
EU845_MOD2	845 Building YS3000 batch process. With mixing and degassing vessels, filtration, and packaging. This emission unit is subject to the requirements of 40 CFR Part 63, Subparts A and HHHHH. EU845 is also and the equipment leak provisions of 40 CFR Part 63, Subpart UU (National Emission Standards for Equipment Leaks - Control level 2 Standards).	11-04-2016 08-30-2021	FGRULE290 FGCOATINGSMACT
EU433	433 Building R290 Burn Off Oven used to clean residual low-density polyethylene from metal parts used in R&D extrusion processes.	11-08-2019	FGRULE290
EU1870-01	1870 Building Vapor intrusion system	02-20-2022	FGRULE290
EU845_AEH10	EU845_AEH10 is a batch scale processing unit with limited emissions located at the 845 Building of the Dow Corporation Coating Materials Multipurpose Research Pilot Plant. It consists of two processing vessels, transfer pumps, a vacuum system, two process mixers, and tote mixing equipment. This emission unit is subject to the requirements of 40 CFR Part 63, Subparts A and HHHHH. EU845_AEH10 is also subject to the equipment leak provisions of 40 CFR Part 63, Subpart UU (National Emission Standards for Equipment Leaks - Control level 2 Standards).	09-30-2022	FGRULE290 FGCOATINGSMACT
EU1353-COLDCLN	1353 Cold cleaner located at the Dow 1353 building and is a <i>Safety Kleen Automated Model 81</i> . It has 8.8 square foot surface area and is an agitated unit with a mechanically assisted cover that contains mineral spirits and <i>Biosoft</i> (surfactant) mixture with a Reid Vapor pressure of 0.5 psia used for cleaning metal parts.	01-01-2022	FGCOLDCLEANER
EU922DieselTank	922 Building Diesel storage tank	1980	FGRULE703
EU922GasolineTank	922 Building Gasoline storage tank	1980	FGRULE703

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU1310RadioTowerRICE	ES&S 1310 Radio Tower utilizes a 324 Horsepower (HP) EPA Tier 3 Certified compression ignition diesel fuel emergency generator. This generator has a total displacement of 6.7 liters.	2018	FGNSPSIII
EUEVOWIFLSRICE	EVO WIF Lift Station utilizes a diesel 800 HP (600 kW) EPA Tier 2 Certified emergency generator. This generator has a total displacement of 2.5 l/cylinder.	2013	FGNSPSIII
EU633RICE	633 Building diesel 324 HP (150 kW) EPA Tier 3 Certified diesel generator.	2015	FGNSPSIII
EU123RICE	123 Building utilizes an EPA certified diesel 315 HP (200 kW) emergency generator	2016	FGNSPSIII
EU1803RICE1480HP	1803 Building circa 1991 Back up 1480 HP diesel generator	1991	FGEMERGCIRICE>500H P-EXISTING
EU1803RICE625HP	1803 Building circa 1968 Back up 525 HP diesel generator	1968	FGEMERGCIRICE>500H P-EXISTING
EU1803RICE1070HP	1803 Building circa 1975 Back up 1070 HP diesel generator	1975	FGEMERGCIRICE>500H P-EXISTING
EU1100RICE	ES&S 1100 Building utilizes a diesel emergency backup generator, that is 370 HP (275 kW).	1987	FGEMERGCIRICE<500H P-Exisitng
EUAustinLiftstation	EVO Austin Street lift station utilizes a 201 HP (150 kW) certified emergency spark ignition natural gas engine subject to 40 CFR Part 60, Table 1 emission standards in NSPS JJJJ. This engine was manufactured May 4, 2007, and installed in December 2015 and has a total displacement of 6.8 liters.	12-2015	FGNSPSJJJJ
EUDIVERSIONDIESELA	A non-emergency diesel fuel-fired Caterpillar Engine LCPXL27.0HXF, EPA Tier 4f, Labeled Model Year 2020 (build date 01-08-2020) with total displacement of 27.0 L subject to 40 CFR Part 60, Subpart IIII and 40 CFR Part 63, Subpart ZZZZ that is used to pump water from the wastewater treatment plant to diversion tanks.	06-02-2021	FGDIVERSIONDIESELS- IIII FGDIVERSIONDIESELS- ZZZZ
EUDIVERSIONDIESELB	A non-emergency diesel fuel-fired Caterpillar Engine LCPXL27.0HXF, EPA Tier 4f, Labeled Model Year 2020 (build date 01-09-2020) with total displacement of 27.0 L subject to 40 CFR Part 60, Subpart IIII and 40 CFR Part 63, Subpart ZZZZ that is used to pump water from the wastewater treatment plant to diversion tanks.	03-17-2021	FGDIVERSIONDIESELS- IIII FGDIVERSIONDIESELS- ZZZZ

**EU82  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Equipment in 588 Building used to produce both vinyl benzyl chloride (VBC) and benzocyclobutene (BCB). EU82 is subject to the MON (40 CFR Part 63, Subpart FFFF). By virtue of being subject to Subpart FFFF, this emission unit is also subject to the equipment leak provisions of 40 CFR Part 63, Subpart H.

This emission unit was permitted in PTI 4-04.

**Flexible Group ID:** FG963THROX (See DDP ROP No. MI-ROP-P1027-2020a or any subsequent revisions), FGMONMACT, FGHONFUGITIVES

**POLLUTION CONTROL EQUIPMENT**

Thermal treatment unit in 963 Building commonly referred to as the 963 THROX.

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Vinyl benzyl chloride (VBC)	Maximum production of 2,160,000 pounds <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EU82	SC VI.1	R 336.1225 R 336.1702
2. Benzo-cyclobutene (BCB)	Maximum production of 1,200,000 pounds <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EU82	SC VI.1	R 336.1225 R 336.1702

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

NA

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall not operate process equipment which vents to the thermal treatment unit (i.e., 963 THROX) with absorber and caustic scrubber unless the thermal treatment unit is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the thermal treatment unit, absorber and caustic scrubber includes, but is not limited to, maintaining compliance with the requirements outlined in FG963THROX. Exceptions to this condition are described in SC IV.2.<sup>2</sup> (R 336.1702, R 336.1224, R 336.1225, R 336.1910)
2. The permittee shall not bypass the 963 THROX with absorber and caustic scrubber for more than the following number of hours per month:<sup>2</sup> (R 336.1702, R 336.1224, R 336.1225)
  - a. 186 hours per month during the VBC process;
  - b. 387 hours per month during the BCB process.

**V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

NA

**VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

1. The permittee shall keep, in a satisfactory manner, production records for EU82 to demonstrate compliance with SC II.1 and II.2. All records shall be made available to the Department upon request.<sup>2</sup> (R 336.1702, R 336.1225)
2. The permittee shall maintain records of the time, date, and duration of each bypass event of the 963 THROX including absorber and caustic scrubber. All records shall be made available to the Department upon request.<sup>2</sup> (R 336.1702, R 336.1224, R 336.1225)
3. Within 60 days after issuance of ROP No. MI-ROP-A4033-2024, the permittee shall submit a plan to the AQD District Supervisor identifying the operating parameters for FG963THROX that shall be obtained from the operator or owner of FG963THROX. All operating parameter data in the plan for FG963THROX shall be obtained within 30 days of the end of the month to which it pertains. If the plan fails to provide adequate information to demonstrate 99.9% destruction of organic compounds, the permittee shall amend the plan. The permittee shall also amend the plan within 45 days after receiving notification from the AQD District Supervisor that the plan does not provide adequate information to demonstrate 99.9% destruction of organic compounds. The permittee shall keep the plan and recorded parameter data on file at the facility and make them available to the Department upon request. (R 336.1213(3)(b)(ii))

See Appendix 7

**VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

See Appendix 8

**VIII. STACK/VENT RESTRICTION(S)**

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV82001	20 <sup>1</sup>	55 <sup>1</sup>	R 336.1225
2. SV82002	2 <sup>1</sup>	65 <sup>1</sup>	R 336.1225
3. SV963THROX	24 <sup>1</sup>	80 <sup>1</sup>	R 336.1225

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subparts A (General Provisions) and FFFF (National Emission Standards for Hazardous Air Pollutant Emissions for Miscellaneous Organic Chemical Manufacturing). Compliance is determined as per FGMONMACT. **(40 CFR Part 63, Subparts A and FFFF)**

**Footnotes:**

<sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>2</sup> This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EU1353  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Silicone Sealants and Adhesives production in the 1353 Building facility. This emission unit includes the 3210 Myers 10 Mixer, a trailer unloading station, a solids loading unit, and a packaging area for final intermediates. Emissions are controlled by the DC3211 dust collector (SV1353-007) and the E3213B chilled water condenser (SV1353-004). The facility is subject to the requirements of 40 CFR Part 63, Subparts A, EEEE, FFFF, and the equipment leak provisions of 40 CFR Part 63, Subpart UU (National Emission Standards for Equipment Leaks - Control level 2 Standards).

This emission unit was permitted in PTI 87-17C.

**Flexible Group ID:** FGMONMACT, FGOLDMACT

**POLLUTION CONTROL EQUIPMENT**

- DC3211 dust collector (SV1353-007)
- E3213B chilled water condenser (SV1353-004)

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	4.3 tpy+	12-month rolling time period as determined at the end of each calendar month	EU1353-01	SC V.1, VI.2, VI.4	<b>R 336.1225 R 336.1702(a)</b>
2. PM	3.0 pph+	Hourly	Equipment vented through SV1353-007	SC V.1, VI.4	<b>R 336.1331</b>
3. PM10	1.4 tpy+	12-month rolling time period as determined at the end of each calendar month	Equipment vented through SV1353-007	SC V.1, VI.4	<b>40 CFR 52.21(c) &amp; (d)</b>
4. PM2.5	1.4 tpy+	12-month rolling time period as determined at the end of each calendar month	Equipment vented through SV1353-007	SC V.1, VI.4	<b>40 CFR 52.21(c) &amp; (d)</b>

+This emission limit does not include fugitive emissions (i.e., emissions from leaking valves, flanges, etc.) from the emission unit.

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee shall not operate the portions of EU1353-01 vented to the E-3213B chilled water condenser unless the condenser is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the E-3213B chilled water condenser includes an exit gas temperature of 40°C or less.<sup>2</sup> (**R 336.1224, R 336.1225, R 336.1702(a), R 336.1910**)



- The permittee shall not load solids into the 3210 Myers 10 Mixer unless the DC3211 dust collector is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the DC3211 dust collector includes a pressure drop greater than 0.15 inches of water and less than 6 inches of water, or as otherwise specified by the manufacturer.<sup>2</sup> (R 336.1224, R 336.1225, R 336.1331, R 336.1910, 40 CFR 52.21(c)&(d))

#### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

- The permittee shall install, calibrate, maintain, and operate in a satisfactory manner, a device to monitor and record the exit gas temperature of the E-3213B chilled water condenser.<sup>2</sup> (R 336.1910)
- The permittee shall equip and maintain the 3210 Myers 10 Mixer with a gauge, which measures the pressure drop across the DC3211 dust collector and sounds an alarm when the pressure drop is less than 0.15 inches of water or greater than 6 inches water, or as otherwise specified by the manufacturer.<sup>2</sup> (R 336.1910)

#### **V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

- Upon request of the AQD District Supervisor, the permittee shall verify the VOC, PM, PM10, and/or PM2.5 emission rates from EU1353-01 by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

<b>Pollutant</b>	<b>Test Method Reference</b>
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10/PM2.5	40 CFR Part 51, Appendix M
VOC	40 CFR Part 60, Appendix A
HAPs	40 CFR Part 63, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.<sup>2</sup> (R 336.1224, R 336.1225, R 336.1331, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c)&(d))

- Upon request of the AQD District Supervisor, the permittee shall verify the VOC, PM, PM10, and/or PM2.5 emission rates from EU1353-01 at a minimum, every five years from the date of the last test. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)
- The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. (R 336.1213(3))

See Appendix 5

#### **VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. (R 336.1213(3)(b)(ii))

- The permittee shall complete all required calculations and records in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.<sup>2</sup> (R 336.1702(a), R 336.1910, 40 CFR 52.21(c)&(d))
- The permittee shall monitor and record, in a satisfactory manner, the exit gas temperature of the E-3213B chilled water condenser on a continuous basis, while the 3210 Myers 10 Mixer is operating. Monitoring and recording of data "on a continuous basis" is defined as an instantaneous data point recorded at least once every 15 minutes. The permittee may record average values (rolling or block) for 15 minute or shorter periods calculated from all

measured data values during each period. In the event the continuous monitoring and recording system is inoperable, the permittee shall record at least one data point per shift for each data point that is required to be monitored on a continuous basis. For each event in which the continuous monitoring and recording system is inoperable, the permittee shall maintain a record of the date, time, and duration of each event. This record shall also include actions taken to correct and prevent a reoccurrence of each event. The permittee shall keep all records on file at the facility and make them available to the Department upon request.<sup>2</sup> **(R 336.1910)**

3. The permittee shall monitor and record, in a satisfactory manner, the pressure drop across the DC3211 dust collector on a continuous basis, while the 3210 Myers 10 Mixer is operating. Monitoring and recording of data “on a continuous basis” is defined as an instantaneous data point recorded at least once every 15 minutes. The permittee may record average values (block or rolling) for 15 minute or shorter periods calculated from all measured data values during each period. In the event the continuous monitoring and recording system is inoperable, the permittee shall record at least one data point per shift for each data point that is required to be monitored on a continuous basis. For each event in which the continuous monitoring and recording system is inoperable, the permittee shall maintain a record of the date, time, and duration of each event. In addition, the permittee shall keep a record of all alarms due to the pressure drop being less than 0.15 inches of water or greater than 6 inches water, or as otherwise specified by the manufacturer. The permittee shall keep all records on file at the facility and make them available to the Department upon request.<sup>2</sup> **(R 336.1910)**
4. The permittee shall calculate the VOC, PM, PM10, and PM2.5 emission rates from EU1353-01 monthly, for the preceding 12-month rolling time period, using a method acceptable to the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request.<sup>2</sup> **(R 336.1702(a), 40 CFR 52.21(c)&(d))**

See Appendix 7

**VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

See Appendix 8

**VIII. STACK/VENT RESTRICTION(S)**

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SV1353-004 <sup>a</sup> (3210 Mixer Main Process Vent)	2 <sup>2</sup>	30 <sup>2</sup>	<b>R 335.1225 40 CFR 52.21(c) &amp; (d)</b>

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
2. SV1353-005 (EU1353-01 Drum Loading/Packaging Ventilation)	12 <sup>2</sup>	30 <sup>2</sup>	R 335.1225 40 CFR 52.21(c) & (d)
3. SV1353-007 <sup>a</sup> (3210 Mixer Solids Loading DC3211 Dust Collector Exhaust)	11 <sup>2</sup>	9 <sup>2</sup>	R 335.1225 40 CFR 52.21(c) & (d)

<sup>a</sup> This stack is not required to be discharged unobstructed vertically upwards to the ambient air.

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subparts A (General Provisions) and FFFF (National Emission Standards for Hazardous Air Pollutant Emissions for Miscellaneous Organic Chemical Manufacturing). Compliance is determined as per FGMONMACT. **(40 CFR Part 63, Subparts A and FFFF)**
2. the permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart EEEE (Organic Liquid Distribution NESHAP). The requirements of this standard are outlined in table FGOLDMACT of the ROP. **(40 CFR Part 63, Subpart EEEE)**

**Footnotes:**

- <sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).
- <sup>2</sup> This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EUB7  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Incineration complex tank farm in the environmental operations (EVO) plant. Emission group consists of 10 tanks (described below) and a carbon adsorption unit for backup control.

Emissions accounted for in this permit include those emissions from the Carbon bed and tank nos. V-101 and V-601.

Tank V-301, V-302, V-303, V-401, V-402, V-403 & V-404: These tanks store liquid hazardous waste burned at the 32 Incinerator. Tank emissions and truck vapor space emissions are vented through the vent header to the 32 Incinerator secondary combustion chamber (SCC) or the carbon bed unit as backup control.

Tank V-701: Although this tank can receive liquid hazardous waste, this tank is generally used to manage water from various sumps. This tank also serves as a receiving tank for the carbon bed unit accumulator. Product stored in this tank is burned at the 32 Incinerator. Emissions are vented through the vent header to the 32 Incinerator secondary combustion chamber (SCC) or the carbon bed unit as backup control.

Tank V-101 & V-601: These tanks are used to manage water from various sumps throughout the facility. Water stored in these tanks is burned at the 32 Incinerator. Tanks vent to atmosphere. De minimis quantities of organics may be present in the water. There may be times for safety reasons the tanks may be used for short periods of time to manage an unforeseen spill to a dike. The material would be placed into another vessel as soon as possible.

This emission unit is subject to the requirements of 40 CFR Part 63, Subparts A and DD. In addition, by virtue of being subject to Subpart DD, EUB7 is also subject to the equipment leak provisions of the HON (i.e., 40 CFR Part 63, Subpart H).

EUB7 Pre-control emissions of VOC are greater than 100 ton per year. EUB7 is a CAM subject emission unit subject to the requirements of 40 CFR Part 64.

This emission unit was permitted in PTI 678-83A.

**Flexible Group ID:** FGHONFUGITIVES, FGOSWRO

**POLLUTION CONTROL EQUIPMENT**

Activated carbon bed with steam regeneration. Emissions from tank nos. V-301, V-302, V-303, V-401, V-402, V-403, V-404, and V-701 are directed to the carbon bed when the 32 Incinerator SCC is down. Vent emissions from container unloading (e.g., dumpsters, dinos, trucks, rail cars) may be directed to the carbon bed when the 32 incinerator SCC is down. The carbon bed vents to either Vent Nos. SVB7 or SVEG32INCIN01. This device is CAM subject for VOCs.

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	11 pph <sup>2</sup>	Hourly	EUB7 (does not include fugitive emissions (i.e., emissions from leaking valves,	SC IV.2 & 3, VI.1 & 4	<b>R 336.1225 R 336.1702(a)</b>

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
			flanges, etc.) from the process.)		
2. VOC	1.2 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month.	EUB7 (does not include fugitive emissions (i.e., emissions from leaking valves, flanges, etc.) from the process.)	SC VI.6	<b>R 336.1225 R 336.1702(a)</b>

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee may direct emissions from the vent header to the carbon bed unit for a period not to exceed a total of 876 hours per 12-month rolling time period as determined at the end of each calendar month.<sup>2</sup> **(R 336.1205(3), R 336.1702(a))**

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall not operate EUB7 unless emissions from the vent header are directed to the 32 Incinerator or the carbon bed unit or the vent header is not venting.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1910)**
2. The permittee shall not vent to the carbon bed unit unless the carbon bed unit is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes, but is not limited to, regenerating the carbon bed unit at least once per calendar week, when in use. In use is defined as when the vapor line valve opens to the carbon bed to allow emissions to the unit.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1910)**
3. The permittee shall not vent emissions from the vent header to the 32 Incinerator unless the incinerator is operating properly. For the purpose of this condition, the incinerator shall be considered properly operating whenever it is in compliance with EU32INCINERATOR, or any subsequent revisions; and the applicable portions of the Hazardous Waste Combustor MACT (40 CFR Part 63, Subpart EEE).<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1910, 40 CFR Part 63, Subpart EEE)**
4. The permittee shall not regenerate the carbon bed unit associated with EUB7 unless the associated condenser is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the condenser includes, but is not limited to, an exit gas temperature of not more than 77°F during regeneration (steam desorption), based on the averaging time specified in SC VI.2 below.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1910)**

**V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

**VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall keep, in a satisfactory manner, the following records for EUB7. All records shall be kept on file for a period of five years and made available to the Department upon request.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1910, 40 CFR 64.6(c)(1)(i) and (ii))**
  - a. Records of the carbon bed unit regeneration on a per regeneration basis, when the carbon bed is in use, and

- b. Records of the total time the vapor line valve position is open to the carbon bed on a per calendar day basis.
2. The permittee shall continuously monitor the carbon bed operating temperature and record once daily, when in use, as an indicator of proper operation of the carbon adsorber. The indicator range is a carbon bed operating temperature outlet gas to exchanger maximum temperature of <135°C. **(40 CFR 64.6(c)(1)(i) and (ii))**
  3. The permittee shall measure and record regeneration cycle time as an indicator of proper operation of the carbon adsorber. The cycle time range is once per week, when in use. **(40 CFR 64.6(c)(1)(i) and (ii))**
  4. The permittee shall continuously monitor and record hourly the condenser outlet gas temperature as an indicator of proper operation of the condenser, when in use. The indicator range is below 77°F. **(40 CFR 64.6(c)(1)(i) and (ii))**
  5. An excursion is operation of the carbon bed for a calendar week without a carbon bed regeneration when the carbon bed is in use or when the carbon bed temperature is above the maximum operating carbon bed temperature of 135 °C and the operation of the condenser above the exhaust gas above 77°F. Carbon bed regeneration is manually tracked by the building on a per regeneration basis. **(40 CFR 64.6(c)(2))**
  6. The permittee shall monitor and record the total time the vapor line valve position is open to the carbon bed daily. **(40 CFR 64.3(a)(2))**
  7. The permittee shall keep, in a satisfactory manner, records of the exit gas temperature of the condenser, during carbon bed regeneration (steam desorption), on a continuous basis. Monitoring and recording of data “on a continuous basis” is defined as an instantaneous data point recorded at least once every 15 minutes for at least 90% of the operating time during an operating calendar day. In the event the permittee records more than one data point during the 15-minute period, the data point recorded may be the average (rolling or block) of all data points recorded during the 15-minute period. Any response to an excursion of the corresponding operational parameter set point or range specified for table EUB7 shall be based upon these 15-minute values. Unless otherwise noted in table EUB7, the permittee is not required to monitor and record operational parameter data during periods of non-operation of the device resulting in cessation of the emissions to which the monitoring applies. All records shall be kept on file for a period of five years and made available to the Department upon request.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1910, 40 CFR 64.6(c)(1)(iii))**
  8. The applicant shall keep records of monthly emission calculations and results to demonstrate compliance with the emission limits listed in the “emission limits” table of this permit. Within 30 days, following the end of each calendar month, the applicant shall calculate and record emissions from the process for the previous calendar month to demonstrate compliance with the 12-month rolling time period emission totals of this permit. All records shall be kept on file for a period of five years and made available to the Department upon request.<sup>2</sup> **(R 336.1225, R 336.1702(a))**
  9. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown, or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). For the carbon bed regeneration, carbon bed operating temperature or the condenser outlet gas temperature excursions trigger an inspection and corrective action as necessary. **(40 CFR 64.7(d))**
  10. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably

preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. **(40 CFR 64.6(c)(3), 40 CFR 64.7(c))**

11. The permittee shall properly maintain the monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. **(40 CFR 64.7(b))**
12. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions. **(40 CFR 64.9(b)(1))**

See Appendix 7

**VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. Each semiannual report of monitoring and deviations shall include summary information on the number, duration, and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. **(40 CFR 64.9(a)(2)(i))**
5. Each semiannual report of monitoring and deviations shall include summary information on monitor downtime. If there were no periods of monitor downtime in the reporting period, then this report shall include a statement that there were no periods of monitor downtime. **(40 CFR 64.9(a)(2)(ii))**

See Appendix 8

**VIII. STACK/VENT RESTRICTION(S)**

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVB7	12 <sup>2</sup>	40 <sup>2</sup>	R 336.1225
2. SVEG32INCIN01	54 <sup>2</sup>	200 <sup>2</sup>	R 336.1225 40 CFR 52.21(c) & (d)

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable requirements of 40 CFR Part 64. **(40 CFR Part 64)**
2. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the AQD and if necessary, submit a proposed

modification of the ROP and CAM Plan to address the necessary monitoring changes. Such a modification may include but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. **(40 CFR 64.7(e))**

**Footnotes:**

<sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>2</sup> This condition is federally enforceable and was established pursuant to Rule 201(1)(a).



**EU32INCINERATOR  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

32 rotary kiln hazardous waste incinerator including kiln, secondary combustion chamber (SCC), and the air pollution control system.

This emission unit is subject to the requirements of 40 CFR Part 63, Subparts A and DD. In addition, by virtue of being subject to Subpart DD, EU32INCINERATOR is also subject to the equipment leak provisions of the HON (i.e., 40 CFR Part 63, Subpart H).

This emission unit is subject to the requirements of 40 CFR Part 61, Subparts A and E and 40 CFR Part 63, Subparts A and EEE. It is an existing source under the provisions of the 40 CFR Part 63, Subpart EEE, replacement standard.

This emission unit was permitted in PTI 226-15.

**Flexible Group ID:** FGOSWRO, FGHONFUGITIVES, FGMERCURY

**POLLUTION CONTROL EQUIPMENT**

Air pollution control (APC) system consists of the following:

- NO<sub>x</sub> abatement control
- quench tower
- condenser
- venturi scrubber
- chlorine scrubber
- nine ionizing wet scrubbers (IWS)

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NO <sub>x</sub>	151 pph <sup>2</sup>	One hour	EU32INCINERATOR	SC VI.1	<b>40 CFR 52.21(d)</b>
2. NO <sub>x</sub>	185.9 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EU32INCINERATOR	SC VI.11	<b>R 336.1205(1) 40 CFR 52.21(b)(3) 40 CFR 52.21(c) &amp; (d)</b>
3. PM (Note A)	0.013 gr/dscf <sup>2</sup>	Hourly	EU32INCINERATOR	SC VI.4, VI.5	<b>R 336.1225 R 336.1331(1)(c) 40 CFR 63.1219(a)(7)</b>
4. PM	24.9 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EU32INCINERATOR	SC VI.13a	<b>R 336.1205(1)</b>
5. PM10 (Note A)	30 mg/dscm <sup>2</sup>	Hourly	EU32INCINERATOR	SC V.1	<b>40 CFR 52.21(c) &amp; (d)</b>
6. PM10	14.9 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EU32INCINERATOR	SC VI.13.b	<b>R 336.1205(1) 40 CFR 52.21(c) &amp; (d)</b>

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
7. PM2.5	9.9 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EU32INCINERATOR	SC VI.13.c	R 336.1205(1) 40 CFR 52.21(c) & (d)
8. SO <sub>2</sub>	36.4 pph <sup>2</sup>	One hour	EU32INCINERATOR	SC VI.1	40 CFR 52.21(d)
9. SO <sub>2</sub>	26.6 pph <sup>2</sup>	3 hours	EU32INCINERATOR	SC VI.1	40 CFR 52.21(c) & (d)
10. SO <sub>2</sub>	39 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EU32INCINERATOR	SC VI.11	R 336.1205(1) 40 CFR 52.21(c) & (d)
11. CO (Notes A & B)	100 ppmv, dry basis (ppmv dry) <sup>2</sup>	One hour	EU32INCINERATOR	SC VI.2	R 336.1224 R 336.1225 R 336.1702(a) 40 CFR 63.1219(a)(5)(i) 40 CFR 63.6(f)(1)
12. CO	99 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EU32INCINERATOR	SC VI.11	R 336.1205(1)
13. THC (Note A)	10 ppmv dry <sup>2</sup>	One hour	EU32INCINERATOR, during DRE testing	SC V.1, V.6	40 CFR 63.1219(a)(5)(i)
14. Total fluorides	2.9 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EU32INCINERATOR	SC VI.13.d	R 336.1205(1)
15. Sulfuric acid mist	6.9 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EU32INCINERATOR	SC VI.13.e	R 336.1205(1)
16. HCl/Cl <sub>2</sub> (Notes A & C)	32 ppmv dry <sup>2</sup>	12 hours	EU32INCINERATOR	SC VI.4	R 336.1225 40 CFR 63.1219(a)(6)
17. Mercury (Notes A & D)	45 µg/dscm <sup>1</sup>	12 hours	EU32INCINERATOR	SC V.1	R 336.1228
18. Mercury (Note A)	130 µg/dscm <sup>2</sup>	12 hours	EU32INCINERATOR	SC II.4.aa, V.1, VI.4	40 CFR 61.50 40 CFR 63.1219(a)(2)
19. Semi-volatile Metals (SVM) (Notes A, C, & D)	120 µg/dscm <sup>1</sup>	12 hours	EU32INCINERATOR	SC V.1	R 336.1225
20. SVM (Notes A & C)	230 µg/dscm <sup>2</sup>	12 hours	EU32INCINERATOR	SC II.4.cc, V.1, VI.4	40 CFR 63.1219(a)(3)
21. LVM (Notes A & C)	92 µg/dscm <sup>2</sup>	12 hours	EU32INCINERATOR	SC II.4.z & bb, V.1, VI.4	R 336.1225 40 CFR 63.1219(a)(4)
22. Antimony	1.09 pph <sup>1</sup>	24 hours	EU32INCINERATOR	SC II.4.l	R 336.1225
23. Manganese	0.26 pph <sup>1</sup>	24 hours	EU32INCINERATOR	SC II.4.q	R 336.1225

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
24. Cobalt	0.47 pph <sup>1</sup>	8 hours	EU32INCINERATOR	SC II.4.o	R 336.1225
25. Platinum	0.047 pph <sup>1</sup>	8 hours	EU32INCINERATOR	SC II.4.v	R 336.1225
26. Silver	0.23 pph <sup>1</sup>	8 hours	EU32INCINERATOR	SC II.4.w	R 336.1225
27. Sulfuric acid	4.08 pph <sup>1</sup>	8 hours	EU32INCINERATOR	SC II.4.x	R 336.1225
28. Tetrachloro-silane	0.11 pph <sup>1</sup>	12 hours	EU32INCINERATOR	SC II.4.u	R 336.1224 R 336.1225
29. Dioxin/Furans (D/F) (Notes A, C, & D)	0.20 ng TEQ/dscm <sup>1</sup>	One hour	EU32INCINERATOR	SC V.1	R 336.1225
30. D/F (Notes A & C)	0.40 ng TEQ/dscm <sup>2</sup>	One hour	EU32INCINERATOR	SC V.1, VI.4	40 CFR 63.1219(a)(1)(B)(ii)
31. Cadmium	0.0007 pph <sup>1</sup>	One hour	EU32INCINERATOR	SC II.4.m	R 336.1225
32. Chromium VI	0.00088 pph <sup>1</sup>	One hour	EU32INCINERATOR	SC II.4.n	R 336.1225
33. Bis (chloro-methyl) ether	0.001 pph <sup>1</sup>	One hour	EU32INCINERATOR	SC II.4.r	R 336.1225
34. Nickel	0.316 pph <sup>1</sup>	One hour	EU32INCINERATOR	SC II.4.s	R 336.1225
35. Hydrazine	0.014 pph <sup>1</sup>	12 hours	EU32INCINERATOR	SC II.4.p	R 336.1225
36. Visible emissions, excluding uncombined water vapor	10% opacity <sup>2</sup>	6-minute average	EU32INCINERATOR	SC VI.4	R 336.1301 R 336.1331

**Note A:** All limits in gr/dscf, mg/dscm, µg/dscm, ng TEQ/dscm, and ppmv dry are corrected to 7% oxygen.

**Note B:** This limit does not apply during periods of startup, shutdown, or malfunction if EU32INCINERATOR is burning only auxiliary fuel and there is no hazardous waste in the primary or secondary combustion chamber. Auxiliary fuel is defined in SC III.2. Hazardous waste shall be considered to be in the primary or secondary combustion chamber:

- 1) while hazardous waste is being fed to EU32INCINERATOR; or
- 2) if waste feed has been cut off, until the hazardous waste residence time has transpired after the waste feed cutoff.

**Note C:** HCl/Cl<sub>2</sub> – Hydrogen chloride and chlorine gas, combined emissions as HCl equivalents.

SVM – Lead and Cadmium combined.

LVM – Arsenic, Beryllium, and Chromium combined.

D/F – Tetra-, penta-, hexa-, hepta-, and octa-chlorinated dibenzo dioxins and furans.

**Note D:** Two emission limits apply to this pollutant. The emission limit with this note is “state only enforceable” and was established pursuant to Rule 201(1)(b).

## II. MATERIAL LIMIT(S)

1. The permittee shall not burn any of the following materials in EU32INCINERATOR:
  - a. Material containing polychlorinated biphenyls (PCBs) at a concentration equal to or greater than 50 parts per million by weight;<sup>1</sup> (R 336.1225)
  - b. Dioxin-listed hazardous wastes F020, F021, F022, F023, F026, or F027, described in R 299.9220.<sup>2</sup> (R 336.1225, 40 CFR 63.1219(a)(1))
2. The permittee may incinerate any wastes containing byproduct material as defined and licensed to the applicant by the U.S. Nuclear Regulatory Commission, in accordance with the conditions of said license and all applicable federal regulations, including 10 CFR Part 20.<sup>2</sup> (R 336.1201(3))

3. The permittee shall use only Huron Water or Service Water in the Air Pollution Control (APC) system. SC IX.6 provides descriptions of Huron Water, Service Water, and the APC system.<sup>2</sup> **(R 336.1205(1), R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 63.1219(a))**
4. The permittee shall prevent throughput to EU32INCINERATOR from exceeding any of the feed rate limits in the Feed Rate Limits Table below. While operating under approved test conditions, the permittee is not subject to any limits in the Feed Rate Limits Table below for which the approved test plan contains an alternate limit. While operating under approved test conditions, the permittee shall prevent throughput to EU32INCINERATOR from exceeding any of the alternate limits in the approved test plan as if such alternate limits were listed in the Feed Rate Limits Table below. The “compliance method” for each limit in this condition is the associated feed monitoring required by SC IX.4.E.<sup>2</sup> **(40 CFR 63.1206(c)(1), 40 CFR 63.1207(h))**

**Feed Rate Limits Table**

<b>Material Feed (See Note #1)</b>	<b>Maximum Feed Rate (See Note #2)</b>	<b>Averaging Time Period</b>	<b>Underlying Applicable Requirements</b>
a. Maximum heat output of total feedrate	130 MMBTU/hr <sup>2</sup>	One hour	<b>R 336.1225 R 336.1702(a) 40 CFR 52.21(c) 40 CFR 63.1219</b>
b. Miscellaneous solid waste feedrate to kiln (examples include soil and debris, packaged waste, latex solids, activated carbon, Waste Water Treatment Plant sludge)	21,500 pph <sup>2</sup>	One hour	<b>R 336.1225 40 CFR 52.21(c) 40 CFR 63.1219</b>
c. Maximum total waste feedrate to EU32INCINERATOR	35,538 pph <sup>2</sup>	One hour	<b>R 336.1225 40 CFR 52.21 40 CFR 63.1209(k)(4)</b>
d. Maximum total pumpable waste feedrate to kiln	12,883 pph <sup>2</sup>	One hour	<b>R 336.1225 40 CFR 52.21 40 CFR 63.1209(k)(4)</b>
e. Maximum total waste feedrate to SCC (See Note #3)	7.178 pph <sup>2</sup>	One hour	<b>R 336.1225 40 CFR 52.21 40 CFR 63.1209(k)(4)</b>
f. Maximum total feedrate of each organic compound	11,000 pph <sup>2</sup>	One hour	<b>R 336.1205(1) R 336.1225</b>
g. Total fluorides	660 pph <sup>2</sup>	8 hours	<b>R 336.1205(1)</b>
h. Sulfuric acid	6,200 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	<b>R 336.1205(3)</b>
i. 2-Propeneamide (acrylamide) (CAS 79-06-1)*	5,900 pph <sup>1</sup>	12 hours	<b>R 336.1225</b>
j. 2-Propeneamide polymers	5,900 pph <sup>1</sup>	12 hours	<b>R 336.1225</b>
k. Aluminum nitride (CAS 24304-00-5)	2,260 pph <sup>1</sup>	12 hours	<b>R 336.1225</b>
l. Antimony (CAS 7440-36-0)	1,090 pph <sup>1</sup>	24 hours	<b>R 336.1225</b>
m. Cadmium (CAS 7440-43-9)	48.1 pph <sup>1</sup>	One hour	<b>R 336.1225</b>
n. Chromium VI (CAS 440-47-3)	2.28 pph <sup>1</sup>	12 hours	<b>R 336.1225</b>
o. Cobalt (CAS 7440-48-4)	470 pph <sup>1</sup>	8 hours	<b>R 336.1225</b>
p. Hydrazine (CAS 302-01-2)	1,400 pph <sup>1</sup>	12 hours	<b>R 336.1225</b>
q. Manganese (CAS 7439-96-5)	260 pph <sup>1</sup>	24 hours	<b>R 336.1225</b>
r. Bis (chloromethyl) ether (CAS 542-88-1)	100 pph <sup>1</sup>	One hour	<b>R 336.1225</b>

Material Feed (See Note #1)	Maximum Feed Rate (See Note #2)	Averaging Time Period	Underlying Applicable Requirements
s. Nickel (CAS 7440-02-0)	316 pph <sup>1</sup>	One hour	R 336.1225
t. Quinoline (CAS 91-22-5)	2,200 pph <sup>1</sup>	12 hours	R 336.1225
u. Tetrachlorosilane (CAS 10026-04-7)	11,000 pph <sup>1</sup>	12 hours	R 336.1224 R 336.1225
v. Platinum (CAS 7440-06-4)	47 pph <sup>1</sup>	8 hours	R 336.1225
w. Silver – soluble (CAS 7440-22-4)	230 pph <sup>1</sup>	8 hours	R 336.1225
x. Sulfuric acid (CAS 7664-93-9)	4,080 pph <sup>1</sup>	8 hours	R 336.1225
y. Lithium hydroxide (CAS 1310-66-3)	500 pph <sup>1</sup>	8 hours	R 336.1225
z. Pumpable LVM	3.0 pph <sup>2</sup>	12 hours	40 CFR 63.1219(a) 40 CFR 63.1209(n)(2)
aa. Mercury	0.072 pph <sup>2</sup>	12 hours	R 336.1228 40 CFR 63.1209(l)(1)
bb. LVM	26.13 pph <sup>2</sup>	12 hours	R 336.1225 40 CFR 63.1219(a) 40 CFR 63.1209(n)(2)
cc.SVM	13.56 pph <sup>2</sup>	12 hours	R 336.1225 40 CFR 63.1219(a) 40 CFR 63.1209(n)(2)

Note #1: Each feedrate limit applies to all feed streams combined, unless otherwise stated for a specific limit.

Note #2: No limitation shall be imposed for the incineration of high alloy, high melting point pieces of metal pipe, valves, pipe fittings, plate, process equipment, or similar materials. This does not exempt metal foils, powders, or granular material.

Note #3: Only pumpable waste and vent streams shall be fed to the Secondary Combustion Chamber (SCC).

\* "CAS" refers to the Chemical Abstracts Service Registry Number

- Following submittal and AQD review of Comprehensive Performance Test (CPT) results, the permittee shall replace entries (z) through (cc) in the Feed Rate Limits Table above with the feed rate limits based on the CPT, for those materials identified by the AQD in writing.<sup>2</sup> (R 336.1225, 40 CFR 52.21(c) & (d), 40 CFR 63.1209(l)(1), 40 CFR 63.1209(n)(2), 40 CFR 63.1219(a))

### III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall not operate EU32INCINERATOR unless the exhaust gases are ducted to the APC system and the APC system is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the APC system includes operating according to the approved operation and maintenance plan. Also, during incineration of wastes a minimum of seven of the nine IWS units shall be energized and in operation.<sup>2</sup> (R 336.1224, R 336.1225, R 336.1702(a), R 336.1910, 40 CFR 52.21(c) & (d), 40 CFR 63.1219)
- During all start-up procedures, auxiliary fuel shall be used to preheat the secondary combustion zone to a minimum temperature of 962°C, or an AQD approved temperature determined by the CPT, prior to the ignition of any waste. During all shutdown procedures, other than during emergency situations, auxiliary fuel shall be used to ensure that temperatures in the secondary combustion chamber are not allowed to drop below the minimum temperature while any waste is still burning. Only the materials listed below shall be used as auxiliary fuel:<sup>2</sup> (R 336.1205(1), R 336.1225, 40 CFR 63.1219)
  - Sweet natural gas;
  - Fuel oil with a maximum sulfur content of 0.5 percent;
  - Comparable fuel excluded from regulation as hazardous waste pursuant to the provisions of R 299.9230 of the administrative rules promulgated under Part 111 of the Environmental Quality Protection Act, 1994 PA 451, as amended.

3. EU32INCINERATOR shall achieve a destruction and removal efficiency (DRE) of 99.999 percent for each principal organic hazardous constituent (POHC) for each waste feed.<sup>2</sup> **(R 336.1225, R 336.1702(a), 40 CFR 63.1219(c))**
4. The permittee shall maintain a functioning Automatic Waste Feed Cutoff (AWFCO) system for the operating parameters listed in the AWFCO Table below. Waste feed to EU32INCINERATOR shall not commence unless each operating parameter is in compliance with its respective waste feed cutoff limit, except as provided in Note #4 in the AWFCO Table below. When any operating parameter exceeds a waste feed cutoff limit, or if any Continuous Monitoring System (CMS) device malfunctions (See Note #1 in the AWFCO Table below) or any component of the AWFCO system fails, all waste feed to EU32INCINERATOR shall automatically and immediately cease, except as provided in Note #4 in the AWFCO Table below, consistent with safe operating procedures. Hereinafter, any such occurrence shall be referred to as an “AWFCO event”. While operating under approved test conditions, the permittee is not subject to any limits in entry (f) and in entries (h) through (kk) in the AWFCO Table below for which the approved test plan contains an alternate limit. While operating under approved test conditions, the permittee shall comply with the alternate limits in the approved test plan as if such alternate limits were listed in the AWFCO Table below.<sup>2</sup> **(R 336.1224, R 336.1225, R 336.1702(a), R 336.1910, R 336.1911, 40 CFR 63.1206(c)(1), 40 CFR 63.1206(c)(3), 40 CFR 63.1207(h), 40 CFR 63.1209(g)(2), 40 CFR 63.1206(c)(5)(i)(C))**

**AWFCO Table**

<b>Operating Parameter</b>	<b>Waste Feed Cutoff Limit</b>	<b>Averaging Time Period</b>
a. Induced fan on	Off	Response initiated immediately upon detection
b. ESV closed (See Note #2)	Open	Response initiated immediately upon detection
c. Span value of any CMS	Met or exceeded	Response initiated immediately upon detection
d. Maximum Kiln Pressure (prior to installation and operation of the secondary seal system or plenums)	Atmospheric	Response initiated immediately upon detection
e. Maximum Kiln Pressure (upon installation & operation of the plenums)	If the pressure in the kiln is greater than ambient, and any of the following three scenarios occur:  (A) The pressure difference between the kiln pressure and the inlet and/or outlet plenums is less than 0.2 inches of water;  (B) The pressurizing equipment for either plenum fails;  (C) The pressure in the kiln is greater than the pressure in the inlet and/or outlet plenums at any time.	Response initiated immediately upon detection
f. Minimum O <sub>2</sub> content	3.0 %	15 minutes
g. Maximum CO concentration	100 ppmv dry at 7% O <sub>2</sub>	One hour
h. Maximum total waste feed to EU32INCINERATOR	35,538 lb/hr	One hour
i. Maximum total pumpable waste feed to kiln	12,883 lb/hr	One hour

Operating Parameter	Waste Feed Cutoff Limit	Averaging Time Period
j. Maximum total waste feed to SCC	7,178 lb/hr	One hour
k. Maximum Stack Gas Flow rate	55,337 scfm	One hour
l. Minimum power (kV) to IWS	8 in 7 or more units	2 minutes
m. Maximum ash feed rate in all feedstreams	12,491 lb/hr	12 hours
n. Minimum water flow in each recycled water system (i.e., 1 <sup>st</sup> , 2 <sup>nd</sup> and 3 <sup>rd</sup> stage) of the IWS.	900 gpm	One hour
o. Minimum water flow to the plates of each IWS unit. (There are 9 IWS units in the IWS system.)	15 gpm in each of 7 or more units	One hour
p. Minimum blowdown from IWS to packed tower condenser	163 gpm	One hour
q. Flame detectors system (See note #3)	Off	Response initiated immediately upon detection
r. Minimum Kiln Temperature	761°C	One hour
s. Minimum SCC Temperature	962°C	One hour
t. Minimum chlorine scrubber differential pressure	0.35 in. w.c.	One hour
u. Maximum Inlet temperature to condenser	120°C	One hour
v. Minimum Water flow to venturi	750 gpm	One hour
w. Minimum Differential pressure venturi	55 in. w.c.	One hour
x. Minimum pH Venturi/chlorine scrubber	7.77	One hour
y. Minimum total water flow to chlorine scrubber	1000 gpm	One hour
z. Minimum Blowdown from Quench	445 gpm	One hour
aa. Minimum Blowdown from chlorine scrubber/venturi	76 gpm	One hour
bb. Minimum total water Flow to Quench	628 gpm	One hour
cc. Minimum water flow to Condenser	2,708 gpm	One hour
dd. Minimum Condenser differential pressure	0.25 in. w.c.	One hour
ee. Minimum inlet water pressure to Condenser	5 psig	One hour
ff. Minimum water flow from Condenser to Quench	300 gpm	One hour
gg. Maximum chlorine and chloride feed rate in all feedstreams	5,488 lb/hr	12 hours
hh. Maximum mercury in all feedstreams	0.072 lb/hr	12 hours
ii. Maximum SVM feed rate in all feedstreams	13.56 lb/hr	12 hours
jj. Maximum LVM feed rate in all feedstreams	26.13 lb/hr	12 hours
kk. Maximum pumpable LVM feed rate	3.0 lb/hr	12 hours

**Note #1:** Where redundant devices are used, malfunction is defined as failure of all redundant monitoring devices.

Note #2: The permittee shall monitor and record the emergency bypass operating time (minutes per day) of the APC system and associated cause on a continuous basis, unless otherwise noted, in a manner and with instrumentation approved in writing by the AQD.

Note #3: The flame detectors system is only used during startup until the combustion chamber has reached the auto-ignition temperature.

Note #4: Automatic cutoff of the vent streams from 1005 Building (EUC3) and the tank farm (EUB7) is not required unless one of the following three operating parameters is not met: Maximum Stack Gas Flow Rate (SC III.4.k), Minimum Kiln Temperature (SC III.4.r), or Minimum SCC Temperature (SC III.4.s).

5. Following submittal and AQD review of CPT results, the permittee shall replace entries (r) through (kk) of the AWFCO Table above with the waste feed cutoff limits based on the CPT, for those limits identified by the AQD in writing. In addition, contingent upon a demonstration that Rule 278 (R 336.1278) does not prohibit increasing the maximum exhaust flow rate without a Permit to Install, and upon approval by the AQD in writing, the permittee shall replace entry (k) of the AWFCO Table above with a flow rate demonstrated in the most recent CPT that does not exceed 60,000 scf per minute (scfm).<sup>2</sup> **(R 336.1225, 40 CFR 52.21(c) & (d), 40 CFR 63.1206(c)(1), 40 CFR 63.1206(c)(3), 40 CFR 63.1207(h), 40 CFR 63.1209(g)(2), 40 CFR 63.1206(c)(5)(i)(C))**

#### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

NA

#### **V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall perform periodic CPTs to verify the DRE and to verify the emission limits specified in the Emission Limit Table for the following pollutants: D/F; Mercury; SVM; LVM; CO; THC; PM; PM10; HCl; and Cl<sub>2</sub>. If approved by the AQD, these tests shall also be used to establish limits for operating parameters and to demonstrate compliance with the performance specifications for the Continuous Monitoring System (CMS).<sup>2</sup> **(R 336.205(1), R 336.1224, R 336.1225, R 336.1228, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, 40 CFR 63.1207(b)(1), 40 CFR 63.1207(c), 40 CFR 63.1207(d)(4), 40 CFR 63.1207(e), 40 CFR 63.1207(f), 40 CFR 63.1208, 40 CFR 63.1209)**
2. Verification of D/F emission rates in accordance with Department requirements will be required. In addition, the permittee shall conduct a performance evaluation of the CMS for compliance assurance with the D/F emission limit.<sup>2</sup> **(R 336.1225, R 336.2001, R 336.2003, R 336.2004, 40 CFR 63.1207(b)(2), 40 CFR 63.1207(d)(2)&(d)(4), 40 CFR 63.1208)**
3. No less than 60 days prior to testing, notification of intent to conduct a D/F performance test and CMS performance evaluation along with a D/F test plan and CMS performance evaluation plan must be submitted to the AQD District Supervisor. All testing plans must be approved by the AQD prior to testing. A complete report of test results must be submitted to the District Supervisor, AQD, within 90 days following the last day of testing.<sup>2</sup> **(R 336.1225, R 336.2001, R 336.2003, R 336.2004, 40 CFR 63.1207(b)(2), 40 CFR 63.1207(d)(2), 40 CFR 63.1208)**
4. The permittee shall commence the D/F test and CMS performance evaluation no later than 31 months after beginning each CPT. Verification of emission rates includes the submittal of a complete report of the test results.<sup>2</sup> **(R 336.1225, R 336.2001, R 336.2003, R 336.2004, 40 CFR 63.1207(b)(2), 40 CFR 63.1207(d)(2), 40 CFR 63.1208)**
5. The permittee shall determine and record the opacity from SVEG32INCIN01 on a semiannual basis during routine operating conditions, using Method 9 (Visual Determination of the Opacity of Emissions from Stationary Sources). The total duration of the observation shall not be less than 30 minutes.<sup>2</sup> **(R 336.1303)**
6. The permittee shall commence each CPT within 61 months after beginning the previous CPT. DRE verification shall be included in the initial CPT and in successive alternating CPTs (the third, the fifth, etc.) thereafter. Verification of DRE and emission rates includes the submittal of a complete report of the test results.<sup>2</sup> **(R 336.1205(1), R 336.1224, R 336.1225, R 336.1228, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004,**



**40 CFR 63.1207(b)(1), 40 CFR 63.1207(c), 40 CFR 63.1207(d)(4), 40 CFR 63.1207(e), 40 CFR 63.1207(f), 40 CFR 63.1208, 40 CFR 63.1209)**

7. No less than one year prior to testing, notification in writing of the intention to conduct a CPT and a CMS performance evaluation along with two copies of a complete stack testing plan and CMS performance evaluation plan must be submitted to the AQD District Supervisor. The final plan must be approved by the AQD prior to testing. Within 90 days following the completion of a CPT, the permittee shall submit two copies of the results of the CPT to the District Supervisor, AQD.<sup>2</sup> **(R 336.1205(1), R 336.1224, R 336.1225, R 336.1228, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, 40 CFR 63.1207(b)(1), 40 CFR 63.1207(c), 40 CFR 63.1207(e), 40 CFR 63.1207(f), 40 CFR 63.1208, 40 CFR 63.1209)**
8. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. **(R 336.1213(3))**

See Appendix 5

**VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall monitor and record the NO<sub>x</sub>, and SO<sub>2</sub>, and CO emissions and the volumetric flow from EU32INCINERATOR on a continuous basis in a manner and with instrumentation approved in writing by the AQD. These monitors and the resulting data shall be used for determining compliance with the emission limits specified in the following table:<sup>2</sup>

<b>Pollutant</b>	<b>Applicable Performance Specification (PS), 40 CFR Part 60 Appendix B</b>	<b>Value requiring reporting in the EER</b>	<b>Averaging time</b>	<b>Applicable Requirements</b>
NO <sub>x</sub>	2 & 6	151 lbs/hr	One hour	<b>40 CFR 52.21(d)</b>
SO <sub>2</sub>	2 & 6	36.4 lbs/hr	One hour	<b>40 CFR 52.21(d)</b>
SO <sub>2</sub>	2 & 6	26.6 lbs/hr	Three hours	<b>40 CFR 52.21(c) &amp; (d)</b>
CO	6 & 4A or 4B	99 tpy	12-month rolling time period as determined at the end of each calendar month	<b>R 336.1205(3)</b>

2. The permittee shall monitor and record the O<sub>2</sub> and CO emissions from EU32INCINERATOR on a continuous basis in a manner and with instrumentation approved in writing by the AQD. These monitors and the resulting data shall be used for determining compliance with the emission limits specified in the table below. The CO concentration shall be determined at 7% O<sub>2</sub> over a one-hour rolling average. The O<sub>2</sub> concentration shall be determined over a 15-minute rolling average.<sup>2</sup>

<b>Pollutant</b>	<b>Applicable PS</b>	<b>Value requiring reporting in the EER</b>	<b>Applicable Requirements</b>
O <sub>2</sub>	3 or 4B	3% or less	<b>40 CFR 52.21</b>
CO	4A or 4B	100 ppmv dry at 7% O <sub>2</sub>	<b>R 336.1225 R 336.1702(a) 40 CFR 63.1203(b)(5)</b>

3. The permittee shall install and maintain a color camera and monitor system to monitor the visual emissions from SVEG32INCIN01.<sup>2</sup> **(R 336.1301, R 336.1331, 40 CFR 63.1219(a)(7))**
4. The permittee shall install, calibrate, and maintain continuous monitors to monitor and record the operating parameters (a) through (ff) listed in the AWFCO Table in SC III.4 on a continuous basis in a manner and with instrumentation approved in writing by the District Supervisor, AQD. All monitoring systems shall be equipped with audible alarms that will be activated by parameter readings listed in the AWFCO Table. Each monitoring

system for operating parameters (c) through (ff) in the AWFCO Table shall also sound an audible warning alarm at a parameter reading more restrictive than the reading listed in the AWFCO Table. No waste shall be fed into EU32INCINERATOR unless the required monitoring and recording devices are installed, maintained, and operating in a satisfactory manner.<sup>2</sup> **(R 336.1205, R 336.1224, R 336.1225, R 336.1301, R 336.1331, R 336.1702(a), R 336.1910, 40 CFR 52.21(c) & (d), 40 CFR 63.1209, 40 CFR 63.1219)**

5. The permittee shall use a continuous monitoring system to document compliance with the following operational parameter limits specified in the AWFCO Table in SC III.4 for the IWS:<sup>2</sup> **(40 CFR 63.1209(g)(2))**
  - a. Item n: water flow for each of the three recycled water systems (i.e., 1<sup>st</sup>, 2<sup>nd</sup> and 3<sup>rd</sup> stage);
  - b. Item o: water flow to the plates of each IWS unit. There are nine IWS units in the IWS system.
6. The permittee shall keep, in a satisfactory manner, a record of each emergency safety vent (ESV) opening event for EU32INCINERATOR. The record of ESV opening events shall include the time, date, and duration of the ESV opening event; whether hazardous waste remained in the combustion chamber at any time during the ESV event; whether the event required reporting pursuant to SC VII.6; and a summary of actions taken to prevent a recurrence.<sup>2</sup> **(R 336.1224, R 336.1225, R 336.1702, R 336.1910)**
7. All AWFCO events shall be recorded and kept on file for a period of at least five years and made available to the AQD upon request. Such records of AWFCO events shall include the date(s), time(s), and duration of each AWFCO event, the actual reading(s) of all operating parameters in the AWFCO Table, the reason(s) for the AWFCO event, the remedial action taken, and the actions taken to prevent reoccurrence of such AWFCO events.<sup>2</sup> **(R 336.1224, R 336.1225, R 336.1702(a), R 336.1910, R 336.1911, 40 CFR 63.1206(c)(1), 40 CFR 63.1206(c)(3), 40 CFR 63.1207(h))**
8. The permittee shall monitor and record the natural gas and fuel oil feed rate and incinerator operating time (hours per day) in a manner and with instrumentation approved in writing by the AQD.<sup>2</sup> **(R 336.1205, 40 CFR 52.21)**
9. The permittee shall maintain a copy of the waste characterization sheets for each waste that the applicant approves for acceptance for incineration. For each accepted waste, applicant shall include the name, address, contact person, and phone number of the person(s) that the waste is received from and the EPA hazardous waste identification codes if appropriate. The permittee shall keep the copy of the waste characterization sheet on file for at least five years after the waste is last fed to EU32INCINERATOR.<sup>2</sup> **(R 336.1225, 40 CFR 63.1209(c))**
10. The permittee shall keep a complete record of the percent sulfur content, by weight, for each specific contract of fuel oil and natural gas. These records shall be made available to the AQD upon request. The applicant shall collect and analyze a fuel oil sample at least once per calendar year for percent sulfur content, by weight, using an EPA approved test method. There shall be at least six months between each annual monitoring event.<sup>2</sup> **(R 336.1205)**
11. The permittee shall use data from the NO<sub>x</sub>, and SO<sub>2</sub>, and CO Continuous Emission Rate Monitoring System(s) (CERMS) to calculate NO<sub>x</sub>, SO<sub>2</sub>, and CO emissions from EU32INCINERATOR. During CERMS downtime the permittee shall calculate SO<sub>2</sub> and NO<sub>x</sub> emissions based on the sulfur and/or nitrogen content of the feed. At the end of each calendar month, the permittee shall record the following emissions information:<sup>2</sup>
  - a. NO<sub>x</sub>, and SO<sub>2</sub>, and CO emissions, in tons, for the calendar month;
  - b. NO<sub>x</sub>, and SO<sub>2</sub>, and CO emissions, in tons, for the rolling 12-month time period ending that month.

The permittee shall make these records available to the Department upon request. **(R 336.1205, 40 CFR 52.21)**

12. The permittee shall monitor and record pressure in the inlet and outlet plenums between the primary and secondary seals on a continuous basis. For this condition, "on a continuous basis" means measuring pressure without interruption, and evaluating the detector response at least once every 15 seconds, and computing and recording the average pressure value at least every 60 seconds. The permittee shall comply with good engineering practice for installation, operation, and calibration of the plenum pressure monitoring system or other written procedures that provide adequate assurance that the equipment would reasonably be expected to monitor accurately.<sup>2</sup> **(40 CFR 63.1206(c)(5)(i)(C))**

13. The permittee shall calculate the emission rates listed below from EU32INCINERATOR monthly, for the preceding 12-month rolling time period, using a method acceptable to the AQD District Supervisor. The permittee shall keep all records on file at the facility and make them available to the Department upon request:<sup>2</sup>
  - a. PM; **(R 336.1205(1))**
  - b. PM10; **(R 336.1205(1), 40 CFR 52.21(c) & (d))**
  - c. PM2.5; **(R 336.1205(1), 40 CFR 52.21(c) & (d))**
  - d. Total fluorides; **(R 336.1205(1))**
  - e. Sulfuric acid mist. **(R 336.1205(1))**
14. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.<sup>2</sup> **(R 336.1205, 40 CFR 52.21(c) & (d))**
15. The permittee shall continuously monitor the outlet NOx, CO and SO2 emissions and record continuously as indicators for the proper operation of the control equipment for NOx, CO and SO2. The indicator ranges are pollutant limits specified in EU32INICNERATOR SC.I – Emission Limits table. The CEMS shall be calibrated in accordance with 40 CFR Part 60, Subpart A. **(40 CFR 64.6(c)(1)(i) and (ii))**
16. Parameters listed in the AWFCO Table SC III.4 that are also subject to CAM for Particulate Matter (PM) Control are in the table below. Per 40 CFR 63.1209 the AWFCO limits are established during the Comprehensive Performance test (CPT) and per ROP special condition III.5 can be updated based on the results of the CPT. The permittee shall continuously measure the parameter specified in the table below and record as specified in the table below as indicators of proper operation of the control equipment for particulate matter emissions. The indicator ranges are specified in the table below. **(40 CFR 64.6(c)(1)(i) and (ii))**

Parameter	AWFCO Limit	Averaging time	Reference
Minimum pressure drop across venturi scrubber	55 in. H <sub>2</sub> O	60-minute rolling average	ROP S.C.III.4.w
Minimum water flow from Condenser to Quench	300 gpm	60-minute rolling average	ROP S.C.III.4.ff
Minimum Ionizing Wet Scrubber (IWS) blowdown rate	163 gpm	60-minute rolling average	ROP S.C.III.4.p
Minimum liquid feed rate to venturi scrubber	750 gpm	60-minute rolling average	ROP S.C.III.4.v
Maximum ash feedrate	12,491 lbs/hr	12-hour rolling average	ROP S.C.III.4.m
Minimum power (Kv) to IWS	8 Kv in 7 or more units	2 minutes	ROP S.C. III.4.l
Minimum water flow in each recycled water system (i.e. 1 <sup>st</sup> , 2 <sup>nd</sup> , and 3 <sup>rd</sup> stage) of the IWS	900 gpm	60-minute rolling average	ROP S.C. III.4.n
Minimum water flow to the plates of each IWS unit (There are 9 IWS units in the IWS System)	15 gpm in each of 7 or more units	60-minute rolling average	ROP S.C. III.4.o
Minimum total water flow to Chlorine Scrubber	1000 gpm	60-minute rolling average	ROP S.C. III.4.y
Minimum total water flow to Quench	628 gpm	60-minute rolling average	ROP S.C. III.4.bb
Minimum water flow to Condenser	2,708 gpm	60-minute rolling average	ROP S.C.III.4.cc

17. For each control device in operation, the permittee shall conduct bypass monitoring for each bypass line such that the valve or closure method cannot be opened without creating an alarm condition for which a record shall be made. Records of the bypass line that was opened and the length of time the bypass line was opened shall be kept on file. **(40 CFR 64.3(a)(2))**

18. The monitors specified in the table below shall continuously monitor the specified indicators. The averaging period is as specified in the table below. The monitors shall be calibrated annually or according to manufacturer recommendations, whichever is more frequent. **(40 CFR 64.6(c)(1)(iii))**

Parameter	AWFCO Limit	Averaging time	Reference
Minimum pressure drop across venturi scrubber	55 in. H <sub>2</sub> O	60-minute rolling average	ROP S.C.III.4.w
Minimum water flow from Condenser to Quench	300 gpm	60-minute rolling average	ROP S.C.III.4.ff
Minimum Ionizing Wet Scrubber (IWS) blowdown rate	163 gpm	60-minute rolling average	ROP S.C.III.4.p
Minimum liquid feed rate to venturi scrubber	750 gpm	60-minute rolling average	ROP S.C.III.4.v
Maximum ash feedrate	12,491 lbs/hr	12-hour rolling average	ROP S.C.III.4.m
Minimum power (Kv) to IWS	8 Kv in 7 or more units	2 minutes	ROP S.C. III.4.l
Minimum water flow in each recycled water system (i.e. 1 <sup>st</sup> , 2 <sup>nd</sup> , and 3 <sup>rd</sup> stage) of the IWS	900 gpm	60-minute rolling average	ROP S.C. III.4.n
Minimum water flow to the plates of each IWS unit (There are 9 IWS units in the IWS System)	15 gpm in each of 7 or more units	60-minute rolling average	ROP S.C. III.4.o
Minimum total water flow to Chlorine Scrubber	1000 gpm	60-minute rolling average	ROP S.C. III.4.y
Minimum total water flow to Quench	628 gpm	60-minute rolling average	ROP S.C. III.4.bb
Minimum water flow to Condenser	2,708 gpm	60-minute rolling average	ROP S.C.III.4.cc

19. An exceedance for NO<sub>x</sub>, CO or SO<sub>2</sub> emission limit is a pollutant emission above the limit specified in EU32INCINERATOR SC.I.-Emission Limits table. **(40 CFR 64.6(c)(2))**
20. An excursion is a departure from the indicator range for indicator for an indicator specified in SC VI.18. **(40 CFR 64.6(c)(2))**
21. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown, or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). The owner or operator shall comply with the requirements of the plans and programs in IX.4. including the Operations and Maintenance Plan for all components of EU32INCINERATOR including the APC system. **(40 CFR 64.7(d))**
22. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. **(40 CFR 64.6(c)(3), 40 CFR 64.7(c))**

23. The permittee shall properly maintain the monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. **(40 CFR 64.7(b))**
24. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions. **(40 CFR 64.9(b)(1))**

See Appendix 3 and 7

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. For each set of 10 AWFCO events during a 60-day block period which are not part of an occurrence covered by an approved startup, shutdown and malfunction plan; the permittee must submit a written report to the AQD District Supervisor, within five calendar days of the tenth AWFCO event documenting the AWFCO events. The report shall include as a minimum the information required in SC VI.7 for recordkeeping of AWFCO events.<sup>2</sup> **(R 336.1224, R 336.1225, R 336.1702(a), R 336.1910, R336.1911, 40 CFR 63.1206(c)(1), 40 CFR 63.1206(c)(3), 40 CFR 63.1207(h))**
5. In accordance with 40 CFR 60.7(c) and (d), for each NO<sub>x</sub>, SO<sub>2</sub>, and CO CERMS, the permittee shall submit two copies of an excess emission report (EER) and summary report in an acceptable format to the AQD, within 30 days following the end of each calendar quarter. The Summary Report shall follow the format of Figure 1 in 40 CFR 60.7(d). Each EER shall include the following information:<sup>2</sup> **(40 CFR 52.21)**
  - a. A report of each event during which emissions of NO<sub>x</sub>, SO<sub>2</sub>, or CO exceeded the associated limits noted in SC VI.1, regardless of whether waste was being fed to EU32INCINERATOR during the event. The report shall include the date, beginning and ending time, magnitude, cause, and corrective actions of each such event during the reporting period;
  - b. A report of all periods during which either all the NO<sub>x</sub> monitors, or all the SO<sub>2</sub> monitors, or all the CO monitors, or all the flow monitors are down while EU32INCINERATOR is operating, hereinafter "CERMS downtime," and corrective action;
  - c. A report of all periods when the monitors were switched between primary status and redundant backup status. The report shall include the date, the time, and the reason for the switch;
  - d. A report of the total source operating time during the reporting period;
  - e. If emissions never exceeded an emission limit or there was no CERMS downtime during the reporting period, the permittee shall report that fact;
  - f. A report of any periods that any NO<sub>x</sub>, SO<sub>2</sub>, CO, or flow monitor exceeds the instrument range.
6. Each calendar quarter, the permittee shall perform and report the Quality Assurance Procedures of each NO<sub>x</sub>, SO<sub>2</sub>, and CO CERMS set forth in Appendix F of 40 CFR Part 60. Within 30 days following the end of each calendar quarter, the permittee shall submit the results to the AQD in the format of the data assessment report (Figure 1, Appendix F of 40 CFR Part 60).<sup>2</sup> **(40 CFR 52.21)**
7. In accordance with 40 CFR 60.7(c) and (d), for each Continuous Emission Monitoring System (CEMS) the permittee shall submit two copies of an EER and summary report in an acceptable format to the AQD, within 30 days following the end of each calendar quarter. The Summary Report shall follow the format of Figure 1 in

40 CFR 60.7(d). Each EER shall include the following information:<sup>2</sup> **(40 CFR 52.21, R 336.1225, R 336.1702(a), 40 CFR 63.1219(a)(5))**

- a. A report of each event during which emissions of O<sub>2</sub> or CO exceeded the associated limit noted in SC VI.2, regardless of whether waste was being fed to EU32INCINERATOR during the event. The report shall include the date, beginning and ending time, magnitude, cause, and corrective actions of each such event during the reporting period;
  - b. A report of all periods during which either all the O<sub>2</sub> monitors or all the CO monitors are down while EU32INCINERATOR is operating, hereinafter "CEMS downtime," and corrective action;
  - c. A report of the number of times and the reason that monitors were switched between primary status and redundant backup status. The report shall include the date, the time, and the reason for the switch;
  - d. A report of the total source operating time during the reporting period;
  - e. If emissions never exceeded an emission limit or there was no CEMS downtime during the reporting period, the permittee shall report that fact;
  - f. A report of any periods that any O<sub>2</sub> or CO monitor exceeds the instrument range.
8. If the emissions of NO<sub>x</sub>, SO<sub>2</sub>, or CO calculated pursuant to SC VI.11 for any 12-month rolling time period exceed the emission limit in SC I.2, SC I.10, or SC I.12, respectively, the permittee shall report the following to the District Supervisor, AQD, for each pollutant with emissions that exceeded the emission limit.
- a. The beginning and ending months of the period in which emissions exceeded the emission limit.
  - b. The calculated emissions for each month in the 12-month period.
  - c. The calculated emissions for the 12-month period.
  - d. The reason(s) that emissions exceeded the limit(s).
  - e. The remedial action taken.
  - f. The actions taken to prevent reoccurrence of emissions that exceed the limit(s).

The permittee shall submit the report within 15 days following the end of the calendar month in which the 12-month rolling time period ends. This report is required whenever calculated emissions exceed any emission limit in the cited conditions, regardless of the amount and type of hazardous waste burned during the period, and regardless of any other considerations. All required data shall be submitted to the District Supervisor in an acceptable format within 15 days following the end of the calendar quarter in which the records were collected.<sup>2</sup> **(R 336.1205, 40 CFR 52.21)**

9. Each calendar quarter, the permittee shall perform and report the Quality Assurance Procedures of O<sub>2</sub> CEMS set forth in Appendix F of 40 CFR Part 60. Within 30 days following the end of each calendar quarter, the permittee shall submit the results to the AQD in the format of the data assessment report (Figure 1, Appendix F of 40 CFR Part 60). **(R 336.1213(3)(c))**
10. If the ESV opens when hazardous waste remains in the combustion chamber (i.e., when the hazardous waste residence time has not expired) during an event other than a malfunction as defined in the startup, shutdown, and malfunction plan such that combustion gases are not treated as during the most recent CPT (e.g., if the combustion gas by-passes any emission control device that was operating during the performance test) and emissions exceed the emission standards of 40 CFR Part 63, Subpart EEE, during the ESV opening event, the permittee shall submit to EGLE a written report within five days of the ESV opening documenting the result of the investigation and corrective measures taken.<sup>2</sup> **(40 CFR 63.1206(c)(4))**
11. The permittee shall submit any performance test reports, including RATA reports, to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**
12. Each semiannual report of monitoring and deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. **(40 CFR 64.9(a)(2)(i))**
13. Each semiannual report of monitoring and deviations shall include summary information on monitor downtime. If there were no periods of monitor downtime in the reporting period, then this report shall include a statement that there were no periods of monitor downtime. **(40 CFR 64.9(a)(2)(ii))** (Include only if there is a monitor)

See Appendix 3

**VIII. STACK/VENT RESTRICTION(S)**

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVEG32INCIN01	54 <sup>2</sup>	200 <sup>2</sup>	R 336.1225 40 CFR 52.21(c) & (d)

**IX. OTHER REQUIREMENT(S)**

1. The NO<sub>x</sub>, SO<sub>2</sub>, and CO CERMS required by SC VI.1 shall meet the following requirements:<sup>2</sup> **(40 CFR 52.21)**
  - a. The span value for each CERMS shall be 2.0 times the lowest emission standard or as specified in the federal regulations;
  - b. Each monitor shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and corresponding PS of Appendix B, 40 CFR Part 60;
  - c. The permittee shall make all monitoring data available to the AQD upon request.
2. The O<sub>2</sub> and CO CEMS required by SC VI.2 shall meet the following requirements:<sup>2</sup> **(40 CFR 52.21, R 336.1225, R 336.1702(a), 40 CFR 63.1219(a)(5))**
  - a. Appendix F of 40 CFR Part 60;
  - b. The permittee shall make monitoring data available to the AQD upon request.
3. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAP) as specified in 40 CFR Part 63, Subparts A and EEE, and 40 CFR Part 61, Subparts A and E, as they apply to EU32INCINERATOR.<sup>2</sup> **(40 CFR Part 61, Subparts A and E; 40 CFR Part 63, Subparts A and EEE)**
4. The permittee shall comply with the following plans and programs for EU32INCINERATOR. The permittee shall not operate EU32INCINERATOR unless the plans are implemented and maintained in the operating record.<sup>2</sup>

Plan name	Requirement	Underlying Applicable Requirement
A. ESV operating plan	The permittee shall develop an ESV operating plan for rapidly stopping the waste feed and shutting down EU32INCINERATOR.	R 336.1911 R 336.1912 40 CFR 63.1206(c)(4)
B. Startup, shutdown, and malfunction plan	The permittee shall develop a plan that includes procedures for operating and maintaining the incineration system, including the APC system, CMS, CERMS and CEMS during periods of startup, shutdown, and malfunction.	R 336.1910 R 336.1912 40 CFR 63.6(e) 40 CFR 63.1206(c)(2)
C. Operator Training and Certification Program	The permittee shall establish a program of training and certification for all individuals that may affect emissions of regulated HAPs for the incineration process.	R 336.1911 R 336.1912 40 CFR 63.1206(c)(6)
D. Operation and Maintenance Plan	The permittee shall develop a plan with procedures for operation, inspection, maintenance, and corrective measures for all components of EU32INCINERATOR including the APC system.	R 336.1910 R 336.1911 R 336.1912 40 CFR 63.1206(c)(7) 40 CFR 63.1206(c)(5)(i)(C)

Plan name	Requirement	Underlying Applicable Requirement
E. Feedstream Analysis Plan	The permittee shall develop and submit this plan for review and approval or disapproval by the District Supervisor, AQD. At a minimum, this plan shall describe methods for determining compliance with the Feed Rate Limits Table in SC II.4 and with entries (h)-(j), (m), and (gg)-(kk) in the AWFCO Table in SC III.4. The permittee shall operate EU32INCINERATOR in accordance with the most recent version of the plan approved by the AQD.	R 336.1205(1) R 336.1225 R 336.1227(2) R 336.1228 R 336.1702(a) 40 CFR 63.1209(c)(2) 40 CFR 63.1209(g)(2)
F. Fugitive dust control plan for the operation of the incinerator complex	The permittee shall develop and submit this plan for review and approval or disapproval by the District Supervisor, AQD. The permittee shall operate EU32INCINERATOR in accordance with the most recent version of the plan approved by the AQD.	R 336.1205 MCL 324.5524

- Upon request, the permittee shall provide samples to EGLE staff of any waste being fed to EU32INCINERATOR, consistent with safe operating practices. EGLE staff shall have access to all waste sampling points and be provided samples upon request, which are representative of waste being burned at the time of the request.<sup>2</sup> (MCL 324.5526)
- The following table of definitions applies to terms used in the conditions for EU32INCINERATOR.<sup>2</sup> (R 336.1201(3))

Term	Description
APC system	Air pollution control system consisting of NO <sub>x</sub> abatement control, quench tower, condenser, venturi scrubber, chlorine scrubber, and nine ionizing wet scrubbers
Averaging Time Period	All time periods are based on a continuous rolling time period, unless otherwise noted.
AWFCO System	Automatic waste feed cutoff system. This is a system comprised of cutoff valves, actuator, sensor, data manager, and other necessary components and electrical circuitry designed, operated and maintained to stop the flow of hazardous waste to the combustion unit automatically and immediately when any operating requirement is exceeded.
CMS	Continuous monitoring system. This is a comprehensive term that may include, but is not limited to, continuous emission monitoring systems, continuous opacity monitoring systems, continuous parameter monitoring systems, or other manual or automatic monitoring that is used for demonstrating compliance with an applicable regulation on a continuous basis as defined by the regulation.
CPT	Comprehensive performance test
ESV	Emergency safety vent
Gpm	Gallons per minute
Gr/dscf	Grains per dry standard cubic foot
Hr	Hour
Huron water	Provided from the City of Midland Water Treatment Plant prior to chlorine being added
In. w.c.	Inches water column
IWS	Ionizing wet scrubbers
KV	Kilovolts
Lbs	Pounds
Mg/dscm	Milligrams per dry standard cubic meter
µg	Micrograms (10 <sup>-6</sup> gram)
Operating under approved test conditions	Incinerator operations pursuant to a test plan approved by the Department for a specific test, including incinerator operations during performance testing and during pretesting
Pretesting	As defined at 40 CFR 63.1207(h)(2)(i) and (ii)



<b>Term</b>	<b>Description</b>
PS	performance specification
SC	Special condition
SCC	Secondary Combustion Chamber
Service water	Untreated Tittabawassee River water, Huron water, Lingle drain, and Tertiary pond treated effluent
Standard conditions	Means a gas temperature of 70°F and a gas pressure of 29.92 inches of mercury absolute
TEQ	Toxicity equivalence. This is the international method of relating the toxicity of various dioxin/furan congeners to the toxicity of 2,3,7,8-tetrachlorodibenzo-p-dioxin.

7. The permittee shall comply with all applicable requirements of 40 CFR Part 64. **(40 CFR Part 64)**
8. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the AQD and if necessary, submit a proposed modification of the ROP and CAM Plan to address the necessary monitoring changes. Such a modification may include but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. **(40 CFR 64.7(e))**
9. The permittee shall submit a revised CAM Plan within 180 days of the issuance of the ROP. **(40 CFR 64.6(e)(2))**

**Footnotes:**

<sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).  
<sup>2</sup> This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**EUC3  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Wastewater treatment plant (WWTP) including the wastewater sludge drying process located in 1005 Building. The wastewater sludge drying process includes the following major equipment and other associated equipment: north and south WWTP sludge belt filter press, pressed sludge dryer, venturi scrubber, packed tower scrubber, and two silos for dried solids storage. The wastewater sludge drying process shall be referred to as the “process” in this table.

The transfer of dried solids from the two silos to the EU32INCINERATOR complex is not part of the EUC3 wastewater sludge drying process.

The wastewater sludge drying process utilizes equipment that the facility has documented as exempt under R 336.1285(m) for Wastewater Treatment Plant exempt equipment. R 336.1285 (m) covers process water treatment equipment, wastewater treatment equipment, and sewage treatment equipment. This equipment includes the sludge feed tank (V-1405) and the auxiliary filter process (plate presses FK-420A, FL-420B, FL-420C and filtrate tank V-TK-422), and it is not covered by this permit.

This emission unit is subject to the requirements of 40 CFR Part 63, Subparts A and DD.

This emission unit was permitted in PTI 129-06.

**Flexible Group ID:** FGOSWRO

**POLLUTION CONTROL EQUIPMENT**

- EU32INCINERATOR
- Venturi scrubber. (Device ID J-1430)
- Packed tower scrubber (Device ID T-1431)
- Silo V-1500 fabric filter.
- Silo V-2500 fabric filter.

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. PM during solids transfer to silos	0.008 pph <sup>2</sup>	Hourly	Solids transfer to silos V-1500 and V-2500	SC VI.5, VI.6	R 336.1224 R 336.1225 R 336.1331(1)(c)
2. PM during solids transfer to silos	0.06 lb / 1,000 lbs of gas, dry gas basis <sup>2</sup>	Hourly	Solids transfer to silos V-1500 and V-2500	SC VI.5, VI.6	R 336.1224 R 336.1225 R 336.1331(1)(c)
3. PM during all other process operations	0.010 pph <sup>2</sup>	Hourly	Process venting through packed tower scrubber	SC VI.5, VI.6	R 336.1224 R 336.1225 R 336.1331(1)(c)
4. PM during all other process operations	0.01 lb / 1,000 lbs of gas, actual basis <sup>2</sup>	Hourly	Process venting through packed tower scrubber	SC VI.5, VI.6	R 336.1224 R 336.1225 R 336.1331(1)(c)
5. VOC	8 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	Process venting through packed tower scrubber	SC V.1, VI.9	R 336.1702(a)

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period/Operating Scenario</b>	<b>Equipment</b>	<b>Monitoring/ Testing Method</b>	<b>Underlying Applicable Requirements</b>
6. Each Category 1 pollutant with annual avg time	0.0002 pph <sup>1</sup>	12-month rolling time period as determined at the end of each calendar month	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
7. Each Category 2 pollutant with annual avg time	0.005 pph <sup>1</sup>	12-month rolling time period as determined at the end of each calendar month	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
8. Each Category 3 pollutant with annual avg time	0.011 pph <sup>1</sup>	12-month rolling time period as determined at the end of each calendar month	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
9. Each Category 4 pollutant with annual avg time	0.11 pph <sup>1</sup>	12-month rolling time period as determined at the end of each calendar month	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
10. Each Category 5 pollutant with annual avg time	1.1 pph <sup>1</sup>	12-month rolling time period as determined at the end of each calendar month	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
11. Each Category 6 pollutant with annual avg time	11.3 pph <sup>1</sup>	12-month rolling time period as determined at the end of each calendar month	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
12. Each Category 7 pollutant with annual avg time	30 pph <sup>1</sup>	12-month rolling time period as determined at the end of each calendar month	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
13. Each Category 1 pollutant with 24-hr avg time	0.00024 pph <sup>1</sup>	24-hour average	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
14. Each Category 2 pollutant with 24-hr avg time	0.0024 pph <sup>1</sup>	24-hour average	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
15. Each Category 3 pollutant with 24-hr avg time	0.024 pph <sup>1</sup>	24-hour average	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period/Operating Scenario</b>	<b>Equipment</b>	<b>Monitoring/ Testing Method</b>	<b>Underlying Applicable Requirements</b>
16. Each Category 4 pollutant with 24-hr avg time	0.24 pph <sup>1</sup>	24-hour average	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
17. Each Category 5 pollutant with 24-hr avg time	2.40 pph <sup>1</sup>	24-hour average	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
18. Each Category 6 pollutant with 24-hr avg time	6.0 pph <sup>1</sup>	24-hour average	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
19. Each Category 7 pollutant with 24-hr avg time	12.0 pph <sup>1</sup>	24-hour average	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
20. Each Category 8 pollutant with 24-hr avg time	18.0 pph <sup>1</sup>	24-hour average	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
21. Each Category 9 pollutant with 24-hr avg time	24.1 pph <sup>1</sup>	24-hour average	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
22. Each Category 10 pollutant 24-hr avg time	30 pph <sup>1</sup>	24-hour average	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
23. Each Category 1 pollutant with 8-hr avg time	0.00012 pph <sup>1</sup>	Eight-hour average	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
24. Each Category 2 pollutant with 8-hr avg time	0.0012 pph <sup>1</sup>	Eight-hour average	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
25. Each Category 3 pollutant with 8-hr avg time	0.012 pph <sup>1</sup>	Eight-hour average	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
26. Each Category 4 pollutant with 8-hr avg time	0.12 pph <sup>1</sup>	Eight-hour average	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period/Operating Scenario</b>	<b>Equipment</b>	<b>Monitoring/ Testing Method</b>	<b>Underlying Applicable Requirements</b>
27. Each Category 5 pollutant with 8-hr avg time	1.2 pph <sup>1</sup>	Eight-hour average	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
28. Each Category 6 pollutant with 8-hr avg time	3.1 pph <sup>1</sup>	Eight-hour average	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
29. Each Category 7 pollutant with 8-hr avg time	6.2 pph <sup>1</sup>	Eight-hour average	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
30. Each Category 8 pollutant with 8-hr avg time	9.3 pph <sup>1</sup>	Eight-hour average	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
31. Each Category 9 pollutant with 8-hr avg time	12.4 pph <sup>1</sup>	Eight-hour average	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
32. Each Category 10 pollutant with 8-hr avg time	24.8 pph <sup>1</sup>	Eight-hour average	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
33. Each Category 11 pollutant with 8-hr avg time	30 pph <sup>1</sup>	Eight-hour average	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
34. Each Category 1 pollutant with 1-hr avg time	0.00007 pph <sup>1</sup>	Hourly	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
35. Each Category 2 pollutant with 1-hr avg time	0.0007 pph <sup>1</sup>	Hourly	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
36. Each Category 3 pollutant with 1-hr avg time	0.007 pph <sup>1</sup>	Hourly	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
37. Each Category 4 pollutant with 1-hr avg time	0.066 pph <sup>1</sup>	Hourly	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
38. Each Category 5 pollutant with 1-hr avg time	0.66 pph <sup>1</sup>	Hourly	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
39. Each Category 6 pollutant with 1-hr avg time	1.3 pph <sup>1</sup>	Hourly	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period/Operating Scenario</b>	<b>Equipment</b>	<b>Monitoring/ Testing Method</b>	<b>Underlying Applicable Requirements</b>
40. Each Category 7 pollutant with 1-hr avg time	2.0 pph <sup>1</sup>	Hourly	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
41. Each Category 8 pollutant with 1-hr avg time	2.6 pph <sup>1</sup>	Hourly	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
42. Each Category 9 pollutant with 1-hr avg time	3.3 pph <sup>1</sup>	Hourly	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
43. Each Category 10 pollutant with 1-hr avg time	4.0 pph <sup>1</sup>	Hourly	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
44. Each Category 11 pollutant with 1-hr avg time	4.6 pph <sup>1</sup>	Hourly	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
45. Each Category 12 pollutant with 1-hr avg time	5.3 pph <sup>1</sup>	Hourly	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
46. Each Category 13 pollutant with 1-hr avg time	6.0 pph <sup>1</sup>	Hourly	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
47. Each Category 14 pollutant with 1-hr avg time	6.6 pph <sup>1</sup>	Hourly	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
48. Each Category 15 pollutant with 1-hr avg time	13.2 pph <sup>1</sup>	Hourly	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
49. Each Category 16 pollutant with 1-hr avg time	19.8 pph <sup>1</sup>	Hourly	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
50. Each Category 17 pollutant with 1-hr avg time	26.5 pph <sup>1</sup>	Hourly	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>
51. Each Category 18 pollutant with 1-hr avg time	30 pph <sup>1</sup>	Hourly	Process venting through packed tower scrubber	SC VI.10, VI.11	<b>R 336.1225</b>

For the purposes of EUC3, the various “Category” pollutants are identified as follows: (all screening levels and category criteria are in micrograms per cubic meter):

For pollutants having an annual screening level averaging period:

- Category 1 Pollutants (are all compounds with a screening level of) 0.00002 to <0.0005
- Category 2 Pollutants - 0.0005 to <0.001

- Category 3 Pollutants - 0.001 to <0.01
- Category 4 Pollutants - 0.01 to <0.1
- Category 5 Pollutants - 0.1 to <1
- Category 6 Pollutants - 1 to <10
- Category 7 Pollutants - 10 and above

For pollutants having a 24-hour screening level averaging period:

- Category 1 pollutants (are all compounds with a screening level of) 0.001 to < 0.01,
- Category 2 pollutants - 0.01 to <0.1
- Category 3 pollutants - 0.1 to <1
- Category 4 pollutants -1 to <10
- Category 5 pollutants - 10 to <25
- Category 6 pollutants - 25 to <50
- Category 7 pollutants - 50 to <75
- Category 8 pollutants - 75 to <100
- Category 9 pollutants - 100 to <200
- Category 10 pollutants - 200 and above

For pollutants having an 8-hour screening level averaging period:

- Category 1 pollutants (are all compounds with a screening level of) 0.001 to < 0.01,
- Category 2 pollutants - 0.01 to <0.1
- Category 3 pollutants - 0.1 to <1
- Category 4 pollutants -1 to <10
- Category 5 pollutants - 10 to <25
- Category 6 pollutants - 25 to <50
- Category 7 pollutants - 50 to <75
- Category 8 pollutants - 75 to <100
- Category 9 pollutants - 100 to <200
- Category 10 pollutants - 200 to <300
- Category 11 pollutants - 300 and above

For pollutants having a 1-hour screening level averaging period:

- Category 1 pollutants (are all compounds with a screening level of) 0.001 to < 0.01
- Category 2 pollutants - 0.01 to <0.1
- Category 3 pollutants - 0.1 to <1
- Category 4 pollutants -1 to <10
- Category 5 pollutants - 10 to <25
- Category 6 pollutants - 25 to <50
- Category 7 pollutants - 50 to <75
- Category 8 pollutants - 75 to <100
- Category 9 pollutants - 100 to <200
- Category 10 pollutants - 200 to <300
- Category 11 pollutants - 300 to <400
- Category 12 pollutants - 400 to <500
- Category 13 pollutants - 500 to <600
- Category 14 pollutants - 600 to <700
- Category 15 pollutants - 700 to <800
- Category 16 pollutants - 800 to <900
- Category 17 pollutants - 900 to <1000
- Category 18 pollutants - 1000 and above

\*Screening levels (SLs) shall be determined according to Rules 231 and 232. For each toxic air contaminant emitted, the permittee shall use SLs determined and listed by the AQD, unless none is listed.

## II. MATERIAL LIMIT(S)

NA

### **III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee shall not operate the process unless a malfunction abatement plan covering the drying, storage, and transport for incineration of solids treated in the process is implemented and maintained. If the malfunction abatement plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the malfunction abatement plan within 45 days after such an event occurs and submit the revised plan to the AQD District Supervisor for review and approval. The revised plan shall include procedures for maintaining and operating in a satisfactory manner, the process, add-on air pollution control device, or monitoring equipment during malfunction events, and a program for corrective action for such events. Once the District Supervisor has approved a revised plan, the revised plan shall supersede the previously approved version. During the period between submittal of a revised plan and District Supervisor action on the submittal, compliance with either the most-recently approved plan or with the revised plan shall be considered compliance with the approved plan.<sup>2</sup> **(R 336.1911)**
2. The permittee shall not discharge directly from the dryer packed tower scrubber to the atmosphere for more than 1752 hours per 12-month rolling time period as determined at the end of each calendar month, commencing with April 2006.<sup>2</sup> **(R 336.1225, R 336.1702(a))**

### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. When the dryer is not venting to EU32INCINERATOR, the permittee shall not operate the process unless the venturi scrubber is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the venturi scrubber includes a liquid flow rate not less than 250 gallons per minute.<sup>2</sup> **(R 336.1331, R 336.1910)**
2. When the dryer is not venting to EU32INCINERATOR, the permittee shall not operate the process unless the packed tower scrubber is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the packed tower scrubber includes a liquid flow rate not less than 200 gallons per minute.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1901, R 336.1910)**
3. The permittee shall equip and maintain the venturi scrubber with a liquid flow indicator capable of indicating a range that includes the minimum flow for satisfactory operation and with an audible alarm that sounds when flow drops below the minimum flow for satisfactory operation.<sup>2</sup> **(R 336.1331, R 336.1910)**
4. The permittee shall equip and maintain the packed tower scrubber with a liquid flow indicator capable of indicating a range that includes the minimum flow for satisfactory operation and with an audible alarm that sounds when the flow drops below the minimum flow for satisfactory operation.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1901, R 336.1910)**
5. The permittee shall not transfer solids to a silo unless the associated fabric filter is installed, maintained, and operated in a satisfactory manner. Further, when transferring solids to silos, the permittee shall transfer to only one silo at a time.<sup>2</sup> **(R 336.1224, R 336.1225, R 336.1331, R 336.1910)**
6. The permittee shall not operate the process unless the venturi scrubber and packed tower scrubber are vented to EU32INCINERATOR, except as allowed in SC III.2 of this permit, and EU32INCINERATOR is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes, but is not limited to, meeting the operational parameter limits for minimum kiln temperature, minimum SCC temperature, and maximum stack gas flow rate in the AWFCO table within EU32INCINERATOR of this ROP or any subsequent revisions.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1901, R 336.1910)**

### **V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall determine the VOC concentration of gases leaving the packed tower absorber each calendar quarter, commencing in the 1<sup>st</sup> quarter 2007. No less than 45 days prior to the first test, the permittee shall submit a complete test plan to the AQD. No less than 45 days prior to any subsequent tests utilizing any change, the permittee shall submit a complete test plan to the AQD. The test plan must explain how the permittee will



use the results of the test to verify compliance with the VOC ton per year limit specified in this permit. The AQD must approve the final plan prior to testing. Results of the first performance test must be submitted to the AQD within 60 days following the date of the test. Testing frequency may be reduced based upon approval by the AQD. Performance test data and test plans for subsequent quarters will be made available upon request.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21)**

2. The sampling plan required in SC V.1 for determining the VOC emission rates includes sampling and analysis of the solid feeds to the process per the current approved plan. **(R 336.1213(3)(a)(i))**
3. Upon request from the AQD District Supervisor, the permittee shall verify Particulate Matter emission rates from silos V-1550 and V-2500 by testing at the owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60 Appendix A or 40 CFR Part 63, Appendix A. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
4. The permittee shall verify Particulate Matter emission rates from EUC3 by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
PM	40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules
PM10/PM2.5	40 CFR Part 51, Appendix M

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**

5. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. **(R 336.1213(3))**

**See Appendix 5**

**VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. When the dryer is not venting to EU32INCINERATOR, the permittee shall monitor the liquid flow rate for the venturi scrubber on a continuous basis. Monitoring and recording of data "on a continuous basis" is defined as an instantaneous data point recorded at least once every 15 minutes for at least 90 percent of the operating time during an operating calendar day. In the event the permittee records more than one data point during the 15-minute period, the data point recorded may be the average (rolling or block) of all data points recorded during the 15-minute period. Any response to an excursion of the corresponding operational parameter set point or range specified in this table shall be based upon these 15-minute values. Unless otherwise noted in this table, the permittee is not required to monitor and record operational parameter data during periods of non-operation of the device resulting in cessation of the emissions to which the monitoring applies. The permittee shall keep all records on file at the facility for a period of five years and make them available to the Department upon request.<sup>2</sup> **(R 336.1331, R 336.1910)**

2. When the dryer is not venting to EU32INCINERATOR, the permittee shall monitor the liquid flow rate for the packed tower absorber on a continuous basis. Monitoring and recording of data "on a continuous basis" is defined as an instantaneous data point recorded at least once every 15 minutes for at least 90 percent of the operating time during an operating calendar day. In the event the permittee records more than one data point during the 15-minute period, the data point recorded may be the average (rolling or block) of all data points recorded during the 15-minute period. Any response to an excursion of the corresponding operational parameter set point or range specified in this table shall be based upon these 15-minute values. Unless otherwise noted in this table, the permittee is not required to monitor and record operational parameter data during periods of non-operation of the device resulting in cessation of the emissions to which the monitoring applies. The permittee shall keep all records on file at the facility for a period of five years and make them available to the Department upon request.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1901, R 336.1910)**
3. For the venturi scrubber, when not venting to EU32INCINERATOR, the permittee shall keep, in a satisfactory manner, a record of every low flow alarm indicating flow less than the minimum specified in SC IV.1 and of all actions taken to restore proper flow following an alarm. The permittee shall keep these records on file for a period of five years and make them available to the Department upon request.<sup>2</sup> **(R 336.1331, R 336.1910)**
4. For the packed tower scrubber, when not venting to EU32INCINERATOR, the permittee shall keep, in a satisfactory manner, a record of every low flow alarm indicating flow less than the minimum specified in SC IV.2 and of all actions taken to restore proper flow following an alarm. The permittee shall keep these records on file for a period of five years and make them available to the Department upon request.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1901, R 336.1910)**
5. The permittee shall monitor, in a satisfactory manner, the visible emissions from each dried solids storage silo on a monthly basis. The permittee shall monitor visible emissions during routine transfer to each silo. For the purposes of this condition, such monitoring does not have to be in accordance with Method 9. If monitoring reveals any visible emissions, the permittee shall inspect the silo collector and perform any maintenance required to eliminate visible emissions.<sup>2</sup> **(R 336.1224, R 336.1225, R 336.1331, R 336.1910)**
6. The permittee shall keep, in a satisfactory manner, monthly records of the results of the visible emissions monitoring of the dried solids storage silos and of any maintenance performed after visible emissions are observed. The permittee shall keep these records on file for a period of five years and make them available to the Department upon request.<sup>2</sup> **(R 336.1224, R 336.1225, R 336.1331, R 336.1910)**
7. The permittee shall keep, in a satisfactory manner, a log of the daily hours of discharge directly from the packed tower absorber to the atmosphere. The permittee shall keep all records on file at the facility for a period of five years and make them available to the Department upon request.<sup>2</sup> **(R 336.1225, R 336.1702(a))**
8. Within 30 days following the end of each calendar month, the permittee shall calculate and record emissions from the process for the previous calendar month to demonstrate compliance with the 12-month rolling time period emission limit specified in this permit. The permittee shall keep all records on file at the facility for a period of five years and make them available to the Department upon request.<sup>2</sup> **(R 336.1702(a), 40 CFR 52.21)**
9. The permittee shall monitor, in a satisfactory manner, the composition of the solids exiting the belt press, before the solids enter the dryer, at least once per calendar year. There shall be at least six months between each annual monitoring event.<sup>1</sup> **(R 336.1225)**
10. The permittee shall keep, in a satisfactory manner, annual records of the results of solids composition monitoring required by SC VI.9. The records shall include the method used to collect the sample, the list of analytes, the basis for the chosen analytes, and the analyte sampling method. The permittee shall keep all records on file at the facility for a period of five years and make them available to the Department upon request.<sup>1</sup> **(R 336.1225)**
11. The permittee shall calculate the emission rate of each toxic air contaminant from the portions of the wastewater sludge drying process exhausted through the packed tower absorber monthly, within 30 days of the end of each calendar month in accordance with the calculation method submitted to the AQD. The permittee shall submit any revision to the calculation method prior to the calendar month the permittee begins to use the revised method.

The permittee shall keep all records on file at the facility for a period of five years and make them available to the Department upon request.<sup>1</sup> (R 336.1225)

See Appendix 7

**VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
4. The permittee shall submit any Particulate Matter emission control performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. (R 336.1213(3)(c), R 336.2001(5))
5. Upon request from the AQD District Supervisor the permittee shall submit results from sampling and analysis of the solid feeds to the process required in SC V.1.

See Appendix 8

**VIII. STACK/VENT RESTRICTION(S)**

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air unless otherwise noted:

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVEGC3002A <sup>+</sup>	NA <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901 40 CFR 52.21(c) & (d)
2. SVEGC3002B <sup>+</sup>	NA <sup>2</sup>	75 <sup>2</sup>	R 336.1225, R 336.1901 40 CFR 52.21(c) & (d)
3. SVEGC3001	18 <sup>2</sup>	95 <sup>2</sup>	R 336.1225, R 336.1901 40 CFR 52.21(c) & (d)
4. SVEG32INCIN01	54 <sup>2</sup>	200 <sup>2</sup>	R 336.1225 40 CFR 52.21(c) & (d)

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

<sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>2</sup> This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

## D. FLEXIBLE GROUP SPECIAL CONDITIONS

Part D outlines the terms and conditions that apply to more than one emission unit. The permittee is subject to the special conditions for each flexible group in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

The permittee shall comply with all specific details in the special conditions and the underlying applicable requirements cited. If a specific condition type does not apply, NA (not applicable) has been used in the table. If there are no special conditions that apply to more than one emission unit, this section will be left blank.

### FLEXIBLE GROUP SUMMARY TABLE

The descriptions provided below are for informational purposes and do not constitute enforceable conditions.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGRULE290	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290.	EU1353-02 EU845_MOD2 EU433 EU1870-01 EU845_AEH10
FGCOLDCLEANERS	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278 and Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.	EU1353-COLDCLN
FGHONFUGITIVES	Emission units subject to the requirements of 40 CFR Part 63, Subparts A (General Provisions) and H (HON for Equipment Leaks).	EU82 EUB7 EU1353-02 EU32INCINERATOR
FGMERCURY	Emission units subject to the requirements of 40 CFR Part 61, Subpart A (General Provisions) and Subpart E (Mercury NESHAP).	EU32INCINERATOR
FGOSWRO	Emission units subject to the requirements of 40 CFR Part 63, Subpart A (General Provisions) and Subpart DD (Off-Site Waste and Recovery Operations MACT).	EUB7 EUC3 EU32INCINERATOR
FGRULE703	Any new storage vessel subject to the requirements of R 336.1703 (Rule 703). Storage vessels subject to AQD Rule 703 are those which meet the following criteria: <ol style="list-style-type: none"> <li>1. Receive gasoline from a delivery vessel into any new stationary vessel of more than 2000-gallon capacity located at any gasoline dispensing facility; AND</li> <li>2. Were placed into operation on or after July 1, 1979, or for which an application for a permit to install, pursuant to the provisions of Part 2 of Act 451 is made to EGLE on or after July 1, 1979, or both, except for any process or process equipment which is defined as an "existing source" under R 336.1601.</li> </ol>	EU922DieselTank EU922GasolineTank
FGOLDMACT	Emission units subject to the requirements of 40 CFR Part 63, Subpart EEEE Organic Liquid Distribution (OLD) (non-gasoline) operations at major sources of hazardous air pollutant (HAP) emissions.	EU1353 EU1353-02

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGMONMACT	These conditions apply to miscellaneous organic chemical manufacturing process units (MCPU) that are located at, or are part of, a major source as defined in section 112(a) of the Clean Air Act and that meet all the criteria specified in 40 CFR Part 63, Subpart FFFF 40 CFR 63.2435. Specified processes are further defined in 40 CFR 63.2440.	EU82 EU1353 EU1353-02
FGCOATINGSMACT	Each new and existing miscellaneous coating manufacturing operation as defined in 40 CFR Part 63, Subpart HHHHH, 63.7985(b) that meet the conditions specified in 40 CFR 63.7985(a)(1) through (4). This includes the facility-wide collection of equipment described in 40 CFR 63.7985(b)(1) through (4) used to manufacture coatings as defined in 40 CFR 63.8105 and also includes cleaning operations.	EU845_MOD2 EU845_AEH10
FGNSPSIII	Non-fire Pump Emergency Reciprocating Internal Combustion diesel-fueled emergency engines with a model year of 2011 or later, subject to 40 CFR Part 60, Subpart IIII.	EU1310RadioTowerRICE EUEVOWIFLS EU633RICE EU123RICE
FGEMERGCIRICE<500H P-EXISTING	40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major source of HAP emissions, existing emergency, compression ignition (CI) RICE equal to or less than 500 brake hp. A RICE is existing if the date of installation is before June 12, 2006.	EU1100-HP370
FGEMERGCIRICE>500H P-EXISTING	40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major source of HAP emissions, existing emergency, compression ignition (CI) RICE greater than 500 brake hp. A RICE is existing if the date of installation is before December 19, 2002.	EU1803-HP1480 EU1803-HP1070 EU1803-HP525
FGDIVERSIONDIESELS- IIII	Two compression ignition (CI) internal combustion engine (ICE) with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) subject to 40 CFR Part 63, Subpart IIII – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines for 2007 and later model year non-emergency engines with a displacement of less than 30 l/cyl constructed after July 11, 2005, and manufactured after April 1, 2006.	EUDIVERSIONDIESELA EUDIVERSIONDIESELB
FGDIVERSIONDIESELS- ZZZZ	Two new compression ignition (CI) reciprocating internal combustion engines (RICE) subject to 40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major source of Hazardous Air Pollutants (HAPs), used for non-emergency purposes, and are greater than 500 brake horsepower (bhp).	EUDIVERSIONDIESELA EUDIVERSIONDIESELB

## FGRULE290 FLEXIBLE GROUP CONDITIONS

### DESCRIPTION

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a, and Rule 290. Emission units installed/modified before December 20, 2016, may show compliance with Rule 290 in effect at the time of installation/modification.

**Emission Units installed on or after December 20, 2016:** EU1353-02, EU845\_MOD2, EU433, EU1870-01, EU845\_AEH10

**Emission Units installed prior to December 20, 2016:** None

### POLLUTION CONTROL EQUIPMENT

NA

### I. EMISSION LIMIT(S)

1. Each emission unit that emits only noncarcinogenic volatile organic compounds or noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone if the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively. **(R 336.1290(a)(i))**
2. Any emission unit for which CO<sub>2</sub> equivalent emissions are not more than 6,250 tons per month and for which the total uncontrolled or controlled emissions of all other air contaminants are not more than 1,000 or 500 pounds per month, respectively, and all the following criteria listed below are met: **(R 336.1290(2)(a)(ii))**
  - a. For toxic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 0.04 micrograms per cubic meter and less than 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively; **(R 336.1290(2)(a)(ii)(A))**
  - b. For toxic air contaminants with initial risk screening levels greater than or equal to 0.04 microgram per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively; **(R 336.1290(2)(a)(ii)(B))**
  - c. The emission unit shall not emit any toxic air contaminants, excluding non-carcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with an initial threshold screening level or initial risk screening level less than 0.04 microgram per cubic meter; **(R 336.1290(2)(a)(ii)(C))**
  - d. For total mercury, the uncontrolled or controlled emissions shall not exceed 0.01 pounds per month from emission units installed on or after December 20, 2016; **(R 336.1290(2)(a)(ii)(D))**
  - e. For lead, the uncontrolled or controlled emissions shall not exceed 16.7 pounds per month from emission units installed on or after December 20, 2016. **(R 336.1290(2)(a)(ii)(E))**
3. Any emission unit that emits only particulate air contaminants without initial risk screening levels and other air contaminants that are exempted under Rule 290(2)(a)(i) or Rule 290(2)(a)(ii), if all the following provisions are met: **(R 336.1290(2)(a)(iii))**
  - a. The particulate emissions are controlled by an appropriately designed and operated fabric filter collector or an equivalent control system which is designed to control particulate matter to a concentration of less than or equal to 0.01 pound of particulate per 1,000 pounds of exhaust gases and which does not have exhaust gas flow rate more than 30,000 actual cubic feet per minute; **(R 336.1290(2)(a)(iii)(A))**
  - b. The visible emissions from the emission unit are not more than 5% opacity in accordance with the methods contained in Rule 303; **(R 336.1290(2)(a)(iii)(B))**

- c. The initial threshold screening level for each particulate toxic air contaminant, excluding nuisance particulate, is more than 2.0 micrograms per cubic meter. **(R 336.1290(2)(a)(iii)(C))**

## **II. MATERIAL LIMIT(S)**

NA

## **III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The provisions of Rule 290 apply to each emission unit that is operating pursuant to Rule 290. **(R 336.1290)**
2. The following requirements apply to emission units installed on or after December 20, 2016, utilizing control equipment:
  - a. An air cleaning device for volatile organic compounds shall be installed, maintained, and operated in accordance with the manufacturer's specifications. Examples include the following: **(R 336.1290(2)(b)(i), R 336.1910)**
    - i. Oxidizers and condensers equipped with a continuously displayed temperature indication device;
    - ii. Wet scrubbers equipped with a liquid flow rate monitor;
    - iii. Dual stage carbon absorption where the first canister is monitored for breakthrough and replaced if breakthrough is detected.
  - b. An air cleaning device for particulate matter shall be installed, maintained, and operated in accordance with the manufacturer's specifications or the permittee shall develop a plan that provides to the extent practicable for the maintenance and operation of the equipment in the manner consistent with good air pollution control practices for minimizing emissions. It shall also be equipped to monitor appropriate indicators of performance, for example, static pressure drop, water pressure, and water flow rate. **(R 336.1290(2)(b)(ii), R 336.1910)**

## **IV. DESIGN/EQUIPMENT PARAMETER(S)**

NA

## **V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

## **VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall maintain records of the following information for each emission unit for each calendar month using the methods outlined in the EGLE, AQD Rule 290; Permit to Install Exemption Record form (EQP 3558) or in a format that is acceptable to the AQD District Supervisor: **(R 336.1213(3))**
  - a. Records identifying each air contaminant that is emitted; **(R 336.1213(3))**
  - b. Records identifying if each air contaminant is controlled or uncontrolled; **(R 336.1213(3))**
  - c. Records identifying if each air contaminant is either carcinogenic or non-carcinogenic; **(R 336.1213(3))**
  - d. Records identifying the ITSL and IRSL, if established, of each air contaminant that is being emitted under the provisions of Rules 290(2)(a)(ii) and (iii); **(R 336.1213(3))**
  - e. Records of material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions in enough detail to demonstrate that the actual emissions of the emission unit meet the emission limits outlined in this table and Rule 290. Volatile organic compound emissions from units installed on or after December 20, 2016, shall be calculated using mass balance, generally accepted engineering calculations, or another method acceptable to the AQD District Supervisor; **(R 336.1213(3), R 336.1290(2)(d))**
  - f. Records are maintained on file for the most recent 2-year period and are made available to the department upon request. **(R 336.1213(3), R 336.1290(2)(e))**

2. The permittee shall maintain an inventory of each emission unit that is exempt pursuant to Rule 290. This inventory shall include the following information: **(R 336.1213(3))**
  - a. The permittee shall maintain a written description of each emission unit as it is maintained and operated throughout the life of the emission unit; **(R 336.1290(2)(c), R 336.1213(3))**
  - b. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(2)(a)(iii), the permittee shall maintain a written description of the control device, including the designed control efficiency and the designed exhaust gas flow rate. **(R 336.1213(3))**
3. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(2)(a)(iii), the permittee shall perform a monthly visible emission observation of each stack or vent during routine operating conditions. This observation need not be performed using Method 9. The permittee shall keep a written record of the results of each observation. **(R 336.1213(3))**

See Appendix 4

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

## **VIII. STACK/VENT RESTRICTION(S)**

NA

## **IX. OTHER REQUIREMENT(S)**

1. When an emission unit under FGRULE290 is also an affected process unit under an applicable Part 63 standard that requires compliance with the provisions of 40 CFR Part 63, Subpart H, the permittee shall comply with the applicable requirements of 40 CFR Part 63, Subparts A (General Provisions) and H (National emission standards for organic hazardous air pollutants for equipment leaks). Compliance is determined as per FGHONFUGITIVES unless otherwise specified in the applicable Part 63 standard. **(40 CFR Part 63, Subparts A and H)**
2. When an emission unit under FGRULE290 is also an affected miscellaneous coating manufacturing operation, the permittee shall comply with the applicable requirements of 40 CFR Part 63, Subparts A (General Provisions) and HHHHH (National Emission Standards for Miscellaneous Coating Manufacturing Operations). **(40 CFR Part 63, Subparts A and HHHHH)**
3. When an emission unit under FGRULE290 is also an affected miscellaneous organic chemical manufacturing process unit, the permittee shall comply with the applicable requirements of 40 CFR Part 63, Subparts A (General Provisions) and FFFF (National Emission Standards for Hazardous Air Pollutant Emissions for Miscellaneous Organic Chemical Manufacturing). Compliance is determined as per FGMONMACT. **(40 CFR Part 63, Subparts A and FFFF)**
4. When an air emission unit under FGRULE290 is an affected organic liquid distribution process unit, the permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart EEEE (Organic Liquid Distribution NESHAP). The requirements of this standard are outlined in table FGOLDMACT of the ROP. **(40 CFR Part 63, Subpart EEEE)**



## **FGCOLDCLEANERS FLEXIBLE GROUP CONDITIONS**

### **DESCRIPTION**

Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, Rule 278a, and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.

**Emission Unit:** EU1353-COLDCLN

### **POLLUTION CONTROL EQUIPMENT**

NA

### **I. EMISSION LIMIT(S)**

NA

### **II. MATERIAL LIMIT(S)**

1. The permittee shall not use cleaning solvents containing more than five percent by weight of the following halogenated compounds: methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, or any combination thereof. **(R 336.1213(2))**

### **III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. Cleaned parts shall be drained for no less than 15 seconds or until dripping ceases. **(R 336.1611(2)(b), R 336.1707(3)(b))**
2. The permittee shall perform routine maintenance on each cold cleaner as recommended by the manufacturer. **(R 336.1213(3))**

### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The cold cleaner must meet one of the following design requirements:
  - a. The air/vapor interface of the cold cleaner is no more than ten square feet; **(R 336.1281(2)(h))**
  - b. The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment. **(R 336.1285(2)(r)(iv))**
2. The cold cleaner shall be equipped with a device for draining cleaned parts. **(R 336.1611(2)(b), R 336.1707(3)(b))**
3. All new and existing cold cleaners shall be equipped with a cover and the cover shall be closed whenever parts are not being handled in the cold cleaner. **(R 336.1611(2)(a), R 336.1707(3)(a))**
4. The cover of a new cold cleaner shall be mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia or if the solvent is agitated or heated. **(R 336.1707(3)(a))**
5. If the Reid vapor pressure of any solvent used in a new cold cleaner is greater than 0.6 psia; or, if any solvent used in a new cold cleaner is heated above 120 degrees Fahrenheit, then the cold cleaner must comply with at least one of the following provisions:
  - a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7. **(R 336.1707(2)(a))**

- b. The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0. **(R 336.1707(2)(b))**
- c. The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. **(R 336.1707(2)(c))**

#### **V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

#### **VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

- 1. For each new cold cleaner in which the solvent is heated, the solvent temperature shall be monitored and recorded at least once each calendar week during routine operating conditions. **(R 336.1213(3))**
- 2. The permittee shall maintain the following information on file for each cold cleaner: **(R 336.1213(3))**
  - a. A serial number, model number, or other unique identifier for each cold cleaner;
  - b. The date the unit was installed, manufactured or that it commenced operation;
  - c. The air/vapor interface area for any unit claimed to be exempt under Rule 281(2)(h);
  - d. The applicable Rule 201 exemption;
  - e. The Reid vapor pressure of each solvent used;
  - f. If applicable, the option chosen to comply with Rule 707(2).
- 3. The permittee shall maintain written operating procedures for each cold cleaner. These written procedures shall be posted in an accessible, conspicuous location near each cold cleaner. **(R 336.1611(3), R 336.1707(4))**
- 4. As noted in Rule 611(2)(c) and Rule 707(3)(c), if applicable, an initial demonstration that the waste solvent is a safety hazard shall be made prior to storage in non-closed containers. If the waste solvent is a safety hazard and is stored in non-closed containers, verification that the waste solvent is disposed of so that not more than 20 percent, by weight, is allowed to evaporate into the atmosphere shall be made on a monthly basis. **(R 336.1213(3), R 336.1611(2)(c), R 336.1707(3)(c))**

#### **VII. REPORTING**

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

#### **VIII. STACK/VENT RESTRICTION(S)**

NA

#### **IX. OTHER REQUIREMENT(S)**

NA

**FGHONFUGITIVES  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Emission units subject to the requirements of 40 CFR Part 63, Subparts A (General Provisions) and H (HON for Equipment Leaks).

**Emission Units:** EU82, EUB7, EU32INCINERATOR, EU1353-02

**POLLUTION CONTROL EQUIPMENT**

See each emission unit

**I. EMISSION LIMIT(S)**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period/Operating Scenario</b>	<b>Equipment</b>	<b>Monitoring/ Testing Method</b>	<b>Underlying Applicable Requirements</b>
1. Organic HAP – Phase I	10,000 ppm	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Pumps in light liquid service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	<b>40 CFR Part 63, Subpart H</b>
2. Organic HAP – Phase II	5000 ppm	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Pumps in light liquid service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	<b>40 CFR Part 63, Subpart H</b>
3. Organic HAP – Phase III (general)	1000 ppm	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Pumps in light liquid service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	<b>40 CFR Part 63, Subpart H</b>
4. Organic HAP – Phase III (food/medical service)	2000 ppm	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Pumps in light liquid service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	<b>40 CFR Part 63, Subpart H</b>
5. Organic HAP – Phase III (polymerizing monomers)	5000 ppm	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Pumps in light liquid service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	<b>40 CFR Part 63, Subpart H</b>
6. Organic HAP	No Detectable Emissions (NDE) = 500 ppm above background	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Compressors	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	<b>40 CFR Part 63, Subpart H</b>

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
7. Organic HAP	NDE	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Pressure relief devices in gas/vapor service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	<b>40 CFR Part 63, Subpart H</b>
8. Organic HAP - Phase I	10,000 ppm	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Valves in gas/vapor or light liquid service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	<b>40 CFR Part 63, Subpart H</b>
9. Organic HAP - Phase II and III	500 ppm	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Valves in gas/vapor or light liquid service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	<b>40 CFR Part 63, Subpart H</b>
10. Organic HAP	NDE	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Pumps, valves, connectors & agitators in heavy liquid service; pressure relief devices in liquid service; and instrumentation systems	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	<b>40 CFR Part 63, Subpart H</b>
11. Organic HAP	NDE	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Closed-vent systems	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	<b>40 CFR Part 63, Subpart H</b>
12. Organic HAP	10,000 ppm	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Agitators in gas/vapor or light liquid service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	<b>40 CFR Part 63, Subpart H</b>
13. Organic HAP	500 ppm	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	Connectors in gas/vapor or light liquid service	Defined in Method 21 of 40 CFR Part 60, Appendix A, except as otherwise allowed by the regulation	<b>40 CFR Part 63, Subpart H</b>

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

NA

#### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall comply with the applicable design criteria for equipment subject to 40 CFR Part 63, Subpart H. Applicable design criteria may include: **(40 CFR Part 63, Subpart H)**:
  - a. 63.163(e) Design criteria for pumps equipped with dual mechanical seal systems
  - b. 63.163(j) Criteria for designating pumps as unsafe-to-monitor
  - c. 63.164 Design criteria for compressors
  - d. 63.166 Design criteria for sampling systems
  - e. 63.168(h) Criteria for designating unsafe-to-monitor valves
  - f. 63.168(i) Criteria for designating difficult-to-monitor valves
  - g. 63.172(b)-(c) Design criteria for control devices
  - h. 63.173(d) Design criteria for agitators equipped with dual mechanical seal systems
  - i. 63.173(h) Criteria for designating agitators as difficult-to-monitor
  - j. 63.173(j) Criteria for designating agitators as unsafe-to-monitor
  - k. 63.174(f) Criteria for designating connectors as unsafe-to-monitor
  - l. 63.174(g) Criteria for designating connectors as unsafe-to-repair
  - m. 63.174(h) Criteria for designating connectors as inaccessible

#### **V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall conduct monitoring for equipment leaks, defined in SC I.1 through SC I.13 of this table, in accordance with 40 CFR Part 63, Subpart H, Sections 63.163 through 63.174, as applicable. **(40 CFR Part 63, Subpart H)**
2. The permittee shall conduct pressure testing, for batch processes using this option, in accordance with 40 CFR Part 63, Subpart H, Section 63.178 (Alternative means of emission limitation: Batch processes). **(40 CFR Part 63, Subpart H)**
3. The permittee shall use Method 21 (except as otherwise specified in 40 CFR Part 63, Subpart H, Section 63.180(b) or (c), or except as allowed under an alternative monitoring method approved by the US EPA in letters dated July 26, 2007 and August 19, 2008) when performing instrument monitoring of equipment, as per 40 CFR Part 63, Subpart H, Section 63.180(b) (Test methods and procedures). **(40 CFR Part 63, Subpart H)**
4. The permittee shall conduct instrument monitoring at the frequencies listed in 40 CFR Part 63, Subpart H, Sections 63.163 through 63.174, as applicable. **(40 CFR Part 63, Subpart H)**
5. Batch process pressure testing, when applicable, shall be conducted each time the process is reconfigured, or at a minimum of once per year, in accordance with 40 CFR 63.178(b)(1). For processes subject to MON and complying with pressure testing, this provision is allowed for both batch and continuous processes per 40 CFR 63.2480(b)(1). **(40 CFR Part 63, Subpart H and FFFF)**
6. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. **(R 336.1213(3))**

See Appendix 5

#### **VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. If applicable, control devices used to comply with the provisions of 40 CFR Part 63, Subpart H shall be monitored to ensure proper operation and maintenance, in accordance with 40 CFR 63.172(e) (Standards: Closed-vent systems and control devices). **(40 CFR Part 63, Subpart H)**
2. The permittee shall comply with the applicable requirements of 40 CFR 63.181 (Recordkeeping requirements). **(40 CFR Part 63, Subpart H)**.

See Appendix 7

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. If applicable, the permittee shall submit an Initial Notification within 120 days of promulgation of a referencing subpart, in accordance with 40 CFR 63.182(b). **(40 CFR Part 63, Subpart H)**
5. If applicable, the permittee shall submit a Notification of Compliance Status Report within 90 days of any applicable compliance date, in accordance with 40 CFR 63.182(c). **(40 CFR Part 63, Subpart H)**
6. If applicable, the permittee shall submit semiannual Periodic Reports, beginning six months after the date of the Notification of Compliance Status Report, in accordance with 40 CFR 63.182(d). **(40 CFR Part 63, Subpart H)**
7. Semiannual periodic reports are due March 15 and September 15 of each year. Reports for rules not included in these date change agreements are due according to the schedule in their applicable flexible group table. Startup, shutdown, and malfunction reports shall be submitted at the same time. **(40 CFR Part 63, Subpart A, 40 CFR 63.9(i), 40 CFR 63.10(a)(6), 40 CFR 63.10(d)(5)(i), 40 CFR 63.182(d)(1))**

See Appendix 8

## **VIII. STACK/VENT RESTRICTION(S)**

NA

## **IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart A (General Provisions). The applicable sections of Subpart A are listed in Table 4 of 40 CFR Part 63, Subpart H. **(40 CFR Part 63, Subparts A & H)**
2. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart H (National Emission Standards for Organic Hazardous air Pollutants for Equipment Leaks). The applicable requirements may include: **(40 CFR Part 63, Subpart H)**
  - a. 63.160 Applicability
  - b. 63.161 Definitions
  - c. 63.162 Standards: General
  - d. 63.163 Standards: Pumps in light liquid service
  - e. 63.164 Standards: Compressors
  - f. 63.165 Standards: Pressure relief devices in gas/vapor service
  - g. 63.166 Standards: Sampling connection systems
  - h. 63.167 Standards: Open-ended valves or lines
  - i. 63.168 Standards: Valves in gas/vapor service and in light liquid service
  - j. 63.169 Standards: Pumps, valves, connectors, and agitators in heavy liquid service; instrumentation systems; and pressure relief devices in liquid service
  - k. 63.170 Standards: Surge control vessels and bottoms receivers
  - l. 63.171 Standards: Delay of repair

- m. 63.172 Standards: Closed-vent systems and control devices
- n. 63.173 Standards: Agitators in gas/vapor service and in light liquid service
- o. 63.174 Standards: Connectors in gas/vapor service and in light liquid service
- p. 63.178 Alternative means of emission limitations: Batch processes
- q. 63.180 Test methods and procedures
- r. 63.181 Recordkeeping requirements
- s. 63.182 Reporting requirements

**Footnotes:**

<sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>2</sup> This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**FGMERCURY  
FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Emission units subject to the requirements of 40 CFR Part 61, Subpart A (General Provisions) and Subpart E (Mercury NESHAP).

**Emission Unit:** EU32INCINERATOR

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Mercury	3.2 kg (7.1 lb)	Based on a 24-hour period	EU32INCINERATOR	SC VI.1	40 CFR 61.52(b)

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

NA

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

NA

**V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. No changes shall be made in the operation which would potentially increase emissions above the level determined by the most recent stack test, until the new emission level has been estimated by calculation and the results reported to the Administrator. **(40 CFR 61.53(d)(4))**
2. No changes in the operation of a plant shall be made after a sludge test has been conducted which would potentially increase emissions above the level determined by the most recent sludge test, until the new emission level has been estimated by calculation and the results reported to the Administrator. **(40 CFR 61.54(e))**

**See Appendix 5**

**VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall keep records of emission test results and other data needed to determine total mercury emissions for a minimum of two years, in accordance with 40 CFR 61.53(d)(6). **(40 CFR 61.53(d)(6))**

**See Appendix 7**



## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

## **VIII. STACK/VENT RESTRICTION(S)**

NA

## **IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with the applicable requirements of 40 CFR Part 61, Subpart A (General Provisions). **(40 CFR Part 61, Subpart A)**
2. The permittee shall comply with the applicable requirements of 40 CFR Part 61, Subpart E (Mercury NESHAP). The applicable requirements may include: **(40 CFR Part 61, Subpart E)**
  - a. 61.50 Applicability
  - b. 61.51 Definitions
  - c. 61.52 Emission Standard – paragraph (b) only
  - d. 61.53 Stack Sampling – paragraph (d) only
  - e. 61.55 Monitoring of emissions and operations – paragraph (a) only

## FGOSWRO FLEXIBLE GROUP CONDITIONS

### DESCRIPTION

Emission units subject to the requirements of 40 CFR Part 63, Subpart A (General Provisions) and Subpart DD (Off-Site Waste and Recovery Operations MACT).

**Emission Units:** EUB7, EUC3, EU32INCINERATOR

### POLLUTION CONTROL EQUIPMENT

NA

#### I. EMISSION LIMIT(S)

NA

#### II. MATERIAL LIMIT(S)

NA

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall establish a range for each parameter that indicates proper operation of the control device, based on the parameter(s) measured during the performance test, as applicable, in accordance with 40 CFR 63.684(e)(2) or 63.695(e)(3) as applicable. **(40 CFR Part 63, Subpart DD)**

#### IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

#### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. If applicable, the permittee shall conduct testing in accordance with the pertinent requirements of 40 CFR 63.684(d) & (h) (Standards: Off-site material treatment), 40 CFR 63.693(d)-(h) (Standards: Closed-vent systems and control devices) and 40 CFR 63.694(l) (Testing methods and procedures). **(40 CFR Part 63, Subpart DD)**
2. The permittee shall use the test methods and procedures referenced in the applicable sections of 40 CFR 63.694 (Testing methods and procedures), and with the pertinent test methods and procedures of any referenced subpart used for compliance, as applicable, including 40 CFR 63.905; 40 CFR 63.925; 40 CFR 63.945; and 40 CFR 63.1046. **(40 CFR Part 63, Subparts DD, OO, PP, QQ, VV)**
3. The performance demonstration for treatment processes must be annually reviewed, and updated if applicable, in accordance with 40 CFR 63.684(d). **(40 CFR Part 63, Subparts DD)**
4. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. **(R 336.1213(3))**

**See Appendix 5**

## **VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall comply with the applicable parametric monitoring requirements of 40 CFR 63.684(e) (Standards: Off-site material treatment), 40 CFR 63.693(b)(4)-(5) (Standards: Closed-vent systems and control devices) and 40 CFR 63.695 (Inspection and monitoring requirements), and with the applicable parametric monitoring requirements of any referenced subpart used for compliance, as applicable, including 40 CFR 63.906; 40 CFR 63.926; 40 CFR 63.946; 40 CFR 63.964 and; 40 CFR 63.1047. **(40 CFR Part 63, Subpart DD)**
2. The permittee shall comply with the equipment leak provisions of either 40 CFR Part 63, Subpart H (National Emission Standard for Hazardous Air Pollutants for equipment Leaks) as referenced in 40 63.691(b) and 63.691(c) as applicable. Compliance with this section shall be determined using FGHONFUGITIVES. **(40 CFR Part 63, Subpart DD)**
3. The permittee shall comply with the applicable requirements of 40 CFR 63.696 (Recordkeeping requirements), and with the applicable recordkeeping requirements of any referenced subpart used for compliance, as applicable, including 40 CFR 63.907; 40 CFR 63. 927; 40 CFR 63.947; 40 CFR 63.965; and 40 CFR 63.1048. **(40 CFR Part 63, Subpart DD).**

See Appendix 7

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. Semiannual Periodic Reports are due March 15 and September 15 of each year, in accordance with 40 CFR Part 63, Subpart DD, Section 63.697(b)(4), and per a reporting date change agreement, approved by EPA on April 17, 2001. Reports of malfunction shall be submitted with the Periodic Report, in accordance with 40 CFR 63.10(d)(5)(i) and 40 CFR 63.697(b)(3) and Table 2 of 40 CFR Part 63, Subpart DD. **(40 CFR Part 63, Subpart DD)**
5. Other reports shall be submitted as applicable, in accordance with 40 CFR 63.697 and Table 2 of 40 CFR Part 63, Subpart DD. **(40 CFR Part 63, Subpart DD)**
6. The permittee shall submit any performance test reports including RATA reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

See Appendix 8

## **VIII. STACK/VENT RESTRICTION(S)**

NA

## **IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart A (General Provisions). The applicable sections of Subpart A are listed in Table 2 of Subpart DD. **(40 CFR Part 63, Subparts A & DD)**

2. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart DD (National Emission Standards for Hazardous Air Pollutants from Off-Site Waste and Recovery Operations). The applicable sections of Subpart DD may include: **(40 CFR Part 63, Subpart DD)**
  - a. 63.680 Applicability and designation of affected source
  - b. 63.681 Definitions
  - c. 63.683 Standards: General
  - d. 63.684 Standards: Off-site material treatment
  - e. 63.685 Standards: Tanks
  - f. 63.686 Standards: Oil-water and organic-water separators
  - g. 63.687 Standards: Surface impoundments
  - h. 63.688 Standards: Containers
  - i. 63.689 Standards: Transfer systems
  - j. 63.690 Standards: Process vents
  - k. 63.691 Standards: Equipment leaks
  - l. 63.693 Standards: Closed-vent systems and control devices
  - m. 63.694 Testing methods and procedures
  - n. 63.695 Inspection and monitoring requirements
  - o. 63.696 Recordkeeping requirements
  - p. 63.697 Reporting requirements
  
3. The permittee shall comply with the applicable requirements of any referenced subpart used for compliance. Referenced subparts that may be used include: **(40 CFR Part 63, Subpart DD)**
  - a. 40 CFR Part 63, Subpart OO – National Emission Standards for Tanks – Level 1
  - b. 40 CFR Part 63, Subpart PP – National Emission Standards for Containers
  - c. 40 CFR Part 63, Subpart QQ – National Emission Standards for Surface Impoundments
  - d. 40 CFR Part 63, Subpart RR – National Emission Standards for Individual Drain Systems
  - e. 40 CFR Part 63, Subpart VV – National Emission Standards for Oil-Water Separators and Organic-Water Separators

**FGRULE703  
FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Any new storage vessels subject to the requirements of R 336.1703 (Rule 703). Storage vessels subject to Rule 703 are those which meet the following criteria:

1. Receive gasoline from a delivery vessel into any new stationary vessel of more than 2000-gallon capacity located at any gasoline dispensing facility; AND
2. Were placed into operation on or after July 1, 1979, or for which an application for a permit to install, pursuant to the provisions of Part 2 of Act 451 is made to EGLE on or after July 1, 1979, or both, except for any process or process equipment which is defined as an "existing source" under R 336.1601.

**Emission Unit:** EU922DieselTank, EU922GasolineTank

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

NA

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall not load or allow the loading of gasoline from a delivery vessel into any new stationary vessel of more than 2000-gallon capacity located at any gasoline dispensing facility, unless such stationary vessel is equipped with a permanent submerged fill pipe. **(R 336.1703(1))**

**V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

**VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall maintain an up-to-date record of all storage vessels subject to the requirements of Rule 703. **(R 336.1213(3))**

**See Appendix 7**

**VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

**See Appendix 8**

**VIII. STACK/VENT RESTRICTION(S)**

NA

**IX. OTHER REQUIREMENT(S)**

1. A new stationary vessel at a gasoline dispensing facility shall be constructed in a manner that will allow the vessel to be retrofitted according to Rule 703(2) and (3). **(R 336.1703(5))**

**FGOLDMACT  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Each new, reconstructed, or existing Organic Liquid Distribution (OLD) (non-gasoline) operation that is part of an emission unit subject to the requirements of 40 CFR Part 63, Subpart EEEE. The 40 CFR Part 63, Subpart EEEE affected source is comprised of storage tanks, transfer racks, equipment leak components associated with storage tanks, transfer racks and pipelines, transport vehicles, and all containers while loading or unloading at transfer racks subject to Subpart EEEE. Equipment listed in 40 CFR 63.2338(c) that is part of an affected source under another National Emission Standards for Hazardous Air Pollutants is excluded from the affected source.

**Emission Units:** EU1353

**POLLUTION CONTROL EQUIPMENT**

See each Emission Unit

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Total organic HAP	Reduce emissions by 95 wt% OR ≤ 20ppmv* exhaust concentration	Defined in 40 CFR Part 63, Subparts A and EEEE	Storage Tanks (See Table 2 of 40 CFR Part 63, Subpart EEEE)	SC V.1 - V.8	<b>40 CFR 63.2346(a)</b>
2. Total organic HAP	Reduce emissions by 95 wt% OR ≤ 20ppmv* exhaust concentration	Defined in 40 CFR Part 63, Subparts A and EEEE	Transfer Racks (See Table 2 of 40 CFR Part 63, Subpart EEEE)	SC V.1 - V.8	<b>40 CFR 63.2346(b)</b>

\* Corrected to 3% oxygen for combustion devices using supplemental combustion air.

3. The permittee shall comply with the applicable requirements for storage tanks and transfer racks specified in 40 CFR Part 63, Subpart SS for meeting emission limits, substituting the term storage tank at each occurrence of the term storage vessel in 40 CFR Part 63, Subpart SS. **(40 CFR 63.2346(a)(1))**
4. The permittee must be in compliance with the emission limitations at all times when the equipment identified in 40 CFR 63.2338(b)(1) through (4) is in OLD operation. The emission limitations apply during periods of startup, shutdown and malfunction (SSM) except as provided in 40 CFR 63.2378(b)(2) and (3). **(40 CFR 63.2350(a), 40 CFR 63.2378(b)(1))**

**II. MATERIAL LIMIT(S)**

NA

### **III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. For each storage tank identified in Table 2 of 40 CFR Part 63, Subpart EEEE, items 1 through 5, the permittee shall reduce the emissions of organic HAP using one of the following work practice standards:
  - a. Route emissions to a fuel gas system or back into a process as specified in 40 CFR Part 63, Subpart SS; **(40 CFR 63.2346(a)(2))**
  - b. Comply with 40 CFR Part 63, Subpart WW (control level 2); or **(40 CFR 63.2346(a)(3))**
  - c. Use a vapor balancing system that complies with 40 CFR 63.2346(a)(4)(i) through (vii) and with the recordkeeping requirements in 40 CFR 63.2390(e). **(40 CFR 63.2346(a)(4))**
2. For each storage tank identified in Table 2 of 40 CFR Part 63, Subpart EEEE, item 6, the permittee shall reduce the emissions of organic HAP using one of the following work practice standards:
  - a. Route emissions to a fuel gas system or back into a process as specified in 40 CFR Part 63, Subpart SS; or **(40 CFR 63.2346(a)(2))**
  - b. Use a vapor balancing system that complies with 40 CFR 63.2346(a)(4)(i) through (vii) and with the recordkeeping requirements in 40 CFR 63.2390(e). **(40 CFR 63.2346(a)(4))**
3. For each **new** transfer rack that meets the criterion for control in Table 2 of 40 CFR Part 63, Subpart EEEE, items 7 through 10, the permittee shall reduce the emissions of organic HAP during loading of organic liquids into transport vehicles or containers using one of the following work practice standards:
  - a. Route emissions to a fuel gas system or back into a process as specified in 40 CFR Part 63, Subpart SS; **(40 CFR 63.2346(b)(2))**
  - b. Use a vapor balancing system that routes organic HAP vapors displaced from the loading of organic liquids into transport vehicles to the storage tank from which the liquid being loaded originated or to another storage tank connected to a common header; and **(40 CFR 63.2346(b)(3)(i))**
  - c. Use a vapor balancing system that routes organic HAP vapors displaced from the loading of organic liquids into containers directly (e.g., no intervening tank or containment area such as a room) to the storage tank from which the liquid being loaded originated or to another storage tank connected to a common header. **(40 CFR 63.2346(b)(3)(ii))**
4. For each **existing** transfer rack that meets the criterion for control in Table 2 of 40 CFR Part 63, Subpart EEEE, items 7 through 10, the permittee shall reduce the emissions of organic HAP during loading of organic liquids into transport vehicles using one of the following work practice standards:
  - a. Route emissions to a fuel gas system or back into a process as specified in 40 CFR Part 63, Subpart SS; or **(40 CFR 63.2346(b)(2))**
  - b. Use a vapor balancing system that routes organic HAP vapors displaced from the loading of organic liquids into transport vehicles to the storage tank from which the liquid being loaded originated or to another storage tank connected to a common header. **(40 CFR 63.2346(b)(3)(i))**
5. For each pump, valve, and sampling connection that operates in organic liquids service for at least 300 hours per year at an affected source that has at least one storage tank or transfer rack that meets the applicability criteria for control in Table 2 of 40 CFR Part 63, Subpart EEEE, the permittee must comply with 40 CFR Part 63, Subpart TT (control level 1); 40 CFR Part 63, Subpart UU (control level 2); or 40 CFR Part 63, Subpart H. **(40 CFR 63.2346(c))**
6. For each transport vehicle equipped with vapor collection equipment that is loaded at a transfer rack subject to control based on the criteria specified in Table 2 of 40 CFR Part 63, Subpart EEEE, items 7 through 10, the permittee must follow the steps in 40 CFR 60.502(e) to ensure that organic liquids are loaded only into vapor-tight transport vehicles and comply with the provisions in 40 CFR 60.502(f) through (i), substituting the term "transport vehicle" at each occurrence of the term "tank truck" or "gasoline tank truck". **(40 CFR 63.2346(d)(1))**
7. For each transport vehicle without vapor collection equipment that is loaded at a transfer rack subject to control based on the criteria specified in Table 2 of 40 CFR Part 63, Subpart EEEE, items 7 through 10, the permittee must ensure that organic liquids are loaded only into transport vehicles that have current certification in accordance with the U.S. Department of Transportation (DOT) pressure test requirements in 49 CFR Part 180 for cargo tanks or 49 CFR 173.31 for tank cars. **(40 CFR 63.2346(d)(2))**



8. For each existing, new and reconstructed high throughput transfer rack routing emissions to a control device to comply with an emission limit in Table 2 of 40 CFR Part 63, Subpart EEEE, the permittee shall meet the operating limits specified in Table 3 of 40 CFR Part 63, Subpart EEEE as identified below. The permittee must establish the operating limits during the initial performance test or design evaluation. The operating limits shall be met at all times after they are established, when the equipment identified in 40 CFR 63.2338(b)(1) through (4) is in OLD operation. **(40 CFR 63.2346(e), 40 CFR 63.2350(a), 40 CFR 63.2370(b) and Table 3)**

Control Device	Operating Limit
Thermal oxidizer	Maintain the daily average fire box or combustion zone temperature greater than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit.
Catalytic oxidizer	a. Replace the existing catalyst bed before the age of the bed exceeds the maximum allowable age established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND b. Maintain the daily average temperature at the inlet of the catalyst bed greater than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND c. Maintain the daily average temperature difference across the catalyst bed greater than or equal to the minimum temperature difference established during the design evaluation or performance test that demonstrated compliance with the emission limit.
Absorber	a. Maintain the daily average concentration level of organic compounds in the absorber exhaust less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR b. Maintain the daily average scrubbing liquid temperature less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND c. Maintain the difference between the specific gravities of the saturated and fresh scrubbing fluids greater than or equal to the difference established during the design evaluation or performance test that demonstrated compliance with the emission limit.
Condenser	a. Maintain the daily average concentration level of organic compounds at the condenser exit less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR b. Maintain the daily average condenser exit temperature less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit.
Adsorption system with adsorbent regeneration	a. Maintain the daily average concentration level of organic compounds in the adsorber exhaust less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR b. Maintain the total regeneration stream mass flow during the adsorption bed regeneration cycle greater than or equal to the reference stream mass flow established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND c. Before the adsorption cycle commences, achieve and maintain the temperature of the adsorption bed after regeneration less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND d. Achieve a pressure reduction during each adsorption bed regeneration cycle greater than or equal to the pressure reduction established during the design evaluation or performance test that demonstrated compliance with the emission limit.

Control Device	Operating Limit
Adsorption system without adsorbent regeneration	a. Maintain the daily average concentration level of organic compounds in the adsorber exhaust less than or equal to the reference concentration established during the design evaluation or performance test that demonstrated compliance with the emission limit; OR b. Replace the existing adsorbent in each segment of the bed with an adsorbent that meets the replacement specifications established during the design evaluation or performance test before the age of the adsorbent exceeds the maximum allowable age established during the design evaluation or performance test that demonstrated compliance with the emission limit; AND c. Maintain the temperature of the adsorption bed less than or equal to the reference temperature established during the design evaluation or performance test that demonstrated compliance with the emission limit.
Flare	a. Comply with the equipment and operating requirements in 40 CFR 63.987(a); AND b. Conduct an initial flare compliance assessment in accordance with 40 CFR 63.987(b); AND c. Install and operate monitoring equipment as specified in 40 CFR 63.987(c).
Another type of control	Submit a monitoring plan as specified in 40 CFR 63.995(c) and 40 CFR 63.2366(b) and monitor the control device in accordance with that plan.

9. For each storage tank and low throughput transfer rack, the permittee shall comply with the respective requirements for monitored parameters as specified in 40 CFR Part 63, Subpart SS. Alternatively, the permittee may comply with the operating limits in Table 3 of 40 CFR Part 63, Subpart EEEE. **(40 CFR 63.2346(e))**
10. For noncombustion devices using total organic compounds (TOC) rather than organic HAP to demonstrate compliance with a percent reduction requirement in Table 2 to 40 CFR Part 63, Subpart EEEE, the permittee must first demonstrate, subject to the approval of the Administrator, that TOC is an appropriate surrogate for organic HAP (i.e., for storage tank(s) and/or transfer rack(s), the percent destruction of organic HAP is equal to or higher than the percent destruction of TOC). This demonstration must be conducted prior to or during the initial compliance test. **(40 CFR 63.2346(f))**
11. When electing to comply with 40 CFR Part 63, Subpart EEEE by combining emissions from different emission sources into a single control device, the permittee must comply with the provisions in 40 CFR 63.982(f). **(40 CFR 63.2346(j))**
12. The permittee shall develop a written SSM plan according to the provisions in 40 CFR 63.6(e)(3), except for sources not required to be controlled as specified in 40 CFR 63.2343. The permittee must follow the requirements in 40 CFR 63.6(e)(1) and (3) during periods of startup, shutdown, malfunction or nonoperation of the affected source or any part thereof. In addition, the provisions of 40 CFR 63.2378(b)(1) through (3) apply. **(40 CFR 63.2350(c), 40 CFR 63.2378(b))**
13. The permittee must be in compliance with the operating limits at all times when the equipment identified in 40 CFR 63.2338(b)(1) through (4) is in OLD operation. **(40 CFR 63.2350(a))**
14. The permittee shall operate and maintain the affected source, including air pollution control and monitoring equipment, according to the provisions in 40 CFR 63.6(E)(l)(i). **(40 CFR 63.2350(b))**

**IV. DESIGN/EQUIPMENT PARAMETER(S)**

NA

## **V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall demonstrate initial compliance with each applicable emission limitation and work practice standard as specified in Tables 6 and 7 of 40 CFR Part 63, Subpart EEEE. **(40 CFR 63.2370(a))**
2. The permittee shall demonstrate continuous compliance with each applicable emission limitation, operating limit, and work practice standard in Tables 2 through 4 of 40 CFR Part 63, Subpart EEEE according to the methods specified in 40 CFR Part 63, Subpart SS and in Tables 8 through 10 of 40 CFR Part 63, Subpart EEEE, as applicable. **(40 CFR 63.2378(a))**
3. For each performance test, design evaluation, and/or compliance determination conducted, the permittee shall use the following procedures:
  - a. Performance tests according to the procedures in 40 CFR Part 63, Subpart SS and the provisions specified in 40 CFR 63.2354(b); **(40 CFR 63.2354(a)(1))**
  - b. Design evaluations according to the procedures in 40 CFR Part 63, Subpart SS; **(40 CFR 63.2354(a)(2))**
  - c. Performance evaluations of a continuous emission monitoring system (CEMS) according to the requirements in 40 CFR 63.8(e); **(40 CFR 63.2354(a)(3))**
  - d. Compliance determination of the organic HAP or Total Organic Compounds (TOC) emission limit according to either of the following (in addition to EPA Method 25 or 25A ):
    - i. Method 18 of 40 CFR Part 60, Appendix A; as specified in 40 CFR 63.2354(b)(3)(i); or **(40 CFR 63.2354(b)(3))**
    - ii. Standard Test Method for Determination of Gaseous Organic Compounds by Direct Interface Gas Chromatography-Mass Spectrometry under the conditions specified in 40 CFR 63.2354(b)(3)(ii); **(40 CFR 63.2354(b)(3))**
  - e. Compliance determination of the HAP content of organic liquids according to either EPA Method 311 of 40 CFR Part 63, Appendix A or other method approved by the Administrator. **(40 CFR 63.2354(c))**
4. The permittee shall conduct initial performance tests and design evaluations by the following dates, whichever is earlier: **(40 CFR 63.2358(a))**
  - a. According to the schedule in 40 CFR 63.7(a)(2); or
  - b. The compliance date specified in any applicable State or Federal new source review construction permit.
5. For storage tanks and transfer racks choosing to comply with the emission limits in Table 2 of 40 CFR Part 63, Subpart EEEE, the permittee shall demonstrate initial compliance according to the following schedule:
  - a. For existing transfer racks, by August 4, 2007; **(40 CFR 63.2358(b)(1))**
  - b. For existing storage tanks with a floating roof, the next time the tank is emptied and degassed, but not later than February 3, 2014; **(40 CFR 63.2358(b)(1)(i))**
  - c. For reconstructed and new sources, within 180 days after initial start up. **(40 CFR 63.2358(b)(2))**
6. For storage tanks at existing sources choosing to comply with the work practice standards in Table 4 of 40 CFR Part 63, Subpart EEEE, the permittee shall conduct the initial compliance demonstration the next time the tank is emptied and degassed but not later than February 3, 2014. **(40 CFR 63.2358(c)(1))**
7. For transfer racks and equipment leak components at existing sources that are complying with the work practice standards in Table 4 of 40 CFR Part 63, Subpart EEEE, the permittee shall conduct the initial compliance demonstration by August 4, 2007. **(40 CFR 63.2358(c)(2))**
8. For storage tanks, transfer racks and equipment leak components at reconstructed or new sources that are complying with the work practice standards in Table 4 of 40 CFR Part 63, Subpart EEEE, the permittee shall conduct the initial compliance demonstration within 180 days after the initial startup date for the affected source. **(40 CFR 63.2358(d))**
9. For nonflare control devices, the permittee shall conduct subsequent performance tests required in Table 5 of 40 CFR Part 63, Subpart EEEE, item 1 at any time EPA requests. **(40 CFR 63.2362(a))**

10. For each owned transport vehicle that is equipped with vapor collection equipment that is loaded with organic liquids at transfer racks subject to control based on the criteria in Table 2 of 40 CFR Part 63, Subpart EEEE, items 7 through 10, the permittee shall perform the vapor tightness testing required in Table 5 of 40 CFR Part 63, Subpart EEEE, item 2 at least once per year. **(40 CFR 63.2362(b)(1))**
11. For each owned transport vehicle that does not have vapor collection equipment, the permittee shall maintain current certification in accordance with the U.S. DOT pressure test requirements in 49 CFR Part 180 for cargo tanks or 49 CFR 173.31 for tank cars. **(40 CFR 63.2362(b)(2))**
12. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. **(R 336.1213(3))**

**See Appendix 5**

**VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. For each storage tank with a capacity less than 5,000 gallons and each transfer rack that only unloads organic liquids, the permittee shall keep documentation that verifies that each storage tank and transfer rack identified in 40 CFR 63.2343(a) is not required to be controlled. The documentation must be kept up-to-date and must be in a form suitable and readily available for expeditious inspection and review according to 40 CFR 63.10(b)(1). **(40 CFR 63.2343(a))**
2. For each storage tank using a vapor balancing system per 40 CFR 63.2346(a)(4), the permittee shall keep the following records:
  - a. Current certification in accordance with the U.S. DOT pressure test requirements of 49 CFR Part 180 – cargo tanks; **(40 CFR 63.2390(e)(1))**
  - b. Current certification in accordance with the U.S. DOT pressure test requirements of 49 CFR 173.31 – tank cars; **(40 CFR 63.2390(e)(1))**
  - c. Pressure relief vent setting specified in 40 CFR 63.2346(a)(4)(v); **(40 CFR 63.2390(e)(2))**
  - d. A record of the equipment to be used and procedures to be followed when reloading cargo tanks or tank cars and displacing vapors back to the storage tank from which the liquid originates; **(40 CFR 63.2390(e)(3)(i))**
  - e. A record of each time the vapor balancing system is used to comply with 40 CFR 63.2346(a)(4)(vi)(B). **(40 CFR 63.2390(e)(3)(ii))**
3. For each transport vehicle into which organic liquids are loaded at a transfer rack that is subject to control based on the criteria in Table 2 of 40 CFR Part 63, Subpart EEEE, items 7 through 10, the permittee shall keep the following records:
  - a. The documentation described in 40 CFR 60.505(b) for transport vehicles equipped with vapor collection; **(40 CFR 63.2390(c)(1))**
  - b. Current certification in accordance with U.S. DOT pressure test requirements in 49 CFR Part 180 for cargo tanks without vapor collection equipment; **(40 CFR 63.2390(c)(2))**
  - c. Current certification in accordance with U.S. DOT pressure test requirements in 49 CFR Part 173 for tank cars without vapor collection equipment. **(40 CFR 63.2390(c)(2))**

Alternatively, the permittee may record that the verification of U.S. DOT tank certification or Method 27 in 40 CFR Part 60, Appendix A has been performed. **(40 CFR 63.2390(c)(3))**

4. The permittee shall keep records of the total actual annual facility-level organic liquid loading volume as defined in 40 CFR 63.2406 through transfer racks to document the applicability, or lack thereof, of the emission limitations in Table 2 of 40 CFR Part 63, Subpart EEEE, items 7 through 10. **(40 CFR 63.2390(d))**
5. For each control device required to comply with 40 CFR Part 63, Subpart EEEE, the permittee shall install, operate, and maintain a Continuous Monitoring System (CMS). If using a Continuous Parameter Monitoring System (CPMS), the permittee shall comply with the applicable requirements in 40 CFR Part 63, Subpart SS. If using a Continuous Emission Monitoring System (CEMS), the permittee shall comply with the applicable requirements in 40 CFR 63.8. **(40 CFR 63.2366(a))**

6. For nonflare control devices controlling storage tanks and low throughput transfer racks, the permittee shall submit a monitoring plan according to the requirements in 40 CFR Part 63, Subpart SS. **(40 CFR 63.2366(b))**
7. When using a control device to comply with 40 CFR Part 63, Subpart EEEE, the permittee shall monitor continuously or collect data at all required intervals at all times the emission source and control device are in OLD operation to demonstrate continuous compliance. The permittee is not required to monitor and collect data during the following situations:
  - a. Malfunctions of the Continuous Monitoring System; **(40 CFR 63.2374(b))**
  - b. Repairs of the Continuous Monitoring System; **(40 CFR 63.2374(b))**
  - c. Required quality assurance or control activities (including calibration checks and required zero span adjustments). **(40 CFR 63.2374(b))**

Furthermore, the permittee shall not use data recorded during the above situations in data averages and calculations used to report emission and operating levels. **(40 CFR 63.2374(c))**

8. The permittee shall keep records in a form suitable and readily available for expeditious inspection and review according to 40 CFR 63.10(b)(1) including records stored in electronic form at a separate location. **(40 CFR 63.2394(a))**
9. The permittee shall keep records of all information for five years following the date of each occurrence, measurement, maintenance, corrective action, report or record as specified in 40 CFR 63.10(b)(1). **(40 CFR 63.2394(b))**
10. The permittee shall keep each record on site for at least two years after the date of each occurrence, measurement, maintenance, corrective action, report or record as specified in 40 CFR 63.10(b)(1). These same records may be kept off site for the remaining three years. **(40 CFR 63.2394(c))**
11. The permittee shall keep all records required by 40 CFR 63.2343 for each emission source that does not require control under 40 CFR Part 63, Subpart EEEE. **(40 CFR 63.2390(a))**
12. The permittee shall keep all of the following records for each emission source that requires control under 40 CFR Part 63, Subpart EEEE:
  - a. All records in 40 CFR Part 63, Subpart SS; **(40 CFR 63.2390(b))**
  - b. All records in Table 12 of 40 CFR Part 63, Subpart EEEE; **(40 CFR 63.2390(b))**
  - c. All records required to show continuous compliance as required in 40 CFR Part 63, Subpart SS and in Tables 8 through 10 of 40 CFR Part 63, Subpart EEEE. **(40 CFR 63.2390(b))**

**See Appendix 7**

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. For each storage tank having a capacity greater than or equal to 5,000 gallons that is not subject to control based on the criteria specified in Table 2 of 40 CFR Part 63, Subpart EEEE, items 1 through 6, the permittee shall comply with the requirements specified in 40 CFR 63.2343(b)(1) through (b)(3). **(40 CFR 63.2343(b))**

5. For each transfer rack that loads organic liquids and is not subject to control based on the criteria in Table 2 of 40 CFR Part 63, Subpart EEEE, items 7 through 10, the permittee shall comply with the requirements specified in 40 CFR 63.2343(c)(1) through (c)(3). **(40 CFR 63.2343(c))**
6. The permittee must submit a subsequent Compliance report as specified in paragraphs 40 CFR 63.2343(b)(3) and (c)(3) if one or more of the following events occur since the filing of the Notification of Compliance Status or the last Compliance report:
  - a. Any storage tank or transfer rack became subject to control under this Subpart EEEE; **(40 CFR 63.2343(d)(1))**
  - b. Any storage tank equal to or greater than 18.9 cubic meters (5,000 gallons) became part of the affected source but is not subject to any of the emission limitations, operating limits, or work practice standards of this subpart; **(40 CFR 63.2343(d)(2))**
  - c. Any transfer rack (except those racks at which only unloading of organic liquids occurs) became part of the affected source; **(40 CFR 63.2343(d)(3))**
  - d. Any of the information required in 40 CFR 63.2386(c)(1), (2) or (3) has changed. **(40 CFR 63.2343(d)(4))**
7. The permittee shall submit the following notifications according to the schedule in Table 12 of 40 CFR Part 63, Subpart EEEE:
  - a. Each notification in 40 CFR Part 63, Subpart SS; **(40 CFR 63.2382(a))**
  - b. Each notification in Table 12 of 40 CFR Part 63, Subpart EEEE; **(40 CFR 63.2382(a))**
  - c. Initial notification according to the schedule specified in 40 CFR 63.2382(b); **(40 CFR 63.2382(b))**
  - d. Notification of Intent to conduct a performance test as required in 40 CFR 63.7(b)(1); **(40 CFR 63.2382(c))**
  - e. Notification of Compliance Status including the information required in 40 CFR 63.999(b) and 40 CFR 63.2382(d)(2)(i) through (viii). **(40 CFR 63.2382(d))**

These notifications must be submitted according to the schedule in Table 12 of 40 CFR Part 63, Subpart EEEE and as specified in paragraphs (b) through (d) of 40 CFR 63.2382.

8. The permittee shall submit all applicable reports in 40 CFR 63.2386 according to the schedule in Table 11 of 40 CFR Part 63, Subpart EEEE and by the dates specified in 40 CFR 63.2386(b)(1) through (3). These reports include, but are not limited to, the following:
  - a. Each report in 40 CFR Part 63, Subpart SS; **(40 CFR 63.2386(a))**
  - b. Each report in Table 11 of 40 CFR Part 63, Subpart EEEE; **(40 CFR 63.2386(a))**
  - c. Each report in Table 12 of 40 CFR Part 63, Subpart EEEE; **(40 CFR 63.2386(a))**
  - d. First Compliance Report containing the information specified in 40 CFR 63.2386(c)(1) through (10); **(40 CFR 63.2386(c))**
  - e. Subsequent Compliance Reports containing the information specified in 40 CFR 63.2386(c)(1) through (9) and 40 CFR 63.2386(d)(1) through (4) where applicable; **(40 CFR 63.2386(d))**
  - f. Report of all deviations for each affected source that has obtained a Renewable Operating Permit. **(40 CFR 63.2386(e))**

See Appendix 8

### **VIII. STACK/VENT RESTRICTION(S)**

NA

### **IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart EEEE for Organic Liquid Distribution by the initial compliance date. **(40 CFR Part 63, Subparts A and EEEE)**

## FGMONMACT FLEXIBLE GROUP CONDITIONS

### DESCRIPTION

These conditions apply to miscellaneous organic chemical manufacturing process units (MCPU) that are located at, or are part of, a major source as defined in section 112(a) of the Clean Air Act and that meet all the criteria specified in 40 CFR Part 63, Subpart FFFF, 40 CFR 63.2435. Specified processes are further defined in 40 CFR 63.2440.

**Emission Units:** EU82, EU1353, EU1353-02

### POLLUTION CONTROL EQUIPMENT

See each Emission Unit

#### I. EMISSION LIMIT(S)

1. The permittee shall comply with the emission limits and work practice standards in Tables 1 through 7 to this subpart at all times, and you must meet the requirements specified in 40 CFR 63.2455 through 40 CFR 63.2490 (or the alternative means of compliance in 40 CFR 63.2495, 40 CFR 63.2500, or 40 CFR 63.2505), except as specified in paragraphs (b) through (v) of this section. You must meet the notification, reporting, and recordkeeping requirements specified in 40 CFR 63.2515, 40 CFR 63.2520, and 40 CFR 63.2525. **(40 CFR 63.2450(a))**
2. The permittee shall comply with each applicable emission limit in Table 1 of Subpart FFFF for continuous process vents. **(40 CFR 63.2455(a))**
3. The permittee shall comply with each applicable emission limit in Table 2 of Subpart FFFF for batch process vents. **(40 CFR 63.2460(a))**
4. The permittee shall comply with each applicable emission limit in Table 3 of Subpart FFFF for process vents that emit hydrogen halide and halogen HAP or HAP metals. **(40 CFR 63.2465(a))**
5. The permittee shall comply with each applicable emission limit in Table 4 of Subpart FFFF for storage tanks. **(40 CFR 63.2470(a))**
6. Except for storage tanks in ethylene oxide service as defined in 40 CFR 63.2550, the emission limits in Table 4 to Subpart FFFF for control devices used to control emissions from storage tanks do not apply during periods of planned routine maintenance. **(40 CFR 63.2470(b), 40 CFR 63.2470 (d))**
7. As an alternative to the emission limits specified in Table 4 to Subpart FFFF, the permittee may elect to implement vapor balancing in accordance with 40 CFR 63.1253(f), except as specified in 40 CFR 63.2470(e)(1) through (3). The permittee may comply with the vapor balancing alternative in 40 CFR 63.1253(f) when the storage tank is filled from a barge. All requirements for tank trucks and railcars specified in 40 CFR 63.1253(f) also apply to barges, except when 40 CFR 63.1253(f)(2) refers to pressure testing certifications, the requirements in 40 CFR 61.304(f) apply for barges. **(40 CFR 63.2470(e))**
8. For each surge control vessel or bottoms receiver that meets the capacity and vapor pressure thresholds for a Group 1 storage tank, the permittee shall comply with the emission limits specified in Table 4 of Subpart FFFF. **(40 CFR 63.2450(r))**
9. The permittee shall comply with each applicable emission limit in Table 5 of Subpart FFFF for transfer racks. **(40 CFR 63.2475(a))**

10. The permittee may elect to comply with the pollution prevention alternative requirements specified below in lieu of the emission limitations and work practice standards contained in Tables 1 through 7 to Subpart FFFF for any MCPU for which initial startup occurred before April 4, 2002. The permittee may comply with the requirements of 40 CFR 63.2495(a)(1) for a series of processes, including situations where multiple processes are merged, if the permittee demonstrates to the satisfaction of the Administrator that the multiple processes were merged after the baseline period into an existing process or processes. **(40 CFR 63.2495(a))**
  - a. The permittee must reduce the production-indexed HAP consumption factor (HAP factor) by at least 65% from a 3-year average baseline beginning no earlier than the 1994 through 1996 calendar years. For any reduction in the HAP factor achieved by reducing HAP that are also volatile organic compounds (VOC), the permittee must demonstrate an equivalent reduction in the production-indexed VOC consumption factor (VOC factor) on a mass basis. For any reduction in the HAP factor achieved by reducing a HAP that is not a VOC, the permittee may not increase the VOC factor. **(40 CFR 63.2495(a)(1))**
  - b. Any MCPU for which the permittee seeks to comply by using the pollution prevention alternative must begin with the same starting material(s) and end with the same product(s). The permittee may not comply by eliminating any steps of a process by transferring the step offsite (to another manufacturing location). The permittee may also not merge a solvent recovery step conducted offsite to onsite and as part of an existing process as a method of reducing consumption. **(40 CFR 63.2495(a)(2))**
  - c. The permittee may comply with the requirements of paragraph (a) above for a series of processes, including situations where multiple processes are merged, if the permittee demonstrates to the satisfaction of the Administrator that the multiple processes were merged after the baseline period into an existing process or processes. **(40 CFR 63.2495(a)(3))**
  - d. The permittee must comply with the emission limitations and work practice standards contained in Tables 1 through 7 of Subpart FFFF for all HAP that are generated in the MCPU and that are not included in consumption, as defined in 40 CFR 63.2550. If any vent stream routed to the combustion control is a halogenated vent stream, as defined in 40 CFR 63.2550, then hydrogen halides that are generated as a result of combustion control must be controlled according to the requirements of 40 CFR 63.994 and the requirements referenced therein. The permittee may not merge nondedicated formulation or nondedicated solvent recovery processes with any other processes. **(40 CFR 63.2495(b))**
  - e. To demonstrate initial compliance with the pollution prevention alternative requirements (40 CFR 63.2495(a)), the permittee must prepare a demonstration summary in accordance with 40 CFR 63.2495(c)(1) and calculate baseline and target annual HAP and VOC factors in accordance with 40 CFR 63.2495(c)(2) and (3). **(40 CFR 63.2495(c))**
11. For an existing source, the permittee may elect to comply with the percent reduction emission limitations in Tables 1, 2, 4, 5, and 7 to Subpart FFFF by complying with the emissions averaging provisions specified in 40 CFR 63.150, except as specified below: **(40 CFR 63.2500(a))**
  - a. The batch process vents in an MCPU collectively are considered one individual emission point for the purposes of emissions averaging, except that only individual batch process vents must be excluded to meet the requirements of 40 CFR 63.150(d)(5); **(40 CFR 63.2500(b))**
  - b. References in 40 CFR 63.150 to 40 CFR 63.112 through 40 CFR 63.130 mean the corresponding requirements in 40 CFR 63.2450 through 40 CFR 63.2490, including applicable monitoring, recordkeeping, and reporting; **(40 CFR 63.2500(c))**
  - c. References to “periodic reports” in 40 CFR 63.150 mean “compliance report” for the purposes of Subpart FFFF; **(40 CFR 63.2500(d))**
  - d. For batch process vents, estimate uncontrolled emissions for a standard batch using the procedures in 40 CFR 63.1257(d)(2)(i) and (ii) instead of the procedures in 40 CFR 63.150(g)(2). Multiply the calculated emissions per batch by the number of batches per month when calculating the monthly emissions for use in calculating debits and credits; **(40 CFR 63.2500(e))**
  - e. References to “storage vessels” in 40 CFR 63.150 mean “storage tank” as defined in 40 CFR 63.2550 for the purposes of Subpart FFFF. **(40 CFR 63.2500(f))**
12. As an alternative to complying with the emission limits and work practice standards for process vents and storage tanks in Tables 1 through 4 to Subpart FFFF and the requirements in 40 CFR 63.2455 through 40 CFR 63.2470, the permittee may comply with the emission limits below and demonstrate compliance in accordance with the requirements in 40 CFR 63.2505(b). **(40 CFR 63.2505)**
  - a. The permittee must route vent streams through a closed-vent system to a control device that reduces HAP emissions as specified in either paragraph below. **(40 CFR 63.2505(a)(1))**



- i. If the permittee uses a combustion control device, it must reduce HAP emissions to an outlet TOC concentration of 20 parts per million by volume (ppmv) or less and to an outlet concentration of hydrogen halide and halogen HAP of 20 ppmv or less, or as an alternative, if the permittee controls halogenated vent streams emitted from a combustion device followed by a scrubber, reduce the hydrogen halide and halogen HAP generated in the combustion device by greater than or equal to 95% by weight in the scrubber. **(40 CFR 63.2505(a)(1)(i))**
- ii. If the permittee uses a noncombustion control device(s), it must reduce HAP emissions to an outlet total organic HAP concentration of 50 ppmv or less, and an outlet concentration of hydrogen halide and halogen HAP of 50 ppmv or less. **(40 CFR 63.2505(a)(1)(ii))**
- b. Any Group 1 process vents within a process that are not controlled according to this alternative standard must be controlled according to the emission limits in Tables 1 through 3 to Subpart FFFF. **(40 CFR 63.2505(a)(2))**

## II. MATERIAL LIMIT(S)

NA

## III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall comply with the emission limits and work practice standards in Tables 1 through 7 to this subpart at all times, and you must meet the requirements specified in 40 CFR 63.2455 through 40 CFR 63.2490 (or the alternative means of compliance in 40 CFR 63.2495, 40 CFR 63.2500, or 40 CFR 63.2505), except as specified in paragraphs (b) through (v) of this section. You must meet the notification, reporting, and recordkeeping requirements specified in 40 CFR 63.2515, 40 CFR 63.2520, and 40 CFR 63.2525. **(40 CFR 63.2450(a))**
2. When organic HAP emissions from different emission types (e.g., continuous process vents, batch process vents, storage tanks, transfer operations, and waste management units) are combined, the permittee shall comply with the requirements of either 40 CFR 63.2450(c)(1) or 40 CFR 63.2450(c)(2). **(40 CFR 63.2450(c))**
3. The permittee shall not use a flare to control halogenated vent streams or hydrogen halide and halogen HAP emissions. **(40 CFR 63.2450(o))**
4. For each surge control vessel or bottoms receiver that meets the capacity and vapor pressure thresholds for a Group 1 storage tank, the permittee shall comply with the work practice standards specified in Table 4 of Subpart FFFF. For each surge control vessel and bottoms receiver in ethylene oxide service as defined in 40 CFR 63.2550, you must also meet the applicable process vent requirements specified in 40 CFR 63.2492 and 63.2493(a) through (c). **(40 CFR 63.2450(r))**
5. For the purposes of determining group status for continuous process vents, batch process vents, and storage tanks in 40 CFR 63.2455, 40 CFR 63.2460, and 40 CFR 63.2470, the permittee shall consider hydrazine to be an organic HAP. **(40 CFR 63.2450(s))**
6. Periods of planned routine maintenance of each control device used to control emissions from storage tanks, during which the control device does not meet the emission limit specified in Table 4 to Subpart FFFF, must not exceed 240 hours per year (hr/yr). The permittee may submit an application to the Administrator requesting an extension of this time limit to a total of 360 hr/yr. The application must explain why the extension is needed, it must indicate that no material will be added to the storage tank between the time the 240-hr limit is exceeded and the control device is again operational, and it must be submitted at least 60 days before the 240-hr limit will be exceeded. **(40 CFR 63.2470(d))**
7. The permittee must comply with each work practice standard in Table 5 to Subpart FFFF that applies to transfer racks, and the permittee must meet each applicable requirement in 40 CFR 63.2475(b) and (c). When the term "high throughput transfer rack" is used in 40 CFR Part 63, Subpart SS, the term "Group 1 transfer rack," as defined in 40 CFR 63.2550, applies for the purposes of Subpart FFFF. **(40 CFR 63.2475)**

#### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

NA

#### **V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The requirements specified in 40 CFR 63.2450 (g)(1) through (5) apply instead of or in addition to the requirements specified in 40 CFR Part 63, Subpart SS. **(40 CFR 63.2450(g))**
2. To demonstrate compliance with the emission limit in Table 3 to Subpart FFFF for HAP metals at a new source, the permittee must conduct an initial performance test of each control device that is used to comply with the emission limit for HAP metals specified in Table 3 to Subpart FFFF. The permittee must conduct the performance test according to the procedures in 40 CFR 63.997. The permittee must use Method 29 of Appendix A of 40 CFR Part 60 to determine the HAP metals at the inlet and outlet of each control device or use Method 5 of Appendix A of 40 CFR Part 60 to determine the total particulate matter (PM) at the inlet and outlet of each control device. The permittee has demonstrated initial compliance if the overall reduction of either HAP metals or total PM from the process is greater than or equal to 97% by weight. **(40 CFR 63.2465(d)(2))**
3. For storage tanks, you must measure the concentration of ethylene oxide of the fluid stored in the storage tanks. **(40 CFR 63.2492(b))**
4. For each batch process vent or continuous process vent, you must measure the flow rate and concentration of ethylene oxide of each process vent specified in 40 CFR 63.2492(a). **(40 CFR 63.2492(a))**
5. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. **(R 336.1213(3))**

See Appendix 5

#### **VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall comply with the recordkeeping requirements specified in 40 CFR 63.2515, 40 CFR 63.2520, and 40 CFR 63.2525. **(40 CFR 63.2450(a))**
2. Each continuous emissions monitoring system (CEMS) must be installed, operated, and maintained according to the requirements in 40 CFR 63.8 and 40 CFR 63.2450(j)(1) through (5). **(40 CFR 63.2450(j))**
3. The provisions in 40 CFR 63.2450(k)(1) through (6) of this section apply in addition to the requirements for continuous parameter monitoring system (CPMS) in 40 CFR Part 63, Subpart SS. **(40 CFR 63.2450(k))**
4. 40 CFR 63.152(f)(7)(ii) through (iv) and 40 CFR 63.998(b)(2)(iii) and (b)(6)(i)(A), which apply to the exclusion of monitoring data collected during periods of startup, shutdown, and malfunction from daily averages, do not apply for the purposes of 40 CFR Part 63, Subpart FFFF. **(40 CFR 63.2450(l))**
5. To demonstrate compliance with the emission limit in Table 3 to Subpart FFFF for HAP metals at a new source, the permittee must comply with the monitoring requirements specified in 40 CFR 63.1366(b)(1)(xi) for each fabric filter used to control HAP metals. **(40 CFR 63.2465(d)(3))**
6. The permittee must keep records of HAP and VOC consumption, production, and the rolling annual HAP and VOC factors for each MCPU for which the permittee is complying with 40 CFR 63.2495(a), the pollution prevention standard. **(40 CFR 63.2495(e))**
7. The permittee shall keep each applicable record required by 40 CFR Part 63, Subpart A and in referenced subparts of 40 CFR Part 63, Subparts F, G, SS, UU, WW, and GGG and in referenced Subpart F of 40 CFR Part 63 **(40 CFR 63.2525(a))**

8. The permittee shall keep records of each operating scenario as specified below:
  - a. A description of the process and the type of process equipment used; **(40 CFR 63.2525(b)(1))**
  - b. An identification of related process vents, including their associated emissions episodes if not complying with the alternative standard in 40 CFR 63.2505; wastewater point of determination (POD); storage tanks; and transfer racks; **(40 CFR 63.2525(b)(2))**
  - c. The applicable control requirements of Subpart FFFF, including the level of required control, and for vents, the level of control for each vent; **(40 CFR 63.2525(b)(3))**
  - d. The control device or treatment process used, as applicable, including a description of operating and/or testing conditions for any associated control device; **(40 CFR 63.2525(b)(4))**
  - e. The process vents, wastewater POD, transfer racks, and storage tanks (including those from other processes) that are simultaneously routed to the control device or treatment process(s); **(40 CFR 63.2525(b)(5))**
  - f. The applicable monitoring requirements of Subpart FFFF and any parametric level that assures compliance for all emissions routed to the control device or treatment process; **(40 CFR 63.2525(b)(6))**
  - g. Calculations and engineering analyses required to demonstrate compliance; **(40 CFR 63.2525(b)(7))**
  - h. For reporting purposes, a change to any of these elements not previously reported, except for 40 CFR 63.2525(b)(5), constitutes a new operating scenario. **(40 CFR 63.2525(b)(8))**
9. The permittee shall keep a schedule or log of operating scenarios for processes with batch vents from batch operations updated each time a different operating scenario is put into effect. **(40 CFR 63.2525(c))**
10. The permittee shall keep records of the information specified below for Group 1 batch process vents in compliance with a percent reduction emission limit in Table 2 to Subpart FFFF if some of the vents are controlled to less the percent reduction requirement: **(40 CFR 63.2525(d))**
  - a. Records of whether each batch operated was considered a standard batch; **(40 CFR 63.2525(d)(1))**
  - b. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch. **(40 CFR 63.2525(d)(2))**
11. The permittee shall keep records of the information specified below, as applicable, for each process with Group 2 batch process vents or uncontrolled hydrogen halide and halogen HAP emissions from the sum of all batch and continuous process vents less than 1,000 lb/yr. No records are required if the permittee documented in the notification of compliance status report that the MCPU meets any of the situations described in 40 CFR 63.2525(e)(1)(i), (ii), or (iii). **(40 CFR 63.2525(e))**
  - a. If the permittee documented in the notification of compliance status report that an MCPU has Group 2 batch process vents because the non-reactive organic HAP is the only HAP and usage is less than 10,000 lb/yr, as specified in 40 CFR 63.2460(b)(7), the permittee must keep records of the amount of HAP material used, and calculate the daily rolling annual sum of the amount used no less frequently than monthly. If a record indicates usage exceeds 10,000 lb/yr, the permittee must estimate emissions for the preceding 12 months based on the number of batches operated and the estimated emissions for a standard batch, and begin recordkeeping as specified in 40 CFR 63.2525(e)(4). After 1 year, the permittee may revert to recording only usage if the usage during the year is less than 10,000 lb. **(40 CFR 63.2525(e)(2))**
  - b. If the permittee documented in the notification of compliance status report that total uncontrolled organic HAP emissions from the batch process vents in an MCPU will be less than 1,000 lb/yr for the anticipated number of standard batches, then the permittee must keep records of the number of batches operated and calculate a daily rolling annual sum of batches operated no less frequently than monthly. If the number of batches operated results in organic HAP emissions that exceed 1,000 lb/yr, the permittee must estimate emissions for the preceding 12 months based on the number of batches operated and the estimated emissions for a standard batch, and begin recordkeeping as specified in 40 CFR 63.2525(e)(4). After one year, the permittee may revert to recording only the number of batches if the number of batches operated during the year results in less than 1,000 lb of organic HAP emissions. **(40 CFR 63.2525(e)(3))**
  - c. If none of the conditions specified in 40 CFR 63.2525(e)(1) through (3) are met, the permittee must keep records of the information specified below: **(40 CFR 63.2525(e)(4))**
    - i. A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions; **(40 CFR 63.2525(e)(4)(i))**
    - ii. A record of whether each batch operated was considered a standard batch; **(40 CFR 63.2525(e)(4)(ii))**

- iii. The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch; **(40 CFR 63.2525(e)(4)(iii))**
  - iv. Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly. **(40 CFR 63.2525(e)(4)(iv))**
12. The permittee shall keep a record of each time a safety device is opened to avoid unsafe conditions in accordance with 40 CFR 63.2450(s). **(40 CFR 63.2525(f))**
  13. The permittee shall keep record of the results of each CPMS calibration check and the maintenance performed, as specified in 40 CFR 63.2450(k)(1). **(40 CFR 63.2525(g))**
  14. For each CEMS, The permittee must keep a record of the information specified in paragraph (l)(1) through (3) of 40 CFR 63.2525. The records shall be maintained as specified in 40 CFR 63.10(b)(1) of Subpart A . **(40 CFR 63.2525(l))**
  15. For each PUG, the permittee must keep records specified below: **(40 CFR 63.2525(i))**
    - a. Descriptions of the MCPU and other process units in the initial PUG required by 40 CFR 63.2535(l)(1)(v); **(40 CFR 63.2525(i)(1))**
    - b. Rationale for including each MCPU and other process unit in the initial PUG (i.e., identify the overlapping equipment between process units) required by 40 CFR 63.2535(l)(1)(v); **(40 CFR 63.2525(i)(2))**
    - c. Calculations used to determine the primary product for the initial PUG required by 40 CFR 63.2535(l)(2)(iv); **(40 CFR 63.2525(i)(3))**
    - d. Descriptions of process units added to the PUG after the creation date and rationale for including the additional process units in the PUG as required by 40 CFR 63.2535(l)(1)(v); **(40 CFR 63.2525(i)(4))**
    - e. The calculation of each primary product redetermination required by 40 CFR 63.2535(l)(2)(iv). **(40 CFR 63.2525(i)(5))**
  16. For each bag leak detector used to monitor PM HAP emissions from a fabric filter, maintain records of any bag leak detection alarm, including the date and time, with a brief explanation of the cause of the alarm and the corrective action taken. **(40 CFR 63.2525(k))**

See Appendix 7

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall comply with the notification and reporting requirements specified in 40 CFR 63.2515, 40 CFR 63.2520, and 40 CFR 63.2525. **(40 CFR 63.2450(a))**
5. When 40 CFR 63.2455 through 63.2490 reference other subparts in 40 CFR Part 63 that use the term “periodic report,” it means “compliance report” for the purposes of 40 CFR Part 63, Subpart FFFF. The compliance report must include the information specified in 40 CFR 63.2520(e), as well as the information specified in referenced subparts. **(40 CFR 63.2450(m)(1))**
6. When there are conflicts between 40 CFR Part 63, Subpart FFFF and referenced subparts for the due dates of reports required by 40 CFR Part 63, Subpart FFFF, reports must be submitted according to the due dates presented in 40 CFR Part 63, Subpart FFFF. **(40 CFR 63.2450(m)(2))**

7. Excused excursions, as defined in 40 CFR Part 63, Subparts G and SS, are not allowed. **(40 CFR 63.2450(m)(3))**
8. If an emission stream contains energetics or organic peroxides that, for safety reasons, cannot meet an applicable emission limit specified in Tables 1 through 7 to Subpart FFFF, then the permittee must submit documentation in the precompliance report explaining why an undue safety hazard would be created if the air emission controls were installed, and the permittee must describe the procedures that will be implemented to minimize HAP emissions from these vent streams. **(40 CFR 63.2450(q))**
9. If complying with the pollution prevention standard, the permittee must include the pollution prevention demonstration plan in the precompliance report required by 40 CFR 63.2520(c). The permittee must identify all days when the annual factors were above the target factors in the compliance reports. **(40 CFR 63.2495(f))**
10. The permittee must submit each applicable report in Table 11 to Subpart FFFF. **(40 CFR 63.2520(a))**
11. Unless the Administrator has approved a different schedule for submission of reports under 40 CFR 63.10(a), the permittee must submit each report by the date in Table 11 to Subpart FFFF and according to 40 CFR 63.2520(b)(1) through (5). **(40 CFR 63.2520(b))**
12. The permittee must submit a precompliance report to request approval for any of the items in 40 CFR 63.2520(c)(1) through (7). The report will be approved or disapproved within 90 days after receipt. If it is disapproved, the permittee must still be in compliance with the emission limitations and work practice standards in Subpart FFFF by the compliance date. To change any of the information submitted in the report, the permittee must submit a notification 60 days before the planned change is to be implemented. **(40 CFR 63.2520(c))**
13. The permittee must submit a notification of compliance status report according to the schedule in 40 CFR 63.2520(d)(1), and the notification of compliance status report must contain the information specified in 40 CFR 63.2520(d)(2). **(40 CFR 63.2520(d))**
14. The compliance report must contain the information specified in 40 CFR 63.2520(e)(1) through (10). **(40 CFR 63.2520(e))**
15. The permittee must submit all of the notifications in 40 CFR 63.6(h)(4) and (5), 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), (f)(4) and (6), and 40 CFR 63.9(b) through (h) that apply by the dates specified. **(40 CFR 63.2515(a))**
16. As specified in 40 CFR 63.9(b)(2), if the affected source starts-up before November 10, 2003, the permittee must submit an initial notification not later than 120 calendar days after November 10, 2003. **(40 CFR 63.2515(b)(1))**
17. As specified in 40 CFR 63.9(b)(3), if the new affected source starts-up on or after November 10, 2003, the permittee must submit an initial notification not later than 120 calendar days after becoming subject to Subpart FFFF. **(40 CFR 63.2515(b)(2))**
18. If required to conduct a performance test, the permittee must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in 40 CFR 63.7(b)(1). For any performance test required as part of the initial compliance procedures for batch process vents in Table 2 to Subpart FFFF, the permittee must also submit the test plan required by 40 CFR 63.7(c) and the emission profile with the notification of the performance test. **(40 CFR 63.2515(c))**

See Appendix 8

#### **VIII. STACK/VENT RESTRICTION(S)**

NA

#### **IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and Subpart FFFF for Miscellaneous Organic Chemical Manufacturing. **(40 CFR Part 63, Subparts A and FFFF)**
2. The permittee shall determine if an emission stream is a halogenated vent stream, as defined in 40 CFR 63.2550, by calculating the mass emission rate of halogen atoms in accordance with 40 CFR 63.115(d)(2)(v). Alternatively, the permittee may elect to designate the emission stream as halogenated. **(40 CFR 63.2450(b))**
3. Except when complying with 40 CFR 63.2485, if the permittee reduces organic HAP emissions by venting emissions through a closed-vent system to any combination of control devices (except a flare) or recovery devices, the permittee shall meet the requirements of 40 CFR 63.982(c) and the requirements referenced therein. **(40 CFR 63.2450(e)(1))**
4. Except when complying with 40 CFR 63.2485, if the permittee reduces organic HAP emissions by venting emissions through a closed-vent system to a flare, the permittee shall meet the requirements of 40 CFR 63.982(b) and the requirements referenced therein. **(40 CFR 63.2450(e)(2))**
5. If the permittee uses a halogen reduction device to reduce hydrogen halide and halogen HAP emissions from halogenated vent streams, the permittee shall meet the requirements of 40 CFR 63.994 and the requirements referenced therein. If the permittee uses a halogen reduction device before a combustion device, the permittee shall determine the halogen atom emission rate prior to the combustion device according to the procedures in 40 CFR 63.115(d)(2)(v). **(40 CFR 63.2450(e)(3))**
6. As part of a flare compliance assessment required in 40 CFR 63.987(b), the permittee has the option of demonstrating compliance with the requirements of 40 CFR 63.11(b) by complying with the requirements in either 40 CFR 63.11(b)(6)(i) or 40 CFR 63.987(b)(3)(ii). If the permittee elects to meet the requirements in 40 CFR 63.11(b)(6)(i), the permittee shall keep flare compliance assessment records as specified in 40 CFR 63.2450(f)(2)(i) and (ii). **(40 CFR 63.2450(f))**
7. To determine the percent reduction of a small control device that is used to comply with an emission limit specified in Table 1, 2, 3, or 5, the permittee may elect to conduct a design evaluation as specified in 40 CFR 63.1257(a)(1) instead of a performance test as specified in 40 CFR Part 63, Subpart SS. The permittee shall establish the value(s) and basis for the operating limits as part of the design evaluation. For continuous process vents, the design evaluation must be conducted at maximum representative operating conditions for the process, unless the Administrator specifies or approves alternate operating conditions. For transfer racks, the design evaluation must demonstrate that the control device achieves the required control efficiency during the reasonably expected maximum transfer loading rate. **(40 CFR 63.2450(h))**
8. When 40 CFR 63.997(e)(2)(iii)(C) requires correcting the measured concentration at the outlet of a combustion device to 3% oxygen if supplemental combustion air is added, procedures in 40 CFR 63.997(e)(2)(iii)(C) must be followed to perform the concentration correction, or Method 3A of 40 CFR part 60, appendix A-2, may also be used to determine the oxygen concentration. **(40 CFR 63.2450(i))**
9. For each continuous process vent, the permittee shall either designate the vent as a Group 1 continuous process vent or determine the total resource effectiveness (TRE) index value as specified in 40 CFR 63.115(d), except as specified in 40 CFR 63.2455(b)(1) through (3). **(40 CFR 63.2455(b))**
10. If the permittee uses a recovery device to maintain the TRE above a specified threshold, the permittee shall meet the requirements of 40 CFR 63.982(e) and the requirements referenced therein, except as specified in 40 CFR 63.2450 and 40 CFR 63.2455(c)(1). **(40 CFR 63.2455(c))**
11. If a process has batch process vents, as defined in 40 CR 63.2550, the permittee must determine the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process using the procedures specified in 40 CFR 63.1257(d)(2)(i) and (ii), except as specified in 40 CFR 63.2460(b)(1) through (7). **(40 CFR 63.2460(b))**

12. Exceptions to the requirements for batch process vents in 40 CFR Part 63, Subparts SS and WW are specified in 40 CFR 66.2460(c)(1) through (9). **(40 CFR 63.2460(c))**
13. If any process vents within a process emit hydrogen halide and halogen HAP, the permittee must determine and sum the uncontrolled hydrogen halide and halogen HAP emissions from each of the process vents within the process using the procedures specified in 40 CFR 63.1257(d)(2)(i) and/or (ii), as appropriate. When 40 CFR 63.1257(d)(2)(ii)(E) requires documentation to be submitted in the precompliance report, it means the notification of compliance status report for the purposes of 40 CFR 63.2465(b). **(40 CFR 63.2465(b))**
14. If collective uncontrolled hydrogen halide and halogen HAP emissions from the process vents within a process are greater than or equal to 1,000 pounds per year (lb/yr), the permittee must comply with 40 CFR 63.994 and the requirements referenced therein, except as specified in 40 CFR 63.2465(c)(1) through (3). **(40 CFR 63.2465(c))**
15. To demonstrate compliance with the emission limit in Table 3 to Subpart FFFF for HAP metals at a new source, the permittee must determine the mass emission rate of HAP metals based on process knowledge, engineering assessment, or test data. **(40 CFR 63.2465(d)(1))**
16. If the permittee conducts a performance test or design evaluation for a control device used to control emissions only from storage tanks, the permittee must establish operating limits, conduct monitoring, and keep records using the same procedures as required in 40 CFR Part 63, Subpart SS for control devices used to reduce emissions from process vents instead of the procedures specified in 40 CFR 63.985(c), 40 CFR 63.998(d)(2)(i), and 40 CFR 63.999(b)(2). **(40 CFR 63.2470(c)(1))**
17. When the term "storage vessel" is used in 40 CFR Part 63, Subparts SS and WW, the term "storage tank," as defined in 40 CFR 63.2550 applies for the purposes of Subpart FFFF. **(40 CFR 63.2470(c)(2))**
18. The permittee must meet each requirement in Table 6 to Subpart FFFF that applies to equipment leaks, except as specified in 40 CFR 63.2480(b) through (d). **(40 CFR 63.2480)**
19. The permittee must meet each requirement in Table 7 to Subpart FFFF that applies to wastewater streams and liquid streams in open systems within an MCPU, except as specified in 40 CFR 63.2485(b) through (o). **(40 CFR 63.2485)**
20. The permittee must meet each requirement in Table 10 to Subpart FFFF that applies to heat exchange systems, except that the phrase "a chemical manufacturing process unit meeting the conditions of 40 CFR 63.100 (b)(1) through (b)(3) of this section" in 40 CFR 63.104(a) means "an MCPU meeting the conditions of 40 CFR 63.2435" for the purposes of Subpart FFFF and that the reference to 40 CFR 63.100(c) in 40 CFR 63.104(a) does not apply for the purposes Subpart FFFF. **(40 CFR 63.2490)**
21. For each MCPU for which the permittee is complying with 40 CFR 63.2495(a), the pollution prevention standard, the permittee must calculate annual rolling average values of the HAP and VOC factors (annual factors) in accordance with the procedures specified below. To show continuous compliance, the annual factors must be equal to or less than the target annual factors calculated according to 40 CFR 63.2495(c)(3). **(40 CFR 63.2495(d))**
  - a. To calculate the annual factors, the permittee must divide the consumption of both total HAP and total VOC by the production rate, per process, for 12-month periods at the frequency specified in either paragraph below, as applicable. **(40 CFR 63.2495(d)(1))**
    - i. For continuous processes, the permittee must calculate the annual factors every 30 days for the 12-month period preceding the 30th day (i.e., annual rolling average calculated every 30 days). A process with both batch and continuous operations is considered a continuous process for the purposes of this section. **(40 CFR 63.2495(d)(2))**
    - ii. For batch processes, the permittee must calculate the annual factors every 10 batches for the 12-month period preceding the 10th batch (i.e., annual rolling average calculated every 10 batches), except as specified if the permittee produces more than 10 batches during a month, the permittee must calculate the annual factors at least once during that month and, if the permittee produces less than 10 batches in

- a 12-month period, the permittee must calculate the annual factors for the number of batches in the 12-month period since the previous calculations. **(40 CFR 63.2495(d)(3))**
22. To demonstrate compliance with the alternative standard in 40 CFR 63.2505, the permittee must meet the requirements of 40 CFR 63.1258(b)(5) beginning no later than the initial compliance date specified in 40 CFR 63.2445, except as specified below. **(40 CFR 63.2505(b))**
- a. The permittee must comply with the requirements in 40 CFR 63.983 and the requirements referenced therein for closed-vent systems. **(40 CFR 63.2505(b)(1))**
  - b. When 40 CFR 63.1258(b)(5)(i) refers to 40 CFR 63.1253(d) and 40 CFR 63.1254(c), the requirements in paragraph 40 CFR 63.2505(a) apply for the purposes of Subpart FFFF. **(40 CFR 63.2505(b)(2))**
  - c. When 40 CFR 63.1258(b)(5)(i)(B) refers to "HCl," it means "total hydrogen halide and halogen HAP" for the purposes of Subpart FFFF. **(40 CFR 63.2505(b)(3))**
  - d. When 40 CFR 63.1258(b)(5)(ii) refers to 40 CFR 63.1257(a)(3), it means 40 CFR 63.2450(j)(5) for the purposes of Subpart FFFF. **(40 CFR 63.2505(b)(4))**
  - e. The permittee must submit the results of any determination of the target analytes of predominant HAP in the notification of compliance status report. **(40 CFR 63.2505(b)(5))**
  - f. If the permittee elects to comply with the requirement to reduce hydrogen halide and halogen HAP by greater than or equal to 95% by weight in 40 CFR 63.2505(a)(1)(i)(C), the permittee must meet the requirements below. **(40 CFR 63.2505(b)(6))**
    - i. Demonstrate initial compliance with the 95% reduction by conducting a performance test and setting a site-specific operating limit(s) for the scrubber in accordance with 40 CFR 63.994 and the requirements referenced therein. The permittee must submit the results of the initial compliance demonstration in the notification of compliance status report. **(40 CFR 63.2505(b)(6)(i))**
    - ii. Install, operate, and maintain CPMS for the scrubber as specified in 40 CFR 63.994(c) and 40 CFR 63.2450(k), instead of as specified in 40 CFR 63.1258(b)(5)(i)(C). **(40 CFR 63.2505(b)(6)(ii))**
  - g. If flow to the scrubber could be intermittent, the permittee you must install, calibrate, and operate a flow indicator as specified in 40 CFR 63.2460(c)(7). **(40 CFR 63.2505(b)(7))**
  - h. Use the operating day as the averaging period for CEMS data and scrubber parameter monitoring data. **(40 CFR 63.2505(b)(8))**
  - i. The requirements in 40 CFR 63.2505(a) do not apply to emissions from storage tanks during periods of planned routine maintenance of the control device that do not exceed 240 hr/yr. The permittee may submit an application to the Administrator requesting an extension of this time limit to a total of 360 hr/yr in accordance with the procedures specified in 40 CFR 63.2470(d). The permittee must comply with the recordkeeping and reporting specified in 40 CFR 63.998(d)(2)(ii) and 40 CFR 63.999(c)(4) for periods of planned routine maintenance. **(40 CFR 63.2505(b)(9))**
23. For any equipment, emission stream, or wastewater stream subject to the provisions of both 40 CFR Part 63, Subpart FFFF and another rule, the permittee may elect to comply only with the provisions as specified in 40 CFR 63.2535(a) through (l). The permittee also must identify the subject equipment, emission stream, or wastewater stream, and the provisions that will be complied with, in the notification of compliance status report required by 40 CFR 63.2520(d). **(40 CFR 63.2535)**
24. For any Group 2 emission point that becomes a Group 1 emission point after the compliance date for the facility, the permittee shall comply with the Group 1 requirements beginning on the date the switch occurs. An initial compliance demonstration, as specified in 40 CFR Part 63, Subpart FFFF, shall be conducted within 150 days after the switch occurs. **(40 CFR 63.2445(d))**
25. If, after the compliance date for the facility, hydrogen halide and halogen HAP emissions from process vents in a process increase to more than 1,000 lb/yr, or HAP metals emissions from a process at a new affected source increase to more than 150 lb/yr, the permittee shall comply with the applicable emission limits specified in Table 3 of 40 CFR Part 63, Subpart FFFF and the associated compliance requirements beginning on the date the emissions exceed the applicable threshold. An initial compliance demonstration, as specified in 40 CFR Part 63, Subpart FFFF, shall be conducted within 150 days after the switch occurs. **(40 CFR 63.2445(e))**
26. If the permittee has a small control device for process vent or transfer rack emissions that becomes a large control device, as defined in 40 CFR 63.2550(i), the permittee shall comply with monitoring and associated recordkeeping and reporting requirements for large control devices beginning on the date the switch occurs. An



initial compliance demonstration, as specified in 40 CFR Part 63 Subpart FFFF, shall be conducted within 150 days after the switch occurs. **(40 CFR 63.2445(f))**

**Footnotes:**

<sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>2</sup> This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

**FGCOATINGSMACT  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Each new and existing miscellaneous coating manufacturing operation as defined in 40 CFR Part 63, Subpart HHHHH, 63.7985(b) that meet the conditions specified in 40 CFR 63.7985(a)(1) through (4). This includes the facility-wide collection of equipment described in 40 CFR 63.7985(b)(1) through (4) used to manufacture coatings as defined in 40 CFR 63.8105 and also includes cleaning operations.

**Emission Unit:** EU845\_MOD2, EU845\_AEH10

**POLLUTION CONTROL EQUIPMENT**

See each emission unit

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Organic HAP with vapor pressure > 0.6 kPa	> 75% reduction by weight	Defined in 40 CFR Part 63, Subparts A and HHHHH	EXISTING Stationary Process Vessel	SC V.1, V.2, V.3, V.4, VI.1	<b>40 CFR 63.8005(a)</b>
2. Organic HAP with vapor pressure < 0.6 kPa	> 60% reduction by weight	Defined in 40 CFR Part 63, Subparts A and HHHHH	EXISTING Stationary Process Vessel	SC V.1, V.2, V.3, V.4, VI.1	<b>40 CFR 63.8005(a)</b>
3. Total organic HAP	> 95% reduction by weight	Defined in 40 CFR Part 63, Subparts A and HHHHH	NEW Portable & Stationary Process Vessel	SC V.1, V.2, V.3, V.4, VI.1	<b>40 CFR 63.8005(a)</b>
4. Hydrogen halide and halogen HAP *  ---OR---  Halogen atom mass emission rate *	> 95% reduction by weight ---OR--- 0.45 kg/hr  ---OR---  0.45 kg/hr	Defined in 40 CFR Part 63, Subparts A and HHHHH	EXISTING Stationary Vessel  and  NEW Portable and Stationary	SC V.1, V.2, V.3, V.4, VI.1	<b>40 CFR 63.8005(a)</b>
5. Total Organic HAP	≥ 90% reduction by weight	Defined in 40 CFR Part 63, Subparts A and HHHHH	Group 1 Storage Tank	Defined in 40 CFR Part 63, Subparts A and HHHHH	<b>40 CFR 63.8010(a)</b>
6. Total Organic HAP	≥ 80% reduction by weight	Defined in 40 CFR Part 63, Subparts A and HHHHH	Group 2 Storage Tank	Defined in 40 CFR Part 63, Subparts A and HHHHH	<b>40 CFR 63.8010(a)</b>

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
7. Total Organic HAP	≥ 75% reduction by weight	Defined in 40 CFR Part 63, Subparts A and HHHHH	Group 1 transfer operation vent stream	Defined in 40 CFR Part 63, Subparts A and HHHHH	<b>40 CFR 63.8025(a)</b>
8. Hydrogen halide and halogen HAP *	≥ 95% reduction by weight ---OR--- 0.45 kg/hr  ---OR---  Halogen atom mass emission rate *	Defined in 40 CFR Part 63, Subparts A and HHHHH	Halogenated Group 1 transfer operation vent stream with combustion device	Defined in 40 CFR Part 63, Subparts A and HHHHH	<b>40 CFR 63.8025(a)</b>
9. Organic HAP with vapor pressure > 0.6 kPa	> 75% reduction by weight	Defined in 40 CFR Part 63, Subparts A and HHHHH	EXISTING Stationary Process Vessel	SC V.1, V.2, V.3, V.4, VI.1	<b>40 CFR 63.8005(a)</b>

\*This limit applies to a halogenated vent stream from a process vessel for which a combustion control device is used to control organic HAP emissions.

## II. MATERIAL LIMIT(S)

NA

## III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall comply with the applicable emission limits and work practice standards specified in Tables 1 through 5 of 40 CFR Part 63, Subpart HHHHH, at all times, except during periods of startup, shutdown, and malfunction (SSM). **(40 CFR 63.8000(a))**
2. If an emission stream contains halogen atoms, and a combustion-based control device (excluding a flare) is used to meet an organic HAP emission limit, the permittee must determine if the emission stream meets the definition of a halogenated stream by calculating the concentration of each organic compound that contains halogen atoms using the procedures specified in 40 CFR 63.115(d)(2)(v), multiplying each concentration by the number of halogen atoms in the organic compound, and summing the resulting halogen atom concentration for all of the organic compounds in the emission stream. Alternatively, the permittee may elect to designate the emission stream as halogenated. **(40 CFR 63.8000(b)(1))**
3. The permittee may open a safety device, as defined in 40 CFR 63.8105, at any time conditions require it to avoid unsafe conditions. **(40 CFR 63.8000(b)(2))**
4. The permittee shall comply with the requirements of 40 CFR Part 63, Subpart SS as specified below for closed vent systems and control devices that are used to comply with an emission limit in Table 1, 2, or 5 of 40 CFR Part 63, Subpart HHHHH, except as stated in 40 CFR 63.8000(d)(1) through (7):
  - a. Meet the requirements of 40 CFR 63.982(c) and the requirements therein, if organic HAP emissions are reduced by venting emissions through a closed-vent system to any combination of control devices (except a flare). **(40 CFR 63.8000(c)(1))**
  - b. Meet the requirements of 40 CFR 63.982(b) and the requirements therein, if organic HAP emissions are reduced by venting emissions through a closed-vent system to a flare. The flare may not be used to control halogenated vent streams or hydrogen halide and halogen HAP emissions. **(40 CFR 63.8000(c)(2))**

- c. Meet the requirements of 40 CFR 63.994 and the requirements referenced therein if a halogen reduction device is used to reduce hydrogen halide and halogen HAP emissions that are generated by combusting halogenated vent streams. If the halogen reduction device is used before a combustion device, determine the halogen atom emission rate prior to the combustion device according to the procedures in 40 CFR 63.115(d)(2)(v). **(40 CFR 63.8000(c)(3))**
5. For a control device with total inlet HAP emissions less than one ton per year, the permittee shall establish operating limit(s) for parameter(s) that will be measured and recorded at least once per averaging period (daily or block) to verify that the control device is operating properly. The permittee may measure the same parameter(s) required for control devices that control inlet HAP emission equal to or greater than one ton per year. If the parameter will not be measured continuously, the permittee must request approval of the proposed procedure in the precompliance report. The operating limits and measurement frequency must be identified and rationale provided to support how these measurements demonstrate the control device is operating properly. **(40 CFR 63.8000(d)(3))**
6. The permittee shall equip each portable and stationary process vessel with a cover or lid that must be in place at all times when the vessel contains a HAP, except for material additions and sampling. **(40 CFR 63.8005(a)(1))**
7. The permittee shall reduce the emissions of organic HAP for each existing stationary process vessel using one of the following methods: **(40 CFR 63.8005(a)(1))**
  - a. By considering both capture and any combination of control (except a flare); or
  - b. By venting emissions through a closed-vent system to any combination of control devices (except a flare); or
  - c. By venting emissions from a non-halogenated vent stream through a closed-vent system to a flare; or
  - d. By venting emissions through a closed-vent system to a condenser that reduces the outlet gas temperature to  $< 10^{\circ}\text{C}$  if the process vessel contains HAP with a partial pressure  $< 0.6$  kPa, or  $< 2^{\circ}\text{C}$  if the process vessel contains HAP with a partial pressure  $\geq 0.6$  kPa and  $< 17.2$  kPa, or  $< -5^{\circ}\text{C}$  if the process vessel contains HAP with a partial pressure  $\geq 17.2$  kPa.
8. The permittee shall reduce the emissions of total organic HAP for each new portable and/or stationary process vessel using one of the following methods: **(40 CFR 63.8005(a)(1))**
  - a. By venting emissions through a closed-vent system to any combination of control devices (except a flare);
  - b. By venting emissions from a non-halogenated vent stream through a closed-vent system to a flare; or
  - c. By venting emissions through a closed-vent system to a condenser that reduces the outlet gas temperature to  $< -4^{\circ}\text{C}$  if the process vessel contains HAP with a partial pressure  $< 0.7$  kPa, or  $< -20^{\circ}\text{C}$  if the process vessel contains HAP with a partial pressure  $\geq 0.7$  kPa and  $< 17.2$  kPa, or  $< -30^{\circ}\text{C}$  if the process vessel contains HAP with a partial pressure  $\geq 17.2$  kPa.
9. If a combustion control device is used to control organic HAP emissions, the permittee shall use a halogen reduction device after the combustion control device to reduce emission of hydrogen halide and halogen HAP. **(40 CFR 63.8005(a)(1))**
10. If a combustion control device is used to control organic HAP emissions, the permittee shall use a halogen reduction device before the combustion control device to reduce the halogen atom mass emission rate. **(40 CFR 63.8005(a)(1))**
11. The permittee shall comply with the emission limits and work practice standards and the applicable requirements of 40 CFR 63.8000(b), except as listed below: **(40 CFR 63.8005(a)(1))**
  - a. Process vessels are not required to meet the emission limits and work practice standards, if the permittee complies with 40 CFR 63.8050 (emissions averaging for stationary process vessels at existing sources) or 40 CFR 63.8055 (weight percent HAP limit in coating products); **(40 CFR 63.8005(a)(1)(i))**
  - b. The emission limits and work practice standards apply to emissions from automatic cleaning operations only, not from manually conducted cleaning operations. **(40 CFR 63.8005(a)(1)(ii))**
12. For each control device on a process vessel used to comply with the emission limitations, the permittee shall comply with the requirements of 40 CFR Part 63, Subpart SS as specified in 40 CFR 63.8000(c), except as stated in 40 CFR 63.8000(d) and 40 CFR 63.8005 (b) through (g). **(40 CFR 63.8005(a)(2))**

13. The permittee shall establish operating limits under the conditions required for the initial compliance demonstration except as specified in 40 CFR 63.8005(e)(1) and (e)(2). **(40 CFR 63.8005(e))**
14. If the permittee elects to establish separate operating limits for different emission episodes, operating block averages may be determined instead of the daily averages specified in 40 CFR 63.998(b)(3). An operating block is a period of time equal to the time from the beginning to end of an emission episode or sequence of emission episodes. **(40 CFR 63.8005(f))**
15. If a flow indicator could be intermittent, the permittee must install, calibrate and operate a flow indicator at the inlet or outlet of the control device to identify periods of no flow. Periods of no flow cannot be used in daily or block averages or in fulfilling a minimum data availability requirement. **(40 CFR 63.8005(g))**
16. As an alternative to complying with the emission limits and work practice standards for each stationary process vessel greater than or equal to 250 gallons at an existing affected source, the permittee may elect to comply with emissions averaging as specified in 40 CFR 63.8050(b) through (e). **(40 CFR 63.8050(a))**
17. As an alternative to complying with the emission limits and work practice standards for each stationary process vessel at an existing affected source, the permittee may elect to comply with a 5-weight percent HAP limit for process vessels that are used to manufacture coatings with a HAP content of less than 0.05 kg per kg product as specified in 40 CFR 63.8055(b). **(40 CFR 63.8055(a))**
18. The permittee shall be in compliance with the emission limits and work practice standards at all times, except during periods of startup, shutdown and malfunction. **(40 CFR 63.8010(a))**
19. The permittee shall comply with the following for each storage tank: **(40 CFR 63.8010)**
  - a. The applicable requirements in 40 CFR 63.8000(b); and
  - b. The applicable weight percent reduction for total organic HAP; or
  - c. The requirements of 40 CFR Part 63, Subpart WW except as specified in 40 CFR 63.8010(b); or
  - d. Reduce total organic HAP emissions from the Group 1 or Group 2 storage tank by venting emissions from a non-halogenated vent stream through a closed-vent system to a flare.
20. For each control device used to comply with the emission limits, the permittee must comply with the requirements of 40 CFR Part 63, Subpart SS as specified in 40 CFR 63.8000(c), except as stated in 40 CFR 63.8000(d) and 40 CFR 63.8010(b) through (d). **(40 CFR 63.8010)**
21. The permittee shall be in compliance with the emission limits and work practice standards at all times, except during periods of startup, shutdown and malfunction. **(40 CFR 63.8020(a))**
22. For each wastewater tank used to store a Group 1 wastewater stream, the permittee shall maintain a fixed roof, which may have openings necessary for proper venting of the tank, such as pressure/vacuum vent or j-pipe vent. **(40 CFR 63.8020(a))**
23. For each Group 1 wastewater stream, the permittee shall convey, using hard-piping, and treat the wastewater as a hazardous waste in accordance with 40 CFR Part 264, 265, or 266 either onsite or offsite. If the wastewater contains 50 ppmw of partially soluble HAP, the permittee may elect to treat the wastewater in an enhanced biological treatment system that is located either onsite or offsite. **(40 CFR 63.8020(a))**
24. For each wastewater stream generated: **(40 CFR 63.8020(b))**
  - a. The permittee may designate any wastewater stream as a Group 1 wastewater stream without determining the concentration;
  - b. If any wastewater stream is not designated as a Group 1 wastewater stream, the permittee shall use procedures specified in 40 CFR 63.144(b) to establish concentrations except compounds listed in Table 8 of 40 CFR 63.144 do not apply and alternatives to the test methods specified in 40 CFR 63.144(b)(5)(i) are specified in 40 CFR 63.8020(b)(ii).
25. The permittee shall reduce the emissions of organic HAP for each Group 1 transfer operation vent stream using one of the following methods: **(40 CFR 63.8025(a))**

- a. By venting emissions through a closed-vent system to any combination of control devices (except a flare); or
  - b. By venting emissions from a non-halogenated vent stream through a closed-vent system to a flare; or
  - c. By using a vapor balancing system designed and operated to collect organic HAP vapors displaced from tank trucks and railcars during loading and route the collected HAP vapors to the storage tank from which the liquid being loaded originated or to another storage tank connected by a common header.
26. If a combustion control device is used to control organic HAP emissions, the permittee shall use a halogen reduction device after the combustion control device to reduce emission of hydrogen halide and halogen HAP. **(40 CFR 63.8025(a))**
27. If a combustion control device is used to control organic HAP emissions, the permittee shall use a halogen reduction device before the combustion control device to reduce the halogen atom mass emission rate. **(40 CFR 63.8025(a))**
28. The permittee shall comply with each emission limit and work practice standard in Table 5 of 40 CFR Part 63, Subpart HHHHH and the applicable requirements in 40 CFR 63.8000(b). For each control device used to comply with Table 5 of 40 CFR Part 63, Subpart HHHHH, the permittee shall comply with the requirements of 40 CFR Part 63, Subpart SS as specified in 40 CFR 63.8000(c), except as stated in 40 CFR 63.8000(d) and 40 CFR 63.8025(b). **(40 CFR 63.8025(a))**
29. For Group 1 transfer operations as defined in 40 CFR 63.8105, all transfer racks used for bulk loading coatings must meet the requirements for high throughput transfer racks in Subpart SS. **(40 CFR 63.8025(b))**
30. For a heat exchange system, as defined in 40 CFR 63.101, the permittee shall comply with the requirements specified in 40 CFR 63.104, except as stated as stated below: **(40 CFR 63.8030(a))**
- a. The phrase a chemical manufacturing process unit meeting the conditions of 40 CFR 63.100(b)(1) through (b)(3) of Subpart HHHHH in 40 CFR 63.104(a) means the miscellaneous coating manufacturing operations defined in 40 CFR 63.7985(b); **(40 CFR 63.8030(b))**
  - b. The reference to 40 CFR 63.100(c) in 40 CFR 63.104(a) does not apply; **(40 CFR 63.8030(c))**
  - c. The reference to 40 CFR 63.103(c)(1) in 40 CFR 63.104(f)(1) does not apply. Records must be retained as specified in 40 CFR 63.10(b)(1); **(40 CFR 63.8030(d))**
  - d. The reference to the periodic report required by 40 CFR 63.152(c) of 40 CFR Part 63, Subpart G means the compliance report required by 40 CFR 63.8075(e). **(40 CFR 63.8030(e))**

#### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. For equipment that is in organic HAP service at an existing source, the permittee shall comply with the following, except as stated in 40 CFR 63.8015(b) through (d): **(40 CFR 63.8015(a))**
  - a. The requirements in 40 CFR 63.424(a) through (d) and 40 CFR 63.428(e), (f) and (h)(4) except as specified in 40 CFR 63.8015(b); or
  - b. The requirements of 40 CFR Part 63, Subpart TT; or
  - c. The requirements of 40 CFR Part 63, Subpart UU, except as specified in 40 CFR 63.8015(c) and (d).
2. For equipment that is in organic HAP service at a new source, the permittee shall comply with the following, except as stated in 40 CFR 63.8015(b) through (d). **(40 CFR 63.8015(a))**
  - a. The requirements of 40 CFR Part 63, Subpart TT; or
  - b. The requirements of 40 CFR Part 63, Subpart UU, except as specified in 40 CFR 63.8015(c) and (d).

#### **V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The requirements specified in 40 CFR 63.8000(d)(1) apply instead of or in addition to the requirements for performance testing of control devices as specified in 40 CFR Part 63, Subpart SS. **(40 CFR 63.8000(d))**
2. The permittee may elect to conduct a design evaluation as specified in 40 CFR 63.1257(a)(1) to determine the percent reduction of a small control device, instead of a performance test as specified in 40 CFR Part 63, Subpart

SS. The values and basis for the operating limits must be established as part of the design evaluation. **(40 CFR 63.8000(d)(2))**

3. The permittee shall demonstrate initial compliance with a percent reduction emission limit by conducting a performance test or design evaluation under conditions as specified in 63.7(e)(1), except that the performance test or design evaluation must be conducted under worst-case conditions. The performance test for a control device used to control emission from process vessels must be conducted according to 40 CFR 63.1257(b)(8), including the submittal of a site-specific test plan for approval prior to testing. **(40 CFR 63.8005(d)(1))**
4. To demonstrate initial compliance for condensers, the permittee shall determine uncontrolled emissions using the procedures specified in 40 CFR 63.1257(d)(2) and determine controlled emissions using the procedures specified in 40 CFR 63.1257(d)(3)(i)(B) and (iii). **(40 CFR 63.8005(d)(2))**
5. The permittee shall demonstrate that each process condenser is properly operated according to the procedures specified in 40 CFR 63.1257(d)(2)(i)(C)(4)(ii) and (d)(3)(iii)(B). As an alternative to measuring the exhaust temperature, the permittee may elect to measure the liquid temperature in the receiver. **(40 CFR 63.8005(d)(3))**
6. The permittee shall conduct a performance test or compliance demonstration equivalent to the initial compliance demonstration within 360 hours of a change in operating conditions that are not considered to be within the previously established worst-case conditions. **(40 CFR 63.8005(d)(4))**
7. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. **(R 336.1213(3))**

**See Appendix 5**

## **VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall keep all records required by 40 CFR 63.8080. These records include, but are not limited to, the following:
  - a. Each applicable record required by 40 CFR Part 63, Subpart A and in referenced Subparts SS, TT, UU and WW of 40 CFR Part 63; **(40 CFR 63.8080(a))**
  - b. If complying with emissions averaging, records of the monthly number of batches for each process vessel, the quarterly actual emissions for each process vessel, the quarterly estimated emissions for each process vessel if it had been controlled as specified in Table 1 to 40 CFR Part 63, Subpart HHHHH, and comparison of the sums of the quarterly actual and estimated emissions as specified in 40 CFR 63.8050(d); **(40 CFR 63.8080(b))**
  - c. A record of each time a safety device is opened to avoid unsafe conditions in accordance with 40 CFR 63.8000(b)(2); **(40 CFR 63.8080(c))**
  - d. Records of the results of each CPMS calibration check and the maintenance performed, as specified in 40 CFR 63.8000(d)(5); **(40 CFR 63.8080(d))**
  - e. For each CEMS, 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 63.8080(e))**
  - f. In the SSMP required by 40 CFR 63.6(e)(3), including Group 2 or non-affected emission points is not required. For equipment leaks only, the SSMP requirement is limited to control devices and is optional for other equipment; **(40 CFR 63.8080(f))**
  - g. If separate operating limits are established as allowed in 40 CFR 63.8005(e), retain a log of operation or a daily schedule indicating the time when changing from one operating limit to another. **(40 CFR 63.8080(g))**
2. The permittee may elect to comply with the monitoring and recordkeeping requirements of 40 CFR Part 63, Subpart HHHHH or the monitoring and recordkeeping requirements of another applicable subpart as specified in 40 CFR 63.8090(a) and (b). **(40 CFR 63.8090)**
3. If a continuous emission monitoring system (CEMS) is used, it must be installed, operated and maintained according to the requirements in 40 CFR 63.8 and 40 CFR 63.8000(d)(4)(i) through (iv). **(40 CFR 63.8000(d)(4))**

4. If a continuous parameter monitoring system (CPMS) is used, the permittee shall comply with the requirements in 40 CFR Part 63, Subpart SS and the provisions in 40 CFR 63.8000(d)(5)(i) through (iii). **(40 CFR 63.8000(d)(5))**
5. The exclusion of monitoring data from daily averages collected during periods of SSM as specified in 40 CFR 63.998(b)(2)(iii) and (b)(6)(i)(A) does not apply. **(40 CFR 63.8000(d)(6))**
6. If complying with emissions averaging, the permittee shall keep records of the monthly number of batches for each process vessel, the quarterly actual emissions for each process vessel, the quarterly estimated emissions for each process vessel if it had been controlled as specified in Table 1 to 40 CFR Part 63, Subpart HHHHH, and comparison of the sums of the quarterly actual and estimated emissions as specified in 40 CFR 63.8050(d). **(40 CFR 63.8080(b))**
7. For each enhanced biological treatment unit used, the permittee must monitor total suspended solids (TSS), biological oxygen demand (BOD), and the biomass concentration. In the precompliance report, the permittee shall identify and provide rationale for proposed operating limits for these parameters, methods for monitoring, the frequency of monitoring, and recordkeeping and reporting procedures that will demonstrate proper operation of the enhanced biological treatment unit. Alternatively, the permittee may use the precompliance report to request to monitor other parameters and must include a description of planned reporting and recordkeeping procedures and the basis for the selected monitoring frequencies and the methods that will be used. **(40 CFR 63.8020(c))**

See Appendix 3

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit all reports required by 40 CFR 63.8075. These reports include, but are not limited to, the following:
  - a. A pre-compliance report, submitted 6 months prior to the compliance date, to request approval of any of the information in 40 CFR 63.8075(c)(1) through (4). The report will be either approved or disapproved by the AQD within 90 days after receipt. If this report is disapproved, compliance with the emission limitations and work practice standards in 40 CFR Part 63, Subpart HHHHH by the compliance date is still required; **(40 CFR 63.8075(c))**
  - b. A notification of compliance status report, submitted no later than 150 days after the applicable compliance date specified in 40 CFR 63.7995, and including the information specified in 40 CFR 63.8075(d)(2); **(40 CFR 63.8075(d))**
  - c. A compliance report, submitted semiannually in accordance with 40 CFR 63.8075(b) which contains the information specified in 40 CFR 63.8075(e)(1) through (8). **(40 CFR 63.8075(e))**
5. The permittee may elect to comply with the reporting requirements of 40 CFR Part 63, Subpart HHHHH or the reporting requirements of another applicable subpart as specified in 40 CFR 63.8090(a) and (b). **(40 CFR 63.8090)**
6. The permittee shall submit all notifications required by 40 CFR 63.8070. These notifications include, but are not limited to, the following:



- a. All notifications specified in 40 CFR 63.6(h)(4) and (5), 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), (f)(4) and (6), and 40 CFR 63.9(b) through (h) that apply by the dates specified; **(40 CFR 63.8070(a))**
  - b. An initial notification as specified in 40 CFR 63.9(b)(2) or (3), submitted not later than 120 calendar days after December 11, 2003, for an existing affected source, or submitted not later than 120 calendar days after becoming subject to this subpart for a new affected source; **(40 CFR 63.8070(b))**
  - c. If a performance test is required, a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in 40 CFR 63.7(b)(1). For any performance test required as part of the initial compliance procedures for process vessels in Table 1 of 40 CFR Part 63, Subpart HHHHH, the test plan required by 40 CFR 63.7(c) and the emission profile must also be submitted with the notification of the performance test. **(40 CFR 63.8070(c))**
7. If wastewater is transferred offsite for enhanced biological treatment, the permittee must obtain written certification from the offsite facility stating that the offsite facility will comply with the requirements of 40 CFR Part 63, Subpart HHHHH. **(40 CFR 63.8020(d))**
  8. The permittee shall submit any performance test reports including RATA reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

See Appendix 8

**VIII. STACK/VENT RESTRICTION(S)**

NA

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart HHHHH for Miscellaneous Coating Manufacturing by the initial compliance date. **(40 CFR Part 63, Subparts A and HHHHH)**
2. The permittee shall comply with the applicable General Provisions in 40 CFR 63.1 through 40 CFR 63.15 as specified in Table 10 to 40 CFR Part 63, Subpart HHHHH. **(40 CFR 63.8095)**

**FGNSPSIII  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Non-fire Pump Emergency Reciprocating Internal Combustion diesel-fueled emergency engines with a model year of 2011 or later, subject to 40 CFR Part 60, Subpart IIII.

**Emission Unit ID:** EU1310RadioTowerRICE, EUEVOWIFLS, EU633RICE, EU123RICE

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>	<b>Monitoring / Testing Method</b>	<b>Underlying Applicable Requirements</b>
1. NMHC + NOx	4.0 g/kW	Hourly	EU1310RadioTowerRICE, EU633RICE, and EU123RICE	SC V.1 & VI.2	<b>40 CFR 60.4202 or 60.4205(b), 40 CFR 1039 Table 3, and 40 CFR 60.4211(c)</b>
2. CO	3.5 g/kW-hr	Hourly	EU1310RadioTowerRICE, EU633RICE, and EU123RICE	SC V.1 & VI.2	<b>40 CFR 60.4202 or 60.4205(b), 40 CFR 1039 Table 3, and 40 CFR 60.4211(c)</b>
3. PM	0.20 g/KW-hr	Hourly	EU1310RadioTowerRICE, EU633RICE, and EU123RICE	SC V.1 & VI.2	<b>40 CFR 60.4202 or 60.4205(b), 40 CFR 1039 Table 3, and 40 CFR 60.4211(c)</b>
4. NMHC + NOx	6.4 g/KW-hr	Hourly	EUEVOWIFLSRICE	SC V.1 & VI.2	<b>40 CFR 60.4205(b), 40 CFR 1039 Table 2, and 40 CFR 60.4211(c)</b>
5. CO	3.5 g/KW-hr	Hourly	EUEVOWIFLSRICE	SC V.1 & VI.2	<b>40 CFR 60.4205(b), 40 CFR 1039 Table 2, and 40 CFR 60.4211(c)</b>
6. PM	0.20 g/KW-hr	Hourly	EUEVOWIFLSRICE	SC V.1 & VI.2	<b>40 CFR 60.4205(b), 40 CFR 1039 Table 2, and 40 CFR 60.4211(c)</b>

## **II. MATERIAL LIMIT(S)**

1. The permittee shall burn only diesel fuel in each engine in FGNSPSIII with a maximum sulfur content of 15 ppm (0.0015 percent) by weight and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent. **(40 CFR 60.4207, 40 CFR 1090.305)**

## **III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee may operate each engine in FGNSPSIII for no more than 100 hours per calendar year for the purpose of necessary 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 permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. 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 internal combustion engines beyond 100 hours per calendar year. **(40 CFR 60.4211(f)(2))**
2. The permittee may operate each engine in FGNSPSIII up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted as part of the 100 hours per calendar year provided for maintenance and testing as provided in 40 CFR 60.4211(f)(2). Except as provided in 40 CFR 60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. **(40 CFR 60.4211(f)(3))**
3. If the permittee purchased a certified engine, according to procedures specified in 40 CFR Part 60, Subpart IIII, for the same model year, the permittee shall meet the following requirements for each engine in FGNSPSIII:
  - a. Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions,
  - b. Change only those emission-related settings that are permitted by the manufacturer, and
  - c. Meet the requirements as specified in 40 CFR 1068, as they apply to the engine.

If the permittee does not operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine. **(40 CFR 60.4211)**

4. If the permittee purchased a non-certified engine or a certified engine operating in a non-certified manner, the permittee shall keep a maintenance plan for each engine in FGNSPSIII and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 60.4211(g)(3))**

## **IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall equip and maintain each engine in FGNSPSIII with non-resettable hours meters to track the operating hours. **(40 CFR 60.4209)**
2. The maximum rated power output of each engine in FGNSPSIII shall not exceed the horsepower (HP) or kilowatts (kW) as certified by the equipment manufacturer. **(40 CFR 60.4202, 40 CFR 60.4205, 40 CFR 1039, 40 CFR 1042)**

## **V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. If any engine in FGNSPSIII is not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows:

- a. 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;
- b. If a performance test is required, the performance tests shall be conducted according to the engine cylinder size:
  - i. 40 CFR 60.4212 (less than 30 liters)
  - ii. 40 CFR 60.4213 (greater than 30 liters)
- c. For an engine >500 HP, conduct subsequent performance testing every 8,760 hours of engine operation or every 3 years thereafter, whichever comes first, to demonstrate compliance with the applicable emission standards.

No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(40 CFR 60.4211(g)(2) and (3), 40 CFR 60.4212(3))**

## **VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1201(3))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 30<sup>th</sup> day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(40 CFR Part 60, Subpart IIII)**
2. The permittee shall keep, in a satisfactory manner, the following records for each engine in FGNSPSIIII:
  - a. For each certified engine: The permittee shall keep records of the manufacturer certification documentation;
  - b. For each uncertified engine: The permittee shall keep records of testing required in SC V.1.

The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4211)**

3. The permittee shall keep, in a satisfactory manner, the following records of maintenance activity for each engine in FGNSPSIIII:
  - a. For each certified engine: The permittee shall keep records of the manufacturer's emission-related written instructions, and records demonstrating that the engine has been maintained according to those instructions, as specified in SC III.4;
  - b. For each uncertified engine: The permittee shall keep records of a maintenance plan, as required by SC III.5, and maintenance activities.

The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4211)**

4. The permittee shall monitor and record, the total hours of operation for each engine in FGNSPSIIII on a monthly and 12-month rolling time period basis, and the hours of operation during emergency and non-emergency service that are recorded through the non-resettable hour meter for each engine in FGNSPSIIII, on a calendar year basis, in a manner acceptable to the AQD District Supervisor. The permittee shall document how many hours are spent for emergency operation of each engine in FGNSPSIIII, including what classified the operation as emergency and how many hours are spent for non-emergency operation. **(40 CFR 60.4211, 40 CFR 60.4214)**
5. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in FGNSPSIIII, demonstrating that the fuel meets the requirement of 40 CFR 1090.305. The certification or test data shall include the name of the oil supplier or laboratory, the sulfur content, and cetane index or aromatic content of the fuel oil. **(40 CFR 60.4207(b), 40 CFR 1090.305)**

**VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit a notification specifying whether each engine of FGNSPSIII will be operated in a certified or a non-certified manner to the AQD District Supervisor, in writing, and within 30 days of switching the manner of operation. **(40 CFR Part 60, Subpart IIII)**

**VIII. STACK/VENT RESTRICTION(S)**

NA

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with the provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and IIII, as they apply to each engine of FGNSPSIII. **(40 CFR Part 60, Subparts A & IIII, 40 CFR 63.6590(c))**
2. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subparts A and ZZZZ, as they apply to each engine of FGNSPSIII. **(40 CFR Part 63, Subparts A & ZZZZ, 40 CFR 63.6585)**

**FGEMERGCIRICE<500HP-EXISTING  
FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major source of HAP emissions, existing emergency, compression ignition (CI) RICE equal to or less than 500 brake hp. A RICE is existing if the date of installation is before June 12, 2006.

**Emission Unit:** EU1100-HP370

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

1. The permittee shall burn only diesel fuel in each engine with a maximum sulfur content of 15 ppm (0.0015 percent) by weight and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent. **(40 CFR 63.6604(b), 40 CFR 1090.305)**

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee must comply with the requirements in Item 1 of Table 2c of 40 CFR Part 63, Subpart ZZZZ which apply to each engine in FGEMERCIGRICE<500HP-EXISTING as specified in the following:
  - a. Change oil and filter every 500 hours of operation or annually, whichever comes first, except as allowed in SC III.2;
  - b. Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
  - c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

If the emergency engine is being operated during an emergency and it is not possible to shut down the engine to perform the management practice requirements on the schedule required, or if performing the work 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 been abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law or which the risk was deemed unacceptable. **(40 CFR 63.6602, 40 CFR Part 63, Subpart ZZZZ, Table 2c.1)**

2. Each engine in FGEMERCIGRICE<500HP-EXISTING 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 provided in SC III.5. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for the permittee 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))**

#### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall equip and maintain each engine in FGEMERCIGRICE<500HP-EXISTING with non-resettable hours meters to track the operating hours. **(40 CFR 63.6625(f))**

#### **V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. If using the oil analysis program, the permittee 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% of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20% from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all these condemning limits are not exceeded, the permittee is not required to change the oil. If any of the limits are exceeded, the permittee 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 permittee must change the oil within 2 business days or before commencing operation, whichever is later. The permittee 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))**

#### **VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. For each engine in FGEMERCIGRICE<500HP-EXISTING, the permittee shall keep in a satisfactory manner the following:
  - a. A copy of each notification and report that was submitted to comply with 40 CFR Part 63, Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted;
  - b. Records of the occurrence and duration of each malfunction of operation or the air pollution control and monitoring equipment;
  - c. Records of performance tests and performance evaluations;
  - d. Records of all required maintenance performed on the air pollution control and monitoring equipment;
  - e. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

The permittee shall keep all records on file and make them available to the department upon request. **(40 CFR 63.6655(a), 40 CFR 63.6660)**

2. For each engine in FGEMERCIGRICE<500HP-EXISTING, the permittee shall keep in a satisfactory manner, records to demonstrate continuous compliance with the operation and maintenance of the engine according to the manufacturer's emission-related operation and maintenance instructions; or develop and follow a maintenance plan that provides 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. The permittee shall keep all records on file and make them available to the department upon request. **(40 CFR 63.6655(d), 40 CFR 63.6660, 40 CFR Part 63, Subpart ZZZZ, Table 6.9)**
3. For each engine in FGEMERCIGRICE<500HP-EXISTING, the permittee shall keep in a satisfactory manner, records of the maintenance conducted to demonstrate that the engine and after-treatment control device (if any) were operated and maintained according to the developed maintenance plan. The permittee shall keep all records on file and make them available to the department upon request. **(40 CFR 63.6655(e), 40 CFR 63.6660)**
4. The permittee shall monitor and record, the total hours of operation for each engine in FGEMERCIGRICE<500HP-EXISTING on a monthly basis, and the hours of operation during emergency and non-emergency service that are recorded through the non-resettable hour meter for each engine in FGEMERCIGRICE<500HP-EXISTING on a calendar year basis, in a manner acceptable to the AQD District Supervisor. The permittee shall 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. The permittee shall keep all records on file and make them available to the department upon request. **(R 336.1213(3) 40 CFR 63.6655(f), 40 CFR 63.6660)**

**VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

**See Appendix 8**

**VIII. STACK/VENT RESTRICTION(S)**

NA

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and ZZZZ for Stationary Reciprocating Internal Combustion Engines. **(40 CFR Part 63, Subparts A and ZZZZ)**



## **FGEMERGCIRICE>500HP-EXISTING FLEXIBLE GROUP CONDITIONS**

### **DESCRIPTION**

40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major source of HAP emissions, existing emergency, compression ignition (CI) RICE greater than 500 brake hp. A RICE is existing if the date of installation is before December 19, 2002.

**Emission Unit:** EU1803-HP1480, EU1803-HP1070, EU1803-HP525

### **POLLUTION CONTROL EQUIPMENT**

NA

### **I. EMISSION LIMIT(S)**

NA

### **II. MATERIAL LIMIT(S)**

1. The permittee shall burn only diesel fuel in each engine with a maximum sulfur content of 15 ppm (0.0015 percent) by weight and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent. **(40 CFR 63.6604(b), 40 CFR 1090.305)**

### **III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee shall operate and maintain each engine in FGEMERGCIRICE>500HP-EXISTING and after-treatment control device (if any) in a manner consistent with good air pollution control practices for minimizing emissions. **(40 CFR 63.6605)**
2. For each engine in FGEMERGCIRICE>500HP-EXISTING, the permittee 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 apply. **(40 CFR 63.6625(h))**
3. The permittee may operate each engine in FGEMERGCIRICE>500HP-EXISTING for no more than 100 hours per calendar year for the purpose of necessary 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 permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. 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 internal combustion engines beyond 100 hours per calendar year. **(40 CFR 63.6640(f)(2))**
4. Each engine in FGEMERGCIRICE>500HP-EXISTING 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 provided in SC III.3. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for the permittee 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))**

#### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee shall equip and maintain each engine in FGEMERGCIRICE>500HP-EXISTING with non-resettable hours meters to track the operating hours. **(R 336.1213(3))**

#### **V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

NA

#### **VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. For each engine in FGEMERGCIRICE>500HP-EXISTING, the permittee shall keep in a satisfactory manner, records of the maintenance conducted to demonstrate that the engine and after-treatment control device (if any) were operated and maintained according to the developed maintenance plan. The permittee shall keep all records on file and make them available to the department upon request. **(40 CFR 63.6655(e))**
2. The permittee shall monitor and record, the total hours of operation for each engine in FGEMERGCIRICE>500HP-EXISTING on a monthly basis, and the hours of operation during emergency and non-emergency service that are recorded through the non-resettable hour meter for each engine in FGEMERGCIRICE>500HP-EXISTING on a calendar year basis, in a manner acceptable to the AQD District Supervisor. The permittee shall 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. The permittee shall keep all records on file and make them available to the department upon request. **(R 336.1213(3))**
3. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in FGEMERGCIRICE>500HP-EXISTING demonstrating that the fuel meets the requirement of SC II.1. The certification or test data shall include the name of the oil supplier or laboratory, the sulfur content, and cetane index or aromatic content of the fuel oil. The permittee shall keep all records on file and make them available to the department upon request. **(40 CFR 80.510(b))**
4. The permittee's records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1). **(40 CFR 63.6660(a))**
5. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. **(40 CFR 63.6660(b))**

#### **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

#### **VIII. STACK/VENT RESTRICTION(S)**

NA

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and ZZZZ for Stationary Reciprocating Internal Combustion Engines. **(40 CFR Part 63, Subparts A and ZZZZ)**

**FGDIVERSIONDIESELS-III  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Two compression ignition (CI) internal combustion engines (ICE) with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) subject to 40 CFR Part 63, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines for 2007 and later model year non-emergency engines with a displacement of less than 30 l/cyl constructed after July 11, 2005, and manufactured after April 1, 2006.

**Emission Unit:** EUDIVERSIONDIESELA, EUDIVERSIONDIESELB

**POLLUTION CONTROL EQUIPMENT**

Each engine is equipped with a dual exhaust such that each exhaust has a single stage catalytic reduction and closed crankcase ventilation system.

**I. EMISSION LIMIT(S)**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period/Operating Scenario</b>	<b>Equipment</b>	<b>Monitoring/ Testing Method</b>	<b>Underlying Applicable Requirements</b>
1. NMHC NonMethane Hydrocarbon	0.19 g/kW-hr	Hourly <sup>A</sup>	Each engine of FGDIVERSIONDIES ELS-III	SC VI.2	<b>40 CFR 60.4201(a) 40 CFR 60.4204(b) - Table 1 of 40 CFR 1039.101</b>
2. NOx	3.5 g/kW-hr	Hourly <sup>A</sup>	Each engine of FGDIVERSIONDIES ELS-III	SC VI.2	<b>40 CFR 60.4201(a) 40 CFR 60.4204(b) - Table 1 of 40 CFR 1039.101</b>
3. CO	3.5 g/kW-hr	Hourly <sup>A</sup>	Each engine of FGDIVERSIONDIES ELS-III	SC VI.2	<b>40 CFR 60.4201(a) 40 CFR 60.4204(b) - Table 1 of 40 CFR 1039.101</b>
4. PM	0.04 g/kW-hr	Hourly <sup>A</sup>	Each engine of FGDIVERSIONDIES ELS-III	SC VI.2	<b>40 CFR 60.4201(a) 40 CFR 60.4204(b) - Table 1 of 40 CFR 1039.101</b>

<sup>A</sup>These emission limits are for certified engines; if testing becomes required to demonstrate compliance, then the tested values must be compared to the Not to Exceed (NTE) requirements determined through 40 CFR 60.4212(c).

**II. MATERIAL LIMIT(S)**

1. The permittee must use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel: maximum sulfur content of 15 ppm (0.0015 percent) by weight and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent. **(40 CFR 60.4207(b), 40 CFR 1090.305)**

### **III. PROCESS/OPERATIONAL RESTRICTION(S)**

1. The permittee shall meet the following requirements for each engine in FGDIVERSIONDIESELS-III:
  - a. Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions; **(40 CFR 60.4211(a)(1))**
  - b. Change only those emission-related settings that are permitted by the manufacturer; **(40 CFR 60.4211(a)(2))**
  - c. Meet the requirements as specified in 40 CFR Part 1068, as they apply. **(40 CFR 60.4211(a)(3))**
2. If the permittee does not install, configure, operate, and maintain each engine and control device according to the manufacturer's emission-related written instructions, or changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate each engine in FGDIVERSIONDIESELS-III in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 60.4211(g))**

### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee must comply by purchasing an engine certified to the emission standards in 40 CFR 60.4204(b), as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications. **(40 CFR 60.4211(c))**

### **V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. If any engine in FGDIVERSIONDIESELS-III is not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows:
  - a. 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 changing emission-related settings in a way that is not permitted by the manufacturer;
  - b. If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4212;
  - c. Conduct subsequent performance testing every 8,760 hours of engine operation or every 3 years thereafter, whichever comes first, to demonstrate compliance with the applicable emission standards.

No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004, 40 CFR 60.4211(g)(3), 40 CFR 60.4212)**

### **VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1213(3))**
2. The permittee shall keep, in a satisfactory manner, the following records for each engine in FGDIVERSIONDIESELS-III:
  - a. For each certified engine: The permittee shall keep records of the manufacturer certification documentation.
  - b. For each uncertified engine: The permittee shall keep records of testing required in SC V.1.

The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4211)**

3. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in FGDIVERSIONDIESELS-III, demonstrating that the fuel meets the requirement of 40 CFR 1090.305. The certification or test data shall include the name of the oil supplier or laboratory, the sulfur content, and cetane index or aromatic content of the fuel oil. **(R 336.1213(3), 40 CFR 60.4207(b), 40 CFR 1090.305)**

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit a notification specifying whether each engine in FGDIVERSIONDIESELS-III will be operated in a certified or a non-certified manner to the AQD District Supervisor, in writing, within 30 days following the initial startup of the engine and within 30 days of switching the manner of operation. **(R 336.1213(3), 40 CFR Part 60, Subpart III)**

See Appendix 8

## **VIII. STACK/VENT RESTRICTION(S)**

NA

## **IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with the provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and III, as they apply to each engine in FGDIVERSIONDIESELS-III. **(40 CFR Part 60, Subparts A and III)**

**FGDIVERSIONDIESELS-ZZZZ  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Two new compression ignition (CI) reciprocating internal combustion engines (RICE) subject to 40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major source of Hazardous Air Pollutants (HAPs), used for non-emergency purposes, and greater than 500 brake horsepower (bhp).

**Emission Units:** EUDIVERSIONDIESELA, EUDIVERSIONDIESELB

**POLLUTION CONTROL EQUIPMENT**

Each engine is equipped with a dual exhaust such that each exhaust has a single stage catalytic reduction and closed crankcase ventilation system.

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. CO  -OR-  Formaldehyde	70% reduction or more of CO  -OR-  Formaldehyde concentration of 580 ppbvd or less at 15 percent O <sub>2</sub>	Hourly, except during periods of startup	Each engine of FGDIVERSIONDIESELS-ZZZZ	SC V.1	<b>40 CFR 63.6600(b) 40 CFR Part 63, Subpart ZZZZ, Table 2a.3.a OR Table 2a.3.b</b>

**II. MATERIAL LIMITS**

1. The permittee shall burn only diesel fuel in each engine in FGDIVERSIONDIESELS-ZZZZ with a maximum sulfur content of 15 ppm (0.0015 percent) by weight and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent. **(40 CFR 1090.305)**

**III. PROCESS/OPERATIONAL RESTRICTIONS**

1. At all times, the permittee must operate and maintain any engine in FGDIVERSIONDIESELS-ZZZZ 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 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))**
2. For each engine in FGDIVERSIONDIESELS-ZZZZ, the permittee must 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 apply. **(40 CFR 63.6625(h))**

3. If using a CPMS, the permittee must prepare a site-specific monitoring plan for each engine in FGDIVERSIONDIESELS-ZZZZ that addresses the continuous parameter monitoring system (CPMS) design, data collection, and the quality assurance and quality control elements as outlined in the following: **(40 CFR 63.6625(b)(1))**
  - a. The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations; **(40 CFR 63.6625(b)(1)(i))**
  - b. Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements; **(40 CFR 63.6625(b)(1)(ii))**
  - c. Equipment performance evaluations, system accuracy audits, or other audit procedures; **(40 CFR 63.6625(b)(1)(iii))**
  - d. Ongoing operation and maintenance procedures in accordance with provisions in 40 CFR 63.8(c)(1)(ii) and (c)(3); **(40 CFR 63.6625(b)(1)(iv))**
  - e. Ongoing reporting and recordkeeping procedures in accordance with provisions in 40 CFR 63.10(c), (e)(1), and (e)(2)(i). **(40 CFR 63.6625(b)(1)(v))**

#### **IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee complying with the emission limitations in Item 3.a of Table 2a of 40 CFR Part 63, Subpart ZZZZ and using an oxidation catalyst must comply with the operating limitations in Item 1 of Table 2b of 40 CFR Part 63, Subpart ZZZZ that apply to each engine in FGDIVERSIONDIESELS-ZZZZ as specified in the following: **(40 CFR 63.6600(b))**
  - a. Maintain the catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load plus or minus 10 percent from the pressure drop across the catalyst that was measured during the initial performance test; **(40 CFR Part 63, Subpart ZZZZ, Table 2b.1.a)**
  - b. Maintain the temperature of the exhaust so that the catalyst inlet temperature is greater than or equal to 450 °F and less than or equal to 1350 °F. **(40 CFR Part 63, Subpart ZZZZ, Table 2b.1.b)**
2. For each engine in FGDIVERSIONDIESELS-ZZZZ, the permittee shall install, operate, and maintain each CPMS in continuous operation according to the procedures in the site-specific monitoring plan and according to the following requirements: **(40 CFR 63.6625(b)(2))**
  - a. The CPMS must collect data at least once every 15 minutes (see also 40 CFR 63.6635); **(40 CFR 63.6625(b)(3))**
  - b. For a CPMS measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 °C (5 °F) or 1 percent of the measurement range, whichever is larger; **(40 CFR 63.6625(b)(4))**
  - c. Conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in the site-specific monitoring plan at least annually; **(40 CFR 63.6625(b)(5))**
  - d. Conduct a performance evaluation of each CPMS in accordance with the site-specific monitoring plan. **(40 CFR 63.6625(b)(6))**

#### **V. TESTING/SAMPLING**

Records shall be maintained on file for a period of five years. **(40 CFR 63.6655)**

1. The permittee must conduct initial performance testing within 180 days after startup and subsequent performance tests semiannually, according to the requirements specified in Item 1 of Table 4 of 40 CFR Part 63, Subpart ZZZZ. If demonstrate compliance for two consecutive tests, the permittee may reduce the frequency of subsequent performance tests to annually. The test must be conducted at any load condition within plus or minus 10 percent of 100 percent load. The permittee must conduct three separate test runs for each performance test required, as specified in 40 CFR 63.7(e)(3). Each test run must last at least 1 hour. If determining compliance with the percent reduction requirement, the permittee must use the equations specified in 40 CFR 63.6620(e). The engine percent load during the performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal.



The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.2001, R 336.2003, R 336.2004, 40 CFR 63.6610(a) and (d), 40 CFR 63.6615, 40 CFR 63.6620(a), (b), (d), and (e), 40 CFR 63.6640(a), 40 CFR Part 63, Subpart ZZZZ, Table 3.1, Table 4.1, Table 5.1, and Table 6.1)**

2. The permittee shall submit a Notification of Intent to the Administrator to conduct a performance test at least 60 days before the performance test is initially scheduled to begin to allow the Administrator, upon request, to review and approve the site-specific test plan and to have an observer present during the test, as required in 40 CFR 63.7(b)(1). **(40 CFR 63.6645(g))**
3. If the catalyst is changed, the permittee must reestablish the operating parameters measured during the initial performance test. When reestablishing the values of the operating parameters, the permittee must also conduct a performance test to demonstrate meeting the required emission limitation applicable in SC I.1. **(40 CFR 63.6640(b))**
4. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. **(R 336.1213(3))**

## **VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(40 CFR 63.6655)**

1. For each engine in FGDIVERSIONDIESELS-ZZZZ, the permittee must keep the records described as follows: **(40 CFR 63.6655(a))**
  - a. A copy of each notification and report that was submitted to comply with 40 CFR Part 63, Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that was 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 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 40 CFR 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. To demonstrate continuous compliance, the permittee must monitor and collect data according to following: **(40 CFR 63.6635(a))**
  - a. Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, the permittee must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions; **(40 CFR 63.6635(b))**
  - b. The permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. The permittee must, however, use all the valid data collected during all other periods. **(40 CFR 63.6635(c))**
3. For each CPMS, the permittee must keep the records as follows: **(40 CFR 63.6655(b))**
  - a. Records described in 40 CFR 63.10(b)(2)(vi) through (xi); **(40 CFR 63.6655(b)(1))**
  - b. Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3); **(40 CFR 63.6655(b)(2))**
  - c. Requests for alternatives to the relative accuracy test for CEMS or CPMS {choose one} as required in 40 CFR 63.8(f)(6)(i), if applicable. **(40 CFR 63.6655(b)(3))**
4. For each engine in FGDIVERSIONDIESELS-ZZZZ, the permittee must keep records to demonstrate continuous compliance with the operating limitations in SC IV.2 as follows: **(40 CFR 63.6640(a), 40 CFR 63.6655(d))**

- a. Collecting the catalyst inlet temperature data according to 40 CFR 63.6625(b) and **(40 CFR Part 63, Subpart ZZZZ, Table 6.1.a.ii)**
  - b. Reducing these data to 4-hour rolling averages; and **(40 CFR Part 63, Subpart ZZZZ, Table 6.1.a.iii)**
  - c. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and **(40 CFR Part 63, Subpart ZZZZ, Table 6.1.a.iv)**
  - d. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test. **(40 CFR Part 63, Subpart ZZZZ, Table 6.1.a.v)**
5. The permittee shall keep fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in FGDIVERSIONDIESELS-ZZZZ, demonstrating that the fuel meets the requirement of SC II.1. The certification or test data shall include the name of the oil supplier or laboratory, the sulfur content, and cetane index or aromatic content of the fuel oil. **(R 336.1213(3), 40 CFR 1090.305)**
  6. The permittee's records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1). **(40 CFR 63.6660(a))**
  7. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5-years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. **(40 CFR 63.6660(b))**
  8. The permittee must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). **(40 CFR 63.6660(c))**

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit all applicable notifications specified in 40 CFR 63.7(b) and (c), 63.8 (e), (f)(4), and (f)(6), and 63.9(b) through (e), (g), and (h) by the dates specified. **(40 CFR 63.6645(a)(3))**
5. The permittee must submit a Notification of Compliance Status, including the performance test results, before the close of business on the 60<sup>th</sup> day following the completion of the performance test according to 63.10(d)(2). **(40 CFR 63.6645(h)(2))**
6. The permittee must submit a semiannual compliance report, as specified in Table 7 of 40 CFR Part 63, Subpart ZZZZ: **(40 CFR 63.6650(a))**
  - a. The report must contain the following:
    - i. If there are no deviations from any applicable emission limitations or operating limitations that apply, a statement that there were no deviations during the reporting period. If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in 40 CFR 63.8(c)(7), a statement that there were not periods during which the CMS was out-of-control during the reporting period; or **(40 CFR Part 63, Subpart ZZZZ, Table 7.1.a)**
    - ii. If there was a deviation from any emission limitation or operating limitation during the reporting period, the information in 40 CFR 63.6650(d). If there were periods during which the CMS, including CEMS and CPMS, was out-of-control, as specified in 40 CFR 63.8(c)(7), the information in 40 CFR 63.6650(e); or **(40 CFR Part 63, Subpart ZZZZ, Table 7.1.b)**
    - iii. If there was a malfunction during the reporting period, the information in 40 CFR 63.665(c)(4); **(40 CFR Part 63, Subpart ZZZZ, Table 7.1.c)**

- b. The compliance report must contain the following information, as specified in 40 CFR 63.6650(c):
    - i. Company name and address; **(40 CFR 63.6650(c)(1))**
    - ii. Certification of the report by a responsible official; **(40 CFR 63.6650(c)(2))**
    - iii. Date of report and beginning and ending dates of the reporting period; **(40 CFR 63.6650(c)(3))**
    - iv. If there was a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the permittee during a malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction. **(40 CFR 63.6650(c)(4))**
    - v. If there are no deviations from any emission or operating limitations that apply, a statement that there were no deviations from the emission or operating limitations during the reporting period. **(40 CFR 63.6650(c)(5))**
    - vi. If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in 40 CFR 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period. **(40 CFR 63.6650(c)(6))**
  - c. If not using a CPMS, for each deviation from an emission or operating limitation that occurs for each engine in FGDIVERSIONDIESELS where a CMS is not being used to comply with the emission or operating limitations, the semiannual compliance report must contain the following: **(40 CFR 63.6650(d))**
    - i. The total operating time of each engine in FGDIVERSIONDIESELS at which the deviation occurred during the reporting period; **(40 CFR 63.6650(d)(1))**
    - ii. Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken. **(40 CFR 63.6650(d)(2))**
  - d. If using a CMS, for each deviation from an emission or operating limitation that occurs for each engine in FGDIVERSIONDIESELS where a CMS is used to comply with the emission and operating limitations, the semiannual compliance report must contain the following: **(40 CFR 63.6650(e))**
    - i. The date and time that each malfunction started and stopped; **(40 CFR 63.6650(e)(1))**
    - ii. The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks; **(40 CFR 63.6650(e)(2))**
    - iii. The date, time, and duration that each CMS was out-of-control, including the information in 40 CFR 63.8(c)(8); **(40 CFR 63.6650(e)(3))**
    - iv. The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period; **(40 CFR 63.6650(e)(4))**
    - v. A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period; **(40 CFR 63.6650(e)(5))**
    - vi. A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes; **(40 CFR 63.6650(e)(6))**
    - vii. A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period; **(40 CFR 63.6650(e)(7))**
    - viii. An identification of each parameter and pollutant (CO) that was monitored at the stationary RICE; **(40 CFR 63.6650(e)(8))**
    - ix. A brief description of the stationary RICE; **(40 CFR 63.6650(e)(9))**
    - x. A brief description of the CMS; **(40 CFR 63.6650(e)(10))**
    - xi. The date of the latest CMS certification or audit; **(40 CFR 63.6650(e)(11))**
    - xii. A description of any changes in CMS, processes, or controls since the last reporting period. **(40 CFR 63.6650(e)(12))**
7. The permittee shall report all deviations as defined in 40 CFR Part 63, Subpart ZZZZ in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Item 1 of Table 7 in 40 CFR Part 63, Subpart ZZZZ along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in 40 CFR Part 63, Subpart ZZZZ, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements

to the permit authority. The permittee may submit the first and subsequent Compliance reports according to the dates specified in SC VII.2 and SC VII.3. **(40 CFR 63.6650(b)(5), 40 CFR 63.6650(f))**

8. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

**See Appendix 8**

### **VIII. STACK/VENT RESTRICTIONS**

NA

### **IX. OTHER REQUIREMENTS**

1. For new, reconstructed and rebuilt (as defined in 40 CFR 94.11(a)) stationary reciprocating engines, any deviations that occur during the first 200 hours of operation from engine start-up are not violations. **(40 CFR 63.6640(d))**
2. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart ZZZZ, for Stationary Reciprocating Internal Combustion Engines . **(40 CFR Part 63, Subparts A and ZZZZ)**

**FGNSPSJJJJ  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Natural gas-fired lean burn emergency engines greater than 25 hp (19 KW) but less than 500 hp subject to 40 CFR Part 60, Subpart JJJJ, Standards of Performance for Stationary Spark Ignition (SI) Internal Combustion Engines (ICE). The emergency SI ICE commenced construction after June 12, 2006, and was manufactured on or after January 1, 2009.

**Emission Units:** EUAustinLiftstation

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NO <sub>x</sub>	2.0 g/HP-hr - OR - 160 ppmvd at 15 percent at 15 percent oxygen	Hourly	Each engine in FGNSPSJJJJ	SC V.1, VI.1	<b>40 CFR 60.4233(e), Table 1 to 40 CFR Part 60, Subpart JJJJ</b>
2. CO	4.0 g/HP-hr - OR - 540 ppmvd at 15 percent oxygen	Hourly	Each engine in FGNSPSJJJJ	SC V.1, VI.1	<b>40 CFR 60.4233(e), Table 1 to 40 CFR Part 60, Subpart JJJJ</b>
3. VOC	1.0 g/HP-hr <sup>A</sup> - OR - 86 ppmvd at 15 percent oxygen <sup>A</sup>	Hourly	Each engine in FGNSPSJJJJ	SC V.1, VI.1	<b>40 CFR 60.4233(e), Table 1 to 40 CFR Part 60, Subpart JJJJ</b>

ppmvd = parts per million by volume on a dry gas basis

<sup>A</sup> When calculating VOC emissions for this emission limit, emissions of formaldehyde should not be included.

**II. MATERIAL LIMIT(S)**

NA

**III. PROCESS/OPERATIONAL RESTRICTION(S)**

- The permittee may operate each engine in FGNSPSJJJJ for no more than 100 hours per calendar year for the purpose of necessary 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 permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. 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 internal combustion engines beyond 100 hours per calendar year. **(40 CFR 60.4243(d)(2))**
- Each engine in FGNSPSJJJJ may operate up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing as

described in SC III.1. Except as provided in 40 CFR 60.4243(d)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or demand response, or to generate income for the permittee to supply non-emergency power as part of a financial arrangement with another entity. **(40 CFR 60.4243(d)(3))**

3. If each engine in FGNSPSJJJJ is operated as a certified engine, according to procedures specified in 40 CFR Part 60 Subpart JJJJ, for the same model year, the permittee shall meet the following requirements: **(40 CFR 60.4243(a))**
  - a. Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions;
  - b. Meet the requirements as specified in 40 CFR 1068 Subparts A through D, as applicable, including labeling and maintaining certified engines according to the manufacturer's recommendations;
  - c. Only change those engine settings that are permitted by the manufacturer.

If the permittee does not operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine and be subject to SC III.5. **(40 CFR 60.4243(b)(1))**

4. If any engine in FGNSPSJJJJ is a non-certified engine or a certified engine operating in a non-certified manner, per 40 CFR Part 60, Subpart JJJJ, the permittee shall 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. **(40 CFR 60.4243(b)(2))**

#### **IV. DESIGN/EQUIPMENT PARAMETER(S)**

1. The permittee must install and maintain a non-resettable hour meter on each engine in FGNSPSJJJJ. **(R 336.1213(3), 40 CFR 60.4237)**

#### **V. TESTING/SAMPLING**

Records must be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. If any engine in FGNSPSJJJJ is a non-certified engine or a certified engine operating in a non-certified manner, per 40 CFR Part 60 Subpart JJJJ, the permittee must demonstrate compliance as follows:
  - a. Conduct an initial performance test to demonstrate compliance with the applicable emission limits in SC I.2 – I.3 within 60 days after achieving the maximum production rate at which the engine will be operated, but not later than 180 days after initial startup, or within 1 year after the engine is no longer operated as a certified engine;
  - b. The performance tests shall consist of three separate test runs of at least 1 hour, for each performance test required in 40 CFR 60.4244 and Table 2 to 40 CFR Part 60, Subpart JJJJ;
  - c. Subsequent performance testing shall be completed every 8,760 hours of engine operation or every 3 years, whichever comes first, to demonstrate compliance with the applicable emission limits.

No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004, 40 CFR 60.8, 40 CFR 60.4243, 40 CFR 60.4244, 40 CFR 60.4245, 40 CFR Part 60 Subpart JJJJ)**

#### **VI. MONITORING/RECORDKEEPING**

Records must be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall keep, in a satisfactory manner, the following records for each engine in FGNSPSJJJJ:
  - a. If certified: The permittee shall keep records of the documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable.
  - b. If non-certified: The permittee shall keep records of testing required in SC V.1.

The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4233(e), 40 CFR 60.4243, 40 CFR 60.4245(a))**

2. The permittee shall keep, in a satisfactory manner, the following records of maintenance activity for each engine in FGNSPSJJJ J:
  - a. If certified: The permittee shall keep the manufacturer's emission-related written instructions and records demonstrating that the engine has been maintained according to them, as specified in SC III.4.
  - b. If non-certified: The permittee shall keep records of a maintenance plan, as required by SC III.5 and records of conducted maintenance.

The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4243, 40 CFR 60.4245(a))**

3. The permittee must keep records of the hours of operation for each engine in FGNSPSJJJJ that is recorded through the non-resettable hour meter. The permittee 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. **(40 CFR 60.4243, 40 CFR 60.4245(b))**
4. The permittee must keep records of all notifications submitted to comply with 40 CFR Part 60, Subpart JJJJ and all documentation supporting any notification for each engine in FGNSPSJJJJ. **(R 336.1213(3), 40 CFR 60.4245(a))**

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**
5. The permittee shall submit a notification specifying whether each engine in FGNSPSJJJJ will be operated in a certified or a non-certified manner to the AQD District Supervisor, in writing, within 30 days following the initial startup of each engine and within 30 days of switching the manner of operation. **(R 336.1213(3), 40 CFR Part 60, Subpart JJJJ)**

See Appendix 8

## **VIII. STACK/VENT RESTRICTION(S)**

NA

## **IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of the federal Standards of Performance for Stationary Spark Ignition Internal Combustion Engines as specified in 40 CFR Part 60, Subparts A and JJJJ. **(40 CFR Part 60, Subparts A and JJJJ)**
2. The permittee shall comply with all applicable provisions of the federal National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines as specified in 40 CFR Part 63, Subparts A and ZZZZ. **(40 CFR 63.6590(c), 40 CFR Part 63, Subparts A and ZZZZ)**

ROP No: MI-ROP-A4033-2024  
Expiration Date: January 16, 2029  
PTI No: MI-PTI-A4033-2024



### E. NON-APPLICABLE REQUIREMENTS

At the time of the ROP issuance, the AQD has determined that the requirements identified in the table below are not applicable to the specified emission unit(s) and/or flexible group(s). This determination is incorporated into the permit shield provisions set forth in the General Conditions in Part A pursuant to Rule 213(6)(a)(ii). If the permittee makes a change that affects the basis of the non-applicability determination, the permit shield established as a result of that non-applicability decision is no longer valid for that emission unit or flexible group.

Emission Unit/Flexible Group ID	Non-Applicable Requirement	Justification
EU922DieselTank/FGRULE703	R 336.1703(2)	The gasoline storage tank located at 922 building (installed in 1986) is not located in an area listed in table 61 of the Part 6 rules. Therefore, this tank is not required to have a vapor balance system or equivalent control as required by AQD Rule 703(2).
EU92GasolineTank/FGRULE703	R 336.1703(2)	The gasoline storage tank located at 922 building (installed in 1986) is not located in an area listed in table 61 of the Part 6 rules. Therefore, this tank is not required to have a vapor balance system or equivalent control as required by AQD Rule 703(2).

## APPENDICES

### Appendix 1. Acronyms and Abbreviations

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	acfm	Actual cubic feet per minute
BACT	Best Available Control Technology	BTU	British Thermal Unit
CAA	Clean Air Act	°C	Degrees Celsius
CAM	Compliance Assurance Monitoring	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO <sub>2</sub> e	Carbon Dioxide Equivalent
CEMS	Continuous Emission Monitoring System	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
COM	Continuous Opacity Monitoring	°F	Degrees Fahrenheit
Department/ department	Michigan Department of Environment, Great Lakes, and Energy	gr	Grains
EGLE	Michigan Department of Environment, Great Lakes, and Energy	HAP	Hazardous Air Pollutant
EU	Emission Unit	Hg	Mercury
FG	Flexible Group	hr	Hour
GACS	Gallons of Applied Coating Solids	HP	Horsepower
GC	General Condition	H <sub>2</sub> S	Hydrogen Sulfide
GHGs	Greenhouse Gases	kW	Kilowatt
HVLP	High Volume Low Pressure*	lb	Pound
ID	Identification	m	Meter
IRSL	Initial Risk Screening Level	mg	Milligram
ITSL	Initial Threshold Screening Level	mm	Millimeter
LAER	Lowest Achievable Emission Rate	MM	Million
MACT	Maximum Achievable Control Technology	MW	Megawatts
MAERS	Michigan Air Emissions Reporting System	NMOC	Non-methane Organic Compounds
MAP	Malfunction Abatement Plan	NO <sub>x</sub>	Oxides of Nitrogen
MSDS	Material Safety Data Sheet	ng	Nanogram
NA	Not Applicable	PM	Particulate Matter
NAAQS	National Ambient Air Quality Standards	PM10	Particulate Matter equal to or less than 10 microns in diameter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	%	Percent
PTI	Permit to Install	psia	Pounds per square inch absolute
RACT	Reasonable Available Control Technology	psig	Pounds per square inch gauge
ROP	Renewable Operating Permit	scf	Standard cubic feet
SC	Special Condition	sec	Seconds
SCR	Selective Catalytic Reduction	SO <sub>2</sub>	Sulfur Dioxide
SDS	Safety Data Sheet	TAC	Toxic Air Contaminant
SNCR	Selective Non-Catalytic Reduction	Temp	Temperature
SRN	State Registration Number	THC	Total Hydrocarbons
TEQ	Toxicity Equivalence Quotient	tpy	Tons per year
USEPA/EPA	United States Environmental Protection Agency	µg	Microgram
VE	Visible Emissions	µm	Micrometer or Micron
		VOC	Volatile Organic Compounds
		yr	Year

\*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

## Appendix 2. Schedule of Compliance

The permittee certified in the ROP application that this stationary source is in compliance with all applicable requirements and the permittee shall continue to comply with all terms and conditions of this ROP. A Schedule of Compliance is not required. **(R 336.1213(4)(a), R 336.1119(a)(ii))**

## Appendix 3. Monitoring Requirements

### A. The following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced in FGCOATINGSMACT

1. If a control device used to comply with 40 CFR Part 63, Subpart HHHHH, is also subject to monitoring, recordkeeping and reporting requirements in 40 CFR Part 264, Subpart AA, BB, or CC; or monitoring and recordkeeping requirements in 40 CFR Part 265, Subpart AA, BB, or CC; and the permittee complies with the periodic reporting requirements under 40 CFR Part 264, Subpart AA, BB, or CC, the permittee may elect to comply with the monitoring, recordkeeping and reporting requirements of 40 CFR Part 63, Subpart HHHHH; or the monitoring and recordkeeping requirements of 40 CFR Part 264 or 265 and the reporting requirements in 40 CFR Part 264. If the permittee elects to comply with the monitoring, recordkeeping and reporting requirements of 40 CFR Parts 264 and/or 265, the information required for the compliance report in 40 CFR 63.8075(e) must be reported and the notification of compliance status report required by 40 CFR 63.8075(d) must identify the monitoring, recordkeeping and reporting authority under which the permittee will comply. **(40 CFR 63.8090(a))**
2. For any equipment that is subject to 40 CFR Part 63, Subpart HHHHH, and is also subject to 40 CFR Part 264, Subpart BB or 40 CFR Part 265, Subpart BB, compliance with recordkeeping and reporting requirements of 40 CFR Part 264 and/or 265 may be used to comply with the recordkeeping and reporting requirements of 40 CFR 63.1255, to the extent that the requirements of 40 CFR Part 264 and/or 265 duplicate the requirements of 40 CFR Part 63, Subpart HHHHH. The permittee shall identify, in the notification of compliance status report required by 40 CFR 63.8075(d), compliance with the recordkeeping and reporting authority under 40 CFR Part 264 and/or 265. **(40 CFR 63.8090(b))**
3. Any storage tank used in miscellaneous coating manufacturing operations that is both controlled with a floating roof and in compliance with the provisions of 40 CFR Part 60, Subpart Kb, shall be considered in compliance with 40 CFR Part 63, Subpart HHHHH. Any storage tank with a fixed roof, closed-vent system, and control device in compliance with 40 CFR Part 60, Subpart Kb, shall be considered in compliance with 40 CFR Part 63, Subpart HHHHH, however, the permittee must comply with the monitoring, recordkeeping and reporting requirements in 40 CFR Part 63, Subpart HHHHH. The permittee must identify in the notification of compliance status report required by 40 CFR 63.8075(d) which storage tanks are in compliance with 40 CFR Part 60, Subpart Kb. **(40 CFR 63.8090(c))**

### B. Continuous Emission Monitoring System (CEMS) Requirements

1. Within 30 calendar days after commencement of initial start-up, the permittee shall submit two copies of a Monitoring Plan to the AQD, for review and approval. The Monitoring Plan shall include drawings or specifications showing proposed locations and descriptions of the required CEMS.
2. Within 150 calendar days after commencement of initial start-up, the permittee shall submit two copies of a complete test plan for the CEMS to the AQD for approval.
3. Within 180 calendar days after commencement of initial start-up, the permittee shall complete the installation and testing of the CEMS.
4. Within 60 days of completion of testing, the permittee shall submit to the AQD two copies of the final report demonstrating the CEMS complies with the requirements of the corresponding Performance Specifications (PS) in the following table:

Pollutant	Applicable PS*
NOx	2 & 6
SO2	2 & 6
CO	2 & 6
CO <sub>2</sub>	6, 4A or 4B
O <sub>2</sub>	3 or 4B
*Or other PS as approved by the AQD.	

5. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.
6. The CEMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and PS 2, 3, 4, and 6 (see No. 4 above) of Appendix B to 40 CFR Part 60 or 40 CFR Part 75, Appendices A and B, as applicable.
7. Each calendar quarter, the permittee shall perform the Quality Assurance Procedures of the CEMS set forth in Appendix F of 40 CFR Part 60 or 40 CFR Part 75, Appendix B. Within 30 days following the end of each calendar quarter, the permittee shall submit the results to the AQD in the format of the data assessment report. (Figure 1, Appendix F of 40 CFR Part 60).
8. In accordance with 40 CFR 60.7(c) and (d), the permittee shall submit two copies of an excess emission report (EER) and summary report in an acceptable format to the AQD, within 30 days following the end of each calendar quarter. The summary report shall follow the format of Figure 1 in 40 CFR 60.7(d). The EER shall include the following information:
  - a. A report of each exceedance above the limits specified in the Emission Limits of this permit. This includes the date, time, magnitude, cause and corrective actions of all occurrences during the reporting period;
  - b. A report of all periods of CEMS downtime and corrective action;
  - c. A report of the total operating time of each emission unit during the reporting period;
  - d. A report of any periods that the CEMS exceeds the instrument range;
  - e. If no exceedances or CEMS downtime occurred during the reporting period, the permittee shall report that fact.
9. The permittee shall keep all monitoring data on file for a period of at least five years and make them available to the AQD upon request.

**Appendix 4. Recordkeeping**

The permittee may use form EQP 3558 (RULE 290 PERMIT TO INSTALL EXEMPTION: SOURCES WITH LIMITED EMISSIONS RECORD) provided by the Environmental Sciences and Services Division, for the recordkeeping requirements referenced in FGRULE290.

**Appendix 5. Testing Procedures**

Specific testing requirement plans, procedures, and averaging times are detailed in the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

**Appendix 6. Permits to Install**

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-A4033-2017. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (\*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-2017b is being reissued as Source-Wide PTI No. MI-PTI-A4033-2024.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
87-17B	202000132	Minor modification application for PTI 87-17C. Permit modified to cover the addition of a new product.	EU1353-01
87-17C	202100022	Minor modification application for PTI 87-17C. Permit modified to cover the addition of a new product.	EU1353-01
NA	201900086	New ROP and State Registration numbers (SRN) for assets in ROP No. MI-ROP-A4033-2017b owned by Trinseo (SRN P1025) SK Saran (SRN P1026), Dow Dupont (SRN P1027) and Dow AgroScience (SRN P1028)	Dow Chemical SRN A4033 ROP Significant Mod

**Appendix 7. Emission Calculations**

Specific emission calculations to be used with monitoring, testing or recordkeeping data are detailed in the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, this appendix is not applicable.

**Appendix 8. Reporting**

**A. Annual, Semiannual, and Deviation Certification Reporting**

The permittee shall use EGLE, AQD, Report Certification form (EQP 5736) and EGLE, AQD, Deviation Report form (EQP 5737) for the annual, semiannual and deviation certification reporting referenced in the Reporting Section of the Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Alternative formats must meet the provisions of Rule 213(4)(c) and Rule 213(3)(c)(i), respectively, and be approved by the AQD District Supervisor.

**B. Other Reporting**

Specific reporting requirement formats and procedures are detailed in Part A or the appropriate Source-Wide, Emission Unit and/or Flexible Group Special Conditions. Therefore, Part B of this appendix is not applicable.