

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

EFFECTIVE DATE: October 13, 2021

ISSUED TO

**Trinseo LLC (hereinafter "Trinseo")**

State Registration Number (SRN): P1025

LOCATED AT

1604 Building, Barth Street, Midland, Midland County, Michigan 48667

The stationary source consists of Trinseo LLC (SRN P1025), SK Saran Americas, LLC (SRN: P1026), DDP Specialty Electronic Materials US, Inc. (SRN P1027), The Dow Chemical Company (SRN: A4033), Dow Silicones (SRN: A4043), and Corteva Agriscience LLC (SRN: P1028).

**RENEWABLE OPERATING PERMIT**

Permit Number: MI-ROP-P1025-2021

Expiration Date: October 13, 2026

Administratively Complete ROP Renewal Application Due Between  
April 13, 2025 and April 13, 2026

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-P1025-2021

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))**

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- 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

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 AQD R 336.1213(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 Part 61, Subpart M, Section 61.150(d). **(40 CFR Part 61, Subpart M)**

#### 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 follow the applicable notification requirements in 40 CFR Part 61, Subpart M, Section 61.145(b) prior to any applicable demolition or renovation activity. **(40 CFR Part 61, Subpart M)**
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 Part 61, Subpart M, Section 61.150(d)(4). **(40 CFR Part 61, Subpart M)**
6. An Initial Report shall be filed, according to the requirements of 40 CFR Part 61, Subpart M, Section 61.153, within 90 days of startup for any new source subject to Section 61.154. **(40 CFR Part 61, Subpart M)**

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 or Part 71 of Chapter I. **(40 CFR Part 63, Subpart A, Section 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, Saginaw Bay 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 40 CFR Part 61, Subparts A and M (National Emission Standards for Asbestos). The applicable sections of Subpart M 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 Part 61, Subpart M, Section 61.145(c) during any demolition or renovation activity. **(40 CFR Part 61, Subpart M)**
5. The permittee shall not install or reinstall on a facility component any insulating materials that contain commercial asbestos (other than spray-applied insulating materials) if the materials are either molded and friable or wet-applied and friable after drying, as per 40 CFR Part 61, Subpart M, Section 61.148. **(40 CFR Part 61, Subpart M)**
6. The permittee shall follow the applicable waste disposal requirements in 40 CFR Part 61, Subpart M, Section 61.150 for any asbestos removed during demolition or renovation activities. **(40 CFR Part 61, Subpart M)**
7. The permittee shall follow the applicable requirements of 40 CFR Part 61, Subpart M, Section 61.152 if air cleaning is used as part of the method of compliance with Sections 61.145 or 61.150. **(40 CFR Part 61, Subpart M)**
8. The permittee shall comply with the applicable requirements of 40 CFR Part 61, Subpart M, Section 61.154 for any active waste disposal site that receives asbestos-containing waste material. **(40 CFR Part 61, Subpart M)**
9. The permittee shall comply with any other applicable asbestos regulation listed in 40 CFR Part 61, Subpart M, Section 61.156. **(40 CFR Part 61, Subpart M)**
10. The permittee shall comply with the applicable requirements of 40 CFR Part 61, Subpart M, Appendix A for any regulated roof removal operation. **(40 CFR Part 61, Subpart M)**
11. For any performance test required pursuant to AQD Part 10 rules, the permittee may submit as a part of their stack test plan, a request to use existing performance test data where such data exists. The AQD will evaluate as a part of the stack test plan review, whether or not such existing data can be used in lieu of conducting a new performance test. For any performance test required by a federal standard, existing performance test data can only be used in lieu of a required stack test if allowed by the standard. **(R 336.2001, R 336.2003, R 336.2004)**
12. 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)**
13. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart GGGGG (Site Remediation NESHAP). **(40 CFR Part 63, Subpart 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
EU31	<p>The mass ABS process in the low gloss ABS manufacturing plant with reactors, separators, storage tanks/silos, and related equipment. This process is separated into two trains, A-Train and B-Train, and their associated equipment.</p> <p>Under normal operation A-Train air emissions typically vent to the styrene absorber (aka packed column styrene scrubber) then to the combustion air intake of two process heaters unless the vent header collection system is shut down for maintenance. The vent header collection system is located between the absorber and the combustion air intake of the heaters. In the event the vent header system is shutdown, process exhaust from the styrene absorber discharges to the air through Vent No. SVEG31001.</p> <p>The emission unit is subject to 40 CFR Part 63, Subparts A, H (equipment leak provisions of the HON), JJJ (Group IV Polymers and Resins), and DDDDD (Industrial, Commercial and Institutional Boilers and Process Heaters – Major Sources).</p> <p>This emission unit was permitted in PTI 417-73, 349-90, 349-90A, 349-90B, and 3-04A.</p>	1991 03-09-2005	FGHONFUGITIVES FGPOLYSTYRENE FGBOILERMACT FGOLDMACT FGBENZENEWASTE

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU33	<p>The styrene copolymer facility is a continuous copolymer manufacturing operation. The process to make styrene copolymer involves raw material handling, reaction and devolatilization, finishing and process heaters.</p> <p>The emission unit is subject to 40 CFR Part 63, Subparts A, H (equipment leak provisions of the HON), JJJ (Group IV Polymers and Resins), DDDDD (Industrial, Commercial, and Institutional Boilers and Process Heaters – Major Sources).</p> <p>The process heaters are not required control for achieving compliance with the Polymer &amp; Resins IV MACT.</p> <p>This emission unit was permitted in PTI 72-08A.</p>	07-13-2009	FGHONFUGITIVES FGPOLYSTYRENE FGBOILERMACT FGOLDMACT FGBENZENEWASTE
EUB1	<p>The Latex facility consists of raw material unloading and storage, polymerization of raw materials, recycle of unreacted components, final product storage, and loading of latex to containers for shipping.</p> <p>This emission unit is subject to the requirements of 40 CFR Part 63, Subparts A, Q, and U. By virtue of being subject to Subpart U, this emission unit is also subject to the equipment leak provisions of the HON (i.e., 40 CFR Part 63, Subpart H).</p> <p>This emission unit was permitted in 49-07A.</p>	05-12-2004	FG963THROX -See ROP for the DDP (SRN P1027) FGLATEX FGHONFUGITIVES FGOLDMACT FGBENZENEWASTE
EU86	<p>Process for unloading, storage, and distribution of purchased styrene. Equipment located in 954 Building.</p> <p>This emission unit is subject to the requirements of 40 CFR Part 63, Subparts A, JJJ, and EEEE. In addition, by virtue of being subject to Subpart JJJ, EU86 is also subject to the equipment leak provisions of the HON (i.e., 40 CFR Part 63, Subpart H).</p> <p>This emission unit was permitted in PTI 350-88C.</p>	1988 11-04-1991 07-03-2003	FGPOLYSTYRENE FGHONFUGITIVES FGOLDMACT

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU91	<p>A process for storage and distribution of 1,3-butadiene. Consists of a 430,000 gallon spherical 1,3-butadiene (Buta) storage tank and a railcar transfer system. The spherical storage tank is controlled at approximately 20 psig. A vapor return system with nitrogen purge is used for transfers to the storage sphere.</p> <p>With regard to EU91, the 954 THROX is only used to prepare the storage sphere for maintenance (pad/depad). This emission unit is subject to the requirements of 40 CFR Part 63, Subparts A, U, and EEEE. By virtue of being subject to Subpart U, this emission unit is also subject to the equipment leak provisions of the HON (i.e., 40 CFR Part 63, Subpart H).</p> <p>This emission unit was permitted in PTI 188-89A.</p>	06-29-1989	FG954THROX See ROP for the DAS/Corteva (SRN P1028) FGHONFUGITIVES FGLATEX FGOLDMACT
EURULE290	Any existing or future emission unit that emits air contaminants which are exempt from the requirements of R 336.1201 pursuant to R 336.1290.	NA	FGRULE290 FGBOILERMACT FGLATEX
EUCOLDCLEANER	Any existing cold cleaner (placed into operation prior to 07-01-1979) or new cold cleaner (placed into operation after 07-01-1979) that is exempt from NSR permitting by R 336.1281(h) or R 336.1285 (r)(iv).	NA	FGCOLDCLEANERS
EUEMERGCIRICE	Emergency generators subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE). Title 40 of the Code of Federal Regulations (CFR) Part 63, Subpart ZZZZ (40 CFR 63.6580-6675). The engines are regulated as existing compression (CI) emergency RICE with a maximum site rate of less than 500 brake horsepower (HP) and greater than 500 brake horsepower (HP) located at a Major Source of HAP emissions.	NA	FGEMERGCIRICE

**EU31  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

The mass ABS process in the low gloss ABS manufacturing plant with reactors, separators, storage tanks/silos and related equipment. This process is separated into two trains, A-Train and B-Train, and their associated equipment.

Under normal operation A-Train air emissions typically vent to the styrene absorber (aka packed column styrene scrubber) then to the combustion air intake of the online process heater unless the vent header collection system is shut down for maintenance. In the event the vent header system is shutdown, process exhaust from the styrene scrubber discharges to the air through Vent No. SVEG31001.

Under normal operation B-train air emissions typically vent to the combustion air intake of the online process heater unless the vent header collection system is shut down for maintenance. In the event the vent header is shutdown, emissions will vent to the packed water scrubber and be discharged through Vent No. SVEG31002.

The emission unit is subject to 40 CFR Part 63, Subparts A, H (equipment leak provisions of the HON), JJJ (Group IV Polymers and Resins), and Subpart DDDDD (Industrial, Commercial and Institutional Boilers and Process Heaters – Major Sources).

This emission unit was permitted in PTI 417-73C, 349-90, 349-90A, 349-90B, and 3-04A

**Flexible Group ID:** FGHONFUGITIVES, FGPOLYSTYRENE, FGBOILERMACT, FGOLDMACT

**POLLUTION CONTROL EQUIPMENT**

- Two 7 million BTU/hr natural gas direct-fired process heaters equipped with continuous oxygen trim system referred to as process heater F-3A east and process heater F-3B west located at 1295 building.
- Packed Column Styrene scrubber
- Packed Column Water scrubber
- Carbon bed

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Styrene	8.8 tpy <sup>1</sup>	12-month rolling time period**	EU31 vents only, does not include fugitive emissions	SC V.1, VI.3, VI.4, VI.5, VI.6	R 336.1225
2. Styrene	1.33 pph <sup>1</sup>	Hourly	Vent No. 658-3 (serves two tanks previously affiliated with EU38)	SC V.1, III.11, VI.7	R 336.1224 R 336.1225
3. Styrene	477 lbs/yr <sup>1</sup>	12-month rolling time period**	Vent No. 658-3 (tank previously affiliated with EU38)	SC VI.6	R 336.1224 R 336.1225
4. Acrylonitrile	0.06 tpy <sup>1</sup>	12-month rolling time period**	EU31 vents only, does not include fugitive emissions	SC VI.3, VI.4, VI.5, VI.6	R 336.1225

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
5. VOC	10 tpy <sup>2</sup>	12-month rolling time period**	EU31 vents only, does not include fugitive emissions	SC V.1, VI.3, VI.4, VI.5, VI.6	<b>R 336.1702</b>

\*\* Annual limits (tpy) shall be based upon a 12-month rolling time period as determined at the end of each calendar month.

**II. MATERIAL LIMIT(S)**

NA

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

- The permittee shall comply with the applicable requirements of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subparts A and JJJ, as they apply to EU31.<sup>2</sup> **(40 CFR Part 63, Subparts A and JJJ)**
- When F-3A east or F-3B west are not subject to the requirements of 40 CFR Part 63, Subpart JJJ, if the radiant combustion temperature of a process heater receiving process exhaust is less than 432°C (except for 360 hours per year during process heater bypass based on a 12-month rolling time period as determined at the end of each calendar month) the permittee shall implement corrective action and maintain a record of action taken to prevent reoccurrence. Compliance with this condition shall be based on continuous monitoring data. **(R 336.1213(3))**
- The permittee shall not operate process heaters F-3A east or F-3B west unless a malfunction abatement plan (MAP) as described in Rule 911(2), for F-3A east and F-3B west has been submitted within 90 days of issuance of ROP No. MI-ROP-P1025-2021 and is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs.

The permittee shall also amend the MAP within 45 days if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1911, R336.1213(3))**

- The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subparts A and H (National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks) as specified in FGHONFUGITIVES, as they apply to EU31, except as described in SC IX.1 below.<sup>2</sup> **(40 CFR Part 63, Subparts A and H)**
- The permittee shall comply with the applicable requirements of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subparts A and DDDDD, as specified in FGBOILERMACT, insofar as they apply to process heaters F-3A east and F-3B west within EU31.<sup>2</sup> **(40 CFR Part 63, Subparts A and DDDDD)**
- The permittee shall not vent to F-3A east or F-3B west unless the Styrenics heaters are installed and operating properly<sup>2</sup> **(R 336.1910)**
- Proper operation of the process heater F-3A east or F-3B west includes compliance with monitoring and MAP requirements for F-3A east and F-3Bwest. **(R336.1213(3))**

8. When venting directly to the atmosphere as allowed by SC III.11 the average liquid flow rate of the water scrubber shall not be less than 15 gallons per minute.<sup>2</sup> **(R 336.1225, R 336.1702, R 336.1910)**
9. When venting directly to the atmosphere as allowed by SC III.11, the average liquid flow rate of the styrene scrubber shall not be less than 0.5 gallons per minute.<sup>2</sup> **(R 336.1225, R 336.1702, R 336.1910)**
10. When venting directly to the atmosphere as allowed by SC III.11 the average styrene temperature at the inlet line of the styrene scrubber shall not exceed 15°C.<sup>2</sup> **(R 336.1225, R 336.1702, R 336.1910)**
11. The permittee shall not operate EU31 in bypass mode for more than 360 hours per 12-month rolling time period as determined at the end of each calendar month. Bypass of the process heaters is defined as the time when the process heaters are down, and the process is continuing to run until the process can be safely shut down or the process heaters can be brought back on line. During bypass mode, emissions which normally vent to a process heater are vented to either the styrene scrubber or the water scrubber prior to discharge to the atmosphere.<sup>2</sup> **(R 336.1225, R 336.1702)**
12. The permittee shall not operate in bypass mode of process heaters F-3A east or F-3B west unless a malfunction abatement plan (MAP) as described in Rule 911(2), for the styrene scrubber and the water scrubber has been submitted within 90 days of issuance of ROP No. MI-ROP-P1025-2021 and is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs.

The permittee shall also amend the MAP within 45 days if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. **(R 336.1911, R336.1213(3))**

13. The permittee shall initiate carbon bed change out activities on or before the carbon bed load capacity reaches 75% and shall not operate the carbon bed after the load capacity exceeds 90%.<sup>2</sup> **(R 336.1225, R 336.1910)**

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

1. The permittee shall equip and maintain the water scrubber with a liquid flow indicator.<sup>2</sup> **(R 336.1225, R 336.1702, R 336.1910)**
2. When venting directly to the atmosphere per SC III.9 the permittee shall not operate the process unless the monomer recovery system and water scrubber are installed and operating properly.<sup>2</sup> **(R 336.1225, R 336.1702, R 336.1910)**
3. Proper operation of the monomer recovery system (styrene scrubber) and water scrubber includes compliance with monitoring and MAP requirement for the styrene scrubber and water scrubber. **(R336.1213(3))**
4. The permittee shall equip and maintain the styrene scrubber with a liquid flow indicator and temperature indicator for the chilled styrene inlet.<sup>2</sup> **(R 336.1225, R 336.1702, R 336.1910)**
5. The permittee shall not transfer materials causing emissions through Vent No. SVEG31001 unless the common vent header (i.e., pipeline to styrene scrubber) and the styrene scrubber are installed and operating properly.<sup>2</sup> **(R 336.1225, R 336.1702, 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 verify VOC and Styrene emission rates from EU31 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
VOC	40 CFR Part 60, Appendix A
Styrene	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)**

2. The permittee shall verify the VOC and Styrene emission rates from EU31 within 360 days of issuance of ROP No. MI-ROP-P1025-2021. Thereafter the permittee shall verify the VOC and Styrene emission rates from EU31 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)**
3. 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, on a continuous basis, the liquid flow rate of the water scrubber. For the purpose of this condition, 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 in this permit shall be based upon these 15-minute values. Unless otherwise noted in this permit, 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.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1910), (40 CFR Part 63, Subpart JJJ)**
2. The permittee shall monitor, on a continuous basis, the liquid flow rate and the inlet liquid temperature of the styrene scrubber. For the purpose of this condition, 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 in this permit shall be based upon these 15-minute values. Unless otherwise noted in this permit, 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.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1910)**
3. The permittee shall keep, in a satisfactory manner, continuous liquid flow rate records for the water scrubber, as required by SC VI.1. All records shall be made available to the Department upon request.<sup>2</sup> **(R 336.1225, R 336.1702, R 336.1910)**



4. The permittee shall keep, in a satisfactory manner, continuous liquid flow rate and inlet temperature records for the styrene scrubber, as required by SC VI.2. All records shall be made available to the Department upon request.<sup>2</sup> **(R 336.1225, R 336.1702, R 336.1910)**
5. The permittee shall maintain a current list of the materials used in EU31 that are determined to be exempt from the health-based screening level requirements of R 336.1225. The list shall include the compound name and CAS# and a calculation demonstrating the emission rate of each material.<sup>1</sup> **(R 336.1226)**
6. 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 made available to the Department upon request.<sup>2</sup> **(R 336.1225, R 336.1702)**
7. The permittee shall maintain a record of each occurrence of the bypass of the process heaters. The record shall include the date, time, duration, cause, and corrective action of each bypass. Bypass of the process heaters is defined as the time when the process heaters are down and the process is continuing to run until the process can be safely shutdown or the process heaters can be brought back on line.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1910)**
8. The permittee shall keep records of the carbon bed load capacity calculation and resulting change-outs, as required by SC III.8. Carbon bed load capacity calculations shall be executed, assessed, and recorded within 30 days following the end of the calendar month. All records shall be made available to the Department upon request.<sup>2</sup> **(R 336.1225, R 336.1702, R 336.1910)**
9. When F-3A east or F-3B west are not subject to the requirements of 40 CFR Part 63, Subpart JJJ, the permittee shall monitor and record, on a continuous basis, the fire box radiant temperature of each process heater. For the purpose of this condition, "on a continuous basis", is defined as an instantaneous data point recorded at least once every 15 minutes. **(R 336.1213(3))**

**See Appendices 3 and 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))**
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. SVEG31001 Styrene Scrubber vent between absorber and process heater intake	2 <sup>1</sup>	81 <sup>1</sup>	<b>R 336.1225</b>
2. SVEG31002 Water Scrubber	2 <sup>1</sup>	81 <sup>1</sup>	<b>R 336.1225</b>
3. SVEG31004 Slurry Tank	22.5 <sup>1</sup>	24 <sup>1</sup>	<b>R 336.1225</b>
4. SVG31006* Mercaptan storage tank	1.5 <sup>1</sup>	11 <sup>1</sup>	<b>R 336.1225</b>
5. SVEG31010* Carbon Bed	4 <sup>1</sup>	8 <sup>1</sup>	<b>R 336.1225</b>
6. SVEG31024 Process heater	14 <sup>1</sup>	70 <sup>1</sup>	<b>R 336.1225</b>
7. SVEG31025 Process heater	14 <sup>1</sup>	70 <sup>1</sup>	<b>R 336.1225</b>
8. SVEG31012 (Vent No. 658-3. This vent is associated with a styrene tank that used to be affiliated with EU38.)**	4 <sup>2</sup>	15 <sup>2</sup>	<b>R 336.1201</b>

\* Exhaust gases are not discharged upwards.

\*\* The orientation of Vent No. 658-3 is gooseneck down.

**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).

**EU33  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

The styrene copolymer facility is a continuous copolymer manufacturing operation. The process to make styrene copolymer involves raw material handling, reaction and devolatilization, finishing and process heaters.

The emission unit is subject to 40 CFR Part 63, Subparts A, H (equipment leak provisions of the HON), JJJ (Group IV Polymers and Resins), and DDDDD (Industrial, Commercial, and Institutional Boilers and Process Heaters – Major Sources).

The process heaters are not required control for achieving compliance with the Polymer & Resins IV MACT standard.

This emission unit was permitted in PTI 72-08A.

**Flexible Group ID:** FGHONFUGITIVES, FGPOLYSTYRENE, FGBOILERMACT, FGOLDMACT

**POLLUTION CONTROL EQUIPMENT**

- Two 7 MMBTU/hr (output) process heaters equipped with continuous oxygen trim system. The process heaters operate in parallel and are designed to incinerate the process vent gases and heavy recycle streams from EU33. Typically, the plant will only operate one process heater at a time while the other heater is kept warm and ready for use if needed.

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Styrene*	1.0 tpy <sup>1</sup>	12-month rolling time period as determined at the end of each calendar month	EU33	SC VI.5	R 336.1225

\* Limit does not include fugitive emissions (i.e. emissions from leaking valves, flanges, etc) from the process.

**II. MATERIAL LIMIT(S)**

NA

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

1. In the event of a malfunction of the EU33 process heaters, the permittee may bypass the EU33 process heater for a period not to exceed a total of 864 hours per year, based on a 12-month rolling time period as determined at the end of each calendar month.<sup>1</sup> (R 336.1225)
2. In the event of a startup/shutdown condition of EU33, the permittee may bypass the EU33 process heater (with tank filling losses and breathing losses) for a period not to exceed a total of 4380 hours per year, based on a 12-month rolling time period as determined at the end of each calendar month.<sup>1</sup> (R 336.1225)

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

1. The permittee shall not operate EU33, unless at least one of the EU33 process heaters is installed, maintained, and operated in a satisfactory manner – except as allowed in SC III.1 or III.2. Satisfactory operation of the

process heaters includes, but is not limited to, maintaining a minimum batch cycle daily average fire box temperature of 550°C. Should EU33 need to switch usage between heaters, three hours of operation below the daily average minimum firebox temperature of 550°C is allowed for the spare heater to ramp up to the required temperature. Corrective action shall take place if the operating temperature of the on-line heater falls below the minimum daily average, except during ramp-up to temperature.<sup>2</sup> (R 336.1225, 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. Upon request of the AQD District Supervisor, the permittee shall verify Styrene emission rates from EU33 by testing at the owner’s expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed 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)

Pollutant	Test Method Reference
Styrene	40 CFR Part 63, Appendix A

2. 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 install, calibrate, maintain, and operate in a satisfactory manner a device to monitor and record the fire box temperature of each EU33 process heater on a continuous basis when the process is venting to the EU33 process heaters. 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 in EU33 shall be based upon these 15-minute values. 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.<sup>2</sup> (R 336.1225, R 336.1910)
2. The permittee shall keep operating temperature records for the EU33 process heaters as required by SC VI.1. The permittee shall make all records and calculations available to the Department upon request.<sup>2</sup> (R 336.1225, R 336.1910)
3. The permittee shall maintain a current list of the materials used in EU33 that are determined to be exempt from the health-based screening level requirements of Rule 225. The list shall include the compound name and CAS number and a calculation demonstrating the emission rate of each material. The permittee shall make all records available to the Department upon request.<sup>1</sup> (R 336.1225, R 336.1901)
4. The permittee shall record the time and duration of each bypass of venting the EU33 process to the process heaters including cause of bypass (i.e., malfunction or start-up/shutdown). The permittee shall make all records available to the Department upon request.<sup>2</sup> (R 336.1225, R 336.1910, R 336.1911)

- The permittee shall calculate the styrene emission rate from EU33 monthly, for the preceding 12-month rolling time period, using a method acceptable to the AQD District Supervisor. The permittee shall make all records available to the Department upon request.<sup>1</sup> **(R 336.1225)**

See Appendices 3 and 4

**VII. REPORTING**

- Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
- 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))**
- 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))**
- 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. SVEG33004 Vent Bypass	4 <sup>1</sup>	50 <sup>1,2</sup>	<b>R 336.1225</b>
2. SVEG33005 Process heater	19 <sup>1</sup>	59 <sup>1</sup>	<b>R 336.1225</b>
3. SVEG33006 Process heater	19 <sup>1</sup>	59 <sup>1</sup>	<b>R 336.1225</b>

**IX. OTHER REQUIREMENT(S)**

- The permittee shall comply with all provisions of the National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks as specified in 63.1331 of Subpart JJJ and 40 CFR Part 63, Subparts A and H as referenced by 40 CFR Part 63, Subpart JJJ, identified in FGHONFUGITIVES of this ROP, as they apply to EU33.<sup>2</sup> **(40 CFR Part 63, Subpart A and H)**
- The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subparts A and JJJ, identified in FGPOLYSTYRENE of this ROP, as they apply to EU33.<sup>2</sup> **(40 CFR Part 63, Subparts A and JJJ)**
- The permittee shall comply with the applicable requirements of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subparts A and DDDDD, as specified in FGBOILERMACT for process heater FH1930 and FH1940, insofar as they apply to EU33.<sup>2</sup> **(40 CFR Part 63, Subparts A and DDDDD)**

**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).

**EUB1**  
**EMISSION UNIT CONDITIONS**

**DESCRIPTION**

The Latex facility consists of raw material unloading and storage, polymerization of raw materials, recycle of unreacted components, final product storage and loading of latex to containers for shipping.

This emission unit is subject to the requirements of 40 CFR Part 63, Subparts A, Q, and U. By virtue of being subject to Subpart U, this emission unit is also subject to the equipment leak provisions of the HON (40 CFR Part 63, Subpart H), as applicable.

This emission unit was permitted in PTI 49-07A.

**Flexible Group ID:** FG963THROX (See ROP for DDP SRN P1027), FGLATEX, FGHONFUGITIVES, FGOLDMACT

**POLLUTION CONTROL EQUIPMENT**

- Vapor Balance systems
- Afterburner See FG963THROX in ROP for DDP (SRN P1027) 963 THROX – thermal heat recovery oxidation unit followed by a quench, HCl absorber and caustic/sodium thiosulfate/water scrubber
- Backup afterburner (TOX - Thermal oxidation unit utilized in the event the 963THROX is not operating)

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Additives (non-carcinogenic air contaminants with ITSL $\geq$ 2ug/m3)*	5.2 pph <sup>1</sup>	Hourly	EUB1	SC VI.2	R 336.1225
2. Additives (non-carcinogenic air contaminants with ITSL $\geq$ 2ug/m3)*	43.3 lbs / year <sup>1</sup>	12-month rolling time period as determined at the end of each calendar month	EUB1	SC VI.2	R 336.1225
3. 1,3-Butadiene *	720 lb / year <sup>1</sup>	12-month rolling time period as determined at the end of each calendar month	EUB1	SC VI.2	R 336.1225
4. PM (non-carcinogenic air contaminants with ITSL $\geq$ 2ug/m3)	0.03 lb / 1000 lbs of exhaust gases <sup>2</sup>	Hourly	EUB1 from Vent #13	SC VIII.1	R 336.1331
5. PM (non-carcinogenic air contaminants with ITSL $\geq$ 2ug/m3)	0.08 lb / 1000 lbs of exhaust gases <sup>2</sup>	Hourly	EUB1 from Vent #28	SC VIII.4	R 336.1331

\* This limit does not include fugitive emissions from the process.

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

1. The permittee shall not use any chromium-based water treatment chemicals in any industrial process cooling tower (IPCT). **(40 CFR Part 63, Subpart Q)**

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

1. The firebox temperature for the backup TTU shall not be less than 800°C when accepting process vents. Compliance with this limit shall be, at least in part, determined per the applicable federal standard.<sup>2</sup> **(40 CFR Part 63, Subpart U, R 336.1910, R 336.1225)**
2. For industrial process cooling towers, 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 1 of Subpart Q. **(40 CFR Part 63, Subparts A and Q)**
3. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart Q (National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers). The applicable sections of Subpart Q may include: **(40 CFR Part 63, Subpart Q)**
  - a. 63.400 Applicability
  - b. 63.401 Definitions
  - c. 63.402 Standard
  - d. 63.403 Compliance dates
  - e. 63.404 Compliance demonstrations
  - f. 63.405 Notification requirements
  - g. 63.406 Recordkeeping and reporting requirements

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

1. The permittee shall not operate the portions of the system which are ducted to the afterburner/scrubber control system (963 THROX including control) unless the afterburner/scrubber or backup afterburner are installed and operating properly.<sup>2</sup> **(R 336.1225, 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 Administrator can require cooling water sample analysis of an IPCT if there is information to indicate that the IPCT is not in compliance with the requirements of 40 CFR 63.402, as per 40 CFR Part 63, Subpart Q, Section 63.404. **(40 CFR Part 63, Subpart Q)**

**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 firebox temperature for the backup TOX 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 75% 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 EUB1 shall be based upon these 15-minute values. 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.<sup>2</sup> **(R 336.1910, R 336.1225, 40 CFR Part 63, Subpart U)**



2. 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 limits specified in SC I.2 and SC I.3. These records shall be made available to the AQD upon request.<sup>1</sup> **(R 336.1225)**
3. The permittee may maintain records of water treatment chemical purchases as per 40 CFR Part 63, Subpart Q, Section 63.404(c). **(40 CFR Part 63, Subpart Q)**
4. The permittee will conduct 40 CFR Part 63, Subpart F required quarterly leak detection monitoring as applicable for Heat Exchange Systems. **(40 CFR Part 63, Subparts F and U).**
5. Within 60 days after issuance of ROP No. MI-ROP-P1025-2021, 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 336.1910)**

See Appendices 3 and 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))**
4. The permittee shall submit an Initial Report for any new IPCT within 12 months after initial startup, in accordance with 40 CFR Part 63, Subpart Q, Section 63.405(a)(2). **(40 CFR Part 63, Subpart Q)**

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. Vent #13 (SVB10013) Methacrylamide mix tank	6 <sup>1</sup>	36 <sup>1</sup>	<b>R 336.1225</b>
2. Vent #17 (SV963THROX)	18 <sup>1</sup>	80 <sup>1</sup>	<b>R 336.1225</b>
3. Vent #18 (SVB10018) TOX	30 <sup>1</sup>	40 <sup>1</sup>	<b>R 336.1225</b>

<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>
4. Vent #28 (SVB10028) Raw Material	6 <sup>1</sup>	41 <sup>1</sup>	<b>R 336.1225</b>
5. Vent #30 (SVB10030) Methanol storage tank	2 <sup>1</sup>	18 <sup>1</sup>	<b>R 336.1225</b>

**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).

**EU86**  
**EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Process for unloading, storage, and distribution of purchased styrene. Equipment located in 954 Building.

This emission unit is subject to the requirements of 40 CFR Part 63, Subparts A, JJJ, and EEEE. In addition, by virtue of being subject to Subpart JJJ, EU86 is also subject to the equipment leak provisions of the HON (i.e., 40 CFR Part 63, Subpart H).

This emission unit was permitted in PTI 350-88C.

**Flexible Group ID:** FGPOLYSTYRENE, FGHONFUGITIVES, FGOLDMACT

**POLLUTION CONTROL EQUIPMENT**

- Adsorber #2 (solvent recovery bed)

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Styrene	0.322 pph <sup>2</sup>	Hourly	EU86	SC VI.2	R 336.1702(a) R 336.1901

**II. MATERIAL LIMIT(S)**

NA

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

1. The permittee shall not transfer any styrene to a EU86 tank unless a minimum desorption/adsorption (D/A) ratio of 1.0 for Adsorber #2 is maintained.<sup>2</sup> (R 336.1702(a), R 336.1901, R 336.1910)
2. The permittee shall not transfer any styrene to EU86 tank unless Adsorber #2 is installed, maintained, and operated in a satisfactory manner.<sup>2</sup> (R 336.1702(a), R 336.1901, 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 monitor, in a satisfactory manner, the D/A ratio of Adsorber #2 on a continuous basis. For the purpose of this condition, "on a continuous basis" is defined as an instantaneous data point recorded at least once every 15 minutes. The permittee may record block average values for 15-minute or shorter periods

calculated from all measured data values during each period. Continuous monitoring shall not be required during periods of: (1) monitoring system breakdown; (2) calibration checks, and zero (low-level) and high-level adjustments; and (3) non-operation of the affected source, resulting in cessation of emissions to which the monitoring applies. In the event of a continuous monitoring system breakdown (i.e., 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.<sup>2</sup> **(R 336.1702(a), R 336.1901, R 336.1910)**

- The permittee shall keep, in a satisfactory manner, continuous records of the D/A ratio for Adsorber #2. All records shall be kept on file and made available to the Department upon request.<sup>2</sup> **(R 336.1702(a), R 336.1901, R 336.1910)**

See Appendices 3 and 4

**VII. REPORTING**

- Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
- 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))**
- 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. SV86010	12 <sup>1</sup>	50 <sup>1</sup>	R 336.1901

**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).

**EU91**  
**EMISSION UNIT CONDITIONS**

**DESCRIPTION**

A process for storage and distribution of 1,3-butadiene. Consists of a 430,000-gallon spherical 1,3-butadiene (Buta) storage tank and a railcar transfer system. The spherical storage tank is controlled at approximately 20 psig. A vapor return system with nitrogen purge is used for transfers to the storage sphere.

With regard to EU91, the 954 THROX is only used to prepare the storage sphere for maintenance (pad/depad). This emission unit is subject to the requirements of 40 CFR Part 63, Subparts A, U, and EEEE. By virtue of being subject to Subpart U, this emission unit is also subject to the equipment leak provisions of the HON (i.e., 40 CFR Part 63, Subpart H).

This emission unit was permitted in PTI 188-89A.

**Flexible Group ID:** FG954THROX (See ROP for DAS/Corteva (P1028), FGHONFUGITIVES, FGLATEX, FGOOLDMACT

**POLLUTION CONTROL EQUIPMENT**

- Vapor return system
- TTU-954 FG954THROX in ROP for DAS (SRN P1028) (thermal treatment unit – 954 including Absorber No. 1 and Scrubber No. 1)

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. 1,3 Butadiene*	20 lbs/yr <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	Storage sphere railcar disconnection, filter change, and sampling. Under normal operation there are no emissions from the storage sphere except during railcar disconnection, filter change, and sampling.	SC VI.1, VI.2	R 336.1225 R 336.1702(a)
2. 1,3 Butadiene*	36 lbs/month <sup>2</sup>	30-day consecutive time period	Storage sphere preparation for maintenance (i.e., emissions from stack No. SV954THROX)	SC VI.1	R 336.1225 R 336.1702(a)

\* This limit does not include fugitive emissions (i.e., emissions from leaking valves, flanges, etc.) from the process.

**II. MATERIAL LIMIT(S)**

NA

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

1. The operating pressure of the EU91 Buta storage sphere shall not exceed 80 psig on a continuous basis. "On a continuous basis" is defined as an instantaneous data point monitored at least once every 15 minutes for at least 90% of the operating time during an operating calendar day. In the event the permittee monitors more than one data point during the 15-minute period, the data point monitored may be the average (rolling or block) of all data points monitored during the 15-minute period. Any response to an excursion of the corresponding operational parameter set point or range specified in this condition shall be based upon these 15-minute values. The permittee is not required to monitor operational parameter data during periods of non-operation of the device.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1910)**

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

1. The permittee shall not transfer into or out of the EU91 Buta storage sphere unless the pressure regulating system is installed, maintained, and operated in a satisfactory manner.<sup>2</sup> **(R 336.1225, R 336.1702(a))**
2. The permittee shall not perform rail car unloading into the EU91 Buta storage sphere unless the vapor return system is installed, maintained, and operated in a satisfactory manner.<sup>2</sup> **(R 336.1225, R 336.1702(a))**
3. The permittee shall not prepare the Buta storage sphere itself for maintenance unless all emissions are vented to the THROX and the THROX is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the 954 THROX includes, but is not limited to, maintaining compliance with the requirements outlined in FG954THROX.<sup>2</sup> **(R 336.1225, R 336.1702(a))**
4. FG954THROX is owned and operated by DAS/Corteva (SRN P1028). The plan required in SC VI.3 below will establish how DAS/Corteva will confirm to Trinseo that compliance with the ROP conditions outlined in FG954THROX are maintained.
5. The permittee shall equip and maintain EU91 with a nitrogen purge of the transfer assembly prior to the disconnection of railcars.<sup>2</sup> **(R 336.1225, R 336.1702(a))**

### **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, records of the operating pressure of the EU91 storage tank each time a high-pressure alarm is triggered; and the corrective action taken to resolve the problem for EU91. All records shall be made available to the Department upon request.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.1910)**
2. The permittee shall keep records of monthly emission calculations and results to demonstrate compliance with the emission limit listed in SC I.1. 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 made available to the Department upon request.<sup>2</sup> **(R 336.1225, R 336.1702(a))**
3. Within 60 days after issuance of ROP No. MI-ROP-P1025-2021, the permittee shall submit a plan to the AQD District Supervisor identifying the operating parameters for FG954THROX that shall be obtained from the operator or owner of FG954THROX. All operating parameter data in the plan for FG954THROX 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 336.1910)**

See Appendices 3 and 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)**

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. SV954 THROX	24 <sup>1</sup>	60 <sup>1</sup>	R 336.1225

**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
FGHONFUGITIVES	Emission units subject to the requirements of 40 CFR Part 63, Subparts A (General Provisions) and H (HON for Equipment Leaks).	EU31, EU33, EUB1, EU86, EU91
FGLATEX	Emission units subject to the requirements of 40 CFR Part 63, Subpart A (General Provisions) and Subpart U (National Emission Standard for Hazardous Air Pollutants: Group I Polymers & Resins).	EUB1, EURULE290, EU91
FGBOILERMACT	Emission units subject to the requirements of 40 CFR Part 63, Subpart A (General Provisions) and Subpart DDDDD (National Emission Standard for Hazardous Air Pollutants: Industrial, Commercial and Institutional Boilers and Process Heaters – Major Sources).	EU31, EU33
FGPOLYSTYRENE	Emission units subject to the requirements of 40 CFR Part 63, Subparts A (General Provisions) and JJJ (Group IV Polymers & Resins MACT).	EU31, EU33, EU86
FGRULE290	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290.	EURULE290
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.	EUCOLDCLEANER
FGOLDMACT	Organic Liquid Distribution (OLD) (non-gasoline) operations at major sources of hazardous air pollutant (HAP) emissions.	EU31, EU33, EUB1, EU86, EU91
FGEMERGCIRICE	Emergency generators subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE). 40 CFR Part 63, Subpart ZZZZ (40 CFR 63.6580-6675). The engines are regulated as existing compression (CI) emergency RICE with a maximum site rate of less than 500 brake horsepower (HP) and greater than 500 brake horsepower (HP) located at a Major Source of HAP emissions.	EUEMERGCIRICE



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PTI No: MI-PTI-P1025-2021

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGBENZENEWASTE	Benzene waste operations that apply to equipment and processes owned by Trinseo at the stationary source that are subject to the requirements of 40 CFR Part 61, Subpart A (General Provisions) and Subpart FF. . The Trinseo facility benzene waste operations are less than 10 Mg/year but are included in the site wide Benzene NESHAP reports submitted by The Dow Chemical Company for the stationary source.	EU31, EU33, EUB1

**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:** EU31, EU33, EUB1, EU86, EU91

**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. 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>

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
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>
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, and 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>

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
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 USEPA 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 Part 63, Subpart H, Section 63.178(b)(1). **(40 CFR Part 63, Subpart H)**

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 Part 63, Subpart H, Section 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 Part 63, Subpart H, Section 63.181 (Recordkeeping requirements). **(40 CFR Part 63, Subpart H)**.

See Appendices 3 and 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))**
4. If applicable, the permittee shall submit an Initial Notification within 120 days of promulgation of a referencing subpart, in accordance with 40 CFR Part 63, Subpart H, Section 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 Part 63, Subpart H, Section 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 Part 63, Subpart H, Section 63.182(d). **(40 CFR Part 63, Subpart H)**
7. Semiannual periodic reports are due March 15 and September 15 of each year, for those process units included in the reporting date change agreements approved by EPA on April 17, 2001 and May 22, 2003. 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, Section 63.9(i), 63.10(a)(6), 63.10(d)(5)(i); 40 CFR Part 63, Subpart H, Section 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 Subpart H. **(40 CFR Part 63, Subparts A and 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 sections of Subpart H 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).

## **FGLATEX FLEXIBLE GROUP CONDITIONS**

### **DESCRIPTION**

Emission units subject to the requirements of 40 CFR Part 63, Subpart A (General Provisions) and Subpart U (National Emission Standard for Hazardous Air Pollutants: Group I Polymers & Resins).

**Emission Units:** EUB1, EURULE290, EU91

### **POLLUTION CONTROL EQUIPMENT**

NA

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

NA

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

NA

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

1. The permittee shall set operational parameters based on the minimum or maximum parameter measured during the performance test, as applicable, in accordance with 40 CFR Part 63, Subpart U, Section 63.505(a). **(40 CFR Part 63, Subpart U)**
2. Whenever a parameter monitoring excursion occurs, as defined in 63.505(g), these excursions shall be reported in the Periodic Reports required in SC VII.5, unless they are excused in accordance with 63.505(i). **(40 CFR Part 63, Subpart U)**

### **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 conduct testing in accordance with the applicable requirements of 40 CFR Part 63, Subpart U, Sections 63.490 (Batch front-end process vents – performance test methods and procedures to determine compliance) and 63.504 (Additional requirements for performance testing); and with the applicable testing requirements of 40 CFR Part 63, Subpart G, as referenced in Subpart U, including Section 63.116 (Process vent provisions – performance test methods and procedures to determine compliance), as referenced in 63.485 (Continuous front-end process vent provisions), Section 63.120 (Storage vessel provisions – procedures to determine compliance), as referenced in 63.484 (Storage vessel provisions), and Section 63.145 (Process wastewater provisions – test methods and procedures to determine compliance), as referenced in 63.501 (Wastewater provisions). **(40 CFR Part 63, Subpart U)**
2. The permittee shall comply with the heat exchange system provisions of 40 CFR Part 63, Subpart F, Section 63.104 (Heat exchange system requirements), as referenced in 40 CFR Part 63, Subpart U, Section 63.502 (Equipment leaks and heat exchange system provisions). **(40 CFR Part 63, Subpart U)**

3. The permittee shall use the test methods and procedures referenced in the applicable sections of 40 CFR Part 63, Subparts G and U, as listed above. **(40 CFR Part 63, Subpart U)**
4. Heat exchange system testing shall be performed monthly for the first six months following the compliance date of the standard, and quarterly thereafter, in accordance with 40 CFR Part 63, Subpart F, Section 63.104(b)(1), as referenced in 40 CFR Part 63, Subpart U, Section 63.502(n). **(40 CFR Part 63, Subpart U)**

## **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 Part 63, Subpart U, Sections 63.489 (Batch front-end process vents – monitoring equipment) and 63.505 (Parameter monitoring levels and excursions); and with the applicable parametric monitoring requirements of 40 CFR Part 63, Subpart G, as referenced in Subpart U, including Section 63.114 (Process vent provisions – monitoring requirements), as referenced in 63.485 (Continuous front-end process vent provisions), Section 63.120 (Storage vessel provisions – procedures to determine compliance), as referenced in 63.484 (Storage vessel provisions), and Section 63.143 (Process wastewater provisions – inspections and monitoring of operations), as referenced in 63.501 (Wastewater provisions). **(40 CFR Part 63, Subpart U)**
2. The permittee shall comply with the applicable equipment leak provisions specified in 63.502 of Subpart U and in 40 CFR Part 63, Subpart H (National Emission Standard for Hazardous Air Pollutants for Equipment Leaks), as referenced in Subpart U, Section 63.502 (Equipment leaks and heat exchange system provisions). Compliance with this section shall be determined using the flexible group table FGHONFUGITIVES, with the revisions listed in 63.502. **(40 CFR Part 63, Subpart U)**
3. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart U, Sections 63.491 (Batch front-end process vents – recordkeeping requirements) and 63.506 (General recordkeeping and reporting provisions); and with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart G, as referenced in Subpart U, including Sections 63.117 (Process vent provisions – reporting and recordkeeping requirements for group and TRE determinations and performance tests) and 63.118 (Process vent provisions – periodic reporting and recordkeeping requirements), as referenced in 63.485 (Continuous front-end process vent provisions), Section 63.123 (Storage vessel provisions – recordkeeping), as referenced in 63.484 (Storage vessel provisions), and Section 63.147 (Process wastewater provisions – recordkeeping), as referenced in 63.501 (Wastewater provisions). **(40 CFR Part 63, Subpart U)**.

**See Appendices 3 and 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))**
4. Supplements to the Precompliance Report may be submitted in accordance with 63.506(e)(3)(ix). **(40 CFR Part 63, Subpart U)**
5. Semiannual Periodic Reports are due March 15 and September 15 of each year, in accordance with 63.506(e)(6) and per reporting date change agreements, approved by EPA on April 17, 2001, and May 22, 2003. Startup,



Shutdown, and Malfunction reports shall be submitted at the same time, in accordance with 63.506(b)(1)(ii).  
**(40 CFR Part 63, Subpart U)**

6. Process change reports shall be submitted as applicable, in accordance with 63.506(e)(7)(iv) and (v). **(40 CFR Part 63, Subpart U)**

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 1 of Subpart U. **(40 CFR Part 63, Subparts A and U)**
2. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart U (Group I Polymers & Resins MACT). The applicable sections of Subpart U may include: **(40 CFR Part 63, Subpart U)**
  - a. 63.480 Applicability and designation of affected sources
  - b. 63.481 Compliance dates and relationship of this subpart to existing applicable rules
  - c. 63.482 Definitions
  - d. 63.483 Emission standards
  - e. 63.484 Storage vessel provisions
  - f. 63.485 Continuous front-end process vent provisions
  - g. 63.486 Batch front-end process vent provisions
  - h. 63.487 Batch front-end process vents – reference control technology
  - i. 63.488 Methods and procedures for batch front-end process vent group determinations – (paragraph (a)(3) only)
  - j. 63.489 Batch front-end process vents – monitoring equipment
  - k. 63.490 Batch front-end process vents – performance test methods and procedures to determine compliance
  - l. 63.491 Batch front-end process vents – recordkeeping requirements
  - m. 63.492 Batch front-end process vents – reporting requirements
  - n. 63.501 Wastewater provisions
  - o. 63.502 Equipment leaks and heat exchange system provisions
  - p. 63.504 Additional requirements for performance testing
  - q. 63.505 Parameter monitoring levels and excursions
  - r. 63.506 General recordkeeping and reporting provisions

#### **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).

## **FGPOLYSTYRENE FLEXIBLE GROUP CONDITIONS**

### **DESCRIPTION**

Emission units subject to the requirements of 40 CFR Part 63, Subparts A (General Provisions) and JJJ (Group IV Polymers & Resins MACT).

**Emission Units:** EU31, EU33, EU86

### **POLLUTION CONTROL EQUIPMENT**

NA

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

NA

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

NA

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

1. The permittee shall set operational parameters based on the minimum or maximum parameter measured during the performance test or as allowed for by design evaluation, as applicable, in accordance with 40 CFR Part 63, Subpart JJJ, Section 63.1334(a). **(40 CFR Part 63, Subpart JJJ)**
2. Whenever a parameter monitoring excursion occurs, these excursions shall be reported in the Periodic Reports required in SC VII.5. **(40 CFR Part 63, Subpart JJJ)**

#### **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 conduct testing in accordance with the applicable requirements of 40 CFR Part 63, Subpart JJJ, Sections 63.1318 (PET and polystyrene affected sources – testing and compliance demonstration provisions), 63.1325 (Batch process vents – performance test methods and procedures to determine compliance) and 63.1333 (Additional requirements for performance testing); and with the applicable testing requirements of 40 CFR Part 63, Subpart G, as referenced in Subpart JJJ, including Section 63.116 (Process vent provisions – performance test methods and procedures to determine compliance), as referenced in 63.1315 (Continuous process vent provisions), Section 63.120 (Storage vessel provisions – procedures to determine compliance), as referenced in 63.1314 (Storage vessel provisions), and Section 63.145 (Process wastewater provisions – test methods and procedures to determine compliance), as referenced in 63.1330 (Wastewater provisions). **(40 CFR Part 63, Subpart JJJ)**
2. The permittee shall comply with applicable the heat exchange system provisions of 40 CFR Part 63, Subpart F, Section 63.104 (Heat exchange system requirements), as referenced in 40 CFR Part 63, Subpart JJJ, Section 63.1328 (Heat exchange systems provisions). **(40 CFR Part 63, Subpart JJJ)**

3. The permittee shall use the applicable test methods and procedures referenced in the applicable sections of 40 CFR Part 63, Subparts G and JJJ, as listed above. **(40 CFR Part 63, Subpart JJJ)**
4. As applicable, heat exchange system testing shall be performed monthly for the first six months following the compliance date of the standard, and quarterly thereafter, in accordance with 40 CFR Part 63, Subpart F, Section 63.104(b)(1), as referenced in 40 CFR Part 63, Subpart JJJ, Section 63.1328(a). **(40 CFR Part 63, Subpart JJJ)**
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 Section 63.114 (Process vent provisions – monitoring requirements), as referenced in 63.1315 (Continuous process vent provisions), Section 63.120 (Storage vessel provisions – procedures to determine compliance), as referenced in 63.1314 (Storage vessel provisions), and Section 63.143 (Process wastewater provisions – inspections and monitoring of operations), as referenced in 63.1330 (Wastewater provisions). **(40 CFR Part 63, Subpart JJJ)**
2. The permittee shall comply with the applicable equipment leak provisions in 63.1331 of 40 CFR Part 63, Subpart JJJ and Subpart H (National Emission Standard for Hazardous Air Pollutants for Equipment Leaks), as referenced in Subpart JJJ, Section 63.1331 (Equipment leak provisions). Compliance with this section shall be determined using FGHONFUGITIVES, with the revisions listed in 63.1331. **(40 CFR Part 63, Subpart JJJ)**
3. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart JJJ, Sections 63.1319 (PET and polystyrene affected sources – recordkeeping provisions), 63.1326 (Batch process vents – recordkeeping requirements), and 63.1335 (General recordkeeping and reporting provisions); and with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart G, as referenced in Subpart JJJ, including Sections 63.117 (Process vent provisions – reporting and recordkeeping requirements for group and TRE determinations and performance tests) and 63.118 (Process vent provisions – periodic reporting and recordkeeping requirements), as referenced in 63.1315 (Continuous process vent provisions), Section 63.123 (Storage vessel provisions – recordkeeping), as referenced in 63.1314 (Storage vessel provisions), and Section 63.147 (Process wastewater provisions – recordkeeping), as referenced in 63.1330 (Wastewater provisions). **(40 CFR Part 63, Subpart JJJ)**.

See Appendices 3 and 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))**
4. The permittee shall comply with the applicable parametric monitoring requirements of 40 CFR Part 63, Subpart JJJ, Sections 63.1317 (PET and polystyrene affected sources – monitoring provisions), 63.1324 (Batch process vents – monitoring equipment), and 63.1334 (Parameter monitoring levels and excursions); and with the

applicable parametric monitoring requirements of 40 CFR Part 63, Subpart G, as referenced in Subpart JJJ, including Section 63.114 (Process vent provisions – monitoring requirements), as referenced in 63.1315 (Continuous process vent provisions), Section 63.120 (Storage vessel provisions – procedures to determine compliance), as referenced in 63.1314 (Storage vessel provisions), and Section 63.143 (Process wastewater provisions – inspections and monitoring of operations), as referenced in 63.1330 (Wastewater provisions). **(40 CFR Part 63, Subpart JJJ)**

5. The permittee shall comply with the applicable equipment leak provisions in 63.1331 of 40 CFR Part 63, Subpart JJJ and Subpart H (National Emission Standard for Hazardous Air Pollutants for Equipment Leaks), as referenced in Subpart JJJ Section 63.1331 (Equipment leak provisions). Compliance with this section shall be determined using FGHONFUGITIVES, with the revisions listed in 63.1331. **(40 CFR Part 63, Subpart JJJ)**
6. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart JJJ, Sections 63.1319 (PET and polystyrene affected sources – recordkeeping provisions), 63.1326 (Batch process vents – recordkeeping requirements), and 63.1335 (General recordkeeping and reporting provisions); and with the applicable recordkeeping requirements of 40 CFR Part 63, Subpart G, as referenced in Subpart JJJ, including Sections 63.117 (Process vent provisions – reporting and recordkeeping requirements for group and TRE determinations and performance tests) and 63.118 (Process vent provisions – periodic reporting and recordkeeping requirements), as referenced in 63.1315 (Continuous process vent provisions), Section 63.123 (Storage vessel provisions – recordkeeping), as referenced in 63.1314 (Storage vessel provisions), and Section 63.147 (Process wastewater provisions – recordkeeping), as referenced in 63.1330 (Wastewater provisions). **(40 CFR Part 63, Subpart JJJ)**.
7. 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)**

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 1 of Subpart JJJ. **(40 CFR Part 63, Subparts A and JJJ)**
2. The permittee shall comply with the applicable requirements of 40 CFR Part 63, Subpart JJJ (Group IV Polymers & Resins MACT). The applicable sections of Subpart JJJ may include: **(40 CFR Part 63, Subpart JJJ)**
  - a. 63.1310 (Applicability and designation of affected sources)
  - b. 63.1311 (Compliance dates and relationship of this subpart to existing applicable rules)
  - c. 63.1312 (Definitions)
  - d. 63.1313 (Emission standards)
  - e. 63.1314 (Storage vessel provisions)
  - f. 63.1315 (Continuous process vent provisions)
  - g. 63.1316 (PET and polystyrene affected sources – emissions control provisions)
  - h. 63.1317 (PET and polystyrene affected sources – monitoring provisions)
  - i. 63.1318 (PET and polystyrene affected sources – testing and compliance demonstration provisions)
  - j. 63.1319 (PET and polystyrene affected sources – recordkeeping provisions)
  - k. 63.1320 (PET and polystyrene affected sources – reporting provisions)
  - l. 63.1321 (Batch process vent provisions)
  - m. 63.1322 (Batch process vents – reference control technology)
  - n. 63.1323 (Batch process vents - methods and procedures for group determinations) – para. (a)(3) only
  - o. 63.1324 (Batch process vents – monitoring equipment)

- p. 63.1325 (Batch process vents – performance test methods and procedures to determine compliance)
- q. 63.1326 (Batch process vents – recordkeeping requirements)
- r. 63.1327 (Batch process vents – reporting requirements)
- s. 63.1328 (Heat exchange system provisions)
- t. 63.1330 (Wastewater provisions)
- u. 63.1331 (Equipment leak provisions)
- v. 63.1333 (Additional requirements for performance testing)
- w. 63.1334 (Parameter monitoring levels and excursions)
- x. 63.1335 (General recordkeeping and reporting provisions)

**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).

**FGBOILERMACT  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Requirements for existing boilers and process heaters with a heat input capacity of <10 MMBTU/hr for major sources of HAP emissions per 40 CFR Part 63, Subpart DDDDD (Boiler MACT). These boilers or process heaters are designed to burn solid, liquid, or gaseous fuels.

**Emission Unit:** EU31, EU33

Equal to or less than 5 MMBTU/hr and only burns gaseous or light liquid fuels	None
Greater than 5 MMBTU/hr and less than 10 MMBTU/hr that burns gaseous or light liquid fuels or any unit that is less than 10 MMBTU/hr and burns any heavy liquid or solid fuels	EU31: Two 7 million BTU/hr natural gas direct-fired process heaters equipped with continuous oxygen trim system referred to as heater F-3A east and heater F-3B west.  EU33: Two 7 million BTU/hr (output) process heaters equipped with continuous oxygen trim system that operate in parallel and are designed to incinerate the process vent gases and heavy recycle streams from EU33.

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

NA

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

1. The permittee must, for boilers or process heaters with a heat input capacity of greater than 5 MMBTU/hr and less than 10 MMBTU/hr without a continuous oxygen trim system, conduct a biennial tune-up of the boiler or process heater according to 40 CFR 63.7540(a)(11) no more than 25 months after the previous tune-up. **40 CFR 63.7500(e), 40 CFR 63.7515(d), 40 CFR 63.7540(a)(11), 40 CFR Part 63, Subpart DDDDD, Table 3.2)**
2. The permittee must conduct a tune-up of each boiler or process heater as specified in: **(40 CFR 63.7540(a)(12))**
  - a. As applicable, inspect the burner and clean or replace any components of the burner as necessary. The permittee may perform the burner inspection any time prior to the tune-up or may delay the burner inspection until the next scheduled unit shutdown. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment. **(40 CFR 63.7540(a)(10)(i))**
  - b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. **(40 CFR 63.7540(a)(10)(ii))**
  - c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. The permittee may delay the inspection until the next scheduled unit shutdown. **(40 CFR 63.7540(a)(10)(iii))**

- d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO<sub>x</sub> requirement to which the unit is subject. **(40 CFR 63.7540(a)(10)(iv))**
  - e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. **(40 CFR 63.7540(a)(10)(v))**
3. If the unit is not operated on the required date for the tune-up, the tune-up must be conducted within 30 calendar days of startup. **(40 CFR 63.7540(a)(13))**
  4. At all times, the permittee must operate and maintain each existing small boiler or process heater, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that 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 63.7500(a)(3))**

#### **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 must keep a copy of each notification and report submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or 2- or 5-year compliance report or one-time energy assessment, as applicable, that the permittee submitted. **(40 CFR 63.7555(a)(1))**
2. The permittee must keep the records in a form suitable and readily available for expeditious review. **(40 CFR 63.7560(a))**
3. The permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. **(40 CFR 63.7560(b))**
4. The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The permittee can keep the records off site for the remaining 3 years. **(40 CFR 63.7560(c))**

See Appendices 3 and 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. 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 DDDDD for Industrial, Commercial, and Institutional Boilers and Process Heaters. **(40 CFR Part 63, Subparts A and DDDDD)**

**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).



## **FGRULE290 FLEXIBLE GROUP CONDITIONS**

### **DESCRIPTION**

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 290.

**Emission Unit:** EURULE290

### **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. Each emission unit that the total uncontrolled or controlled emissions of 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(a)(ii))**
  - a. For noncarcinogenic 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 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 1,000 or 500 pounds per month, respectively. **(R 336.1290(a)(ii)(A))**
  - b. For noncarcinogenic 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 microgram 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(a)(ii)(B))**
  - c. For carcinogenic 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(a)(ii)(C))**
  - d. The emission unit shall not emit any 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(a)(ii)(D))**
3. Each emission unit that emits only noncarcinogenic particulate air contaminants and other air contaminants that are exempted under Rule 290(a)(i) and/or Rule 290(a)(ii), if all of the following provisions are met: **(R 336.1290(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 an exhaust gas flow rate more than 30,000 actual cubic feet per minute; **(R 336.1290(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(a)(iii)(B))**
  - c. The initial threshold screening level for each particulate air contaminant, excluding nuisance particulate, is more than 2.0 micrograms per cubic meter. **(R 336.1290(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)**

## **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 MDEQ, AQD Rule 290, Permit to Install Exemption Record form (EQP 3558) or an alternative format that is approved by 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(a)(ii) and (iii); **(R 336.1213(3))**
  - e. Material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions in sufficient detail to demonstrate that the actual emissions of the emission unit meet the emission limits outlined in this table and Rule 290. **(R 336.1213(3), R 336.1290(c))**
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(b), R 336.1213(3))**
  - b. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(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(a)(iii), the permittee shall perform a monthly visible emission observation of each stack or vent during routine operating conditions or something equivalent (i.e., operational parameter monitoring/recordkeeping) approved by the AQD. This observation needs 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 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 boiler or process heater, the permittee shall comply with the applicable requirements of 40 CFR Part 63, Subparts A (General Provisions) and DDDDD (National Emission Standard for Hazardous Air Pollutants: Industrial, Commercial and Institutional Boilers and Process Heaters – Major Sources). Compliance is determined as per FGBOILERMACT. **(40 CFR Part 63, Subparts A and DDDDD)**

**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).

## **FGCOLDCLEANERS FLEXIBLE GROUP CONDITIONS**

### **DESCRIPTION**

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.

**Emission Unit:** EUCOLDCLEANER

### **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(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(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(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%, 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))**

See Appendices 3 and 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 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

**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).

**FGOLDMACT  
 FLEXIBLE GROUP CONDITIONS**

The affected source is each new, reconstructed, or existing Organic Liquid Distribution (OLD) (non-gasoline) operation that is located at or is part of a major source of HAP emissions. The 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 this subpart. Equipment that is part of an affected source under another National Emission Standards for Hazardous Air Pollutants is excluded from the affected source. **(40 CFR 63.2338(c))**

**Emission Units:** EU31, EU33, EUB1, EUOLDMACT, EU86, EU91

**POLLUTION CONTROL EQUIPMENT**

NA

**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	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 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 63.2346(a)(4)(i) through (vii) and with the recordkeeping requirements in 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 63.2346(a)(4)(i) through (vii) and with the recordkeeping requirements in 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.



Control Device	Operating 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.
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

Control Device	Operating Limit
	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 startup, shutdown, and malfunction 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 startup. **(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))**

See Appendix 5

ROP No: MI-ROP-P1025-2021  
Expiration Date: October 13, 2026  
PTI No: MI-PTI-P1025-2021

## **VI. MONITORING/RECORDKEEPING**

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii), 40 CFR 63.2394)**

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 Appendices 3 and 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 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))**

#### **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)**

#### **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).

**FGEMERGCIRICE  
FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Emergency diesel fuel engines subject to the National Emission Standard for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE). 40 CFR Part 63, Subpart ZZZZ (40 CFR 63.6580-6675). The engines are regulated as existing compression ignition (CI) emergency RICE with a maximum site rate of less than 500 brake horsepower (HP) and greater than 500 brake horsepower (HP) located at a Major Source of HAP emissions.

**Emission Unit:** EUEMERGCIRICE

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

NA

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

1. An affected source that meets any of the criteria in paragraphs 40 CFR 63.6590(c)(1) through (7) must meet the requirements of this part by meeting the requirements of 40 CFR Part 60, Subpart IIII, for compression ignition engines. No further requirements apply for such engines under this part. **(40 CFR 63.6590(c))**
2. The permittee shall limit operation of each stationary emergency RICE with a site rating of less than or equal to 500 brake HP or greater than 500 brake HP as follows:
  - a. There is no time limit on the use of emergency stationary RICE in emergency situations. **(40 CFR 63.6640(f))**
  - b. Emergency stationary RICE may be operated for the purposes of maintenance checks and readiness testing up to 100 hours per year. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. **(40 CFR 63.6640(f))**
  - c. Emergency stationary RICE may be operated up to 50 hours per year in non-emergency situations, but those hours are to be counted towards the 100 hours per year for maintenance and readiness testing. These 50 hours per year for non-emergency situations cannot be used for peak-shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. Up to 15 hours per year can be used as part of a demand response program. **(40 CFR 63.6640(f))**
3. The permittee shall operate and maintain existing emergency stationary RICE with a site rating of less than or equal to 500 brake HP according to the manufacturer's emission-related operation and maintenance instructions or a plan developed by the facility that provides for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 63.6625(e) and 40 CFR 63.6640(a) Table 6(9)(a))**



4. For existing emergency CI RICE with a site rating of less than or equal to 500 brake HP, the permittee shall inspect the air cleaner every 1000 hours of operation or annually, whichever comes first. **(40 CFR 63.6603(a) and Table 2d (4)(b))**
5. For existing emergency CI RICE with a site rating of less than or equal to 500 brake HP, the permittee shall change the oil and filter every 500 hours of operation or annually, whichever comes first. In lieu of changing the oil and filter, the permittee may implement an oil analysis program to have the oil analyzed at the same frequency specified for changing the oil as described in 40 CFR 63.6625(i). **(40 CFR 63.6603(a) and Table 2d(4)(a) and (5)(a))**
6. If implementing an oil analysis program and if the analytical results of the oil analysis program for emergency stationary CI engines with a site rate of less than or equal to 500 brake HP indicate any of the following limits are exceeded, the permittee shall change the oil within 2 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 shall change the oil within 2 days or before commencing operation, whichever is later. **(40 CFR 63.6625(i))**
  - a. Total Base Number is less than 30 percent of the Total Base Number of the oil when new;
  - a. Viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new;
  - b. Percent water content (by volume) is greater than 0.5.
7. For existing emergency CI RICE with a site rating of less than or equal to 500 brake HP, the permittee shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. **(40 CFR 63.6603(a) and Table 2d (4)(c) and (5)(c))**
8. If an existing emergency CI RICE with a site rating of less than or equal to 500 brake HP is operating during an emergency and it is not possible to shut down to perform the management practice requirements (change oil and filter, inspect air cleaner, and inspect hoses and belts) on the required schedule, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The management practice shall be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. **(40 CFR 63.6603(a) and Table 2d footnote 2)**
9. 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 safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission standards apply. **(40 CFR 63.6625(h), 40 CFR 63.6640(a))**
10. Beginning January 1, 2015, an existing emergency CI stationary RICE with a site rating of more than 100 brake HP and a displacement of less than 30 liters per cylinder that uses diesel fuel and operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in 40 CFR 63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in 40 CFR 63.6640(f)(4)(ii), the permittee must use diesel fuel that meets the requirements in 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to January 1, 2015, may be used until depleted. **(40 CFR 63.6604(b))**

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

1. For existing emergency CI RICE with a site rating of 500 brake HP or less, the permittee shall install a nonresettable hour meter. **(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), 40 CFR 63.9360)**

1. If implementing an oil analysis program for emergency stationary CI engines with a site rating of less than or equal to 500 brake HP, the permittee shall at a minimum analyze the oil for the following three parameters: **(40 CFR 63.6625(i))**

- a. Total Base Number
- b. Viscosity
- c. Percent water content (by volume).

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

Records shall be maintained on file for a period of five years. **(R 336.1213(3)(b)(ii), 40 CFR 63.9360)**

1. The permittee shall maintain a copy of each notification and report submitted, including supporting documentation. **(40 CFR 63.6655(a)(1))**
2. The permittee shall maintain a record 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))**
3. The permittee shall maintain a record 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))**
4. The permittee shall maintain records of the maintenance conducted on the stationary RICE in order to demonstrate that the stationary RICE was operated and maintained according to the facility maintenance plan. **(40 CFR 63.6655(e)(2))**
5. For existing emergency stationary RICE that do not meet the emission standards applicable to nonemergency stationary RICE, permittee shall maintain records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The records must document how many hours are spent for emergency operation; including what classified the operation as emergency; and how many hours are spent for nonemergency operation. If the engines are used for demand response operation, the owner or operator must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response. **(40 CFR 63.6655(f))**
6. If implementing an oil analysis program, the permittee shall 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) and (j))**

**See Appendices 3 and 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 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))**

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

NA

#### **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).

**FGBENZENEWASTE  
FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Benzene waste operations that apply to equipment and processes owned by Trinseo at the stationary source that are subject to the requirements of 40 CFR Part 61, Subpart A (General Provisions) and Subpart FF. The Trinseo facility benzene waste operations are less than 10 Mg/year but are included in the site wide Benzene NESHAP reports submitted by The Dow Chemical Company for the stationary source.

**Emission Units:** EU31, EU33, EUB1

**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. The permittee shall keep the records required by 40 CFR Part 61, Subpart FF, Sections 61.356(a), (b) and (b)(1) (Recordkeeping requirements). **(40 CFR Part 61, Subpart FF)**

**See Appendices 3 and 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))**
4. If the total annual benzene quantity from facility waste is less than 10 Mg/year but is equal to or greater than 1 Mg/year, a report updating the information regarding aqueous benzene wastewater streams shall be submitted in compliance with 40 CFR Part 61, Subpart FF, Section 61.357(c) (Reporting requirements). This report is due annually by April 7 or anytime a process change occurs that could cause the total annual benzene quantity from the facility to increase to 10 Mg/yr or more. **(40 CFR Part 61, Subpart FF)**

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, Subparts A (General Provisions) and FF (NESHAP for Benzene Wastewater Operations). The applicable sections of Subpart FF may include: **(40 CFR Part 61, Subparts A and FF)**
  - a. 61.340 Applicability
  - b. 61.341 Definitions
  - c. 61.342 Standards: General – paragraphs (a) and (g) only
  - d. 61.355 Test methods, procedures and compliance provisions – paragraph (a) only
  - e. 61.356 Recordkeeping requirements – paragraphs (a), (b), and (b)(1) only
  - f. 61.357 Reporting requirements – paragraphs (a) and (c) only

#### **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).

## **E. NON-APPLICABLE REQUIREMENTS**

At the time of the ROP issuance, the AQD has determined that no non-applicable requirements have been identified for incorporation into the permit shield provision set forth in the General Conditions in Part A pursuant to Rule 213(6)(a)(ii).

## 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
SNCR	Selective Non-Catalytic Reduction	TAC	Toxic Air Contaminant
SRN	State Registration Number	Temp	Temperature
TEQ	Toxicity Equivalence Quotient	THC	Total Hydrocarbons
USEPA/EPA	United States Environmental Protection Agency	tpy	Tons per year
VE	Visible Emissions	µg	Microgram
		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

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

### Appendix 4. Recordkeeping

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

### 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

#### PTIs rolled in since the issuance of MI-ROP-A4033-2017b:

Trinseo is located at the stationary source that was issued ROP No. MI-ROP-A4033-2017b. The following table lists any PTIs issued or ROP revision applications received from Trinseo since the effective date of MI-ROP-A4033-2017. Those ROP revision applications that are being issued concurrently with this ROP significant modification are identified by an asterisk (\*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
NA			

### 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.