

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

EFFECTIVE DATE: March 2, 2021

ISSUED TO

**Consumers Energy Company – St. Clair Compressor Station**

State Registration Number (SRN): B6637

LOCATED AT

10021 Marine City Highway, Ira Township, Michigan 48023

**RENEWABLE OPERATING PERMIT**

Permit Number: MI-ROP-B6637-2021

Expiration Date: March 2, 2026

Administratively Complete ROP Renewal Application  
Due Between September 2, 2024 and September 2, 2025

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-B6637-2021

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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Joyce Zhu, Warren District Supervisor

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## AUTHORITY AND ENFORCEABILITY

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

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

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

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

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

## A. GENERAL CONDITIONS

### Permit Enforceability

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

### General Provisions

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

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

### **Equipment & Design**

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

### **Emission Limits**

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

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

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

### **Testing/Sampling**

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

## Monitoring/Recordkeeping

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

## Certification & Reporting

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

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

## Permit Shield

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

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

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

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

## Revisions

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

## Reopenings

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

## Renewals

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

## Stratospheric Ozone Protection

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

## Risk Management Plan

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

## Emission Trading

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

## Permit to Install (PTI)

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

### **Footnotes:**

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

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

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

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

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

## SOURCE-WIDE CONDITIONS

### POLLUTION CONTROL EQUIPMENT

NA

### I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Individual HAP	9.9 tons <sup>2</sup>	Per 12-month rolling time period as determined at the end of each calendar month	Source-Wide	SC VI	<b>R 336.1201(3)</b> <b>R 336.1205(2)</b>
2. Total HAPs	24.9 tons <sup>2</sup>	Per 12-month rolling time period as determined at the end of each calendar month	Source-Wide	SC VI	<b>R 336.1201(3)</b> <b>R 336.1205(2)</b>

### II. MATERIAL LIMITS:

NA

### III. PROCESS/OPERATIONAL RESTRICTIONS

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, in a satisfactory manner, monthly Source-Wide individual HAP and Total HAPs calculation records, as required by Special Conditions I.1 and 2.<sup>2</sup> **(R 336.1201(3)), (R 336.1702(a))**
2. The permittee shall keep, in a satisfactory manner, Source-Wide individual and aggregate HAP emission calculation records in tons per 12-month rolling time period as determined at the end of each calendar month. **(R 336.1213(3))**

### VII. REPORTING

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

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year.  
**(R 336.1213(4)(c))**

**See Appendix 8**

**VIII. STACK/VENT RESTRICTIONS**

NA

**IX. OTHER REQUIREMENTS**

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).

## 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
EUEMERGEN3-1	Natural gas fired stationary standby generator rated at 2000 HP or less and used for emergency purposes only.	02/10/2016	NA
EUBOILER3-1	12.3 MMBtu/hr natural gas fired heating boiler for providing building heat.	02/14/2016	NA
EUGASHEATER3-1	0.75 MMBtu/hr natural gas fired fuel gas heater for superheating the natural gas fuel prior to combusting in natural gas fired equipment.	05/18/2016	NA
EUDEHY1	Natural gas glycol dehydration system with a thermal oxidizer for control (common with EUDEHY2). The system consists of an absorber, flash tank, glycol regenerator and a 3 MMBtu/hr natural gas fired regenerator boiler.	01/08/2016	FGDEHY
EUDEHY2	Natural gas glycol dehydration system with a thermal oxidizer for control (common with EUDEHY1). The system consists of an absorber, flash tank, glycol regenerator and a 3 MMBtu/hr natural gas fired regenerator boiler.	01/08/2016	FGDEHY
EUTURBINEC1-1	Natural gas fired combustion turbine. The turbine drives a compressor unit to compress natural gas for transport between the storage fields and the pipeline.	06/03/1996	FGTURBINES
EUTURBINEC1-2	Natural gas fired combustion turbine. The turbine drives a compressor unit to compress natural gas for transport between the storage fields and the pipeline.	06/03/1996	FGTURBINES
EUENGINE3-1	Four stroke, lean burn, 4835 HP, natural gas fired reciprocating internal combustion engine with oxidation catalyst for control.	11/03/2015	FGENGINES-P3
EUENGINE3-2	Four stroke, lean burn, 4835 HP, natural gas fired reciprocating internal combustion engine with oxidation catalyst for control.	10/30/2015	FGENGINES-P3
EUENGINE3-3	Four stroke, lean burn, 4835 HP, natural gas fired reciprocating internal combustion engine with oxidation catalyst for control.	10/14/2015	FGENGINES-P3

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUENGINE3-4	Four stroke, lean burn, 4835 HP, natural gas fired reciprocating internal combustion engine with oxidation catalyst for control.	10/10/2015	FGENGINES-P3
EUPIPEHEATER3-1	Natural gas fired pipeline heater rated at 15 MMBtu/hr.	05/18/2016	FGPIPEHEATERS-P3
EUPIPEHEATER3-2	Natural gas fired pipeline heater rated at 15 MMBtu/hr.	05/18/2016	FGPIPEHEATERS-P3
EUPIPEHEATER1-1	Natural gas fired pipeline heater rated at 5 MMBtu/hr.	05/18/2016	FGWESTDRHTRS-P1
EUPIPEHEATER1-2	Natural gas fired pipeline heater rated at 5 MMBtu/hr.	05/18/2016	FGWESTDRHTRS-P1
EUNEW OILTANKS	Two, 6,000 gallon above ground storage tanks for storing new oil. (Tank #32 & Tank #33)	05/01/2017	FGTANKS
EUUSED OILTANK	6,000 gallon above ground storage tank for storing used oil. (Tank #34)	05/01/2017	FGTANKS
EUEGTANKS	Two, 6,000 gallon above ground storage tanks for storing ethylene glycol (EG). (Tank #30 & Tank #31)	05/01/2017	FGTANKS
EUNEW TEGTANK	6,000 gallon above ground storage tank for storing new triethylene glycol (TEG). (Tank #40)	05/01/2017	FGTANKS
EUUSED TEGTANK	6,000 gallon above ground storage tank for storing used TEG. (Tank #41)	05/01/2017	FGTANKS
EUDISTILLATE TANK	10,000 gallon above ground storage tank for storing distillate (water and hydrocarbons). (Tank #28)	05/01/2017	FGTANKS
EUPARTS CLEANER	Small cold cleaners used for parts cleaning. All cold cleaners have an air/vapor interface of less than 10 square feet. Includes degreasers 1, 2 and 3.	01/01/1995	FGCOLD CLEANERS
EUCOLD CLEANER	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners that were placed into operation prior to July 1, 1979. New cold cleaners that were placed into operation on or after July 1, 1979.	NA	FGCOLD CLEANERS
EURULE 285(2)(mm)	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 285(2)(mm).	NA	FGRULE 285(2)(mm)

**EUEMERGEN3-1  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Natural gas fired stationary standby generator rated at 2000 HP or less and used for emergency purposes only.

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	2.0 g/hp-hr <sup>2</sup>	Hourly	EUEMERGEN3-1	SC V.1	R 336.1205(1)(a), 40 CFR Part 52.21 (c) & (d), 40 CFR Part 60 Subpart JJJJ
2. CO	4.0 g/hp-hr <sup>2</sup>	Hourly	EUEMERGEN3-1	SC V.1	40 CFR Part 52.21 (d), 40 CFR Part 60 Subpart JJJJ
3. VOC	1.0 g/hp-hr <sup>2</sup>	Hourly	EUEMERGEN3-1	SC V.1	R 336.1205(1)(a), R 336.1702, 40 CFR Part 60 Subpart JJJJ

**II. MATERIAL LIMIT(S)**

1. The permittee shall only burn natural gas, as defined in 40 CFR 72.2, in EUEMERGEN3-1.<sup>2</sup> (R 336.1225, R 336.1702(a), 40 CFR 52.21 (c) & (d))

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

1. The permittee shall not operate EUEMERGEN3-1 for more than 500 hours per 12-month rolling time period as determined at the end of each calendar month.<sup>2</sup> (R 336.1205(1)(a), R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))
2. The permittee shall operate and maintain EUEMERGEN3-1 such that it meets the emission limits in SC I.1, I.2, and I.3 over the entire life of the engine.<sup>2</sup> (40 CFR 60.4234, 40 CFR 60.4243(b))
3. If the permittee purchased a non-certified engine (includes purchasing a certified engine which was not operated and maintained as specified), the permittee shall keep a maintenance plan for EUEMERGEN3-1 and shall, to the extent practicable, maintain and operate each engine in a manner consistent with good air pollution control practice for minimizing emissions.<sup>2</sup> (40 CFR 60.4243(b)(2))
4. In order for EUEMERGEN3-1 to be considered an emergency stationary ICE under 40 CFR 60 Subpart JJJJ, the engine must be operated according to the following requirements:<sup>2</sup> (40 CFR 60.4243(d))
  - a. There is no time limit on the use of emergency stationary ICE in emergency situations, except as specified by SC III.1
  - b. The permittee may operate EUEMERGEN3-1 for any combination of the purposes specified below for a maximum of 100 hours per calendar year:
    - i. Maintenance checks and readiness testing provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent

- balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year;
- ii. Emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see 40 CFR 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3; and
  - iii. For periods where there is a deviation of voltage or frequency of five percent or greater below standard voltage or frequency.
- c. EUEMERGEN3-1 may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in SC III.6.b. Except as provided in SC III.6.c.i below, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
- i. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
    - A. The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
    - B. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region;
    - C. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines;
    - D. The power is provided only to the facility itself or to support the local transmission and distribution system; and
    - E. The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

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

1. The permittee shall equip and maintain EUEMERGEN3-1 with a non-resettable hour meter to record the operating hours.<sup>2</sup> **(40 CFR 60.4237(a), 40 CFR 60.4245(b))**

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

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

1. If EUEMERGEN3-1 is not a certified engine consistent with 40 CFR 60.4243(b)(1), within 60 days after achieving the maximum production rate, but not later than 180 days after commencement of trial operation, federal Standards of Performance for New Stationary Sources require verification of the NO<sub>x</sub>, CO and VOC emission rates from EUEMERGEN3-1, by testing at owner's expense, in accordance with 40 CFR Part 60 Subparts A and JJJJ, 60 CFR 60.4244. The permittee shall notify the AQD District Supervisor in writing within 15 days of the date of commencement of trial operation in accordance with 40 CFR 60.7(a)(3). Stack testing procedures and the location of stack testing ports shall be in accordance with the applicable federal Reference Methods, 40 CFR Part 60 Appendix A. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. After conducting the initial performance test, the permittee shall conduct subsequent performance testing, for non-certified engines, every 8,760 hours or three years, whichever comes first.<sup>2</sup> **(40 CFR 60.4243(b), 40 CFR 60.4245(d))**

## **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, a log of the monthly and 12-month rolling time period hours of operation for EUEMERGEN3-1. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency, and how many hours are spent for non-emergency operation. The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request.<sup>2</sup> **(R 336.1205(1)(a)(ii)(B), 40 CFR 60.4245(b))**
2. The permittee shall keep, in a satisfactory manner, records of the following for EUEMERGEN3-1.<sup>2</sup> **(40 CFR 60.4245(a))**
  - a. All notifications submitted to comply with 40 CFR Part 60, Subparts A and JJJJ and all documentation supporting any notification;
  - b. Maintenance conducted on the engine;
  - c. If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable;
  - d. If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR 60.4243(a)(2), documentation that the engine meets the emission standards.

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**
5. Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in 40 CFR 60.4231 must submit an initial notification as required in 40 CFR 60.7(a)(1). The notification must include the following information:<sup>2</sup> **(40 CFR 60.7(a)(1))**
  - a. Name and address of the owner or operator; **(40 CFR 60.4245(c)(1))**
  - b. The address of the affected source; **(40 CFR 60.4245(c)(2))**
  - c. Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement; **(40 CFR 60.4245(c)(3))**
  - d. Emission control equipment; and **(40 CFR 60.4245(c)(4))**
  - e. Fuel used. **(40 CFR 60.4245(c)(5))**
6. The permittee shall submit a notification specifying whether EUEMERGEN3-1 will be operated in a certified or a non-certified manner to the AQD District Supervisor, in writing, within 30 days following the initial startup of the engine and within 30 days of switching the manner of operation.<sup>2</sup> **(R 336.1201(3))**

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. SVEMERGEN3-1	22 <sup>2</sup>	40 <sup>2</sup>	R 336.1225, 40 CFR 52.21 (c) & (d)

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of the New Source Performance Standards as specified in 40 CFR Part 60, Subpart A and Subpart JJJJ, as they apply to EUEMERGEN3-1.<sup>2</sup> **(40 CFR Part 60 Subpart A and JJJJ)**
2. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subpart A and Subpart ZZZZ, as they apply to EUEMERGEN3-1.<sup>2</sup> **(40 CFR, Part 63, Subparts A and ZZZZ)**

**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).

## **EUBOILER3-1 EMISSION UNIT CONDITIONS**

### **DESCRIPTION**

12.3 MMBtu/hr natural gas fired heating boiler for providing building heat.

**Flexible Group ID:** NA

### **POLLUTION CONTROL EQUIPMENT**

NA

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

NA

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

1. The permittee shall only burn natural gas, as defined in 40 CFR 72.2, in EUBOILER3-1.<sup>2</sup> (**R 336.1225, R 336.1702, 40 CFR 52.21 (c) & (d)**)

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

1. At least 60 days prior to start-up of EUBOILER3-1, the permittee shall submit to the AQD District Supervisor, for review and approval, a malfunction abatement/preventative maintenance plan for EUBOILER3-1. After approval of the malfunction abatement/preventative maintenance plan by the AQD District Supervisor, the permittee shall not operate EUBOILER3-1 unless the malfunction abatement/preventative maintenance plan, or an alternate plan approved by the AQD District Supervisor, is implemented and maintained. The plan shall incorporate specific maintenance inspections, checks and procedures and the associated frequencies as recommended by the equipment manufacturer, as well as incorporating standard industry practices. At a minimum the plan shall include:
  - a. Identification of the equipment and, if applicable, air-cleaning device, and the supervisory personnel responsible for overseeing the inspection, maintenance, and repair.
  - b. Description of the items or conditions to be inspected and frequency of the inspections or repairs.
  - c. Identification of the equipment and, if applicable, air-cleaning device, operating parameters that shall be monitored to detect a malfunction or failure, the normal operating range of these parameters and a description of the method of monitoring or surveillance procedures.
  - d. Identification of the major replacement parts that shall be maintained in inventory for quick replacement.
  - e. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If the plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the plan within 45 days after such an event occurs and submit the revised plan for approval to the AQD District Supervisor. Should the AQD determine the malfunction abatement/preventative maintenance plan to be inadequate, the AQD District Supervisor may request modification of the plan to address those inadequacies.<sup>2</sup> (**R 336.1225, R 336.1702, R 336.1910, R 336.1911, R 336.1912, 40 CFR 52.21(c), and (d)**)

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

1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the natural gas usage for EUBOILER3-1 on a monthly basis.<sup>2</sup> (**40 CFR 60.48c(g)(2)**)

**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 emissions and operating information for EUBOILER3-1 in accordance with the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Dc.<sup>2</sup> **(40 CFR Part 60 Subparts A & Dc)**
2. The permittee shall keep records of emissions and operating information to comply with the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Dc.<sup>2</sup> **(40 CFR Part 60 Subparts A & Dc)**
3. The permittee shall maintain satisfactory records to demonstrate that the facility is only burning pipeline natural gas, as defined in 40 CFR 72.2, in EUBOILER3-1. **(R 336.1213(3))**

**VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall provide written notification of construction and operation to comply with the federal Standards of Performance for New Stationary Sources, 40 CFR 60.7 and 60.48c(a). The permittee shall submit this notification to the AQD District Supervisor within the time frames specified in 40 CFR 60.7.<sup>2</sup> **(40 CFR 60.7, 40 CFR 60.48c(a))**
5. The permittee shall submit all notifications as required under 40 CFR 60.48c, as applicable to EUBOILER3-1.<sup>2</sup> **(40 CFR Part 60 Subpart Dc)**

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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBOILER3-1	20 <sup>2</sup>	40 <sup>2</sup>	R 336.1225, 40 CFR 52.21 (c) & (d)

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Dc, as they apply to EUBOILER<sup>1,2</sup> **(40 CFR Part 60 Subparts A & Dc)**

**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).

## **EUGASHEATER3-1 EMISSION UNIT CONDITIONS**

### **DESCRIPTION**

0.75 MMBtu/hr natural gas fired fuel gas heater for superheating the natural gas fuel prior to combusting in natural gas fired equipment.

**Flexible Group ID:** NA

### **POLLUTION CONTROL EQUIPMENT**

NA

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

NA

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

1. The permittee shall only burn natural gas, as defined in 40 CFR 72.2, in EUGASHEATER3-1.<sup>2</sup> **(R 336.1225, R 336.1702, 40 CFR 52.21 (c) & (d))**

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

1. At least 60 days prior to start-up of EUGASHEATER3-1, the permittee shall submit to the AQD District Supervisor, for review and approval, a malfunction abatement/preventative maintenance plan for EUGASHEATER3-1. After approval of the malfunction abatement/preventative maintenance plan by the AQD District Supervisor, the permittee shall not operate EUGASHEATER3-1 unless the malfunction abatement/preventative maintenance plan, or an alternate plan approved by the AQD District Supervisor, is implemented and maintained. The plan shall incorporate specific maintenance inspections, checks and procedures and the associated frequencies as recommended by the equipment manufacturer, as well as incorporating standard industry practices. At a minimum the plan shall include:
  - a. Identification of the equipment and, if applicable, air-cleaning device, and the supervisory personnel responsible for overseeing the inspection, maintenance, and repair.
  - b. Description of the items or conditions to be inspected and frequency of the inspections or repairs.
  - c. Identification of the equipment and, if applicable, air-cleaning device, operating parameters that shall be monitored to detect a malfunction or failure, the normal operating range of these parameters and a description of the method of monitoring or surveillance procedures.
  - d. Identification of the major replacement parts that shall be maintained in inventory for quick replacement.
  - e. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If the plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the plan within 45 days after such an event occurs and submit the revised plan for approval to the AQD District Supervisor. Should the AQD determine the malfunction abatement/preventative maintenance plan to be inadequate, the AQD District Supervisor may request modification of the plan to address those inadequacies.<sup>2</sup> **(R 336.1225, R 336.1702, R 336.1910, R 336.1911, R 336.1912, 40 CFR 52.21(c), and (d))**

### **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))

NA

**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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVGASHEATER3-1	14 <sup>2</sup>	15 <sup>2</sup>	R 336.1225, 40 CFR 52.21 (c) & (d)

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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

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

## D. FLEXIBLE GROUP SPECIAL CONDITIONS

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

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

### FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGDEHY	Two natural gas glycol dehydration systems with a common thermal oxidizer rated at 6 MMBtu/hr and used for control. Each system consists of an absorber, flash tank, glycol regenerator and three MMBtu/hr natural gas fired regenerator boiler.	EUDEHY1 EUDEHY2
FGENGINES-P3	Four new natural gas fired compressor engines. Each engine is a four stroke, lean burn (4SLB), 4835 HP, natural gas fired reciprocating internal combustion engine with oxidation catalyst for control.	EUENGINE3-1 EUENGINE3-2 EUENGINE3-3 EUENGINE3-4
FGTURBINES	Two Solar, natural gas fired combustion turbine compressors.	EUTURBINEC1-1 EUTURBINEC1-2
FGPIPEHEATERS-P3	Two natural gas fired pipeline heaters, each one is rated at 15 MMBtu/hr.	EUPIPEHEATER3-1 EUPIPEHEATER3-2
FGWESTDRHTRS-P1	Two natural gas fired pipeline heaters, each one is rated at 5 MMBtu/hr.	EUPIPEHEATER1-1 EUPIPEHEATER1-2
FGTANKS	Eight above ground storage tanks for holding oils, ethylene glycol, TEG and distillates. There are no requirements applicable to FGTANKS.	EUNEWOILTANKS EUUSED OILTANK EUEGTANKS EUNEWTEGTANK EUUSEDTEGTANK EUDISTILLATETANK
FGCOLDCLEANERS	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, Rule 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.	EUPARTSCLEANER, EUCOLDCLEANER
FGRULE285(2)(mm)	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 285(2)(mm).	FGRULE285(2)(mm)

**FGDEHY  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Two natural gas glycol dehydration systems with a common thermal oxidizer rated at 6 MMBtu/hr and used for control. Each system consists of an absorber, flash tank, glycol regenerator and 3 MMBtu/hr natural gas fired regenerator boiler.

**Emission Unit:** EUDEHY1, EUDEHY2

**POLLUTION CONTROL EQUIPMENT**

Thermal Oxidizer

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. VOC	7.4 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month.	FGDEHY	SC IV.1 SC VI.3	<b>R 336.1225, R 336.1702(a) R 336.1205(1)(a)</b>

**II. MATERIAL LIMIT(S)**

NA

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

1. The permittee shall not use stripping gas in either dehydrator in FGDEHY.<sup>2</sup> **(R 336.1205, R 336.1225, R 336.1702(a))**
2. The permittee shall not process natural gas in either dehydrator in FGDEHY unless the thermal oxidizer is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the thermal oxidizer includes maintaining a daily average minimum combustion temperature of 1400°F and a minimum retention time of 0.5 seconds.<sup>2</sup> **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)**
3. At least 60 days prior to start-up of any equipment in FGDEHY, the permittee shall submit to the AQD District Supervisor, for review and approval, a malfunction abatement/preventative maintenance plan for FGDEHY. After approval of the malfunction abatement/preventative maintenance plan by the AQD District Supervisor, the permittee shall not operate any equipment in FGDEHY unless the malfunction abatement/preventative maintenance plan, or an alternate plan approved by the AQD District Supervisor, is implemented and maintained. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. At a minimum the plan shall include:
  - a. Identification of the equipment and, if applicable, air-cleaning device, and the supervisory personnel responsible for overseeing the inspection, maintenance, and repair.
  - b. Description of the items or conditions to be inspected and frequency of the inspections or repairs.
  - c. Identification of the equipment and, if applicable, air-cleaning device, operating parameters that shall be monitored to detect a malfunction or failure, the normal operating range of these parameters and a description of the method of monitoring or surveillance procedures.
  - d. Identification of the major replacement parts that shall be maintained in inventory for quick replacement.

- e. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If the plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the plan within 45 days after such an event occurs and submit the revised plan for approval to the AQD District Supervisor. Should the AQD determine the malfunction abatement/preventative maintenance plan to be inadequate, the AQD District Supervisor may request modification of the plan to address those inadequacies.<sup>2</sup> (R 336.1225, R 336.1702, R 336.1910, R 336.1911, R 336.1912, R 336.2803, R 336.2804, 40 CFR 52.21(c), (d))

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

1. Flash tank exhaust gases from each dehydrator in FGDEHY shall be routed to either the regenerator boiler as fuel or the thermal oxidizer.<sup>2</sup> (R 336.1205(1)(a), R 336.1225, R 336.1702(a), R 336.1910)
2. The permittee shall not operate the glycol regenerators unless the exhaust gases from each dehydrator in FGDEHY are routed to a common thermal oxidizer designed to achieve a minimum VOC destruction efficiency of 98% (by weight), a daily average minimum combustion temperature of 1400°F and a minimum retention time of 0.5 seconds and the thermal oxidizer is installed, maintained, and operated in a satisfactory manner.<sup>2</sup> (R 336.1205(1)(a), R 336.1225, R 336.1702(a), R 336.1910)

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

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

1. At least once each calendar year the permittee shall obtain, by sampling, an analysis of the wet gas stream. The permittee shall analyze the sample for nitrogen, carbon dioxide, hydrogen sulfide, C1 through C6 series hydrocarbons, benzene, toluene, xylene, ethylbenzene, and heptanes plus. The permittee must submit any request for a change in the sampling frequency to the AQD District Supervisor for review and approval.<sup>2</sup> (R 336.1205, R 336.1225, R 336.1702(a))

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

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.<sup>2</sup> (R 336.1201, R 336.1205, R 336.1225, R 336.1702(a))
2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the temperature of the thermal oxidizer combustion zone on a continuous basis.<sup>2</sup> (R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)
3. The permittee shall calculate the VOC emission rate from FGDEHY for each calendar month and 12-month rolling time period, using a method acceptable to the AQD District Supervisor. If GRI-GLYCalc (Version 3.0 or higher) is used to calculate the emission rates, the inputs to the model shall be representative of actual operating conditions of each dehydrator in FGDEHY and shall include the most recent gas analysis data. The permittee must submit any request for a change in the calculation frequency to the AQD District Supervisor for review and approval. The permittee shall keep records of VOC emission rates on file at the facility and make them available to the Department upon request.<sup>2</sup> (R 336.1205, R 336.1225, R 336.1702(a))
4. The permittee shall keep, in a satisfactory manner, weekly records of the combustion zone temperature of the thermal oxidizer, while processing natural gas, as required by SC III.2 and SC VI.2. The permittee shall keep all records on file at the facility and make them available to the Department upon request.<sup>2</sup> (R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)

5. The permittee shall keep, in a satisfactory manner, records of the wet gas composition as determined through analysis of wet gas samples for FGDEHY, as required by SC V.1. The permittee shall keep all records on file at the facility and make them available to the Department upon request.<sup>2</sup> **(R 336.1205, R 336.1225, R 336.1702(a))**
6. The permittee shall continuously monitor combustion chamber temperature and record every 15 minutes for an hourly average as an indicator of proper operation of the TO. The indicator range is a minimum temperature in the combustion chamber of 1400°F when the dehydrator is operating. **(40 CFR 64.6(c)(1)(i) and (ii))**
7. For each control device in operation, the permittee shall conduct bypass monitoring for each bypass line such that the valve or closure method cannot be opened without creating an alarm condition for which a record shall be made. Records of the bypass line that was opened and the length of time the bypass line was opened shall be kept on file. **(40 CFR 64.3(a)(2))**
8. The temperature monitor shall continuously monitor the combustion chamber temperature of each thermal oxidizer in FGDEHY. The averaging period is daily. The monitor shall be calibrated at least annually. **(40 CFR 64.6(c)(1)(iii))**
9. An excursion is when the daily average minimum temperature in the combustion chamber of the thermal oxidizer associated with EUDEHY1 and EUDEHY2 is less than 1400°F. **(40 CFR 64.6(c)(2))**
10. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). **(40 CFR 64.7(d))**
11. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. **(40 CFR 64.6(c)(3), 40 CFR 64.7(c))**
12. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. **(40 CFR 64.6(c)(3), 40 CFR 64.7(c))**
13. The permittee shall properly maintain the monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. **(40 CFR 64.7(b))**
14. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions. **(40 CFR 64.9(b)(1))**

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**

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

See Appendix 8

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

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

<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. SVDEHYTO	60 <sup>2</sup>	40 <sup>2</sup>	<b>R 336.1225, 40 CFR 52.21 (c) &amp; (d)</b>
2. SVREBOILER1	30 <sup>2</sup>	40 <sup>2</sup>	<b>R 336.1225, 40 CFR 52.21 (c) &amp; (d)</b>
3. SVREBOILER2	30 <sup>2</sup>	40 <sup>2</sup>	<b>R 336.1225, 40 CFR 52.21 (c) &amp; (d)</b>

**IX. OTHER REQUIREMENT(S)**

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

**Footnotes:**

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

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

**FGENGINES-P3  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Four new natural gas fired compressor engines. Each engine is a four stroke, lean burn (4SLB), 4835 HP, natural gas fired reciprocating internal combustion engine with oxidation catalyst for control.

**Emission Units:** EUENGINE3-1, EUENGINE3-2, EUENGINE3-3, EUENGINE3-4

**POLLUTION CONTROL EQUIPMENT**

Oxidation catalyst on each engine

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. NO <sub>x</sub>	0.6 g/hp-hr <sup>a,2</sup>	Hourly	Each engine in FGENGINES-P3	SC V.1	<b>R 336.1205(1)(a), 40 CFR 52.21(c) &amp; (d), 40 CFR 60.4233(e)</b>
2. CO	0.36 g/hp-hr <sup>b,2</sup>	Hourly	Each engine in FGENGINES-P3	SC V.1	<b>R 336.1205(1)(a), 40 CFR 52.21 (d), 40 CFR 60.4233(e)</b>
3. VOC	0.2 g/hp-hr <sup>c,2</sup>	Hourly	Each engine in FGENGINES-P3	SC V.1	<b>R 336.1205(1)(a), 40 CFR 52.21 (d), 40 CFR 60.4233(e)</b>
4. NO <sub>x</sub>	1.0 g/hp-hr	Hourly	Each engine in FGENGINES-P3	SC V.1, SC V.2	<b>40 CFR 60.4233(e)</b>
5. CO	2.0 g/hp-hr	Hourly	Each engine in FGENGINES-P3	SC V.1, SC V.2	<b>40 CFR 60.4233(e)</b>
6. VOC	0.7 g/hp-hr	Hourly	Each engine in FGENGINES-P3	SC V.1, SC V.2	<b>40 CFR 60.4233(e)</b>

<sup>a</sup> Compliance with this streamlined NO<sub>x</sub> limit shall be considered compliance with the 1.0 g/hp-hr NO<sub>x</sub> limit established by 40 CFR 60.4233(e).

<sup>b</sup> Compliance with this streamlined CO limit shall be considered compliance with the 2.0 g/hp-hr CO limit established by 40 CFR 60.4233(e).

<sup>c</sup> Compliance with this streamlined VOC limit shall be considered compliance with the 0.7 g/hp-hr VOC limit established by 40 CFR 60.4233(e).

**II. MATERIAL LIMIT(S)**

1. The permittee shall only burn natural gas, as defined in 40 CFR 72.2, in any engine in FGENGINES-P3.<sup>2</sup> **(R 336.1225, R 336.1702(a), 40 CFR 52.21 (c) & (d))**

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

1. At least 60 prior to startup of any engine in FGENGINES-P3, the permittee shall submit to the AQD District Supervisor, for review and approval, a preventative maintenance / malfunction abatement plan (PM / MAP) for FGENGINES-P3. After approval of the PM / MAP by the AQD District Supervisor, the permittee shall not operate FGENGINES-P31 unless the PM / MAP, or an alternate plan approved by the AQD District Supervisor, is

implemented and maintained. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. At a minimum the plan shall include:

- a. Identification of the equipment and, if applicable, air-cleaning device and the supervisory personnel responsible for overseeing the inspection, maintenance, and repair
- b. Description of the items or conditions to be inspected and frequency of the inspections or repairs
- c. Identification of the equipment and, if applicable, air-cleaning device, operating parameters that shall be monitored to detect a malfunction or failure, the normal operating range of these parameters and a description of the method of monitoring or surveillance procedures
- d. Identification of the major replacement parts that shall be maintained in inventory for quick replacement
- e. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits

If the plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the plan within 45 days after such an event occurs and submit the revised plan for approval to the AQD District Supervisor. Should the AQD determine the PM / MAP to be inadequate, the AQD District Supervisor may request modification of the plan to address those inadequacies.<sup>2</sup> **(R 336.1205, R 336.1702(a), R 336.1910, R 336.1911, R 336.1912, 40 CFR 52.21 (c) & (d))**

2. The permittee shall operate and maintain each engine in FGENGINES-P3 such that it meets the emission limits in SC I.1, I.2, and I.3 over the entire life of the engine.<sup>2</sup> **(40 CFR 60.4234, 40 CFR 60.4243(b))**
3. If the permittee purchased a certified engine according to procedures specified in 40 CFR Part 60 Subpart JJJJ, for the same model year, the permittee shall meet the following requirements for FGENGINES-P3:<sup>2</sup> **(40 CFR 60.4243(b)(1))**
  - a. operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions,
  - b. keep a maintenance plan and only change those engine settings that are permitted by the manufacturer, and
  - c. meet the requirements as specified in 40 CFR 1068 Subparts A through D.
4. If the permittee purchased a non-certified engine (includes purchasing a certified engine which was not operated and maintained as specified), the permittee shall keep a maintenance plan for FGENGINES-P3 and shall, to the extent practicable, maintain and operate each engine in a manner consistent with good air pollution control practice for minimizing emissions.<sup>2</sup> **(40 CFR 60.4243(b)(2))**

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

1. The nameplate capacity of each engine in FGENGINES-P3 shall not exceed 4,835 hp, as certified by the equipment manufacturer.<sup>2</sup> **(R 336.1205(1)(a), R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4230)**
2. The permittee shall not operate any engine in FGENGINES-P3 unless its respective oxidation catalyst is installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each oxidation catalyst in accordance with an approved MAP for FGENGINES-P3 as required in SC III.1, over the entire life of the engine.<sup>2</sup> **(R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), R 336.1910, 40 CFR 52.21 (c) & (d), 40 CFR Part 60 Subpart JJJJ)**

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

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

1. Within 180 days after commencement of initial startup, the permittee shall verify NO<sub>x</sub>, CO and VOC emission rates from each engine of FGENGINES-P3 by testing at owner's expense, in accordance with Department requirements. 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. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.<sup>2</sup> **(R 336.1205(1)(a), R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

2. If any engine in FGENGINES-P3 is not a certified engine consistent with 40 CFR 60.4243(b)(1), within 60 days after achieving the maximum production rate, but not later than 180 days after commencement of trial operation, federal Standards of Performance for New Stationary Sources require verification of the NO<sub>x</sub>, CO and VOC emission rates from each such engine in FGENGINES-P3, by testing at owner's expense, in accordance with 40 CFR Part 60 Subparts A and JJJJ, 60 CFR 60.4244. To the extent that testing conducted pursuant to V.1 is conducted in accordance with 40 CFR Part 60, Subpart JJJJ, a single test event can be used to satisfy both V.1 and V.2 testing requirements. The permittee shall notify the AQD District Supervisor in writing within 15 days of the date of commencement of trial operation in accordance with 40 CFR 60.7(a)(3). Stack testing procedures and the location of stack testing ports shall be in accordance with the applicable federal Reference Methods, 40 CFR Part 60 Appendix A. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. After conducting the initial performance test, the permittee shall conduct subsequent performance testing, for non-certified engines, every 8,760 hours or three years, whichever comes first.<sup>2</sup> **(40 CFR 60.4243(b), 40 CFR 60.4245(d))**
3. For the performance tests required in SC V.1 and V.2, the permittee shall conduct three separate test runs, one hour each or longer, at any load within ±10 percent of 100 peak (or the highest achievable) load. **(40 CFR 60.4244, 40 CFR Part 60 Subpart JJJJ, Table 2)**

## **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall keep records of the following information for each engine of FGENGINES-P3.<sup>2</sup> **(R 336.1205, R 336.1702(a), R 336.1911, 40 CFR 52.21 (c) & (d), 40 CFR 60.4245(a), 40 CFR 60.4243 (b)(2)(ii))**
  - a. All notifications submitted to comply with 40 CFR Part 60 Subpart JJJJ and all documentation supporting any notification.
  - b. Maintenance conducted on each engine of FGENGINES-P3 according to the PM/MAP required by SC III.1.
  - c. If any engine in FGENGINES-P3 is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable.
  - d. If any engine in FGENGINES-P3 is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR 60.4243(a)(2), documentation that the engine meets the emission standards.
2. The permittee shall keep, in a satisfactory manner, monthly fuel use records for FGENGINES-P3 for purposes of determining HAP emissions from the engines on a monthly and 12-month rolling time period basis as determined at the end of each calendar month. This is required to demonstrate compliance with the individual and total HAP limits in FGFACILITY, listed in ROP NO. MI-ROP-B6637-2010. The permittee shall keep all records on file at the facility and make them available to the Department upon request.<sup>2</sup> **(R 336.1205(1)(a))**
3. The permittee shall keep documentation that each engine in FGENGINES-P3 meets the emission standards in SC I.4 through I.6. **(40 CFR 60.4245(a)(4))**
4. The permittee shall maintain satisfactory records to indicate that the facility is only burning pipeline natural gas, as defined in 40 CFR 72.2, in FGENGINES3. **(R 336.1213(3))**

## **VII. REPORTING**

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

4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**
5. Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in 40 CFR 60.4231 must submit an initial notification as required in 40 CFR 60.7(a)(1). The notification must include the following information:<sup>2</sup> **(40 CFR 60.7(a)(1))**
  - a. Name and address of the owner or operator; **(40 CFR 60.4245(c)(1))**
  - b. The address of the affected so; **(40 CFR 60.4245(c)(2))**
  - c. Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement; **(40 CFR 60.4245(c)(3))**
  - d. Emission control equipment; and **(40 CFR 60.4245(c)(4))**
  - e. Fuel used. **(40 CFR 60.4245(c)(5))**
6. The permittee shall submit a notification specifying whether each engine of FGENGINE3-P3 will be operated in a certified or a non-certified manner to the AQD District Supervisor, in writing, within 30 days following the initial startup of the engine and within 30 days of switching the manner of operation.<sup>2</sup> **(R 336.1201(3))**
7. The permittee shall notify the district within seven days of startup of any engine in FGENGINE3-P3 and the date of completion of the shake down period for the new engines.<sup>2</sup> **(R 336.1201(3), 40 CFR 52.21(c) & (d))**

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. SVENGINE3-1	36 <sup>2</sup>	65 <sup>2</sup>	<b>R 336.1225, 40 CFR 52.21 (c) &amp; (d)</b>
2. SVENGINE3-2	36 <sup>2</sup>	65 <sup>2</sup>	<b>R 336.1225, 40 CFR 52.21 (c) &amp; (d)</b>
3. SVENGINE3-3	36 <sup>2</sup>	65 <sup>2</sup>	<b>R 336.1225, 40 CFR 52.21 (c) &amp; (d)</b>
4. SVENGINE3-4	36 <sup>2</sup>	65 <sup>2</sup>	<b>R 336.1225, 40 CFR 52.21 (c) &amp; (d)</b>

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of the New Source Performance Standards as specified in 40 CFR Part 60, Subpart A and Subpart JJJJ, as they apply to each engine in FGENGINE3-P3.<sup>2</sup> **(40 CFR Part 60 Subpart A and JJJJ)**
2. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subpart A and Subpart ZZZZ, as they apply to FGENGINE3-P3.<sup>2</sup> **(40 CFR, Part 63, Subparts A and ZZZZ)**

**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).

**FGTURBINES  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Two Solar, natural gas fired combustion turbine compressors

**Emission Units:** EUTURBINEC1-1, EUTURBINEC1-2

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

<b>Pollutant</b>	<b>Limit</b>	<b>Time Period / Operating Scenario</b>	<b>Equipment</b>	<b>Testing / Monitoring Method</b>	<b>Underlying Applicable Requirements</b>
1. NOx	12.6 pph <sup>2</sup>	Hourly	Both turbines combined	SC V	<b>R 336.2803 R 336.2804</b>
2. NOx	39.0 tons per year <sup>2</sup>	12 month rolling time period, as determined at the end of each calendar month	Two turbines combined	SC V, SC VI.5	<b>R 336.1205</b>
3. NOx	150 ppmdv at 15% oxygen <sup>2</sup>	Hourly	Each Turbine	SC V	<b>40 CFR 60.332(a)(2)</b>
4. CO	20.7 pph <sup>2</sup>	Hourly	Two Turbines Combined	SC V	<b>R 336.2804</b>
5. CO	90.6 tons per year <sup>2</sup>	12 month rolling time period, as determined at the end of each calendar month	Two Turbines Combined	SC V, SC VI.5	<b>R 336.1205</b>
6. CO	1.09 grams per horsepower-hr corrected to 15% oxygen on a dry gas basis at 100% speed and 100% torque <sup>2</sup>	Hourly	Each Turbine	SC V	<b>R 336.2804</b>
7. VOC	0.2 pph <sup>2</sup>	Hourly	Two Turbines Combined	SC VI	<b>R 336.1702</b>
8. VOC	1.0 tpy <sup>2</sup>	12 month rolling time period, as determined at the end of each calendar month	Two Turbines Combined	SC VI	<b>R 336.1205 R 336.1702</b>
9. VOC	0.1 grams per horsepower-hr corrected to 15% oxygen on a dry gas basis at 100% speed and 100% torque <sup>2</sup>	Hourly	Each Turbine	SC VI	<b>R 336.1702</b>

## **II. MATERIAL LIMITS**

NA

## **III. PROCESS/OPERATIONAL RESTRICTIONS**

1. The permittee shall burn only natural gas, as defined in 60.331(u), as fuel in any stationary gas turbine in FGTURBINES.<sup>2</sup> **(R 336.1301(1), 40 CFR 60.333(b); 40 CFR 60.334(h))**
2. The permittee shall operate the turbines, at all times within the range of gas producer speed, based on a daily average, which is established to assure compliance with respective emission limits. This range of gas producer speed shall be established by testing in accordance with Section V of FGTURBINES.<sup>2</sup> **(R 336.1910, R 336.2803, R 336.2804)**
3. The permittee shall not operate FGTURBINES for more than 12,380 hours per year (combined) on a 12-month rolling time period basis as determined at the end of each calendar month.<sup>2</sup> **(R 336.1205(1))**

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

NA

## **V. TESTING/SAMPLING**

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

1. Within the five-year period following the most recent test, the permittee shall test at least one of each group of identical turbines at the facility for NOx and CO emissions and establish the ranges of gas producer speed within which the two turbines can operate in compliance with their emission limits.<sup>2</sup> **(R 336.2803, R 336.2804)**
2. To ensure continued compliance the permittee shall test each turbine for NOx and CO at least once every five-year period.<sup>2</sup> **(R 336.2803, R 336.2804)**
3. All testing, sampling, analytical and calibration procedures used for the NOx and CO test programs shall be performed in accordance with 40 CFR Part 60, Subpart GG and 40 CFR Part 60, Subpart A, Method 10 and Method 20 or other acceptable reference methods approved by the AQD.<sup>2</sup> **(R 336.2001, R 336.2003, R 336.2004)**
4. The permittee shall submit a complete test protocol to the AQD for approval at least 30 days prior to the anticipated test date. The protocol shall include the process information in Appendix 8 of the ROP.<sup>2</sup> **(R 336.2001, R 336.2003, R 336.2004)**

## **VI. MONITORING/RECORDKEEPING**

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

1. For each turbine, the permittee shall monitor and record the following operating parameters and compile the data for each calendar month and 12-month rolling time period:<sup>2</sup> **(R 336.1205, R 336.1702, R 336.2803, R 336.2804)**
  - a. Hours of operation
  - b. Accumulated horsepower hours
  - c. Fuel consumption
2. The permittee shall monitor and record the following operating parameters on a daily basis:<sup>2</sup> **(R 336.1205, R 336.1702, R 336.2803, R 336.2804)**
  - a. Average horsepower levels
  - b. Average gas producer speed (%)

3. The permittee shall monitor and record the following operating parameters on an hourly basis:<sup>2</sup> **(R 336.1205, R 336.1702, R 336.2803, R 336.2804)**
  - a. Unit in or out of service
  - b. Gas producer speed (%)
  - c. Horsepower level
4. The permittee shall demonstrate, using one of the following sources of information, that the gaseous fuel burned in FGTUBRINES is natural gas, as defined in 40 CFR 60.331(u). These sources of information include:<sup>2</sup> **(40 CFR 60.334(h)(3))**
  - a. The gas quality characteristics in a current, valid purchase contract, tariff sheet, or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less, or
  - b. Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/scf. At a minimum, the amount of fuel sampling data specified in Section 2.3.1.4 or 2.3.2.4 or Appendix D of 40 CFR Part 75 is required.
5. The permittee shall calculate yearly emission rates for NO<sub>x</sub>, CO and VOC for each turbine and maintain such records.<sup>2</sup> **(R 336.1205, R 336.1702, R 336.2803, R 336.2804)**

**VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit a complete report of all test results, including the established operating range and specific parameters, to the District Supervisor, Air Quality Division, within 60 days following the last date of the test.<sup>2</sup> **(R 336.2001)**

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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVTURBINEC1-1	40 <sup>2</sup>	17 <sup>2</sup>	<b>R 336.2803 R 336.2804</b>
2. SVTURBINEC1-2	40 <sup>2</sup>	17 <sup>2</sup>	<b>R 336.2803 R 336.2804</b>

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall operate the turbines in accordance with the requirements of 40 CFR 60, Subparts A and GG, unless otherwise stated.<sup>2</sup> **(40 CFR 60 Subparts A and GG)**

2. The permittee shall maintain and implement a preventive maintenance plan (PMP), approvable by the AQD. The PMP shall identify the specific operating ranges of gas producer speed, which is established in accordance with Section V of FGTURBINES. The permittee shall implement the PMP, as referenced in the AQD files at the Warren District Office, for deviations from requirements contained in the section.<sup>2</sup> (**R 336.1205, R 336.1702, R 336.2803, R 336.2804**)

**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).

## **FGPIPEHEATERS-P3 FLEXIBLE GROUP CONDITIONS**

### **DESCRIPTION**

Two natural gas fired pipeline heaters, each one is rated at 15 MMBtu/hr.

**Emission Units:** EUPIPEHEATER3-1, EUPIPEHEATER3-2

### **POLLUTION CONTROL EQUIPMENT**

NA

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

NA

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

1. The permittee shall only burn natural gas, as defined in 40 CFR 72.2, in FGPIPEHEATERS-P3.<sup>2</sup> **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

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

1. At least 60 days prior to startup of any heater in FGPIPEHEATERS-P3, the permittee shall submit to the AQD District Supervisor, for review and approval, a preventative maintenance / malfunction abatement plan (PM / MAP) for each heater in FGPIPEHEATERS-P3. After approval of the PM / MAP by the AQD District Supervisor, the permittee shall not operate FGPIPEHEATERS-P3 unless the PM / MAP, or an alternate plan approved by the AQD District Supervisor, is implemented and maintained. The plan shall incorporate specific maintenance inspections, checks and procedures and the associated frequencies as recommended by the equipment manufacturer, as well as incorporating standard industry practices. At a minimum the plan shall include:
  - a. Identification of the equipment and, if applicable, air-cleaning device and the supervisory personnel responsible for overseeing the inspection, maintenance, and repair
  - b. Description of the items or conditions to be inspected and frequency of the inspections or repairs
  - c. Identification of the equipment and, if applicable, air-cleaning device, operating parameters that shall be monitored to detect a malfunction or failure, the normal operating range of these parameters and a description of the method of monitoring or surveillance procedures
  - d. Identification of the major replacement parts that shall be maintained in inventory for quick replacement
  - e. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits

If the plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the plan within 45 days after such an event occurs and submit the revised plan for approval to the AQD District Supervisor. Should the AQD determine the PM / MAP to be inadequate, the AQD District Supervisor may request modification of the plan to address those inadequacies.<sup>2</sup> **(R 336.1702, R 336.1910, R 336.1911, R 336.1912, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

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

1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the natural gas usage for each pipeline heater in FGPIPEHEATERS-P3 on a monthly basis.<sup>2</sup> **(40 CFR 60.48(c)(g)(2))**

**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, monthly natural gas usage records for FGPIPEHEATERS-P3, as required by SC IV.1. The permittee shall keep all records on file at the facility and make them available to the Department upon request.<sup>2</sup> **(40 CFR Part 60 Subpart Dc)**
2. The permittee shall monitor emissions and operating information for each heater in FGPIPEHEATERS-P3 in accordance with the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Dc.<sup>2</sup> **(40 CFR Part 60 Subparts A & Dc)**
3. The permittee shall keep records of emissions and operating information to comply with the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Dc.<sup>2</sup> **(40 CFR Part 60 Subparts A & Dc)**

**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 provide written notification of construction and operation to comply with the federal Standards of Performance for New Stationary Sources, 40 CFR 60.7. The permittee shall submit this notification to the AQD District Supervisor within the time frames specified in 40 CFR 60.7.<sup>2</sup> **(40 CFR 60.7)**
5. The permittee shall submit all notifications as required under 40 CFR 60.48c, as applicable to FGPIPEHEATERS-P3.<sup>2</sup> **(40 CFR Part 60 Subpart Dc)**

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 Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVPIPEHTR3-1	43* <sup>2</sup>	36 <sup>2</sup>	R 336.1225, 40 CFR 52.21 (c) & (d)
2. SVPIPEHTR3-2	43* <sup>2</sup>	36 <sup>2</sup>	R 336.1225, 40 CFR 52.21 (c) & (d)

\* Alternatively, each pipeline heater may be equipped with two stacks. If this option is chosen, the maximum exhaust dimension for each individual stack shall not exceed 30”.

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subparts A and Dc, as they apply to each heater in FGPIPEHEATERS-P3.<sup>2</sup> **(40 CFR Part 60 Subparts A & Dc)**

**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).

## **FGWESTDRHTRS-P1 FLEXIBLE GROUP CONDITIONS**

### **DESCRIPTION**

Two natural gas fired pipeline heaters, each one is rated at 5 MMBtu/hr.

**Emission Units:** EUPIPEHEATER1-1, EUPIPEHEATER1-2

### **POLLUTION CONTROL EQUIPMENT**

NA

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

NA

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

1. The permittee shall only burn natural gas, as defined in 40 CFR 72.2, in FGWESTDRHTRS-P1.<sup>2</sup> **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

### **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))**

NA

### **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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVPIPEHTR1-1	30 <sup>2</sup>	15 <sup>2</sup>	R 336.1225, 40 CFR 52.21 (c) & (d)
2. SVPIPEHTR1-2	30 <sup>2</sup>	15 <sup>2</sup>	R 336.1225, 40 CFR 52.21 (c) & (d)

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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

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

## **FGCOLDCLEANERS FLEXIBLE GROUP CONDITIONS**

### **DESCRIPTION**

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

**Emission Units:** EUPARTSCLEANER, 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(2)(h))**
  - b. The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment. **(R 336.1285(2)(r)(iv))**
2. The cold cleaner shall be equipped with a device for draining cleaned parts. **(R 336.1611(2)(b), R 336.1707(3)(b))**
3. All new and existing cold cleaners shall be equipped with a cover and the cover shall be closed whenever parts are not being handled in the cold cleaner. **(R 336.1611(2)(a), R 336.1707(3)(a))**
4. The cover of a new cold cleaner shall be mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia or if the solvent is agitated or heated. **(R 336.1707(3)(a))**
5. If the Reid vapor pressure of any solvent used in a new cold cleaner is greater than 0.6 psia; or, if any solvent used in a new cold cleaner is heated above 120 degrees Fahrenheit, then the cold cleaner must comply with at least one of the following provisions:

- a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7. **(R 336.1707(2)(a))**
- b. The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0. **(R 336.1707(2)(b))**
- c. The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. **(R 336.1707(2)(c))**

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

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

NA

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

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

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

#### **VII. REPORTING**

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

See Appendix 8

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

NA

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

NA

**FGRULE285(2)(mm)**  
**FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 285(2)(mm).

**Emission Unit:** EURULE285(2)(mm)

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

NA

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

1. For venting of natural gas for routine maintenance or relocation of transmission and distribution systems in amounts greater than 1,000,000 standard cubic feet, the permittee shall, at a minimum, implement measures to assure safety of employees and the public and minimize impacts to the environment. **(R 336.1285(2)(mm)(ii)(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))**

NA

**VI. MONITORING/RECORDKEEPING**

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

NA

**VII. REPORTING**

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

4. For venting of natural gas for routine maintenance or relocation of transmission and distribution systems in amounts greater than 1,000,000 standard cubic feet, the permittee shall notify the AQD District Supervisor prior to a scheduled pipeline venting. **(R 336.1285(2)(mm)(ii)(A))**
5. For venting of natural gas for routine maintenance or relocation of transmission and distribution systems in amounts greater than 1,000,000 standard cubic feet, the permittee shall provide necessary notification in accordance with the Michigan gas safety standards, the federal pipeline and hazardous materials safety administration standards, and the federal energy regulatory commission standards, as applicable. The permittee is not required to copy the AQD on the notifications. **(R 336.1285(2)(mm)(ii)(B))**
6. For emergency venting of natural gas in amounts greater than 1,000,000 standard cubic feet per event, the permittee shall notify the pollution emergency alert system (PEAS) within 24 hours of an emergency pipeline venting. For purposes of this requirement, an emergency is considered an unforeseen event that disrupts normal operating conditions and poses a threat to human life, health, property, or the environment if not controlled immediately. **(R 336.1285(2)(mm)(iv))**

**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).

## **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**

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-B6637-2015. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (\*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-B6637-2015a is being reissued as Source-Wide PTI No. MI-PTI-B6637-2021.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
178-17	201900043	Revised PTI 178-17 (dated January 3, 2019) is to replace PTI 178-17 dated April 2, 2018 that is covered in Minor Modification 201800094. These two applications will be processed together, since the revised PTI was to correct UAR errors. Remove EUGLYCDEHY since it has been dismantled as of 6/22/18.	FGTURBINES
106-14	201800095	Incorporate PTI 106-14 into the ROP, which covers the installation of 4 nat. gas-fired RICEs, 2 glycol dehydrators, and 4 pipeline heaters, a nat. gas fired boiler, a nat. gas fuel gas heater, and an emergency generator.	EUEMERGEN3-1, EUBOILER3-1, EUGASHEATER3-1, FGDEHY, FGENGINES-P2, FGENGINES-P3, FGPIPEHEATERS-P3, FGWESTDRHTRS-P1, FGTANKS

## **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**

The permittee shall use the following approved formats and procedures for the reporting requirements referenced in FGTURBINES, SC VII. 4. Alternative formats must be approved by the AQD District Supervisor.

For FGTURBINES a complete test report shall contain a minimum of the following process information:

1. Ambient temperature
2. Barometric pressure
3. Fuel flow
4. Fuel pressure
5. Suction pressure
6. Discharge pressure
7. Horsepower
8. Gas producer speed
9. Power turbine speed