

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

EFFECTIVE DATE: December 22, 2020

ISSUED TO

**DTE Gas Company - Milford Compressor Station**

State Registration Number (SRN): B7221

LOCATED AT

3515 Childs Lake Road, Milford, Oakland County, Michigan 48381

**RENEWABLE OPERATING PERMIT**

Permit Number: MI-ROP-B7221-2020

Expiration Date: December 22, 2025

Administratively Complete ROP Renewal Application  
Due Between June 22, 2024 and June 22, 2025

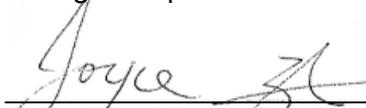
This Renewable Operating Permit (ROP) is issued in accordance with and subject to Section 5506(3) of Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (Act 451). Pursuant to Rule 210(1) of the administrative rules promulgated under Act 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-B7221-2020

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.

### 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<br>(Including Process Equipment & Control Device(s))  | Installation Date/<br>Modification Date | Flexible Group ID |
|------------------|---|---|-------------------|
| EU006            | DeLaval Model HVA-12 Compressor Engine #501, a 4375 horsepower natural gas fired reciprocating engine that drives a natural gas pipeline compressor.  | 01/01/1980                              | FGDELAVALS        |
| EU007            | DeLaval Model HVA-12 Compressor Engine #502, a 4375 horsepower natural gas fired reciprocating engine that drives a natural gas pipeline compressor.  | 01/01/1980                              | FGDELAVALS        |
| EU008            | DeLaval Model HVA-12 Compressor Engine #503, a 4375 horsepower natural gas fired reciprocating engine that drives a natural gas pipeline compressor.  | 01/01/1980                              | FGDELAVALS        |
| EU009            | DeLaval Model HVA-12 Compressor Engine #504, a 4375 horsepower natural gas fired reciprocating engine that drives a natural gas pipeline compressor.  | 01/01/1980                              | FGDELAVALS        |
| EUTURBINE1       | A nominally rated 10,504 HP (ISO), simple-cycle natural gas-fired combustion turbine (CT) for compressing natural gas. The CT is equipped with dry ultra-low NO <sub>x</sub> burners and a combustion air inlet filter. | 08/03/2018                              | FGTURBINES        |
| EUTURBINE2       | A nominally rated 10,504 HP (ISO), simple-cycle natural gas-fired combustion turbine (CT) for compressing natural gas. The CT is equipped with dry ultra-low NO <sub>x</sub> burners and a combustion air inlet filter. | 08/07/2018                              | FGTURBINES        |
| EUTURBINE3       | A nominally rated 10,504 HP (ISO), simple-cycle natural gas-fired combustion turbine (CT) for compressing natural gas. The CT is equipped with dry ultra-low NO <sub>x</sub> burners and a combustion air inlet filter. | 07/25/2018                              | FGTURBINES        |
| EUTURBINE4       | A nominally rated 10,504 HP (ISO), simple-cycle natural gas-fired combustion turbine (CT) for compressing natural gas. The CT is equipped with dry ultra-low NO <sub>x</sub> burners and a combustion air inlet filter. | TBD                                     | FGTURBINES        |

| Emission Unit ID | Emission Unit Description<br>(Including Process Equipment & Control Device(s))  | Installation Date/<br>Modification Date | Flexible Group ID              |
|------------------|---|---|--------------------------------|
| EUTURBINE5       | A nominally rated 10,504 HP (ISO), simple-cycle natural gas-fired combustion turbine (CT) for compressing natural gas. The CT is equipped with dry ultra-low NO <sub>x</sub> burners and a combustion air inlet filter.   | TBD                                     | FGTURBINES                     |
| EUCOLDCLNR       | Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 2009.  | 06/10/1994<br>07/01/2001                | FGCOLDCLEANERS                 |
| EUWAUKESHA       | Waukesha brand natural gas fired generator set, Model VHP5108G, used to supply electricity to the compressor building in the event power is lost from the grid.   | 06/10/1980                              | NA                             |
| EUOFFICEGENSET   | 81 HP natural gas fired emergency generator used to supply electricity to the office building and garage during power outages.  | 06/01/2013                              | NA                             |
| EUNEMGEN         | A nominally rated 1,300 electrical kilowatts (ekW) output emergency genset containing an 1,818 HP natural gas-fueled engine manufactured in 2011 or later. The engine is used to provide electrical power to the station and support equipment in the event power from the public utility grid system is lost. The engine is designed with low NO <sub>x</sub> technology (turbo charger and after cooler). The engine is subject to 40 CFR Part 60 Subpart JJJJ and 40 CFR Part 63 Subpart ZZZZ. | 12/01/2017                              | NA                             |
| EUCOMPBLDGBLR    | 2.51 MMBtu/hour natural gas fired boiler used to provide heat to the compressor and auxiliary buildings.  | 01/01/1980                              | FGNGBOILERMACT                 |
| EUAUXBOIL2A      | A natural gas-fired auxiliary boiler, rated at 3 MMBTU/hr, for heating purposes in Auxiliary Building 2. The auxiliary boiler is equipped with ultra-low NO <sub>x</sub> burners.   | 01/17/2018                              | FGAUXBOILERS<br>FGNGBOILERMACT |
| EUAUXBOIL3A      | A natural gas-fired auxiliary boiler, rated at 3 MMBTU/hr, for heating purposes in Auxiliary Building 3. The auxiliary boiler is equipped with ultra- low NO <sub>x</sub> burners.  | 01/17/2018                              | FGAUXBOILERS<br>FGNGBOILERMACT |
| EUAUXBOIL2B      | A natural gas-fired auxiliary boiler, rated at 3 MMBTU/hr, for heating purposes in Auxiliary Building 2. The auxiliary boiler is equipped with ultra-low NO <sub>x</sub> burners.   | 01/17/2018                              | FGAUXBOILERS<br>FGNGBOILERMACT |
| EUAUXBOIL3B      | A natural gas-fired auxiliary boiler, rated at 3 MMBTU/hr, for heating purposes in Auxiliary Building 3. The auxiliary boiler is equipped with ultra-low NO <sub>x</sub> burners.   | 01/17/2018                              | FGAUXBOILERS<br>FGNGBOILERMACT |
| EUAUXBOIL2C      | A natural gas-fired auxiliary boiler, rated at 1 MMBTU/hr, used as a fuel gas heater in Auxiliary Building 2. The auxiliary boiler is equipped with ultra-low NO <sub>x</sub> burners.  | 01/17/2018                              | FGAUXBOILERS<br>FGNGBOILERMACT |

| Emission Unit ID | Emission Unit Description<br>(Including Process Equipment & Control Device(s))   | Installation Date/<br>Modification Date | Flexible Group ID              |
|------------------|--|---|--------------------------------|
| EUAUXBOIL3C      | A natural gas-fired auxiliary boiler, rated at 1 MMBTU/hr, used as a fuel gas heater in Auxiliary Building 3. The auxiliary boiler is equipped with ultra-low NO <sub>x</sub> burners. | 01/17/2018                              | FGAUXBOILERS<br>FGNGBOILERMACT |
| EUHTR1           | A natural gas-fired auxiliary heater rated at 0.1 MMBTU/hr for comfort heating. The auxiliary heater is uncontrolled.  | 01/17/2018                              | FGAUXHEATING                   |
| EUHTR2           | A natural gas-fired auxiliary heater rated at 0.1 MMBTU/hr for comfort heating. The auxiliary heater is uncontrolled.  | 01/17/2018                              | FGAUXHEATING                   |
| EUHTR3           | A natural gas-fired auxiliary heater rated at 0.1 MMBTU/hr for comfort heating. The auxiliary heater is uncontrolled.  | 01/17/2018                              | FGAUXHEATING                   |
| EUHTR4           | A natural gas-fired auxiliary heater rated at 0.1 MMBTU/hr for comfort heating. The auxiliary heater is uncontrolled.  | 01/17/2018                              | FGAUXHEATING                   |
| EUWTRHTR         | A natural gas-fired water heater rated at 0.125 MMBTU/hr for water heating. The water heater is uncontrolled.  | 01/17/2018                              | FGAUXHEATING                   |
| EUFURNACE        | A natural gas-fired furnace rated at 0.2075 MMBTU/hr for comfort heating. The furnace is uncontrolled.   | 01/17/2018                              | FGAUXHEATING                   |
| EURULE285(mm)    | Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(mm).   | NA                                      | FGRULE285(mm)                  |

**EUWAUKESHA  
EMISSION UNIT CONDITIONS**

**DESCRIPTION**

An existing natural gas fired Waukesha Model VHP5108G internal combustion engine used to provide electricity to the compressor building in the event of a power outage. This engine is exempt from 40 CFR Part 63 Subpart ZZZZ per 63.6590(b)(3)(ii).

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

NA

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

1. The permittee shall only burn pipeline quality natural gas, as defined in 40 CFR 72.2 in EUWAUKESHA. **(R 336.1213(3)), (40 CFR 72.2)**

**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))**

**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).

**EUOFFICEGENSET  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

81 HP Natural gas fired emergency engine subject to the New Source Performance Standard for Spark Ignition Internal Combustion Engines promulgated in 40 CFR 60 Subpart JJJJ. The engine is used in emergencies to generate electricity for the office and the garage.

**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. HC + NOx <sup>a</sup> | 10 g/hp-hr  | Per horsepower hour, per engine | EUOFFICEGENSET | SC V                       | <b>40 CFR 60.4233(e) and 40CFR 60 Subpart JJJJ Table 1</b> |
| 2. CO                    | 387 g/hp-hr | Per horsepower hour, per engine | EUOFFICEGENSET | SC V                       | <b>40 CFR 60.4233(e) and 40CFR 60 Subpart JJJJ Table 1</b> |

<sup>a</sup> The emission standards applicable to emergency engines between 25 HP and 130 HP are in terms of NOX + HC.

**II. MATERIAL LIMIT(S)**

1. The permittee shall only fuel EUOFFICEGENSET with pipeline quality natural gas. **(40 CFR 60.4243(e))**

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

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

If the permittee does not operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, EUOFFICEGENSET will be considered to be operating as a non-certified engine and be subject to SC III.2. **(40 CFR 60.4243(a)(1) & (b)(1))**

2. If EUOFFICEGENSET is not operated and maintained in a certified manner as specified by 40 CFR 60, Subpart JJJJ, the permittee shall keep a maintenance plan for EUOFFICEGENSET and records of conducted maintenance and shall, to the extent practicable, maintain and operate EUOFFICEGENSET in a manner consistent with good air pollutant control practice for minimizing emissions, but no performance testing is required. **(40CFR60.4243(b)(1), 40 CFR 60.4243(a)(2)(i))**

3. The permittee shall operate and maintain EUOFFICEGENSET such that it meets the emission limit in SC I.1 and SC I.2 over the entire life of the engine. **(40 CFR 60.4234)**
4. The permittee may operate EUOFFICEGENSET for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. The permittee may operate EUOFFICEGENSET for up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply non-emergency power as part of a financial arrangement with another entity.<sup>2</sup> **(40 CFR 60.4243(d))**
5. There is no time limit on the use for EUOFFICEGENSET in emergency situations. **(40 CFR 60.4243(d)(1))**

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

1. The permittee shall install a non-resettable hour meter on the engine. **(40 CFR 60.4237)**

#### **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 and record the total hours of operation of the emergency engine on a yearly basis and document how many hours are spent for emergency operation, including what classified the operation as an emergency, and how many hours are spent for nonemergency situations. **(40 CFR 60.4245(b))**
2. The permittee shall maintain records of all maintenance conducted on the engine. **(40 CFR 60.4245(a))**
3. The permittee shall maintain a copy of the engine certification documentation from the manufacturer **(40 CFR 60.4245(a))**
4. The permittee shall keep, in a satisfactory manner, records the manufacturer's emission-related written instructions and records demonstrates that the engine has been maintained according to the manufacturer's emission related written instructions. **(40 CFR 60.4243(e))**

#### **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))**

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

NA

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of 40 CFR 60, Subpart JJJJ. **(R 336.1213(3), 40 CFR 60, Subpart JJJJ)**
2. The permittee shall comply with the applicable provisions of 40 CFR Part 63 Subpart ZZZZ but will satisfy those requirements by meeting the requirements of 40 CFR Part 60, Subpart JJJJ. **(40 CFR 63.6590(c)(6))**

**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).

**EUNEMGEN**  
**EMISSION UNIT CONDITIONS**

**DESCRIPTION**

A nominally rated 1,300 electrical kilowatts (ekW) output emergency genset containing an 1,818 HP natural gas-fueled engine manufactured in 2011 or later. The engine is used to provide electrical power to the station and support equipment in the event power from the public utility grid system is lost. The engine is designed with low NO<sub>x</sub> technology (turbo charger and after cooler). The engine is subject to 40 CFR Part 60 Subpart JJJJ and 40 CFR Part 63 Subpart ZZZZ.

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT**

Low NO<sub>x</sub> Design (Turbo Charger and After Cooler).

**I. EMISSION LIMIT(S)**

| Pollutant                   | Limit                                       | Time Period / Operating Scenario  | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements                               |
|-----------------------------|---|---|-----------|----------------------------|--|
| 1. NO <sub>x</sub>          | 4.0 pph <sup>2</sup>                        | Hourly  | EUNEMGEN  | SC V.2<br>SC VI.4          | R 336.1205(1)(a) & (b)<br>R 336.2803<br>R 336.2804<br>R 336.2810 |
| 2. NO <sub>x</sub>          | 2.0 g/HP-hr <sup>2</sup><br>OR<br>160 ppmvd | Hourly  | EUNEMGEN  | SC V.1<br>SC VI.2          | 40 CFR 60.4233(e)<br>Table 1 of 40 CFR Part 60<br>Subpart JJJJ   |
| 3. PM10                     | 0.01 lb/MMBTU <sup>2</sup>                  | Hourly  | EUNEMGEN  | SC V.2<br>SC VI.4          | R 336.1205(1)(a) & (b)<br>R 336.2803<br>R 336.2804<br>R 336.2810 |
| 4. PM2.5                    | 0.01 lb/MMBTU <sup>2</sup>                  | Hourly  | EUNEMGEN  | SC V.2<br>SC VI.4          | R 336.1205(1)(a) & (b)<br>R 336.2803<br>R 336.2804<br>R 336.2810 |
| 5. CO                       | 11.0 pph <sup>2</sup>                       | Hourly  | EUNEMGEN  | SC V.2<br>SC VI.4          | R 336.1205(1)(a) & (b)<br>R 336.2804<br>R 336.2810               |
| 6. CO                       | 4.0 g/HP-hr <sup>2</sup><br>OR<br>540 ppmvd | Hourly  | EUNEMGEN  | SC V.1<br>SC VI.2          | 40 CFR 60.4233(e)<br>Table 1 of 40 CFR Part 60<br>Subpart JJJJ   |
| 7. GHGs as CO <sub>2e</sub> | 247 tpy <sup>2</sup>                        | 12-month rolling time period as determined at the end of each calendar month. | EUNEMGEN  | SC VI.8                    | R 336.1205(1)(a) & (b)<br>40 CFR 52.21(j)                        |

| Pollutant           | Limit                                      | Time Period / Operating Scenario | Equipment | Monitoring/ Testing Method | Underlying Applicable Requirements   |
|---------------------|--|----------------------------------|-----------|----------------------------|--|
| 8. VOC <sup>A</sup> | 1.0 g/HP-hr <sup>2</sup><br>OR<br>86 ppmvd | Hourly                           | EUNEMGEN  | SC V.1<br>SC VI.2          | <b>R 336.1205(1)(a) &amp; (b)</b><br><b>R 336.1702(a)</b><br><b>40 CFR 60.4233(e)</b><br><b>Table 1 of 40 CFR Part 60 Subpart JJJJ</b> |

ppmvd = parts per million by volume at 15 percent oxygen and on a dry gas basis.

<sup>A</sup> Per footnote “d” of Table 1 of 40 CFR Part 60 Subpart JJJJ, when calculating emissions of VOCs, emissions of formaldehyde should not be included.

## II. MATERIAL LIMIT(S)

1. The permittee shall burn only pipeline quality natural gas in EUNEMGEN.<sup>2</sup> **(R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.4233)**

## III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUNEMGEN for more than 205 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month. The 205 hours includes the 100 hours as described in SC III.2.<sup>2</sup> **(R 336.1205(1)(a) & (b), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**
2. The permittee may operate EUNEMGEN for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the permittee maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. EUNEMGEN may operate up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply non-emergency power as part of a financial arrangement with another entity.<sup>2</sup> **(40 CFR 60.4243(d))**
3. The permittee shall operate and maintain EUNEMGEN such that it meets the emission limits in SC I.2, SC I.6, and SC I.8 over the entire life of the engine.<sup>2</sup> **(40 CFR 60.4234)**
4. If EUNEMGEN is a certified engine and operated in a certified manner, according to procedures specified in 40 CFR Part 60 Subpart JJJJ, for the same model year, the permittee shall meet the following requirements for EUNEMGEN:<sup>2</sup>
  - a. Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions.
  - b. Meet the requirements as specified in 40 CFR Part 1068 Subparts A through D, as applicable, including labeling and maintaining certified engines according to the manufacturer's recommendations; and
  - c. Only change those engine settings that are permitted by the manufacturer.

If the permittee does not operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, the engine will be considered to be operating as a non-certified engine and be subject to SC III.5.<sup>2</sup> **(40 CFR 60.4243(a) & (b)(1))**

5. If EUNEMGEN is a non-certified engine and control device or a certified engine operating in a non-certified manner, per 40 CFR Part 60 Subpart JJJJ, the permittee shall keep a maintenance plan for EUNEMGEN and shall, to the extent practicable, maintain and operate EUNEMGEN in a manner consistent with good air pollution control practice for minimizing emissions.<sup>2</sup> **(40 CFR 60.4243(a)(2) & (b)(2))**

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

1. The permittee shall equip and maintain EUNEMGEN with a non-resettable hours meter to track the operating hours.<sup>2</sup> **(R 336.1205(1)(a) & (b), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.4237(a))**
2. The EUNEMGEN nameplate capacity shall not exceed 1,300 kW for the genset or 1,818 HP for the engine, as certified by the equipment manufacturer.<sup>2</sup> **(R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.4330)**
3. The permittee shall install, calibrate, maintain and operate, in a satisfactory manner, a device to monitor and record the fuel usage for EUNEMGEN on a continuous basis.<sup>2</sup> **(R 336.1205(1)(a) & (b), 40 CFR 52.21(j))**

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

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

1. If EUNEMGEN is non-certified, or operated as a non-certified engine (not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer) the permittee must demonstrate compliance as follows:
  - a. Conduct an initial performance test to demonstrate compliance with the applicable emission standards in SC I.2, SC I.6, and SC I.8, within 60 days after achieving the maximum production rate at which EUNEMGEN will be operated, but not later than 180 days after initial startup of EUNEMGEN, or within one year after EUNEMGEN is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within one year after changing emission-related settings in a way that is not permitted by the manufacturer.
  - b. If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4244. Conduct subsequent performance testing every 8,760 hours of engine operation or every three years, whichever comes first, thereafter, to demonstrate compliance with the applicable emission standards.

If a performance test is required, no less than 30 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.<sup>2</sup> **(R 336.1205(1)(a) & (b), R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, R 336.2810, 40 CFR 60.8, 40 CFR 60.4243(a)(2)(iii) & (b)(2)(ii), 40 CFR 60.4244, 40 CFR 60.4245, 40 CFR Part 60 Subpart JJJJ)**

2. Upon request from the AQD District Supervisor, the permittee may be required to verify the NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> emission limits from EUNEMGEN 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 factors 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) & (b), R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, R 336.2810)**

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

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any

monitoring/recordkeeping special condition.<sup>2</sup> **(R 336.1205(1)(a) & (b), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.4243, 40 CFR 60.4245)**

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

The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> **(R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 60.4233(e), 40 CFR 60.4243, 40 CFR 60.4245(a))**

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

The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> **(40 CFR 60.4243, 40 CFR 60.4245(a), 40 CFR Part 60 Subpart JJJJ)**

4. The permittee shall keep, in a satisfactory manner, either vendor emissions guarantees for NO<sub>x</sub>, CO, PM<sub>10</sub>, and PM<sub>2.5</sub> or the testing required in SC V.2, for EUNEMGEN. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> **(R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810)**
5. The permittee shall monitor and record the total hours of operation and the hours of operation during non-emergencies for EUNEMGEN, on a monthly and 12-month rolling time period basis, in a manner acceptable to the District Supervisor, Air Quality Division. The permittee shall document how many hours are spent for emergency operation of EUNEMGEN, including what classified the operation as emergency and how many hours are spent for non-emergency operation.<sup>2</sup> **(R 336.1205(1)(a) & (b), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.4243, 40 CFR 60.4245(b))**
6. The permittee shall monitor and record, in a satisfactory manner, the natural gas usage for EUNEMGEN on a monthly basis. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> **(R 336.1205(1)(a) & (b), 40 CFR 52.21(j))**
7. The permittee shall keep records of all notifications submitted to comply with 40 CFR Part 60 Subpart JJJJ, and all documentation supporting any notification.<sup>2</sup> **(40 CFR 60.4245(a))**
8. The permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total CO<sub>2e</sub> mass emissions for EUNEMGEN, as required by SC I.7. The permittee shall keep all records on file and make them available to the Department upon request. The calculations shall be performed using the method included in Appendix A unless a new method is approved by the District Supervisor.<sup>2</sup> **(R 336.1205(1)(a) & (b), 40 CFR 52.21(j))**

## **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))**

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

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

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. SVNEMGEN                | 14 <sup>2</sup>                                       | 30.0 <sup>2</sup>                         | <b>R 336.1225<br/>R 336.2803<br/>R 336.2804</b> |

**IX. OTHER REQUIREMENT(S)**

- The permittee shall comply with the provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60 Subpart A and Subpart JJJJ, as they apply to EUNEMGEN.<sup>2</sup> **(40 CFR Part 60 Subparts A & JJJJ)**
- The permittee shall comply with the initial notification requirements 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 EUNEMGEN.<sup>2</sup> **(40 CFR Part 63 Subparts A & ZZZZ, 40 CFR 63.6590(b)(1)(i), 40 CFR 63.6645(f))**

**Footnotes:**

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

## 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  |
|-------------------|---|---|
| FGDELAVALS        | Four 4,375 horsepower natural gas fired reciprocating engines.  | EU006, EU007, EU008, EU009  |
| FGTURBINES        | Five natural gas-fired CTs to drive compressors that will be used to transport natural gas through pipelines. Each CT is equipped with dry ultra-low NO <sub>x</sub> burners and a combustion air inlet filter.   | EUTURBINE1<br>EUTURBINE2<br>EUTURBINE3<br>EUTURBINE4<br>EUTURBINE5                                      |
| FGCOLDCLEANERS    | Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 2009.                                      | EUCOLDCLNR  |
| FGAUXBOILERS      | Six natural gas-fired auxiliary boilers to provide heat in buildings and heat fuel gas for the station and support equipment.   | EUAUXBOIL2A<br>EUAUXBOIL3A<br>EUAUXBOIL2B<br>EUAUXBOIL3B<br>EUAUXBOIL2C<br>EUAUXBOIL3C                  |
| FGAUXHEATING      | Four heaters and a furnace for comfort heating and one water heater. These emission units are not subject to 40 CFR Part 63 Subpart DDDDD.  | EUHTR1, EUHTR2<br>EUHTR3, EUHTR4<br>EUWTRHTR<br>EUFURNACE   |
| FGNGBOILERMACT    | Gas 1 Fuel Subcategory requirements for existing and new boilers that have a heat input capacity of less than or equal to 5 MMBTU per hour (each) at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD. These new boilers must comply with this subpart upon startup. | EUAUXBOIL2A<br>EUAUXBOIL3A<br>EUAUXBOIL2B<br>EUAUXBOIL3B<br>EUAUXBOIL2C<br>EUAUXBOIL3C<br>EUCOMPBLDGBLR |
| FGRULE285(mm)     | Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant Rules 278 and Rule 285(mm).  | EURULE285(mm)   |

**FGDELAVALS  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Four (4) individual DeLaval Model HVA-12 Compressor Engines: each engine is a 4,375-horsepower natural gas fired reciprocating engine that drives a natural gas pipeline compressor. These engines are exempt from 40 CFR Part 63 Subpart ZZZZ per 63.6590(b)(3)(ii).

**Emission Units:** EU006, EU007, EU008, EU009

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

| Pollutant                   | Limit   | Time Period/<br>Operating Scenario   | Equipment  | Monitoring/<br>Testing Method   | Underlying<br>Applicable<br>Requirements |
|-----------------------------|---|--|--|---|--|
| 1. Non-methane Hydrocarbons | 49 tpy <sup>2</sup>                                   | 12-month rolling time period as determined at the end of each calendar month | FGDELAVALS   | The permittee shall conduct all testing methods in accordance with 40 CFR Part 60, Appendix A, or in any other methods as approved by the EGLE - AQD District Supervisor. | <b>40 CFR 52.21<br/>EPA-5-A-79-32</b>    |
| 2. Nitrogen Oxides (NOx)    | 11.5 gm/HP-hour at 100% speed and torque <sup>2</sup> | Hourly   | Each individual DeLaval reciprocating internal combustion engine | The permittee shall conduct all testing methods in accordance with 40 CFR Part 60, Appendix A, or in any other methods as approved by the EGLE - AQD District Supervisor. | <b>40 CFR 52.21<br/>EPA-5-A-79-32</b>    |
| 3. Carbon Monoxide (CO)     | 1.75 gm/HP-hour at 100% speed and torque <sup>2</sup> | Hourly   | Each individual DeLaval reciprocating internal combustion engine | The permittee shall conduct all testing methods in accordance with 40 CFR Part 60, Appendix A, or in any other methods as approved by the EGLE - AQD District Supervisor. | <b>40 CFR 52.21<br/>EPA-5-A-79-32</b>    |

**II. MATERIAL LIMIT(S)**

1. The permittee shall only fire pipeline quality natural gas in the engines.<sup>2</sup> (R 336.1201(3))

**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))**

1. The permittee shall conduct emission testing for non-methane hydrocarbons, nitrogen oxides, and carbon monoxide on each engine once per ROP renewal cycle. **(R 336.1213(3)(b))**
2. All test methods and procedures must be approved by the EGLE-AQD prior to testing. **(R 336.1213(3)(a))**
3. Not less than 30 days prior to the anticipated test date, the permittee shall provide written notification to the EGLE-AQD District Supervisor, of the actual test date. **(R 336.1213(3)(a))**
4. The permittee shall submit a complete written report to EGLE-AQD District Supervisor of the test results within 60 days from the last date of testing. **(R 336.1213(3)(c))**

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

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

1. The permittee shall monitor and record the following for each compressor engine on a monthly basis: **(R 336.1213(3))**
  - a. the fuel consumption
  - b. the operating hours
2. The permittee shall maintain yearly records of the fuel consumption and operating hours. **(R 336.1213(3))**
3. The permittee shall keep records of dates/schedules and types/nature of repairs and maintenance conducted on the engines. **(R 336.1213(3))**
4. The permittee shall calculate nitrogen oxides and carbon monoxide emissions for each engine using the appropriate emission factor formulated from the last required stack test approved by EGLE staff. Emissions shall be calculated using the formula found in Appendix 7. **(R 336.1213(3))**

**See Appendix 7**

#### **VII. REPORTING**

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

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

1. 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. SVCOMPRESSOR6 | 24 <sup>2</sup>                                | 49 <sup>2</sup>                    | <b>R 336.1201(3)</b>               |
| 2. SVCOMPRESSOR7 | 24 <sup>2</sup>                                | 49 <sup>2</sup>                    | <b>R 336.1201(3)</b>               |
| 3. SVCOMPRESSOR8 | 24 <sup>2</sup>                                | 49 <sup>2</sup>                    | <b>R 336.1201(3)</b>               |
| 4. SVCOMPRESSOR9 | 24 <sup>2</sup>                                | 49 <sup>2</sup>                    | <b>R 336.1201(3)</b>               |

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall use no more than four, 4,000 HP DeLaval natural gas-fired reciprocating internal combustion engines in FGDELAVALS.<sup>2</sup> **(40 CFR 52.21, EPA-5-A-79-32)**
2. The permittee shall not substitute the four DeLaval reciprocating combustion engines with any other type of engines without first going through the Permit New Source Review process. The use of the DeLaval engines, along with the NOx and CO emission limits in the Federal PSD Permit No. EPA-5-A-79-32, was BACT for no control at the time of PSD Permit issuance.<sup>2</sup> **(40 CFR 52.21, EPA-5-A-79-32)**
3. The permittee shall comply with all applicable sections of 40 CFR 52.21.<sup>2</sup> **(40 CFR 52.21)**

**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**

Five natural gas-fired CTs to drive compressors that will be used to transport natural gas through pipelines. Each CT is equipped with dry ultra-low NO<sub>x</sub> burners and a combustion air inlet filter.

**Emission Units:** EUTURBINE1, EUTURBINE2, EUTURBINE3, EUTURBINE4, EUTURBINE5

**POLLUTION CONTROL EQUIPMENT**

Dry ultra-low NO<sub>x</sub> burners

**I. EMISSION LIMIT(S)**

| Pollutant                       | Limit   | Time Period/<br>Operating<br>Scenario   | Equipment  | Monitoring/<br>Testing Method | Underlying<br>Applicable<br>Requirements   |
|---------------------------------|---|---|--|-------------------------------|--|
| 1. NO <sub>x</sub> <sup>B</sup> | 15 ppmvd <sup>2</sup><br>(each unit)          | Hourly  | EUTURBINE1<br>EUTURBINE2<br>EUTURBINE3<br>EUTURBINE4<br>EUTURBINE5 | SC V.1<br>SC V.2<br>SC VI.5   | <b>R 336.1205(1)(a) &amp; (b)</b><br><b>R 336.2803</b><br><b>R 336.2804</b><br><b>R 336.2810</b><br><b>40 CFR 60.4320(a)<sup>C</sup></b> |
| 2. NO <sub>x</sub> <sup>D</sup> | 150 ppmvd <sup>2</sup><br>(each unit)         | Hourly  | EUTURBINE1<br>EUTURBINE2<br>EUTURBINE3<br>EUTURBINE4<br>EUTURBINE5 | SC VI.5                       | <b>40 CFR 60.4320(a)</b>   |
| 3. PM10                         | 0.015<br>lb/MMBTU <sup>2</sup><br>(each unit) | Hourly  | EUTURBINE1<br>EUTURBINE2<br>EUTURBINE3<br>EUTURBINE4<br>EUTURBINE5 | SC V.3<br>SC VI.5             | <b>R 336.1205(1)(a) &amp; (b)</b><br><b>R 336.2803</b><br><b>R 336.2804</b><br><b>R 336.2810</b>   |
| 4. PM2.5                        | 0.015<br>lb/MMBTU <sup>2</sup><br>(each unit) | Hourly  | EUTURBINE1<br>EUTURBINE2<br>EUTURBINE3<br>EUTURBINE4<br>EUTURBINE5 | SC V.3<br>SC VI.5             | <b>R 336.1205(1)(a) &amp; (b)</b><br><b>R 336.2803</b><br><b>R 336.2804</b><br><b>R 336.2810</b>   |
| 5. CO <sup>B</sup>              | 25 ppmvd <sup>2</sup><br>(each unit)          | Hourly  | EUTURBINE1<br>EUTURBINE2<br>EUTURBINE3<br>EUTURBINE4<br>EUTURBINE5 | SC V.3<br>SC VI.5             | <b>R 336.1205(1)(a) &amp; (b)</b><br><b>R 336.2804</b><br><b>R 336.2810</b>  |
| 6. GHGs as<br>CO <sub>2</sub> e | 196998 tpy <sup>2</sup>                       | 12-month rolling<br>time period as<br>determined at the<br>end of each<br>calendar month. | FGTURBINES   | SC VI.3<br>SC VI.5            | <b>R 336.1205(1)(a) &amp; (b)</b><br><b>40 CFR 52.21(j)</b>  |

ppmvd = parts per million by volume at 15 percent oxygen and on a dry gas basis.

<sup>B</sup> Normal baseload operation is considered to be loads greater than 50 percent of peak load and at or above 0°F. These emission limits do not include startup and shutdown. Startup and shutdown is considered to be the ramping up or ramping down of the turbines through loads 50 percent or less. Restrictions can be found in SC III.2 through SC III.5.

<sup>c</sup> The emission limit as required in 40 CFR 60.4320(a) is 25 ppm at 15 percent O<sub>2</sub>. SC I.1 subsumes the NSPS emission limit.

<sup>d</sup> Per Table 1 of 40 CFR Part 60 Subpart KKKK: operating at less than 75 percent of peak load or at temperatures less than 0°F.

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

1. The permittee shall burn only pipeline quality natural gas in any unit in FGTURBINES.<sup>2</sup> **(R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.4320, 40 CFR 60.4330)**
2. The pipeline quality natural gas shall not have a total sulfur content in excess of 5.0 gr of sulfur per 100 scf.<sup>2</sup> **(R 336.1205(1)(a) & (b), 40 CFR 52.21(c) & (d), 40 CFR 60.4330, 40 CFR 60.4365)**

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

1. The permittee shall not operate any unit in FGTURBINES unless a MAP as described in Rule 911(2), has been submitted and is implemented and maintained. The MAP shall, at a minimum, specify the following:
  - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
  - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
  - c. 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.
  - d. An identification of the situations that may lead to the dry ultra-low NO<sub>x</sub> burners ceasing to operate, a description of the procedures that will be performed should that occur and how the situations will be minimized, and a description of how each situation will be recorded should it occur.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 90 days after such an event occurs. The permittee shall also amend the MAP within 90 days if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.<sup>2</sup> **(R 336.1910, R 336.1911, R 336.2803, R 336.2804)**

2. The permittee shall not operate any unit in FGTURBINES unless the AQD District Supervisor has approved a plan that describes how emissions will be minimized during startup and shutdown. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. Unless notified by the District Supervisor within 30 business days after plan submittal, the plan shall be deemed approved.<sup>2</sup> **(R 336.1911, R 336.1912, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.4333(a))**
3. The permittee shall not have a combined total of more than five total events (startup and shutdown combined) per clock hour for FGTURBINES.<sup>2</sup> **(R 336.2803, R 336.2804)**
4. The total startup events for FGTURBINES shall not exceed 500 startups per 12-month rolling time period as determined at the end of each calendar month.<sup>2</sup> **(R 336.1205(1)(a) & (b), R 336.2810, 40 CFR 52.21(j))**
5. The total shutdown events for FGTURBINES shall not exceed 500 shutdowns per 12-month rolling time period as determined at the end of each calendar month.<sup>2</sup> **(R 336.1205(1)(a) & (b), R 336.2810, 40 CFR 52.21(j))**

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

1. The maximum nominal rating of each unit in FGTURBINES shall not exceed 10,504 HP (ISO).<sup>2</sup> **(R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 228.2810, 40 CFR 52.21(j))**
2. The permittee shall not operate any unit in FGTURBINES unless its respective dry ultra-low NO<sub>x</sub> burners and combustion air inlet filters are installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each turbine within FGTURBINES in accordance with an approved MAP for FGTURBINES as required in SC III.1.<sup>2</sup> **(R 336.1205(1)(a) & (b), R 336.1910, R 336.2803, R 336.2804, R 336.2810)**
3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the natural gas flow rate for each turbine in FGTURBINES on a continuous basis.<sup>2</sup> **(R 336.1205(1)(a) & (b), 40 CFR 52.21(j))**

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

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

1. Within 60 days after achieving the maximum production rate, but not later than 180 days after commencement of initial startup, the permittee shall verify NO<sub>x</sub> emission rates from each unit in FGTURBINES, as required by federal Standards of Performance for New Stationary Sources, by testing at owner's expense, in accordance with 40 CFR 60.4400 of 40 CFR Part 60 Subparts A and KKKK. 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) & (b), R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, R 336.2810, 40 CFR 60.4375(b), 40 CFR 60.4400(a), 40 CFR Part 60 Subpart KKKK)**
2. To demonstrate continuous compliance, the permittee shall perform subsequent performance tests to verify NO<sub>x</sub> emission rates from each unit in FGTURBINES, as required by federal Standards of Performance for New Stationary Sources, by testing at owner's expense in accordance with 40 CFR 60.4400 of 40 CFR Part 60 Subparts A and KKKK:
  - a. If the previous performance test exceeded 75 percent of the NO<sub>x</sub> emission limit, SC I.1, then the permittee shall perform annual performance tests which are no more than 14 calendar months following the previous performance test.
  - b. If the previous performance test was less than or equal to 75 percent of the NO<sub>x</sub> emission limit, SC I.1, then the permittee shall perform subsequent performance tests once every two years which are no more than 26 calendar months following the previous performance test.

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) & (b), R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, R 336.2810, 40 CFR 60.4340(a), 40 CFR 60.4375(b), 40 CFR 60.4400(a), 40 CFR Part 60 Subpart KKKK)**

3. Within 180 days after commencement of initial startup, the permittee shall verify PM<sub>10</sub>, PM<sub>2.5</sub>, and CO emission rates from each unit in FGTURBINES at maximum routine operating conditions, by testing at owner's expense, in accordance with Department requirements. The permittee shall complete the required testing once every five years of operation, thereafter. Upon written approval of the AQD District Supervisor, subsequent testing may be conducted for a single unit of FGTURBINES as a representative unit. The permittee shall not test the same representative unit in subsequent tests unless approved or requested by the AQD District Supervisor. 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) & (b), R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, R 336.2810)

## **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.<sup>2</sup> (R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))
2. The permittee shall monitor and record, in a satisfactory manner, the natural gas usage for FGTURBINES on a monthly basis. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> (R 336.1205(1)(a) & (b), 40 CFR 52.21(j))
3. The permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total CO<sub>2e</sub> mass emissions for FGTURBINES, as required by SC I.6. The permittee shall keep all records on file and make them available to the Department upon request. The calculations shall be performed using the method included in Appendix 7 unless a new method is approved by the District Supervisor.<sup>2</sup> (R 336.1205(1)(a) & (b), 40 CFR 52.21(j))
4. The permittee shall keep, in a satisfactory manner, records of the number of events per clock hour and the monthly number of startup events and shutdown events for FGTURBINES to show compliance with SC III.3, SC III.4, and SC III.5. Records must be kept in a format acceptable to the AQD District Supervisor. The permittee shall calculate and keep, in a satisfactory manner, records of 12-month rolling startup events and shutdown events for FGTURBINES, as required by SC III.4 and SC III.5. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> (R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))
5. The permittee shall maintain records of all information necessary for all notifications and reports as well as that information necessary to demonstrate compliance with the emission limits of this permit for FGTURBINES. This information shall include, but shall not be limited to the following:
  - a. Compliance tests as required by SC V.1-3.
  - b. Monitoring data.
  - c. Total sulfur content of the natural gas as required by SC II.2.
  - d. Verification of the nominal rating in ISO HP as required by SC IV.1.
  - e. Identification, type, and amount of fuel combusted on a calendar month basis as required by SC VI.2.
  - f. All records required by 40 CFR 60.7, including the initial startup notification and performance tests.
  - g. Records of the number of all startup and shutdown events per turbine as required by SC III.3-5 and SC VI.4.
  - h. All calculations necessary to show compliance with the limits contained in this permit.
  - i. All records related to, or as required by, the MAP.

All of the above information shall be stored in a format acceptable to the AQD District Supervisor and shall be consistent with the requirements of 40 CFR 60.7.<sup>2</sup> (R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1702(a), R 336.1912, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j), 40 CFR 60.7, 40 CFR 60.4365(a), 40 CFR Part 60 Subpart KKKK)

## **VII. REPORTING**

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of each unit in FGTURBINES.<sup>2</sup> (R 336.1216(1)(a)(v), R 336.1201(7)(a))

2. The permittee shall provide written notification of the date construction commences and the actual date of initial startup of each unit in FGTURBINES, in accordance with 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(a))**
3. The permittee shall submit all notifications in 40 CFR 63.9(b) that apply by the dates specified. The Initial Notification shall be submitted no later than 120 calendar days after becoming subject to 40 CFR Part 63 Subpart YYYY.<sup>2</sup> **(40 CFR 63.6095(d), 40 CFR 63.6145)**

**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. SVTURBINE1              | 54 <sup>2</sup>                                       | 95.0 <sup>2</sup>                         | R 336.1225<br>R 336.2803<br>R 336.2804    |
| 2. SVTURBINE2              | 54 <sup>2</sup>                                       | 95.0 <sup>2</sup>                         | R 336.1225<br>R 336.2803<br>R 336.2804    |
| 3. SVTURBINE3              | 54 <sup>2</sup>                                       | 95.0 <sup>2</sup>                         | R 336.1225<br>R 336.2803<br>R 336.2804    |
| 4. SVTURBINE4              | 54 <sup>2</sup>                                       | 95.0 <sup>2</sup>                         | R 336.1225<br>R 336.2803<br>R 336.2804    |
| 5. SVTURBINE5              | 54 <sup>2</sup>                                       | 95.0 <sup>2</sup>                         | R 336.1225<br>R 336.2803<br>R 336.2804    |

**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 KKKK, as they apply to each unit in FGTURBINES.<sup>2</sup> **(40 CFR Part 60 Subparts A & KKKK)**
2. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63 Subparts A and YYYY, as they apply to each unit in FGTURBINES.<sup>2</sup> **(40 CFR Part 63 Subparts A & YYYY)**

**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).

## **FG-COLDCLEANERS FLEXIBLE GROUP CONDITIONS**

### **DESCRIPTION**

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

**Emission Unit:** EUCOLDCLNR

### **POLLUTION CONTROL EQUIPMENT**

NA

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

NA

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

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

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

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

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

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

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

## **V. TESTING/SAMPLING**

NA

## **VI. MONITORING/RECORDKEEPING**

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

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

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

NA

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

NA

## FGAUXBOILERS FLEXIBLE GROUP CONDITIONS

**DESCRIPTION**

Six natural gas-fired auxiliary boilers to provide heat in buildings and heat fuel gas for the station and support equipment.

**Emission Units:** EUAUXBOIL2A, EUAUXBOIL3A, EUAUXBOIL2B, EUAUXBOIL3B, EUAUXBOIL2C, EUAUXBOIL3C

**POLLUTION CONTROL EQUIPMENT**

Ultra-Low NO<sub>x</sub> burners.

**I. EMISSION LIMIT(S)**

| Pollutant                    | Limit   | Time Period/<br>Operating Scenario  | Equipment  | Monitoring/<br>Testing Method | Underlying Applicable Requirements                               |
|------------------------------|---|---|--|-------------------------------|--|
| 1. NO <sub>x</sub>           | 20 ppmvd <sup>2</sup> at 3% O <sub>2</sub><br>(each unit) | Hourly  | EUAUXBOIL2A<br>EUAUXBOIL3A<br>EUAUXBOIL2B<br>EUAUXBOIL3B                               | SC VI.4                       | R 336.1205(1)(a) & (b)<br>R 336.2803<br>R 336.2804<br>R 336.2810 |
| 2. NO <sub>x</sub>           | 9 ppmvd <sup>2</sup> at 3% O <sub>2</sub><br>(each unit)  | Hourly  | EUAUXBOIL2C<br>EUAUXBOIL3C   | SC VI.4                       | R 336.1205(1)(a) & (b)<br>R 336.2803<br>R 336.2804<br>R 336.2810 |
| 3. PM10                      | 0.52 lb/MMscf <sup>2</sup><br>(each unit)                 | Hourly  | EUAUXBOIL2A<br>EUAUXBOIL3A<br>EUAUXBOIL2B<br>EUAUXBOIL3B<br>EUAUXBOIL2C<br>EUAUXBOIL3C | SC VI.4                       | R 336.1205(1)(a) & (b)<br>R 336.2803<br>R 336.2804<br>R 336.2810 |
| 4. PM2.5                     | 0.52 lb/MMscf <sup>2</sup><br>(each unit)                 | Hourly  | EUAUXBOIL2A<br>EUAUXBOIL3A<br>EUAUXBOIL2B<br>EUAUXBOIL3B<br>EUAUXBOIL2C<br>EUAUXBOIL3C | SC VI.4                       | R 336.1205(1)(a) & (b)<br>R 336.2803<br>R 336.2804<br>R 336.2810 |
| 5. CO                        | 84 lb/MMscf <sup>2</sup><br>(each unit)                   | Hourly  | EUAUXBOIL2A<br>EUAUXBOIL3A<br>EUAUXBOIL2B<br>EUAUXBOIL3B<br>EUAUXBOIL2C<br>EUAUXBOIL3C | SC VI.4                       | R 336.1205(1)(a) & (b)<br>R 336.2804<br>R 336.2810               |
| 6. GHGs as CO <sub>2</sub> e | 7,324 tpy <sup>2</sup>                                    | 12-month rolling time period as determined at the end of each calendar month. | FGAUXBOILERS   | SC VI.3<br>SC VI.4            | R 336.1205(1)(a) & (b)<br>40 CFR 52.21(j)                        |

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

1. The permittee shall burn only pipeline quality natural gas in FGAUXBOILERS.<sup>2</sup> **(R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j)), 40 CFR 63.7499(l)**

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

NA

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

1. The maximum design heat input capacity for EUAUXBOIL2A, EUAUXBOIL3A, EUAUXBOIL2B, and EUAUXBOIL3B shall not exceed a maximum of 3 MMBTU per hour each, on a fuel heat input basis. The maximum design heat input capacity for EUAUXBOIL2C, EUAUXBOIL3C shall not exceed a maximum of 1 MMBTU per hour each, on a fuel heat input basis.<sup>2</sup> **(R 336.1205(1)(a) & (b), R 336.1225, R 336.2803, R 336.2804, R 228.2810, 40 CFR 52.21(j))**
2. The permittee shall not operate any unit in FGAUXBOILERS unless its respective ultra-low NOx burners are installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining the air pollution control equipment in accordance with SC III.1.<sup>2</sup> **(R 336.1205(1)(a) & (b), R 336.1910, R 336.2803, R 336.2804, R 228.2810)**
3. The permittee shall install, calibrate, maintain and operate, in a satisfactory manner, a device to monitor and record the natural gas flow rate for FGAUXBOILERS on a continuous basis.<sup>2</sup> **(R 336.1205(1)(a) & (b), 40 CFR 52.21(j))**

## **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 complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.<sup>2</sup> **(R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**
2. The permittee shall monitor and record, in a satisfactory manner, the natural gas usage for FGAUXBOILERS on a monthly basis. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> **(R 336.1205(1)(a) & (b), 40 CFR 52.21(j))**
3. The permittee shall calculate and keep, in a satisfactory manner, records of monthly and 12-month rolling total CO<sub>2e</sub> mass emissions for FGAUXBOILERS, as required by SC I.6. The permittee shall keep all records on file and make them available to the Department upon request. The calculations shall be performed using the method included in Appendix A unless a new method is approved by the District Supervisor.<sup>2</sup> **(R 336.1205(1)(a) & (b), 40 CFR 52.21(j))**
4. The permittee shall maintain records of all information necessary for all notifications and reports as specified in these special conditions as well as that information necessary to demonstrate compliance with the emission limits of this permit. This information shall include, but shall not be limited to the following:
  - a. Monitoring data.
  - b. Verification of heat input capacity required to show compliance with SC IV.1.
  - c. All calculations or documents necessary to show compliance with the limits contained in this permit.

The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup>  
**(R 336.1205(1)(a) & (b), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))**

**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))**

**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. SVAUXBOIL2A             | 8 <sup>2</sup>  | 30.0 <sup>2</sup>                         | R 336.1225<br>R 336.2803<br>R 336.2804    |
| 2. SVAUXBOIL3A             | 8 <sup>2</sup>  | 50.0 <sup>2</sup>                         | R 336.1225<br>R 336.2803<br>R 336.2804    |
| 3. SVAUXBOIL2B             | 8 <sup>2</sup>  | 30.0 <sup>2</sup>                         | R 336.1225<br>R 336.2803<br>R 336.2804    |
| 4. SVAUXBOIL3B             | 8 <sup>2</sup>  | 50.0 <sup>2</sup>                         | R 336.1225<br>R 336.2803<br>R 336.2804    |
| 5. SVAUXBOIL2C             | 6 <sup>2</sup>  | 30.0 <sup>2</sup>                         | R 336.1225<br>R 336.2803<br>R 336.2804    |
| 6. SVAUXBOIL3C             | 6 <sup>2</sup>  | 30.0 <sup>2</sup>                         | R 336.1225<br>R 336.2803<br>R 336.2804    |

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63 Subparts A and DDDDD, as they apply to each unit in FGAUXBOILERS.<sup>2</sup>  
**(40 CFR Part 63 Subparts A & DDDDD)**

**Footnotes:**

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

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

## **FGAUXHEATING FLEXIBLE GROUP CONDITIONS**

### **DESCRIPTION**

Four heaters and a furnace for comfort heating and one water heater. These emission units are not subject to 40 CFR Part 63 Subpart DDDDD.

**Emission Units:** EUHTR1, EUHTR2, EUHTR3, EUHTR4, EUWTRHTR, EUFURNACE

### **POLLUTION CONTROL EQUIPMENT**

NA

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

NA

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

1. The permittee shall burn only pipeline quality natural gas in FGAUXHEATING.<sup>2</sup> (R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))

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

NA

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

1. The maximum design heat input capacity for EUHTR1, EUHTR2, EUHTR3, and EUHTR4 shall not exceed 0.1 MMBTU per hour each, on a fuel heat input basis. The maximum design heat input capacity for EUWTRHTR shall not exceed 0.125 MMBTU per hour on a fuel heat input basis. The maximum design heat input capacity for EUFURNACE shall not exceed 0.2075 MMBTU per hour on a fuel heat input basis.<sup>2</sup> (R 336.1205(1)(a) & (b), R 336.1225, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(j))

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

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

NA

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

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

1. The permittee shall keep manufacturer documentation showing the maximum heat input for each unit in FGAUXHEATING.<sup>2</sup> (R 336.1205(1)(a)&(b), R 336.1225, R 336.2803, R 336.2804, R 228.2810, 40 CFR 52.21(j))

### **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))**

**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).

**FGNGBOILERMACT  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

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

**Emission Units:** EUAUXBOIL2A, EUAUXBOIL3A, EUAUXBOIL2B, EUAUXBOIL3B, EUAUXBOIL2C, EUAUXBOIL3C and EUCOMPBLDGBLR

|  |  |
|--|--|
| Equal to or less than 5 MMBTU/hr and only burns gaseous or light liquid fuels.   | New Units started on January 19, 2018: EUAUXBOIL2A, EUAUXBOIL3A, EUAUXBOIL2B, EUAUXBOIL3B, EUAUXBOIL2C, EUAUXBOIL3C<br>Existing Units: EUCOMPBLDGBLR |
| Greater than 5 MMBTU/hr and less than 10 MMBTU/hr that burns gaseous or light liquid fuels or any unit that is less than 10 MMBTU/hr and burns any heavy liquid or solid fuels | NA   |

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

1. The permittee shall only burn pipeline quality natural gas.<sup>2</sup> **(40 CFR 63.7499(I))**

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

1. The permittee must complete an initial tune-up as specified in SC III.3 by no later than February 19, 2023 for EUAUXBOIL2A, EUAUXBOIL3A, EUAUXBOIL2B, EUAUXBOIL3B, EUAUXBOIL2C, EUAUXBOIL3C. **(40 CFR 63.7510(e))**
2. The permittee must, for boilers or process heaters with a heat input capacity of less than or equal to 5 MMBTU/hr, conduct a five-year tune-up according to 40 CFR 63.7540(a)(12). Each five-year tune-up must be conducted no more than 61 months after the previous tune-up. The burner inspection may be delayed until the next scheduled or unscheduled unit shutdown, but each burner must be inspected at least once every 72 months. **(40 CFR 63.7500(d) or (e), 40 CFR 63.7515(d), 40 CFR 63.7540(a)(12), 40 CFR Part 63, Subpart DDDDD, Table 3.1)**
3. The permittee must conduct a tune-up of each boiler or process heater as specified in the following: **(40 CFR 63.7540(a)(11) or (12))**
  - a. As applicable, inspect the burner and clean or replace any components of the burner, as necessary. The permittee may perform the burner inspection any time prior to the tune-up or may delay the burner inspection until the next scheduled unit shutdown. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment. **(40 CFR 63.7540(a)(10)(i))**

- b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. **(40 CFR 63.7540(a)(10)(ii))**
  - c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. The permittee may delay the inspection until the next scheduled unit shutdown. **(40 CFR 63.7540(a)(10)(iii))**
  - d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO<sub>x</sub> requirement to which the unit is subject. **(40 CFR 63.7540(a)(10)(iv))**
  - e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. **(40 CFR 63.7540(a)(10)(v))**
4. If the unit is not operated on the required date for the tune-up, the tune-up must be conducted within 30 calendar days of startup. **(40 CFR 63.7540(a)(13))**
5. At all times, the permittee must operate and maintain each existing small boiler or process heater, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.7500(a)(3))**

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

NA

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

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

NA

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

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

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

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee must submit the first compliance report for new units and must cover the period beginning on January 19, 2018 and ending on December 31, 2023 for units equal to or less than 5 MMBTU/hr and only burn gaseous or light liquid fuels. The first five-year compliance report must be postmarked or submitted no later than March 15<sup>th</sup> following the end of the first reporting period. **(40 CFR 63.7550(b)(1), (2) and (5))**
5. The permittee must submit boiler or process heater tune-up compliance reports to the appropriate AQD District Office and must be postmarked or submitted by March 15<sup>th</sup> of the year following the applicable five-year period starting from January 1 of the year following the previous tune-up to December 31 (of the latest tune-up year). Compliance reports must also be submitted to EPA using the Compliance and Emissions Data Reporting Interface (CEDRI) which is accessed through the EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://www.epa.gov/cdx)). If the reporting form is not available in CEDRI at the time the compliance report is due, a hardcopy of the compliance report shall be submitted to EPA Region 5. **(40 CFR 63.7550(b), 40 CFR 63.7550(h)(3))**
6. The permittee must include the following information in the compliance report. **(40 CFR 63.7550(c)(1))**
  - a. Company and Facility name and address. **(40 CFR 63.7550(c)(5)(i))**
  - b. Process unit information, emissions limitations, and operating parameter limitations. **(40 CFR 63.7550(c)(5)(ii))**
  - c. Date of report and beginning and ending dates of the reporting period. **(40 CFR 63.7550(c)(5)(iii))**
  - d. Include the date of the most recent tune-up for each unit. Include the date of the most recent burner inspection if it was not done biennially or on a five-year period and was delayed until the next scheduled or unscheduled unit shutdown. **(40 CFR 63.7550(c)(5)(xiv))**
  - e. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. **(40 CFR 63.7550(c)(5)(xvii))**

See Appendix 8

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

NA

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

1. The permittee shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and DDDDD for Industrial, Commercial, and Institutional Boilers and Process Heaters. **(40 CFR Part 63, Subparts A and DDDDD)**

### **Footnotes:**

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

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

**FG-RULE 285(2)(mm)  
FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

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

**Emission Unit:** EURULE285(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, distribution systems and gathering pipelines 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) and R336.1285(2)(mm)(iii)(B))**

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

NA

**V. TESTING/SAMPLING**

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

1. If venting of natural gas in amounts greater than 1,000,000 SCF for routine maintenance or relocation of transmission and distribution system and gathering pipelines, the permittee shall notify the department prior to a scheduled pipeline vent. **(R 336.1285(2)(mm)(ii)(A) and R366.1285(2)(mm)(ii)(A))**
2. If emergency venting of natural gas or fluid gas in amount 7,000,000 SCF per event, the permittee shall notify the pollution emergency alert system within 24 hours of an emergency pipeline venting. Note: 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 the event immediately. **(R 366.1285(2)(mm)(iv))**

**VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall maintain records of the release events which includes the following:
  - a. The date and time of the release.
  - b. The reason for the release.
  - c. The amount of gas released.
  - d. The time and date, the department or pollution emergency alert system is notified.

## **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 (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(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 (mm)(iv))**

## **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/<br>department | Michigan Department of Environment,<br>Great Lakes, and Energy | gr                                    | Grains  |
| EGLE                      | Michigan Department of Environment,<br>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<br>microns in diameter  |
| NESHAP                    | National Emission Standard for Hazardous<br>Air Pollutants     | PM2.5                                 | Particulate Matter equal to or less than 2.5<br>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<br>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-B7221-2015. 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-B7221-2015 is being reissued as Source-Wide PTI No. MI-PTI-B7221-2020.

The following ROP amendments or modifications were issued after the effective date of ROP No. MI-ROP-B7221-2015.

| Permit to Install Number | ROP Revision Application Number | Description of Equipment or Change   | Corresponding Emission Unit(s) or Flexible Group(s)                       |
|--------------------------|---------------------------------|--|---|
| 185-15b                  | NA                              | Three 10,504 HP natural gas-fired combustion turbines, four 3 MMBTU/hr rated natural gas-fired auxiliary boiler, two 1 MMBTU/hr rated natural gas-fired auxiliary boilers, four 0.1 MMBTU/hr rated natural gas-fired auxiliary heaters, one 0.125 MMBTU/hr rated natural gas-fired water heater and one 0.2075 MMBTU/hr rated natural gas-fired furnace, and a | FGTURBINES<br>FGAUXBOILERS<br>FGNEWNGBOILMACT<br>FGAUXHEATING<br>EUNEMGEN |

|        |                        |   |  |
|--------|------------------------|---|--|
|        |                        | 1,300 electrical kilowatts (ekW) natural gas-fired emergency engine   |  |
| 209-16 | 201700034/May 15, 2017 | Incorporate PTI 209-16, which is to change language in FGDELAVALS SC I.1 and SC IX.1 to better represent the intent of the original permit and PSD review, since they do not alter the results of the PSD review, the PTI application did not trigger a PSD review. |  |

**Appendix 7. Emission Calculations**

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in FGDELAVAS.

**For EUNEMGEN:**

$$\text{CO}_2\text{e emissions (tons/month)} = [\text{Fuel Usage (MMscf/month)} \times \text{Higher Heating Value (MMBTU/MMscf)}] \times [\text{CO}_2 \text{ EF (kg/MMBTU)} \times \text{CO}_2 \text{ GWP} + \text{CH}_4 \text{ EF (kg/MMBTU)} \times \text{CH}_4 \text{ GWP} + \text{N}_2\text{O EF (kg/MMBTU)} \times \text{N}_2\text{O GWP}] \times 2.2046 \text{ lb/kg} \times 1/2000 \text{ (ton/lb)}$$

Where:

- Fuel Usage (gallons/month) = monthly fuel usage data
- Heat Content (MMBTU/gallons) = standard value in AP-42 for natural gas or supplier data, if available
- CO<sub>2</sub> EF (kg/MMBTU) = 84.866, related to the manufacturer specification sheet
- CH<sub>4</sub> EF (kg/MMBTU) = emission factors from 40 CFR Part 98, Subpart C, Table C-2 (January 1, 2014)
- N<sub>2</sub>O EF (kg/MMBTU) = emission factors from 40 CFR Part 98, Subpart C, Table C-2 (January 1, 2014)
- CO<sub>2</sub> GWP = global warming potential from 40 CFR Part 98, Subpart A, Table A-1 (January 1, 2014)
- CH<sub>4</sub> GWP = global warming potential from 40 CFR Part 98, Subpart A, Table A-1 (January 1, 2014)
- N<sub>2</sub>O GWP = global warming potential from 40 CFR Part 98, Subpart A, Table A-1 (January 1, 2014)

**For FGTURBINES and FGAUXBOILERS:**

$$\text{CO}_2\text{e emissions (tons/month)} = [\text{Fuel Usage (MMscf/month)} \times \text{Higher Heating Value (MMBTU/MMscf)}] \times [\text{CO}_2 \text{ EF (kg/MMBTU)} \times \text{CO}_2 \text{ GWP} + \text{CH}_4 \text{ EF (kg/MMBTU)} \times \text{CH}_4 \text{ GWP} + \text{N}_2\text{O EF (kg/MMBTU)} \times \text{N}_2\text{O GWP}] \times 2.2046 \text{ lb/kg} \times 1/2000 \text{ (ton/lb)}$$

Where:

- Fuel Usage (MMscf/month) = monthly fuel usage data from fuel flow meter
- Heat Content (MMBTU/MMscf) = standard value in AP-42 for natural gas or supplier data, if available
- CO<sub>2</sub> EF (kg/MMBTU) = emission factors from 40 CFR Part 98, Subpart C, Table C-1 (January 1, 2014)
- CH<sub>4</sub> EF (kg/MMBTU) = emission factors from 40 CFR Part 98, Subpart C, Table C-2 (January 1, 2014)
- N<sub>2</sub>O EF (kg/MMBTU) = emission factors from 40 CFR Part 98, Subpart C, Table C-2 (January 1, 2014)
- CO<sub>2</sub> GWP = global warming potential from 40 CFR Part 98, Subpart A, Table A-1 (January 1, 2014)
- CH<sub>4</sub> GWP = global warming potential from 40 CFR Part 98, Subpart A, Table A-1 (January 1, 2014)
- N<sub>2</sub>O GWP = global warming potential from 40 CFR Part 98, Subpart A, Table A-1 (January 1, 2014)

## **Appendix 8. Reporting**

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

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

### **B. Other Reporting**

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