

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

EFFECTIVE DATE: April 6, 2022

ISSUED TO

DTE Gas Company Willow Compressor Station

State Registration Number (SRN): N7421

LOCATED AT

3020 East Michigan Avenue, Ypsilanti, Washtenaw County, Michigan

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-N7421-2022

Expiration Date: April 6, 2027

Administratively Complete ROP Renewal Application
Due Between October 6, 2025 and October 6, 2026

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

SOURCE-WIDE PERMIT TO INSTALL

Permit Number: MI-PTI-N7421-2022

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

Scott Miller, Jackson 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).² **(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:"² **(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.¹ **(R 336.1901(a))**
 - b. Unreasonable interference with the comfortable enjoyment of life and property.¹ **(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).² **(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.² **(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.² **(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.² **(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.² **(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.² **(R 336.1201(4))**

Footnotes:

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

²This 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 (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUENGINE1	A 4,735 hp natural gas fired reciprocating engine with catalytic oxidation system, subject to 40 CFR Part 63, Subpart ZZZZ, and 40 CFR Part 60, Subpart JJJJ.	07-01-2009	FGENGMACT4Z-ENGINE1
EUTURBINE1	A nominally rated 7,700 HP (ISO), simple-cycle natural gas-fired combustion turbine (CT) with electric start for compressing natural gas.	07-10-2018	NA
EURICE1	A nominally rated 4SLB 2,500 HP natural gas fired reciprocating internal combustion engine with an oxidation catalyst for compressing gas.	04-25-2018	FGENGINES, FGENGMACT4Z-EURICE1-3
EURICE2	A nominally rated 4SLB 2,500 HP natural gas fired reciprocating internal combustion engine with an oxidation catalyst for compressing gas.	04-25-2018	FGENGINES, FGENGMACT4Z-EURICE1-3
EURICE3	A nominally rated 4SLB 5,000 HP natural gas fired reciprocating internal combustion engine with an oxidation catalyst for compressing gas.	04-25-2018	FGENGINES, FGENGMACT4Z-EURICE1-3
EUEMGRICE1	A nominally rated 1,818 HP natural gas-fueled emergency 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.	06-8-2018	NA
EUBOILER1	A nominally rated 3 MMBTU/hr natural gas fired boiler used for heating in the existing Auxiliary Building.	11-03-2017	FGNOX, FGBLRMACT-SM
EUBOILER2	A nominally rated 3 MMBTU/hr natural gas fired boiler used for heating in the existing Auxiliary Building.	11-03-2017	FGNOX, FGBLRMACT-SM
EUBOILER3	A nominally rated 3 MMBTU/hr natural gas fired boiler used for heating in the existing Auxiliary Building.	11-03-2017	FGNOX, FGBLRMACT-SM
EUBOILER4	A nominally rated 1.5 MMBTU/hr natural gas fired boiler used for heating in the existing Auxiliary Building.	09-15-2017	FGNOX, FGBLRMACT-SM

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUBOILER5	A nominally rated 3 MMBTU/hr natural gas fired boiler used for heating in the existing Auxiliary Building	11-03-2017	FGBLRMACT-SM
EUMODHTR1	A nominally rated 125,000 BTU/hr heat input natural gas indirect fired heater used for comfort heating in the new utility building.	11-18-2017	FGNOX
EUMODHTR2	A nominally rated 125,000 BTU/hr heat input natural gas indirect fired heater used for comfort heating in the new utility building.	11-18-2017	FGNOX
EUMODHTR3	A nominally rated 125,000 BTU/hr heat input natural gas indirect fired heater used for comfort heating in the new utility building.	11-18-2017	FGNOX
EUMODHTR4	A nominally rated 125,000 BTU/hr heat input natural gas indirect fired heater used for comfort heating in the new utility building.	11-18-2017	FGNOX
EUMODHTR5	A nominally rated 125,000 BTU/hr heat input natural gas indirect fired heater used for comfort heating in the new utility building.	11-18-2017	FGNOX
EUMODHTR6	A nominally rated 125,000 BTU/hr heat input natural gas indirect fired heater used for comfort heating in the new utility building.	11-18-2017	FGNOX
EUHWHEATER	A nominally rated 125,000 BTU/hr heat input natural gas hot water heater used for heating water in the office building.	11-2017	FGNOX
EUBARD	A nominally rated 75,000 BTU/hr heat input natural gas indirect fire heater used for comfort heating in the MCC building.	11-2017	FGNOX
EUFURNACE	A nominally rated 150,000 BTU/hr heat input natural gas indirect fired heater/AC unit used for comfort heating in the office building.	11-2017	FGNOX
EUILHTR1	A nominally rated 14 MMBTU/hr natural gas fired inline heater to be used for process heating. Located at the Willow Gate Station.	01-12-2017	FGNOX, FGBLRMACT-LG
EUILHTR2	A nominally rated 14 MMBTU/hr natural gas fired inline heater to be used for process heating. Located at the Willow Gate Station.	01-12-2017	FGNOX, FGBLRMACT-LG
EUILHTR3	A nominally rated 14 MMBTU/hr natural gas fired inline heater to be used for process heating. Located at the Willow Gate Station.	01-12-2017	FGNOX, FGBLRMACT-LG
EUILHTR4	A nominally rated 13 MMBTU/hr natural gas fired inline heater to be used for process heating. Located at the Willow Gate Station.	01-12-2017	FGNOX, FGBLRMACT-LG

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.

**EUENGINE1
 EMISSION UNIT CONDITIONS**

DESCRIPTION

A 4,735 hp natural gas fired reciprocating engine with catalytic oxidation system, subject to 40 CFR Part 63, Subpart ZZZZ, and 40 CFR Part 60, Subpart JJJJ.

Flexible Group ID: FGENGMACT4Z-ENGINE1

POLLUTION CONTROL EQUIPMENT

Catalytic oxidation system

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NO _x	41.2 tpy ²	12-month rolling time period as determined at the end of each calendar month.	EUENGINE1	SC.II.1, SC.VI.3, and Appendix 7	R 336.1205(3)
2. NO _x	9.4 lb/hr ^{2*} (0.9 g/hp-hr)	Hourly	EUENGINE1	SC.IV.2	40 CFR 52.21(c) & (d), R 336.2803, R 336.2804
3. NO _x	2.0g/hp-hr ^{2*(a)}	Hourly	EUENGINE1	SC.IV.2	40 CFR 60.4233(e) 40 CFR Part 60, Subpart JJJJ, Table 1
4. NO _x	160 ppmvd at 15% O ₂ ^(a)	Hourly	EUENGINE1	SC.IV.2	40 CFR 60.4233(e), 40 CFR Part 60, Subpart JJJJ, Table 1
5. CO	34.3 tpy ²	12-month rolling time period as determined at the end of each calendar month.	EUENGINE1	SC.II.1, SC.VI.3, and Appendix 7	R 336.1205(3)
6. CO	7.8 lb/hr* (2.5 g/Bhp-hr)	Hourly	EUENGINE1	SC.V.1	40 CFR 52.21(d), R 336.2803, R 336.2804
7. CO	4.0 g/hp-hr ^{2*(a)}	Hourly	EUENGINE1	SC.V.1	40 CFR 60.4233(e) 40 CFR Part 60, Subpart JJJJ, Table 1
8. CO	540 ppmvd at 15% O ₂ ^(a)	Hourly	EUENGINE1	SC.V.1	40 CFR 60.4233(e), 40 CFR Part 60, Subpart JJJJ, Table 1
9. VOC (including formaldehyde)	22.9 TPY ²	12-month rolling time period as determined at the end of each calendar month.	EUENGINE1	SC.II.1, SC.VI.3, and Appendix 7	R 336.1205(3)
10. VOC	1.0 g/hp-hr ^{2*(a)}	Hourly	EUENGINE1	SC.V.1	40 CFR 60.4233(e) 40 CFR Part 60, Subpart JJJJ, Table 1
11. VOC	86 ppmvd at 15% O ₂ ^(a)	Hourly	EUENGINE1	SC.V.1	40 CFR 60.4233(e), 40 CFR Part 60, Subpart JJJJ, Table 1

- * All limits are applicable at or within 10 percent of 100 percent speed, and 100 percent load operating conditions.
- a Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O₂. (Footnote (a) to 40 CFR Part 60, Subpart JJJJ, Table 1)
 - b For purposes of this subpart, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included. (Footnote (d) to 40 CFR Part 60, Subpart JJJJ, Table 1)

II. MATERIAL LIMIT(S)

1. The natural gas usage for EUENGINE1 shall not exceed 292,900,000 cubic feet per year based on a 12-month rolling time period as determined at the end of each calendar month.² **(R 336.1205, R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate any engine equipped with an add-on control device for more than 200 hours per engine without that control device consistent with the Startup, Shutdown, Malfunction Plan (SSM). The 200 hours shall include times such as after an engine change-out occurs and general maintenance performed as allowed by the SSM.² **(R 336.1205, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
2. The permittee shall not operate any engine that contains an add-on control device unless that device is installed, maintained, and operated in a satisfactory manner, except as specified in SC.III.1. Satisfactory operation includes performing the manufacturer's recommended maintenance on the control device and operating in conjunction with the SSM plan specified in SC.III.1.² **(R 336.1205, R 336.1702(a), R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall maintain and operate EUENGINE1 and control devices in accordance with the manufacturer's written instructions or procedures developed by the permittee.² **(40 CFR 60.4243(b)(2))**

V. TESTING/SAMPLING

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

1. The permittee shall verify NO_x, CO, and VOC emission rates from EUENGINE1, as required by federal Standards of Performance for New Stationary Sources, by testing at owner's expense, in accordance with 40 CFR Part 60, Subparts A and JJJJ. Stack testing procedures and the location of stack testing ports shall be in accordance with the applicable federal Reference Methods, 40 CFR Part 60, Appendix A. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. The permittee shall conduct subsequent performance testing every 8,760 hours or every three years to demonstrate compliance for NO_x, CO, and VOC.² **(40 CFR 60.4243(b)(2)(ii), 40 CFR 60.4244, 40 CFR 60.4245(d), R 336.1205, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

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 and make them available by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition.² **(R 336.1205, R 336.1702(a), R 336.1901)**
2. The permittee shall monitor, in a satisfactory manner, the natural gas usage for EUENGINE1 on a continuous basis.² **(R 336.1205, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
3. The permittee shall maintain the annual emission estimates of CO, NOx, and VOC's for a period of at least five years (unless otherwise noted above), be kept in a format acceptable to the Air Quality Division and shall be made available to the Air Quality Division upon request.² **(40 CFR 60.4243(b))**
4. The permittee shall maintain records of all maintenance activities conducted according to the SSM. The permittee shall keep these records on file at the facility for a period of at least five years and make them available to the Department upon request.² **(R 336.1205, R 336.1702(a), R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
5. The permittee shall keep, in a satisfactory manner, for any engine equipped with an add-on control device, monthly and 12-month rolling time period records of the hours that the engine is operated without the control device. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request.² **(R 336.1205, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
6. The permittee shall keep, in a satisfactory manner, monthly fuel use records for EUENGINE1, as required by SC.VI.2. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request.² **(R 336.1205, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
7. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period NOx, CO, and VOC emission calculation records for EUENGINE1, as required by special conditions SC.I.1, SC.I.4, SC.I.7 and Appendix 7. The permittee shall keep all records on file at the facility for a period of at least five years and make them available to the Department upon request.² **(R 336.1205, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
8. The permittee shall keep records of the following information for a non-certified engine:² **(40 CFR 60.4243(b)(2)(ii), 40 CFR 60.4245(a))**
 - a. All notifications submitted to comply with 40 CFR Part 60, Subpart JJJJ and all documentation supporting any notification.
 - b. Maintenance conducted on the engine; and,
 - c. Documentation that the engine meets the emission standards stated in SC.I.3, SC.I.6, and SC.I.8.

See Appendix 7

VII. REPORTING

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

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVENGINE1	32 ²	63 ²	R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the New Source Performance Standards, as specified in 40 CFR Part 60, Subparts A and JJJJ for Stationary Spark Ignition Internal Combustion Engines.² **(40 CFR Part 60, Subparts A and JJJJ, 40 CFR 60.4230)**

Footnotes:

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

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

**EUTURBINE1
 EMISSION UNIT CONDITIONS**

DESCRIPTION

A nominally rated 7,700 HP (ISO), simple-cycle natural gas-fired combustion turbine (CT) with electric start for compressing natural gas.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Dry ultra-low NOx burners and a combustion air inlet filter.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NO _x	15 ppmvd ^{2,a, b}	Hourly	EUTURBINE1	SC V.1, V.2, VI.2	R 336.1205(1)(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4320(a)
2. NO _x	150 ppmvd ^{2,c}	Hourly	EUTURBINE1	SC V.1, VI.2	40 CFR 60.4320(a)
3. CO	25 ppmvd ^{2,b}	Hourly	EUTURBINE1	SC V.3, VI.2	R 336.1205(1)(a)

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

^a The emission limit as required in 40 CFR 60.4320(a) is 25 ppm at 15 percent O₂. SC I.1 subsumes the NSPS emission limit.

^b 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.

^c Per Table 1 of 40 CFR Part 60, Subpart KKKK: operating at less than 75 percent of peak load and at temperatures less than 0°F.

II. MATERIAL LIMIT(S)

1. The permittee shall burn only pipeline quality natural gas in EUTURBINE1.² (R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4320, 40 CFR 60.4330)
2. The pipeline quality natural gas shall not have a total sulfur content in excess of 20 gr of sulfur per 100 scf.² (R 336.1205(1)(a), 40 CFR 60.4330, 40 CFR 60.4365)

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUTURBINE1 unless a malfunction abatement plan (MAP) as described in Rule 911(2), has been submitted and is implemented and maintained. If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs 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.² (R 336.1225, R 336.1702(a), R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The maximum nominal rating of EUTURBINE1 shall not exceed 7,700 HP (ISO).² **(R 336.1205(1)(a), 40 CFR 52.21(c) & (d))**
2. The permittee shall equip and maintain EUTURBINE1 with a low-NOx burner.² **(R 336.1205(1)(a), R 336.1910, 40 CFR 52.21(c) & (d))**
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 EUTURBINE1 on a continuous basis.² **(R 336.1205(1)(a))**

V. TESTING/SAMPLING

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

1. To demonstrate continuous compliance, the permittee shall perform subsequent performance tests to verify NO_x emission rates from EUTURBINE1, as required by federal Standards of Performance for New Stationary Sources, by testing at owner's expense in accordance with 40 CFR Part 60, Subparts A and KKKK:
 - a. If the previous performance test exceeded 75 percent of the NO_x emission limit, SC I.1, then the permittee shall perform annual performance tests which are no more than 14 calendar months apart.
 - b. If the previous performance test was less than or equal to 75 percent of the NO_x 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 apart.

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.² **(R 336.1205(1)(a), R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d), 40 CFR 60.4340(a), 40 CFR 60.4375(b), 40 CFR 60.4400(a))**

2. The permittee shall verify CO emission rates from EUTURBINE1 at maximum routine operating conditions, by testing at owner's expense, in accordance with Department requirements. The permittee shall complete subsequent compliance testing once every five years of operation, thereafter. 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.² **(R 336.1205(1)(a), R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**
3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

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, in a satisfactory manner, the natural gas usage for EUTURBINE1 on a monthly basis. The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(1)(a))**
2. 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 for EUTURBINE1. This information shall include, but shall not be limited to the following:
 - a. Compliance tests required by SC V.1-3.

- b. Monitoring data.
- c. Total sulfur content of the natural gas as required by SC II.2 of this section.
- d. Verification of the nominal rating in ISO HP.
- e. Amount of fuel combusted, on a calendar month basis.
- f. Records of the initial startup notification and performance tests.
- g. All records related to, or as required by, the MAP.
- h. All records necessary to demonstrate compliance with the requirements contained in this permit.

All of the above information shall be stored in a format acceptable to the AQD District Supervisor.² **(R 336.1205(1)(a) & (b), R 336.1224, R 336.1225, R 336.1702(a), R 336.1912, 40 CFR 52.21(c) & (d), 40 CFR Part 60, Subparts A and KKKK)**

VII. REPORTING

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

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVTURBINE1	60 ²	63 ²	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

- 1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and KKKK, as they apply to EUTURBINE1.² **(40 CFR Part 60, Subparts A & KKKK)**

Footnotes:

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

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

**EUEMGRICE1
 EMISSION UNIT CONDITIONS**

DESCRIPTION

A nominally rated 1,818 HP natural gas-fired emergency engine. The engine is used to provide electrical power to the station and support equipment in the event power is lost.

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. NO _x	2.0 pph ²	Hourly	EUEMGRICE1	SC V.2, VI.1, VI.2	R 336.1205(1)(a), 40 CFR 52.21(c) & (d)
2. NO _x	2.0 g/HP-hr ² OR 160 ppmvd ²	Hourly	EUEMGRICE1	SC V.1, VI.1, VI.2	40 CFR 60.4233(e), 40 CFR Part 60, Subpart JJJJ, Table 1
3. CO	4.0 g/HP-hr ² OR 540 ppmvd ²	Hourly	EUEMGRICE1	SC V.1, VI.1, VI.2	40 CFR 60.4233(e), 40 CFR Part 60, Subpart JJJJ, Table 1
4. VOC	1.0 g/HP-hr ^{2, a} OR 86 ppmvd ^{2, a}	Hourly	EUEMGRICE1	SC V.1, VI.1, VI.2	R 336.1205(1)(a), R 336.1702(a), 40 CFR 60.4233(e), 40 CFR Part 60, Subpart JJJJ, Table 1

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

^a For purpose of this emission limit, when calculating emissions of VOC, emissions of formaldehyde should not be included. (See Table 1 of 40 CFR Part 60, Subpart JJJJ.)

II. MATERIAL LIMIT(S)

- The permittee shall burn only pipeline quality natural gas in EUEMGRICE1.² (R 336.1205(1)(a), R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4233)

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall not operate EUEMGRICE1 for more than 500 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month. The 500 hours includes the 100 hours as described in SC III.2.² (R 336.1205(1)(a), R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))
- The permittee may operate EUEMGRICE1 for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The

permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year.² **(40 CFR 60.4243(d)(2))**

3. EUEMGRICE1 may operate up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing as described in SC III.2. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for the permittee to supply non-emergency power as part of a financial arrangement with another entity.² **(40 CFR 60.4243(d)(3))**
4. The permittee shall operate and maintain EUEMGRICE1 such that it meets the emission limits in SC I.2, I.3, and I.4 over the entire life of the engine.² **(40 CFR 60.4234, 40 CFR 60.4243(b))**
5. If EUEMGRICE1 is a non-certified engine or a certified engine operating in a non-certified manner, the permittee shall keep a maintenance plan for EUEMGRICE1 and shall, to the extent practicable, maintain and operate EUEMGRICE1 in a manner consistent with good air pollution control practice for minimizing emissions.² **(40 CFR 60.4243(b)(2))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain EUEMGRICE1 with a non-resettable hours meter to track the operating hours.² **(R 336.1205(1)(a), R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4237(a))**
2. The nameplate capacity of EUEMGRICE1 shall not exceed 1,300 kW (1,818 HP), as certified by the equipment manufacturer.² **(R 336.1205(1)(a) & (b), 40 CFR 52.21(c) & (d), 40 CFR 60.4230)**

V. TESTING/SAMPLING

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

1. If EUEMGRICE1 is a non-certified engine or a certified engine operating in a non-certified manner, the permittee must demonstrate compliance as follows:
 - a. Conduct an initial performance test to demonstrate compliance with the applicable emission limits in SC I.2–I.4 within 1 year after EUEMGRICE1 begins operating in a noncertified manner.
 - b. The performance tests shall be conducted according to 40 CFR 60.4244.
 - c. Subsequent performance testing shall be completed every 8,760 hours of engine operation or every 3 years, whichever comes first, to demonstrate compliance with the applicable emission limits.

No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test.² **(R 336.1205(1)(a), R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21 (c) & (d), 40 CFR 60.8, 40 CFR 60.4243, 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 NOx emission limit in SC I.1 from EUEMGRICE1 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.² **(R 336.1205(1)(a), R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**
3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall keep, in a satisfactory manner, the following records for EUEMGRICE1:
 - a. If operated in a certified manner: The permittee shall keep records of the documentation from the manufacturer that the EUEMGRICE1 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 in a non-certified manner: 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.² **(R 336.1205(1)(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4233(e), 40 CFR 60.4243, 40 CFR 60.4245(a))**

2. The permittee shall keep, in a satisfactory manner, the following records of maintenance activity for EUEMGRICE1:
 - a. If operated in a certified manner: The permittee shall keep the manufacturer's emission-related written instructions and records demonstrating that EUEMGRICE1 has been maintained according to them, as specified in SC III.5.
 - b. If operated in a non-certified manner: The permittee shall keep records of a maintenance plan, as required by SC III.6 and maintenance activities.

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

3. The permittee shall monitor and record the total hours of operation for EUEMGRICE1. The permittee shall document how many hours are spent for emergency operation of EUEMGRICE1 including what classified the operation as emergency.² **(R 336.1205(1)(a), R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4243, 40 CFR 60.4245(b))**
4. The permittee shall keep records of notifications submitted for the completion of construction and start-up of EUEMGRICE1.² **(40 CFR 60.4245(a))**

VII. REPORTING

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

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVEMGRICE1	18 ²	30 ²	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and JJJJ, as they apply to EUEMGRICE1.² (40 CFR Part 60, Subparts A & JJJJ)

Footnotes:

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

² 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
FGENGINES	Requirements for RICE subject to New Source Performance Standards (NSPS) for RICE, 40 CFR Part 60, Subpart JJJJ and NOx emission limit.	EURICE1, EURICE2, EURICE3
FGENGMACT4Z-EURICE1-3	Requirements for RICE subject to the National Emission Standards for Hazardous Air Pollutants 40 CFR Part 63, Subpart ZZZZ.	EURICE1, EURICE2, EURICE3
FGENGMACT4Z-ENGINE1	Requirements for RICE subject to the National Emission Standards for Hazardous Air Pollutants 40 CFR Part 63, Subpart ZZZZ.	EUENGINE1
FGNOX	Natural gas fired boilers and heaters subject to NOx limit.	EUBOILER1, EUBOILER2, EUBOILER3, EUBOILER4, EUMODHTR1, EUMODHTR2, EUMODHTR3, EUMODHTR4, EUMODHTR5, EUMODHTR6, EUILHTR1, EUILHTR2, EUILHTR3, EUILHTR4, EUHWHEATER, EUBARD, EUFURNACE
FGBLRMACT-SM	Boilers and process heaters subject to Industrial Boiler MACT (Gas 1 Fuel Subcategory requirements for new Boilers/Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD) with a heat input capacity of <10 MMBTU/hr.	EUBOILER1, EUBOILER2, EUBOILER3, EUBOILER4, EUBOILER5
FGBLRMACT-LG	Boilers and process heaters subject to Industrial Boiler MACT (Gas 1 Fuel Subcategory requirements for new Boilers/Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD) with a heat input capacity of 10 MMBTU/hr or greater.	EUILHTR1, EUILHTR2, EUILHTR3, EUILHTR4
FGRULE285(2)(mm)	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 285(2)(mm).	NA

**FGENGINES
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Three (3) non-emergency natural gas-fired reciprocating internal combustion engines (RICE) equipped with oxidation catalysts. The engines are used for compressing gas and are subject to 40 CFR Part 60, Subpart JJJJ and 40 CFR Part 63, Subpart ZZZZ.

Emission Units: EURICE1, EURICE2, EURICE3

POLLUTION CONTROL EQUIPMENT

Oxidation catalysts to control CO emissions.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NO _x	2.76 pph ² (limit applies to each engine)	Hourly	EURICE1, EURICE2	SC V.1	40 CFR 52.21(c) & (d), R 336.2803, R 336.2804
2. NO _x	5.51 pph ²	Hourly	EURICE3	SC V.1	40 CFR 52.21(c) & (d), R 336.2803, R 336.2804
3. NO _x	1.0 g/HP-hr or 82 ppmvd at 15% O ₂ ² (limits apply to each engine)	Hourly	EURICE1, EURICE2, EURICE3	SC V.2	40 CFR 60.4233(e), Table 1 to 40 CFR Part 60, Subpart JJJJ
4. VOC	0.7 g/HP-hr ^a or 60 ppmvd at 15% O ₂ ^{a2} (limits apply to each engine)	Hourly	EURICE1, EURICE2, EURICE3	SC V.2	40 CFR 60.4233(e), Table 1 to 40 CFR Part 60, Subpart JJJJ
5. CO	2.0 g/HP-hr ^b or 270 ppmvd at 15% O ₂ ^{b2} (limits apply to each engine)	Hourly	EURICE1, EURICE2, EURICE3	SC V.2	40 CFR 60.4233(e), Table 1 to 40 CFR Part 60, Subpart JJJJ

^a For purposes of this emission limit, when calculating emissions of VOC, emissions of formaldehyde should not be included. (See Table 1 to 40 CFR Part 60, Subpart JJJJ.)

^b Owners and operators of new or reconstructed non-emergency lean burn SI stationary engines with a site rating of greater than or equal to 250 brake HP located at a major source that are meeting the requirements of 40 CFR Part 63, Subpart ZZZZ, Table

2a do not have to comply with the CO emission standards of Table 1 of 40 CFR Part 60, Subpart JJJJ. (i.e. If the engine meets FGEMACT4Z-EURICE1-3, SC I.1, then it is in compliance with FGEMINES, SC I.5.)

II. MATERIAL LIMIT(S)

1. The permittee shall burn only pipeline quality natural gas in FGEMINES.² **(R 336.1205, R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 60.4233)**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate and maintain each engine included in FGEMINES such that it meets the emission limits in SC I.3 – I.5 over the entire life of the engine.² **(40 CFR 60.4234, 40 CFR 60.4243(b))**
2. If each engine is operated as a certified engine, according to procedures specified in 40 CFR Part 60, Subpart JJJJ, for the same model year, the permittee shall meet the following requirements for FGEMINES:
 - a. Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions,
 - b. Meet the requirements as specified in 40 CFR 1068 Subparts A through D, as applicable, including labeling and maintaining certified engines according to the manufacturer's recommendations,
 - c. Only change those engine settings that are permitted by the manufacturer.

If the permittee does not operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine and be subject to SC III.3.² **(40 CFR 60.4243(b)(1))**

3. If an engine of FGEMINES 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 that engine and shall, to the extent practicable, maintain and operate FGEMINES in a manner consistent with good air pollution control practice for minimizing emissions.² **(40 CFR 60.4243(b)(2))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The nameplate capacity of FGEMINES shall not exceed 2,500 HP for EURICE1 or EURICE2, and 5,000 HP for EURICE3, as certified by the equipment manufacturer.² **(R 336.1205, 40 CFR 60.4230)**

V. TESTING/SAMPLING

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

1. The permittee shall verify NO_x emission rates from each unit in FGEMINES 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 approval of the AQD District Supervisor, subsequent testing may be conducted for a single unit of FGEMINES 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.² **(R 336.1205(1)(a), R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**

2. For any engine included in FGENGINES that 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 must demonstrate compliance as follows:
 - a. Conduct an initial performance test to demonstrate compliance with the applicable emission limits in SC I-3-I.5, within 1 year after any engine in FGENGINES is no longer operated as a certified engine.
 - b. If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4244.
 - c. Conduct subsequent performance testing every 8,760 hours of engine operation or every 3 years, whichever comes first.

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.² **(R 336.1205, R 336.1702(a), R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d), 40 CFR 60.8, 40 CFR 60.4243, 40 CFR 60.4244, 40 CFR 60.4245, 40 CFR Part 60, Subpart JJJJ)**

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

VI. MONITORING/RECORDKEEPING

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

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

The permittee shall keep all records on file and make them available to the Department upon request.² **(R 336.1205(1)(a), 40 CFR 52.21(c) & (d), 40 CFR 60.4233(e), 40 CFR 60.4243, 40 CFR 60.4245(a))**

2. The permittee shall keep, in a satisfactory manner, the following records of maintenance activity for each engine included in FGENGINES:
 - a. If operated in a certified manner: The permittee shall keep the manufacturer's emission-related written instructions and records demonstrating that each engine has been maintained according to them, as specified in SC III.2.
 - b. If operated in a non-certified manner: The permittee shall keep records of a maintenance plan, as required by SC III.3 and maintenance activities.

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

3. The permittee shall keep records of notifications submitted for the completion of construction and start-up of each engine in FGENGINES.² **(40 CFR 60.4245(a))**

VII. REPORTING

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

2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**
5. Except as provided in R 336.1285, if any engine included in FGENGINES is replaced with an equivalent-emitting or lower-emitting engine, the permittee shall notify the AQD District Supervisor of such change-out and submit acceptable emissions data to show that the alternate engine is equivalent-emitting or lower-emitting. The data shall be submitted within 30-days of the engine change out.² **(R 336.1205, R 336.1702(a), R 336.1911, 40 CFR 52.21 (c) & (d))**

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVRICE1	24 ²	63 ²	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVRICE2	24 ²	63 ²	R 336.1225, 40 CFR 52.21(c) & (d)
3. SVRICE3	32 ²	63 ²	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the New Source Performance Standards as specified in 40 CFR Part 60, Subparts A and JJJJ, as they apply to any engine included in FGENGINES.² **(40 CFR Part 60, Subparts A and JJJJ)**

Footnotes:

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

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

**FGENGMACT4Z-EURICE1-3
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

New 4 SLB spark ignition RICE located at a Major Source of HAPs greater than 500 HP, non- emergency.

Emission Units: EURICE1, EURICE2, EURICE3

POLLUTION CONTROL EQUIPMENT

Oxidation catalyst to control CO

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. CO	≥93% reduction ^{a 2} (limit applies to each engine) OR Formaldehyde ≤14 ppmvd at 15% O ₂ ^{a 2} (limit applies to each engine)	Hourly	FGENGMACT4Z- EURICE1-3	SC V.1	40 CFR 63.6600(b) Table 2a

^a Emission limit is not applicable during start- up.

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate any engine of FGENGMACT4Z-EURICE1-3 unless the catalytic oxidation system is installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes the following: **(40 CFR 63.6600 (b), 40 CFR 63 Subpart ZZZZ Table 2b)**
 - a. Maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load +/- 10 percent from the pressure drop across the catalysts that was measured during the initial performance test; and
 - b. Maintain the temperature of the exhaust for the catalyst inlet temperature is greater than or equal to 450°F and less than or equal to 1350°F.²
2. The permittee shall operate each engine of FGENGMACT4Z-EURICE1-3 in compliance with the emission limitations and operating limitations. Each engine of FGENGMACT4Z-EURICE1-3, including associated air pollution control equipment and monitoring equipment, must be operated and maintained, in a manner consistent with safety and good air pollution control practices for minimizing emissions.² **(40 CFR 63.6605)**

3. The permittee shall minimize the time spent at idle during startup and minimize the startup time of each engine of FGEMACT4Z-EURICE1-3 to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission limits in SCI.1 apply. Deviations that occur during the first 200 hours of operation from initial startup of any engine of FGEMACT4Z-EURICE1-3 are not violations.² **(40 CFR 63.6625(h), 40 CFR 63.6640(d))**
4. The permittee must reestablish the values of the operating parameters measured during the initial performance test when a catalyst is changed for any engine of FGEMACT4Z-EURICE1-3. When the operating parameters are reestablished, the permittee must also conduct a performance test to demonstrate compliance with the emission limits in SC I.1 or SC I.2.² **(40 CFR 63.6640(b))**
5. For new, reconstructed and rebuilt RICE, deviation from the emissions or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn in period) are not violations.² **(40 CFR 63.6640(d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each engine of FGEMACT4Z-EURICE1-3 with a catalytic oxidation system.² **(40 CFR 63.6600 (b), Table 2b)**
2. The permittee shall install, calibrate, operate, and maintain each continuous parameter monitoring system (CPMS) (thermocouple) in continuous operation according to the procedures in your site-specific monitoring plan. Continuous operation means the CPMS (thermocouple) must collect data (catalyst inlet temperature) at least once every 15 minutes when any engine of FGEMACT4Z-EURICE1-3 is operating.² **(40 CFR 63.6625(b))**
3. For a CPMS measuring temperature range (thermocouple), the temperature sensor must have a minimum tolerance of 2.8°F or 1 percent of the measured range whichever is larger. The CPMS (thermocouple) must be verified according to the site-specific monitoring plan annually (calendar year).² **(40 CFR 63.6625(b))**
4. If the permittee elects to install a CEMS, the permittee shall install, operate, and maintain a CEMS to monitor CO and either O₂ or CO₂ according to the requirements in 40 CFR 63.6625(a). If the permittee is meeting a requirement to reduce CO emissions, the CEMS must be installed at both the inlet and the outlet of the control device. If the permittee is meeting a requirement to limit the concentration of CO, the CEMS must be installed at the outlet of the control device.² **(40 CFR 63.6625(a))**

V. TESTING/SAMPLING

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

1. The permittee shall verify the formaldehyde emission rates, from each engine included in FGEMACT4Z-EURICE1-3 or verify the catalytic system efficiency by utilizing CO emission rates as a surrogate, from each engine included in FGEMACT4Z-EURICE1-3, by testing at owner's expense, in accordance with Department requirements. Testing must be conducted at 100 percent speed and load ±10 percent. Initial testing shall be conducted within 180 days of start-up. Subsequent testing shall be conducted semiannually, until two consecutive semiannual passing events have been demonstrated. After two consecutive passing events, subsequent testing can be changed to annually. If fail annual test, revert to semiannual testing until two consecutive passing events. If a catalyst is changed for any engine in FGEMACT4Z-EURICE1-3 the permittee shall also conduct a performance test to demonstrate they are meeting the required emission limitations. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test.² **(R 336.2001, R 336.2003, R 336.2004, 40 CFR 63.6610(a), 40 CFR 63.6615, 40 CFR 63.6630(c) 40 CFR 63.6645(g) and (h))**

2. If any engine in FGENGMACT4Z-EURICE1-3 is subject to performance testing is not operating, the engine does not need to be started solely to conduct the performance test. The performance test can be conducted when the engine is started up again.² **(40 CFR 63.6620(b))**
3. When the catalyst is changed for any engine, the permittee shall, at the owner's expense and in accordance with Department requirements, reestablish the values of the operating parameters measured during the initial performance test and conduct a performance test to demonstrate the required emission limits are being met. Testing must be conducted at 100 percent speed and load ± 10 percent. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test.² **(R 336.2001, R 336.2003, R 336.2004, 40 CFR 63.6640(b))**
4. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

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 continuously monitor, at least once every 15 minutes, the catalyst inlet temperature at all times that any engine for FGENGMACT4Z-EURICE1-3 is operating except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. This monitoring data shall be kept on file at the facility and made available to the Department upon request.² **(40 CFR 63.6625(b)(3), 40 CFR 63.6635(b), 40 CFR 63.6660, Table 6 of 40 CFR Part 63, Subpart ZZZZ)**
2. The permittee shall not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. The permittee must, however, use all the valid data collected during all other periods.² **(40 CFR 63.6635(c))**
3. The permittee shall keep the following records for each engine in FGENGMACT4Z-EURICE1-3:
 - a. A copy of notification of commencement of construction and initial start-up notification.
 - b. Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or of the air pollution control and monitoring equipment.
 - c. Records of catalyst efficiency performance tests and performance evaluations.
 - d. Records of all required maintenance performed on the air pollution control and monitoring equipment.
 - e. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.These records shall be kept on file at the facility and made available to the Department upon request.² **(40 CFR 63.6605(b), 40 CFR 63.6655(a), 40 CFR 63.6660)**
4. The permittee shall maintain the following records for each CPMS on file at the facility and make available to the Department upon request:² **(40 CFR 63.6655(b) & 40 CFR 63.6660)**
 - a. Each period during which the CPMS malfunctioned or was inoperative (including out-of-control periods);
 - b. The catalyst inlet temperature measurements, including raw data and 4 hour rolling average;
 - c. Thermocouple calibration checks;

- d. Adjustments and maintenance performed on CPMS.
- 5. The permittee shall maintain the following records to demonstrate continuous compliance with the emission limits in SC I.1. These records shall be kept on file at the facility and made available to the Department upon request.² **(40 CFR 63.6655(d), 40 CFR 63.6660, Table 6 of 40 CFR Part 63, Subpart ZZZZ)**
 - a. Catalyst inlet temperature data reduced to 4-hour rolling averages; and
 - b. Pressure drop across the catalyst measured monthly.

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. A written stack test report of the average percent load determined during a performance test must be included in the notification of compliance status. The following information must be included in the written report:² **(40 CFR 63.6620(i))**
 - a. The engine model number,
 - b. The engine manufacturer,
 - c. The year of purchase,
 - d. The manufacturer's site-rated brake horsepower,
 - e. The ambient temperature, pressure, and humidity during the performance test.
 - f. The calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. All assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.
- 5. The permittee shall report each instance in which they did not meet each emission limitation in SC I.1 or operating limitation in SC III.1 except as allowed in SC III.5. These instances are deviations from the emission and operating limitations in 40 CFR Part 63, Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650 in the semiannual compliance report during the period in which they occurred.² **(40 CFR 63.6640(b) & (d))**
- 6. The permittee shall submit a first semiannual Compliance report which must cover the period beginning on the compliance date that is specified for the affected source in 40 CFR 63.6595 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the start-up. The first Compliance report must be postmarked or delivered no later than September 15 or March 15, whichever date follows the end of the first calendar half after the compliance date that is specified for the start-up date. Each subsequent Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from September 15 or March 15.² **(40 CFR 63.6650(b), Table 7 of 40 CFR Part 63, Subpart ZZZZ)**

7. The permittee shall include the following information in each semiannual Compliance report:² **(40 CFR 63.6650(c) & (e), 40 CFR 63.8(c)(8), 40 CFR 63.10(e)(3))**
- a. Company name and address.
 - b. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
 - c. Date of report and beginning and ending dates of the reporting period.
 - d. If a malfunction occurred during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction.
 - e. If there are no deviations from any emission or operating limitations, a statement that there were no deviations from the emission or operating limitations during the reporting period.
 - f. If there were no periods during which the CPMS was out-of-control, as specified in 40 CFR 63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.
 - g. If there was a deviation from an emission or operating limitation, the following information must be included.
 - i. The date and time that each malfunction started and stopped.
 - ii. The date, time, and duration that each CPMS was inoperative, except for zero (low-level) and high-level checks.
 - iii. The date, time, and duration that each CPMS was out-of-control, including the information required in the excess emissions and continuous monitoring system performance report.
 - iv. The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.
 - v. A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.
 - vi. A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
 - vii. A summary of the total duration of CPMS downtime during the reporting period, and the total duration of CPMS downtime as a percent of the total operating time of the stationary RICE at which the CPMS downtime occurred during that reporting period.
 - viii. An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.
 - ix. A brief description of the stationary RICE.
 - x. A brief description of the CPMS.
 - xi. The date of the latest CPMS certification or audit.
 - xii. A description of any changes in CPMS, processes, or controls since the last reporting period.
8. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and ZZZZ, as they apply to any engine included in FGENGMACT4Z-EURICE1-3.² **(40 CFR 63.6595, 40 CFR Part 63, Subparts A and ZZZZ)**

Footnotes:

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

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

**FGENGMACT4Z-ENGINE1
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

New spark ignition RICE located at a Major Source of HAPs greater than 500 HP, non-emergency.

Emission Unit: EUENGINE1

POLLUTION CONTROL EQUIPMENT

Catalytic oxidation system

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. CO	≥ 93% reduction ² (limit applies to each engine)	Hourly, excluding periods of startup and shutdown	Each engine in FGENGMACT4Z-ENGINE1	SC V.1	40 CFR 63.6600(b) Table 2a
-OR-					
2. Formaldehyde	≤14 ppmvd at 15% O ₂ ² (limit applies to each engine)	Hourly, excluding periods of startup and shutdown	Each engine in FGENGMACT4Z-ENGINE1	SC V.1	40 CFR 63.6600(b) Table 2a

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate any engine of FGENGMACT4Z-ENGINE1 unless the catalytic oxidation system is installed, maintained, and operated in a satisfactory manner, except as allowed in SC.III.5. Satisfactory manner includes the following:² **(40 CFR 63.6600 (b), Table 2b of 40 CFR Part 63, Subpart ZZZZ)**
 - a. Maintain your catalyst so that the pressure drop across the catalyst does not change by more than 2 inches of water at 100 percent load +/- 10 percent from the pressure drop across the catalysts that was measured during the initial performance test; and,
 - b. Maintain the temperature of the exhaust for the catalyst inlet temperature is greater than or equal to 450°F and less than or equal to 1350°F.

2. The permittee shall operate each engine of FGENGMACT4Z-ENGINE1 in compliance with the emission limitations and operating limitations. Each engine of FGENGMACT4Z-ENGINE1, including associated air pollution control equipment and monitoring equipment, must be operated and maintained, in a manner consistent with safety and good air pollution control practices for minimizing emissions.² **(40 CFR 63.6605)**

3. The permittee shall minimize the time spent at idle during startup and minimize the startup time of each engine of FGENGMACT4Z-ENGINE1 to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission limits in SC.I.1 apply.² **(40 CFR 63.6625(h))**
4. The permittee must reestablish the values of the operating parameters measured during the initial performance test when a catalyst is changed for any engine of FGENGMACT4Z-ENGINE1. When the operating parameters are reestablished, the permittee must also conduct a performance test to demonstrate compliance with the emission limits in SC I.1.² **(40 CFR 63.6640(b))**
5. For new, reconstructed and rebuilt RICE, deviation from the emissions or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn in period) are not violations.² **(40 CFR 63.6640(d))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each engine of FGENGMACT4Z-ENGINE1 with a catalytic oxidation system.² **(40 CFR 63.6600 (b), Table 2b)**
2. The permittee shall install, calibrate, operate, and maintain each Continuous Parameter Monitoring System (CPMS) (thermocouple), in continuous operation according to the procedures in a site-specific monitoring plan. The CPMS (thermocouple) must collect data at least once every 15 minutes when the associated engine of FGENGMACT4Z-ENGINE1 is operating.² **(40 CFR 63.6625(b))**
3. For a CPMS measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8°F or 1 percent of the measured range whichever is larger.² **(40 CFR 63.6625(b))**
4. The CPMS (thermocouple) must be verified according to the site-specific monitoring plan annually (calendar year).² **(40 CFR 63.6625(b)(5))**

V. TESTING/SAMPLING

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

1. The permittee shall verify the formaldehyde emission rates, from each engine included in FGENGMACT4Z-ENGINE1, or verify the catalytic system efficiency by utilizing CO emission rates as a surrogate, from each engine included in FGENGMACT4Z-ENGINE1, by testing at owner's expense, in accordance with Department requirements. Testing must be conducted at 100 percent speed and load ± 10 percent. Subsequent testing shall be conducted semiannually, until two consecutive semiannual passing events have been demonstrated. After two consecutive passing events, subsequent testing can be changed to annually. If the annual test failed, revert to semiannual testing until two consecutive passing events. The annual test fails if the results do not comply with the CO or formaldehyde emission limitation or deviate from any operating limitations (such as temperature or pressure) during a test. No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test.² **(40 CFR 63.6610(a), 40 CFR 63.6615, 40 CFR 63.6620(b), 40 CFR 63.6630, 40 CFR 63.6645(g) and (h))**
2. If any engine in FGENGMACT4Z-ENGINE1 subject to performance testing is not operating, the engine does not need to be started solely to conduct the performance test. The performance test can be conducted when the engine is started up again.² **(40 CFR 63.6620(b))**
3. If a catalyst is changed for any engine in FGENGMACT4Z-ENGINE1 the permittee shall conduct a performance test on that specific engine to demonstrate the emission limits are being met.² **(40 CFR 63.6640(b))**
4. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall continuously monitor, at least once every 15 minutes, the catalyst inlet temperature at all times that any engine for FGEMGMACT4Z-ENGINE1 is operating except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. This monitoring data shall be kept on file at the facility and made available to the Department upon request.² **(40 CFR 63.6625(b)(3), 40 CFR 63.6635(b), 40 CFR 63.6660, Table 6 of 40 CFR Part 63, Subpart ZZZZ)**
2. The permittee shall not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. The permittee must, however, use all the valid data collected during all other periods.² **(40 CFR 63.6635(c))**
3. The permittee shall keep the following records for each engine in FGEMGMACT4Z-ENGINE1:
 - a. Records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or of the air pollution control and monitoring equipment;
 - b. Records of catalyst efficiency performance tests and performance evaluations;
 - c. Records of all required maintenance performed on the air pollution control and monitoring equipment; and,
 - d. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

These records shall be kept on file at the facility and made available to the Department upon request.² **(40 CFR 63.6655(a))**

4. The permittee shall maintain the following records for each Continuous Monitoring System (CPMS) (thermocouple):
 - a. Each period during which the CPMS (thermocouple) malfunctioned or was inoperative (including out-of-control periods);
 - b. The catalyst inlet temperature measurements, including raw data and 4 hour rolling average;
 - c. Thermocouple calibration checks; and,
 - d. Adjustments and maintenance performed on CPMS.

These records shall be kept on file at the facility and made available to the Department upon request.² **(40 CFR 63.6655(b))**

5. The permittee shall maintain the following records to demonstrate continuous compliance with the emission limits in SC I.1:
 - a. Catalyst inlet temperature data reduced to 4-hour rolling averages; and
 - b. Pressure drop across the catalyst measured monthly.

These records shall be kept on file at the facility and made available to the Department upon request.² **40 CFR 63.6660, 40 CFR 63.6655(d), Table 6 of 40 CFR Part 63, Subpart ZZZZ)**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**
5. A written stack test report of the average percent load determined during a performance test must be included in the notification of compliance status. The following information must be included in the written report:² **(40 CFR 63.6620(i))**
 - a. The engine model number;
 - b. The engine manufacturer;
 - c. The year of purchase;
 - d. The manufacturer's site-rated brake horsepower;
 - e. The ambient temperature, pressure, and humidity during the performance test; and,
 - f. The calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. All assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided.
6. The permittee shall report each instance in which they did not meet each emission limitation in SC I.1 or operating limitation in SC III.1, except as allowed in SC III.5. These instances are deviations from the emission and operating limitations in 40 CFR Part 63, Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650 in the semiannual compliance report during the period in which they occurred. Deviations that occur during the first 200 hours of operation from initial startup of any engine of FGENGMACT4Z-ENGINE1 are not violations.² **(40 CFR 63.6640(b) & (d))**
7. Each Compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.² **(40 CFR 63.6650(b), Table 7 of 40 CFR Part 63, Subpart ZZZZ)**
8. The permittee shall include the following information in each Compliance report:² **(40 CFR 63.6650(c) & (e), 40 CFR 63.8(c)(8), 40 CFR 63.10(e)(3))**
 - a. Company name and address.
 - b. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
 - c. Date of report and beginning and ending dates of the reporting period.
 - d. If a malfunction occurred during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken during a malfunction of an affected source to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction.

- e. If there are no deviations from any emission or operating limitations, a statement that there were no deviations from the emission or operating limitations during the reporting period.
- f. If there were no periods during which the CPMS was out-of-control, as specified in 40 CFR 63.8(c)(7), a statement that there were no periods during which the CPMS was out-of-control during the reporting period.
- g. If there was a deviation from an emission or operating limitation, the following information must be included.
 - i. The date and time that each malfunction started and stopped.
 - ii. The date, time, and duration that each CPMS was inoperative, except for zero (low-level) and high-level checks.
 - iii. The date, time, and duration that each CPMS was out-of-control, including the information required in the excess emissions and continuous monitoring system performance report.
 - iv. The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period.
 - v. A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period.
 - vi. A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes.
 - vii. A summary of the total duration of CPMS downtime during the reporting period, and the total duration of CPMS downtime as a percent of the total operating time of the stationary RICE at which the CPMS downtime occurred during that reporting period.
 - viii. An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE.
 - ix. A brief description of the stationary RICE.
 - x. A brief description of the CPMS.
 - xi. The date of the latest CPMS certification or audit.
 - xii. A description of any changes in CPMS, processes, or controls since the last reporting period.

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

- 1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and ZZZZ, as they apply to any engine included in FGENGMACT4Z-ENGINE^{1,2} (**40 CFR 63.6595, 40 CFR Part 63, Subparts A and ZZZZ**)

Footnotes:

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

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

**FGNOX
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Boilers and heaters with NOx limits.

Emission Units: EUBOILER1, EUBOILER2, EUBOILER3, EUBOILER4, EUMODHTR1, EUMODHTR2, EUMODHTR3, EUMODHTR4, EUMODHTR5, EUMODHTR6, EUILHTR1, EUILHTR2, EUILHTR3, EUILHTR4, EUHWHEATER, EUBARD, EUFURNACE

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	27.1 tpy ^{a2}	12-month rolling time period as determined at the end of each month	FGNOX	SC VI.2	R 336.1205(3), 40 CFR 52.21(c) & (d)

^a This limit is based on NOx emission factors contained in the most recent AP-42 (Compilation of Air Pollutant Emission Factors) Table 1.4-1.

II. MATERIAL LIMIT(S)

1. The permittee shall burn only pipeline quality natural gas in FGNOX.² (R 336.1205(1)(a), R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner device(s) to monitor and record the natural gas flow rate for FGNOX on a continuous basis.² (R 336.1205(1)(a), R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))

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, in a satisfactory manner, the natural gas usage for FGNOX on a monthly time period basis. The permittee shall keep all records on file and make them available to the Department upon request.² (R 336.1205(1)(a), R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))

- The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period NO_x emission calculation records for FGNOX using the natural gas usage, as required by SC VI.1. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² (R 336.1205(1)(a), R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) & (d))

VII. REPORTING

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

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBOILER1, SVBOILER2 SVBOILER3	Shared Stack 20 ²	Shared Stack 42 ²	R 336.1225, 40 CFR 52.21(c) & (d)
2. SVBOILER4	6 ²	32 ²	R 336.1225, 40 CFR 52.21(c) & (d)
3. SVMODHTR1	12 ²	15 ²	R 336.1225, 40 CFR 52.21(c) & (d)
4. SVMODHTR2	12 ²	15 ²	R 336.1225, 40 CFR 52.21(c) & (d)
5. SVMODHTR3	12 ²	15 ²	R 336.1225, 40 CFR 52.21(c) & (d)
6. SVMODHTR4	12 ²	15 ²	R 336.1225, 40 CFR 52.21(c) & (d)
7. SVMODHTR5	12 ²	15 ²	R 336.1225, 40 CFR 52.21(c) & (d)
8. SVMODHTR6	12 ²	15 ²	R 336.1225, 40 CFR 52.21(c) & (d)
9. SVILHTR1	27.6 ²	26.8 ²	R 336.1225, 40 CFR 52.21(c) & (d)
10. SVILHTR2	27.6 ²	26.8 ²	R 336.1225, 40 CFR 52.21(c) & (d)
11. SVILHTR3	27.6 ²	26.8 ²	R 336.1225, 40 CFR 52.21(c) & (d)
12. SVILHTR4	27.6 ²	26.8 ²	R 336.1225, 40 CFR 52.21(c) & (d)
13. EUHWHEATER	4 ²	12 ²	R 336.1225, 40 CFR 52.21(c) & (d)
14. EUBARD	2.5 ²	8 ²	R 336.1225, 40 CFR 52.21(c) & (d)
15. EUFURNACE	2 ²	1 ²	R 336.1225, 40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

**FGBLRMACT-SM
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Requirements for new 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:

Equal to or less than 5 MMBTU/hr and only burns gaseous or light liquid fuels	EUBOILER1, EUBOILER2, EUBOILER3, EUBOILER4, EUBOILER5
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)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee must, for boilers or process heaters installed after June 4, 2010 with a heat input capacity of less than or equal to 5 MMBTU/hr, complete an initial tune-up as specified in SC III.9 by no later than 5 years (61 months) from startup. **(40 CFR 63.7510(g))**
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 5-year tune-up according to 40 CFR 63.7540(a)(12). Each 5-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_x 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))**
10. 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))**
11. At all times, the permittee must operate and maintain each existing small boiler or process heater, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.7500(a)(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

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

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 boiler or process heater tune-up compliance reports to the appropriate AQD District Office and must be postmarked or submitted by March 15th of the year following the applicable 5-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). 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))**
5. 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 5-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:

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

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

FGBLRMACT-LG FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Requirements for new boilers and process heaters that are designed to burn gas 1 subcategory fuel with a heat input capacity of 10 MMBTU/hr or greater at major sources of HAP emissions per 40 CFR Part 63, Subpart DDDDD (Boiler MACT). Units designed to burn gas 1 subcategory fuels include boilers or process heaters that burn only natural gas, refinery gas, and/or Other Gas 1 fuels. Units that burn liquid fuel for testing or maintenance purposes for less than a total of 48 hours per year, or that burn liquid fuel during periods of curtailment or supply interruptions are included in this definition.

Emission Units: EUILHTR1, EUILHTR2, EUILHTR3, EUILHTR4

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall burn only pipeline quality natural gas in FGBLRMACT-LG. **(R 336.1213(2))**
2. The permittee must, for boilers or process heaters installed after June 4, 2010, complete an initial tune-up as specified in SC III.5 by no later than 13 months from startup. **(40 CFR 63.7510(g))**
3. The permittee shall conduct an annual tune up of each boiler or process heater as specified below. The annual tune-up shall be no more than 13 months after the previous tune-up. **(40 CFR 63.7500(a)(1), 40 CFR 63.7515(d), Table 3 of 40 CFR Part 63, Subpart DDDDD)**
 - 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 delay the burner inspection until the next scheduled unit shutdown. Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. 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). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection. **(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_x 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 gas 1 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 that the permittee submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or annual compliance report that the permittee submitted. **(40 CFR 63.7555(a)(1))**
2. The permittee shall maintain on-site and submit, if requested by the AQD, an annual tune-up report containing the information listed below.
 - a. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater. **(40 CFR 63.7540(a)(10)(vi)(A))**
 - b. A description of any corrective actions taken as a part of the tune-up. **(40 CFR 63.7540(a)(10)(vi)(B))**
3. The permittee's records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). **(40 CFR 63.7560(a))**
4. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5-years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. **(40 CFR 63.7560(b))**
5. The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2-years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The permittee can keep the records off site for the remaining 3-years. **(40 CFR 63.7560(c))**

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 an Initial Notification not later than 15-days after the actual date of startup of the affected source. **(40 CFR 63.7545(c))**
5. The permittee must submit boiler and process heater tune-up compliance reports to the appropriate AQD District Office. The reports must be postmarked or submitted by March 15th and must cover the period of January 1 through December 31 of the reporting year. For new units, the first report should cover the period of startup to December 31 of the reporting year. Compliance reports must also be submitted to EPA using the Compliance and Emissions Data Reporting Interface (CEDRI) which is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). **(40 CFR 63.7550(b))**
6. The permittee must submit a compliance report containing the following information.
 - 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 annually 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 provisions of the National Emissions Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters as specified in 40 CFR Part 63, Subparts A and DDDDD. **(40 CFR Part 63, Subparts A and DDDDD)**

Footnotes:

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

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

FGRULE285(2)(mm)
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 285(2)(mm). Transmission and distribution systems or field gas from gathering lines.

Emission Unit: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

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

NA

VI. MONITORING/RECORDKEEPING

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

NA

VII. REPORTING

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

2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. For venting of natural gas for routine maintenance or relocation of transmission and distribution systems in amounts greater than 1,000,000 standard cubic feet, the permittee shall notify the AQD District Supervisor prior to a scheduled pipeline venting. **(R 336.1285(2)(mm)(ii)(A))**
5. For venting of natural gas for routine maintenance or relocation of transmission and distribution systems in amounts greater than 1,000,000 standard cubic feet, the permittee shall provide necessary notification in accordance with the Michigan gas safety standards, the federal pipeline and hazardous materials safety administration standards, and the federal energy regulatory commission standards, as applicable. The permittee is not required to copy the AQD on the notifications. **(R 336.1285(2)(mm)(ii)(B))**
6. For venting of field gas for routine maintenance or relocation of gathering pipelines in amounts greater than 1,000,000 standard cubic feet, the permittee shall notify the AQD District Supervisor prior to a scheduled pipeline venting. **(R 336.1285(2)(mm)(iii)(A))**
7. For venting of field gas for routine maintenance or relocation of gathering pipelines in amounts greater than 1,000,000 standard cubic feet, the permittee shall provide necessary notification in accordance with the Michigan Department of Environment, Great Lakes and Energy, Office of Geological Survey, and the Michigan Public Service Commission Standards, as applicable. The permittee is not required to copy the AQD on the notifications. **(R 336.1285(2)(mm)(iii)(B))**
8. For emergency venting of natural gas or field gases in amounts greater than 1,000,000 standard cubic feet per event, the permittee shall notify the pollution emergency alert system (PEAS) within 24 hours of an emergency pipeline venting. For purposes of this requirement, an emergency is considered an unforeseen event that disrupts normal operating conditions and poses a threat to human life, health, property, or the environment if not controlled immediately. **(R 336.1285(2)(mm)(iv))**

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

²This 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 ₂ e	Carbon Dioxide Equivalent
CEMS	Continuous Emission Monitoring System	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
COM	Continuous Opacity Monitoring	°F	Degrees Fahrenheit
Department/ department	Michigan Department of Environment, Great Lakes, and Energy	gr	Grains
EGLE	Michigan Department of Environment, Great Lakes, and Energy	HAP	Hazardous Air Pollutant
EU	Emission Unit	Hg	Mercury
FG	Flexible Group	hr	Hour
GACS	Gallons of Applied Coating Solids	HP	Horsepower
GC	General Condition	H ₂ 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 _x	Oxides of Nitrogen
MSDS	Material Safety Data Sheet	ng	Nanogram
NA	Not Applicable	PM	Particulate Matter
NAAQS	National Ambient Air Quality Standards	PM10	Particulate Matter equal to or less than 10 microns in diameter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	%	Percent
PTI	Permit to Install	psia	Pounds per square inch absolute
RACT	Reasonable Available Control Technology	psig	Pounds per square inch gauge
ROP	Renewable Operating Permit	scf	Standard cubic feet
SC	Special Condition	sec	Seconds
SCR	Selective Catalytic Reduction	SO ₂	Sulfur Dioxide
SDS	Safety Data Sheet	TAC	Toxic Air Contaminant
SNCR	Selective Non-Catalytic Reduction	Temp	Temperature
SRN	State Registration Number	THC	Total Hydrocarbons
TEQ	Toxicity Equivalence Quotient	tpy	Tons per year
USEPA/EPA	United States Environmental Protection Agency	µg	Microgram
VE	Visible Emissions	µm	Micrometer or Micron
		VOC	Volatile Organic Compounds
		yr	Year

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

Appendix 2. Schedule of Compliance

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

Appendix 3. Monitoring Requirements

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 Permit to Install and/or Operate, that relates to the identified emission units or flexible groups as of the effective date of this ROP. This includes all Permits to Install and/or Operate that are hereby incorporated into Source-Wide PTI No. MI-PTI-N7421-2022. PTIs issued after the effective date of this ROP, including amendments or modifications, will be identified in Appendix 6 upon renewal.

Permit to Install Number	Description of Equipment	Corresponding Emission Unit(s) or Flexible Group(s)
44-16B	44-16B Installed three heaters and removed a comfort heater. 44-16A One Turbine, three natural gas fired reciprocating internal combustion engines (RICE) with oxidation catalysts, one natural gas fired emergency RICE, four boilers, four inline heaters and seven mod heaters.	EUTURBINE1, EUEMGRICE1, FGENGINES, FGENGMACT4Z-EURICE1-3, FGNOX, FGBLRMACT
246-07A	One 5000 hp natural gas fired reciprocating engine with catalytic oxidation system.	EUENGINE1, FGENGMACT4Z-ENGINE1

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 EUENGINE1

Procedures for Calculating NOx, CO, VOC Emissions

The permittee shall demonstrate compliance with the NOx, VOC and CO emission limits by keeping track of all fuel usage for all equipment using such fuel at this facility and multiplying that fuel usage by an equipment-specific emission factor. The emission factors are typically expressed as the mass of pollutant per unit of fuel.

The permittee shall use emission factors from vendor data or from source specific testing (stack testing), as available for EUENGINE1. This also applies to engine(s) from engine change-out(s). If emission factors from other sources are used, the permittee shall obtain the approval of the AQD District Supervisor before using the emission factors to calculate emissions.

The permittee shall document the source of each emission factor used in the calculations.

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.