

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

EFFECTIVE DATE: December 30, 2020
REVISION DATES: October 12, 2022, April 17, 2023

ISSUED TO

Consumers Energy Company - Ray Compressor Station

State Registration Number (SRN): B6636

LOCATED AT

69333 Omo Road, Armada, Macomb County, Michigan 48005-4510

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B6636-2020b

Expiration Date: December 30, 2025

Administratively Complete ROP Renewal Application
Due Between June 30, 2024 and June 30, 2025

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

SOURCE-WIDE PERMIT TO INSTALL

Permit Number: MI-PTI-B6636-2020b

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

Joyce Zhu, Warren District Supervisor

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AUTHORITY AND ENFORCEABILITY

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

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

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

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

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

A. GENERAL CONDITIONS

Permit Enforceability

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

General Provisions

1. The permittee shall comply with all conditions of this ROP. Any ROP noncompliance constitutes a violation of Act 451, and is grounds for enforcement action, for ROP revocation or revision, or for denial of the renewal of the ROP. All terms and conditions of this ROP that are designated as federally enforceable are enforceable by the Administrator of the United States Environmental Protection Agency (USEPA) and by citizens under the provisions of the federal Clean Air Act (CAA). Any terms and conditions based on applicable requirements which are designated as "state-only" are not enforceable by the USEPA or citizens pursuant to the CAA. **(R 336.1213(1)(a))**
2. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this ROP. **(R 336.1213(1)(b))**
3. This ROP may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any ROP term or condition. This does not supersede or affect the ability of the permittee to make changes, at the permittee's own risk, pursuant to Rule 215 and Rule 216. **(R 336.1213(1)(c))**
4. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities: **(R 336.1213(1)(d))**
 - a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the ROP.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the ROP.
 - c. Inspect, at reasonable times, any of the following:
 - i. Any stationary source.
 - ii. Any emission unit.
 - iii. Any equipment, including monitoring and air pollution control equipment.
 - iv. Any work practices or operations regulated or required under the ROP.
 - d. As authorized by Section 5526 of Act 451, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the ROP or applicable requirements.
5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information which is claimed by the permittee to be confidential, consistent with the requirements of the 1976 PA 442, MCL 40 CFR15.231 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 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
EUENGINE31	Caterpillar G3616, natural gas fired, four-stroke lean burn (4SLB), reciprocating internal combustion engine (RICE) with oxidation catalyst emission control device and compressor. The engine drives a compressor to compress natural gas for transportation between storage field and pipeline system. The engine maximum rated heat input is 32 MMBtu/hr. The engine rated output is 4,735 horsepower.	04/22/2013	FGENGINES3
EUENGINE32	Caterpillar G3616, natural gas fired, four-stroke lean burn (4SLB), reciprocating internal combustion engine (RICE) with oxidation catalyst emission control device and compressor. The engine drives a compressor to compress natural gas for transportation between storage field and pipeline system. The engine maximum rated heat input is 32 MMBtu/hr. The engine rated output is 4,735 horsepower.	04/23/2013	FGENGINES3
EUENGINE33	Caterpillar G3616, natural gas fired, four-stroke lean burn (4SLB), reciprocating internal combustion engine (RICE) with oxidation catalyst emission control device and compressor. The engine drives a compressor to compress natural gas for transportation between storage field and pipeline system. The engine maximum rated heat input is 32 MMBtu/hr. The engine rated output is 4,735 horsepower.	04/23/2013	FGENGINES3

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUENGINE34	Caterpillar G3616, natural gas fired, four-stroke lean burn (4SLB), reciprocating internal combustion engine (RICE) with oxidation catalyst emission control device and compressor. The engine drives a compressor to compress natural gas for transportation between storage field and pipeline system. The engine maximum rated heat input is 32 MMBtu/hr. The engine rated output is 4,735 horsepower.	04/26/2013	FGENGINES3
EUENGINE35	Caterpillar G3616, natural gas fired, four-stroke lean burn (4SLB), reciprocating internal combustion engine (RICE) with oxidation catalyst emission control device and compressor. The engine drives a compressor to compress natural gas for transportation between storage field and pipeline system. The engine maximum rated heat input is 32 MMBtu/hr. The engine rated output is 4,735 horsepower.	04/26/2013	FGENGINES3
EUGLYCDEHYD01	Glycol Dehydrator for removing water from natural gas. Construction of this emission unit began prior to August 23, 2011.	01/01/1984 02/15/2005	FGGLYCDEHYDS, FGDEHYHHH
EUGLYCDEHYD02	Glycol Dehydrator for removing water from natural gas. Construction of this emission unit began prior to August 23, 2011.	01/01/1984 02/15/2005	FGGLYCDEHYDS, FGDEHYHHH
EUDEHY3	Glycol dehydration system processing natural gas drawn from the storage field; contains a 4.8 MMBTU/HR natural gas fired reboiler (EUDEHYBLR3), still column, two contact towers, a surge tank and a flash tank. The flash tank exhaust gas is routed to a thermal oxidizer or the reboiler for control and the still vent exhaust gas is routed to a thermal oxidizer for control. Construction of this emission unit began prior to August 23, 2011.	05/02/2013	FGDEHYHHH
EUAUXGEN2-7	Existing emergency generator exempt from Permit To Install requirements pursuant to Rule 285(g) and subject to 40 CFR 63, Subpart ZZZZ, but does not have to meet the requirements of Subpart ZZZZ and Subpart A, including initial notification under 40 CFR 63.6590(b)(3), as existing emergency stationary RICE greater than 500 HP at a major source of HAPs. This emission unit is an existing Caterpillar, two-stroke lean burn (2SLB), natural gas-fired emergency generator with a maximum heat input of 7.1 MMBtu/hr. and a rated output of 1085 BHP.	01/01/1995	NA

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUEMERGGEN3	Caterpillar G3516B LE, spark ignition (SI), natural gas-fired four-stroke lean burn (4SLB), reciprocating internal combustion engine (RICE) with Lo-NOx combustion technology, emergency generator. The engine maximum rated heat input is 12.25 MMBtu/hr. The engine rated output is 1,818 horsepower. The emergency generator was manufactured November 8, 2011.	03/29/2013	NA
EUPIPEHEATER31	Natural gas-fired pipeline heater, equipped with a low NOx burner, rated at maximum heat input of 18 MMBTU/hr.	03/07/2013	FGPIPEHEATERS3, FG-BLRMACT
EUPIPEHEATER32	Natural gas-fired pipeline heater, equipped with a low NOx burner, rated at maximum heat input of 18 MMBTU/hr.	03/07/2013	FGPIPEHEATERS3, FGBLRMACT
EUBOILER3	Natural gas-fired boiler for building heat and hot water, rated at maximum heat input of 12.25 MMBTU/hr.	01/15/2013	FGBLRMACT
EUPIPEHTR1	Natural gas-fired pipeline heater rated at a maximum heat input of 6 MMBTU/hr.	01/01/1966	FGBLRMACTSMALL
EUPIPEHTR2	Natural gas-fired pipeline heater rated at a maximum heat input of 6 MMBTU/hr.	01/01/1966	FGBLRMACTSMALL
EUPIPEHTR3	Natural gas-fired pipeline heater rated at a maximum heat input of 6 MMBTU/hr.	01/01/1966	FGBLRMACTSMALL
EUPIPEHTR4	Natural gas-fired pipeline heater rated at a maximum heat input of 6 MMBTU/hr.	01/01/1966	FGBLRMACTSMALL
EUFGEATER	Natural gas-fired fuel gas process heater rated at 0.75 MMBtu/hr.	01/01/1994	FGBLRMACTSMALL
EUAUXBLR2-7	Natural gas-fired heating boiler Plant 2 rated at 5 MMBtu/hr.	01/01/1995	FGBLRMACTSMALL
EUDEHYBLR1	Natural gas-fired reboiler burner, associated with EUGLYCDEHYD01, rated at 1.4 MMBtu/hr.	1984	FGBLRMACTSMALL
EUDEHYBLR2	Natural gas-fired reboiler burner, associated with EUGLYCDEHYD02, rated at 1.4 MMBtu/hr.	1984	FGBLRMACTSMALL
EUDEHY3BLR	Natural gas-fired reboiler burner, associated with EUDEHY3, rated at 4.8 MMBTU/hr.	2013	FGBLRMACTSMALL
EUFGHTR-P1	Natural gas-fired fuel gas process heater rated at 0.25 MMBTU/hr.	11/18/2015	FGBLRMACTSMALL
EUPARTSCLEANER	One parts cleaner with an air/vapor interface of not more than 10 ft ² , located in the machine shop.	01/01/1995	FGCOLDCLEANERS
EURULE285(2)(mm)	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(2)(mm).	N/A	FGRULE285(2)(mm)
EUTANKNO1	6,000 gallon horizontal above ground new oil storage tank.	08/01/2012	FGTANKS3
EUTANKNO2	6,000 gallon horizontal above ground new oil storage tank.	08/01/2012	FGTANKS3

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUTANKUO	6,000 gallon horizontal above ground used oil storage tank.	08/01/2012	FGTANKS3
EUTANKNEG	6,000 gallon horizontal above ground new ethylene glycol storage tank.	08/01/2012	FGTANKS3
EUTANKUEG	6,000 gallon horizontal above ground used /holding ethylene glycol storage tank.	08/01/2012	FGTANKS3
EUTANKNTEG	5,000 gallon horizontal above ground new triethylene glycol (TEG) storage tank.	08/01/2012	FGTANKS3
EUTANKHTEG	5,000 gallon horizontal above ground holding TEG storage tank.	08/01/2012	FGTANKS3

**EUDEHY3
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Glycol dehydration system processing natural gas drawn from the storage field; contains a 4.8 MMBTU/HR natural gas fired reboiler (EUDEHYBLR3), still column, two contact towers, a surge tank and a flash tank. The flash tank exhaust gas is routed to a thermal oxidizer or the reboiler for control and the still vent exhaust gas is routed to a thermal oxidizer for control. Construction of this emission unit began prior to August 23, 2011.

Flexible Group ID: FGDEHYHHH

POLLUTION CONTROL EQUIPMENT

Flash tank and thermal oxidizer.

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	4.2 lb/hr ²	Hourly	EUDEHY3	SC V.1 SC VI.4	R 336.1225 R 336.1702 R 336.2810 40 CFR 52.21(j)
2. VOC	18.2 tpy ²	12-month rolling time period as determined at the end of each calendar month	EUDEHY3	SC VI.4	R 336.1225 R 336.1702
3. NOx	1.3 lb/hr ²	Hourly	EUDEHY3 ^A	SC V.1 SC V.2	R 336.2803 R 336.2804 R 336.2810 40 CFR 52.21 (c) (d) and (j)
4. Benzene	Less than 0.9 MG/year ²	12-month rolling time period as determined at the end of each calendar month	EUDEHY3	SC VI.4	R 336.1225 R 336.1201(3)
5. NOx	0.098 lb/MMBTU ²	Instantaneous	Reboiler ^B	SC V.3 SC VI.8	R 336.2810 40 CFR 52.21 (j)
6. VOC	0.0054 lb/MMBTU ²	Instantaneous	Reboiler ^B	SC V.3 SC VI.8	R 336.1702 R 336.2810 40 CFR 52.21 (j)

^AFuel burning equipment associated with the dehydrator system (thermal oxidizer)

^B4.8 MMBTU/hour process heater for the reboiler

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not use stripping gas in EUDEHY3.² **(R 336.1225, R 336.1702(a), R 336.1901, R 336.2810, 40 CFR 52.21(j))**
2. The permittee shall not process natural gas in EUDEHY3 unless a minimum combustion chamber temperature of 1400°F and a minimum retention time of 0.5 seconds in the thermal oxidizer are maintained.² **(R 336.1225, R 336.1702(a), R 336.1901, R 336.1910, R 336.2810, 40 CFR 52.21(j))**
3. The permittee shall not operate EUDEHY3 unless the malfunction abatement/preventative maintenance plan approved by the AQD District Supervisor, or an alternate plan approved by the AQD District Supervisor, is implemented and maintained. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. At a minimum the plan shall include:
 - a. Identification of the equipment and, if applicable, air-cleaning device, and the supervisory personnel responsible for overseeing the inspection, maintenance, and repair.
 - b. Description of the items or conditions to be inspected and frequency of the inspections or repairs.
 - c. Identification of the equipment and, if applicable, air-cleaning device, operating parameters that shall be monitored to detect a malfunction or failure, the normal operating range of these parameters and a description of the method of monitoring or surveillance procedures.
 - d. Identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - e. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If the plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the plan within 45 days after such an event occurs and submit the revised plan for approval to the AQD District Supervisor. Should the AQD determine the malfunction abatement/preventative maintenance plan to be inadequate, the AQD District Supervisor may request modification of the plan to address those inadequacies.² **(R 336.1225, R 336.1702, R 336.1910, R 336.1911, R 336.1912, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c), (d) and (j))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not process natural gas in EUDEHY3 unless the flash tank is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes routing the flash tank exhaust gas to the reboiler combustion unit or thermal oxidizer for destruction.² **(R 336.1225, R 336.1702(a), R 336.1901, R 336.1910, R 336.2810, 40 CFR 52.21(j))**
2. The permittee shall not process natural gas in EUDEHY unless the thermal oxidizer is installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the thermal oxidizer includes a minimum VOC destruction efficiency of 98% (by weight), and maintaining a minimum combustion chamber temperature of 1400°F and a minimum retention time of 0.5 second.² **(R 336.1225, R 336.1702(a), R 336.1901, R 336.1910, R 336.2810, 40 CFR 52.21(j))**

V. TESTING/SAMPLING

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

1. At least once each calendar year the permittee shall obtain, by sampling, an analysis of the wet gas stream. The permittee shall analyze the sample for nitrogen, carbon dioxide, hydrogen sulfide, C1 through C6 series hydrocarbons, benzene, toluene, xylene, ethylbenzene, and heptanes plus. The permittee must submit any request for a change in the sampling frequency to the AQD District Supervisor for review and approval.² **(R 336.1225, R 336.1702(a), R 336.1901, R 336.2810)**

2. Within 60 days after receiving written notification from the AQD requiring performance testing to verify the NOx emission rate from EUDEHY3, unless otherwise authorized by the department, the permittee shall verify NOx emission rates from EUDEHY3 by testing at the owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved USEPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved USEPA Method, may be specified in an AQD-approved Test Protocol. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
3. Within 60 days after receiving written notification from the AQD requiring performance testing to verify the NOx and VOC emission rate from the Reboiler, unless otherwise authorized by the department, the permittee shall verify NOx and VOC emission rates from the Reboiler on EUDEHY3 by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
NOx	40 CFR Part 60, Appendix A
VOC	40 CFR Part 60, Appendix A

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

4. The permittee shall 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 by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.² **(R 336.1225, R 336.1702(a), R 336.1901, R 336.2810, 40 CFR 52.21(j))**
2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record, on a continuous basis, the temperature in the combustion chamber of the thermal oxidizer.² **(R 336.1225, R 336.1702(a), R 336.1901, R 336.1910, R 336.2810, 40 CFR 52.21(j))**
3. The permittee shall determine the benzene emissions either uncontrolled, or with federally enforceable controls in place and using either of the procedures below:
 - a. The permittee shall determine actual average benzene emissions using the model GRI-GLYCalc™, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc™ Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI-95/0368.1).² **(40 CFR 63.1282(a)(2)(i))**
 - b. The permittee shall determine an average mass rate of benzene emissions in kilograms per hour through direct measurement using the methods specified in 40 CFR 63.1282(a)(2)(ii). Annual emissions in kilograms per year shall be determined by multiplying the mass rate by the number of hours the unit is operated per year. This result shall be converted to megagrams per year.² **(40 CFR 63.1282(a)(2)(ii))**

4. The permittee shall calculate the VOC and benzene emission rates from EUDEHY3 for each calendar month and 12-month rolling time period, using a method acceptable to the AQD District Supervisor. If GRI-GLYCalc (Version 3.0 or higher) is used to calculate the emission rates, the inputs to the model shall be representative of actual operating conditions of EUDEHY3 and shall include the most recent gas analysis data. The permittee must submit any request for a change in the calculation frequency to the AQD District Supervisor for review and approval. The permittee shall keep records of VOC and benzene emission rates on file at the facility and make them available to the Department upon request.² **(R 336.1225, R 336.1702(a), R 336.1901, R 336.2810, 40 CFR 52.21(j))**
5. The permittee shall keep, in a satisfactory manner, daily records of the temperature in the combustion chamber of the thermal oxidizer, while processing natural gas, as required by SC III.2 and SC VI.2. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² **(R 336.1205, R 336.1225, R 336.1702(a), R 336.1901, R 336.1910, R 336.2810, 40 CFR 52.21(j))**
6. The permittee shall keep, in a satisfactory manner, records of the wet gas composition as determined through analysis of wet gas samples for EUDEHY3, as required by SC V.1. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² **(R 336.1225, R 336.1702(a), R 336.1901, R 336.2810, 40 CFR 52.21(j))**
7. The permittee shall keep records of the actual average benzene emissions (in terms of benzene emissions per year) as determined in accordance with SC VI.3. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² **(R 336.1201(3))**
8. The permittee shall keep, in a satisfactory manner, records of the date and description of any maintenance performed, tune-ups, and testing results for the reboiler burner on EUDEHY3. All records shall be kept on file and made available to the Department upon request. **(R 336.1213(3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit all applicable notifications and reports required by 40 CFR 63.1285 by the dates specified.² **(40 CFR 63.1285)**

See Appendix 8

VIII. STACK/VENT RESTRICTIONS

The exhaust gases from the stack(s) 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. SVREBOILER3	30 ²	31 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)

Stack & Vent ID	Maximum Exhaust Diameter/ Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
2. SVOXIDIZER3	70 ²	40 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENTS

1. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 63, Subpart HHH, as they apply to EUDEHY3.² **(40 CFR Part 63, Subpart HHH)**

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).

EUAUXGEN2-7
EMISSION UNIT CONDITIONS

DESCRIPTION

Existing emergency generator exempt from Permit To Install requirements pursuant to Rule 285(g) and subject to 40 CFR 63, Subpart ZZZZ, but does not have to meet the requirements of Subpart ZZZZ and Subpart A, including initial notification under 40 CFR 63.6590(b)(3), as existing emergency stationary RICE greater than 500 HP at a major source of HAPs. This emission unit is an existing Caterpillar, two-stroke lean burn (2SLB), natural gas-fired emergency generator with a maximum heat input of 7.1 MMBtu/hr. and a rated output of 1085 BHP.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMITS

NA

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. To be considered an emergency stationary RICE under Subpart ZZZZ, the permittee shall limit operation of EUAUXGEN2-7 as follows:
 - a. There is no time limit on the use EUAUXGEN2-7 in emergency situations. **(40 CFR 63.6640(f)(1))**
 - b. The permittee may operate EUAUXGEN2-7 for a maximum of 100 hours per year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. **(40 CFR 63.6640(f)(2)(i))**
 - c. The permittee may operate EUAUXGEN2-7 up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to supply power to an electric grid. **(40 CFR 63.6640(f)(3))**

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of 5 years. **(R 336.1213(3)(b)(ii))**

1. The permittee shall keep records of the hours of operation of EUAUXGEN2-7. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² **(R 336.1201(3))**
2. The permittee shall maintain a log of the hours of operation, including reason (i.e.: emergency, maintenance testing, readiness testing). **(40 CFR 63.6640)**

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. Report shall be received by 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. Report shall be received by appropriate AQD district office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

See Appendix 8

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

1. The permittee shall comply with all applicable requirements of 40 CFR Part 63, Subpart ZZZZ-National Emission Standards for Hazardous Air Pollutants from Stationary Reciprocating Internal Combustion Engines. **(R 336.1213(3), 40 CFR Part 63, Subpart 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).

**EUEMERGGEN3
 EMISSION UNIT CONDITIONS**

DESCRIPTION:

Caterpillar G3516B LE, spark ignition (SI), natural gas-fired four-stroke lean burn (4SLB), reciprocating internal combustion engine (RICE) with Lo-NOx combustion technology, emergency generator. The engine maximum rated heat input is 12.25 MMBtu/hr. The engine rated output is 1,818 horsepower. The emergency generator was manufactured November 8, 2011.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT:

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	0.5 g/hp-hr ²	Hourly	EUEMERGGEN3	SC V.1 SC V.2 SC VI.2	R 336.2803 R 336.2804 R 336.2810 40 CFR 52.21(c), (d) & (j)
2. VOC	0.81 g/hp-hr ²	Hourly	EUEMERGGEN3	SC V.1 SC V.2 SC VI.2	R 336.1702 R 336.2810 40 CFR 52.21(j)
3. NOx	2.0 g/hp-hr	Hourly	EUEMERGGEN3	SC V.1 SC V.2 SC VI.2	40 CFR 60.4233(e), Table 1 to Subpart JJJJ of Part 60
4. CO	4.0 g/hp-hr	Hourly	EUEMERGGEN3	SC V.1 SC V.2 SC VI.2	40 CFR 60.4233(e), Table 1 to Subpart JJJJ of Part 60
5. VOC ^a	1.0 g/hp-hr	Hourly	EUEMERGGEN3	SC V.1 SC V.2 SC VI.2	40 CFR 60.4233(e), Table 1 to Subpart JJJJ of Part 60

^a For purposes of 40 CFR Part 60, Subpart JJJJ, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EUEMERGGEN3 for more than 500 hours per 12-month rolling time period as determined at the end of each calendar month.² (R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c), (d) & (j))

2. The permittee shall only burn natural gas, as defined in 40 CFR 72.2, in EUEMERGGEN3.² **(R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
3. The permittee shall keep a maintenance plan for EUEMERGGEN3 and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practices for minimizing emissions. **(40 CFR 60.4243(b)(2))**
4. If the permittee does not operate EUEMERGGEN3 in accordance with SC III.4.a through III.4.c, EUEMERGGEN3 will not be considered an emergency engine for the purposes of 40 CFR Part 60, Subpart JJJJ and 40 CFR Part 63, Subpart ZZZZ and will have to meet all applicable requirements for non-emergency engines in 40 CFR Part 60, Subpart JJJJ and 40 CFR Part 63, Subpart ZZZZ. 40 CFR Part 60, Subpart JJJJ and 40 CFR Part 63, Subpart ZZZZ contain the following requirements for operating emergency engines:
 - a. There is no time limit on the use of EUEMERGGEN3 in emergency situations. **(40 CFR 60.4243(d)(1), 40 CFR 63.6640(f)(1))**
 - b. The permittee may operate EUEMERGGEN3 for up to 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. **(40 CFR 60.4243(d)(2)(i), 40 CFR 63.6640(f)(2)(i))**
 - c. The permittee may operate EUEMERGGEN3 for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing as provided in SC III.4.b. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. **(40 CFR 60.4243(d)(3), 40 CFR 63.6640(f)(3))**
5. The permittee shall operate and maintain EUEMERGGEN3 such that it meets the emission limits in SC I.3, I.4, and I.5 over the entire life of the engine. **(40 CFR 60.4234, 40 CFR 60.4243(b))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain EUEMERGGEN3 with a non-resettable hour meter to track the operating hours. **(40 CFR 60.4237(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 conduct an initial performance test for EUEMERGGEN3 within one year after startup of the engine to demonstrate compliance with the emission limits in SC I.1 through SC I.5. The performance test shall be conducted according to 40 CFR 60.4244. No less than 30 days prior to testing, a complete test plan shall be submitted to AQD. The final plan must be approved by 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. **(40 CFR 60.4243(b)(2)(ii), 40 CFR 60.4244, 40 CFR Part 60, Subpart JJJJ)**
2. The permittee shall conduct subsequent performance testing every 8,760 hours of operation or three years, whichever comes first. The performance test shall be conducted according to 40 CFR 60.4244. 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 approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(40 CFR 60.4243(b)(2)(ii), 40 CFR 60.4244, 40 CFR Part 60, Subpart JJJJ)**

3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than seven days prior to the anticipated test date. **(R 336.2001(4))**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall keep, in a satisfactory manner, a log of the monthly and 12-month rolling time period hours of operation for EUEMERGGEN3, including reason for operation (i.e.: emergency, readiness testing, maintenance checks). The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request.² **(R 336.1205(1)(a)(ii)(B), 40 CFR 60.4245(b))**
2. The permittee shall keep records of the following information for EUEMERGGEN3: **(40 CFR 60.4245(a), 40 CFR 60.4243(b)(2)(ii))**
 - a. Records of testing required in SC V.1 and V.2
 - b. All notifications submitted to comply with 40 CFR Part 60, Subpart JJJJ and all documentation supporting any notification.
 - c. Maintenance conducted on EUEMERGGEN3.
 - d. Documentation that EUEMERGGEN3 meets the emission standards.
3. The permittee shall maintain satisfactory records to indicate that the facility is only burning pipeline natural gas, as defined in 40 CFR 72.2, in EUEMERGGEN3. **(R 336.1213(3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. Report shall be received by 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. Report shall be received by appropriate AQD district office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit an initial notification which includes the following information:²
 - a. A statement that EUEMERGGEN3 operates as an emergency RICE, as defined in 40 CFR 63.6675. **(40 CFR 63.6645(f))**
 - b. The name and address of the owner or operator. **(40 CFR 63.9(b)(2)(i), 40 CFR 63.6645(f))**
 - c. The physical location of the affected source. **(40 CFR 63.9(b)(2)(ii), 40 CFR 63.6645(f))**
 - d. A statement that the initial notification is required under 40 CFR Part 63, Subpart ZZZZ, 63.6645(f). **(40 CFR 63.9(b)(2)(iii), 40 CFR 63.6645(f))**
 - e. A brief description of the nature, size, design, and method of operation of the source, including its operating design capacity and an identification of each point of emission for each hazardous air pollutant. **(40 CFR 63.9(b)(2)(iv), 40 CFR 63.6645(f))** and
 - f. A statement of whether the affected source is a major source or an area source. **(40 CFR 63.9(b)(2)(v), 40 CFR 63.6645(f))**
5. The permittee shall submit two complete test reports of the test results to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, within 60 days following the last date of the test. **(R 336.2001(5))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVEMERGGEN3	22 ²	42 ²	R 336.1225 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, Subpart A and Subpart JJJJ, as they apply to EUEMERGGEN3.² **(40 CFR Part 60, Subpart A and JJJJ)**
2. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart ZZZZ, as they apply to EUEMERGGEN3.² **(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).

**EUBOILER3
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Natural gas-fired boiler for building heat and hot water, rated at maximum heat input of 12.25 MMBTU/hr.

Flexible Group ID: FG-BLRMACT

POLLUTION CONTROL EQUIPMENT

Low NOx burner

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NO _x	0.43 lb/hr* ²	Hourly	EUBOILER3	SC V.1 SC VI.5 SC VI.6	R 336.2803 R 336.2804 R 336.2810 40 CFR 52.21 (c), (d), & (j)
2. VOC	0.05 lb/hr** ²	Hourly	EUBOILER3	SC V.1 SC VI.6	R 336.1702 R 336.2810 40 CFR 52.21 (j)

* Based on an emission factor of 0.035 lb/MMBTU
 **Based on an emission factor of 0.004 lb/MMBTU

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall only burn natural gas, as defined in 40 CFR 72.2, in EUBOILER3.² (**R 336.1225, R 336.1702, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)**)
2. The permittee shall not operate EUBOILER3 unless a malfunction abatement/preventative maintenance plan, or an alternate plan approved by the AQD District Supervisor, is implemented and maintained. The plan shall incorporate specific maintenance inspections, checks and procedures and the associated frequencies as recommended by the equipment manufacturer, as well as incorporating standard industry practices. At a minimum the plan shall include:
 - a. Identification of the equipment and, if applicable, air-cleaning device, and the supervisory personnel responsible for overseeing the inspection, maintenance, and repair.
 - b. Description of the items or conditions to be inspected and frequency of the inspections or repairs.
 - c. Identification of the equipment and, if applicable, air-cleaning device, operating parameters that shall be monitored to detect a malfunction or failure, the normal operating range of these parameters and a description of the method of monitoring or surveillance procedures.
 - d. Identification of the major replacement parts that shall be maintained in inventory for quick replacement.

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

If the plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the plan within 45 days after such an event occurs and submit the revised plan for approval to the AQD District Supervisor. Should the AQD determine the malfunction abatement/preventative maintenance plan to be inadequate, the AQD District Supervisor may request modification of the plan to address those inadequacies.² (R 336.1225, R 336.1702, R 336.1910, R 336.1911, R 336.1912, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c), (d) and (j))

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the natural gas usage for EUBOILER3 on a monthly basis.² (R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d), 40 CFR 60.48c(g)(2))
- 2. The permittee shall not operate EUBOILER3 unless the boiler is equipped with a low NOx burner and is installed, maintained, and operated in a satisfactory manner.² (R 336.1910, R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c), (d) and (j))

V. TESTING/SAMPLING

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

- 1. Within 60 days following receipt of written notification from the AQD requiring performance testing to verify NOx and VOC emissions from EUBOILER3, unless otherwise authorized by the department, the permittee shall verify NOx and VOC emission rates from EUBOILER3 by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
NOx	40 CFR Part 60, Appendix A
VOC	40 CFR Part 60, Appendix A

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

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

4. The permittee shall keep, in a satisfactory manner, monthly fuel use records for EUBOILER3. All records shall be kept on file and made available to the Department upon request. **(40 CFR 60.48c(g)(2))**
5. The permittee shall keep on file, a demonstration that the low-NOx burner is designed to emit no more than 0.035 pound of NOx per million Btu of heat input. (i.e., manufacturer’s guarantee, test data, etc.) **(R 336.1213(3))**
6. The permittee shall keep, in a satisfactory manner, records of the date and description of any maintenance performed, tune-ups, and testing results for EUBOILER3. All records shall be kept on file and made available to the Department upon request. **(R 336.1213(3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall provide written notification of construction and operation to comply with the federal Standards of Performance for New Stationary Sources, 40 CFR 60.7 and 40 CFR 60.48c(a). The permittee shall submit this notification to the AQD District Supervisor within the time frames specified in 40 CFR 60.7.² **(40 CFR 60.7, 40 CFR 60.48c(a))**
5. The permittee shall submit all notifications as required under 40 CFR 60.48c, as applicable to EUBOILER3.² **(40 CFR Part 60, Subpart Dc)**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBOILER3	20 ²	42 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and Dc, as they apply to EUBOILER3.² **(40 CFR Part 60, Subparts A & Dc)**

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).

D. FLEXIBLE GROUP CONDITIONS

Part D outlines 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
FGENGINES3	Five Caterpillar G3616, natural gas fired, spark ignition, four-stroke lean burn (4SLB), reciprocating internal combustion engine (RICE) with oxidation catalyst emission control device and compressor. Each engine drives a compressor to compress natural gas for transportation between storage field and pipeline system. Each engine's maximum rated heat input is 32 MMBtu/hr. Each engine's rated output is 4,735 horsepower.	EUENGINE31, EUENGINE32, EUENGINE33, EUENGINE34, EUENGINE35
FGGLYCDEHYDS	Two glycol dehydrators for removing water from natural gas.	EUGLYCDEHYD01, EUGLYCDEHYD02
FGDEHYHHH	40 CFR Part 63, Subpart HHH establishes national emission limitations and operating limitations for affected sources at natural gas transmission and storage facilities that are major sources of HAP emissions. The rule applies to facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final user. An affected source is each new or existing glycol dehydration unit. The three glycol dehydration units identified in this flexible group are existing units per 40 CFR 63.1270(b) because construction commenced on or before August 23, 2011. The three glycol dehydration units identified in this flexible group are small glycol dehydration units per 40 CFR 63.1271 because actual annual average benzene emissions have been less than 0.90 Mg/yr.	EUGLYCDEHYD01, EUGLYCDEHYD02, EUDEHY3
FGPIPEHEATERS3	Two natural gas-fired pipeline heaters, equipped with a low NOx burner, rated at maximum heat input of 18 MMBTU/hr. each.	EUIPIPEHEATER31, EUIPIPEHEATER32
FG-BLRMACTSMALL	Requirements for existing and 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.	EUFGHEATER, EUAUXBLR2-7, EUDEHYBLR1, EUDEHYBLR2, EUDEHY3REBLR, EUFGHTR-P1, EUIPEHTR1, EUIPEHTR2, EUIPEHTR3, EUIPEHTR4

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-BLRMACT	Requirements for new boiler 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.	EUPIPEHEATER31, EUPIPEHEATER32, EUBOILER3
FG-COLDCLEANERS	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, Rule 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.	EUPARTSCLEANER
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).	EURULE285(mm)
FGTANKS3	Seven above ground horizontal storage tanks ranging in size from 5,000 to 6,000 gallons that were subject to the requirement in R 336.1201 to have a permit to install (PTI) per 40 CFR 52.21 applicability to the complete project, which includes the seven tanks. There are no requirements applicable to FGTANKS3.	EUTANKNO1, EUTANKNO2, EUTANKUO, EUTANKNEG, EUTANKUEG, EUTANKNTEG, EUTANKHTEG

FGENGINES3
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Five Caterpillar G3616, natural gas fired, spark ignition, four-stroke lean burn (4SLB), reciprocating internal combustion engine (RICE) with oxidation catalyst emission control device and compressor. Each engine drives a compressor to compress natural gas for transportation between storage field and pipeline system. Each engine's maximum rated heat input is 32 MMBtu/hr. Each engine's rated output is 4,735 horsepower.

Emission Units: EUENGINE31, EUENGINE32, EUENGINE33, EUENGINE34 and EUENGINE35

POLLUTION CONTROL EQUIPMENT

Two-way oxidation catalyst

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NO _x	0.5 g/hp-hr ²	Hourly	Each Engine in FGENGINES3	SC V.5 through V.8	R 336.2803 R 336.2804 R 336.2810 40 CFR 52.21(c), (d) & (j)
2. Carbon Monoxide	0.2 g/hp-hr ²	Hourly	Each Engine in FGENGINES3	SC V.5 through V.8	40 CFR 52.21(d)
3. Carbon Monoxide or Formaldehyde	93% reduction in CO emissions or a formaldehyde concentration of ≤ 14 ppmvd at 15% O ₂ * ²	Hourly	Each Engine in FGENGINES3	SC V.1 through V.4, Section VI	40 CFR 63.6600(b)
4. VOC	0.19 g/hp-hr ²	Hourly	Each Engine in FGENGINES3	SC V.5 through V.8	R 336.1702(a) R 336.2810 40 CFR 52.21(j)
5. NO _x	1.0 g/hp-hr	Hourly	Each Engine in FGENGINES3	SC V.5 through V.8	40 CFR 60.4233(e), Table 1 to Subpart JJJJ of Part 60
6. Carbon Monoxide	2.0 g/hp-hr	Hourly	Each Engine in FGENGINES3	SC V.5 through V.8	40 CFR 60.4233(e), Table 1 to Subpart JJJJ of Part 60
7. VOC ^a	0.7 g/hp-hr	Hourly	Each Engine in FGENGINES3	SC V.5 through V.8	40 CFR 60.4233(e), Table 1 to Subpart JJJJ of Part 60

*These limits apply at 100% load (plus or minus 10% load) during all periods of operation except for periods of startup, shutdown and malfunction. (40 CFR Part 63, Subpart ZZZZ, Table 2a, 40 CFR 63.6605(a))

^a For purposes of 40 CFR Part 60, Subpart JJJJ, when calculating emissions of volatile organic compounds, emissions of formaldehyde should not be included.

II. MATERIAL LIMIT(S)

1. The permittee shall only burn natural gas, as defined in 40 CFR 72.2, in FGENGINES3.² **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Upon startup of any engine in FGENGINES3, the permittee shall implement and maintain a plan that describes how emissions will be minimized during all startups, shutdowns, and malfunctions. The plan shall incorporate requirements listed in 40 CFR 63.6(e)(3). Deviations from the emission or operating limitations that occur during a period of startup, shutdown, or malfunction are not violations if it is demonstrated that the startup, shutdown and malfunction plan was implemented.² **(40 CFR 63.6605(b), 40 CFR 63.6640(c), 40 CFR 63.6640(d))**
2. For the stationary, reciprocating, spark ignition, 4SLB engines in FGENGINES3, any deviations that occur during the first 200 hours of operation from engine start-up (engine burn-in period) are not violations.² **(40 CFR 63.6640(d))**
3. The permittee shall not operate FGENGINES3 unless an approvable PM / MAP, or an alternate plan approved by the AQD District Supervisor, is implemented and maintained. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. At a minimum the plan shall include:
 - a. Identification of the equipment and, if applicable, air-cleaning device and the supervisory personnel responsible for overseeing the inspection, maintenance, and repair
 - b. Description of the items or conditions to be inspected and frequency of the inspections or repairs
 - c. Identification of the equipment and, if applicable, air-cleaning device, operating parameters that shall be monitored to detect a malfunction or failure, the normal operating range of these parameters and a description of the method of monitoring or surveillance procedures
 - d. Identification of the major replacement parts that shall be maintained in inventory for quick replacement
 - e. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits

If the plan fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the plan within 45 days after such an event occurs and submit the revised plan for approval to the AQD District Supervisor. Should the AQD determine the PM / MAP to be inadequate, the AQD District Supervisor may request modification of the plan to address those inadequacies.² **(R 336.1702, R 336.1910, R 336.1911, R 336.1912, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d), 40 CFR 60.4243(b)(2)(ii))**

4. At all times, the permittee shall maintain and operate each engine in FGENGINES3, including associated air pollution control equipment and monitoring equipment, in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 60.4243(b)(2)(ii), (40 CFR 63.6605(b))**
5. The permittee shall prepare a site-specific monitoring plan that addresses oxidation catalyst parameter monitoring system design, data collection, and the quality assurance and quality control elements in 40 CFR 63.6625(b)(1)(i) through (v) (SC III.5.a through SC III.5.e) and in 40 CFR 63.8(d). **(40 CFR 63.6625(b)(1)(i) through (v))**
 - a. The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;
 - b. Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements;
 - c. Equipment performance evaluations, system accuracy audits, or other audit procedures;
 - d. Ongoing operation and maintenance procedures in accordance with provisions in 40 CFR 63.8(c)(1)(ii) and (c)(3);

- e. Ongoing reporting and recordkeeping procedures in accordance with provisions in 40 CFR 63.10(c), (e)(1), and (e)(2)(i).
- 6. As specified in 40 CFR 63.8(f)(4), the permittee may request approval monitoring system quality assurance and quality control procedures alternative to those specified in 40 CFR 63.6625(b)(1)(i) through (v) (SC III.5.a through SC III.5.e). "Monitoring System" refers to Continuous Monitoring Systems (CMS) for the oxidation catalyst, which includes Continuous Parameter Monitoring Systems (CPMS). **(40 CFR 63.6625(b))**
- 7. The permittee shall conduct a performance evaluation of each CPMS in accordance with their site-specific monitoring plan. The permittee shall conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in their site-specific monitoring plan at least annually. **(40 CFR 63.6625(b)(5) & (6))**
- 8. The permittee shall minimize the engines' time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standard applicable to all times other than startup applies. **(40 CFR 63.6625(h))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall not operate any spark ignition 4SLB engine in FGENGINE3 unless the associated oxidation catalyst system is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes the following:² **(R 336.1702(a), R 336.1910, R 336.2804, 40 CFR 52.21(d), 40 CFR 63.6600(b), 40 CFR 63.6640(a), 40 CFR Part 63, Subpart ZZZZ, Table 2b)**
 - a. Maintaining the catalyst so that the pressure drop across the catalyst does not change by more than two inches of water, at 100 percent load (± 10 percent load), from the pressure drop measured during the initial performance test (initial performance test will be conducted at 100 percent load, ± 10 percent load)
 - b. Maintain the engine exhaust temperature so that the catalyst inlet temperature is greater than or equal to 450°F and less than or equal to 1350°F.
 - c. Performing the manufacturer's recommended maintenance on the control device and operating in conjunction with the PM / MAP specified in SC III.3.
- 2. The permittee shall ensure that the CPMS collects oxidation catalyst temperature data at least once every 15 minutes and the CPMS temperature sensor has a minimum tolerance of 2.8 degrees Celsius (5 degrees Fahrenheit) or 1 percent of the measurement range, whichever is larger. **(40 CFR 63.6625(b)(3) & (4))**

V. TESTING/SAMPLING

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

- 1. The permittee shall conduct an initial compliance demonstration for each applicable emission and operating limitation according to Table 5 of 40 CFR, Part 63, Subpart ZZZZ, as identified below. During the initial performance test, the permittee shall establish each applicable operating limitation.² **(40 CFR 63.6630, 40 CFR Part 63, Subpart ZZZZ, Table 5)**

For each	Complying with requirement to	You have demonstrated initial compliance if
4SLB stationary RICE.	a. Reduce CO emissions using oxidation catalyst and using a CPMS.	i. The average reduction of emissions of CO determined from the initial performance test achieves the required CO percent reduction; and ii. You have installed a CPMS to continuously monitor catalyst inlet temperature according to the requirements in 40 CFR 63.6625(b); and iii. You have recorded the catalyst pressure drop and catalyst inlet temperature during the initial performance test.

2. For any performance tests conducted for any 4SLB engine in FGENGINES3, the permittee shall conduct three separate test runs, one hour each, and at any load condition within ± 10 percent of 100 percent load. Following the initial performance test, subsequent testing must be conducted semi-annually. After two consecutive passing events, the testing frequency can be changed to annually, unless results of any subsequent test indicate non-compliance with the CO emission limitations or there has been a deviation from the catalyst pressure drop or catalyst inlet temperature operating limitation. If the catalyst is changed, the permittee shall reestablish the operating parameters measured during the initial test and conduct a subsequent test to demonstrate compliance with the applicable emission limitation. If applicable, the permittee shall determine compliance with the percent reduction requirement using the equation in 40 CFR 63.6620(e). No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD, as required in 63.7(b)(1). The final plan must be approved by the AQD prior to testing.² **(40 CFR 63.6610(a), 40 CFR 63.6615, 40 CFR 63.6620, 40 CFR 63.6640(b))**
3. Compliance with SC I.3 of this table is based on the results of testing the average of three 1-hour runs conducted according to the requirements in 40 CFR 63.6620 and Table 4 of that subpart.² **(40 CFR 63.6600, 40 CFR 63.6620(b))**
4. For any CO performance tests conducted for an engine in FGENGINES, the permittee shall conduct three separate test runs, one hour each, and at any load condition within ± 10 percent of 100 percent load.² **(40 CFR 63.6620(d), 40 CFR Part 63, Subpart ZZZZ, Tables 4 & 6)**
5. The permittee shall conduct an initial performance test for each engine in FGENGINES3 within one year after startup of the engine to demonstrate compliance with the NO_x, CO, and VOC emission limits in SC I.1, SC I.2, and SC I.4 through SC I.7. The performance test shall be conducted according to 40 CFR 60.4244. **(40 CFR 60.4243(b)(2)(ii), 40 CFR 60.4244, R 336.1213(3))**
6. The permittee shall conduct subsequent performance testing for each engine in FGENGINES3 every 8,760 hours of operation or three years, whichever comes first, to demonstrate compliance with the NO_x, CO, and VOC emission rates in SC I.1, SC I.2, and SC I.4 through SC I.7. The performance test shall be conducted according to 40 CFR 60.4244. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(40 CFR 60.4243(b)(2)(ii), 40 CFR 60.4244, R 336.1213(3))**
7. For the performance tests required in SC V.5 and V.6, the permittee shall conduct three separate test runs, one hour each or longer, at any load within ± 10 percent of 100 peak (or the highest achievable) load. **(40 CFR 60.4244, 40 CFR Part 60, Subpart JJJJ, Table 2)**
8. The permittee shall not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in 40 CFR 60.8(c). If an engine in FGENGINES3 is nonoperational, the permittee does not need to start up the engine solely to conduct a performance test; however, the permittee must conduct the performance test immediately upon startup of the engine. **(40 CFR 60.4244(b))**
9. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than seven days prior to the anticipated test date. **(R 336.2001(4))**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall install, operate, and maintain a continuous parameter monitoring system (CPMS) for each stationary RICE in FGENGINES3, according to the requirements in 40 CFR 63.8 and 40 CFR 63.6635, to continuously monitor the operating parameters. This system shall include, but is not limited to:² **(40 CFR 63.6625(b), 40 CFR 63.6635, 40 CFR 63.6640)**
 - a. Operation and maintenance requirements described in 40 CFR 63.8(c)
 - b. A quality control program described in 40 CFR 63.8(d)
 - c. Performance evaluations described in 40 CFR 63.8(e)

- d. An alternative monitoring method may be requested and approved pursuant to 40 CFR 63.8(f)
 - e. Data must be reduced as described in 40 CFR 63.8(g)
2. For each stationary RICE with oxidation catalyst, the permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor and record, on a continuous basis and according to the requirements in 40 CFR 63.6625(b) and 40 CFR 63.6635, the temperature at the inlet of the catalyst for each stationary RICE.² **(40 CFR 63.6625(b), 40 CFR 63.6635, 40 CFR 63.6640)**
 3. For each stationary RICE with oxidation catalyst, the permittee shall measure the pressure drop across the catalyst for each stationary RICE once per calendar month and demonstrate that the pressure drop is within the operating limitation established during the performance test.² **(40 CFR 63.6625(b), 40 CFR 63.6640)**
 4. For 4SLB engines with oxidation catalyst control complying with the CO reduction limits, in lieu of the CPMS specified in SC VI.1, VI.2 and VI.3, the permittee can opt to install, calibrate, maintain, and operate in a satisfactory manner a continuous emission monitoring system (CEMS) to monitor and record the CO and either the O₂ or CO₂ at both the inlet and outlet of the control device for each 4SLB engine, according to the procedures in 40 CFR 63.6625(a)(1) through (4) and 40 CFR 63.6635.² **(40 CFR 63.6625(a), 40 CFR 63.6635, 40 CFR 63.6640)**
 5. For each stationary RICE with oxidation catalyst, the permittee shall keep, in a satisfactory manner, records of the 4-hour rolling average for each catalyst inlet temperature and the monthly pressure drop for each catalyst, as required by SC VI.2 and VI.3. All records shall be kept on file for a period of at least five years (at least two years at the site) and made available to the Department upon request.² **(40 CFR 63.6655, 40 CFR 63.6660)**
 6. The permittee shall keep the following records:
 - a. A copy of each notification and report submitted to comply with 40 CFR Part 60, Subpart JJJJ and 40 CFR Part 63, Subpart ZZZZ, and the documentation supporting any notification. **(40 CFR 60.4245, 40 CFR 63.6655(a)(1))**
 - b. Records specified in 40 CFR 63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction. **(40 CFR 63.6655(a)(2))**
 - c. Records of performance tests and evaluations as required in 40 CFR 63.10(b)(2)(viii). **(40 CFR 63.6655(a)(3))**
 - d. For each CEMS or CPMS, records described in 40 CFR 63.10(b)(2)(vi) through (xi). **(40 CFR 63.6655(b)(1))**
 - e. For each CEMS or CPMS, previous versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3)(SC III.5). **(40 CFR 63.6655(b)(2))**
 - f. For each CEMS or CPMS, requests for alternatives to the relative accuracy test as required in 40 CFR 63.8(f)(6)(i) if applicable. **(40 CFR 63.6655(b)(3))**

All records shall be kept on file for a period of at least five years (at least two years at the site) and made available to the Department upon request.² **(40 CFR 63.6655, 40 CFR 63.6660)**

7. The permittee shall demonstrate continuous compliance with each applicable emission and operating limitation as specified in Table 6 to 40 CFR Part 63, Subpart ZZZZ, using the method(s) described below.² **(40 CFR 63.6640 and 40 CFR Part 63, Subpart ZZZZ, Table 6)**

For each	Complying with requirement to	You must demonstrate continuous compliance by
4SLB stationary RICE.	a. Reduce CO emissions using an oxidation catalyst and using a CPMS.	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved ¹ ; and ii. Collecting the catalyst inlet temperature data according to 40 CFR 63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and

For each	Complying with requirement to	You must demonstrate continuous compliance by
		iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.

¹After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.

8. The permittee shall maintain a log of all maintenance activities conducted according to the PM / MAP (pursuant to III.3). The permittee shall keep this log on at the facility file for a period of at least five years and make it available to the Department upon request.² **(R 336.1702(a), R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d), 40 CFR 60.4245(a)(2))**
9. The permittee shall keep at the facility, in a satisfactory manner, monthly fuel use records for each engine included in FGENGINES3. They shall be made available to the Department upon request. **(R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d), R 336.1213(3))**
10. The permittee shall keep records of action taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. **(40 CFR 63.6655(a)(5))**
11. The permittee shall keep documentation that each engine in FGENGINES3 meets the emission standards in SC I.5 through I.7. **(40 CFR 60.4245(a)(4))**
12. The permittee shall maintain satisfactory records to indicate that the facility is only burning pipeline natural gas, as defined in 40 CFR 72.2, in FGENGINES3, **(R 336.1213(3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
1. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. For each stationary RICE that uses a CPMS to comply with emission and operating limitations, the permittee shall submit to the AQD District Supervisor, a semi-annual compliance report, as specified in 40 CFR 63.6650, which contains all deviations during the reporting period from any applicable emission limitation or operating limitation and all periods during which the CPMS was out of control as defined in 40 CFR 63.8(c)(7). If there were no deviations from any applicable emission limitations or operating limitations or no periods that the CPMS was out of control, the report shall contain a statement that there were no deviations and no periods during which the CPMS was out of control during the reporting period. The first report shall cover the period beginning on the applicable compliance date specified in 40 CFR 63.6595 and ending on June 30 (postmarked or delivered by September 15) or December 31 (postmarked or delivered by March 15), whichever date is the first date following the end of the first calendar half after the applicable compliance date. Each subsequent report must cover the semi-annual period from January 1 through June 30, or from July 1 through December 31. The subsequent reports must be postmarked or delivered by September 15 or March 15; whichever date is the first date following

the end of the semiannual reporting period. The compliance report must also contain the following information, as specified in 40 CFR 63.6650 (c) and (e):

- a. Company name and address
- b. Certification of the report by a responsible official
- c. Date of report and beginning and ending dates of the reporting period
- d. The number of startups, shutdowns, and malfunctions that occurred during the reporting period and demonstration that the Startup/Shutdown/Malfunction Plan was followed during such events
- e. If there were no deviations from any applicable emission or operating limitations under 40 CFR 63, Subpart ZZZZ during the reporting period, a statement that no such deviations occurred during the reporting period
- f. If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out of control, as specified in 40 CFR 63.8(c)(7), a statement that there were no periods during which the CMS was out of control during the reporting period
- g. An identification of each parameter monitored and whether CO or formaldehyde was monitored
- h. The date and time that each malfunction started and stopped
- i. The date, time and duration that each CPMS was out of control (as defined in 40 CFR 63.8(c)(7)) and the corrective actions taken
- j. The date, time and duration that each CPMS was inoperative, except for low-level and high-level checks
- k. The date and time that each deviation started and stopped and whether each deviation occurred during a summary of the total duration of the deviations during the reporting period and the percent of the total duration during the total source operating time of that reporting period
- l. period of malfunction or during another period
- m. A breakdown of the total duration of deviations due to control equipment problems, process problems, other known causes and any unknown causes
- n. A summary of the total duration of CMPS downtime during the reporting period and the percent of the total duration of downtime during the total source operating time of that reporting period
- o. A brief description of the stationary RICE
- p. A brief description of the CMS
- q. The date of the latest CMS certification or audit
- r. A description of any changes in the CMS, processes or controls since the last reporting period

A copy of the compliance report shall be kept on file for a period of at least five years (at least two years at the site) and made available to the Department upon request.² **(40 CFR 63.6640(b), 40 CFR 63.6650, 40 CFR 63.6660)**

5. The permittee shall submit to the AQD District Supervisor, a startup, shutdown and malfunction report if actions addressing the startup, shutdown and malfunction were not consistent with the Startup/Shutdown/Malfunction Plan. Notification of the event and the actions taken during the event shall be submitted by fax or telephone within two working days after the event occurred. Within seven working days after the event, the permittee shall submit a letter to the AQD District Supervisor which contains the information specified in 40 CFR 63.10(d)(5)(ii) including:
 - a. Company name and address
 - b. Certification of the report by a responsible official
 - c. Circumstances of the event
 - d. Reasons for not following the Startup/Shutdown/Malfunction Plan
 - e. Whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred
 - f. Actions taken to minimize emissions in conformance with 40 CFR 63.6(e)(1)(i)

Notwithstanding the preceding timelines for notifications, the owner or operator may make alternative reporting arrangements with the Department in accordance with 40 CFR 63.9(i). A copy of the report shall be kept on file for a period of at least five years (at least two years at the site) and made available to the Department upon request.² **(40 CFR 63.6650, 40 CFR 63.6660)**

6. The permittee shall submit all applicable notifications specified in 40 CFR 63.7(b) and (c), 63.8 (e), (f)(4), and (f)(6), and 63.9(b) through (e), (g), and (h) by the dates specified.² **(40 CFR 63.6645(a))**

7. If startup of a new or reconstructed RICE occurs on or after August 16, 2004, the permittee shall submit an initial notification as required by 63.9(b), no later than 120 days after the RICE becomes subject to 40 CFR Part 63, Subpart ZZZZ.² **(40 CFR 63.6645(c))**
8. For a compliance demonstration that does not include a performance test, the permittee shall submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii), before the close of the 30th business day following completion of the compliance demonstration.² **(40 CFR 63.6630(c), 40 CFR 63.6645(h)(1))**
9. For a compliance demonstration that includes a performance test, the permittee shall submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii), before the close of the 60th business day following completion of the performance test according to 63.10(d)(2) and shall include the following:
 - a. RICE manufacturer, model number, year of purchase, and site-rated brake horsepower;² **(40 CFR 63.6620(i), 40 CFR 63.6630(c), 40 CFR 63.6645(h)(2))**
 - b. Ambient temperature, pressure, and humidity during the performance test;² **(40 CFR 63.6620(i), 40 CFR 63.6630(c), 40 CFR 63.6645(h)(2))**
 - c. Average percent load for the RICE and assumptions made to estimate or calculate percent load during the performance test;² **(40 CFR 63.6620(i), 40 CFR 63.6630(c), 40 CFR 63.6645(h)(2))**
 - d. The model number of any measuring devices used during the test and the percent accuracy;² **(40 CFR 63.6620(i), 40 CFR 63.6630(c), 40 CFR 63.6645(h)(2))**
 - e. Performance test results.² **(40 CFR 63.6630(c), 40 CFR 63.6645(h)(2))**
10. The permittee shall report each instance in which requirements of Table 8 of Subpart ZZZZ are not met.² **(40 CFR 63.6640(e))**
11. The permittee shall submit two complete test reports of the test results to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, within 60 days following the last date of the test. **(R 336.2001(5), 40 CFR 60.4245(d))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVENGINE31	36 ²	75 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)
2. SVENGINE32	36 ²	75 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)
3. SVENGINE33	36 ²	75 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)
4. SVENGINE34	36 ²	75 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
5. SVENGINE35	36 ²	75 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)

The exhaust gases shall be discharged unobstructed vertically upwards to the ambient air.

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart ZZZZ, for Stationary Reciprocating Internal Combustion Engines by the initial compliance date.² **(40 CFR Part 63, Subparts A and ZZZZ)**
2. The permittee shall comply with all applicable provisions of the New Source Performance Standards, as specified in 40 CFR Part 60, Subpart A and Subpart JJJJ, as they apply to each engine in FGENGINE3.² **(40 CFR Part 60, Subparts A and JJJJ)**

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).

**FGGLYCDEHYDS
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Two glycol dehydrators for removing water from natural gas.

Emission Units: EUGLYCDEHYD01, EUGLYCDEHYD02

POLLUTION CONTROL EQUIPMENT

Vapor recovery system with reboiler and thermal oxidizer.

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	71.0 pounds/day ²	Daily	EUGLYCDEHYD01 and EUGLYCDEHYD02 combined	Section V	R 336.1702(a)
2. VOC	12.0 tons/year ²	12-month rolling time period as determined for each calendar month.	EUGLYCDEHYD01 and EUGLYCDEHYD02 combined	Section V	R 336.1702(a)
3. Benzene	0.90 megagram/year ²	Actual average emissions based on a 12-month rolling time period as determined for each calendar month.	Each glycol dehydrator unit process vent	Section V	R 336.1201(3), 40 CFR 63.1282(a)(2)(i)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not use stripping gas in the glycol regenerator still.² **(R 336.1702(a))**

IV. DESIGN/EQUIPMENT PARAMETERS

1. The permittee shall not operate each glycol dehydration unit unless the thermal oxidizer is installed, maintained and operated in a satisfactory manner.² **(R 336.1702(a), R 336.1910)**
2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a temperature monitoring device in the combustion chamber of the thermal oxidizer to monitor and record the temperature on a continuous basis, during operation of each glycol dehydration unit. Temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval.² **(R 336.1702(a), R 336.1910)**

3. Satisfactory operation of the thermal oxidizer includes maintaining a daily average minimum combustion chamber temperature of 1400 °F and a minimum retention time of 0.5 seconds, thus maintaining a minimum VOC destruction efficiency of 95 percent (by weight).² (R 336.1702(a), R 336.1910)
4. The permittee shall burn any flash tank off-gas in the glycol dehydration reboiler combustion unit or thermal oxidizer.² (R 336.1702(a), R 336.1910)

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years.² (R 336.1213(3)(b)(ii))

1. The permittee shall determine the non-hydrocarbon and hydrocarbon composition, including benzene content, of the natural gas processed in each glycol dehydration unit in accordance with the procedures presented in the GRI-GLYCalc™ Technical Reference manual.² (R 336.1702(a))
2. The permittee may determine the actual average VOC and benzene emissions from each glycol dehydration unit process using an **emission factor** calculated, each time the natural gas is analyzed, with the GRI-GLYCalc™ computer model, version 3.0 or higher and the procedures presented in the associated GRI-GLYCalc™ Technical Reference manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled “Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions”. The VOC composition and benzene content, of the natural gas, which is input to model shall be as determined in the most recent analysis of the natural gas processed in each glycol dehydration unit.² (40 CFR 63.1282(a)(2)(i)), R 336.1702(a))
3. The permittee shall analyze the natural gas processed in each glycol dehydration unit to determine its composition including the VOC and benzene content, once per dehydration season.² (R 336.1702(a))
4. The permittee shall sample and conduct analysis of the wet gas stream in accordance with methods that are standard in the natural gas industry. Any requests for a change in the sample frequency must be submitted to the AQD District Supervisor for review and approval. (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 calculate the annual VOC and benzene emissions from each glycol dehydration unit process vent, based on a 12-month rolling period. The annual emissions, based on a 12-month rolling time period, shall be calculated for each calendar month and shall be made available to the AQD upon request.² (R 336.1702(a))
2. The permittee shall maintain records of the facility’s annual natural gas throughput and make available to AQD upon request.² (R 336.1702(a), 40 CFR 63.1270(a)(3))
3. The permittee shall conduct monitoring and maintain satisfactory records to show proper operation of the thermal oxidizer.² (R 336.1702(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))

See Appendix 8

VIII. STACK/VENT RESTRICTIONS

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVOXIDIZER1	46.5 ²	40 ²	40 CFR 52.21 (c) & (d)
2. SVOXIDIZER2	46.5 ²	40 ²	40 CFR 52.21 (c) & (d)
3. SVGLYCDEHYD01	20.0 ²	31 ²	40 CFR 52.21 (c) & (d)
4. SVGLYCDEHYD02	20.0 ²	31 ²	40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable requirements of 40 CFR Part 63, Subpart HHH-National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities.² **(40 CFR Part 63, Subpart HHH)**
2. The permittee can substitute other methods of testing, recordkeeping, and monitoring upon submittal and approval by the District as necessary to meet the applicable requirements of 40 CFR Part 63, Subpart HHH.² **(40 CFR Part 63, Subpart HHH, R 336.1201(3))**

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).

**FGDEHYHHH
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

40 CFR Part 63, Subpart HHH establishes national emission limitations and operating limitations for affected sources at natural gas transmission and storage facilities that are major sources of HAP emissions. The rule applies to facilities that transport or store natural gas prior to entering the pipeline to a local distribution company or to a final user. An affected source is each new or existing glycol dehydration unit. The three glycol dehydration units identified in this flexible group are existing units per 40 CFR 63.1270(b) because construction commenced on or before August 23, 2011. The three glycol dehydration units identified in this flexible group are small glycol dehydration units per 40 CFR 63.1271 because actual annual average benzene emissions have been less than 0.90 Mg/yr.

Emission Units: EUGLYCDEHYD01, EUGLYCDEHYD02 and EUDEHY3

POLLUTION CONTROL EQUIPMENT

Vapor recovery system with reboiler and thermal oxidizer.

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. BTEX	Calculated using Equation 1 in Appendix 7	Annual	EUGLYCDEHYD01 EUGLYCDEHYD02 EUDEHY3	SC V.2 SC VI.3	40 CFR 63.1275(b)(1)(iii)

See Appendix 7

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. At all times, the permittee shall operate and maintain each glycol dehydration unit in FGDEHYHHH, 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 which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.1274(h))**
2. The permittee shall operate each control device in accordance with the requirements specified below: **(40 CFR 63.1281(f)(2))**
 - a. Each control device used to comply with this subpart shall be operating at all times. More than one unit may be vented to a control device.
 - b. For each control device monitored in accordance with 40 CFR 63.1283(d) the permittee shall demonstrate compliance when the daily average of the monitoring parameter value is greater than the minimum monitoring parameter value established during the most recent compliance demonstration.

3. The permittee shall operate the thermal oxidizer at or above the minimum temperature established based on values measured during the performance test required in SC V.2. **(40 CFR 63.1282(e)(1))**
4. The permittee shall prepare a site-specific monitoring/quality control plan that addresses the Continuous Parameter Monitoring System (CPMS) design, data collection, and the quality assurance and quality control elements. Each CPMS must be installed, calibrated, operated, and maintained in accordance with the procedures in your approved site-specific monitoring plan. The permittee may request approval of monitoring system quality assurance and quality control procedures alternative to those specified below and in your site-specific monitoring plan. **(40 CFR 63.1274(c), 40 CFR 63.1283(d)(1)(ii-iv))**
 - a. The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations; **(40 CFR 63.1283(d)(1)(ii)(A))**
 - b. Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements; **(40 CFR 63.1283(d)(1)(ii)(B))**
 - c. Equipment performance checks, system accuracy audits, or other audit procedures; **(40 CFR 63.1283(d)(1)(ii)(C))**
 - d. Ongoing operation and maintenance procedures in accordance with provisions in 40 CFR 63.8(c)(1) and (c)(3); **(40 CFR 63.1283(d)(1)(ii)(D))**
 - e. Ongoing reporting and recordkeeping procedures in accordance with provisions in 40 CFR 63.10(c), (e)(1), and (e)(2)(i); **(40 CFR 63.1283(d)(1)(ii)(E))**
 - f. Initial and any subsequent calibration of the CPMS; **(40 CFR 63.8(d)(2)(i))**
 - g. Determination and adjustment of the calibration drift of the CPMS; **(40 CFR 63.8(d)(2)(ii))**
 - h. Preventive maintenance of the CPMS, including spare parts inventory; **(40 CFR 63.8(d)(2)(iii))**
 - i. Data recording, calculations, and reporting; **(40 CFR 63.8(d)(2)(iv))**
 - j. Accuracy audit procedures, including sampling and analysis methods; **(40 CFR 63.8(d)(2)(v))**
 - k. Program of corrective action for a malfunctioning CPMS. **(40 CFR 63.8(d)(2)(vi))**
5. The permittee must conduct a performance evaluation of each CPMS in accordance with the site-specific monitoring plan. **(40 CFR 63.1283(d)(1)(iv))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall connect each process vent to a control device or a combination of control devices through a closed vent system. The closed vent system shall be designed and operated in accordance with the following requirements: **(40 CFR 63.1274(c), 40 CFR 63.1275(b)(1)(iii)(A), 40 CFR 63.1281(c), 40 CFR 63.1283(c)(2)(iii))**
 - a. The closed-vent system shall route all gases, vapors, and fumes emitted from the material in and emission unit to a control device that meets the requirements specified in SC IV.2.
 - b. The closed-vent system shall be designed and operated with no detectable emissions.
 - c. For each bypass device in the closed-vent system that could divert all or a portion of the gases, vapors, or fumes from entering the control device, the permittee shall:
 - i. At the inlet to the bypass device that could divert the stream away from the control device to the atmosphere, properly install, calibrate, maintain, and operate a flow indicator that is capable of taking periodic readings and sounding an alarm when the bypass device is open such that the stream is being, or could be, diverted away from the control device to the atmosphere; or
 - ii. Secure the bypass device valve installed at the inlet to the bypass device in the non-diverting position using a car-seal or lock-and-key type configuration.
 - d. Low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and safety devices are not subject to the requirements of SC IV.1.c.
2. The permittee shall connect each process vent to an enclosed combustion device (e.g., thermal vapor incinerator, boiler, or process heater) that is designed and operated to meet the mass content of BTEX in the gases vented to the device to the levels in SC I.1 as determined in accordance with the requirements of 40 CFR 63.1282(d). If a boiler or process heater is used as the control device, then the vent stream shall be introduced into the flame zone of the boiler or process heater. Each control device shall be operating at all times. **(40 CFR 63.1274(c), 40 CFR 63.1275(b)(1)(iii)(A), 40 CFR 63.1281(f)(1)(i)(A), 40 CFR 63.1281(f)(2))**

3. The permittee shall install and operate a continuous parameter monitoring system (CPMS) to measure the temperature of each thermal oxidizer. The CPMS shall meet the following specifications and requirements: **(40 CFR 63.1274(c), 40 CFR 63.1283(d)(1))**
 - a. Each CPMS shall measure data values at least once every hour and record either:
 - i. Each measured data value; or
 - ii. Each block average value for each 1-hour period or shorter periods calculated from all measured data values during each period. If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the hourly (or shorter period) block average instead of all measured values.
4. The permittee shall install, calibrate, operate, and maintain a monitoring device, equipped with a continuous recorder, to measure the thermal oxidizer temperature. The monitoring device shall meet the following requirements: **(40 CFR 63.1274(c), 40 CFR 63.1283(d)(3))**
 - a. The device shall have a minimum accuracy of ± 2 percent of the temperature being monitored in $^{\circ}\text{C}$, or $\pm 2.5^{\circ}\text{C}$, whichever value is greater.
 - b. The temperature sensor shall be installed at a location representative of the combustion zone temperature

V. TESTING/SAMPLING

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

1. The permittee shall perform "no detectable emissions" testing for closed vent systems using the test methods and procedures specified in 40 CFR 63.1282(b). **(40 CFR 63.1282(b))**
2. The permittee shall conduct a performance test to demonstrate that each thermal oxidizer meets the requirements of SC IV.2 (40 CFR 1281(f)(1)) using the following test methods and procedures: **(40 CFR 63.1282(d)(3))**
 - a. Method 1 or 1A, 40 CFR Part 60, Appendix A, as appropriate, shall be used for selection of the sampling sites. The sampling site shall be located at the outlet of the combustion device.
 - b. The gas volumetric flow rate shall be determined using Method 2, 2A, 2C, or 2D, 40 CFR, Part 60, Appendix A, as appropriate.
 - c. To determine compliance with the BTEX emission limit, the permittee shall use one of the following methods: Method 18, 40 CFR Part 60, Appendix A; ASTM D64200-99 (Reapproved 2004); or any other method or data that have been validated according to the applicable procedures in Method 301, 40 CFR, Part 63, Appendix
 - d. The permittee shall conduct performance tests according to the following schedule:
 - i. An initial performance test shall be conducted no later than October 15, 2015.
 - ii. The first periodic performance test shall be conducted not later than 60 months after the initial performance test. Subsequent periodic performance tests shall be conducted at intervals no longer than 60 months following the previous periodic performance test or whenever a source desires to establish a new operating limit. Combustion control devices meeting either of the following criteria are not required to conduct periodic performance tests:
 - A. A control device whose model is tested under and meets the criteria of manufacturers performance test in 40 CFR 63.1282(g).
 - B. A combustion control device demonstrating during the performance test that combustion zone temperature is an indicator of destruction efficiency and operates at a minimum temperature of 1400 degrees F.

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 determine the actual flow rate of natural gas to each glycol dehydration unit using either of the following procedures: **(40 CFR 63.1282(a)(1))**
 - a. Install and operate a monitoring instrument that directly measures natural gas flow rate to each glycol dehydration unit with an accuracy of ± 2 percent or better. The annual natural gas flow rate shall be converted to a daily average by dividing the annual flow rate by the number of days per year each emission unit processed natural gas.

- b. Documenting, to the AQD's satisfaction, the actual annual average natural gas flow rate to each glycol dehydration unit.
2. The permittee shall maintain records of the annual facility natural gas throughput each year. **(40 CFR 63.1270(a)(3))**
3. The permittee shall demonstrate compliance with the thermal oxidizer performance requirements in 40 CFR 63.1281(f)(1) (SC IV.2) as follows: **(40 CFR 63.1274(c), 40 CFR 63.1282(e), 40 CFR 63.1283(d))**
 - a. Establish a minimum temperature for the thermal oxidizer to define the conditions at which the thermal oxidizer must be operated to continuously achieve the performance requirements in 40 CFR 63.1281(f)(1) (SC IV.2). The minimum temperature shall be established based on values measured during the performance test conducted in accordance with the requirements of 40 CFR 63.1282(d)(3) to demonstrate that the control device achieves the applicable performance requirements specified in 40 CFR 63.1281(f)(1) and supplemented, as necessary, by control device manufacturer's recommendations. **(40 CFR 63.1282(e)(1), 40 CFR 63.1283(d)(5)(i)(A))**
 - b. Continuously monitor and record the temperature on the thermal oxidizer and calculate the daily average temperature for each operating day as follows: **(40 CFR 63.1282(e)(2), 40 CFR 63.1283(d)(4))**
 - i. Using the data recorded by the monitoring system, except for inlet gas flow rate, the permittee shall calculate the daily average value for each monitored operating parameter for each operating day. If the emissions unit operation is continuous, the operating day is a 24-hour period. If the emissions unit operation is not continuous, the operating day is the total number of hours of control device operation per 24-hour period. Valid data points must be available for 75 percent of the operating hours in an operating day to compute the daily average.
 - c. Compliance with the thermal oxidizer control device performance requirements specified in SC IV.2 is achieved when the daily average of the temperature readings calculated in SC VI.3.b. is either equal to or greater than the minimum value established under SC VI.3.a. **(40 CFR 63.1282(e)(3))**
4. The permittee shall operate each CPMS at all times the associated glycol dehydration unit in FGDEHYHHH is operating except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, system accuracy audits and required zero and span adjustments). A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. Monitoring system repairs are required to be completed in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable. **(40 CFR 63.1282(e)(4))**
5. The permittee must conduct the CPMS equipment performance checks, system accuracy audits, or other audit procedures specified in the site-specific monitoring plan at least once every 12 months. **(40 CFR 63.1274(c), 40 CFR 63.1283(d)(1)(iii))**
6. Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required quality monitoring system quality assurance or quality control activities (including, as applicable, system accuracy audits and required zero and span adjustments), failure to collect required data is a deviation of the monitoring requirements. **(40 CFR 63.1282(e)(6))**
7. For each closed-vent system, the permittee shall comply with the following requirements: **(40 CFR 63.1274(c), 40 CFR 63.1283(c)(1) through (4))**
 - a. Except for parts of the closed-vent system or cover that are designated unsafe to inspect or difficult to inspect, each closed-vent system and each bypass device shall be inspected according to the procedures specified below according to the following schedule: **(40 CFR 63.1283(c)(1))**
 - i. For each closed-vent system joints, seams, or other connections that are permanently or semi-permanently sealed (e.g., a welded joint between two sections of hard piping or a bolted or gasketed ducting flange): **(40 CFR 63.1283(c)(2)(i))**
 - A. Conduct an initial inspection to demonstrate that the closed-vent system operates with no detectable emissions.

- B. Conduct annual visual inspections for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in piping; loose connections; or broken or missing caps or other closure devices.
 - ii. For closed-vent system components other than those specified in SC VI.7.a.i above: **(40 CFR 63.1283(c)(2)(ii))**
 - A. Conduct an initial inspection to demonstrate that the closed-vent system operates with no detectable emissions.
 - B. Conduct annual inspections to demonstrate that the components or connections operate with no detectable emissions.
 - C. Conduct annual visual inspections for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork; loose connections; or broken or missing caps or other closure devices.
 - iii. For each bypass device, except low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and safety devices, the permittee shall either: **(40 CFR 63.1283(c)(2)(iii))**
 - A. At the inlet to the bypass device that could divert the steam away from the control device to the atmosphere, set the flow indicator to take a reading at least once every 15 minutes; or
 - B. If the bypass device valve installed at the inlet to the bypass device is secured in the non-diverting position using a car-seal or a lock-and-key type configuration, visually inspect the seal or closure mechanism at least once every month to verify that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass device.
 - b. In the event that a leak or defect is detected, the permittee shall repair the leak or defect as soon as practicable, except as provided in VI.7.c. **(40 CFR 63.1283(c)(3))**
 - i. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.
 - ii. Repair shall be completed no later than 15 calendar days after the leak is detected.
 - c. Delay of repair of a closed-vent system for which leaks or defects have been detected is allowed if the repair is technically infeasible without a shutdown, as defined in 40 CFR 63.1271, or if the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next shutdown. **(40 CFR 63.1283(c)(4))**
 - d. In all cases where the provisions of 40 CFR Part 63, Subpart HHH require the permittee to repair leaks by a specified time after the leak is detected, it is a violation of 40 CFR Part 63, Subpart HHH to fail to take action to repair the leak(s) within the specified time. If action is taken to repair the leak(s) within the specified time, failure of that action to successfully repair the leak(s) is not a violation of this standard. However, if the repairs are unsuccessful, and a leak is detected, the permittee shall take further action as required by the applicable provisions of this subpart. **(40 CFR 63.1274(g))**
8. Any parts of the closed-vent system or cover that are designated, as described below, as unsafe to inspect are exempt from the inspection requirements of SC VI.7 if: **(40 CFR 63.1274(c), 40 CFR 63.1283(c)(5))**
- a. The permittee determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with SC VI.7.a.i or ii.
 - b. The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.
9. Any parts of the closed-vent system or cover that are designated, as described below, as difficult to inspect are exempt from the inspection requirements of SC VI.7 if: **(40 CFR 63.1274(c), 40 CFR 63.1283(c)(6))**
- a. The permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than two meters above a support surface; and
 - b. The permittee has a written plan that requires inspection of the equipment at least once every five years.
10. The permittee shall maintain records identifying all parts of the closed-vent system that are designated as unsafe to inspect in accordance with SC VI.8, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment. **(40 CFR 63.1274(c), 40 CFR 63.1283(c)(5), 40 CFR 63.1284(b)(5))**
11. The permittee shall maintain records identifying all parts of the closed-vent system that are designated as difficult to inspect in accordance with SC VI.9, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment. **(40 CFR 63.1274(c), 40 CFR 63.1283(c)(6), 40 CFR 63.1284(b)(6))**

12. For each inspection conducted in accordance with SC VI.7 during which no leaks or defects are detected, the permittee shall maintain a record that the inspection was performed, the date of the inspection, and a statement that no leaks or defects were detected. **(40 CFR 63.1274(c), 40 CFR 63.1284(b)(8))**
13. The permittee shall maintain the following records for each inspection conducted in accordance with SC VI.7 during which a leak or defect is detected. **(40 CFR 63.1274(c), 40 CFR 63.1283(c)(7), 40 CFR 63.1284(b)(7))**
 - a. The instrument identification numbers, operator name or initials, and identification of the equipment.
 - b. The date the leak or defect was detected and the date of the first attempt to repair the leak or defect.
 - c. Maximum instrument reading measured by the method specified in SC V.1 after the leak or defect is successfully repaired or determined to be non-repairable.
 - d. "Repair delayed" and the reason for the delay if a leak or defect is not repaired within 15 calendar days after discovery of the leak or defect.
 - e. The name, initials, or other form of identification of the permittee (or designee) whose decision it was that repair could not be affected without a shutdown.
 - f. The expected date of successful repair of the leak or defect if a leak or defect is not repaired within 15 calendar days.
 - g. Dates of shutdowns that occur while the equipment is unrepaired.
 - h. The date of successful repair of the leak or defect.
14. An excursion for a control device is determined to have occurred when the monitoring data or lack of monitoring data result in any one of the criteria specified below being met. When multiple operating parameters are monitored for the same control device and during the same operating day, and more than one of these operating parameters meets an excursion criterion specified below, then a single excursion is determined to have occurred for the control device for that operating day: **(40 CFR 63.1274(c), 40 CFR 63.1283(d)(6))**
 - a. When the daily average value of a monitored operating parameter is less than the minimum operating parameter limit (or, if applicable, greater than the maximum operating parameter limit) established for the operating parameter. **(40 CFR 63.1283(d)(6)(i))**
 - b. When the monitoring data are not available for at least 75 percent of the operating hours in a day. **(40 CFR 63.1283(d)(6)(iii))**
 - c. An excursion occurs for a closed-vent system containing one or more bypass devices that could be used to divert all or a portion of the gases, vapors, or fumes from entering the control device when: **(40 CFR 63.1283(d)(6)(iv))**
 - i. The flow indicator indicates that flow has been detected and that the stream has been diverted away from the control device to the atmosphere. **(40 CFR 63.1283(d)(6)(iv)(A))**
 - ii. If the seal or closure mechanism has been broken, the bypass line valve position has a changed, the key for the lock-and-key type lock has been checked out, or the car-seal has broken. **(40 CFR 63.1283(d)(6)(iv)(B))**
15. For each excursion, the permittee shall be deemed to have failed to have applied control in a manner that achieves the required operating parameter limits. Failure to achieve the required operating parameter limits is a violation of this standard. **(40 CFR 63.1274(c), 40 CFR 63.1283(d)(7))**
16. Nothing in SC VI.14 through VI.15 shall be construed to allow or excuse a monitoring parameter deviation caused by any activity that violates other applicable provisions of 40 CFR Part 63, Subpart HHH. **(40 CFR 63.1274(c), 40 CFR 63.1283(d)(9))**
17. Data recorded during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities may not be used in calculations used to report emissions or operating levels. All the data collected during all other required data collection periods must be used in assessing the operation of the control device and associated control system. **(40 CFR 63.1274(c), 40 CFR 63.1282(e)(5))**
18. The permittee shall maintain the records specified in 40 CFR 63.10(b)(2), listed below. **(40 CFR 63.1274(c), 40 CFR 63.1284(b)(2))**
 - a. All required maintenance performed on the air pollution control and monitoring equipment; **(40 CFR 63.10(b)(2)(iii))**

- b. Each period during which a CPMS is malfunctioning or inoperative (including out-of-control periods); **(40 CFR 63.10(b)(2)(vi))**
 - c. All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CPMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report); **(40 CFR 63.10(b)(2)(vii))**
 - d. All results of performance tests, CPMS performance evaluations, and opacity and visible emission observations; **(40 CFR 63.10(b)(2)(viii))**
 - e. All measurements as may be necessary to determine the conditions of performance tests and performance evaluations; **(40 CFR 63.10(b)(2)(ix))**
 - f. All CPMS calibration checks; **(40 CFR 63.10(b)(2)(x))**
 - g. All adjustments and maintenance performed on CPMS; **(40 CFR 63.10(b)(2)(xi))**
 - h. Any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements under this 40 CFR 63, if the source has been granted a waiver under 40 CFR 63.10(f); **(40 CFR 63.10(b)(2)(xii))**
 - i. All emission levels relative to the criterion for obtaining permission to use an alternative to the relative accuracy test, if the source has been granted such permission under 40 CFR 63.8(f)(6); **(40 CFR 63.10(b)(2)(xiii))** and
 - j. All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9. **(40 CFR 63.10(b)(2)(xiv))**
19. The permittee shall maintain the following records: **(40 CFR 63.1274(c), 40 CFR 63.1284(b)(4), 40 CFR 63.1284(g))**
- a. Continuous records of the equipment operating parameters specified to be monitored in SC VI.3.b. **(40 CFR 63.1284(b)(4)(i))**
 - b. Records of the daily average value of each continuously monitored parameter for each operating day determined according to the procedures specified in SC VI.3.b. **(40 CFR 63.1284(b)(4)(ii))**
 - c. Hourly records of the times and durations of all periods when the vent stream is diverted from the control device or the device is not operating. **(40 CFR 63.1284(b)(4)(iii))**
 - d. Where a seal or closure mechanism is used to comply with the closed vent bypass, hourly records of flow are not required. In such cases, the owner or operator shall record that the monthly visual inspection of the seals or closure mechanism has been done, and shall record the duration of all periods when the seal mechanism is broken, the bypass line valve position has changed, or the key for a lock-and-key type lock has been checked out, and records of any car-seal that has broken. **(40 CFR 63.1284(b)(4)(iv))**
20. Monitoring data recorded during periods identified below shall not be included in any average or percent leak rate computed under this 40 CFR Part 63, Subpart HHH: **(40 CFR 63.1274(c), 40 CFR 63.1284(b)(3))**
- a. Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments;
 - b. Periods of non-operation resulting in cessation of the emissions to which the monitoring applies; and
 - c. An excursion when monitoring data are not available for at least 75 percent of the operating hours in a day.
21. The permittee shall maintain records of the occurrence and duration of each malfunction of process equipment or the air pollution control equipment and monitoring equipment. The permittee shall maintain records of actions taken during periods of malfunction to minimize emissions in accordance with SCIII.2 including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. **(40 CFR 63.1274(c), 40 CFR 63.1284(f))**
22. The permittee shall keep the records specified in 40 CFR 63.10(c) for each monitoring system operated in accordance with the requirements in 40 CFR 63.1283(d). Notwithstanding the previous sentence, monitoring data recorded during periods identified in SC VI.20 shall not be included in any average or percent leak rate computed under this subpart. Records shall be kept of the times and durations of all such periods and any other periods during process or control device operation when monitors are not operating or failed to collect required data. **(40 CFR 63.1274(c), 40 CFR 63.1284(b)(3))**

23. The permittee shall maintain files of all information (including all reports and notifications) required by this 40 CFR Part 63, Subpart HHH. The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report or period. **(40 CFR 63.1274(c), 40 CFR 63.1284(b)(1))**
 - a. All applicable records shall be maintained in such a manner that they can be readily accessed.
 - b. The most recent 12 months of records shall be retained on site or shall be accessible from a central location by computer or other means that provides access within two hours after a request.
 - c. The remaining four years of records may be retained offsite.
24. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche. **(40 CFR 63.1274(c), 40 CFR 63.1284(b)(1)(iv))**

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 the notification of the planned date of a performance test and site-specific test plan at least 60 days before the test. **(40 CFR 63.1285(b)(3))**
5. The permittee shall submit a Notification of Compliance Status Report as required under 40 CFR 63.9(h) within 180 days after October 15, 2015. In addition to the information required under 40 CFR 63.9(h) the Notification of Compliance Status Report shall include the information specified in paragraphs VI.5.a. through VI.5.g below. If an owner or operator submits the required information at different times, and/or different submittals, subsequent submittals may refer to previous submittals instead of duplicating and resubmitting the previously submitted information. **(40 CFR 63.1274(c), 40 CFR 63.1285(d))**
 - a. If a closed-vent system and a control device other than a flare are used to comply with 40 CFR 63.1274, the owner or operator shall submit the information in SC VII.5.a.i and VII.5.a.ii. **(40 CFR 63.1285(d)(1))**
 - i. If the owner or operator is required to conduct a performance test, the performance test results including the information specified in SC VII.5.a.i.A and B. Results of a performance test conducted prior to the compliance date of this subpart can be used provided that the test was conducted using the methods specified in 40 CFR 63.1282(d)(3), and that the test conditions are representative of current operating conditions. If the owner or operator operates a combustion control device model tested under 40 CFR 63.1282(g), an electronic copy of the performance test results shall be submitted via email to *Oil_and_Gas_PT@EPA.GOV* unless the test results for that model of combustion control device are posted at the following Web site: *epa.gov/air quality/oil and gas*.
 - A. The percent reduction of HAP or TOC, or the outlet concentration of HAP or TOC (parts per million by volume on a dry basis), determined as specified in 40 CFR 63.1282(d)(3); and
 - B. The value of the monitored parameters specified in 40 CFR 63.1283(d), or a site-specific parameter approved by the permitting agency, averaged over the full period of the performance test.
 - ii. The results of the closed-vent system initial inspections performed according to the requirements in 40 CFR 63.1283(c)(2)(i) and (ii).
 - b. The owner or operator shall submit one complete test report for each test method used for a particular source. **(40 CFR 63.1285(d)(3))**
 - i. For additional tests performed using the same test method, the results specified in SC VII.5.a.i shall be submitted, but a complete test report is not required.
 - ii. A complete test report shall include a sampling site description, description of sampling and analysis procedures and any modifications to standard procedures, quality assurance procedures, record of operating conditions during the test, record of preparation of standards, record of calibrations, raw data

- sheets for field sampling, raw data sheets for field and laboratory analyses, documentation of calculations, and any other information required by the test method.
- c. For each control device other than a flare used to meet the requirements of 40 CFR 63.1274, the owner or operator shall submit the information specified in SC VII.5.c.i. through VI.5.c.iii for each operating parameter required to be monitored in accordance with the requirements of 40 CFR 63.1283(d). **(40 CFR 63.1285(d)(4))**
 - i. The minimum operating parameter value or maximum operating parameter value, as appropriate for the control device, established by the owner or operator to define the conditions at which the control device must be operated to continuously achieve the applicable performance requirements of 40 CFR 63.1281(d)(1) or (e)(3)(ii).
 - ii. An explanation of the rationale for why the owner or operator selected each of the operating parameter values established in 40 CFR 63.1283(d)(5). This explanation shall include any data and calculations used to develop the value, and a description of why the chosen value indicates that the control device is operating in accordance with the applicable requirements of 40 CFR 63.1281(d)(1), (e)(3)(ii), or (f)(1).
 - iii. A definition of the source's operating day for purposes of determining daily average values of monitored parameters. The definition shall specify the times at which an operating day begins and ends.
 - d. Results of any continuous monitoring system performance evaluations shall be included in the Notification of Compliance Status Report. **(40 CFR 63.1285(d)(5))**
 - e. The owner or operator shall comply with all requirements for compliance status reports contained in the source's Title V permit, including reports required under 40 CFR Part 63, Subpart HHH. Each time a notification of compliance status is required under this subpart, the owner or operator of such source shall submit the notification of compliance status to the appropriate permitting authority following completion of the relevant compliance demonstration activity specified in this subpart. **(40 CFR 63.1285(d)(6))**
 - f. The owner or operator shall submit an analysis demonstrating whether an affected source is a major source using the maximum throughput calculated according to 40 CFR 63.1270(a). **(40 CFR 63.1285(d)(8))**
 - g. The owner or operator shall submit a statement as to whether the source has complied with the requirements of this subpart. **(40 CFR 63.1285(d)(9))**
6. The permittee shall prepare Periodic Reports in accordance with a. and b. below and submit them to the Administrator. **(40 CFR 63.1274(c), 40 CFR 63.1285(e))**
- a. The permittee shall submit Periodic Reports semiannually beginning 60 calendar days after the end of the applicable reporting period. The first report shall be submitted no later than 240 days after the date the Notification of Compliance Status Report is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status Report is due. The report shall include certification by a responsible official of truth, accuracy, and completeness. **(40 CFR 63.1285(e)(1))**
 - b. The permittee shall include the following information and any other information as applicable in 40 CFR 63.1285(e)(2). **(40 CFR 63.1285(e)(2))**
 - i. A description of all excursions as defined in SC VI.14 through SC VI.15 that have occurred during the six-month reporting period, and the information described in 40 CFR 63.1285(e)(2)(ii).
 - ii. For each inspection conducted in accordance with SC VI.7 during which a leak or defect is detected, the records described in SC VI.13 must be included in the next Periodic Report.
 - iii. For each closed-vent system with a bypass line, records required under SCVI.19.c and d.
 - iv. A statement identifying if there were no excursions during the reporting period.
 - v. Any change in compliance methods as described in 40 CFR 63.1282(e).
 - vi. The results of any periodic test conducted during the reporting period.
7. Whenever a process change is made, or a change in any of the information submitted in the Notification of Compliance Status Report, the permittee shall submit a report within 180 days after the process change is made or as a part of the next Periodic Report, whichever is sooner. The report shall include: **(40 CFR 63.1274(c), 40 CFR 63.1285(f))**
- a. A brief description of the process change;
 - b. A description of any modification to standard procedures or quality assurance procedures;
 - c. Revisions to any of the information reported in the original Notification of Compliance Status Report under SC VII.5;
 - d. Information required by the Notification of Compliance Status Report under SC VII.5 for changes involving the addition of processes or equipment.

8. Within 60 days after the date of completing a performance test (defined in 40 CFR 63.2) you must submit the results of the performance tests to EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). Performance test data must be submitted in the file format generated through use of EPA's Electronic Reporting Tool (ERT) (see <http://www.epa.gov/ttn/chief/ert/index.html>). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. All reports required by this subpart not subject to the above electronic reporting requirements must be sent to the Administrator at the appropriate address. The Administrator may request a report in any form suitable for the specific case (e.g., by commonly used electronic media such as Excel spreadsheet, on CD or hard copy). The Administrator retains the right to require submittal of reports in paper format. **(40 CFR 63.1274(c), 40 CFR 63.1285(g))**
9. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than seven days prior to the anticipated test date. **(R 336.2001(4))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall determine major source status using the maximum annual facility natural gas throughput calculated according to 40 CFR 63.1270(a)(1)(i) through (a)(1)(iv). As an alternative to calculating the maximum natural gas throughput, the owner or operator of a new or existing source may use the facility design maximum natural gas throughput to estimate the maximum potential emissions. **(40 CFR 63.1270(a)(1))**
2. The permittee shall determine the maximum values for other parameters used to calculate potential emissions as the maximum over the same period for which maximum throughput is determined. These parameters shall be based on an annual average or the highest single measured value. For estimating maximum potential emissions from glycol dehydration units, the glycol circulation rate used in the calculation shall be the unit's maximum rate under its physical and operational design consistent with the definition of potential to emit in 40 CFR 63.2. **(40 CFR 63.1270(a)(4))**
3. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart HHH, for Natural Gas Transmission and Storage Facilities by October 15, 2015. **(40 CFR Part 63, Subparts A and HHH)**

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).

**FGPIPEHEATERS3
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Two natural gas-fired pipeline heaters, equipped with a low NOx burner, rated at maximum heat input of 18 MMBTU/hr. each.

Emission Units: EUPIPEHEATER31, EUPIPEHEATER32

POLLUTION CONTROL EQUIPMENT

Each heater is equipped with low NOx burners

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NO _x	0.9 lb/hr* ²	Hourly	Each pipe heater in FGPIPEHEATERS3	SC V.1 SC VI.6	R 336.2803 R 336.2804 R 336.2810 40 CFR 52.21 (c), (d), & (j)
2. VOC	0.9 lb/hr* ²	Hourly	Each pipe heater in FGPIPEHEATERS3	SC V.1 SC VI.7	R 336.702 R 336.2810 40 CFR 52.21(j)

* Based on an emission factor of 0.05 lb/MMBTU

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall only burn natural gas, as defined in 40 CFR 72.2, in FGPIPEHEATERS3.² **(R 336.1225, R 336.1702, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
2. The permittee shall not operate FGPIPEHEATERS3 unless an approvable preventative maintenance / malfunction abatement plan (PM / MAP), or an alternate plan approved by the AQD District Supervisor, is implemented and maintained. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. The plan shall incorporate specific maintenance inspections, checks and procedures and the associated frequencies as recommended by the equipment manufacturer, as well as incorporating standard industry practices. At a minimum the plan shall include:
 - a. Identification of the equipment and, if applicable, air-cleaning device and the supervisory personnel responsible for overseeing the inspection, maintenance, and repair.
 - b. Description of the items or conditions to be inspected and frequency of the inspections or repairs.
 - c. Identification of the equipment and, if applicable, air-cleaning device, operating parameters that shall be monitored to detect a malfunction or failure, the normal operating range of these parameters and a description of the method of monitoring or surveillance procedures.
 - d. Identification of the major replacement parts that shall be maintained in inventory for quick replacement.

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

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

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the natural gas usage for each pipe heater in FGPIPEHEATERS3 on a monthly basis.² (40 CFR 60.48(c)(g)(2))

V. TESTING/SAMPLING

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

- 1. Within 60 days following receipt of written notification from the department, unless otherwise authorized by the department, the permittee shall verify NOx and VOC emission rates from FGPIPEHEATERS3 by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
NOx	40 CFR Part 60, Appendix A
VOC	40 CFR Part 60, Appendix A

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

- 2. The permittee shall 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, monthly natural gas usage records for FGPIPEHEATERS3, as required by SC IV.1. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² (40 CFR Part 60, Subpart Dc)
- 2. The permittee shall monitor emissions and operating information for each heater in FGPIPEHEATERS3 in accordance with the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and Dc.² (40 CFR Part 60, Subparts A & Dc)
- 3. The permittee shall keep records of emissions and operating information to comply with the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and Dc.² (40 CFR Part 60, Subparts A & Dc)
- 4. The permittee shall maintain satisfactory records to indicate that the facility is only burning natural gas, as defined in 40 CFR 72.2, in FGPIPEHEATERS3. (R 336.1213(3))

5. The permittee shall keep, in a satisfactory manner, monthly fuel use records for FGPIPEHEATERS3. All records shall be kept on file and made available to the Department upon request. **(40 CFR 60.48c(g)(2))**
6. The permittee shall keep on file, a demonstration that each low-NOx burner is designed to emit no more than 0.05 pound of NOx per million Btu of heat input. (i.e., manufacturer’s guarantee, test data, etc.) **(R 336.1213(3))**
7. The permittee shall keep, in a satisfactory manner, records of the date and description of any maintenance performed, tune-ups, and testing results for each heater in FGPIPEHEATERS3. All records shall be kept on file and made available to the Department upon request. **(R 336.1213(3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall provide written notification of construction and operation to comply with the federal Standards of Performance for New Stationary Sources, 40 CFR 60.7. The permittee shall submit this notification to the AQD District Supervisor within the time frames specified in 40 CFR 60.7.² **(40 CFR 60.7)**
5. The permittee shall submit all notifications as required under 40 CFR 60.48c, as applicable to FGPIPEHEATERS3.² **(40 CFR Part 60, Subpart Dc)**

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVPIPEHTR31A	30 ²	25 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)
2. SVPIPEHTR31B	30 ²	25 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)
3. SVPIPEHTR32A	30 ²	25 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)
4. SVPIPEHTR32B	30 ²	25 ²	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and Dc, as they apply to each heater in FGPIPEHEATERS³.²
(40 CFR Part 60, Subparts A & Dc)

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).

FGBLRMACT FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Requirements for new boiler 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: EUPIPEHEATER31, EUPIPEHEATER32, EUBOILER3

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee must complete an initial tune-up as specified in SC III.2 by no later than: **(40 CFR 63.7510(e))**
 - a. February 15, 2014 for EUBOILER3
 - b. April 7, 2014 for EUPIPEHEATER31 and EUPIPEHEATER32
2. 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 operating 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 Notification of Compliance Status or semiannual compliance report that the permittee submitted. **(40 CFR 63.7555(a)(1))**
2. If the permittee uses an alternative fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart under 40 CFR Part 63, Other Gas 1 fuel, or gaseous fuel subject to another subpart of 40 CFR Part 60, Part 61, or Part 65, the permittee must keep records of the total hours per calendar year that alternative fuel is burned and the total hours per calendar year that the unit operated during periods of gas curtailment or gas supply emergencies. **(40 CFR 63.7555(h))**
3. 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))**
 - c. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. **(40 CFR 63.7540(a)(10)(vi)(C))**
4. The permittee's records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). **(40 CFR 63.7560(a))**
5. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. **(40 CFR 63.7560(b))**
6. The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least two years after the date of each occurrence, measurement, maintenance,

corrective action, report, or record. The permittee can keep the records off site for the remaining three years. **(40 CFR 63.7560(c))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. For the initial compliance demonstration for each boiler or process heater, the permittee must submit the Notification of Compliance Status before the close of business on the 60th day following the completion of all compliance demonstrations. The Notification of Compliance Status report must contain all of the information specified below.
 - a. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7545(e)(1))**
 - b. In addition to the information required in 40 CFR 63.9(h)(2), the notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official.
 - i. "This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR Part 63, Subpart DDDDD at this site according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi)." **(40 CFR 63.7545(e)(8)(i))**
 - ii. "The facility has had an energy assessment performed according to 40 CFR 63.7530(e)." **(40 CFR 63.7545(e)(8)(ii))**
5. 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))**
6. If the permittee intends to use a fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart of 40 CFR Part 63, Part 60, Part 61, or Part 65, or Other Gas 1 fuel to fire the affected unit during a period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575, the permittee must submit a notification of alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575. The notification must include the information as listed below.
 - a. Company name and address. **(40 CFR 63.7545(f)(1))**
 - b. Identification of the affected unit. **(40 CFR 63.7545(f)(2))**
 - c. Reason the permittee is unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared, or the natural gas supply interruption began. **(40 CFR 63.7545(f)(3))**
 - d. Type of alternative fuel that the permittee intends to use. **(40 CFR 63.7545(f)(4))**
 - e. Dates when the alternative fuel use is expected to begin and end. **(40 CFR 63.7545(f)(5))**
7. 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))**

8. 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))**
9. The permittee must submit all reports required by Table 9 of this subpart electronically using CEDRI that is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, submit the report to the EPA Region V at the appropriate address listed in 40 CFR 63.13 and to the appropriate AQD District Office. **(40 CFR 63.7550(h)(3))**

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:

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).

**FGBLRMACTSMALL
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

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

Emission Units:

Equal to or less than 5 MMBTU/hr and only burns gaseous or light liquid fuels	EUFGHEATER, EUAUXBLR2-7, EUDEHYBLR1, EUDEHYBLR2, EUDEHY3REBLR, EUFGHTR-P1
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	EUIPEHTR1, EUIPEHTR2, EUIPEHTR3, EUIPEHTR4

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee must, for all boilers and process heaters installed on or before June 4, 2010 (EUFGHEATER, EUAUXBLR2-7, EUDEHYBLR1, EUDEHYBLR2, EUIPEHTR1, EUIPEHTR2, EUIPEHTR3, EUIPEHTR4), complete an initial tune-up as specified in SC III.5 by no later than January 31, 2016. **(40 CFR 63.7510(e))**
2. The permittee must, for EUDEHY3REBLR and EUFGHTR-P1, complete an initial tune-up as specified in SC III.5 by no later than: **(40 CFR 63.7510(g))**
 - a. May 1, 2018 for EUDEHY3REBLR
 - b. December 18, 2020 for EUFGHTR-P1
3. The permittee must, for boilers or process heaters with a heat input capacity of less than or equal to 5 MMBTU/hr (EUFGHEATER, EUAUXBLR2-7, EUDEHYBLR1, EUDEHYBLR2, EUDEHY3REBLR, EUFGHTR-P1), conduct a five-year tune-up according to 40 CFR 63.7540(a)(12). Each five-year tune-up must be conducted no more than 61 months after the previous tune-up. The burner inspection may be delayed until the next scheduled or unscheduled unit shutdown, but each burner must be inspected at least once every 72 months. **(40 CFR 63.7500(d) or (e), 40 CFR 63.7515(d), 40 CFR 63.7540(a)(12), 40 CFR Part 63, Subpart DDDDD, Table 3.1)**

4. The permittee must, for boilers or process heaters with a heat input capacity of greater than 5 MMBTU/hr and less than 10 MMBTU/hr (EUIPEHTR1, EUIPEHTR2, EUIPEHTR3, EUIPEHTR4), conduct a biennial tune-up of the boiler or process heater according to 40 CFR 63.7540(a)(11) no more than 25 months after the previous tune-up. **(40 CFR 63.7500(e), 40 CFR 63.7515(d), 40 CFR 63.7540(a)(11), 40 CFR Part 63, Subpart DDDDD, Table 3.2)**
5. 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))**
6. If the unit is not operating 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))**
7. At all times, the permittee must operate and maintain each existing small boiler or process heater, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.7500(a)(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee must keep a copy of each notification and report submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or 2 or 5 year compliance report or one-time energy assessment, as applicable, that the permittee submitted. **(40 CFR 63.7555(a)(1))**

2. The permittee must keep the records in a form suitable and readily available for expeditious review. **(40 CFR 63.7560(a))**
3. The permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. **(40 CFR 63.7560(b))**
4. The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The permittee can keep the records off site for the remaining three years. **(40 CFR 63.7560(c))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee must submit the first compliance report for existing units and must cover the period beginning on January 31, 2016 and ending on December 31, 2018 for units greater than 5 MMBTU/hr and less than 10 MMBTU/hr that burn gaseous or light liquid fuels or any unit that is less than 10 MMBTU/hr and burns any heavy liquid or solid fuels. The first 2-year compliance report must be postmarked or submitted no later than March 15th following the end of the first reporting period. **(40 CFR 63.7550(b)(1), (2) and (5))**
5. The permittee must submit the first compliance report for existing units and must cover the period beginning on January 31, 2016 and ending on December 31, 2021 for units equal to or less than 5 MMBTU/hr and only burn gaseous or light liquid fuels. The first five-year compliance report must be postmarked or submitted no later than March 15th following the end of the first reporting period. **(40 CFR 63.7550(b)(1), (2) and (5))**
6. The permittee must submit the first compliance report as follows for new units and must cover the period beginning on:
(40 CFR 63.7550(b)(1), (2) and (5))
 - a. April 1, 2013 and ending on December 31, 2018 for EUDEHY3REBLR. The first five-year compliance report must be postmarked or submitted no later than March 15th following the end of the first reporting period.
 - b. November 18, 2015 and ending on December 31, 2020 for EUFGHTR-P1. The first five-year compliance report must be postmarked or submitted no later than March 15th following the end of the first reporting period.
7. 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 2 or five-year period starting from January 1 of the year following the previous tune-up to December 31 (of the latest tune-up year). Compliance reports must also be submitted to EPA using the Compliance and Emissions Data Reporting Interface (CEDRI) which is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). 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))**
8. The permittee must include the following information in the compliance report. **(40 CFR 63.7550(c)(1))**
 - a. Company and Facility name and address. **(40 CFR 63.7550(c)(5)(i))**

- b. Process unit information, emissions limitations, and operating parameter limitations. **(40 CFR 63.7550(c)(5)(ii))**
- c. Date of report and beginning and ending dates of the reporting period. **(40 CFR 63.7550(c)(5)(iii))**
- d. Include the date of the most recent tune-up for each unit. Include the date of the most recent burner inspection if it was not done biennially or on a five-year period and was delayed until the next scheduled or unscheduled unit shutdown. **(40 CFR 63.7550(c)(5)(xiv))**
- e. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. **(40 CFR 63.7550(c)(5)(xvii))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

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

Footnotes:

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).

FGCOLDCLEANERS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

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

Emission Unit: EUPARTSCLEANER

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

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

IV. DESIGN/EQUIPMENT PARAMETER(S)

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

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

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

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

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

FGRULE285(2)(mm)
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

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

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

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

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

NA

VII. REPORTING

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

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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
SNCR	Selective Non-Catalytic Reduction	TAC	Toxic Air Contaminant
SRN	State Registration Number	Temp	Temperature
TEQ	Toxicity Equivalence Quotient	THC	Total Hydrocarbons
USEPA/EPA	United States Environmental Protection Agency	tpy	Tons per year
VE	Visible Emissions	µg	Microgram
		µm	Micrometer or Micron
		VOC	Volatile Organic Compounds
		yr	Year

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

Appendix 2. Schedule of Compliance

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

Appendix 3. Monitoring Requirements

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

Appendix 4. Recordkeeping

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

Appendix 5. Testing Procedures

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

Appendix 6. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-B6636-2015. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-B6636-2015a is being reissued as Source-Wide PTI No. MI-PTI-B6636-2020b.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
NA	201600081	Remove EUENGINE1-2 and EUENGINE1-3 because they were disconnected and abandoned in place. Add EUFGHTR-P1, new heater installed 11/18/15 and subject to boiler MACT.	EUENGINE1-2 EUENGINE1-3 FGENGINES FGLOADLIMIT EUEFGHTR-P1

The following table lists the ROP amendments or modifications issued after the effective date of ROP No. MI-ROP-B6636-2020.

Permit to Install Number	ROP Revision Application Number - Issuance Date	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
NA	202300021 / April 17, 2023	The following equipment has been removed from Plant 2: EUENGINE2-7, EUTURBINE2-5 and EUTURBINE2-6, and therefore, the associated conditions and flexible groups from FGTURBINES and FGLOADLIMIT, were removed from the ROP.	Emission Units and Flexible Groups Removed: EUENGINE2-7, EUTURBINE2-5 and EUTURBINE2-6 FGTURBINES FGLOADLIMIT

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 FGDEHYHHH SC I.1.

Equation 1:

$$EL_{BTEX} = 3.10 \times 10^{-4} * \text{Throughput} * C_{i,BTEX} * 365 \frac{\text{days}}{\text{year}} * \frac{1 \text{ Mg}}{1 \times 10^6 \text{ grams}}$$

Where:

EL_{BTEX} = Unit-specific BTEX emission limit, megagrams per year;

3.10×10^{-4} = BTEX emission limit, grams BTEX/standard cubic meter-ppmv;

Throughput = Annual average daily natural gas throughput, standard cubic meters per day;

$C_{i,BTEX}$ = Annual average BTEX concentration of the natural gas at the inlet to the glycol dehydration unit, ppmv.

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.