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

EFFECTIVE DATE: October 29, 2024

ISSUED TO

Consumers Energy Company - Overisel Compressor Station

State Registration Number (SRN): N5792

LOCATED AT

4131 138th Avenue, Hamilton, Allegan County, Michigan 49419

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-N5792-2024

Expiration Date: October 29, 2029

Administratively Complete ROP Renewal Application Due Between April 29, 2028 and April 29, 2029

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-N5792-2024

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

Julie Brunner, ROP Central Unit 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
 - c. Inspect, at reasonable times, any of the following:
 - i. Any stationary source.
 - ii. Any emission unit.
 - iii. Any equipment, including monitoring and air pollution control equipment.
 - iv. Any work practices or operations regulated or required under the ROP.
 - d. As authorized by Section 5526 of Act 451, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the ROP or applicable requirements.
- 5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information which is claimed by the permittee to be confidential, consistent with the requirements of the 1976 PA 442, MCL §15.231 et seq., and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the USEPA together with a claim of confidentiality. (R 336.1213(1)(e))

6. A challenge by any person, the Administrator of the USEPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. (R 336.1213(1)(f))

- 7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. (R 336.1213(1)(g))
- 8. This ROP does not convey any property rights or any exclusive privilege. (R 336.1213(1)(h))

Equipment & Design

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

Emission Limits

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

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

- 12. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
 - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.¹ (R 336.1901(a))
 - b. Unreasonable interference with the comfortable enjoyment of life and property. (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 annual compliance certification (pursuant to Rule 213(4)(c)) shall be submitted to the USEPA through the USEPA's Central Data Exchange (CDX) using the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through CDX (https://cdx.epa.gov/), unless it contains confidential business information then use the following address: 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):
 - a. June 21, 1999,
 - b. Three years after the date on which a regulated substance is first listed under 40 CFR 68.130, or
 - c. 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:

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

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

B. SOURCE-WIDE CONDITIONS

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

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

C. EMISSION UNIT SPECIAL CONDITIONS

Part C outlines terms and conditions that are specific to individual emission units listed in the Emission Unit Summary Table. The permittee is subject to the special conditions for each emission unit in addition to the General Conditions in Part A and any other terms and conditions contained in this ROP.

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

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUDEHY	A small glycol dehydration system processing natural gas using triethylene glycol (TEG). Systems consists of two identical halves. Each half has two contact towers, a flash tank, a surge tank, a reboiler, and a thermal oxidizer. This unit is subject to 40 CFR Part 63, Subpart HHH.	11-09-2021	FGMACTHHHSMALL
EUENGINE1-1	Natural gas fired reciprocating engine used for gas compression; 19 MMBTU/hr (2700 HP).	01-01-1959	FGENGINES
EUENGINE1-2	Natural gas fired reciprocating engine used for gas compression; 19 MMBTU/hr (2700 HP).	01-01-1959	FGENGINES
EUENGINE1-3	Natural gas fired reciprocating engine used for gas compression; 19 MMBTU/hr (2700 HP).	01-01-1961	FGENGINES
EUENGINE1-4	Natural gas fired reciprocating engine used for gas compression; 19 MMBTU/hr (2700 HP).	01-01-1963	FGENGINES
EUEMERGEN	Natural gas fueled engine driving a 1,462 hp (1.3 megawatt) emergency generator. Manufactured in 2012	11-26-2013	NA
EUADMINGEN	Natural gas-fired emergency stationary RICE with an engine nameplate of 127.6 HP for emergency power generation. Cummins Model QSJ5.9G	09-29-2018	NA
EUFUELHEATER1A	Natural gas-fired fuel gas heater in Warehouse; 150,000 BTU/hr.	06-24-2005	FGBLRMACT
EUFUELHEATER1B	Natural gas-fired fuel gas heater for the Line Heaters; 150,000 BTU/hr.	06-24-2005	FGBLRMACT
EUBOILER1	Natural gas-fired boiler for building heat (Auxiliary Building); 1,680,000 BTU/hr.	12-01-2010	FGBLRMACT
EULINEHEATER1	Natural gas-fired pipeline heater (Salem Field); 4,000,000 BTU/hr.	04-01-1961	FGBLRMACT
EULINEHEATER2	Natural gas-fired pipeline heater (Salem Field); 4,000,000 BTU/hr.	04-01-1961	FGBLRMACT

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EULINEHEATER3	Natural gas-fired pipeline heater (Salem Field); 4,000,000 BTU/hr.	04-01-1961	FGBLRMACT
EULINEHEATER4A	Natural gas-fired pipeline heater (Overisel Field); 9,200,000 BTU/hr	10-01-2004	FGBLRMACT
EULINEHEATER5A	Natural gas-fired pipeline heater (Overisel Field); 9,200,000 BTU/hr.	10-01-2004	FGBLRMACT
EULINEHEATER6A	Natural gas-fired pipeline heater (Overisel Field); 9,200,000 BTU/hr.	10-01-2004	FGBLRMACT
EUREBOILER1	Process heater (part of EUDEHY); heat input rating of 3 MMBTU/hr	11-09-2021	FGBLRMACT
EUREBOILER2	Process heater (part of EUDEHY); heat input rating of 3 MMBTU/hr	11-09-2021	FGBLRMACT
EURULE285(2)(mm)	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278 and 285(2)(mm).	NA	FGRULE285(2)(mm)

EUDEHY EMISSION UNIT CONDITIONS

DESCRIPTION

A small glycol dehydration system processing natural gas using triethylene glycol (TEG). Systems consists of two identical halves. Each half has two contact towers, a flash tank, a surge tank, a reboiler, and a thermal oxidizer. This unit is subject to 40 CFR Part 63, Subpart HHH.

Flexible Group ID: FGMACTHHHSMALL

POLLUTION CONTROL EQUIPMENT

Thermal Oxidizers

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. VOC	3.37 tpy ²	12-month rolling time period as determined at the end of each calendar month	EUDEHY	SC VI.2	R 336.1205, R 336.1225, R 336.1702(a)

II. MATERIAL LIMIT(S)

1. The permittee shall not use stripping gas in EUDEHY.² (R 336.1205, R 336.1225, R 336.1702(a))

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The glycol recirculation rate for EUDEHY shall not exceed a maximum of 24 gallons per minute.² (R 336.1205, R 336.1225, R 336.1702(a))
- 2. The permittee shall not operate EUDEHY unless a minimum temperature of 1400°F and a minimum retention time of 1 seconds in the thermal oxidizers are maintained.² (R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)
- 3. At least 60 days prior to startup, the permittee shall submit to the AQD District Supervisor, for review and approval, a preventative maintenance / malfunction abatement plan (PM / MAP) for EUDEHY. After approval of the PM / MAP by the AQD District Supervisor, the permittee shall not operate EUDEHY unless the PM / MAP, or an alternate plan approved by the AQD District Supervisor, is implemented, and maintained. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. At a minimum, the plan shall include:
 - a. Identification of the equipment and, if applicable, air-cleaning device and the supervisory personnel responsible for overseeing the inspection, maintenance, and repair.
 - b. Description of the items or conditions to be inspected and frequency of the inspections or repairs.
 - c. Identification of the equipment and if applicable, air-cleaning device, operating parameters that shall be monitored to detect a malfunction or failure, the normal operating range of these parameters and a description of the method of monitoring or surveillance procedures.
 - d. Identification of the major replacement parts that shall be maintained in inventory for quick replacement.

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

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

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall not operate EUDEHY unless the flash tanks are installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes routing the flash tank exhaust gas to a reboiler as burner fuel or to a thermal oxidizer for destruction.² (R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)
- 2. The permittee shall not operate in EUDEHY unless the thermal oxidizers are installed, maintained, and operated in a satisfactory manner. Satisfactory operation of the thermal oxidizers includes a minimum VOC destruction efficiency of 98 percent (by weight), maintaining a minimum temperature of 1400°F, and a minimum retention time of 1 second.² (R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)
- 3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor continuously and record the glycol recirculation rate of EUDEHY on an hourly basis.² (R 336.1205, R 336.1702(a), R 336.1910, R 336.2802, 40 CFR 52.21)
- 4. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor continuously and record the temperature of the combustion chamber of the thermal oxidizers on an hourly basis.² (R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)

V. <u>TESTING/SAMPLING</u>

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

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

VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.² (R 336.1205, R 336.1225, R 336.1702(a))
- 2. The permittee shall calculate the VOC emission rates from EUDEHY 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 EUDEHY and shall include the most recent gas analysis data. The permittee must submit any request for a change in the calculation frequency to the AQD District Supervisor for review and approval. The permittee shall keep records of VOC emission rates on file at the facility and make them available to the Department upon request.² (R 336.1205, R 336.1224, R 336.1225, R 336.1702(a))
- 3. The permittee shall keep, in a satisfactory manner, hourly and daily records of the glycol recirculation rate for EUDEHY, as required by SC III.1 and SC IV.4. 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))

4. The permittee shall keep, in a satisfactory manner, hourly and daily records of the combustion zone temperature of the thermal oxidizer, while processing natural gas, as required by SC III.2 and SC IV.4. 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 336.1910)

- 5. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period hours of operation, for EUDEHY as required by SC IV.4. 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 336.1702(a))
- 6. The permittee shall keep, in a satisfactory manner, records of the wet gas composition as determined through analysis of wet gas samples for EUDEHY, 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 336.1205, R 336.1225, 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 RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVTHERMOX_A	24 ¹	60 ¹	R 336.1225
2. SVTHERMOX_B	24 ¹	60 ¹	R 336.1225

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 HHH: Natural Gas Transmission and Storage Facilities.² (40 CFR Part 63, Subparts A and HHH)

Footnotes:

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

EUEMERGEN EMISSION UNIT CONDITIONS

DESCRIPTION

Natural gas fueled engine driving a 1,462 hp (1.3 megawatt) emergency generator. Manufactured in 2012.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. <u>EMISSION LIMIT(S)</u>

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	2.0 g/hp-hr ² -OR- 160 ppmvd at 15% O2	Hourly	EUEMERGEN	SC V.1	40 CFR 60.4233(e), Table 1 to 40 CFR 60, Subpart JJJJ
2. CO	4.0 g/hp-hr ² -OR- 540 ppmvd at 15% O2	Hourly	EUEMERGEN	SC V.1	40 CFR 60.4233(e), Table 1 to 40 CFR 60, Subpart JJJJ
3. VOC	1.0 g/HP-hr ^A - OR - 86 ppmvd at 15% O ₂ ^A	Hourly	EUEMERGEN	SC V.1	40 CFR 60.4233(e), Table 1 to 40 CFR 60, Subpart JJJJ

ppmvd = parts per million by volume on a dry gas basis

II. MATERIAL LIMIT(S)

1. The permittee shall burn only natural gas in EUEMERGEN.² (40 CFR 60.4230)

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee may operate EUEMERGEN for no more than 100 hours per year based on a 12-month rolling time period as determined at the end of each calendar month 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 year. EUEMERGEN may operate 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 generate income for a facility to supply non-emergency power as part of a financial arrangement with another entity.² (40 CFR 60.4243(d))
- 2. The permittee shall operate and maintain EUEMERGEN such that it meets the emission limits in SC I.1, I.2, and I.3 over the entire life of the engine.² (40 CFR 60.4234, 40 CFR 60.4243(b))

A When calculating VOC emissions for this emission limit, emissions of formaldehyde should not be included.

3. If the permittee purchased a certified engine, according to procedures specified in 40 CFR Part 60, Subpart JJJJ, for the same model year, the permittee shall meet the following requirements for EUEMERGEN:² (40 CFR 60.4243(b)(1))

- a. Operate and maintain the certified engine and control device according to the manufacturer's emissionrelated written instructions.
- b. Keep a maintenance plan and the permittee may only change those engine settings that are permitted by the manufacturer. If you do not operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine, and
- c. Meet the requirements as specified in 40 CFR 1068 Subparts A through D.
- 4. If the permittee purchased a non-certified engine, the permittee must keep a maintenance plan and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR 60.4243(b)(2)(ii))

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall equip and maintain EUEMERGEN with a non-resettable hour meter to track the operating hours.² (R 336.1205(1)(a) and (3), R 336.1225, 40 CFR 60.4237)
- 2. The nameplate capacity of EUEMERGGEN shall not exceed 1,462 hp (1.3 megawatts), as certified by the equipment manufacturer.² (40 CFR 60.4230)

V. TESTING/SAMPLING

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

- 1. The permittee shall conduct an initial performance test for EUEMERGEN within one year after startup of the engine to demonstrate compliance with the emission limits in 40 CFR 60.4233(e), unless the engines have been certified by the manufacturer as required by 40 CFR Part 60, Subpart JJJJ and the permittee maintains the engine as required by 40 CFR 60.4243(b)(1). If a performance test is required, the performance tests 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 the AQD. The final plan must be approved by the AQD prior to testing. After conducting the initial performance test, the permittee shall conduct subsequent performance testing, for non-certified engines, every 8,760 hours or 3 years, whichever comes first. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test.² (40 CFR 60.4243, 40 CFR 60.4244, 40 CFR Part 60, Subpart JJJJ)
- 2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. (R 336.1213(3))

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 30th day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.² (R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))
- The permittee shall keep, in a satisfactory manner, records of testing required in SC V.1 or manufacturer certification and maintenance records documenting that EUEMERGEN meets the applicable emission limitations contained in the federal Standards of Performance for New Stationary Sources 40 CFR Part 60, Subpart JJJJ. The permittee shall keep all records on file and make them available to the Department upon request.² (40 CFR 60.4245)

3. The permittee shall monitor and record the hours of operation of EUEMERGEN during emergencies and non-emergencies, on a monthly and 12-month rolling time period basis, in a manner acceptable to the District Supervisor, Air Quality Division. The permittee shall record the time of operation of EUEMERGEN and the reason it was in operation during that time.² (40 CFR 60.4243)

- 4. The permittee shall keep records of the following information for EUEMERGEN:2 (40 CFR 60.4245(a))
 - a. All notifications submitted to comply with 40 CFR Part 60, Subpart JJJJ and all documentation supporting any notification. (40 CFR 60.4245(a)(1))
 - b. Maintenance conducted on EUEMERGEN. (40 CFR 60.4245(a)(2))
 - c. If EUEMERGGEN is a certified engine, documentation from the manufacturer that the EUEMERGEN is certified to meet the emission standards and information as required in 40 CFR Parts 1048, 1054, and 1060, as applicable. (40 CFR 60.4245(a)(3))
 - d. If EUEMERGEN is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR 60.4243(a)(2), documentation that EUEMERGEN meets the emission standards. **(40 CFR 60.4245(a)(4))**

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVEMERGENGINEGEN	22 ²	18.5 ²	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)

IX. OTHER REQUIREMENT(S)

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

2. The permittee shall comply with the 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 EUEMERGEN.² (40 CFR Part 63, Subparts A and ZZZZ, 40 CFR 63.6595)

Footnotes:

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

EUADMINGEN EMISSION UNIT CONDITIONS

DESCRIPTION

Natural gas-fired emergency stationary RICE with an engine nameplate of 127.6 HP for emergency power generation. Cummins Model QSJ5.9G. EPA certified engine (EPA Certificate Number: HCEXB05.9ALB-014).

40 CFR Part 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition (SI) Internal Combustion Engines (ICE), natural gas-fired lean burn emergency engine greater than 25 HP (19 KW) but less than or equal to 500 HP (373 KW). The emergency SI ICE commenced construction after June 12, 2006 and was manufactured on or after January 1, 2009.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. <u>EMISSION LIMIT(S)</u>

Р	ollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. N	IOx + HC	10 g/HP-hr	Hourly	EUADMINGEN	SC VI.1	40 CFR 60.4233(e),
					SC VI.2	Table 1 to 40 CFR Part
						60, Subpart JJJJ
2. C	0	387 g/HP-hr	Hourly	EUADMINGEN	SC VI.1	40 CFR 60.4233(e),
		_			SC VI.2	Table 1 to 40 CFR Part
						60, Subpart JJJJ

HC - hydrocarbon

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee may operate EUADMINGEN for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the AQD 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))
- 2. The permittee may operate EUADMINGEN up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing as described in SC III.1. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or demand response, or to generate income for the permittee to supply non-emergency power as part of a financial arrangement with another entity. (40 CFR 60.4243(d)(3)

3. If the permittee purchases an engine certified according to procedures specified in 40 CFR Part 60, Subpart JJJJ, for the same model year, and operates and maintains the certified stationary SI combustion engine and control device according to the manufacturer's emission related written instructions, the permittee must meet the requirements as specified in 40 CFR Part 1068, Subparts A through D as they apply. If the permittee adjusts engine settings according to and consistent with the manufacturer's instructions, the stationary SI internal combustion engine will not be considered out of compliance. (40 CFR 60.4243(a)(1), 40 CFR 60.4243(b)(1))

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee must install and maintain EUADMINGEN with a non-resettable hour meter. (R 336.1213(3), 40 CFR 60.4237)

V. TESTING/SAMPLING

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

- 1. If the permittee purchased a non-certified engine or does not operate and maintain a certified engine and control device according to the manufacturer's written emission-related instructions, the permittee is required to perform initial performance testing as indicated in 40 CFR 60.4244, but is not required to conduct subsequent performance testing unless the stationary engine undergoes rebuild, major repair or maintenance. Therefore, the permittee must demonstrate compliance as follows:
 - a. Conduct an initial performance test to demonstrate compliance with the applicable emission limits within 60 days after achieving the maximum production rate at which the engine will be operated, but not later than 180 days after initial startup, or within 1 year after the engine is no longer operated as a certified engine.
 - b. The performance tests shall consist of three separate test runs of at least 1 hour, for each performance test required in 40 CFR 60.4244 and Table 2 to 40 CFR Part 60, Subpart JJJJ.

No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004, 40 CFR 60.4243(f), 40 CFR 60.4244, 40 CFR 60.4245, 40 CFR Part 60, Subpart JJJJ)

2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before performance tests are conducted of the time and place. (**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. If the permittee purchases an engine certified according to procedures specified in 40 CFR Part 60, Subpart JJJJ, for the same model year, and operates and maintains the certified stationary SI combustion engine and control device according to the manufacturer's emission related written instructions, the permittee must keep records of conducted maintenance to demonstrate compliance. (40 CFR 60.4243(a)(1), 40 CFR 60.4243(b)(1))
- 2. The permittee must keep records of the following: (40 CFR 60.4245(a))
 - a. All notifications submitted to comply with 40 CFR Part 60, Subpart JJJJ and all documentation supporting any notification. (40 CFR 60.4245(a)(1))
 - b. Maintenance conducted on engine in EUADMINGEN. (40 CFR 60.4245(a)(2))
 - c. If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR Parts 1048, 1054, and 1060, as applicable. (40 CFR 60.4245(a)(3))

d. If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR 60.4243(a)(2), documentation that the engine meets the emission standards. (40 CFR 60.4245(a)(4))

3. The permittee must keep records of the hours of operation for EUADMINGEN that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. (40 CFR 60.4243, 40 CFR 60.4245(b))

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. (R 336.1213(3)(c), R 336.2001(5))
- 5. The permittee shall submit a notification specifying whether EUADMINGEN will be operated in a certified or a non-certified manner to the AQD District Supervisor, in writing, within 30 days following the initial startup of each engine and within 30 days of switching the manner of operation. (R 336.1213(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 federal Standards of Performance for Stationary Spark Ignition Internal Combustion Engines as specified in 40 CFR Part 60, Subparts A and Subpart JJJJ. (40 CFR Part 60, Subparts A and JJJJ)
- 2. The permittee shall comply with all applicable provisions of the federal National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines as specified in 40 CFR Part 63, Subparts A and Subpart ZZZZ. (40 CFR 63.6590(c), 40 CFR Part 63, Subparts A and ZZZZ)

D. FLEXIBLE GROUP SPECIAL CONDITIONS

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

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

FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGENGINES	Four (4) existing natural gas-fired reciprocating engines used for gas compression; 19 MMBTU/hr (2700 HP) each.	EUENGINE1-1 EUENGINE1-2 EUENGINE1-3 EUENGINE1-4
FGMACTHHHSMALL	Requirements for new small glycol dehydrators (<0.9 Mg/yr benzene emissions) at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart HHH.	EUDEHY
FGBLRMACT	New and existing industrial boilers and process heaters fired by natural gas and subject to 40 CFR Part 63, Subpart A and Subpart DDDDD.	EUFUELHEATER1A EUFUELHEATER1B EUBOILER1 EULINEHEATER1 EULINEHEATER2 EULINEHEATER3 EULINEHEATER4A EULINEHEATER5A EULINEHEATER6A EUREBOILER1 EUREBOILER2
FGRULE285(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).	EURULE285(2)(mm)

FGENGINES FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Four (4) existing natural gas-fired reciprocating engines for gas compression; 19,000,000 BTU/hr each.

Emission Units: EUENGINE1-1, EUENGINE1-2, EUENGINE1-3, EUENGINE1-4

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall submit within 180 days of permit issuance, and implement and maintain, a malfunction abatement plan (MAP) as described in Rule 911(2), for FGENGINES. The MAP shall, at a minimum, specify the following:
 - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for guick replacement.
 - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP within 45 days, if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits. (R 336.1911, R 336.1912(6))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall monitor and record the fuel consumption rate for each engine in FGENGINES for each calendar month. (R 336.1213(3)(b))
- 2. The permittee shall keep, in a satisfactory manner, records of monitoring and maintenance conducted to demonstrate that each engine in FGENGINES is operated and maintained according to the approved MAP in SC III.1. The permittee shall keep all records on file and make them 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))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the federal National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines as specified in 40 CFR Part 63, Subpart A and Subpart ZZZZ. (40 CFR Part 63, Subparts A and ZZZZ, 40 CFR 63.6590(b)(3)(i))

FGMACTHHHSMALL FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Requirements for new small glycol dehydrators (<0.9 Mg/yr benzene emissions) at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart HHH.

Emission Unit: EUDEHY

POLLUTION CONTROL EQUIPMENT

Thermal Oxidizers

I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1.		Calculated using Equation 2 of 40 CFR Part 63 Subpart HHH (Appendix 7) ²		EUDEHY	SC V.2 SC V.4 SC V.5	40 CFR 63.1275(b)(1)(iii)
2.	Benzene	<0.9 Mg/yr ²	Annual	EUDEHY	SC V.2	40 CFR 63.1275(b)(1)(iii)

See Appendix 7

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The process vent from each glycol dehydration unit shall be vented to a control device or a combination of control devices through a closed-vent system except when the permittee is following the requirements of 40 CFR 1275(c) (SC III.6).² (40 CFR 63.1275(b)(1)(iii)(A), 40 CFR 63.1275(c))
- 2. The control device(s) used to meet the BTEX emission limit calculated in 40 CFR 63.1275(b)(1)(iii) (SC I.1), shall be one of those specified below and must be designed and operated in accordance with the following requirements:² (40 CFR 63.1281(f)(1))
 - a. An enclosed combustion device (e.g. thermal oxidizer) that has been determined, in accordance with the requirements of 40 CFR 63.1282(d), to reduce the mass content of BTEX in the gases vented to the device to meet the emission limit calculated in 40 CFR 63.1275(b)(1)(iii) (SC I.1). (40 CFR 63.1281(f)(1)(i)(A))

OR

b. An enclosed combustion device (e.g. thermal oxidizer) that has been determined, in accordance with the requirements of 40 CFR 63.1282(e), to reduce the TOC or total HAP concentration in the exhaust gases at the outlet of the incinerator to a level equal to or less than 20 ppmv on a dry basis corrected to three percent oxygen. (40 CFR 63.1281(f)(1)(i)(B))

3. The permittee shall operate each control device in accordance with the requirements specified below:² (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. (40 CFR 63.1281(f)(2)(i))
- b. For each control device monitored in accordance with requirements of 40 CFR 63.1283(d) (SC IV.2, SC VI. 11-19), the permittee shall demonstrate compliance according to the requirements of 40 CFR 63.1282(e) or (h). (40 CFR 63.1281(f)(2)(ii))
- 4. At all times, the permittee must operate and maintain each glycol dehydrator, 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.² (40 CFR 63.1274(h))
- 5. 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.² (40 CFR 63.1274(g))
- 6. As an alternative to the requirements of paragraph 40 CFR 63.1275(b), the permittee may comply with one of the following:² (40 CFR 63.1275(c))
 - a. The permittee shall control air emissions by connecting the process vent to a process natural gas line. (40 CFR 63.1275(c)(1))
 - b. Control of HAP emissions from a GCG separator (flash tank) vent is not required if the permittee demonstrates, to the Administrator's satisfaction, that total emissions to the atmosphere from the glycol dehydration unit process vent are reduced by one of the levels specified in paragraph 40 CFR 63.1275(c)(3)(i) through (iv) through the installation and operation of controls as specified in paragraph 40 CFR 63.1275(b)(1). (40 CFR 63.1275(c)(3))
 - i. For each new small glycol dehydration unit, BTEX emissions are reduced to a level less than the limit calculated in Equation 2 of paragraph 40 CFR 63.1275(b)(1)(iii) (SC I.1). (40 CFR 63.1275(c)(3)(iv))

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. A continuous parameter monitoring system (CPMS) shall be installed and operated to meet the following specifications and requirements:² (40 CFR 63.1283(d)(1))
 - a. Each CPMS shall measure data values at least once every hour and record either:
 - Each measured data value.
 - ii. Each block average value for each one-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.
- 2. The permittee shall install, calibrate, operate, and maintain a device equipped with a continuous recorder to measure the values of operating parameters appropriate for the control device as specified below.² (40 CFR 63.1283(d)(3))
 - a. For a thermal oxidizer, the temperature monitoring device shall have a minimum accuracy of ±2 percent of the temperature being monitored in °C, or ±2.5°C, whichever value is greater. The temperature sensor shall be installed at a location representative of the combustion zone temperature.

3. The permittee shall not operate the glycol dehydration unit unless each process vent is connected to a control device or combination of control devices through a closed-vent system. The closed vent system shall be designed and operated in accordance with the following requirements:² (40 CFR 63.1274(c), 40 CFR 63.1275(b)(1)(iii)(A), 40 CFR 63.1275(c), 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 an emission unit to a control device that meets the requirements specified in 40 CFR 63.1281(f). (40 CFR 63.1281(c)(1))
- b. The closed-vent system shall be designed and operated with no detectable emissions. (40 CFR 63.1281(c)(2))
- 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 either: (40 CFR 63.1281(c)(3)(i))
 - 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 40 CFR 63.1281(c)(3)(i), SC IV.3(c). (40 CFR 63.1281(c)(3)(ii))

V. TESTING/SAMPLING

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

- 1. Determination of the actual flow rate of natural gas to each glycol dehydration unit shall be made using either of the following procedures:² (40 CFR 63.1282(a)(1))
 - a. Install and operate a monitoring instrument that directly measures natural gas flowrate to each glycol dehydration unit with an accuracy of plus or minus 2 percent or better. The permittee shall convert the annual natural gas flowrate to a daily average by dividing the annual flowrate by the number of days per year the glycol dehydration unit processed natural gas; or
 - b. Document to the AQD's satisfaction, the actual annual average natural gas flow rate to each glycol dehydration unit.
- 2. Determination of actual average benzene or BTEX emissions from each glycol dehydration unit shall be made using the procedures of either 40 CFR 63.1282(a)(2) (i) or (ii) below. Emissions shall be determined either uncontrolled or with federally enforceable controls in place.² (40 CFR 63.1282(a)(2))
 - a. The permittee shall determine actual average benzene or BTEX emissions using the model GRI-GLYCalcTM, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalcTM 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). (40 CFR 63.1282(a)(2)(i))
 - b. The permittee shall determine an average mass rate of benzene or BTEX emissions in kilograms per hour through direct measurement by performing three runs of Method 18 in 40 CFR part 60, appendix A; or ASTM D6420-99 (Reapproved 2004) (incorporated by reference as specified in 40 CFR 63.14), as specified in 40 CFR 63.772(a)(1)(ii); or an equivalent method; and averaging the results of the three runs. 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. (40 CFR 63.1282(a)(2)(ii))
- 3. 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).² (40 CFR 63.1282(b))

4. The permittee shall demonstrate that the thermal oxidizers meet the requirements of 40 CFR 1281(f)(1) (SC IV.2) by conducting a performance test in accordance with the following test methods and procedures:² (40 CFR 63.1282(c)(1), 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. (40 CFR 63.1282(d)(3)(i))
- b. The gas volumetric flowrate shall be determined using Method 2, 2A, 2C, or 2D, 40 CFR, Part 60, Appendix A, as appropriate. **(40 CFR 63.1282(d)(3)(ii))**
- c. To determine compliance with the BTEX emission limit in SC I.1, the permittee shall use one of the following methods: Method 18, 40 CFR Part 60, Appendix A; ASTM D6420-99 (Reapproved 2004) (incorporated by reference as specified in 40 CFR 63.14), as specified in 40 CFR 63.772(a)(1)(ii); or any other method or data that have been validated according to the applicable procedures in Method 301, 40 CFR Part 63, Appendix A. The BTEX emissions shall be calculated using the procedures in 40 CFR 63.1282(d)(3)(v). (40 CFR 63.1282(d)(3)(v))
- d. The permittee shall conduct performance tests according to the following schedule: (40 CFR 63.1282(d)(3)(vi))
 - i. An initial performance test shall be conducted no later than 180 days after startup.
 - ii. Except as specified in 40 CFR 63.1282(e)(3)(vi)(B)(1) and (2) below, periodic performance tests shall be conducted for all control devices required to conduct initial performance tests. The first periodic performance test shall be conducted no later than 60 months after the initial performance test required in 40 CFR 63.1282(d)(3)(vi)(A) (SC V.4(d)(i). 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 the criteria in either 40 CFR 63.1282(d)(3)(vi)(B)(1) and (2) below are not required to conduct periodic performance tests:
 - A. A combustion control device whose model is tested under, and meets the criteria of, the manufacturers performance testing in 40 CFR 63.1282(g).
 - B. A combustion control device demonstrating during the performance test under 40 CFR 63.1282(d) that combustion zone temperature is an indicator of destruction efficiency and operates at a minimum temperature of 1400 degrees Fahrenheit.
- 5. As an alternative to conducting a performance test under 40 CFR 63.1282(d)(3), the permittee may use a control device that can be demonstrated to meet the performance requirements of 40 CFR 63.1281(f)(1) through a performance test conducted by the manufacturer, as specified in 40 CFR 63.1282(g).² (40 CFR 63.1282(d))

VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall maintain records of the annual facility natural gas throughput each year.² (40 CFR 63.1270(a)(3))
- 2. The permittee shall comply with the requirements below in order to show compliance with 40 CFR 63.1281(f)(1)(i)(B):² (40 CFR 63.1281(f)(1)(i)(B), 40 CFR 63.1282(e))
 - a. Establish a site-specific minimum monitoring parameter value according to the requirements of 40 CFR 63.1283(d)(5)(i) (SC VI.16).
 - b. Calculate the daily average of the applicable monitored parameter in accordance with 40 CFR 63.1283(d)(4) (SC VI.15) except that the inlet gas flowrate to the control device shall not be averaged.
 - c. Compliance is achieved when the daily average of the monitoring parameter value calculated under paragraph 40 CFR 63.1282(e)(2) of this section is equal to or greater than the minimum monitoring value established under paragraph 40 CFR 63.1282(e)(1) of this section. For inlet gas flowrate, compliance with

the operating parameter limit is achieved when the value is equal to or less than the value established under the performance test conducted under 40 CFR 63.1282(d) (SC V.4), as applicable.

- 3. The permittee shall operate the CPMS at all times when the glycol dehydration system 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.² (40 CFR 63.1282(e)(4))
- 4. 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.² (40 CFR 63.1282(e)(5))
- 5. 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.² (40 CFR 63.1282(e)(6))
- 6. Except as provided in paragraphs 40 CFR 63.1283(c)(5) and (6), stated in SC VI.9 and SC VI.10, the permittee shall inspect each closed-vent system and each bypass device according to the procedures and schedule specified below:² (40 CFR 63.1274(c), 40 CFR 63.1283(c)(2))
 - a. 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) the permittee shall: (40 CFR 63.1283(c)(2)(i))
 - i. Conduct an initial inspection according to 40 CFR 63.1282(b) to demonstrate that the closed-vent system operates with no detectable emissions.
 - ii. 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.
 - b. For closed-vent system components other than those specified in 40 CFR 63.1283(c)(2)(i) (SC VI.6.a), the permittee shall: (40 CFR 63.1283(c)(2)(ii))
 - i. Conduct an initial inspection to demonstrate that the closed-vent system operates with no detectable emissions.
 - ii. Conduct annual inspections to demonstrate that the components or connections operate with no detectable emissions.
 - iii. 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.
 - c. 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))
 - i. 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
 - ii. 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.

7. 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 40 CFR 63.1283(c)(4) (SC VI.8):2 (40 CFR 63.1274(c), 40 CFR 63.1283(c)(3))

- a. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.
- b. Repair shall be completed no later than 15 calendar days after the leak is detected.
- 8. 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.² (40 CFR 63.1274(c), 40 CFR 63.1283(c)(4))
- 9. Any parts of the closed-vent system that are designated, as described below, as unsafe to inspect are exempt from the inspection requirements of 40 CFR 63.1283(c)(2)(i) and (ii) (SC VI.6.a and b):² (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 40 CFR 63.1283(c)(2)(i) and (ii) (SC VI.6(a) and (b)).
 - b. The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.
- 10. Any parts of the closed-vent system that are designated, as described below, as difficult to inspect are exempt from the inspection requirements of 40 CFR 63.1283(c)(2)(i) and (ii) (SC VI.6.a and b):² (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 2 meters above a support surface; and
 - b. The permittee has a written plan that requires inspection of the equipment at least once every 5 years.
- 11. A site-specific monitoring plan must be prepared that addresses the monitoring system design, data collection, and the quality assurance and quality control elements below. Each CPMS must be installed, calibrated, operated, and maintained in accordance with the procedures in the site-specific monitoring plan:² (40 CFR 63.1274(c), 40 CFR 63.1283(d)(1)(ii))
 - 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 checks, system accuracy audits, or other audit procedures.
 - d. Ongoing operation and maintenance procedures in accordance with provisions in 40 CFR 63.8(c)(1) 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).
- 12. Using the process described in 40 CFR 63.8(f)(4), the permittee may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in 40 CFR 63.1283(d)(1)(ii)(A)-(E), SC VI.11(a)-(e), in the site-specific monitoring plan.² (40 CFR 63.1274(c), 40 CFR 63.1283(d)(1)(ii))
- 13. The permittee shall 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.² (40 CFR 63.1274(c), 40 CFR 63.1283(d)(1)(iii))
- 14. The permittee shall conduct a performance evaluation of each CPMS in accordance with the site-specific monitoring plan.² (40 CFR 63.1274(c), 40 CFR 63.1283(d)(1)(iv))

15. Using the data recorded by the monitoring system, except for inlet gas flowrate, 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.² (40 CFR 63.1283(d)(4))

- 16. For the control devices used to comply with 40 CFR Part 63, Subpart HHH, the permittee shall establish a minimum operating parameter value or a maximum operating parameter value, as appropriate for the control device, to define the conditions at which the control device must be operated to continuously achieve the applicable performance requirements specified in 40 CFR 63.1281(f)(1) (SC III.2). Each minimum or maximum operating parameter value shall be established as follows:² (40 CFR 63.1282(e)(1), 40 CFR 63.1283(d)(5)(i))
 - a. If the permittee operates a control device where the performance test requirement was met under 40 CFR 63.1282(g) to demonstrate that the control device achieves the applicable performance requirements specified in 40 CFR 63.1281(f)(1) (SC III.2)), then the maximum inlet gas flowrate shall be established based on the performance test and supplemented, as necessary, by the manufacturer recommendations.
- 17. 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.² (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. For control device whose model is tested under 40 CFR 63.1282(g) an excursion occurs when:
 - i. The inlet gas flowrate exceeds the maximum established during the test conducted under 40 CFR 63.1282(q).
 - ii. Failure of the quarterly visible emissions test conducted under 40 CFR 63.1282(h)(3) occurs.
 - d. 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))
- 18. 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.² (40 CFR 63.1274(c), 40 CFR 63.1283(d)(7))
- 19. Nothing in 40 CFR 63.1283(d)(1) through (d)(8) shall be construed to allow or excuse a monitoring parameter deviation caused by any activity that violates other applicable provisions of this subpart.² (40 CFR 63.1274(c), 40 CFR 63.1283(d)(9))
- 20. 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 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or period.² (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 2 hours after a request.
- c. The remaining 4 years of records may be retained offsite.
- d. 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.
- 21. The permittee shall maintain the records specified in 40 CFR 63.10(b)(2).2 (40 CFR 63.1284(b)(2))
- 22. The permittee shall maintain records specified in 40 CFR 63.10(c) for each monitoring system in accordance with the requirements of 40 CFR 63.1283(d) (SC IV.2, SC VI. 11-19). Notwithstanding the previous sentence, monitoring data recorded during periods identified in paragraphs 40 CFR 63.1284(b)(3)(i) through (iv) below, 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.² (40 CFR 63.1284(b)(3))
 - a. Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments.
 - Periods of non-operation resulting in cessation of the emissions to which the monitoring applies.
 - c. Excursions due to invalid data as defined in 40 CFR 40 CFR 63.1283(d)(6)(iii) (SC VI.17.b).
- 23. The permittee shall keep the following records up-to-date and readily accessible:² (40 CFR 63.1284(b)(4), 40 CFR 63.1284(g), 40 CFR 63.1284(h))
 - a. Continuous records of the equipment operating parameters specified to be monitored under 40 CFR 63.1283(d) or specified by the Administrator in accordance with 40 CFR 40 CFR 63.1283(d)(3)(iii). (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 40 CFR 40 CFR 63.1283(d)(4) except as specified in paragraphs 40 CFR 63.1284(b)(4)(ii)(A) through (C).
 - 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 40 CFR 63.1281(c)(3)(i)(B), 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))
- 24. The permittee shall maintain records identifying all parts of the closed-vent system that are designated as unsafe to inspect in accordance with 40 CFR 63.1283(c)(5) (SC VI.9), an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.² (40 CFR 63.1283(c)(7), 40 CFR 63.1284(b)(5))
- 25. The permittee shall maintain records identifying all parts of the closed-vent system that are designated as difficult to inspect in accordance with 40 CFR 63.1283(c)(6) (SC VI.10), an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.² (40 CFR 63.1283(c)(7), 40 CFR 63.1284(b)(6))
- 26. The permittee shall maintain the following records for each inspection conducted during which a leak or defect is detected:² (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 40 CFR 63.1282(b) after the leak or defect is successfully repaired or determined to be nonrepairable.

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 owner or operator (or designee) whose decision it was that repair could not be effected 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.
- 27. For each inspection conducted in accordance with 40 CFR 63.1283(c) (SC VI.6-10) 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.² (40 CFR 63.1283(c)(7), 40 CFR 63.1284(b)(8))
- 28. The permittee shall maintain records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control equipment and monitoring equipment. The owner or operator shall maintain records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.1274(h) (SC III.4), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.² (40 CFR 63.1274(c), 40 CFR 63.1284(f))

VII. REPORTING

- 1. 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.² (40 CFR 63.1285(b)(3))
- 2. The permittee shall submit a Notification of Compliance Status Report as required under 40 CFR 63.9(h) within 180 days after startup. In addition to the information required under 40 CFR 63.9(h) the Notification of Compliance Status Report shall include the information specified 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.² (40 CFR 63.1285(b)(4), 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 40 CFR 63.1285(d)(1)(iii), SC VII.2.a.iii, and the information in either 40 CFR 63.1285(d)(1)(i) or (ii), SC VII.2.a.i or 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 40 CFR 63.1285(d)(1)(ii)(A) and (B) below. 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) (SC V.4), 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/airquality/oilandgas/. (40 CFR 63.1285(d)(1)(ii))
 - 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) (SC V.4).
 - 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) (SC VI.6.a and b). (40 CFR 63.1285(d)(1)(iii)

b. The permittee 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 40 CFR 63.1285(d)(3)(ii), SC VII.2.a.ii, shall be submitted, but a complete test report is not required. (40 CFR 63.1285(d)(3)(i))
- 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. (40 CFR 63.1285(d)(3)(ii))
- c. For each control device other than a flare used to meet the requirements of 40 CFR 63.1274, the permittee shall submit the information specified in 40 CFR 63.1285(d)(4)(i)-(iv), as applicable, below 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(e)(3)(ii). (40 CFR 63.1285(d)(4)(i))
 - ii. An explanation of the rationale for why the permittee selected each of the operating parameter values established in 40 CFR 63.1283(d)(5) (SC VI.16). 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(e)(3)(ii) or (f)(1). (40 CFR 63.1285(d)(4)(ii))
 - 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. (40 CFR 63.1285(d)(4)(iii))
- 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 permittee 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 permittee 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 permittee shall submit a statement as to whether the source has complied with the requirements of this subpart. (40 CFR 63.1285(d)(9))
- h. If the permittee installs a combustion control device model tested under the manufacturer's performance test procedures in 40 CFR 63.1282(g), the Notification of Compliance Status Report shall include the data listed under 40 CFR 63.1282(g)(8). **(40 CFR 63.1285(d)(11)**
- i. For each combustion control device model tested under 40 CFR 63.1282(g), the information listed in 40 CFR 63.1285(d)(12)(i)-(vi) below: **(40 CFR 63.1285(d)(12))**
 - Name, address, and telephone number of the control device manufacturer.
 - ii. Control device model number.
 - iii. Control device serial number.
 - iv. Date the model of control device was tested by the manufacturer.
 - v. Manufacturer's HAP destruction efficiency rating.

- vi. Control device operating parameters, maximum allowable inlet gas flowrate.
- 3. The permittee shall prepare Periodic Reports in accordance with 40 CFR 63.1285(e)(1) and (2) below and submit them to the Administrator.² (40 CFR 63.1285(e))
 - a. An owner or operator 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. (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. The information required under 40 CFR 63.10(e)(3). For the purposes of this subpart and the information required under 40 CFR 63.10(e)(3), excursions (as defined in 40 CFR63.1283(d)(6)) shall be considered excess emissions. (40 CFR 63.1285(e)(2)(i))
 - ii. A description of all excursions as defined in 40 CFR 63.1283(d)(6) (SC VI.17) that have occurred during the 6-month reporting period, and the information described below. (40 CFR 63.1285(e)(2)(ii))
 - A. For each excursion caused 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), as specified in 40 CFR 63.1283(d)(6)(i), the report must include the daily average values of the monitored parameter, the applicable operating parameter limit, and the date and duration of the period that the excursion occurred.
 - B. For each excursion caused by lack of monitoring data, as specified in 40 CFR 63.1283(d)(6)(iii), the report must include the date and duration of period when the monitoring data were not collected and the reason why the data were not collected.
 - C. For each excursion caused when the maximum inlet gas flowrate identified under 40 CFR 63.1282(g) is exceeded, the report must include the values of the inlet gas identified and the date and duration of the period that the excursion occurred.
 - D. For each excursion caused when visible emissions determined under 40 CFR 63.1282(h) exceed the maximum allowable duration, the report must include the date and duration of the period that the excursion occurred, repairs affected to the unit, and date the unit was returned to service.
 - iii. For each inspection conducted in accordance with 40 CFR 63.1283(c) during which a leak or defect is detected, the records described in condition 40 CFR 63.1284(b)(7) must be included in the next Periodic Report. (40 CFR 63.1285(e)(2)(iii))
 - iv. For each closed-vent system with a bypass line subject to 40 CFR 63.1281(c)(3)(i)(A) or (B), records required under 40 CFR 63.1284(b)(4)(iii) or (iv) respectively. (40 CFR 63.1285(e)(2)(iv))
 - v. The information below section shall be stated in the Periodic Report, when applicable. (40 CFR 63.1285(e)(2)(vi))
 - A. A statement identifying there were no excursions during the reporting period if applicable. (40 CFR 63.1285(e)(2)(vi)(A))
 - B. A statement identifying no continuous monitoring system has been inoperative, out of control, repaired, or adjusted if applicable. (40 CFR 63.1285(e)(2)(vi)(B))
 - vi. Any change in compliance methods as described in 40 CFR 63.1282(e). (40 CFR 63.1285(e)(2)(vii))
 - vii. The results of any periodic test as required in 40 CFR63.1282(d)(3) conducted during the reporting period. (40 CFR 63.1285(e)(2)(x))
 - viii. For combustion control device inspections conducted in accordance with 40 CFR 63.1283(b) for control devices complying with the manufacturer's performance testing, the records specified in 40 CFR 63.1284(h). (40 CFR 63.1285(e)(2)(xii))

- ix. Certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (40 CFR 63.1285(e)(2)(xiii))
- 4. 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:² (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 40 CFR 63.1285(d) (SC VII.6).
 - d. Information required by the Notification of Compliance Status Report under 40 CFR 63.1285(d) (SC VII.6) for changes involving the addition of processes or equipment.
- 5. Within 60 days after the date of completing a performance test (defined in 40 CFR 63.2) 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.² (40 CFR 63.1285(g))

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 Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart HHH: Natural Gas Transmission and Storage Facilities.² (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).

FGBLRMACT 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 gas 1 fuel subcategory as defined in 40 CFR Part 63.7575.

Emission Units:

Equal to or less than 5	EUFUELHEATER1A, EUFUELHEATER1B, EUBOILER1, EULINEHEATER1,
MMBTU/hr and only burns	EULINEHEATER2, EULINEHEATER3, EUREBOILER1, EUREBOILER2
gaseous or light liquid fuels	
Greater than 5 MMBTU/hr and	EULINEHEATER4A, EULINEHEATER5A, EULINEHEATER6A
less than 10 MMBTU/hr that	
burns gaseous or light liquid	
fuels	

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

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

- b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. (40 CFR 63.7540(a)(10)(ii))
- c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. The permittee may delay the inspection until the next scheduled unit shutdown.
 (40 CFR 63.7540(a)(10)(iii))
- d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_X requirement to which the unit is subject. (40 CFR 63.7540(a)(10)(iv))
- e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. (40 CFR 63.7540(a)(10)(v))
- 4. If the unit is not operated on the required date for the tune-up, the tune-up must be conducted within 30 calendar days of startup. (40 CFR 63.7540(a)(13))
- 5. At all times, the permittee must operate and maintain each existing small boiler or process heater, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (40 CFR 63.7500(a)(3))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

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

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. The permittee must submit boiler or process heater tune-up compliance reports to the appropriate AQD District Office and must be postmarked or submitted by March 15th of the year following the applicable 2 or 5-year period starting from January 1 of the year following the previous tune-up to December 31 (of the latest tune-up year). Compliance reports must also be submitted to EPA using the Compliance and Emissions Data Reporting Interface (CEDRI) which is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). If the reporting form is not available in CEDRI at the time the compliance report is due, a hardcopy of the compliance report shall be submitted to EPA Region 5. (40 CFR 63.7550(b), 40 CFR 63.7550(h)(3))
- 5. The permittee must include the following information in the compliance report. (40 CFR 63.7550(c)(1))
 - a. Company and Facility name and address. (40 CFR 63.7550(c)(5)(i))
 - b. Process unit information, emissions limitations, and operating parameter limitations. (40 CFR 63.7550(c)(5)(ii))
 - c. Date of report and beginning and ending dates of the reporting period. (40 CFR 63.7550(c)(5)(iii))
 - d. Include the date of the most recent tune-up for each unit. Include the date of the most recent burner inspection if it was not done biennially or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown. (40 CFR 63.7550(c)(5)(xiv))
 - e. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. (40 CFR 63.7550(c)(5)(xvii))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

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

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 Rules 278, 278a and 285(2)(mm).

Emission Unit: EURULE285(2)(mm)

POLLUTION CONTROL EQUIPMENT

NA

I. <u>EMISSION LIMIT(S)</u>

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

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

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/	Michigan Department of Environment,	gr	Grains	
department	Great Lakes, and Energy	HAP	Hazardous Air Pollutant	
EGLE	Michigan Department of Environment,	Hg	Mercury	
	Great Lakes, and Energy	hr	Hour	
EU	Emission Unit	HP	Horsepower	
FG	Flexible Group	H ₂ S	Hydrogen Sulfide	
GACS	Gallons of Applied Coating Solids	kW	Kilowatt	
GC	General Condition	lb	Pound	
GHGs	Greenhouse Gases	m	Meter	
HVLP	High Volume Low Pressure*	mg	Milligram	
ID	Identification	mm	Millimeter	
IRSL	Initial Risk Screening Level	MM	Million	
ITSL	Initial Threshold Screening Level	MW	Megawatts	
LAER	Lowest Achievable Emission Rate	NMOC	Non-methane Organic Compounds	
MACT	Maximum Achievable Control Technology	NO _x	Oxides of Nitrogen	
MAERS	Michigan Air Emissions Reporting System	ng	Nanogram	
MAP	Malfunction Abatement Plan	PM	Particulate Matter	
MSDS	Material Safety Data Sheet	PM10	Particulate Matter equal to or less than 10	
NA	Not Applicable		microns in diameter	
NAAQS	National Ambient Air Quality Standards	PM2.5	Particulate Matter equal to or less than 2.5	
		_	microns in diameter	
NESHAP	National Emission Standard for Hazardous	pph	Pounds per hour	
NSPS	Air Pollutants New Source Performance Standards	ppm	Parts per million	
	New Source Review	ppmv	Parts per million by volume	
NSR PS		ppmw %	Parts per million by weight Percent	
	Performance Specification			
PSD	Prevention of Significant Deterioration	psia	Pounds per square inch absolute	
PTE	Permanent Total Enclosure	psig	Pounds per square inch gauge	
PTI	Permit to Install	scf	Standard cubic feet	
RACT	Reasonable Available Control Technology	sec	Seconds	
ROP	Renewable Operating Permit	SO ₂	Sulfur Dioxide	
SC	Special Condition	TAC	Toxic Air Contaminant	
SCR	Selective Catalytic Reduction	Temp	Temperature	
SDS	Safety Data Sheet	THC	Total Hydrocarbons	
SNCR	Selective Non-Catalytic Reduction	tpy	Tons per year	
SRN	State Registration Number	μg	Microgram	
TEQ	Toxicity Equivalence Quotient	μm	Micrometer or Micron	
USEPA/EPA	United States Environmental Protection	VOC	Volatile Organic Compounds	
–	Agency	yr	Year	
VE	Visible Emissions			

^{*}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

There are no specific testing requirement plans or procedures for this ROP. 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-N5792-2018. 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-N5792-2018 is being reissued as Source-Wide PTI No. MI-PTI-N5792-2024.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
202-19	NA	Addition of new small glycol dehydrators and the requirements for them at major sources of HAPs per 40 CFR Part 63 Subpart HHH.	EUDEHY FGMACTHHHSMALL

Appendix 7. Emission Calculations

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the emission limit of BTEX referenced in FGMACTHHHSMALL, SC I.1, BTEX emissions (40 CFR 63.1275(b)(iii), Equation 2):

$$EL_{BTEX} = 5.44 \times 10^{-5} * Throughput * C_{iBTEX} * 365 \frac{days}{yr} * \frac{1 \, Mg}{1 \times 10^6 \, grams} \quad \text{Equation 2}$$

Where:

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

5.44 × 10⁻⁵ = BTEX emission limit, grams BTEX/standard cubic meter-ppmv.

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

C_IBTEX = 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.