

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

EFFECTIVE DATE: December 2, 2020
REVISION DATES: January 25, 2021, September 9, 2021

ISSUED TO

ANR - Eaton Rapids Gas Storage System

State Registration Number (SRN): N3022

LOCATED AT

3349 South Waverly Road, Eaton Rapids, Ingham County, Michigan 48827

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-N3022-2020b

Expiration Date: December 2, 2025

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

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

SOURCE-WIDE PERMIT TO INSTALL

Permit Number: MI-PTI-N3022-2020b

This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(1) of Act 451. Pursuant to Rule 214a of the administrative rules promulgated under Act 451, the terms and conditions herein, identified by the underlying applicable requirement citation of Rule 201(1)(a), constitute a federally enforceable PTI. The PTI terms and conditions do not expire and remain in effect unless the criteria of Rule 201(6) are met. Operation of all emission units identified in the PTI is subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

Michigan Department of Environment, Great Lakes, and Energy



Brad Myott, Lansing District Supervisor

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AUTHORITY AND ENFORCEABILITY

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

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

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

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

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

A. GENERAL CONDITIONS

Permit Enforceability

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

General Provisions

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

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

Equipment & Design

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

Emission Limits

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

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

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

Testing/Sampling

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

Monitoring/Recordkeeping

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

Certification & Reporting

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

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

Permit Shield

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

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

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

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

Revisions

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

Reopenings

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

Renewals

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

Stratospheric Ozone Protection

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

Risk Management Plan

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

Emission Trading

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

Permit to Install (PTI)

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

Footnotes:

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

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

B. SOURCE-WIDE CONDITIONS

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

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

C. EMISSION UNIT SPECIAL CONDITIONS

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

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

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUERCOMP-A	Superior Model 16SGTB: 2650 HP (18.82 MMBTU/hr) natural gas-fired, 4 stroke lean-burn, spark ignition (SI) reciprocating internal combustion engines (RICE). This compressor engine is used to compress natural gas for injection into or withdrawal from a natural gas storage field. The compressor engine uses up to 0.02 MMscf/hr of natural gas.	09-01-1989 / 03-09-1999	FGERCMPRS
EUERCOMP-B	Superior Model 16SGTB: 2650 HP (18.82 MMBTU/hr) natural gas-fired, 4 stroke lean-burn, SI RICE. This compressor engine is used to compress natural gas for injection into or withdrawal from a natural gas storage field. The compressor engine uses up to 0.02 MMscf/hr of natural gas.	09-01-1989 / 03-09-1999	FGERCMPRS
EUERCOMP-C	Superior Model 16SGTB: 2650 HP (18.82 MMBTU/hr) natural gas-fired, 4 stroke lean-burn, SI RICE. This compressor engine is used to compress natural gas for injection into or withdrawal from a natural gas storage field. The compressor engine uses up to 0.02 MMscf/hr of natural gas.	06-01-1994 / 03-09-1999	FGERCMPRS
EUERGLYDEH	Glycol dehydrator with condenser and thermal oxidizer.	09-01-1989 / 11-17-1997	FGERGLYDEH, FGMACTHHH
EUREBOILER	0.65 MMBtu/hr reboiler on the glycol dehydration system.	09-01-1989 / 11-17-1997	FGERGLYDEH, FGMACTHHH, FGMACTDDDDD<10
EUERGEN	Waukesha generator model F2895GU delivering 500 kW/hr using a 670 HP 6-cylinder natural gas-fired, 4 stroke rich-burn, SI RICE.	01-01-1989	FGMACTEMERGENCY
EUERBATHEATER	10.0 MMBtu/hr boiler used to heat water for process needs.	01-01-2003	FGMACTDDDDD
EUERBOILER	2.092 MMBtu/hr boiler used for fuel temperature regulation.	09-01-1989	FGMACTDDDDD<10
EUERPIPEMAINT	Routine and emergency venting of natural gas from transmission and distribution systems.	09-01-1989	FGRULE285(2)(mm)
EUERFIELDMAINT	Routine and emergency venting of field gas from gathering lines.	09-01-1989	FGRULE285(2)(mm)

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
FGERCMPRS	Three identical compressor engines used to compress natural gas in the storage reservoir during injection and into the pipeline during withdrawal.	EUERCOMP-A, EUERCOMP-B, EUERCOMP-C
FGERGLYDEH	A glycol dehydration system to remove water from the natural gas withdrawn from the reservoir consisting of a three-phase separator, glycol regenerator/reboiler, and still column with a thermal incinerator or condenser for control.	EUERGLYDEH, EUREBOILER
FGMACTHHH	One existing small glycol dehydration unit, as defined in 40 CFR 63.1271, located at a major source of HAPs subject to 40 CFR Part 63, Subpart HHH.	EUERGLYDEH, EUREBOILER
FGMACTDDDDD	Requirements for an existing process heater designed to burn gas 1 subcategory fuel with a heat input capacity of 10 MMBTU/hr or greater at a major source of HAP emissions per 40 CFR Part 63, Subpart DDDDD (Boiler MACT). Units designed to burn gas 1 subcategory fuels include boilers or process heaters that burn only natural gas, refinery gas, and/or Other Gas 1 fuels.	EUERBATHEATER
FGMACTDDDDD<10	Requirements for existing boilers with a heat input capacity of <10 MMBTU/hr located at a major source of HAP emissions per 40 CFR Part 63, Subpart DDDDD (Boiler MACT). These boilers are designed to burn gaseous fuels.	EUREBOILER, EUERBOILER
FGMACTEMERGENCY	An existing emergency spark ignition engine greater than 500 HP that commenced construction or reconstruction before December 19, 2002, located at a major source of HAPs subject to 40 CFR Part 63, Subpart ZZZZ.	EUERGEN
FGRULE285(2)(MM)	Routine and emergency venting of natural gas from transmission and distribution systems or field gas from gathering lines, exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 285(2)(mm)	EUERPIPEMAINT, EUERFIELDMAINT

**FGERCMPRS
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Three identical compressor engines used to compress natural gas in the storage reservoir during injection and into the pipeline during withdrawal.

Emission Unit: EUERCOMP-A, EUERCOMP-B, EUERCOMP-C

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NO _x	52.6 pph ²	Hourly	FGERCMPRS	SC V.1	40 CFR 52.21 (c) & (d)
2. NO _x	230.3 tpy ²	12-month rolling time period as determined at the end of each calendar month	FGERCMPRS	SC VI.3	40 CFR 52.21 (c) & (d)
3. NO _x	3.0 g/HP-hr corrected to 15% O ₂ on dry gas basis ²	100% speed and 100% torque	FGERCMPRS	SC V.1	40 CFR 52.21 (c) & (d)
4. CO	49.1 pph ²	Hourly	FGERCMPRS	SC V.1	40 CFR 52.21(d)
5. CO	215.0 tpy ²	12-month rolling time period as determined at the end of each calendar month	FGERCMPRS	SC VI.3	40 CFR 52.21(d)
6. CO	2.8 g/HP-hr corrected to 15% O ₂ on dry gas basis ²	100% speed and 100% torque	FGERCMPRS	SC V.1	40 CFR 52.21(d)
7. VOC	21.0 pph ²	Hourly	FGERCMPRS	SC V.1	R 336.1702(a), 40 CFR 52.21 (c) & (d)
8. VOC	92.1 tpy ²	12-month rolling time period as determined at the end of each calendar month	FGERCMPRS	SC VI.3	R 336.1702(a), 40 CFR 52.21 (c) & (d)
9. VOC	1.2 g/HP-hr corrected to 15% O ₂ on dry gas basis ²	100% speed and 100% torque	FGERCMPRS	SC V.1	R 336.1702(a), 40 CFR 52.21 (c) & (d)

II. MATERIAL LIMIT(S)

- The permittee shall only burn pipeline quality natural gas, as defined in 40 CFR 72.2, in FGERCMPRS. (R 336.1213(2))

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Within 90 days of permit issuance, the permittee shall submit to the AQD District Supervisor, for review and approval, a Preventative Maintenance / Malfunction Abatement plan (PM/MAP) for FGERCMPRS. After approval of the PM/MAP by the AQD District Supervisor, the permittee shall not operate FGERCMPRS 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. **(R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

1. The permittee shall verify NOx, CO, and VOC emission rates from FGERCMPRS from at least one of the identical units by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

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

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

2. The permittee shall verify the NOx, CO, and VOC emission rates from FGERCMPRS from at least one of the identical units, at a minimum, every five years from the date of the last test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall complete all required records in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1213(3))**

2. The permittee shall maintain the following record for each engine in FGERCMPRS:
 - a. Engine manufacturer;
 - b. Date engine was manufactured;
 - c. Engine model number and model year;
 - d. Maximum engine power;
 - e. Engine serial number;
 - f. Engine specification sheet;
 - g. Date of initial startup of the engine;
 - h. Date engine was removed from service at this stationary source;
 - i. Date replacement engine was installed at this stationary source;
 - j. Manufacturer’s data, specifications, and operating and maintenance procedures for each engine;
 - k. Maintenance activities conducted according to the PM/MAP.
 The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1213(3))**

3. The permittee shall keep the following information on a monthly basis:
 - a. The horse power hours produced by each engine per calendar month.
 - b. The emission factor expressed as grams of pollutant emitted per horse power hour as determined by the most recent stack test.
 - c. NOx, CO, and VOC emission calculations determining the monthly emission rate of each in tons per calendar month.
 - d. NOx, CO, and VOC emission calculations determining the annual emission rate of each in tons per 12-month rolling time period as determined at the end of each calendar month.
 The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1213(3))**

See Appendix 7

VII. REPORTING

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

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

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

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 Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVER001	22 ²	35 ²	40 CFR 52.21(c) & (d)

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
2. SVER002	22 ²	35 ²	40 CFR 52.21(c) & (d)
3. SVER003	22 ²	35 ²	40 CFR 52.21(c) & (d)

IX. OTHER REQUIREMENT(S)

1. The permittee shall maintain the fencing, warning signs, and/or other measures as necessary to prevent unauthorized individuals from entering the plant property and buildings.² **(40 CFR 52.21(c) and (d))**
2. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart ZZZZ as they apply to FGRCMPRS. **(40 CFR Part 63, Subparts A and ZZZZ)**

Footnotes:

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

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

**FGERGLYDEH
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

A glycol dehydration system to remove water from the natural gas withdrawn from the reservoir consisting of a three-phase separator, glycol regenerator/reboiler, and still column with a thermal incinerator or condenser for control.

Emission Unit: EUERGLYDEH, EUREBOILER

POLLUTION CONTROL EQUIPMENT

Thermal oxidizer with a back-up condenser

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	51.9 lb/day ²	Calendar day	FGERGLYDEH	SC V.1, SC VI.5	R 336.1702(a)
2. VOC	9.5 tpy ²	12-month rolling time period as determined at the end of each calendar month	FGERGLYDEH	SC V.1, SC VI.6	R 336.1702(a)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. Within 90 days of permit issuance, the permittee shall submit to the AQD District Supervisor, for review and approval, a Preventative Maintenance / Malfunction Abatement plan (PM/MAP) for FGERGLYDEH. After approval of the PM/MAP by the AQD District Supervisor, the permittee shall not operate FGERGLYDEH 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. **(R 336.1911)**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate FGERGLYDEH unless the flash tank is installed and operating properly. A properly operating flash tank will volatilize organic compounds out of the rich glycol stream and route them to the glycol dehydrator reboiler burner, thermal incinerator or equivalent combustion control device.² **(R 336.1702(a))**
2. The permittee shall not operate FGERGLYDEH unless the glycol regenerator still is equipped with a condenser, thermal incinerator or equivalent control device and the control device, which includes associated monitoring equipment, is installed and operating properly.² **(R 336.1702(a))**
3. When the glycol regenerator still is controlled by a condenser, the permittee shall not operate the glycol dehydrator unless the condenser exhaust gas temperature is 120°F or less.² **(R 336.1702(a))**
4. When the glycol regenerator still is controlled by a condenser, the permittee shall equip and maintain the condenser with an exhaust gas temperature monitor.² **(R 336.1702(a))**
5. When the glycol regenerator still and/or flash tank is controlled by a thermal incinerator, the permittee shall not operate the glycol dehydrator unless the incinerator operating temperature is at least 1400°F.² **(R 336.1702(a))**
6. When the glycol regenerator still and/or flash tank is controlled by a thermal incinerator, the permittee shall equip and maintain the incinerator with an operating temperature monitor.² **(R 336.1702(a))**

V. TESTING/SAMPLING

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

1. Verification of VOC emission rates from FGERGLYDEH by testing, at owner's expense, in accordance with Department requirements, may be required. The testing shall be conducted within 60 days following the receipt of the written notification of the requirement. Verification of emission rates includes the submittal of a complete report of the test results. If testing is required, a complete test plan must be submitted to the Air Quality Division. The final plan must be approved by the Division prior to testing and a complete report of test results must be submitted to the Division within 60 days following the last date of testing.² **(R 336.1702(a), R 336.2001, R 336.2003, R 336.2004)**
2. The permittee shall determine the composition, including the VOC content, of the natural gas processed in FGERGLYDEH at least once every five calendar years. The natural gas composition shall be determined by a method or methods which are standard in the natural gas industry, subject to approval by the AQD. **(R 336.1213(3))**

See Appendix 5

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 records in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1213(3))**
2. When the glycol regenerator still is controlled by a condenser, the permittee shall monitor and record the condenser exhaust gas temperature on a daily basis when FGERGLYDEH is operating. A written log of the daily exhaust gas temperatures shall be kept on file and made available to the AQD upon request.² **(R 336.1702(a))**
3. When the glycol regenerator still and/or flash tank is controlled by a thermal incinerator, the permittee shall monitor and record the incinerator operating temperature on a daily basis when FGERGLYDEH is operating. A written log of the daily incinerator operating temperatures shall be kept on file and made available to the AQD upon request.² **(R 336.1702(a))**

4. When the glycol regenerator still and/or flash tank is controlled by a thermal incinerator or equivalent combustion device, the permittee shall retain, in a manner acceptable to the AQD, calculations showing VOC destruction efficiency is at least 95% by weight. These calculations shall be kept on file and made available to the AQD upon request.² **(R 336.1702(a))**
5. The permittee shall calculate and record the amount of VOC emissions, in pounds, for FGERGLYDEH each calendar day. Records of daily VOC emissions shall be kept on file and made available to the AQD upon request. **(R 336.1213(3))**
6. The permittee shall calculate and record the amount of VOC emissions, in tons, for FGERGLYDEH on a monthly and 12-month rolling time period basis as determined at the end of each calendar month. Monthly and 12-month rolling time period records shall be kept on file and made available to the AQD upon request. **(R 336.1213(3))**
7. The permittee shall determine the actual average VOC emissions from the glycol dehydration system using an **emission factor** calculated with the GRI-GLYCalc™ computer model, version 3.0 or higher per the procedures described in the associated GRI-GLYCalc™ Technical Reference manual. Inputs to the model shall be representative of the actual operating conditions of the glycol dehydration system and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled “Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions.” The VOC composition of the natural gas inputted into the model shall be determined from the most recent chemical analysis of the natural gas processed in the glycol dehydration system. **(R 336.1213(3))**
8. The permittee shall keep, in a satisfactory manner, the records and information associated with the PM/MAP for FGERGLYDEH, as required by SC III.1. All PM/MAP records shall be kept on file and made available to the AQD upon request. **(R 336.1213(3))**

See Appendix 7

VII. REPORTING

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVER005 (condenser)	2 ²	15.5 ²	R 336.1201(3)
2. SVER006 (oxidizer)	NA ²	15.5 ²	R 336.1201(3)

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 as they apply to FGERGLYDEH.
(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).

**FGMACTHHH
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

One existing small glycol dehydration unit, as defined in 40 CFR 63.1271, located at a major source of HAPs subject to 40 CFR Part 63, Subpart HHH.

Emission Unit: EUERGLYDEH, EUREBOILER

POLLUTION CONTROL EQUIPMENT

Thermal oxidizer with back-up condenser

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. BTEX	Calculated using the equation in Appendix 7	Annual	Glycol Dehydration System	SC V.2, SC VI.5	40 CFR 63.1275 (b)(1)(iii)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. At all times the permittee must operate and maintain the glycol dehydration system, 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 which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.1274(h))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate the glycol dehydration system 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: **(40 CFR 63.1274(c), 40 CFR 63.1275(b)(1)(iii)(A), 40 CFR 63.1281(c), 40 CFR 63.1283(c)(2)(iii))**
 - a. The closed-vent system shall route all gases, vapors, and fumes emitted from the material in an emission unit to a control device that meets the requirements specified in SC IV.2. **(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 SC IV.1.c. **(40 CFR 63.1281(c)(3)(ii))**
2. The permittee shall not operate the glycol dehydration system unless each process vent is connected to a control device or combination of control devices through a closed-vent system. The control device shall be operating at all times and shall be one of the following: **(40 CFR 63.1274(c), 40 CFR 63.1275(b)(1)(iii)(A), 40 CFR 63.1281(f))**
 - a. An enclosed combustion device (e.g., thermal vapor incinerator, catalytic vapor incinerator, boiler, or process heater) that is designed and operated to meet the mass content of BTEX in the gases vented to the device is reduced to the levels in SC I.1 as determined in accordance with the requirements of 40 CFR 63.1282(d). If a boiler or process heater is used as the control device, then the vent stream shall be introduced into the flame zone of the boiler or process heater. **(40 CFR 63.1281(f)(1)(i)(A))**
 - b. The concentration of either TOC or total HAP in the exhaust gases at the outlet of the device is reduced to a level equal to or less than 20 parts per million by volume on a dry basis corrected to 3 percent oxygen as determined in accordance with the requirements of 40 CFR 63.1282(e). **(40 CFR 63.1281(f)(1)(i)(B))**
 - c. A condenser that is designed and operated to reduce the mass content of BTEX in the gases vented to the device as determined in accordance with the requirements of 40 CFR 63.1282(d). **(40 CFR 63.1281(f)(1)(ii))**
 - d. The permittee may vent more than one unit to a control device used to comply with 40 CFR 63 Subpart HHH. **(40 CFR 63.1281(f)(2))**
3. The permittee shall install, calibrate, operate, and maintain a temperature monitoring device, equipped with a continuous recorder, on the thermal oxidizer and condenser. The monitoring device shall have a minimum accuracy of ± 2 percent of the temperature being monitored in $^{\circ}\text{C}$, or ± 2.5 $^{\circ}\text{C}$, whichever value is greater. The temperature sensor shall be installed as follows: **(40 CFR 63.1274(c), 40 CFR 63.1283(d)(3))**
 - a. For the thermal oxidizer, the temperature sensor shall be installed at a location representative of the combustion zone temperature. **(40 CFR 63.1283(d)(3)(i)(A))**
 - b. For the condenser, the temperature sensor shall be installed at a location in the exhaust vent stream from the condenser. **(40 CFR 63.1283(d)(3)(i)(E))**
4. The permittee shall install and operate a continuous parameter monitoring system (CPMS) for the thermal oxidizer and condenser that meets the following specifications and requirements: **(40 CFR 63.1274(c), 40 CFR 63.1283(d)(1)(i))**
 - a. Each CPMS shall measure data values at least once every hour and record either:
 - i. Each measured data value; or
 - ii. Each block average value for each 1-hour period or shorter periods calculated from all measured data values during each period. If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the hourly (or shorter period) block average instead of all measured values.
5. The permittee must install, calibrate, operate, and maintain each CPMS in accordance with the procedures in the approved site-specific monitoring plan required in SC VI.3. **(40 CFR 63.1274(c), 40 CFR 63.1283(d)(1)(iv))**

V. TESTING/SAMPLING

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

1. The permittee shall perform "no detectable emissions" testing for closed vent systems using the test methods and procedures specified in 40 CFR 63.1282(b). **(40 CFR 63.1282(b))**
2. The permittee shall demonstrate that the thermal oxidizer and condenser meet the requirements of 40 CFR 1281(f)(1) in SC IV.2 by conducting a performance test in accordance with the following test methods and procedures: **(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)(1))**
 - b. The gas volumetric flowrate shall be determined using Method 2, 2A, 2C, or 2D, 40 CFR, Part 60, Appendix A, as appropriate.
 - c. To determine compliance with the BTEX emission limit 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).

3. For condenser control devices, as an alternative to the performance testing required in SC V.2, the permittee may use the procedures documented in the GRI report entitled "Atmospheric Rich/Lean method for Determining Glycol Dehydrator Emissions" (GRI-95/0368.1) as inputs for the model GRI-GLYCalc™, version 3.0 or higher, to generate a condenser performance curve. If the owner or operator and the Administrator do not agree on a demonstration of control device performance using a design analysis, then the disagreement shall be resolved using the results of a performance test performed by the owner or operator in accordance with the requirements of SC V.2. **(40 CFR 63.1282(d)(3), 40 CFR 63.1282(d)(4), 40 CFR 63.1282(d)(5))**
4. For the thermal oxidizer, as an alternative to conducting the performance test in SC V.2, the permittee may use a combustion 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 paragraph 40 CFR 63.1281(g). **(40 CFR 63.1282(d)(3))**
5. Unless an alternate schedule has been approved by the AQD, no less than 30 days prior to testing, the permittee shall submit notification of intent to conduct a performance test and a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. The testing protocol shall describe the test method(s) and the operating limits, including targets for key operational parameters to be monitored and recorded during testing, as applicable. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1213(3), R 336.2001, 40 CFR 63.7)**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall determine the actual flow rate of natural gas to the glycol dehydration system using either of the following procedures: **(40 CFR 63.1282(a)(1))**
 - a. Installing and operating a monitoring instrument that directly measures natural gas flowrate with an accuracy of ± 2 percent or better. The annual natural gas flowrate shall be converted to a daily average by dividing the annual flowrate by the number of days per year of processed natural gas.
 - b. Documenting, in a satisfactory manner, the actual annual average natural gas flowrate to the glycol dehydration system.
2. The permittee shall maintain records of the annual facility natural gas throughput each year. **(40 CFR 63.1270(a)(3))**
3. The permittee shall prepare a site-specific monitoring plan that addresses the following monitoring system design, data collection, and quality assurance and quality control elements for each CPMS: **(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; **(40 CFR 63.1283(d)(1)(ii)(A))**
 - b. Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements; **(40 CFR 63.1283(d)(1)(ii)(B))**
 - c. Equipment performance checks, system accuracy audits, or other audit procedures; **(40 CFR 63.1283(d)(1)(ii)(C))**
 - d. Ongoing operation and maintenance procedures in accordance with provisions in 40 CFR 63.8(c)(1) and (c)(3); **(40 CFR 63.1283(d)(1)(ii)(D))**
 - e. Ongoing reporting and recordkeeping procedures in accordance with provisions in 40 CFR 63.10(c), (e)(1), and (e)(2)(i); **(40 CFR 63.1283(d)(1)(ii)(E))**
 - f. Initial and any subsequent calibration of the CPMS; **(40 CFR 63.8(d)(2)(i))**
 - g. Determination and adjustment of the calibration drift of the CPMS; **(40 CFR 63.8(d)(2)(ii))**
 - h. Preventive maintenance of the CPMS, including spare parts inventory; **(40 CFR 63.8(d)(2)(iii))**
 - i. Data recording, calculations, and reporting; **(40 CFR 63.8(d)(2)(iv))**
 - j. Accuracy audit procedures, including sampling and analysis methods; **(40 CFR 63.8(d)(2)(v))**
 - k. Program of corrective action for a malfunctioning CPMS. **(40 CFR 63.8(d)(2)(vi))**

4. The permittee shall demonstrate compliance with the thermal oxidizer performance requirements in 40 CFR 63.1281(f)(1) as follows: **(40 CFR 63.1282(e)(1), 40 CFR 63.1283(d)(5)(i), (40 CFR 63.1282(e)(1), 40 CFR 63.1283(d)(5)(i) and (ii))**
 - a. Establish a minimum temperature for the thermal oxidizer to define the conditions at which the thermal oxidizer must be operated to continuously achieve the performance requirements in 40 CFR 63.1281(f)(1) in SC IV.2. The minimum temperature shall be established based on values measured during the performance test conducted in accordance with the requirements of 40 CFR 63.1282(d)(3) to demonstrate that the control device achieves the applicable performance requirements specified in 40 CFR 63.1281(f)(1) and supplemented, as necessary, by control device manufacturer's recommendations. If the permittee operates a control device where the performance test requirement was met under 40 CFR 63.1282(g) (manufacturers' performance test) to demonstrate that the control device achieves the applicable performance requirements specified in 40 CFR 63.1281(f)(1), then the maximum inlet gas flowrate shall be established based on the performance test and supplemented, as necessary, by the manufacturer recommendations. **(40 CFR 63.1283(d)(5)(i)(A), 40 CFR 63.1283(d)(5)(i)(C))**
 - b. Continuously monitor and record the temperature on the thermal oxidizer and calculate the daily average temperature for each operating day as follows: **(40 CFR 63.1282(e)(2), 40 CFR 63.1283(d)(4))**
 - i. Using the data recorded by the temperature monitoring systems, the permittee shall calculate the daily average temperature 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. **(40 CFR 63.1283(d)(4))**
 - c. Compliance with the thermal oxidizer control device performance requirements specified in SC IV.2.a is achieved when the daily average of the temperature readings calculated in SC VI.4.b is either equal to or greater than the minimum value established under SC VI.4.a. **(40 CFR 63.1282(e)(3))**
5. When using a condenser as the control device, the permittee shall demonstrate compliance with the BTEX emission reductions by complying with the following requirements: **(40 CFR 63.1282(f))**
 - a. Establish a site-specific condenser performance curve using the procedures documented in the GRI report entitled, "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI-95/0368.1) as inputs for the model GRI-GLYCalc™, Version 3.0 or higher. The permittee shall identify the minimum percent reduction necessary to meet the BTEX limit in SC I.1. **(40 CFR 63.1282(f)(1), 40 CFR 63.1283(d)(5)(ii)(C))**
 - b. Calculate the daily average condenser outlet temperature as follows: **(40 CFR 63.1282(f)(2)(i))**
 - i. Using the data recorded by the temperature monitoring systems, the permittee shall calculate the daily average temperature 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. **(40 CFR 63.1283(d)(4))**
 - c. Determine the condenser efficiency for the current operating day using the daily average condenser outlet temperature and the condenser performance curve. **(40 CFR 63.1282(f)(2)(ii))**
 - d. At the end of each operating day the permittee shall calculate the 30-day average BTEX emission reduction from the condenser efficiencies for the preceding 30 operating days. **(40 CFR 63.1282(f)(2)(iii))**
 - e. Compliance is achieved if the average BTEX emission reduction calculated in SC VI.5.d is equal to or greater than the minimum percent reduction necessary to meet the BTEX limit in SC I.1. **(40 CFR 63.1282(f)(3)(ii))**
6. The permittee shall operate the CPMS at all times 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. **(40 CFR 63.1282(e)(4))**
7. Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required quality monitoring system quality assurance or quality control activities (including, as applicable,

system accuracy audits and required zero and span adjustments), failure to collect required data is a deviation of the monitoring requirements. **(40 CFR 63.1282(e)(6))**

8. 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. **(40 CFR 63.1274(c), 40 CFR 63.1283(d)(1)(iii))**
9. The permittee must conduct a performance evaluation of each CPMS in accordance with the site-specific monitoring plan required in SC VI.3. **(40 CFR 63.1274(c), 40 CFR 63.1283(d)(1)(iv))**
10. An excursion for a control device is determined to have occurred when the monitoring data or lack of monitoring data result in any one of the criteria specified below being met. When multiple operating parameters are monitored for the same control device and during the same operating day, and more than one of these operating parameters meets an excursion criterion specified below, then a single excursion is determined to have occurred for the control device for that operating day. **(40 CFR 63.1274(c), 40 CFR 63.1283(d)(6))**
 - a. When the daily average value of a monitored operating parameter is less than the minimum operating parameter limit (or, if applicable, greater than the maximum operating parameter limit) established for the operating parameter; **(40 CFR 63.1283(d)(6)(i))**
 - b. When the 30-day average condenser efficiency calculated according to the requirements of SC VI.5.d is less than the identified 30-day required percent reduction; **(40 CFR 63.1283(d)(6)(ii))**
 - c. 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))**
 - d. 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(g).
 - ii. Failure of the quarterly visible emissions test conducted under 40 CFR 63.1282(h)(3) occurs.
 - e. 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))**
11. For each excursion, the permittee shall be deemed to have failed to have applied control in a manner that achieves the required operating parameter limits. Failure to achieve the required operating parameter limits is a violation of this standard. **(40 CFR 63.1274(c), 40 CFR 63.1283(d)(7))**
12. Data recorded during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities may not be used in calculations used to report emissions or operating levels. All the data collected during all other required data collection periods must be used in assessing the operation of the control device and associated control system. **(40 CFR 63.1282(e)(5))**
13. For each closed-vent system, the permittee shall comply with the following requirements: **(40 CFR 63.1283(c)(1))**
 - a. The permittee shall inspect each closed-vent system and each bypass device according to the procedures and schedule specified below: **(40 CFR 63.1274(c), 40 CFR 63.1283(c)(2)(i))**
 - i. For each closed-vent system joints, seams, or other connections that are permanently or semi-permanently sealed (e.g., a welded joint between two sections of hard piping or a bolted or gasketed ducting flange) the permittee shall:
 - A. Conduct an initial inspection according to 40 CFR 63.1282(b) to demonstrate that the closed-vent system operates with no detectable emissions.
 - B. Conduct annual visual inspections for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in piping; loose connections; or broken or missing caps or other closure devices.
 - ii. For closed-vent system components other than those specified in VI.13.a.i, the permittee shall: **(40 CFR 63.1283(c)(2)(ii))**

- A. Conduct an initial inspection to demonstrate that the closed-vent system operates with no detectable emissions.
 - B. Conduct annual inspections to demonstrate that the components or connections operate with no detectable emissions.
 - C. Conduct annual visual inspections for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork; loose connections; or broken or missing caps or other closure devices.
- iii. For each bypass device, except low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and safety devices, the permittee shall either: **(40 CFR 63.1283(c)(2)(iii))**
- A. At the inlet to the bypass device that could divert the steam away from the control device to the atmosphere, set the flow indicator to take a reading at least once every 15 minutes; or
 - B. If the bypass device valve installed at the inlet to the bypass device is secured in the non-diverting position using a car-seal or a lock-and-key type configuration, visually inspect the seal or closure mechanism at least once every month to verify that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass device.
14. In the event that a leak or defect is detected, the permittee shall repair the leak or defect as soon as practicable, except as provided in VI.15: **(40 CFR 63.1274(c), 40 CFR 63.1283(c)(3))**
- a. A first attempt at repair shall be made no later than five calendar days after the leak is detected.
 - b. Repair shall be completed no later than 15 calendar days after the leak is detected.
15. Delay of repair of a closed-vent system for which leaks or defects have been detected is allowed if the repair is technically infeasible without a shutdown, as defined in 40 CFR 63.1271, or if the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next shutdown. **(40 CFR 63.1274(c), 40 CFR 63.1283(c)(4))**
16. Any parts of the closed-vent system that are designated, as described in SC VI.18, as unsafe to inspect are exempt from the inspection requirements of SC VI.13.a.i and SC VI.13.a.ii: **(40 CFR 63.1274(c), 40 CFR 63.1283(c)(5))**
- a. The permittee determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with SC VI.13.a.i or ii.
 - b. The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.
17. Any parts of the closed-vent system that are designated, as described in SC VI.19, as difficult to inspect are exempt from the inspection requirements of SC VI.13.a.i and VI.13.a.ii: **(40 CFR 63.1274(c), 40 CFR 63.1283(c)(6))**
- a. The permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than two meters above a support surface; and
 - b. The permittee has a written plan that requires inspection of the equipment at least once every five years.
18. The permittee shall maintain records identifying all parts of the closed-vent system that are designated as unsafe to inspect in accordance with SC VI.13, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment. **(40 CFR 63.1274(c), 40 CFR 63.1283(c)(5), 40 CFR 63.1284(b)(5))**
19. The permittee shall maintain records identifying all parts of the closed-vent system that are designated as difficult to inspect in accordance with SC VI.13, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment. **(40 CFR 63.1274(c), 40 CFR 63.1283(c)(6), 40 CFR 63.1284(b)(6))**
20. For each closed-vent system inspection conducted in accordance with SC VI.13 during which no leaks or defects are detected, the permittee shall maintain a record that the inspection was performed, the date of the inspection, and a statement that no leaks or defects were detected. **(40 CFR 63.1274(c), 40 CFR 63.1284(b)(8))**
21. The permittee shall maintain the following records for each closed-vent system inspection conducted in accordance with SC VI.13 during which a leak or defect is detected: **(40 CFR 63.1274(c), 40 CFR 63.1283(c)(7), 40 CFR 63.1284(b)(7))**
- a. The instrument identification numbers, operator name or initials, and identification of the equipment.

- b. The date the leak or defect was detected and the date of the first attempt to repair the leak or defect.
 - c. Maximum instrument reading measured by the method specified in SC V.1 after the leak or defect is successfully repaired or determined to be non-repairable.
 - d. "Repair delayed" and the reason for the delay if a leak or defect is not repaired within 15 calendar days after discovery of the leak or defect.
 - e. The name, initials, or other form of identification of the permittee (or designee) whose decision it was that repair could not be affected without a shutdown.
 - f. The expected date of successful repair of the leak or defect if a leak or defect is not repaired within 15 calendar days.
 - g. Dates of shutdowns that occur while the equipment is unrepaired.
 - h. The date of successful repair of the leak or defect.
22. The permittee shall maintain the following records: **(40 CFR 63.1274(c), 40 CFR 63.1284(b)(4), 40 CFR 63.1284(g))**
- a. Continuous records of the equipment operating parameters specified to be monitored in conditions SC VI.4; **(40 CFR 63.1284(b)(4)(i))**
 - b. Records of the daily average value of each continuously monitored parameter for each operating day determined according to the procedures specified in SC VI.4.a. **(40 CFR 63.1284(b)(4)(ii))**
 - c. For condensers using reduction efficiency for compliance, records of the annual 30-day rolling average condenser efficiency determined in SC VI.5.d shall be kept in addition to the daily averages. **(40 CFR 63.1284(b)(4)(ii))**
 - d. 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))**
 - e. Where a seal or closure mechanism is used to comply with the closed vent bypass, hourly records of flow are not required. In such cases, the owner or operator shall record that the monthly visual inspection of the seals or closure mechanism has been done, and shall record the duration of all periods when the seal mechanism is broken, the bypass line valve position has changed, or the key for a lock-and-key type lock has been checked out, and records of any car-seal that has broken. **(40 CFR 63.1284(b)(4)(iv))**
23. The permittee shall maintain the records specified in 40 CFR 63.10(b)(2), listed below: **(40 CFR 63.1274(c), 40 CFR 63.1284(b)(2))**
- a. All required maintenance performed on the air pollution control and monitoring equipment; **(40 CFR 63.10(b)(2)(iii))**
 - b. Each period during which a CPMS is malfunctioning or inoperative (including out-of-control periods); **(40 CFR 63.10(b)(2)(vi))**
 - c. All required measurements needed to demonstrate compliance with a relevant standard (including, but not limited to, 15-minute averages of CPMS data, raw performance testing measurements, and raw performance evaluation measurements, that support data that the source is required to report); **(40 CFR 63.10(b)(2)(vii))**
 - d. All results of performance tests, CPMS performance evaluations, and opacity and visible emission observations; **(40 CFR 63.10(b)(2)(viii))**
 - e. All measurements as may be necessary to determine the conditions of performance tests and performance evaluations; **(40 CFR 63.10(b)(2)(ix))**
 - f. All CPMS calibration checks; **(40 CFR 63.10(b)(2)(x))**
 - g. All adjustments and maintenance performed on CPMS; **(40 CFR 63.10(b)(2)(xi))**
 - h. Any information demonstrating whether a source is meeting the requirements for a waiver of recordkeeping or reporting requirements under this 40 CFR 63, if the source has been granted a waiver under 40 CFR 63.10(f); **(40 CFR 63.10(b)(2)(xii))**
 - i. All emission levels relative to the criterion for obtaining permission to use an alternative to the relative accuracy test, if the source has been granted such permission under 40 CFR 63.8(f)(6); **(40 CFR 63.10(b)(2)(xiii))** and
 - j. All documentation supporting initial notifications and notifications of compliance status under 40 CFR 63.9. **(40 CFR 63.10(b)(2)(xiv))**
24. Monitoring data recorded during periods identified below shall not be included in any average or percent leak rate computed under this 40 CFR 63 Subpart HHH: **(40 CFR 63.1274(c), 40 CFR 63.1284(b)(3))**
- a. Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments;
 - b. Periods of non-operation resulting in cessation of the emissions to which the monitoring applies; and
 - c. An excursion when monitoring data are not available for at least 75 percent of the operating hours in a day.

25. The permittee shall keep the records specified in 40 CFR 63.10(c), listed below, for each monitoring system operated in accordance with the requirements in 40 CFR 63.1283(d). Notwithstanding the previous sentence, monitoring data recorded during periods identified in SC VI.24 shall not be included in any average or percent leak rate computed under this subpart. Records shall be kept of the times and durations of all such periods and any other periods during process or control device operation when monitors are not operating or failed to collect required data. **(40 CFR 63.1274(c), 40 CFR 63.1284(b)(3))**
- a. All required CPMS measurements (including monitoring data recorded during unavoidable CPMS breakdowns and out-of-control periods); **(40 CFR 63.10(c)(1))**
 - b. The date and time identifying each period during which the CPMS was inoperative except for zero (low-level) and high-level checks; **(40 CFR 63.10(c)(5))**
 - c. The date and time identifying each period during which the CPMS was out of control, as defined in 40 CFR 63.8(c)(7); **(40 CFR 63.10(c)(6))**
 - d. The specific identification (i.e., the date and time of commencement and completion) of each period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during startups, shutdowns, and malfunctions of the affected source; **(40 CFR 63.10(c)(7))**
 - e. The specific identification (i.e., the date and time of commencement and completion) of each time period of excess emissions and parameter monitoring exceedances, as defined in the relevant standard(s), that occurs during periods other than startups, shutdowns, and malfunctions of the affected source; **(40 CFR 63.10(c)(8))**
 - f. The nature of the repairs or adjustments to the CPMS that was inoperative or out of control; **(40 CFR 63.10(c)(12))**
 - g. The total process operating time during the reporting period; **(40 CFR 63.10(c)(13))**
 - h. All procedures that are part of a quality control program developed and implemented for CPMS under 40 CFR 63.8(d). **(40 CFR 63.10(c)(14))**
 - i. Monitoring system breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments; **(40 CFR 63.1284(b)(1)(i))**
 - j. Periods of non-operation resulting in cessation of the emissions to which the monitoring applies; **(40 CFR 63.1284(b)(1)(iii))**
 - k. Excursions due to the monitoring data not available for at least 75 percent of the operating hours in a day. **(40 CFR 63.1284(b)(1)(iv))**
26. The permittee shall maintain records of the occurrence and duration of each malfunction of process equipment or the air pollution control equipment and monitoring equipment. The permittee shall maintain records of actions taken during periods of malfunction to minimize emissions in accordance with SC III.1 including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. **(40 CFR 63.1274(c), 40 CFR 63.1284(f))**
27. The permittee shall maintain files of all information (including all reports and notifications) required by this 40 CFR Part 63, Subpart HHH. The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report or period. **(40 CFR 63.1284(b)(1))**
- a. All applicable records shall be maintained in such a manner that they can be readily accessed.
 - b. The most recent 12 months of records shall be retained on site or shall be accessible from a central location by computer or other means that provides access within two hours after a request.
 - c. The remaining four years of records may be retained offsite.
 - 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.

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 of Compliance Status Report as required under 40 CFR 63.9(h). In addition to the information required under 40 CFR 63.9(h), the Notification of Compliance Status Report shall include the information specified in SC VII.5 below. If an owner or operator submits the required information at different times, and/or different submittals, subsequent submittals may refer to previous submittals instead of duplicating and resubmitting the previously submitted information. **(40 CFR 63.1285(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 SC VII.5.a.iii. and the information in either SC VII.5.a.i. or ii. **(40 CFR 63.1285(d)(1))**
 - i. The condenser design analysis documentation specified in 40 CFR 63.1282(d)(4) if the owner or operator elects to prepare a design analysis; or **(40 CFR 63.1285(d)(1)(i))**
 - ii. If the owner or operator is required to conduct a performance test, the performance test results including the information specified in SC VII.5.a.ii.A and B. Results of a performance test conducted prior to the compliance date of this subpart can be used provided that the test was conducted using the methods specified in 40 CFR 63.1282(d)(3), and that the test conditions are representative of current operating conditions. If the owner or operator operates a combustion control device model tested under 40 CFR 63.1282(g), an electronic copy of the performance test results shall be submitted via email to *Oil_and_Gas_PT@EPA.GOV* unless the test results for that model of combustion control device are posted at the following Web site: <https://www.epa.gov/controlling-air-pollution-oil-and-natural-gas-industry>. **(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); and
 - B. The value of the monitored parameters specified in 40 CFR 63.1283(d), or a site-specific parameter approved by the permitting agency, averaged over the full period of the performance test.
 - iii. The results of the closed-vent system initial inspections performed according to the requirements in 40 CFR 63.1283(c)(2)(i) and (ii). **(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 SC VII.5.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 SC VII.5.c.i through iii for each operating parameter required to be monitored in accordance with the requirements of 40 CFR 63.1283(d). **(40 CFR 63.1285(d)(4))**
 - i. The minimum operating parameter value or maximum operating parameter value, as appropriate for the control device, established by the owner or operator to define the conditions at which the control device must be operated to continuously achieve the applicable performance requirements of 40 CFR 63.1281(d)(1) or (e)(3)(ii). **(40 CFR 63.1285(d)(4)(i))**
 - ii. An explanation of the rationale for why the owner or operator selected each of the operating parameter values established in 40 CFR 63.1283(d)(5). This explanation shall include any data and calculations used to develop the value, and a description of why the chosen value indicates that the control device is operating in accordance with the applicable requirements of 40 CFR 63.1281(d)(1), (e)(3)(ii), or (f)(1). **(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 submit a statement as to whether the source has complied with the requirements of this subpart. **(40 CFR 63.1285(d)(9))**

6. The permittee shall prepare and submit Periodic Reports in accordance with SC VII.6.a and b below: **(40 CFR 63.1285(e))**
 - a. The permittee shall submit Periodic Reports semiannually. The reports 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. The report shall include certification by a responsible official of truth, accuracy, and completeness.
 - b. The permittee shall include the following information and any other information as applicable in 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 CFR 63.1283(d)(6)) shall be considered excess emissions. **(40 CFR 63.1285(e)(2)(i))**
 - ii. A description of all deviations that have occurred during the 6-month reporting period, and the information described in 40 CFR 63.1285(e)(2)(ii). **(40 CFR 63.1285(e)(2)(ii))**
 - iii. For each inspection conducted in accordance with SC VI.13 during which a leak or defect is detected, the records described in condition SC VI.24 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, records required under condition VI.23.e and f. **(40 CFR 63.1285(e)(2)(iv))**
 - v. The information below section shall be stated in the Periodic Report, when applicable.
 - A. A statement identifying there were no deviations 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 CFR 63.1282(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)(xii))**
7. Whenever a process change is made, or a change in any of the information submitted in the Notification of Compliance Status Report, the permittee shall submit a report within 180 days after the process change is made or as a part of the next Periodic Report, whichever is sooner. The report shall include: **(40 CFR 63.1285(f))**
 - a. A brief description of the process change;
 - b. A description of any modification to standard procedures or quality assurance procedures;
 - c. Revisions to any of the information reported in the original Notification of Compliance Status Report under SC VII.5.
 - d. Information required by the Notification of Compliance Status Report under SC VII.5 for changes involving the addition of processes or equipment.
8. Within 60 days after the date of completing a performance test (defined in 40 CFR 63.2) 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. At the discretion of the delegated authority, the permittee must also submit these reports to the delegated authority in the format specified by the delegated authority. The Administrator retains the right to require submittal of reports in paper format. **(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. **(40 CFR Part 63, Subparts A and HHH)**

**FGMACTDDDDD
FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Requirements for an existing process heater designed to burn gas 1 subcategory fuel with a heat input capacity of 10 MMBTU/hr or greater at a major source of HAP emissions per 40 CFR Part 63, Subpart DDDDD (Boiler MACT). Units designed to burn gas 1 subcategory fuels include boilers or process heaters that burn only natural gas, refinery gas, and/or Other Gas 1 fuels.

Emission Units: EUERBATHEATER

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall conduct an annual tune up of each process heater as specified below. The annual tune-up shall be no more than 13 months after the previous tune-up. **(40 CFR 63.7500(a)(1), 40 CFR 63.7515(d), Table 3 of 40 CFR Part 63, Subpart DDDDD)**
 - a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown. Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment. **(40 CFR 63.7540(a)(10)(i))**
 - b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. **(40 CFR 63.7540(a)(10)(ii))**
 - c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection. **(40 CFR 63.7540(a)(10)(iii))**
 - d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject. **(40 CFR 63.7540(a)(10)(iv))**
 - e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. **(40 CFR 63.7540(a)(10)(v))**
2. 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))**
3. At all times, the permittee must operate and maintain each existing gas 1 process heater, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air

pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.7500(a)(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee must keep a copy of each notification and report that the permittee submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that the permittee submitted. **(40 CFR 63.7555(a)(1))**
2. The permittee shall maintain on-site and submit, if requested by the AQD, an annual tune-up report containing the information listed below.
 - a. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the process heater. **(40 CFR 63.7540(a)(10)(vi)(A))**
 - b. A description of any corrective actions taken as a part of the tune-up. **(40 CFR 63.7540(a)(10)(vi)(B))**
 - c. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. **(40 CFR 63.7540(a)(10)(vi)(C))**
3. The permittee's records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). **(40 CFR 63.7560(a))**
4. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5-years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. **(40 CFR 63.7560(b))**
5. The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2-years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The permittee can keep the records off site for the remaining 3-years. **(40 CFR 63.7560(c))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee must submit process heater tune-up compliance reports to the appropriate AQD District Office. The reports must be postmarked or submitted by March 15th and must cover the period of January 1 through December 31 of the reporting year. Compliance reports must also be submitted to EPA using the Compliance

and Emissions Data Reporting Interface (CEDRI) which is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). **(40 CFR 63.7550(b))**

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

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

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

**FGMACTDDDDDD<10
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Requirements for existing boilers with a heat input capacity of <10 MMBTU/hr located at a major source of HAP emissions per 40 CFR Part 63, Subpart DDDDD (Boiler MACT). These boilers are designed to burn gaseous fuels.

Emission Unit: EUREBOILER, EUERBOILER

Equal to or less than 5 MMBTU/hr and only burns gaseous fuels.	EUREBOILER, EUERBOILER
Greater than 5 MMBTU/hr and less than 10 MMBTU/hr that burns gaseous or light liquid fuels or any unit that is less than 10 MMBTU/hr and burns any heavy liquid or solid fuels.	NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee must, for boilers with a heat input capacity of less than or equal to 5 MMBTU/hr, conduct a 5-year tune-up according to 40 CFR 63.7540(a)(12). Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. The burner inspection may be delayed until the next scheduled or unscheduled unit shutdown, but each burner must be inspected at least once every 72 months. **(40 CFR 63.7500(d) or (e), 40 CFR 63.7515(d), 40 CFR 63.7540(a)(12), 40 CFR Part 63, Subpart DDDDD, Table 3.1))**
2. The permittee must conduct a tune-up of each boiler 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, 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. For the initial compliance demonstration for each boiler, the permittee must submit the Notification of Compliance Status before the close of business on the 60th day following the completion of the initial boiler tune-up for all boiler or process heaters at the facility. The Notification of Compliance Status report must contain all the information specified below.
 - a. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with 40 CFR Part 63, Subpart DDDDD, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by the permittee or the EPA through a petition process to be a non-waste under 40 CFR 241.3, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of 40 CFR 241.3, and justification for the selection of fuel(s) burned during the compliance demonstration. **(40 CFR 63.7545(e)(1))**
 - b. In addition to the information required in 40 CFR 63.9(h)(2), the notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official:
 - i. "This facility completed the required initial tune-up for all of the boilers covered by 40 CFR Part 63, Subpart DDDDD at this site according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi)." **(40 CFR 63.7545(e)(8)(i))**
 - ii. Except for units that burn only natural gas, refinery gas, or other gas 1 fuel, or units that qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act, include the following: "No secondary materials that are solid waste were combusted in any affected unit." **(40 CFR 63.7545(e)(8)(iii))**
5. The permittee must submit boiler tune-up compliance reports to the appropriate AQD District Office and must be postmarked or submitted by March 15th of the year following the applicable 5-year period starting from January 1 of the year following the previous tune-up to December 31 (of the latest tune-up year). Compliance reports must also be submitted to EPA using the Compliance and Emissions Data Reporting Interface (CEDRI) which is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). If the reporting form is not available in CEDRI at the time the compliance report is due, a hardcopy of the compliance report shall be submitted to EPA Region 5. **(40 CFR 63.7550(b), 40 CFR 63.7550(h)(3))**
6. The permittee must include the following information in the compliance report. **(40 CFR 63.7550(c)(1))**
 - a. Company and Facility name and address. **(40 CFR 63.7550(c)(5)(i))**
 - b. Process unit information, emissions limitations, and operating parameter limitations. **(40 CFR 63.7550(c)(5)(ii))**
 - c. Date of report and beginning and ending dates of the reporting period. **(40 CFR 63.7550(c)(5)(iii))**
 - d. Include the date of the most recent tune-up for each unit. Include the date of the most recent burner inspection if it was not done biennially or on a 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)**

FGMACTEMERGENCY FLEXIBLE GROUP CONDITIONS

DESCRIPTION

An existing emergency spark ignition engine greater than 500 HP that commenced construction or reconstruction before December 19, 2002, located at a major source of HAPs subject to 40 CFR Part 63, Subpart ZZZZ.

Emission Unit: EUERGEN

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate and maintain each engine in FGMACTEMERGENCY and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 63.6605, 40 CFR 63.6625(e))**
2. The permittee may operate each engine in FGMACTEMERGENCY for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. **(40 CFR 63.6640(f)(2))**
3. Each engine in FGMACTEMERGENCY may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted towards the 100 hours per calendar year provided for maintenance and testing as provided in SC III.2. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for the permittee to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. **(40 CFR 63.6640(f)(3))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each engine in FGMACTEMERGENCY with non-resettable hours meters to track the operating hours. **(R 336.1213(3)(a))**

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. For each engine in FGMACTEMERGENCY, the permittee shall keep in a satisfactory manner, records of the maintenance conducted to demonstrate that the engine and after-treatment control device (if any) were operated and maintained according to the developed maintenance plan. The permittee shall keep all records on file and make them available to the department upon request. **(40 CFR 63.6655(e), 40 CFR 63.6660)**
2. The permittee shall monitor and record, the total hours of operation for each engine in FGMACTEMERGENCY on a monthly basis, and the hours of operation during emergency and non-emergency service that are recorded through the non-resettable hour meter for each engine in FGMACTEMERGENCY on a calendar year basis, in a manner acceptable to the AQD District Supervisor. The permittee shall document how many hours are spent for emergency operation including what classified the operation as emergency and how many hours are spent for non-emergency operation. The permittee shall keep all records on file and make them available to the department upon request. **(R 336.1213(3)(b))**

See Appendix 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))**

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 ZZZZ for Stationary Reciprocating Internal Combustion Engines. **(40 CFR Part 63, Subparts A and ZZZZ)**

FGRULE285(2)(mm)
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Routine and emergency venting of natural gas from transmission and distribution systems or field gas from gathering lines, exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 285(2)(mm).

Emission Unit: EUERPIPEMAINT, EUERFIELDMAINT

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

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

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

NA

VII. REPORTING

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

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

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

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

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

Appendix 2. Schedule of Compliance

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

Appendix 3. Monitoring Requirements

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

Appendix 4. Recordkeeping

The permittee shall use the following approved formats and procedures for the recordkeeping requirements referenced in FGMACTEMERGENCY. Alternative formats must be approved by the AQD District Supervisor.

Generator Use Report for Eaton Rapids Gas Transmission and Storage				
Beginning Date	Ending Date	Elapsed Hours	Reason	Comment
3-14-2009	3-16-2009	42	Emergency	Loss of electricity.
4-01-2009	4-01-2009	4	Testing	OSHA required safety test.
6-27-2009	6-27-2009	1	Maintenance	Run in following bearing replacement.

Appendix 5. Testing Procedures

The permittee shall use the following approved test plans, procedures, and averaging to measure the pollutant emissions for the applicable requirements referenced in FGERGLYDEH.

A revised sampling protocol, "Dehydration Gas Sampling Protocol for Michigan", has been developed by the permittee for all ANR gas compressor storage facilities in Michigan. The purpose of the protocol is to incorporate standard sampling and analytical techniques recognized by the natural gas industry into the testing requirements of each individual ROP. The protocol and any future changes to the protocol must be approved by the AQD. A version of the protocol, as approved by the AQD, shall be used to measure the pollutant emissions for the applicable requirements referenced in Section V.

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-N3022-2014. 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-N3022-2014 is being reissued as Source-Wide PTI No. MI-PTI-N3022-2020b.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
NA	NA	NA	NA

The following table lists the ROP amendments or modifications issued after the effective date of ROP No. MI-ROP-N3022-2020.

Permit to Install Number	ROP Revision Application Number - Issuance Date	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
NA	202100097 / September 9, 2021	This Minor Modification was to add the wording "from at least one of the identical units" back to SC V.1 and SC V.2 in FGRCMPRS. This wording was accidentally removed during the last ROP Renewal and was requested to be added back into the ROP.	FGRCMPRS

Appendix 7. Emission Calculations

Compressor Engines, FGRCMPRS:

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

Determine tons of pollutant per year.

$$ER = \sum_{i=1}^{12} \left(EF * x * \frac{\text{pounds}}{453.6 \text{ grams}} * \frac{\text{ton}}{2000 \text{ pounds}} \right)$$

Where:

- ER** is the Emission Rate in tons per year.
- EF** is an emission factor expressed as grams of pollutant emitted per horsepower hour as determined in the most recent stack test.
- x** is the total horsepower hours produced by the engine for the month.
- i** is the sum of each calendar month for a 12-month period.

Glycol Dehydrator System, FGERGLYDEH:

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

Non-methane VOC emissions from the glycol dehydrator shall be calculated by using an emission factor derived by the GRI-GLYCalc™ computer model Version 3.0 or later. Inputs to the model shall be representative of actual operating conditions of the glycol dehydrator. Non-methane VOC composition of the natural gas which is input into the model shall be as determined by the most recent analysis. The permittee shall recalculate the emission factor each time the natural gas is analyzed to determine its non-methane VOC content.

$$VOC = NGas * EF$$

Where:

- VOC** is the pounds of volatile organic compounds emitted in a calendar day.
- NGas** is the amount, in million standard cubic feet, of natural gas processed through the system in a calendar day.
- EF** is an emission factor expressed as pounds of VOC emitted per million cubic feet of gas processed.

EF is based on calculations from the GRI GlyCalc™ computer model. EF shall be periodically recalculated, using GRI GlyCalc™, as more current data becomes available. The calculated EF is subject to approval by the AQD District Supervisor.

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in FGMACTHHH, SC I.1.
40 CFR 63.1275(c)(3)(iii) For each existing small glycol dehydration unit, BTEX emissions are reduced to a level less than the limit calculated in Equation 1 of 40 CFR 63.1275(b)(1)(iii).

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

Where:

- EL_{BTEX} = Unit-specific BTEX emission limit, megagrams per year;
- 3.10 × 10⁻⁴ = BTEX emission limit, grams BTEX/standard cubic meter-ppmv;
- Throughput = Annual average daily natural gas throughput, standard cubic meters per day;
- C_{i,BTEX} = Annual average BTEX concentration of the natural gas at the inlet to the glycol dehydration unit, ppmv.

Appendix 8. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

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

B. Other Reporting

The permittee shall use the following approved formats and procedures for the reporting requirements referenced in FGRCMPRS. Alternative formats must be approved by the AQD District Supervisor.

For FGRCMPRS, a complete test report shall contain at a minimum the following process information:

- a. ambient temperature
- b. barometric pressure
- c. fuel consumption
- d. % load
- e. fuel pressure
- f. suction pressure
- g. discharge pressure
- h. horsepower
- i. engine torque
- j. engine speed