

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

EFFECTIVE DATE: February 28, 2024

ISSUED TO

ANR Storage Company – Rapid River Compressor Station

State Registration Number (SRN): B7197

LOCATED AT

2170 Rabourn Road NE, Kalkaska, Kalkaska County, Michigan 49646

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B7197-2024

Expiration Date: February 28, 2029

Administratively Complete ROP Renewal Application
Due Between August 28, 2027 and August 28, 2028

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-B7197-2024

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

Michigan Department of Environment, Great Lakes, and Energy

Julie Brunner, ROP Central Unit Supervisor

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AUTHORITY AND ENFORCEABILITY

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

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

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

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

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

A. GENERAL CONDITIONS

Permit Enforceability

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

General Provisions

1. The permittee shall comply with all conditions of this ROP. Any ROP noncompliance constitutes a violation of Act 451, and is grounds for enforcement action, for ROP revocation or revision, or for denial of the renewal of the ROP. All terms and conditions of this ROP that are designated as federally enforceable are enforceable by the Administrator of the United States Environmental Protection Agency (USEPA) and by citizens under the provisions of the federal Clean Air Act (CAA). Any terms and conditions based on applicable requirements which are designated as "state-only" are not enforceable by the USEPA or citizens pursuant to the CAA. **(R 336.1213(1)(a))**
2. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this ROP. **(R 336.1213(1)(b))**
3. This ROP may be modified, revised, or revoked for cause. The filing of a request by the permittee for a permit modification, revision, or termination, or a notification of planned changes or anticipated noncompliance does not stay any ROP term or condition. This does not supersede or affect the ability of the permittee to make changes, at the permittee's own risk, pursuant to Rule 215 and Rule 216. **(R 336.1213(1)(c))**
4. The permittee shall allow the department, or an authorized representative of the department, upon presentation of credentials and other documents as may be required by law and upon stating the authority for and purpose of the investigation, to perform any of the following activities: **(R 336.1213(1)(d))**
 - a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the ROP.
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the 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 annual compliance certification (pursuant to Rule 213(4)(c)) shall be submitted to the USEPA through the USEPA's Central Data Exchange (CDX) using the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through CDX (<https://cdx.epa.gov/>), unless it contains confidential business information then use the following address: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. **(R 336.1213(4)(c))**
20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. **(R 336.1213(3)(c))**
 - a. For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
 - b. For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - c. For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

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

Permit Shield

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

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

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

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

Revisions

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

Reopenings

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

Renewals

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

Stratospheric Ozone Protection

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

Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).
39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of 40 CFR Part 68, no later than the latest of the following dates as provided in 40 CFR 68.10(a):
- 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
EURRCOMP-A	Compressor engine A, a natural gas fired, reciprocating, internal combustion Ingersoll Rand 410-KVR-TE engine rated at 3750 HP.	05-01-198	FGRRCOMP
EURRCOMP-B	Compressor engine B, a natural gas fired, reciprocating, internal combustion Ingersoll Rand 410-KVR-TE engine rated at 3750 HP.	05-01-1980	FGRRCOMP
EURRGEN-B	Generator engine B, a natural gas fired, reciprocating, internal combustion, Waukesha F2895GU engine, rated at 302 HP Used to power an emergency electricity generator.	05-01-1980	FGEMERGENCY-RICE-SI≤ 500 BHP ZZZZ
EURRGLYDEH	Glycol dehydration unit with maximum process capacity of 11.458 MMscf/hr. of natural gas. The glycol dehydration unit includes a natural gas-fired reboiler with a heat input capacity of 0.5 MMBTU/Hr.	01-01-1989	FGDEHY-HHH
EURRBOILER	Cleaver Brooks natural gas-fired boiler, 2.09 MMBTU/hr	01-01-1980	FGBOILERMACT < 10 MMBTU/hr DDDDD
EURRHTR-A	Sivalls natural gas-fired withdrawal heater, 6.5 MMBTU.	01-01-1980	FGBOILERMACT < 10 MMBTU/hr DDDDD
EURRHTR-B	Sivalls natural-gas-fired withdrawal heater, 6.5 MMBTU.	01-01-1980	FGBOILERMACT < 10 MMBTU/hr DDDDD
EURRPIPEMAINT	Routine and emergency venting of natural gas from transmission and distribution systems.	01-01-1980	FGRULE285(2)(mm)

**EURRGLYDEH
 EMISSION UNIT CONDITIONS**

DESCRIPTION

Glycol Dehydration Unit with maximum process capacity of 11.458 MMscf/hr. of natural gas. The glycol dehydration unit includes a natural gas-fired reboiler with a heat input capacity of 0.5 MMBTU/Hr.

Flexible Group ID: FGDEHY-HHH

POLLUTION CONTROL EQUIPMENT

Condenser and thermal oxidizer

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. VOC	113.3 pounds per day ²	As determined at the end of each calendar month	EURRGLYDEH	SC VI.6	R 336.1702(a)
2. VOC	20.7 tons per year ²	12-month rolling time period as determined at the end of each calendar month	EURRGLYDEH	SC VI.6	R 336.1702(a)
3. Benzene	Less than 0.9 megagrams (0.992 Tons) per year ²	Calendar year	EURRGLYDEH	SC VI.7	40 CFR 63.1274(d)(2)

II. MATERIAL LIMIT(S)

Material	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Natural gas processed	275 MMcf of natural gas per day ²	Day	EURRGLYDEH	SC VI.5	R 336.1702(a)

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The glycol dehydration unit shall not be operated unless it is equipped with a thermal oxidizer or a condenser. The condenser or thermal oxidizer, including any associated monitoring equipment, shall be operated properly.² **(R 336.1702(a), R 336.1910)**
- When the glycol dehydration unit is controlled by the condenser, the condenser exhaust temperature shall be 120°F or less.² **(R 336.1702(a))**
- The glycol dehydration unit shall not be operated unless the glycol separator is installed and operating properly. A properly operating glycol separator will volatize organic compounds out of the rich glycol stream and route them to the glycol regenerator reboiler burner, thermal oxidizer, or equivalent control device.² **(R 336.1702(a))**
- When the glycol dehydration unit is controlled by a thermal oxidizer, the thermal oxidizer shall have an operating temperature of at least 1400°F and VOC destruction efficiency shall be at least 95%.² **(R 336.1702(a))**

5. The natural gas used as fuel in the glycol dehydration unit shall not contain more than 20 grains of total sulfur per 100 cubic feet of natural gas. The permittee may also incinerate emissions from the glycol separator in the glycol reboiler burner.² **(R 336.1702(a))**
6. The permittee shall not use stripping gas in the glycol dehydration unit.² **(R 336.1702(a))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The total capacity of the glycol pump(s) of the glycol dehydration unit shall be no greater than 12.8 gpm.² **(R 336.1702(a))**
2. The thermal oxidizer shall be designed and equipped with a temperature monitor to continuously monitor the operating temperature and also be designed and equipped with an alarm system that will alarm if the operating temperature is less than 1400°F.² **(R 336.1702(a))**
3. The glycol condenser shall be designed and equipped with an exhaust gas temperature monitor to continuously monitor the operating temperature and also be designed and equipped with an alarm system that will alarm if the operating temperature is greater than 120°F.² **(R 336.1702(a))**
4. If the glycol dehydration unit is controlled by the thermal oxidizer, then the thermal oxidizer shall maintain a minimum retention time of 0.5 seconds.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. The natural gas processed in the glycol dehydration unit shall be analyzed once per calendar year to determine its content and composition using method(s) standard in the natural gas industry, subject to approval by the AQD.² **(R 336.1702(a), R 336.1901)**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall monitor the alarm events (alarm actuated because temperature of control equipment was outside the acceptable range) from the primary control device, either the thermal oxidizer or the condenser. The day and time of the alarm event shall be maintained in addition to the corrective action taken that resulted from the alarm event. If the primary control alarm system is not operating properly, then the permittee shall monitor and record the exhaust gas temperature from the control device once per day for all days the glycol dehydration unit is operating. If the alarm system is not operating properly, a written log of the daily control device operating temperatures shall be maintained.² **(R 336.1702(a))**
2. The permittee shall retain calculations, for the thermal oxidizer when controlling the glycol dehydration unit, showing the VOC destruction efficiency is at least 95% by weight. The calculations shall be retained and performed in a manner acceptable to the Air Quality Division.² **(R 336.1702(a))**
3. The permittee shall record the hours of operation of the glycol dehydration unit for each calendar month and each 12-month rolling time period.² **(R 336.1201(3))**
4. The permittee shall record the primary emission control device for the dehydration unit for each day the unit is in operation. The information shall be available to the AQD upon request no later than the 15th of the next calendar month.² **(R 336.1201(3))**
5. The permittee shall record the amount of natural gas processed through the glycol dehydration unit for each day.² **(R 336.1201(3))**

6. The permittee shall calculate and record the daily VOC emissions from the glycol dehydration unit at the end of each calendar day, using the method specified in Appendix 7 of this permit. The permittee shall calculate the emissions per calendar month by summing emissions from the applicable days and shall calculate the annual VOC emissions based on a 12 month rolling time period by summing emissions from the applicable months. The calculated VOC emissions shall be available to the AQD upon request no later than the 15th of the next calendar month.² **(R 336.1201(3))**
7. The permittee shall determine the annual benzene emissions from the glycol dehydration unit by using either of the procedures listed below. Emissions shall be determined either uncontrolled or with federally enforceable controls in place. The emissions shall be calculated at the end of each calendar year and shall be available to the AQD upon request no later than the following January 15th.² **(40 CFR 63.1282(a)(2))**
 - a. The permittee may determine benzene emissions using the model GRI-GLYCalc™ Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc™ Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled “Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions” (GRI-95/0368.1); **(40 CFR 63.1282(a)(2)(i))** or
 - b. Alternatively, the permittee may determine the benzene emissions rate in kilograms per hour through direct measurement by performing three runs of Method 18 in 40 CFR Part 60, Appendix A (or an equivalent method), and averaging the results of the three runs. Annual emissions shall be determined by multiplying the mass rate determined during this stack by the number of hours the unit is operated per year and converting the result to megagrams. **(40 CFR 63.1282(a)(2)(ii))**

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. SVRR008 (Glycol Regenerator)	2 ²	20 ²	R 336.1702(a)
2. SVRR009 (Condenser)	NA ²	20 ²	R 336.1702(a)

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
3. SVRR010 (Thermal Oxidizer Stack)	NA ²	20 ²	R 336.1702(a)

IX. OTHER REQUIREMENT(S)

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

Footnotes:

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

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

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
FGRRCOMP	Compressor engines A and B, natural gas fired reciprocating, internal combustion Ingersoll Rand 410-KVR-TE engines rated at 3750 hp.	EURRCOMP-A, EURRCOMP-B
FGEMERGENCY-RICE-SI≤ 500 BHP ZZZZ	40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major source of HAP emissions, existing emergency, spark ignition (SI) RICE equal to or less than 500 bhp. A RICE is existing if the date of installation is before June 12, 2006.	EURRGEN-B
FGDEHY-HHH	40 CFR Part 63, Subpart HHH – National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities, located at a major source of HAP emissions, existing small dehydration unit with an actual annual average natural gas flowrate less than 283.0 thousand standard cubic meters per day or actual annual average benzene emissions less than 0.90 megagrams per year and a closed-vent system complying with the requirements of 40 CFR 63.1275(b)(1)(iii).	EURRGLYDEH
FGBOILERMACT < 10 MMBTU/hr DDDDD	Requirements for existing boiler and process heater with a heat input capacity of <10 MMBTU/hr for major sources of HAP emissions per 40 CFR Part 63, Subpart DDDDD (Boiler MACT). These boilers or process heaters are designed to burn solid, liquid, or gaseous fuels.	EURRBOILER, EURRHTR-A, EURRHTR-B
FGRULE285(2)(mm)	Routine and emergency venting of natural gas from transmission and distribution systems exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 285(2)(mm)	EURRPIPEMAINT

**FGRRCOMP
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

Two, Ingersoll Rand, Model 410-KVR-TE, four-cycle, lean burn, spark ignition, natural gas-fired reciprocating internal combustion engines rated at 3,750 HP each.

Emission Units: EURRCOMP-A, EURRCOMP-B

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Nitrogen Oxides (NO _x)	99.2 lbs/hr ²	Hourly	Each compressor engine in FGRRCOMP	SC V.1	40 CFR 52.21

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The natural gas used as fuel for the compressor engines shall not contain more than 20 grains of total sulfur per 100 cubic feet of natural gas.² **(R 336.1301(1)(a))**
2. The permittee shall maintain the engines in accordance with the facility's AQD approved Preventative Maintenance Plan.² **(R 336.1201(3))**
3. The permittee shall implement and maintain, a preventative maintenance / malfunction abatement plan (PM/MAP) as described in Rule 911(2), for FGRRCOMP. The MAP shall, at a minimum, specify the following:
 - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
 - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

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

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The compressor engines shall be designed so that each engine does not emit more than 12 grams of NOx per brake horsepower hour at 100 % speed and 100 % torque.² **(R 336.52.21)**

V. TESTING/SAMPLING

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

1. The NOx emissions from each engine shall be tested by once every five years. The testing shall be performed in accordance with reference methods approved by the AQD.² **(R 336.1201(3))**
2. The permittee shall verify NOx emission rates from FGRRCOMP by testing at the owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in 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 and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
3. The permittee shall verify the NOx emission rates from FGRRCOMP 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)**
4. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before testing of the time and place performance tests will be conducted. **(R 336.1213(3))**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall maintain records of the preventative maintenance performed in accordance with the AQD approved Preventative Maintenance Plan (PMP).² **(R 336.1911)**
2. The permittee shall maintain, in a satisfactory manner, monthly records of the amount used and the total sulfur content of the natural gas combusted in FGRRCOMP. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1213(3))**

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
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. SVRR001	30 ¹	49.2 ¹	R 336.1901
2. SVRR002	30 ¹	49.2 ¹	R 336.1901

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 63.6590(b)(3)(ii), 40 CFR Part 63, Subparts A and ZZZZ)**

Footnotes:

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

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

FGEMERGENCY-RICE-SI≤ 500 BHP ZZZZ
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major source of HAP emissions, existing emergency, spark ignition (SI) RICE equal to or less than 500 bhp. A RICE is existing if the date of installation is before June 12, 2006.

Emission Unit: EURRGEN-B

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee must comply with the requirements in Item 6 of Table 2c of 40 CFR Part 63, Subpart ZZZZ which apply to each engine in FGEMERGENCY-RICE-SI≤ 500 BHP ZZZZ as specified in the following:
 - a. Change oil and filter every 500 hours of operation or annually, whichever comes first, except as allowed in SC III.2;
 - b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
 - c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

If the emergency engine is being operated during an emergency and it is not possible to shut down the engine to perform the management practice requirements on the schedule required, or if performing the management practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice standard can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State or local law has been abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. **(40 CFR 63.6602, 40 CFR Part 63, Subpart ZZZZ, Table 2c.6)**

2. The permittee may utilize an oil analysis program in order to extend the specified oil change requirement in SC III.1. The oil analysis must be performed at the same frequency specified for changing the oil in SC III.1. **(40 CFR 63.6625(j))**

3. The permittee shall operate and maintain each engine in FGEMERGENCY-RICE-SI≤ 500 BHP ZZZZ 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), 40 CFR 63.6640(a), 40 CFR Part 63, Subpart ZZZZ, Table 6.9)**
4. For each engine in FGEMERGENCY-RICE-SI≤ 500 BHP ZZZZ, the permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply. **(40 CFR 63.6625(h))**
5. The permittee may operate each engine in FGEMERGENCY-RICE-SI≤ 500 BHP ZZZZ 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))**
6. Each engine in FGEMERGENCY-RICE-SI≤ 500 BHP ZZZZ 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.5**. 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 FGEMERGENCY-RICE-SI≤ 500 BHP ZZZZ with non-resettable hours meters to track the operating hours. **(40 CFR 63.6625(f))**

V. TESTING/SAMPLING

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

1. If using the oil analysis program, the permittee must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the permittee must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the permittee must change the oil within 2 business days or before commencing operation, whichever is later. The permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. **(40 CFR 63.6625(j))**

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 FGEMERGENCY-RICE-SI≤ 500 BHP ZZZZ, the permittee shall keep in a satisfactory manner the following:

- a. A copy of each notification and report that was submitted to comply with 40 CFR Part 63, Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted,
- b. Records of the occurrence and duration of each malfunction of operation or the air pollution control and monitoring equipment,
- c. Records of performance tests and performance evaluations,
- d. Records of all required maintenance performed on the air pollution control and monitoring equipment,
- e. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

The permittee shall keep all records on file and make them available to the department upon request. **(40 CFR 63.6655(a), 40 CFR 63.6660)**

2. For each engine in FGEMERGENCY-RICE-SI \leq 500 BHP ZZZZ, the permittee shall keep in a satisfactory manner, records to demonstrate continuous compliance with the operation and maintenance of the engine according to the manufacturer's emission-related operation and maintenance instructions; or develop and follow a maintenance plan that provides 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. The permittee shall keep all records on file and make them available to the department upon request. **(40 CFR 63.6655(d), 40 CFR 63.6660, 40 CFR Part 63, Subpart ZZZZ, Table 6.9)**
3. For each engine in FGEMERGENCY-RICE-SI \leq 500 BHP ZZZZ, 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)**
4. The permittee shall monitor and record, the total hours of operation for each engine in FGEMERGENCY-RICE-SI \leq 500 BHP ZZZZ 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 FGEMERGENCY-RICE-SI \leq 500 BHP ZZZZ 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. **(R 336.1213(3), 40 CFR 63.6655(f), 40 CFR 63.6660)**
5. 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 63.6660(a))**
6. 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 63.6660(b))**

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

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)**

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).

**FGDEHY-HHH
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

40 CFR Part 63, Subpart HHH – National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities, located at a major source of HAP emissions, existing small dehydration unit with an actual annual average natural gas flowrate less than 283.0 thousand standard cubic meters per day or actual annual average benzene emissions less than 0.90 megagrams per year and a closed-vent system complying with the requirements of 40 CFR 63.1275(b)(1)(iii).

Emission Units: EURRGLYDEH

POLLUTION CONTROL EQUIPMENT

Thermal Oxidizer as the primary control with a condenser as a backup.

I. EMISSION LIMIT(S)

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

See Appendix 7

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. At all times, the permittee shall operate and maintain each glycol dehydration unit in FGDEHY-HHH, 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 AQD which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.1274(h))**
2. The permittee shall operate each control device at all times during operation of FGDEHY-HHH. The permittee may vent more than one unit to a control device used to comply with 40 CFR Part 63, Subpart HHH. **(40 CFR 63.1281(f)(2)(i))**
3. The permittee shall prepare a site-specific monitoring plan that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in 40 CFR 63.1283(d) and in 40 CFR 63.8(d). Each CPMS must be installed, calibrated, operated, and maintained in accordance with the procedures in the approved site-specific monitoring plan. **(40 CFR 63.1274(c), 40 CFR 63.1283(d)(1))**
 - 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); and **(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. The permittee must conduct the CPMS equipment performance checks, system accuracy audits, or other audit procedures specified in the site-specific monitoring plan at least once every 12 months. **(40 CFR 63.1283(d)(1)(iii))**
- g. The permittee must conduct a performance evaluation of each CPMS in accordance with the site-specific monitoring plan. **(40 CFR 63.1283(d)(1)(iv))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall connect the process vent 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))**
 - a. The closed-vent system shall route all gases, vapors, and fumes emitted from the material in an emissions 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 **(40 CFR 63.1281(c)(3)(i)(A))**
 - 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. **(40 CFR 63.1281(c)(3)(i)(B))**
 - 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 control device(s) 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(f)(1))**
 - 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 as determined in accordance with the requirements of SC V.1, or 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). 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))**
 - b. A vapor recovery device (e.g., carbon adsorption system or condenser) or other non-destructive control device 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 SC V.1. **(40 CFR 63.1281(f)(1)(ii))**

3. The permittee shall install and operate a continuous parameter monitoring system. The continuous monitoring system shall be designed and operated so that a determination can be made on whether the control device is achieving the applicable performance requirements of SC IV.2. Each continuous parameter monitoring system shall measure data values at least once every hour and record either each measured data value; or 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. **(40 CFR 63.1274(c)(2), 40 CFR 63.1283(d)(1)(i))**
4. The permittee shall install, calibrate, operate, and maintain a device equipped with a continuous recorder to measure the values of operating parameters appropriate for the control device as specified below. **(40 CFR 63.1274(c)(2), 40 CFR 63.1283(d)(3))**
 - a. For a thermal vapor incinerator that demonstrates during the performance test conducted under SC V.1 that combustion zone temperature is an accurate indicator of performance, a temperature monitoring device equipped with a continuous recorder. 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 at a location representative of the combustion zone temperature. **(40 CFR 63.1283(d)(3)(i)(A))**
 - b. For a condenser, a temperature monitoring device equipped with a continuous recorder. The temperature 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 at a location in the exhaust vent stream from the condenser. **(40 CFR 63.1283(d)(3)(i)(E))**

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 demonstrate the control device achieves the performance requirements of SC IV.2 using a performance test according to the following test methods and procedures: **(40 CFR 63.1282(c), 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. Any references to particulate mentioned in Methods 1 and 1A do not apply. The sampling site shall be located at the outlet of the combustion device. **(40 CFR 63.1282(d)(3)(i))**
 - b. The gas volumetric flowrate shall be determined using Method 2, 2A, 2C, or 2D, 40 CFR Part 60, Appendix A, as appropriate. **(40 CFR 63.1282(d)(3)(ii))**
 - c. To determine compliance with the BTEX emission limit specified 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 following procedures shall be used to calculate BTEX emissions: **(40 CFR 63.1282(d)(3)(v))**
 - i. The minimum sampling time for each run shall be 1 hour in which either an integrated sample or a minimum of four grab samples shall be taken. If grab sampling is used, then the samples shall be taken at approximately equal intervals in time, such as 15-minute intervals during the run. **(40 CFR 63.1282(d)(3)(v)(A))**
 - ii. The mass rate of BTEX shall be computed using the equations and procedures specified in 40 CFR 63.1282(d)(3)(v)(B)(1). **(40 CFR 63.1282(d)(3)(v)(B)(1))**
 - iii. When the BTEX mass rate is calculated, only BTEX compounds measured by Method 18, 40 CFR Part 60, Appendix A, or ASTM D6420-99 (Reapproved 2004) (incorporated by reference as specified in 40 CFR 63.14 as specified in 40 CFR 63.772(a)(1)(ii), shall be summed using the equation in 40 CFR 63.1282(d)(3)(v)(B)(1). **(40 CFR 63.1282(d)(3)(v)(B)(2))**

2. The permittee shall conduct an initial performance test within 180 days after the compliance date that is specified for each affected source in 40 CFR 63.1270(d)(3). The performance test results shall be submitted in the Notification of Compliance Status Report as required in SC VII.6. **(40 CFR 63.1282(d)(3)(vi)(A))**
3. The permittee shall conduct periodic performance tests for all control devices required to conduct initial performance tests. The first periodic performance test shall be conducted no later than 60 months after the initial performance test required in SC V.2. Subsequent periodic performance tests shall be conducted at intervals no longer than 60 months following the previous periodic performance test or whenever a source desires to establish a new operating limit. The periodic performance test results must be submitted in the next Periodic Report as specified in SC VII.14. Combustion control devices meeting the following criteria are not required to conduct periodic performance tests: a control device whose model is tested under, and meets the criteria of, 40 CFR 63.1282(g), or a combustion control device demonstrating during the performance test under SC V.1 that combustion zone temperature is an indicator of destruction efficiency and operates at a minimum temperature of 760 degrees C. **(40 CFR 63.1282(d)(3)(vi)(B))**
4. 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(c), 40 CFR 63.1285(b)(3))**

VI. MONITORING/RECORDKEEPING

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

1. The determination of actual flowrate of natural gas to the glycol dehydration unit shall be made using either of the following procedures: **(40 CFR 63.1282(a)(1))**
 - a. The permittee shall install and operate a monitoring instrument that directly measures natural gas flow rate to the glycol dehydration unit with an accuracy of plus or minus 2 percent or better. The permittee shall convert the annual natural gas flow rate to a daily average by dividing the annual flow rate by the number of days per year each emission unit processed natural gas. **(40 CFR 63.1282(a)(1)(i))**
 - b. The permittee shall document, to the AQD's satisfaction, the actual annual average natural gas flow rate to the glycol dehydration unit. **(40 CFR 63.1282(a)(1)(ii))**
2. The determination of actual average benzene or BTEX emissions from the glycol dehydration unit shall be made using the procedures of either SC VI.2.a or SC VI.2.b. Emissions shall be determined either uncontrolled or with federally enforceable controls in place. **(40 CFR 63.1282(a)(2))**
 - a. The permittee shall determine actual average benzene or BTEX emissions using the model GRI-GLYCalc™, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc™ Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI-95/0368.1); **(40 CFR 63.1282(a)(2)(i))** or
 - b. The permittee shall determine an average mass rate of benzene or BTEX emissions in kilograms per hour through direct measurement by performing three runs of Method 18 in 40 CFR Part 60, Appendix A; or ASTM D6420-99 (Reapproved 2004) (incorporated by reference as specified in 40 CFR 63.14), as specified in 40 CFR 63.772(a)(1)(ii); or an equivalent method; and averaging the results of the three runs. Annual emissions in kilograms per year shall be determined by multiplying the mass rate by the number of hours the unit is operated per year. This result shall be converted to megagrams per year. **(40 CFR 63.1282(a)(2)(ii))**
3. The permittee shall maintain records of the annual facility natural gas throughput each year calculated in accordance with 40 CFR 63.1270(a)(1). **(40 CFR 63.1270(a))**

4. The permittee shall establish a site-specific maximum or minimum monitoring parameter value (as appropriate) for the control device to define the conditions at which the control device must be operated to continuously achieve the applicable performance requirements of SC IV.2. Each minimum or maximum operating parameter value shall be established based on values measured during the performance test and supplemented, as necessary, by a condenser design analysis or control device manufacturer's recommendations or a combination of both. **(40 CFR 63.1282(c)(1), 40 CFR 63.1282(e)(1), 40 CFR 63.1283(d)(5)(i)(A))**
5. Using the data recorded by the monitoring system, except for inlet gas flowrate, the permittee must calculate the daily average value for each monitored operating parameter for each operating day. If the emission unit operation is continuous, the operating day is a 24-hour period. If the emission 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. Compliance is achieved when the daily average of the monitoring parameter value calculated is either equal to or greater than the minimum or equal to or less than the maximum monitoring value established under SC VI.4. For inlet gas flowrate, compliance with the operating parameter limit is achieved when the value is equal to or less than the value established under SC V.1, as applicable. **(40 CFR 63.1274(c), 40 CFR 63.1282(c)(1), (40 CFR 63.1282(e)(2 and 3), 40 CFR 63.1283(d)(4))**
6. 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), the CMS required in 40 CFR 63.1283(d) must be operated at all times the affected source is operating. 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 63.1274(c), 40 CFR 63.1282(c)(1), 40 CFR 63.1282(e)(4))**
7. Data recorded during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities may not be used in calculations used to report emissions or operating levels. All the data collected during all other required data collection periods must be used in assessing the operation of the control device and associated control system. **(40 CFR 63.1274(c), 40 CFR 63.1282(c)(1), 40 CFR 63.1282(e)(5))**
8. 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 63.1274(c), 40 CFR 63.1282(c)(1), 40 CFR 63.1282(e)(6))**
9. The permittee shall maintain records of the occurrence and duration of each malfunction of operation (*i.e.*, process equipment) or the air pollution control equipment and monitoring equipment. The 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))**
10. The permittee shall maintain the following records up-to-date and readily accessible: **(40 CFR 63.1274(c), 40 CFR 63.1284(b)(4))**
 - a. Continuous records of the equipment operating parameters specified to be monitored under 40 CFR 63.1283(d) or specified by the AQD in accordance with 40 CFR 63.1283(d)(3)(iii). **(40 CFR 63.1284(b)(4)(i))**
 - b. Records of the daily average value of each continuously monitored parameter for each operating day determined according to the procedures specified in SC VI.5. **(40 CFR 63.1284(b)(4)(ii))**
 - c. Hourly records of the times and durations of all periods when the vent stream is diverted from the control device or the device is not operating. **(40 CFR 63.1284(b)(4)(iii))**
 - d. Where a seal or closure mechanism is used to comply with SC IV.1.c.ii, hourly records of flow are not required. In such cases, the permittee 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))**

11. Each closed-vent system shall be inspected according to the procedures and schedule specified in SC VI.11.a and b. Each bypass device shall be inspected according to the procedures in SC VI.11.c. **(40 CFR 63.1274(c), 40 CFR 63.1282(b), 40 CFR 63.1283(c)(1) and (2))**
 - a. For each closed-vent system joints, seams, or other connections that are permanently or semi-permanently sealed (e.g., a welded joint between two sections of hard piping or a bolted or gasketed ducting flange) the permittee shall: **(40 CFR 63.1283(c)(2)(i))**
 - i. Conduct an initial inspection according to the procedures specified in 40 CFR 63.1282(b) to demonstrate that the closed-vent system operates with no detectable emissions. Inspection results shall be submitted with the Notification of Compliance Status Report as specified in SC VII.5. **(40 CFR 63.1283(c)(2)(i)(A))**
 - ii. Conduct annual visual inspections 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. The permittee shall monitor a component or connection using the procedures specified in 40 CFR 63.1282(b) to demonstrate that it operates with no detectable emissions following any time the component or connection is repaired or replaced or the connection is unsealed. Inspection results shall be submitted in the Periodic Report as specified in SC VII.14. **(40 CFR 63.1283(c)(2)(i)(B))**
 - b. For closed-vent system components other than those specified in SC VI.11.a, the permittee shall: **(40 CFR 63.1283(c)(2)(ii))**
 - i. Conduct an initial inspection according to the procedures specified in 40 CFR 63.1282(b) to demonstrate that the closed-vent system operates with no detectable emissions. Inspection results shall be submitted with the Notification of Compliance Status Report as specified in SC VII.5. **(40 CFR 63.1283(c)(2)(ii)(A))**
 - ii. Conduct annual inspections according to the procedures specified in 40 CFR 63.1282(b) to demonstrate that the components or connections operate with no detectable emissions. Inspection results shall be submitted in the Periodic Report as specified in SC VII.14. **(40 CFR 63.1283(c)(2)(ii)(B))**
 - iii. Conduct annual visual inspections for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork; loose connections; or broken or missing caps or other closure devices. Inspection results shall be submitted in the Periodic Report as specified in SC VII.14. **(40 CFR 63.1283(c)(2)(ii)(C))**
 - c. For each bypass device, except as provided for in SC IV.1.c, the permittee shall either: **(40 CFR 63.1283(c)(2)(iii))**
 - i. At the inlet to the bypass device that could divert the steam away from the control device to the atmosphere, set the flow indicator to take a reading at least once every 15 minutes; **(40 CFR 63.1283(c)(2)(iii)(A))** or
 - ii. If the bypass device valve installed at the inlet to the bypass device is secured in the non-diverting position using a car-seal or a lock-and-key type configuration, visually inspect the seal or closure mechanism at least once every month to verify that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass device. **(40 CFR 63.1283(c)(2)(iii)(B))**
12. 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 SC VI.13. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 15 calendar days after the leak is detected. **(40 CFR 63.1283(c)(3))**

13. Delay of repair of a closed-vent system for which leaks or defects have been detected is allowed if the repair is technically infeasible without a shutdown, as defined in 40 CFR 63.1271, or if the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next shutdown. **(40 CFR 63.1283(c)(4))**
14. Any parts of the closed-vent system or cover that are designated, as described below, as unsafe to inspect are exempt from the inspection requirements of SC VI.11.a or b if: **(40 CFR 63.1274(c), 40 CFR 63.1283(c)(5))**
 - a. The permittee determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with SC VI.11.a or b. **(40 CFR 63.1283(c)(5)(i))**
 - b. The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times. **(40 CFR 63.1283(c)(5)(ii))**
15. Any parts of the closed-vent system or cover that are designated, as described below, as unsafe to inspect are exempt from the inspection requirements of SC VI.11.a or b if: **(40 CFR 63.1274(c), 40 CFR 63.1283(c)(5))**
 - a. The permittee determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with SC VI.11.a or b. **(40 CFR 63.1283(c)(5)(i))**
 - b. The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times. **(40 CFR 63.1283(c)(5)(ii))**
16. Any parts of the closed-vent system or cover that are designated, as described below, as difficult to inspect are exempt from the inspection requirements of SC VI.11.a or b if: **(40 CFR 63.1274(c), 40 CFR 63.1283(c)(6))**
 - a. The permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than two meters above a support surface; and **(40 CFR 63.1283(c)(6)(i))**
 - b. The permittee has a written plan that requires inspection of the equipment at least once every 5 years. **(40 CFR 63.1283(c)(6)(ii))**
17. 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.15, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment. **(40 CFR 63.1274(c), 40 CFR 63.1284(b)(5))**
18. 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.16, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment. **(40 CFR 63.1274(c), 40 CFR 63.1284(b)(6))**
19. For each inspection conducted in accordance with SC VI.11 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))**
20. For each inspection conducted in accordance with SC VI.11, during which a leak or defect is detected, a record of the following information shall be maintained. **(40 CFR 63.1274(c), 40 CFR 63.1284(b)(7))**
 - a. The instrument identification numbers, operator name or initials, and identification of the equipment. **(40 CFR 63.1284(b)(7)(i))**
 - b. The date the leak or defect was detected and the date of the first attempt to repair the leak or defect. **(40 CFR 63.1284(b)(7)(ii))**
 - c. Maximum instrument reading measured by the method specified in 40 CFR 63.1282(b) after the leak or defect is successfully repaired or determined to be non-repairable. **(40 CFR 63.1284(b)(7)(iii))**
 - 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. **(40 CFR 63.1284(b)(7)(iv))**

- 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. **(40 CFR 63.1284(b)(7)(v))**
 - f. The expected date of successful repair of the leak or defect if a leak or defect is not repaired within 15 calendar days. **(40 CFR 63.1284(b)(7)(vi))**
 - g. Dates of shutdowns that occur while the equipment is unrepaired. **(40 CFR 63.1284(b)(7)(vii))**
 - h. The date of successful repair of the leak or defect. **(40 CFR 63.1284(b)(7)(viii))**
21. 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. An excursion occurs 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 in accordance with the requirements of SC VI.4. **(40 CFR 63.1283(d)(6)(i))**
 - b. An excursion occurs When the monitoring data are not available for at least 75 percent of the operating hours in a day. **(40 CFR 63.1283(d)(6)(iii))**
 - c. If the closed-vent system contains 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, an excursion occurs when: **(40 CFR 63.1283(d)(6)(iv))**
 - i. For each bypass line subject to SC IV.1.c.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. For each bypass line subject to SC IV.1.c.ii, if the seal or closure mechanism has been broken, the bypass line valve position has 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))**
22. 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))**
23. The permittee shall maintain files of all information (including all reports and notifications) required by this 40 CFR 63 Subpart HHH. The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report or period. **(40 CFR 63.1274(c), 40 CFR 63.1284(b)(1))**
- a. All applicable records shall be maintained in such a manner that they can be readily accessed. **(40 CFR 63.1284(b)(1)(i))**
 - b. The most recent 12 months of records shall be retained on site or shall be accessible from a central location by computer or other means that provides access within 2 hours after a request. **(40 CFR 63.1284(b)(1)(ii))**
 - c. The remaining four years of records may be retained offsite. **(40 CFR 63.1284(b)(1)(iii))**
 - 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. **(40 CFR 63.1284(b)(1)(iv))**
24. The permittee shall keep the records specified in 40 CFR 63.10(c) for each monitoring system operated in accordance with the requirements in 40 CFR 63.1283(d). Notwithstanding the previous sentence, monitoring data recorded during periods identified below shall not be included in any average or percent leak rate computed under this subpart. Records shall be kept of the times and durations of all such periods and any other periods during process or control device operation when monitors are not operating or failed to collect required data. **(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; **(40 CFR 63.1284(b)(3)(i))**
 - b. Periods of non-operation resulting in cessation of the emissions to which the monitoring applies; and **(40 CFR 63.1284(b)(3)(iii))**
 - c. Excursions due to invalid data as defined in SC VI.20.b. **(40 CFR 63.1284(b)(3)(iv))**

VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
- 4. The permittee shall submit the following records: **(40 CFR 63.1285(b))**
 - a. The initial notification, under 40 CFR 63.9(b)(2), shall be submitted within 1 year after an affected source becomes subject to the provisions of 40 CFR Part 63 Subpart HHH. **(40 CFR 63.1285(b)(1)(i))**
 - b. The date of the performance evaluation as specified in 40 CFR 63.8(e)(2), required only if the permittee is requested by the AQD to conduct a performance evaluation for a continuous monitoring system. A separate notification of the performance evaluation is not required if it is included in the initial notification submitted in accordance with SC VII.4.a. **(40 CFR 63.1285(b)(2))**

5. The permittee shall submit a Notification of Compliance Status Report as required under 40 CFR 63.9(h) within 180 days after the compliance date specified in 40 CFR 63.1270(d). 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.6-10. This information may be submitted in an operating permit application, in an amendment to an operating permit application, in a separate submittal, or in any combination of the three. If all of the information required has been submitted at any time prior to 180 days after the applicable compliance dates specified in 40 CFR 63.1270(d), a separate Notification of Compliance Status Report is not required. If the permittee submits the information specified in SC VII.6-10 at different times, and/or different submittals, subsequent submittals may refer to previous submittals instead of duplicating and resubmitting the previously submitted information. **(40 CFR 63.1274(c), 40 CFR 63.1285(d))**
6. If a closed-vent system and a control device other than a flare are used to comply with 40 CFR 63.1274, the permittee shall submit the following information: **(40 CFR 63.1285(d)(1))**
 - a. The performance test results including the information specified below. Results of a performance test conducted prior to the compliance date of 40 CFR Part 63 Subpart HHH can be used provided that the test was conducted using the methods specified in SC V.1, and that the test conditions are representative of current operating conditions. **(40 CFR 63.1285(d)(1)(ii))**
 - i. 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 SC V.1; and **(40 CFR 63.1285(d)(1)(ii)(A))**
 - ii. 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. **(40 CFR 63.1285(d)(1)(ii)(B))**
7. The permittee shall submit one complete test report for each test method used for a particular source. For additional tests performed using the same test method, the results specified below shall be submitted, but a complete test report is not required. **(40 CFR 63.1285(d)(3)(i))**
 - a. 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))**
8. The permittee shall submit the information specified below for each operating parameter required to be monitored in accordance with the requirements of 40 CFR 63.1283(d). **(40 CFR 63.1285(d)(4))**
 - a. The minimum operating parameter value or maximum operating parameter value, as appropriate for the control device, established by the permittee to define the conditions at which the control device must be operated to continuously achieve the applicable performance requirements of SC III.3. **(40 CFR 63.1285(d)(4)(i))**
 - b. An explanation of the rationale for why the permittee 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 SC IV.2. **(40 CFR 63.1285(d)(4)(ii))**
 - c. 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))**
9. Results of any continuous monitoring system performance evaluations shall be included in the Notification of Compliance Status Report. **(40 CFR 63.1285(d)(5))**
10. The permittee shall submit a statement as to whether the source has complied with the requirements of 40 CFR Part 63 Subpart HHH. **(40 CFR 63.1285(d)(9))**

11. The permittee shall include the following information in semiannual Periodic Reports: **(40 CFR 63.1285(e)(1), 40 CFR 63.1285(e)(2))**
 - a. The information required under 40 CFR 63.10(e)(3). For the purposes of 40 CFR Part 63, Subpart HHH and the information required under 40 CFR 63.10(e)(3), excursions (as defined in SC VI.21) shall be considered excess emissions. **(40 CFR 63.1285(e)(2)(i))**
 - b. A description of all excursions as defined in SC VI.21 that have occurred during the 6-month reporting period. **(40 CFR 63.1285(e)(2)(ii))**
 - i. For each excursion caused when the daily average value of a monitored operating parameter is less than the minimum operating parameter limit (or, if applicable, greater than the maximum operating parameter limit), as specified in SC VI.20, the report must include the daily average values of the monitored parameter, the applicable operating parameter limit, and the date and duration of the period that the excursion occurred. **(40 CFR 63.1285(e)(2)(ii)(A))**
 - ii. For each excursion caused by lack of monitoring data, as specified in SC VI.21, the report must include the date and duration of period when the monitoring data were not collected and the reason why the data were not collected. **(40 CFR 63.1285(e)(2)(ii)(C))**
 - c. For each inspection conducted in accordance with SC VI.11 during which a leak or defect is detected, the records specified in SC VI.20 must be included in the next Periodic Report. **(40 CFR 63.1285(e)(2)(iii))**
 - d. For each closed-vent system with a bypass line subject to SC IV.1.c.i, records required under SC VI.10.c of all periods when the vent stream is diverted from the control device through a bypass line. For each closed-vent system with a bypass line subject to SC IV.1.c.ii, records required under SC VI.10.d of all periods in which the seal or closure mechanism is broken, the bypass valve position has changed, or the key to unlock the bypass line valve was checked out. **(40 CFR 63.1285(e)(2)(iv))**
 - e. The following information shall be stated in the Periodic Report, when applicable: **(40 CFR 63.1285(e)(2)(vi))**
 - i. No excursions. **(40 CFR 63.1285(e)(2)(vi)(A))**
 - ii. No continuous monitoring system has been inoperative, out of control, repaired, or adjusted. **(40 CFR 63.1285(e)(2)(vi)(B))**
 - f. Any change in compliance methods as described in 40 CFR 63.1282(e). **(40 CFR 63.1285(e)(2)(vii))**
12. 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 as required under SC VII.11, whichever is sooner. The report shall include: **(40 CFR 63.1274(c), 40 CFR 63.1285(f))**
 - a. A brief description of the process change; **(40 CFR 63.1285(f)(1))**
 - b. A description of any modification to standard procedures or quality assurance procedures; **(40 CFR 63.1285(f)(2))**
 - c. Revisions to any of the information reported in the original Notification of Compliance Status Report under SC VII.5; **(40 CFR 63.1285(f)(3))**
 - d. Information required by the Notification of Compliance Status Report under SC VII.5 for changes involving the addition of processes or equipment. **(40 CFR 63.1285(f)(4))**
13. If there was a malfunction during the reporting period, the Periodic Report specified in SC VII.11 shall include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by an owner or operator during a malfunction of an affected source to minimize emissions in accordance with SC III.1, including actions taken to correct a malfunction. **(40 CFR 63.1285(b)(6))**

14. Within 60 days after the date of completing a performance test (defined in 40 CFR 63.2) the permittee must submit the results of the performance tests to EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). Performance test data must be submitted in the file format generated through use of EPA's Electronic Reporting Tool (ERT) (see <http://www.epa.gov/ttn/chief/ert/index.html>). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. If some of the information being submitted for performance tests is confidential business information (CBI), the permittee must submit a complete ERT file including information claimed to be CBI on a compact disk or other commonly used electronic storage media (including, but not limited to, flash drives) to EPA. The electronic media must be clearly marked as CBI and mailed to U.S. EPA/OAPQS/CORE CBI Office, Attention: WebFIRE Administrator, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same ERT file with the CBI omitted must be submitted to EPA via CDX as described earlier in this paragraph. At the discretion of the delegated authority, the permittee must also submit these reports, including the confidential business information, to the delegated authority in the format specified by the delegated authority. **(40 CFR 63.1285(g)(1))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. Control of HAP emissions from a gas-condensate-glycol (GCG) separator (flash tank) vent is not required if the permittee demonstrates, to the AQD's satisfaction, that total emissions to the atmosphere from the glycol dehydration unit process vent are reduced to the level specified in SC I.1 through the installation and operation of controls as specified in SC IV.2. **(40 CFR 63.1275(c)(3))**
2. The permittee shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart HHH, for Natural Gas Transmission and Storage Facilities. **(40 CFR Part 63, Subparts A and HHH)**

**FGBOILERMACT<10 MMBTU/HR DDDDD
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION

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

Emission Units:

Equal to or less than 5 MMBTU/hr and only burns gaseous or light liquid fuels	EURRBOILER (2.09 MMBTU/hr)
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	EURRHTR-A (6.5 MMBTU/hr), EURRHTR-B (6.5 MMBTU/hr)

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee must, for boilers or process heaters 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, for boilers or process heaters with a heat input capacity of greater than 5 MMBTU/hr and less than 10 MMBTU/hr, conduct a biennial tune-up of the boiler or process heater according to 40 CFR 63.7540(a)(11) no more than 25 months after the previous tune-up. **(40 CFR 63.7500(e), 40 CFR 63.7515(d), 40 CFR 63.7540(a)(11), 40 CFR Part 63, Subpart DDDDD, Table 3.2)**
3. The permittee must conduct a tune-up of each boiler or process heater as specified in the following: **(40 CFR 63.7540(a)(11) or (12))**
 - a. As applicable, inspect the burner and clean or replace any components of the burner as necessary. The permittee may perform the burner inspection any time prior to the tune-up or may delay the burner inspection until the next scheduled unit shutdown. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment. **(40 CFR 63.7540(a)(10)(i))**

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

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

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

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

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

FGRULE285(2)(mm)
FLEXIBLE GROUP CONDITIONS

DESCRIPTION

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

Emission Units: EURRPIPEMAINT

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

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

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

NA

VII. REPORTING

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

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. For venting of natural gas for routine maintenance or relocation of transmission and distribution systems in amounts greater than 1,000,000 standard cubic feet, the permittee shall notify the AQD District Supervisor prior to a scheduled pipeline venting. **(R 336.1285(2)(mm)(ii)(A))**
5. For venting of natural gas for routine maintenance or relocation of transmission and distribution systems in amounts greater than 1,000,000 standard cubic feet, the permittee shall provide necessary notification in accordance with the Michigan gas safety standards, the federal pipeline and hazardous materials safety administration standards, and the federal energy regulatory commission standards, as applicable. The permittee is not required to copy the AQD on the notifications. **(R 336.1285(2)(mm)(ii)(B))**
6. For emergency venting of natural gas 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
SDS	Safety Data Sheet	TAC	Toxic Air Contaminant
SNCR	Selective Non-Catalytic Reduction	Temp	Temperature
SRN	State Registration Number	THC	Total Hydrocarbons
TEQ	Toxicity Equivalence Quotient	tpy	Tons per year
USEPA/EPA	United States Environmental Protection Agency	µg	Microgram
VE	Visible Emissions	µm	Micrometer or Micron
		VOC	Volatile Organic Compounds
		yr	Year

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

Appendix 2. Schedule of Compliance

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

Appendix 3. Monitoring Requirements

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

Appendix 4. Recordkeeping

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

Appendix 5. Testing Procedures

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

Appendix 6. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-B7197-2017. 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-B7197-2017 is being reissued as Source-Wide PTI No. MI-PTI-B7197-2024.

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

Appendix 7. Emission Calculations

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in EURRGLYDEH. Alternative calculations shall be approved by the AQD District Supervisor.

Glycol Dehydration Unit

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.

EURRGLYDEH SC VI.8.

$$VOC = N_{Gas} * EF$$

Where:

- VOC** is the pounds of volatile organic compounds emitted in a 24 hour period from midnight to midnight.
- N_{Gas}** is the amount, in million standard cubic feet, of natural gas processed through the system in a 24 hour period from midnight to midnight.
- 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 (tm) computer model. EF shall be periodically recalculated, using GRI GlyCalc, (tm), as more current data becomes available. The calculated EF is subject to approval by the AQD District Supervisor.

Glycol Dehydrator System, EURRGLYDEH Table I.3

Determine amount of benzene emitted (refer to 40 CFR 63.1282(a)(2), Subpart HHH for current language). The procedures of this paragraph shall be used by an owner or operator to determine glycol dehydration unit benzene emissions to meet the criteria for the exemption from control requirements under 40 CFR 63.1274(d) (also listed in EURRGLYDEH Table I.3.) The owner or operator shall determine actual average benzene emissions using the model GRI-GLYCalc, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI-95/0368.1). Alternatively the owner or operator shall determine an average mass rate of benzene emissions in kilograms per hour through direct measurement by performing three runs of Method 18 in 40 CFR Part 60, Appendix A (or an equivalent method), and averaging the results of the three runs. Annual emissions in kilograms per year shall be determined by multiplying the mass rate by the number of hours the unit is operated per year. This result shall be converted to megagrams per year. Emissions shall be determined either uncontrolled or with federally enforceable controls in place.

Glycol Dehydration System, EURRGLYDEH Table 1.4

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in EURRGLYDEH (40 CFR 63.1275, equation 1).

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

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

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