# DECEMBER 12, 2024 - PROPOSED MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY AIR QUALITY DIVISION

**EFFECTIVE DATE:** 

**ISSUED TO** 

**ANR Pipeline Company - Reed City Compressor Station** 

State Registration Number (SRN): B3721

**LOCATED AT** 

7677 230th Avenue, Reed City, Osceola County, Michigan 49677

## RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B3721-20XX

**Expiration Date:** 

Administratively Complete ROP Renewal Application Due Between and

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-B3721-20XX

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

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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.

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## A. GENERAL CONDITIONS

## **Permit Enforceability**

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

#### **General Provisions**

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

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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).<sup>2</sup> (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:"

  (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.<sup>1</sup> (R 336.1901(a))
  - b. Unreasonable interference with the comfortable enjoyment of life and property. (R 336.1901(b))

## **Testing/Sampling**

- 13. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner's or operator's expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1).<sup>2</sup> (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))

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## 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 (<a href="https://cdx.epa.gov/">https://cdx.epa.gov/</a>), 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.

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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.<sup>2</sup> (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))

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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))

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#### Renewals

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

## **Stratospheric Ozone Protection**

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

## **Risk Management Plan**

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

#### **Emission Trading**

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

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## 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.<sup>2</sup> (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.<sup>2</sup> (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.<sup>2</sup> (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.<sup>2</sup> (R 336.1201(4))

#### Footnotes:

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

<sup>&</sup>lt;sup>2</sup>This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

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## **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.

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## SOURCE-WIDE CONDITIONS

## **DESCRIPTION**

All process equipment at the stationary source including equipment covered by other permits, grandfathered equipment, and exempt equipment.

#### POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

#### V. TESTING/SAMPLING

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

NA

#### VI. MONITORING/RECORDKEEPING

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

1. The permittee shall maintain waste shipment records of all asbestos-containing waste material transported off the facility site in accordance with the provisions of 40 CFR 61.150(d)(1), (2) and (3). (40 CFR 61.150(d)(1), (2) and (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. For all renovation of regulated asbestos containing material and demolition required to submit notification under 40 CFR 61.145(a), the permittee shall provide notification to AQD in accordance with the provisions of 40 CFR 61.145(b). (40 CFR 61.145(a) and (b))

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5. With the exception of ordered demolitions, as defined by 40 CFR 61.145(a)(3), the permittee shall provide the notification at least ten working days prior to the onset of any activity that would break up, dislodge or similarly disturb asbestos material. (40 CFR 61.145(b))

- 6. For ordered demolitions, as defined by 40 CFR 61.145(a)(3), the permittee shall provide such notification no later than the following workday after the onset of any activity that would break up, dislodge or similarly disturb asbestos material. (40 CFR 61.145(a)(3))
- 7. The permittee shall provide notification to AQD for all instances where a waste shipment record, signed by the owner or operator of the designated waste disposal site, is not received by the permittee within 45 days of the date the waste was accepted by the initial transporter, in accordance with the provisions of 40 CFR 61.150(d)(4). (40 CFR 61.150(d)(4))

See Appendix 8

## VIII. STACK/VENT RESTRICTION(S)

NA

## IX. OTHER REQUIREMENT(S)

- 1. The permittee shall perform renovation of all regulated asbestos containing material (RACM) in accordance with 40 CFR 61.145(c), and if applicable, Appendix A of 40 CFR Part 61, Subpart M. (40 CFR 61.145(c), 40 CFR Part 61, Subpart M, Appendix A)
- 2. The permittee shall dispose all RACM in accordance with the provisions of 40 CFR 61.150(a), (b) and (c). (40 CRF 61.150(a), (b) and (c))
- 3. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants for Asbestos as specified in 40 CFR Part 61, Subparts A and M. (40 CFR Part 61, Subparts A and M)

## Footnotes:

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

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

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## 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
EURCENGINE1	Reed City Station White Superior 8GT825 Compressor Engine #1, 1000 horsepower (HP) natural gas fired 4-stroke lean burn (SLB) reciprocating internal combustion engine (RICE) used to compress natural gas.	01-01-1964	FGRC001
EURCENGINE2	Reed City Station White Superior 8GT825 Compressor Engine #2, 1000HP natural gas fired 4SLB reciprocating internal combustion engine used to compress natural gas.	01-01-1964	FGRC001
EURCENGINE3	Reed City Station White Superior 8GT825 Compressor Engine #3, 1000HP natural gas fired 4SLB reciprocating internal combustion engine used to compress natural gas.	01-01-1965	FGRC001
EURCENGINE4	Reed City Station White Superior 8GT825 Compressor Engine #4, 1000HP natural gas fired 4SLB reciprocating internal combustion engine used to compress natural gas.	01-01-1965	FGRC001
EURCENGINE5	Reed City Station Ingersol-Rand KVS Compressor Engine #5, 2000HP natural gas fired 4SLB reciprocating internal combustion engine used to compress natural gas.	01-01-1965	FGRC001
EURCENGINE6	Reed City Station Ingersol-Rand KVS Compressor Engine #6, 2000HP natural gas fired 4SLB reciprocating internal combustion engine used to compress natural gas.	01-01-1965	FGRC001
EURCENGINE7	Reed City Station Clark TCVD 16M Compressor Engine #7, 8600HP natural gas fired 2SLB reciprocating internal combustion engine used to compress natural gas.	01-01-1973	FGRC001

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Emission Unit ID	Emission Unit Description (Including Process Equipment & Control	Installation Date/	Flexible Group ID
	Device(s))	Modification Date	
EURCENGINE11	Reed City Station White Superior 8G825 Compressor Engine #11, 660HP natural gas fired 4-stroke rich burn (SRB) reciprocating internal combustion engine used to compress natural gas, equipped with non-selective catalytic reduction for the control of NOx.	01-01-1963	FGRC001 FGMACTZZZZ
EURCENGINE12	Reed City Station White Superior 8G825 Compressor Engine #12, 660HP natural gas fired 4SRB reciprocating internal combustion engine used to compress natural gas, equipped with non-selective catalytic reduction for the control of NOx.	01-01-1963	FGRC001 FGMACTZZZZ
EULOREEDDEHY	Loreed glycol dehydration system includes flash vessel, heat exchangers and filters, distillation column and a reboiler surge tank. This system is controlled by a thermal oxidizer with a condenser as back-up.	01-01-1968	FGMACTHHH FGRC5D<10 (Reboiler Only)
EULOREEDHTR1	Loreed Gas withdrawal heater, 25.5 MMBTU/hr	12-2013	FG- RCNEW5D>10
EULOREEDHTR2	Loreed Gas withdrawal heater, 25.5 MMBTU/hr	12-2013	FG- RCNEW5D>10
EURCSTRAYDEHY	Reed City Stray glycol dehydration system includes flash vessel, heat exchangers and filters, distillation column and a reboiler surge tank. This system is controlled by a thermal oxidizer with a condenser as backup.	01-01-1979	FGMACTHHH FGRC5D<10 (Reboiler Only)
EURCBOILER3	Reed City Station Cleaver Brooks natural gas fired boiler, 2.97 MMBTU/hr used for process heating (heat engine blocks, fuel skids) and comfort heating in the engine room buildings. Located in the Clark Auxiliary Building.)	10-2017	FG-RC5D<10
EURCBOILER4	Reed City Station Cleaver Brooks natural gas fired boiler, 2.97 MMBTU/hr used for process heating (heat engine blocks, fuel skids) and comfort heating in the engine room buildings. Located in the Clark Auxiliary Building.)	10-2017	FG-RC5D<10
EURCGENERATOR3	Reed City Station Caterpillar G3512 4SLB 1,114HP emergency generator used to provide electrical power to the facility and support equipment in the event power is lost.	06-2020	FG-NSPS4J
EUPIPEMAINT	Routine and emergency venting of natural gas from transmission and distribution systems.	01-01-1963	FGRULE285(2)(mm)

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## EULOREEDDEHY EMISSION UNIT CONDITIONS

#### **DESCRIPTION**

EULOREEDDEHY – Loreed glycol dehydration system includes flash vessel, heat exchangers and filters, distillation column and a reboiler surge tank.

Flexible Group ID: FGMACTHHH, FGRC5D<10 (reboiler only)

### POLLUTION CONTROL EQUIPMENT

Thermal oxidizer with condenser as backup.

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

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	voc	295 lb/day²	Calendar day.	EULOREEDDEHY	SC V.1, SC V.2, SC VI.3	R 336.1702(a) R 336.1901(a)
2.	VOC	19 tpy²	12-month rolling time period as determined at the end of each calendar month.		SC V.1, SC V.2, SC VI.3	R 336.1702(a)
3.	Benzene	less than 1 tpy²	12-month rolling time period as determined at the end of each calendar month.		SC V.1, SC V.2, SC VI.4	R 336.1205(1), 40 CFR 63.1274(d)(2)

#### II. MATERIAL LIMIT(S)

NA

## III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not operate EULOREEDDEHY unless it is equipped with a thermal oxidizer and the thermal oxidizer is operating properly, except as specified in SC III.2. Proper operation includes maintaining a minimum operating temperature of 1400°F and a minimum VOC destruction efficiency of 95% in the thermal oxidizer.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a), R 336.1910)
- 2. If the thermal oxidizer malfunctions, the permittee may operate EULOREEDDEHY if it is equipped with a condenser and the condenser is installed and operating properly. When EULOREEDDEHY is controlled by the condenser, the permittee shall not operate EULOREEDDEHY unless the condenser exhaust gas temperature is maintained at 120°F or less.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a), R 336.1910)
- 3. The permittee shall not operate EULOREEDDEHY, unless a flash tank is installed and operating properly, except under upset conditions. A properly operating flash tank will volatilize organic compounds out of the rich glycol stream and route them to the glycol dehydrator reboiler burner or thermal oxidizer for destruction.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a), R 336.1910)

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4. The permittee shall limit the hours of operation of EULOREEDDEHY according to the equation in Appendix 7.B.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a))

5. The permittee shall not use stripping gas in EULOREEDDEHY.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a))

## See Appendix 7

## IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall equip and maintain the thermal oxidizer with a temperature monitor.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a))
- 2. The permittee shall equip and maintain the condenser with an exhaust gas temperature monitor.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a))
- 3. The permittee shall maintain a minimum residence time of 0.5 second in the thermal oxidizer.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a))

#### V. TESTING/SAMPLING

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

- The permittee shall analyze the natural gas processed in EULOREEDDEHY to determine its VOC content and composition once every five years. VOC composition of the natural gas shall be determined by a method or methods standard in the natural gas industry, subject to approval by the Air Quality Division.<sup>2</sup> (R336.1205(1), R336.1702(a), R336.1901)
- 2. The permittee shall recalculate the emission factor referenced in Appendix 7.A each time the natural gas is analyzed to determine its VOC content.<sup>2</sup> (R 336.1205, R 336.1702(a))
- 3. Upon request of the AQD District Supervisor, the permittee shall verify VOC and benzene emission rates from EULOREEDDEHY by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
VOC	40 CFR Part 60, Appendix A
HAPs	40 CFR Part 63, 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)

4. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 7 days of the time and place before performance tests are conducted. (R 336.1213(3), R 336.2001(4))

#### See Appendix 7

#### VI. MONITORING/RECORDKEEPING

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

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1. The permittee shall continuously monitor the operating temperature of the thermal oxidizer and record the operating temperature on a daily basis when EULOREEDDEHY is operating.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a))

- 2. The permittee shall continuously monitor the exhaust gas temperature of the condenser and record the exhaust gas temperature on a daily basis while the condenser is the primary control device for EULOREEDDEHY.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a))
- 3. The permittee shall calculate and record the VOC emission rate, including uncontrolled flash tank emissions from EULOREEDDEHY for each day, calendar month, and 12-month rolling time period.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a))
- 4. The permittee shall calculate and record the benzene emission rate, including uncontrolled flash tank emissions from EULOREEDDEHY for each calendar month and 12-month rolling time period.<sup>2</sup> (R 336.1205(1))
- 5. The permittee shall monitor and record the hours of operation of EULOREEDDEHY for each calendar month and 12-month rolling time period while the condenser is the primary control device for EULOREEDDEHY.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a))
- 6. The permittee shall monitor and record the hours of operation of EULOREEDDEHY while the flash tank emissions are not controlled by the glycol dehydrator reboiler burner or the thermal oxidizer for each calendar month and 12-month rolling time period.<sup>2</sup> (R 336.1205(1), R 336.1702(a))
- 7. The permittee shall monitor and record the total hours of operation of the EULOREEDDEHY for each calendar month and 12-month rolling time period.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a))
- 8. The permittee shall monitor and record the amount of natural gas processed through EULOREEDDEHY on a daily basis.<sup>2</sup> (R 336.1205(1), R 336.1702(a))
- 9. The permittee shall keep on file a copy of the manufacturer's specifications for the design parameters of the thermal oxidizer. At a minimum, the specifications shall include the destruction efficiency and the residence time of the thermal oxidizer.<sup>2</sup> (R 336.1910)

## 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)

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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. SVRC015A	NA	35 <sup>1</sup>	R 336.1901(a)
2. SVRC015B	4 1	35 <sup>1</sup>	R 336.1901(a)

## IX. OTHER REQUIREMENT(S)

- 1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subpart A and Subpart HHH, for Natural Gas Transmission and Storage Facilities. **(40 CFR Part 63 Subparts A and HHH)**
- 2. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters as specified in 40 CFR Part 63, Subparts A and DDDDD, as they apply to the reboiler in EULOREEDDEHY. (40 CFR Part 63, Subparts A and DDDDD)

#### Footnotes:

<sup>&</sup>lt;sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>&</sup>lt;sup>2</sup> This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

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**Expiration Date:** 

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## EURCSTRAYDEHY EMISSION UNIT CONDITIONS

## **DESCRIPTION**

Reed City Stray glycol dehydration system includes flash vessel, heat exchangers and filters, distillation column and a reboiler surge tank. This system is controlled by a thermal oxidizer with a condenser as back-up.

Flexible Group ID: FGMACTHHH, FGRC5D<10 (reboiler only)

## **POLLUTION CONTROL EQUIPMENT**

Thermal Oxidizer with Condenser as back up.

## I. EMISSION LIMIT(S)

F	Pollutant Limit Time Period/		Equipment	Monitoring/	Underlying	
			Operating Scenario		Testing	Applicable
					Method	Requirements
1.	VOC	90 lbs/day <sup>2</sup>	Calendar day	EURCSTRAYDEHY	SC V.1,	R 336.1702(a),
		-			SC V.2,	R 336.1901(a)
					SC VI.3	
2.	VOC	15.4 tpy <sup>2</sup>	12-month rolling time period	EURCSTRAYDEHY	SC V.1,	R 336.1702(a)
			as determined at the end of		SC V.2,	
			each calendar month.		SC VI.3	
3.	Benzene	less than	12-month rolling time period	EURCSTRAYDEHY	SC V.1,	R 336.1205(1)
		1 tpy <sup>2</sup>	as determined at the end of		SC V.2,	40 CFR 63.1274(d)(2)
			each calendar month.		SC VI.4	

#### II. MATERIAL LIMIT(S)

NA

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not operate EURCSTRAYDEHY unless it is equipped with a thermal oxidizer and the thermal oxidizer is installed and operating properly, except as specified in SC III.2. Proper operation includes maintaining a minimum operating temperature of 1400°F and a minimum VOC destruction efficiency of 95 percent in the thermal oxidizer.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a), R 336.1910)
- 2. If the thermal oxidizer malfunctions, the permittee may operate EURCSTRAYDEHY if it is equipped with a condenser and the condenser is installed and operating properly. The permittee shall not operate EURCSTRAYDEHY for more than 2,300 hours per year based on a 12-month rolling time period as determined at the end of each calendar month while the condenser is EURCSTRAYDEHY's primary control device. When the condenser is the primary control device for EURCSTRAYDEHY, the permittee shall not operate EURCSTRAYDEHY unless the condenser exhaust gas temperature is 115°F or less.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a), R 336.1910)
- 3. The permittee shall not operate EURCSTRAYDEHY, unless a flash tank is installed and operating properly. A properly operating flash tank will volatilize organic compounds out of the rich glycol stream and route them to the glycol dehydrator reboiler burner or thermal oxidizer for destruction.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a), R 336.1910)

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4. The permittee shall not use stripping gas in EURCSTRAYDEHY.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a))

## IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall equip and maintain the thermal oxidizer with an operating temperature monitor.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a))
- 2. The permittee shall equip and maintain the condenser with an exhaust gas temperature monitor.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a))
- 3. The permittee shall maintain a minimum residence time of 0.5 second in the thermal.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a))

## V. TESTING/SAMPLING

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

- 1. The permittee shall analyze the natural gas processed in EURCSTRAYDEHY to determine its VOC content and composition at least once every five years. VOC composition of the natural gas shall be determined by a method or methods standard in the natural gas industry, subject to approval by the Air Quality Division.<sup>2</sup> (R336.1205(1), R336.1702(a), R336.1901(a))
- 2. The permittee shall recalculate the emission factor referenced in Appendix 7.A each time the natural gas is analyzed to determine its VOC content.<sup>2</sup> (R 336.1205(1), R 336.1702(a))
- 3. Upon request of the AQD District Supervisor, the permittee shall verify VOC and benzene emission rates from EURCSTRAYDEHY by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
VOC	40 CFR Part 60, Appendix A
HAPs	40 CFR Part 63, 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)

4. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 7 days of the time and place before performance tests are conducted. (R 336.1213(3), R 336.2001(4))

#### See Appendix 7

## VI. MONITORING/RECORDKEEPING

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

1. When EURCSTRAYDEHY is operating the permittee shall continuously monitor the operating temperature of the thermal oxidizer and record the operating temperature on a daily basis.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a))

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2. While the condenser is the primary control device for EURCSTRAYDEHY, the permittee shall continuously monitor the exhaust gas temperature of the condenser and record the exhaust gas temperature on a daily basis.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a))

- 3. The permittee shall calculate and record the VOC emission rate, including uncontrolled flash tank emissions, from EURCSTRAYDEHY for each day, calendar month, and 12-month rolling time period.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a))
- 4. The permittee shall calculate and record the benzene emission, including uncontrolled flash tank emissions, rate from EURCSTRAYDEHY for each calendar month and 12-month rolling time period.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a))
- 5. The permittee shall monitor and record the hours of operation of EURCSTRAYDEHY for each calendar month and 12-month rolling time period while the condenser is the primary control device for EURCSTRAYDEHY.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a))
- 6. The permittee shall monitor and record the hours of operation of EURCSTRAYDEHY while the flash tank emissions are not controlled by the glycol dehydrator reboiler burner or the thermal oxidizer for each calendar month and 12-month rolling time period.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a))
- 7. The permittee shall monitor and record the total hours of operation of EURCSTRAYDEHY for each calendar month and 12-month rolling time period.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a))
- 8. The permittee shall monitor and record the amount of natural gas processed through EURCSTRAYDEHY on a daily basis.<sup>2</sup> (R 336.1205(1), R 336.1702(a), R 336.1901(a))
- 9. The permittee shall keep on file a copy of the manufacturer's specifications for the design parameters of the thermal oxidizer. At a minimum, the specifications shall include the destruction efficiency and the residence time of the thermal oxidizer.<sup>2</sup> (R 336.1910)

#### 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:

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Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVRC024A	NA	25 <sup>1</sup>	R 336.1901
2. SVRC024B	10 <sup>1</sup>	25 <sup>1</sup>	R 336.1901

## IX. OTHER REQUIREMENT(S)

- 1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subpart A and Subpart HHH, for Natural Gas Transmission and Storage Facilities. (40 CFR Part 63 Subparts A and HHH)
- 2. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters as specified in 40 CFR Part 63, Subparts A and DDDDD, as they apply to the reboiler in EURCSTRAYDEHY. (40 CFR Part 63, Subparts A and DDDDD)

#### Footnotes:

<sup>&</sup>lt;sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>&</sup>lt;sup>2</sup>This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

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## 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 ID Flexible Group Description		
		Emission Unit IDs	
FGRC001	Nine Compressor engines that include four White Superior 8GT825 1000HP natural gas fired 4-stroke lean burn (SLB) reciprocating internal combustion engine (RICE), Two Ingersol-Rand KVS 2000HP natural gas fired 4SLB RICE, One Clark TCVD 16M 8600HP natural gas fired 2SLB RICE, and Two White Superior 8G825 660HP natural gas fired 4-stroke rich burn (SRB) RICE.	EURCENGINE1, EURCENGINE2, EURCENGINE3, EURCENGINE4, EURCENGINE5, EURCENGINE6, EURCENGINE7, EURCENGINE11, EURCENGINE12	
FGMACTZZZZ	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 non-emergency, non-black start spark ignition (SI), four-stroke rich burn RICE greater than 500 bhp. A RICE is existing if the date of installation is before December 19, 2002. The facility uses two compressor engines that include, 4-stroke rich burn (SRB), natural gas fired RICEs with a site-rating of 660 horsepower (HP) each to compress natural gas and recycle gas captured from the storage field liquid handling system. These engines are used as needed to regulate flow to and from the storage field.	EURCENGINE11, EURCENGINE12	
FG-NSPS4J	One new Caterpillar G3512 4-stroke lean burn (SLB) 1,114 horsepower (HP) emergency generator. New emergency spark ignition engines greater than 500HP that commenced construction or reconstruction after December 19, 2002. The engine is used to provide electrical power to the station and support equipment in the event power is lost.	EURCGENERATOR3	

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Flexible Group ID	Associated	
		Emission Unit IDs
FGMACTHHH	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). The facility has two glycol dehydration systems, the Loreed and Reed City Stray glycol dehydration systems that remove water from the natural gas. The systems each include a flash vessel, heat exchangers and filters, a distillation column and a reboiler surge tank. The systems are each controlled by a thermal oxidizer with a condenser as back-up.	EULOREEDDEHY , EURCSTRAYDEHY
FG-RCNEW5D>10	Requirements for new boilers and process heaters that are designed to burn gas 1 subcategory fuel with a heat input capacity of 10 MMBTU/hr or greater at major sources of HAP emissions per 40 CFR Part 63, Subpart DDDDD (Boiler MACT). Units designed to burn gas 1 subcategory fuels include boilers or process heaters that burn only natural gas, refinery gas, and/or Other Gas 1 fuels. Units that burn liquid fuel for testing or maintenance purposes for less than a total of 48 hours per year, or that burn liquid fuel during periods of curtailment or supply interruptions are included in this definition. Specifically for two gas withdrawal heaters rated at 25.5 MMBtu/hr.	EULOREEDHTR1, EULOREEDHTR2
FG-RC5D<10	Requirements for new and existing boilers and process heaters with a heat input capacity of <10 MMBTU/hr for major sources of HAP emissions per 40 CFR Part 63, Subpart DDDDD (Boiler MACT). These boilers or process heaters are designed to burn solid, liquid, or gaseous fuels.	EULOREEDDEHY (reboiler only), EURCSTRAYDEHY (reboiler only) EURCBOILER3, EURCBOILER4
FGRULE285(2)(mm)	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 285(2)(mm).	EUPIPEMAINT

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## FGRC001 FLEXIBLE GROUP CONDITIONS

## **DESCRIPTION**

Nine Compressor engines that include four White Superior 8GT825 1000 horsepower (HP) natural gas fired 4-stroke lean burn (SLB) reciprocating internal combustion engine (RICE), Two Ingersol-Rand KVS 2000HP natural gas fired 4SLB RICE, One Clark TCVD 16M 8600HP natural gas fired 2SLB RICE, Two White Superior 8G825 660HP natural gas fired 4-stroke rich burn (SRB) RICE.

**Emission Unit:** EURCENGINE1, EURCENGINE2, EURCENGINE3, EURCENGINE4, EURCENGINE5, EURCENGINE6, EURCENGINE7, EURCENGINE11, EURCENGINE12

#### **POLLUTION CONTROL EQUIPMENT**

Non-selective catalytic reduction (NSCR) for EURCENGINE11 and EURCENGINE12

#### I. EMISSION LIMIT(S)

NA

#### II. MATERIAL LIMIT(S)

NA

### III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The natural gas used as fuel in FGRC001 shall not contain more than 20 grains of total sulfur per 100 cubic feet of natural gas.<sup>2</sup> (R 336.1301(1)(a))

#### IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

#### V. TESTING/SAMPLING

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

NA

#### VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall monitor and record the fuel consumption of the engines for each calendar month.<sup>1</sup> (R 336.1901(a))
- 2. The permittee shall keep the following records for each calendar month that the engines in FGRC001 are operated:
  - a. Sulfur content (in grains per 100 cubic feet) and the higher heating value (BTU/lb) of all fuel being combusted.

The permittee shall keep the records on file, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request. (R 336.1213(3))

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#### VII. REPORTING

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

See Appendix 8

## VIII. STACK/VENT RESTRICTION(S)

NA

## IX. OTHER REQUIREMENT(S)

NA

#### Footnotes:

<sup>&</sup>lt;sup>1</sup> This condition is state only enforceable and was established pursuant to Rule 201(1)(b).

<sup>&</sup>lt;sup>2</sup> This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

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## FGMACTZZZZ 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 non-emergency, non-black start spark ignition (SI), four-stroke rich burn RICE greater than 500 bhp. A RICE is existing if the date of installation is before December 19, 2002. The facility uses two compressor engines that include, 4-stroke rich burn (SRB), natural gas fired RICEs with a site-rating of 660 horsepower (HP) each to compress natural gas and recycle gas captured from the storage field liquid handling system. These engines are used as needed to regulate flow to and from the storage field.

Emission Unit: EURCENGINE11 and EURCENGINE12

#### POLLUTION CONTROL EQUIPMENT

Non-selective catalytic reduction (NSCR).

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

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	Formaldehyde	≤350 ppbvd @ 15% O <sub>2</sub> -OR- ≥76% reduction	Hourly	Each engine in FGMACTZZZZ	SC V.1, SC V.2, SC VI.4	40 CFR 63.6600(a), 40 CFR 63.6640, 40 CFR Part 63, Subpart ZZZZ, Table 1a.1

#### II. MATERIAL LIMIT(S)

NA

#### III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. At all times, the permittee must operate and maintain each engine in FGMACTZZZZ including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (40 CFR 63.6605(b))
- 2. 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 non-startup emission limitations in SC I.1 apply. (40 CFR 63.6600(a), 40 CFR 63.6625(h), 40 CFR 63.6640, 40 CFR Part 63, Subpart ZZZZ, Table 1a.1)
- 3. The permittee shall not operate any stationary RICE in FGMACTZZZZ unless the NSCR system is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes the following: (40 CFR 63.6600(a), 40 CFR 63.6605(b), Part 63 Subpart ZZZZ, Table 1b, Table 6.4)

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a. Maintaining the catalyst so that the pressure drop across the catalyst does not change by more than two inches of water from the pressure drop measured during the most recent performance test.

- b. Maintaining the catalyst inlet temperature greater than or equal to 750 °F and less than or equal to 1250 °F based on a 4-hour rolling average.
- c. Operating EURCENGINE11 at no more than 75% load (±10%).
- d. Operating EURCENGINE12 at no more than 87% load (+10%).
- 4. The permittee must prepare a site-specific monitoring plan for each engine in FGMACTZZZZ that addresses the continuous parameter monitoring system (CPMS) design, data collection, and the quality assurance and quality control elements as outlined in the following: (40 CFR 63.6625(b)(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 63.6625(b)(1)(i))
  - b. Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements; **(40 CFR 63.6625(b)(1)(ii))**
  - c. Equipment performance evaluations, system accuracy audits, or other audit procedures; (40 CFR 63.6625(b)(1)(iii))
  - d. Ongoing operation and maintenance procedures in accordance with provisions in 40 CFR 63.8(c)(1)(ii) and (c)(3); (40 CFR 63.6625(b)(1)(iv))
  - e. Ongoing reporting and recordkeeping procedures in accordance with provisions in 40 CFR 63.10(c), (e)(1), and (e)(2)(i). (40 CFR 63.6625(b)(1)(v))

## IV. <u>DESIGN/EQUIPMENT PARAMETER(S)</u>

- 1. For each engine in FGMACTZZZZ, the permittee must install a CPMS to continuously monitor catalyst inlet temperature according to the requirements in 40 CFR 63.6625(b). (40 CFR 63.6630(a), 40 CFR Part 63, Subpart ZZZZ, Table 5.7.a.ii)
- 2. For each engine in FGMACTZZZZ, the permittee shall install, operate, and maintain each CPMS in continuous operation according to the procedures in the site-specific monitoring plan and according to the following requirements: (40 CFR 63.6625(b)(2))
  - a. The CPMS must collect data at least once every 15 minutes (see also 40 CFR 63.6635). **(40 CFR 63.6625(b)(3))**
  - b. For a CPMS measuring temperature range, the temperature sensor must have a minimum tolerance of 2.8 °C (5 °F) or 1 percent of the measurement range, whichever is larger. (40 CFR 63.6625(b)(4))
  - c. Conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in your site-specific monitoring plan at least annually. (40 CFR 63.6625(b)(5))
  - d. Conduct a performance evaluation of each CPMS in accordance with the site-specific monitoring plan. (40 CFR 63.6625(b)(6))

#### V. TESTING/SAMPLING

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

1. The permittee must conduct subsequent performance tests every 5 years from the date of the last test, according to the requirements specified in Table 4 of 40 CFR Part 63, Subpart ZZZZ. The permittee is not required to start up each engine in FGMACTZZZZ solely to conduct the performance test. If the engine is non-operational, the permittee can conduct the performance test when the engine is started up again. For each performance test, three separate test runs must be conducted as specified in 40 CFR 63.7(e)(3). Each test run must last at least 1 hour, unless otherwise specified. If determining compliance with the percent reduction requirement, the permittee

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must use the equations specified in 40 CFR 63.6620(e). The engine percent load during the performance test must be determined by documenting the calculations, assumptions, and measurement devices used to measure or estimate the percent load in a specific application. (40 CFR 63.6620(a), (b), (d), (e) and (i), 40 CFR 63.6640(a), 40 CFR Part 63, Subpart ZZZZ, Table 4.2, Table 4.3 and Table 6.4.a)

- 2. If the catalyst is changed, the permittee must reestablish the operating parameters measured during the initial performance test. When reestablishing the values of the operating parameters, the permittee must also conduct a performance test within 60 days of changing the catalyst to demonstrate meeting the required emission limitation applicable in SC I.1. (40 CFR 63.6640(b))
- 3. The permittee shall submit a Notification of Intent to the Administrator to conduct a performance test at least 60 days before the performance test is initially scheduled to begin to allow the Administrator, upon request, to review and approve the site-specific test plan and to have an observer present during the test, as required in 40 CFR 63.7(b)(1). (40 CFR 63.6645(g))
- 4. Unless an alternate schedule has been approved by the AQD, 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. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing, as applicable. (R 336.1213(3)(a), R 336.2001, R 336.2003, R 336.2004, 40 CFR 63.7)
- 5. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 7 days of the time and place before performance tests are conducted. (R 336.1213(3), R 336.2001(4))

## VI. MONITORING/RECORDKEEPING

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

- 1. To demonstrate continuous compliance, the permittee must monitor and collect data according to following: (40 CFR 63.6635(a))
  - a. Except for monitor malfunctions, associated repairs, required performance evaluations, and required quality assurance or control activities, the permittee must monitor continuously at all times that the stationary RICE is operating. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. (40 CFR 63.6635(b))
  - b. The permittee may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels. The permittee must, however, use all the valid data collected during all other periods. (40 CFR 63.6635(c))
- 2. For each engine in FGMACTZZZZ, the permittee must keep the records described as follows: (40 CFR 63.6655(a))
  - a. A copy of each notification and report 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 according to the requirement in 40 CFR 63.10(b)(2)(xiv). (40 CFR 63.6655(a)(1))
  - b. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. (40 CFR 63.6655(a)(2))
  - c. Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii). **(40 CFR 63.6655(a)(3))**

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d. Records of all required maintenance performed on the air pollution control and monitoring equipment. (40 CFR 63.6655(a)(4))

- e. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. (40 CFR 63.6655(a)(5))
- 3. For each CPMS, the permittee must keep the records as follows: (40 CFR 63.6655(b))
  - a. Records described in 40 CFR 63.10(b)(2)(vi) through (xi). (40 CFR 63.6655(b)(1))
  - b. Previous (i.e., superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3). (40 CFR 63.6655(b)(2)
  - c. Requests for alternatives to the relative accuracy test for CPMS as required in 40 CFR 63.8(f)(6)(i), if applicable. (40 CFR 63.6655(b)(3))
- 4. For each engine in FGMACTZZZZ, the permittee must keep records to demonstrate continuous compliance with the operating limitations in Table 6.4, of 40 CFR Part 63, Subpart ZZZZ as follows:(40 CFR 63.6640(a), 40 CFR 63.6655(d))
  - a. Collecting the catalyst inlet temperature data according to 40 CFR 63.6625(b); and (40 CFR Part 63, Subpart ZZZZ, Table 6.4.a.i)
  - b. Reducing these data to 4-hour rolling averages; and (40 CFR Part 63, Subpart ZZZZ, Table 6.4.a.ii)
  - c. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and (40 CFR Part 63, Subpart ZZZZ, Table 6.4.a.iii)
  - d. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst does not change by more than two inches of water from the pressure drop established during the performance test. (40 CFR Part 63, Subpart ZZZZ, Table 6.4.a.iv)
  - e. Monitoring of pressure drop across the catalysts for EURCENGINE11 and EURCENGINE12 shall comply with the United States Environmental Protection Agency (USEPA) approved Alternative Monitoring Methods.
- 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))
- 7. The permittee must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). (40 CFR 63.6660(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))

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4. The permittee must report each instance in which each engine in FGMACTZZZZ did not meet each emission limitation or operating limitation in SC I.1 and SC III.2. These instances are deviations from the emission and operating limitations in 40 CFR Part 63, Subpart ZZZZ. These deviations must be reported according to the requirements in 40 CFR 63.6650. Deviations from the emission or operating limitations that occur during the first 200 hours of operation from engine startup (engine burn-in period) are not violations. (40 CFR 63.6640(b))

- 5. The permittee must submit all of the notifications in 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), (f)(4) and (f)(6), 40 CFR 63.9(b) through (e), and (g) and (h) that apply, by the dates specified, to the Administrator. (40 CFR 63.6645(a)(3))
- 6. The permittee must submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii), including the performance test results, before the close of business on the 60th day following the completion of the performance test according to 40 CFR 63.10(d)(2). (40 CFR 63.6645(h)(2))
- 7. A written report of the average percent load determination must be included in the notification of compliance status. The following information must be included in the written report: the engine model number, the engine manufacturer, the year of purchase, the manufacturer's site-rated brake horsepower, the ambient temperature, pressure, and humidity during the performance test, and all assumptions that were made to estimate or calculate percent load during the performance test must be clearly explained. If measurement devices such as flow meters, kilowatt meters, beta analyzers, stain gauges, etc. are used, the model number of the measurement device, and an estimate of its accurate in percentage of true value must be provided. (40 CFR 63.6620(i))
- 8. The permittee must submit a semiannual compliance report, as specified in Table 7 of 40 CFR Part 63, Subpart ZZZZ,. The compliance report must also contain the following information, as specified in 40 CFR 63.6650(c) and (e): (40 CFR 63.6650(a) and (b), 40 CFR Part 63, Subpart ZZZZ, Table 7.1)
  - a. Company name and address. (40 CFR 63.6650(c)(1))
  - b. Certification of the report by a responsible official. (40 CFR 63.6650(c)(2))
  - c. Date of report and beginning and ending dates of the reporting period. (40 CFR 63.6650(c)(3))
  - d. If there was a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the permittee during a malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction. (40 CFR 63.6650(c)(4))
  - e. If there are no deviations from any emission or operating limitations that apply, a statement that there were no deviations from the emission or operating limitations during the reporting period. (40 CFR 63.6650(c)(5))
  - f. If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out-of-control, as specified in 40 CFR 63.8(c)(7), a statement that there were no periods during which the CMS was out-of-control during the reporting period. (40 CFR 63.6650(c)(6))
  - g. For each deviation from an emission or operating limitation that occurs for each engine in FGMACTZZZZ where a CMS is used to comply with the emission and operating limitations, the semiannual compliance report must contain the following: (40 CFR 63.6650(e))
    - i. The date and time that each malfunction started and stopped. (40 CFR 63.6650(e)(1))
    - ii. The date, time, and duration that each CMS was inoperative, except for zero (low-level) and high-level checks. (40 CFR 63.6650(e)(2))
    - iii. The date, time, and duration that each CMS was out-of-control, including the information in 40 CFR 63.8(c)(8). (40 CFR 63.6650(e)(3))
    - iv. The date and time that each deviation started and stopped, and whether each deviation occurred during a period of malfunction or during another period. (40 CFR 63.6650(e)(4))

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v. A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total source operating time during that reporting period. (40 CFR 63.6650(e)(5))

- vi. A breakdown of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes. (40 CFR 63.6650(e)(6))
- vii. A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the stationary RICE at which the CMS downtime occurred during that reporting period. (40 CFR 63.6650(e)(7))
- viii. An identification of each parameter and pollutant (CO or formaldehyde) that was monitored at the stationary RICE. (40 CFR 63.6650(e)(8))
- ix. A brief description of the CMS. (40 CFR 63.6650(e)(10))
- x. The date of the latest CMS certification or audit. (40 CFR 63.6650(e)(11))
- xi. A description of any changes in CMS, processes, or controls since the last reporting period. (40 CFR 63.6650(e)(12))
- xii. The total operating time of the stationary RICE at which the deviation occurred during the reporting period. (40 CFR 63.6650(e)(13))
- 9. The permittee shall report all deviations as defined in 40 CFR Part 63, Subpart ZZZZ in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A). If an affected source submits a Compliance report pursuant to Item 3 of Table 7 in 40 CFR Part 63, Subpart ZZZZ along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A), and the Compliance report includes all required information concerning deviations from any emission or operating limitation in 40 CFR Part 63, Subpart ZZZZ, submission of the Compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a Compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. The permittee may submit the first and subsequent Compliance reports according to the dates specified in SC VII.2 and SC VII.3. (40 CFR 63.6650(b)(5), 40 CFR 63.6650(f))
- 10. 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 336.2001(5))

See Appendix 8

## VIII. STACK/VENT RESTRICTION(S)

NA

#### IX. OTHER REQUIREMENT(S)

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

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## FG-NSPS4J FLEXIBLE GROUP CONDITIONS

## **DESCRIPTION**

One new Caterpillar G3512 4-stroke lean burn (SLB) 1,114 horsepower (HP) emergency generator. New emergency spark ignition engines greater than 500HP that commenced construction or reconstruction after December 19, 2002. The engine is used to provide electrical power to the station and support equipment in the event power is lost.

**Emission Unit:** EURCGENERATOR3

## **POLLUTION CONTROL EQUIPMENT**

NA

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

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. NO <sub>x</sub>	2.0 g/HP-hr OR 160 ppmvd at 15% at oxygen	Hourly	FG-NSPS4J	SC V.1 SC VI.1 SC VI.2	40 CFR 60.4233(e) Table 1 to 40 CFR 60, Subpart JJJJ
2. CO	4.0 g/HP-hr OR 540 ppmvd	Hourly	FG-NSPS4J	SC V.1, SC VI.1, SC VI.2	40 CFR 60.4233(e) Table 1 to 40 CFR 60, Subpart JJJJ
3. VOC	1.0 g/HP-hr <sup>a</sup> OR 86 ppmvd at 15% at oxygen <sup>A</sup>	Hourly	FG-NSPS4J	SC V.1, SC VI.1, SC VI.2	40 CFR 60.4233(e) Table 1 to 40 CFR 60, Subpart JJJJ

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

#### II. MATERIAL LIMIT(S)

NA

## III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee may operate FG-NSPS4J for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. (40 CFR 60.4243(d)(2))
- 2. The permittee may operate FG-NSPS4J up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing as described in SC III.1. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or

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

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demand response, or to generate income for the permittee to supply non-emergency power as part of a financial arrangement with another entity. (40 CFR 60.4243(d)(3)

- 3. If the permittee purchases an engine certified according to procedures specified in 40 CFR Part 60 Subpart JJJJ, for the same model year, and operates and maintains the certified stationary SI combustion engine and control device according to the manufacturer's emission related written instructions, the permittee must meet the requirements as specified in 40 CFR Part 1068, Subparts A through D as they apply. If the permittee adjusts engine settings according to and consistent with the manufacturer's instructions, the stationary SI internal combustion engine will not be considered out of compliance. (40 CFR 60.4243(a)(1), 40 CFR 60.4243(b)(1))
- 4. If the permittee purchases an engine certified according to procedures specified in 40 CFR Part 60 Subpart JJJJ, for the same model year, and does not operate and maintain the certified stationary SI combustion engine and control device according to the manufacturer's emission related written instructions, the engine will be considered a non-certified engine. The permittee must keep a maintenance plan and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR 60.4243(a)(2)(iii), 40 CFR 60.4243(b)(1))
- 5. If FG-NSPS4J is a non-certified engine or a certified engine operating in a non-certified manner, per 40 CFR Part 60, Subpart JJJJ, the permittee shall keep a maintenance plan for FG-NSPS4J and shall, to the extent practicable, maintain and operate FG-NSPS4J in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR 60.4243(b)(2))

## IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee must install and maintain a non-resettable hour meter on the engine in FG-NSPS4J. (R 336.1213(3), 40 CFR 60.4237(a))

#### V. TESTING/SAMPLING

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

- 1. If the permittee purchased a non-certified engine or does not operate and maintain a certified engine and control device according to the manufacturer's written emission-related instructions, the permittee must demonstrate compliance as follows:
  - a. Conduct an initial performance test to demonstrate compliance with the applicable emission limits within 60 days after achieving the maximum production rate at which the engine will be operated, but not later than 180 days after initial startup, or within 1 year after the engine is no longer operated as a certified engine.
  - b. The performance tests shall consist of three separate test runs of at least 1 hour, for each performance test required in 40 CFR 60.4244 and Table 2 to Subpart JJJJ of Part 60.
  - c. Subsequent performance testing shall be completed every 8,760 hours of engine operation or every 3 years, whichever comes first, to demonstrate compliance with the applicable emission limits.

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

2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 7 days of the time and place before performance tests are conducted. (R 336.1213(3), R 336.2001(4))

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#### VI. MONITORING/RECORDKEEPING

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

1. If the permittee purchases an engine certified according to procedures specified in 40 CFR Part 60 Subpart JJJJ, for the same model year, and operates and maintains the certified stationary SI combustion engine and control device according to the manufacturer's emission related written instructions, the permittee must keep records of conducted maintenance to demonstrate compliance. (40 CFR 60.4243(a)(1), 40 CFR 60.4243(b)(1))

- 2. If the permittee purchases an engine certified according to procedures specified in 40 CFR Part 60 Subpart JJJJ, for the same model year, and does not operate and maintain the certified stationary SI combustion engine and control device according to the manufacturer's emission related written instructions, the permittee must keep records of conducted maintenance to demonstrate compliance. In addition, the permittee must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter, as specified in SC V.1, to demonstrate compliance. (40 CFR 60.4243(a)(2)(iii), 40 CFR 60.4243(b)(1))
- 3. The permittee must keep records of the following: (40 CFR 60.4245(a))
  - a. All notifications submitted to comply with 40 CFR Part 60, Subpart JJJJ and all documentation supporting any notification. (40 CFR 60.4245(a)(1))
  - b. Maintenance conducted on engine in FG-NSPS4J. (40 CFR 60.4245(a)(2))
  - c. If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR Parts 1048, 1054, and 1060, as applicable. (40 CFR 60.4245(a)(3))
  - d. If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR 60.4243(a)(2), documentation that the engine meets the emission standards. (40 CFR 60.4245(a)(4))
- 4. The permittee must keep records of the hours of operation for each engine in FG-NSPS4J that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. (40 CFR 60.4243, 40 CFR 60.4245(b))

## VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. (R 336.1213(3)(c), R 336.2001(5))
- 5. If an engine in FG-NSPS4J operates for the purpose specified in SC III.1, the permittee must submit an annual report. (40 CFR 60.4245(e))
  - a. The report must contain the following information:
    - i. Company name and address where the engine is located. (40 CFR 60.4245(e)(1)(i)

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- ii. Date of the report and beginning and ending dates of the reporting period. (40 CFR 60.4245(e)(1)(ii))
- iii. Engine site rating and model year. (40 CFR 60.4245(e)(1)(iii))
- iv. Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place. (40 CFR 60.4245(e)(1)(iv))
- v. Hours spent for operation for the purposes specified in SC III.1, including the date, start time, and end time for engine operation for the purposes specified in SC III.1. The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine. (40 CFR 60.4245(e)(1)(vii))
- b. Annual reports for each calendar year must be submitted no later than March 31 of the following calendar year. (40 CFR 60.4245(e)(2))
- c. The annual report must also be submitted electronically to the EPA using the 40 CFR Part 60, Subpart JJJJ specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (<a href="https://www.epa.gov/cdx">www.epa.gov/cdx</a>). However, if the reporting form specific to the subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the EPA at the appropriate address listed in 40 CFR 60.4. (40 CFR 60.4245(e)(3))

See Appendix 8

# VIII. STACK/VENT RESTRICTION(S)

NA

## IX. OTHER REQUIREMENT(S)

- 1. The permittee shall comply with all applicable provisions of the Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (NSPS) as specified in 40 CFR Part 60, Subpart A and Subpart JJJJ. (40 CFR Part 60, Subpart A & JJJJ)
- 2. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, as specified in 40 CFR Part 63, Subpart A and Subpart ZZZZ. (40 CFR Part 63, Subparts A & ZZZZ)

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# FGMACTHHH 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). The facility has two glycol dehydration systems, the Loreed and Reed City Stray glycol dehydration systems. The systems each include a flash vessel, heat exchangers and filters, a distillation column and a reboiler surge tank. The systems are each controlled by a thermal oxidizer with a condenser as back-up.

Emission Units: EULOREEDDEHY, EURCSTRAYDEHY

#### POLLUTION CONTROL EQUIPMENT

Thermal oxidizer, Condenser

## 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.C	Annual	EULOREEDDEHY EURCSTRAYDEHY	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 FGMACTHHH, 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 FG FGMACTHHH. 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 comply with the control device requirements specified in SC IV.2 except that the emission limit achieved shall be the emission limit specified for the control device(s) in SC VI.8. (40 CFR 63.1275(b)(1)(iii)(C), 40 CFR 63.1281(e)(3)(ii))

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## 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))
- 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 devices 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 thermal oxidizer 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). (40 CFR 63.1281(f)(1)(i))
  - b. A 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 (CPMS). The CPMS 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 CPMS 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))
- 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 oxidizer 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 °C, or ±2.5 °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 °C,

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or ±2.5 °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 demonstrate the control device (condenser) achieves the performance requirements specified in SC IV.2 by electing to use the procedures documented in the GRI report entitled, "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions," (GRI-95/0368.1) as inputs for the model GRI-GLYCalc<sup>TM</sup>, Version 3.0 or higher, to generate a condenser performance curve. (40 CFR 63.1282(d)(5))
- 3. 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))
- 4. 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.10. 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 (1400 degrees F). (40 CFR 63.1282(d)(3)(vi)(B))
- 5. The permittee shall demonstrate the control device achieves the performance requirements specified in SC IV.2 by conducting a condenser design analysis that includes an analysis of the vent stream composition, constituent concentrations, flowrate, relative humidity, and temperature, and shall establish the design outlet organic compound concentration level, design average temperature of the condenser exhaust vent stream, and the

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design average temperatures of the coolant fluid at the condenser inlet and outlet. Documentation of the design analysis shall be submitted as a part of the Notification of Compliance Status Report as required in SC VII.6. If the permittee and the AQD do not agree on a demonstration of control device performance using a design analysis, then the disagreement shall be resolved using the results of a performance test performed by the permittee in accordance with the requirements of 40 CFR 63.1282(d)(3). The AQD may choose to have an authorized representative observe the performance test. (40 CFR 63.1282(d)(4))

- 6. 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))
- 7. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 7 days of the time and place before performance tests are conducted. (R 336.1213(3), R 336.2001(4))

#### VI. MONITORING/RECORDKEEPING

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

- 1. The 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<sup>™</sup>, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc<sup>™</sup> 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 determine glycol dehydration unit baseline operations (as defined in 40 CFR 63.1271). Records of glycol dehydration unit baseline operations shall be retained. (40 CFR 63.1275(b)(1)(iii)(C), 40 CFR 63.1281(e)(1), 40 CFR 63.1284(b)(9))
- 5. The permittee shall document, to the AQD's satisfaction, the conditions for which glycol dehydration unit baseline operations shall be modified to achieve the BTEX limit determined in SC I.1 through a combination of process

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modifications and one or more control devices. If a combination of process modifications and one or more control devices are used, the permittee shall also establish the emission reduction to be achieved by the control device to achieve the BTEX limit determined in SC I.1 for the small glycol dehydration unit process vent. Only modifications in glycol dehydration unit operations directly related to process changes, including but not limited to changes in glycol circulation rate or glycol-HAP absorbency, shall be allowed. Changes in the inlet gas characteristics or natural gas throughput rate shall not be considered in determining the overall emission reduction due to process modifications. (40 CFR 63.1275(b)(1)(iii)(C), 40 CFR 63.1281(e)(2))

- 6. The permittee shall maintain records that the facility continues to operate in accordance with the conditions specified in SC VI.5. (40 CFR 63.1275(b)(1)(iii)(C), 40 CFR 63.1281(e)(3)(i), 40 CFR 63.1284(b)(10))
- 7. 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))
- 8. 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 emissions unit operation is continuous, the operating day is a 24-hour period. If the emissions unit operation is not continuous, the operating day is the total number of hours of control device operation per 24-hour period. Valid data points must be available for 75 percent of the operating hours in an operating day to compute the daily average. 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.7. 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))
- 9. 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 CPMS 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(c)(1)
- 10. The permittee shall establish a site-specific condenser performance curve showing the relationship between condenser outlet temperature and condenser control efficiency. The permittee shall identify the minimum percent reduction necessary to meet the BTEX limit in SC I.1. The curve shall be established as follows: (40 CFR 63.1282(f)(1), 40 CFR 63.1283(d)(5)(ii))
  - a. If the permittee conducts a performance test in accordance with the requirements of SC V.1 to demonstrate that the condenser achieves the applicable performance requirements in SC IV.2 then the condenser performance curve shall be based on values measured during the performance test and supplemented as necessary by control device design analysis, or control device manufacturer's recommendations, or a combination or both. (40 CFR 63.1283(d)(5)(ii)(A))
- 11. The permittee must calculate the daily average condenser outlet temperature for each operating day using the data recorded by the monitoring system. If the emissions unit operation is continuous, the operating day is a 24-hour period. If the emissions unit operation is not continuous, the operating day is the total number of hours of control device operation per 24-hour period. Valid data points must be available for 75 percent of the operating hours in an operating day to compute the daily average. (40 CFR 63.1282(f)(2)(i), 40 CFR 63.1283(d)(4))

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12. The permittee shall determine the condenser efficiency for the current operating day using the daily average condenser outlet temperature calculated in SC VI.11 and the condenser performance curve established in SC VI.10. (40 CFR 63.1282(f)(2)(ii))

- 13. At the end of each operating day, the permittee shall calculate the 30-day average BTEX emission reduction from the condenser efficiencies as determined in SC VI.12 for the preceding 30 operating days. If the permittee uses a combination of process modifications and a condenser in accordance with the requirements of 40 CFR 63.1281(e), the 30-day average BTEX emission reduction, shall be calculated using the emission reduction achieved through process modifications and the condenser efficiency as determined in SC VI.12, both for the preceding 30 operating days. (40 CFR 63.1282(f)(2)(iii))
- 14. After the compliance date specified in 40 CFR 63.1270(d), the permittee that stores natural gas that has less than 30 days of data for determining the average BTEX emission reduction shall calculate the cumulative average at the end of the withdrawal season, each season, until 30 days of condenser operating data are accumulated. For a facility that does not store natural gas, the permittee that has less than 30 days of data for determining average BTEX emission reduction shall calculate the cumulative average at the end of the calendar year, each year, until 30 days of condenser operating data are accumulated. Compliance is achieved if the average BTEX emission reduction calculated is equal to or greater than the minimum percent reduction necessary to meet the BTEX emission limit as determined in SC VI.10. For the purposes of 40 CFR Part 63 Subpart HHH, a withdrawal season begins the first time gas is withdrawn from the storage field after July 1 of the calendar year and ends on June 30 of the next calendar year. Glycol dehydration units that are operated continuously have the option of complying with the requirements specified in 40 CFR 63.772(g). (40 CFR 63.1282(f)(2)(iii)(A-D))
- 15. Compliance is achieved if the average BTEX emission reduction calculated in SC VI.13 is equal to or greater than the minimum percent reduction identified in SC VI.10. (40 CFR 63.1282(f)(3)(ii))
- 16. 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))
- 17. 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.8. (40 CFR 63.1284(b)(4)(ii))
  - c. Records of the annual 30-day rolling average condenser efficiency determined in SC VI.13 shall be kept in addition to the daily averages. (40 CFR 63.1284(b)(4)(ii)(B))
  - d. Hourly records of the times and durations of all periods when the vent stream is diverted from the control device or the device is not operating. (40 CFR 63.1284(b)(4)(iii))
  - e. Where a seal or closure mechanism is used to comply with 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))
- 18. Each closed-vent system shall be inspected according to the procedures and schedule specified in SC VI.18.a and b. Each bypass device shall be inspected according to the procedures in SC VI.18.c. (40 CFR 63.1274(c), 40 CFR 63.1282(b), 40 CFR 63.1283(c)(1) and (2))

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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.10. (40 CFR 63.1283(c)(2)(i)(B))
- b. For closed-vent system components other than those specified in SC VI.18.a, the permittee shall: (40 CFR 63.1283(c)(2)(ii))
  - 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.13. (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.10. (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))
  - At the inlet to the bypass device that could divert the steam away from the control device to the atmosphere, set the flow indicator to take a reading at least once every 15 minutes; or (40 CFR 63.1283(c)(2)(iii)(A))
  - 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))
- 19. 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.20. 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))
- 20. 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))
- 21. 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.21.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.18.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))
- 22. 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.21.a or b if: (40 CFR 63.1274(c), 40 CFR 63.1283(c)(6))

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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))
- 23. 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.21, 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))
- 24. 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.22, 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))
- 25. For each inspection conducted in accordance with SC VI.18 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))
- 26. For each inspection conducted in accordance with SC VI.18, 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))
- 27. 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 30-day average condenser efficiency calculated according to the requirements of SC VI.13 is less than the identified 30-day required percent reduction. (40 CFR 63.1283(d)(6)(ii))
  - c. 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))

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d. 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))
- 28. 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))
  - 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))
- 29. 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))

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30. 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.27.c. (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.6-9. 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.6-9 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 condenser design analysis documentation specified in SC V.1 (Option 3) if the permittee elects to prepare a design analysis. (40 CFR 63.1285(d)(1)(i))
  - b. 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

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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))
- c. The results of the closed-vent system initial inspections performed according to the requirements in SC VI.18. (40 CFR 63.1285(d)(1)(iii))
- 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. Results of any continuous monitoring system performance evaluations shall be included in the Notification of Compliance Status Report. (40 CFR 63.1285(d)(5))
- 9. 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))
- 10. The permittee shall include the following information in semiannual Periodic Reports: (40 CFR 63.1285(e)(1), 0 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.27) shall be considered excess emissions. (40 CFR 63.1285(e)(2)(i))
  - b. A description of all excursions as defined in SC VI.27 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.27, 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 when the 30-day average condenser control efficiency is less than the value, as specified in SC VI.27, the report must include the 30-day average values of the condenser control efficiency, and the date and duration of the period that the excursion occurred. (40 CFR 63.1285(e)(2)(ii)(B))
    - iii. For each excursion caused by lack of monitoring data, as specified in SC VI.27, 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.18 during which a leak or defect is detected, the records specified in SC VI.28 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.17.d 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.17.e of all periods in

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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))
- g. Certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. (40 CFR 63.1285(e)(2)(xiii))
- 11. 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.10, 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))
- 12. If there was a malfunction during the reporting period, the Periodic Report specified in SC VII.10 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))
- 13. 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 <a href="http://www.epa.gov/ttn/chief/ert/index.html">http://www.epa.gov/ttn/chief/ert/index.html</a>). 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

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# 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)

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# FG-RCNEW5D>10 FLEXIBLE GROUP CONDITIONS

## **DESCRIPTION**

Requirements for new boilers and process heaters that are designed to burn gas 1 subcategory fuel with a heat input capacity of 10 MMBTU/hr or greater at major sources of HAP emissions per 40 CFR Part 63, Subpart DDDDD (Boiler MACT). Units designed to burn gas 1 subcategory fuels include boilers or process heaters that burn only natural gas, refinery gas, and/or Other Gas 1 fuels. Units that burn liquid fuel for testing or maintenance purposes for less than a total of 48 hours per year, or that burn liquid fuel during periods of curtailment or supply interruptions are included in this definition. Specifically for two gas withdrawal heaters rated at 25.5 MMBtu/hr.

Emission Unit: EULOREEDHTR1, EULOREEDHTR2

## **POLLUTION CONTROL EQUIPMENT**

NA

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

NA

II. MATERIAL LIMIT(S)

NA

## III. PROCESS/OPERATIONAL RESTRICTION(S)

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

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long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. (40 CFR 63.7540(a)(10)(v))

- 2. If the unit is not operated on the required date for the tune-up, the tune-up must be conducted within 30 calendar days of startup. (40 CFR 63.7540(a)(13)
- 3. At all times, the permittee must operate and maintain each existing gas 1 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. <u>DESIGN/EQUIPMENT PARAMETER(S)</u>

NA

#### V. TESTING/SAMPLING

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

NA

## VI. MONITORING/RECORDKEEPING

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

- 1. The permittee must keep a copy of each notification and report that the permittee submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or annual compliance report that the permittee submitted. (40 CFR 63.7555(a)(1))
- 2. If the permittee uses an alternative fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart under 40 CFR Part 63, Other Gas 1 fuel, or gaseous fuel subject to another subpart of 40 CFR Part 60 or Part 61, or Part 65, the permittee must keep records of the total hours per calendar year that alternative fuel is burned and the total hours per calendar year that the unit operated during periods of gas curtailment or gas supply emergencies. (40 CFR 63.7555(h))
- 3. The permittee shall maintain on-site and submit, if requested by the AQD, an annual tune-up report containing the information listed below.
  - a. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater. (40 CFR 63.7540(a)(10)(vi)(A))
  - b. A description of any corrective actions taken as a part of the tune-up. (40 CFR 63.7540(a)(10)(vi)(B))
  - c. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. (40 CFR 63.7540(a)(10)(vi)(C))
- 4. The permittee's records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). (40 CFR 63.7560(a))
- 5. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5-years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. (40 CFR 63.7560(b))
- 6. The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2-years after the date of each occurrence, measurement, maintenance, corrective

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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. If the permittee intends to use a fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart of 40 CFR Part 63, Part 60, Part 61, or Part 65, or Other Gas 1 fuel to fire the affected unit during a period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575, the permittee must submit a notification of alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575. The notification must include the information as listed below.
  - a. Company name and address. (40 CFR 63.7545(f)(1))
  - b. Identification of the affected unit. (40 CFR 63.7545(f)(2))
  - c. Reason the permittee is unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared, or the natural gas supply interruption began. (40 CFR 63.7545(f)(3))
  - d. Type of alternative fuel that the permittee intends to use. (40 CFR 63.7545(f)(4))
  - e. Dates when the alternative fuel use is expected to begin and end. (40 CFR 63.7545(f)(5))
- 5. The permittee must submit boiler and process heater tune-up compliance reports to the appropriate AQD District Office. The reports must be postmarked or submitted by March 15<sup>th</sup> and must cover the period of January 1 through December 31 of the reporting year. For new units, the first report should cover the period of startup to December 31 of the reporting year. Compliance reports must also be submitted to EPA using the Compliance and Emissions Data Reporting Interface (CEDRI) which is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). (40 CFR 63.7550(b))
- 6. The permittee must submit a compliance report containing the following information.
  - a. Company and Facility name and address. (40 CFR 63.7550(c)(5)(i))
  - b. Process unit information, emissions limitations, and operating parameter limitations. (40 CFR 63.7550(c)(5)(ii))
  - c. Date of report and beginning and ending dates of the reporting period. (40 CFR 63.7550(c)(5)(iii))
  - Include the date of the most recent tune-up for each unit. Include the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled or unscheduled unit shutdown. (40 CFR 63.7550(c)(5)(xiv))
  - e. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. (40 CFR 63.7550(c)(5)(xvii))
- 7. The permittee must submit all reports required by Table 9 of this subpart electronically using CEDRI that is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, submit the report to the EPA Region V at the appropriate address listed in 40 CFR 63.13 and to the appropriate AQD District Office. (40 CFR 63.7550(h)(3))

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See Appendix 8

# VIII. STACK/VENT RESTRICTION(S)

NA

# IX. OTHER REQUIREMENT(S)

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

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# FG-RC5D<10 FLEXIBLE GROUP CONDITIONS

## **DESCRIPTION**

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

#### **Emission Unit:**

Equal to or less than 5 MMBTU/hr and only burns gaseous or light liquid fuels	EURCBOILER3 (2.97 MMBTU/hr) EURCBOILER4 (2.97 MMBTU/hr) EULOREEDDEHY (0.85 MBTU/Hr - reboiler only) EURCSTRAYDEHY (2 MBTU/Hr - reboiler only)
Greater than 5 MMBTU/hr and less than 10 MMBTU/hr that burns gaseous or light liquid fuels or any unit that is less than 10 MMBTU/hr and burns any heavy liquid or solid fuels	NA

# **POLLUTION CONTROL EQUIPMENT**

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

## III. PROCESS/OPERATIONAL RESTRICTION(S)

- 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 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))

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 c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. The permittee may delay the inspection until the next scheduled unit shutdown. (40 CFR 63.7540(a)(10)(iii))

- d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any  $NO_X$  requirement to which the unit is subject. (40 CFR 63.7540(a)(10)(iv))
- e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. (40 CFR 63.7540(a)(10)(v))
- 3. 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))
- 4. 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. <u>DESIGN/EQUIPMENT PARAMETER(S)</u>

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))

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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 15<sup>th</sup> 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 for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, as specified in 40 CFR Part 63, Subparts A and DDDDD. (40 CFR Part 63, Subparts A and DDDDD)

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# FGRULE285(2)(mm) FLEXIBLE GROUP CONDITIONS

#### **DESCRIPTION**

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

**Emission Unit: EUPIPEMAINT** 

#### POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

## III. PROCESS/OPERATIONAL RESTRICTION(S)

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

#### IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

#### V. TESTING/SAMPLING

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

NA

#### VI. MONITORING/RECORDKEEPING

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

NA

## VII. REPORTING

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

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

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

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# **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).

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

<sup>\*</sup>For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 psig.

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## 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**

The following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced in FGMACTZZZZ.

ANR Pipeline Company requested that US EPA approve an Alternative Monitoring Method in accordance with 40 CFR, Part 63, Subpart ZZZZ (RICE MACT). On September 19, 2007 the USEPA approved and described the Alternative Monitoring Methods in the following letter.

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# UNITED STATES ENVIRONMENTAL PROTECTION AGENCY REGION 5

77 WEST JACKSON BOULEVARD CHICAGO, IL 60604-3590

REPLY TO THE ATTENTION OF:

AE-17J

SEP 1 9 2007

Juan J. Rios Senior Environmental Scientist ANR Pipeline Company P.O. Box 2446 Houston, Texas 77252-2446

Dear Mr. Rios:

The United States Environmental Protection Agency (U.S. EPA), Region 5, is in receipt of your July 18, 2007, letter addressed to Greg Fried, in which you formally request approval of alternate monitoring methods at three compressor stations. These stations - Woolfolk Compressor Station and Reed City Compressor Station in Michigan and St. John Compressor Station in Indiana - are subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines (RICE) at 40 C.F.R. Part 63, Subpart ZZZZ. Your request also includes alternate performance testing for the Reed City station. U.S. EPA's Office of Enforcement and Compliance Assurance has referred your request to my office for review.

ANR Pipeline Company (ANR) makes three specific requests for alternative monitoring. First, ANR requests that should a RICE at one of these compressor stations not be operating during a particular month, the company will not be required to start up the RICE for the sole purpose of recording the pressure drop across the catalyst, as normally required at 40 C.F.R. § 63.6640(a). This request is consistent with U.S. EPA's policy as articulated in its memorandum from Michael Alushin, dated September 30, 2005. Accordingly, U.S. EPA approves this request. ANR, however, must document periods when the RICE was not operating as required in 40 C.F.R. § 63.6650.

Second, ANR requests that, should a RICE be operated during a given month below the "target window" for percent load, it not be required to increase the load for the sole purpose of measuring the pressure drop. U.S. EPA approves this request pursuant to the Alushin memorandum; however, ANR will be required to measure the pressure drop once the load is increased to the target window, or when operations exceed 30 days (regardless of load), and to document the time periods when the RICE is operated below the target window in its semi-annual report.

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#### Appendix 4. Recordkeeping

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Third, ANR requests that, for a RICE that can never be operated at the target window, it monitor the pressure drop when the established lower-load baseline (see discussion below) is achieved in any given month. This is acceptable to U.S. EPA for NESHAP compliance purposes only. U.S. EPA recommends monthly pressure drop measurements when the units are operating to assure catalyst performance, even if the units are operating at a reduced load below the target window. Also, please be aware that State agencies may require additional monitoring for other purposes, and that this determination does not obviate the need to comply with any applicable State requirements.

ANR also requested an alternative test method for its two 660 horsepower RICE at Reed City. The NESHAP at 40 C.F.R. § 63.6620 requires performance tests be conducted at any load condition within plus or minus 10 percent of 100 percent load. ANR wishes to test these units at 50 to 80 percent full load. These RICE, according to ANR, do not have the ability to operate at full load due to restrictive operating parameters associated with the gas service that they support. The additional information you supplied by means of electronic mail on August 30, 2007, indicates that an attempt to test at full load would cause undesirable pipeline pressures, thus causing pressure relief valves to be activated, and service to shut down.

This request is acceptable provided that ANR establishes a lower maximum load rate and appropriate differential pressure ranges for the reduced load. Please contact Allen Retlewski of the Michigan Department of Environmental Quality's Cadillac District Office, at (231) 775-3960; to discuss details related to establishing the correct parameters and incorporating them into the facility permits as necessary.

If you have any questions, feel free to contact Jeffrey Gahris, of my staff, at (312) 886-6794.

Sincerely yours,

George T. Czerniak, Chief

Air Enforcement and Compliance Assurance Branch

cc: Janis Denman, Supervisor, Cadillac District
Michigan Department of Environmental Quality

Heidi Hollenbach, Supervisor, Grand Rapids District Michigan Department of Environmental Quality

Dave Cline, Chief, Compliance Data Section Indiana Department of Environmental Management

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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-B3721-2014. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (\*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-B3721-2014a is being reissued as Source-Wide PTI No. MI-PTI-B3721-20XX.

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 EURCO24 and EULOREEDDEHY.

## A. Glycol Dehydration Systems, Tables EURCSTRAYDEHY and EULOREEDDEHY

VOC emissions 
$$\left(\frac{\text{pounds}}{\text{day}}\right) = \frac{\text{MMscf of natural gas processed}}{\text{day}} \times \text{EF}$$

VOC emissions  $\left(\frac{\text{tons}}{\text{month}}\right) = \frac{\text{MMscf of natural gas processed}}{\text{month}} \times \text{EF } \times \frac{1 \text{ ton}}{2000 \text{ pounds}}$ 

Benzene emissions  $\left(\frac{\text{tons}}{\text{month}}\right) = \frac{\text{MMscf of natural gas processed}}{\text{month}} \times \text{EF } \times \frac{1 \text{ ton}}{2000 \text{ pounds}}$ 

Where EF is an emission factor expressed as pounds of VOC or benzene emitted per million cubic feet of gas processed. EF is based on calculations from the GRI-GLYCalc™ computer model as provided to the Air Quality Division by the permittee. However, EF shall be recalculated, using GRI-GLYCalc™ Version 3.0 or higher, after each gas sampling. Inputs to the GRI-GLYCalc™ shall be representative of actual operating conditions of the glycol dehydration unit. The calculated EF is subject to approval by the District Supervisor of the Air Quality Division.

#### B. Glycol Dehydration Systems, Tables EULOREEDDEHY

$$T + 5.7C \le \frac{6800 \text{ hours}}{12 \text{ month rolling time period}}$$

Where:

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T = hours of operation per 12-month rolling time period with the thermal oxidizer as the glycol regenerator still primary control device.

C = hours of operation per 12-month rolling time period with the condenser as the glycol regenerator still primary control device

#### C. FGMACTHHH

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

#### Equation 1:

EL<sub>BTEX</sub> = 3.10 x 10<sup>-4</sup> \* Throughput \* 
$$C_{i,BTEX}$$
 \*  $\frac{1 \text{ Mg}}{y_{ear}}$  \*  $\frac{1 \text{ Mg}}{1 \text{ x } 10^6 \text{ grams}}$ 

#### Where:

EL<sub>BTEX</sub> = Unit-specific BTEX emission limit, megagrams per year;

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

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

Ci,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.