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Michigan Department of Environmental Quality Air Quality Division

EFFECTIVE DATE: February 6, 2014

REVISION DATE: November 16, 2015

**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-B3721-2014a

Expiration Date: February 6, 2019

Administratively Complete ROP Renewal Application Due Between: August 6, 2017 and August 6, 2018

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 Michigan Air Pollution Control Rule 210(1), 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-B3721-2014a

This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(5) of Act 451. Pursuant to Michigan Air Pollution Control Rule 214a, 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 Environmental Quality

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Janis Ransom, Cadillac District Supervisor

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# AUTHORITY AND ENFORCEABILITY

For the purpose of this permit, the **permittee** is defined as any person who owns or operates an emission unit at a stationary source for which this permit has been issued. The **department** is defined in Rule 104(d) as the Director of the Michigan Department of Environmental Quality (MDEQ) 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 will be identified for each ROP term or condition. All terms and conditions that are included in a PTI, are streamlined or subsumed, 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 requirement requires a more detailed schedule of compliance.

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

# A. GENERAL CONDITIONS

### Permit Enforceability

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

#### **General Provisions**

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

and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the USEPA together with a claim of confidentiality. (R 336.1213(1)(e))

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

# Equipment & Design

- 9. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2). (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. Except as provided in Subrules 2, 3, and 4 of Rule 301, states in part; "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 Rule 301(1)(a) or (b) unless otherwise specified in this ROP." The grading of visible emissions shall be determined in accordance with Rule 303. (R 336.1301(1) in pertinent part):
  - a. A 6-minute average of 20 percent opacity, except for one 6-minute average per hour of not more than 27 percent opacity.
  - b. A limit specified by an applicable federal new source performance standard.
- 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.<sup>1</sup> (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). **(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(4))

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

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

# Permit Shield

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

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

- 27. Nothing in this ROP shall alter or affect any of the following:
  - a. The provisions of Section 303 of the CAA, emergency orders, including the authority of the USEPA under Section 303 of the CAA. (R 336.1213(6)(b)(i))
  - b. The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this ROP issuance. (R 336.1213(6)(b)(ii))
  - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. (R 336.1213(6)(b)(iii))
  - d. The ability of the USEPA to obtain information from a source pursuant to Section 114 of the CAA. (R 336.1213(6)(b)(iv))

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

# Revisions

- 30. For changes to any process or process equipment covered by this ROP that do not require a revision of the ROP pursuant to Rule 216, the permittee must comply with Rule 215. **(R 336.1215, R 336.1216)**
- 31. A change in ownership or operational control of a stationary source covered by this ROP shall be made pursuant to Rule 216(1). (R 336.1219(2))
- 32. For revisions to this ROP, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in Rule 216. (R 336.1210(9))
- 33. Pursuant to Rule 216(1)(b)(iii), Rule 216(2)(d) and Rule 216(4)(d), after a change has been made, and until the department takes final action, the permittee shall comply with both the applicable requirements governing the change and the ROP terms and conditions proposed in the application for the modification. During this time period, the permittee may choose to not comply with the existing ROP terms and conditions that the application seeks to change. However, if the permittee fails to comply with the ROP terms and conditions proposed in the application during this time period, the terms and conditions in the ROP are enforceable. (R 336.1216(1)(c)(iii), R 336.1216(2)(d), R 336.1216(4)(d))

# Reopenings

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

# Renewals

35. For renewal of this ROP, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the ROP. (R 336.1210(7))

#### 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, Part 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, Part 68.10(a):
  - a. June 21, 1999,
  - b. Three years after the date on which a regulated substance is first listed under 40 CFR, Part 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**

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

# Permit To Install (PTI)

- 43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule.<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, MDEQ.<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, or has been interrupted for 18 months, the applicable terms and conditions from that PTI 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, MDEQ, 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>2</sup>This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

# **B. SOURCE-WIDE CONDITIONS**

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

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

# C. EMISSION UNIT CONDITIONS

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

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

# EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EURC001	Kewanee boiler L3W-200-G, 8MMBtu/hr	Pre - 6/04/2010	FGMACTDDDDD -EXISTINGGAS1
EURC002	White Superior 8GT825 Compressor Engine #1, 1000hp natural gas fired 4SLB reciprocating internal combustion engine used to compress natural gas.	1/1/1964	FGRC001
EURC003	White Superior 8GT825 Compressor Engine #2, 1000hp natural gas fired 4SLB reciprocating internal combustion engine used to compress natural gas.	1/1/1964	FGRC001
EURC004	White Superior 8GT825 Compressor Engine #3, 1000hp natural gas fired 4SLB reciprocating internal combustion engine used to compress natural gas.	1/1/1965	FGRC001
EURC005	White Superior 8GT825 Compressor Engine #4, 1000hp natural gas fired 4SLB reciprocating internal combustion engine used to compress natural gas.	1/1/1965	FGRC001
EURC006	Ingersol-Rand KVS Compressor Engine #5, 2000hp natural gas fired 4SLB reciprocating internal combustion engine used to compress natural gas.	1/1/1965	FGRC001
EURC007	Ingersol-Rand KVS Compressor Engine #6, 2000hp natural gas fired 4SLB reciprocating internal combustion engine used to compress natural gas.	1/1/1965	FGRC001
EURC008	Clark TCVD 16M Compressor Engine #7, 8600hp natural gas fired 2SLB reciprocating internal combustion engine used to compress natural gas.	1/1/1973	FGRC001
EURC011	White Superior 8G825 Compressor Engine #11, 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.	1/1/1963	FGRC001 FGMACTZZZZ
EURC012	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.	1/1/1963	FGRC001 FGMACTZZZZ
EURC015	Loreed glycol dehydration system removes water from the natural gas. 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.	1/1/1968	FGMACTHHH

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EURC016	Gas withdrawal heater, 25.5 MMBtu/hr	12/2013	FGMACTDDDDD -NEWGAS1
EURC017	Gas withdrawal heater, 25.54 MMBtu/hr	12/2013	FGMACTDDDDD -NEWGAS1
EURC019	Caterpillar G379 4SRB 355 hp emergency generator.	1973	FGMACTEMER- GENCY
EURC020	Waukesha L1616GSIU 4SRB 475 hp emergency generator.	1979	FGMACTEMER- GENCY
EURC024	Reed City Stray glycol dehydration system removes water from the natural gas. 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	1/1/1979	FGMACTHHH
EURC025	Maintenance garage boiler, 0.125 MMBtu/hr, to provide hot water for maintenance work.	Pre 6/04/2010	FGMACTDDDDD -EXISTINGGAS1

# EURC015 EMISSION UNIT CONDITIONS

# DESCRIPTION

EURC015 – Loreed glycol dehydration system. System includes flash vessel, heat exchangers and filters, distillation column and a reboiler surge tank.

Flexible Group ID: NA

# POLLUTION CONTROL EQUIPMENT

Thermal oxidizer with condenser as backup.

# I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	VOC	295 lb/day <sup>2</sup>	Calendar day.	EURC015	Conditions V.1, VI.3	R 336.1901 R 336.1702(a)
2.	VOC	19 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month.	EURC015	Conditions V.1, VI.3	R 336.1702(a)
3.	Benzene	less than 1 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month.	EURC015	Conditions V.1, VI.4	R 336.1205(1),

#### II. MATERIAL LIMIT(S)

NA

# III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall not operate EURC015 unless it is equipped with a thermal oxidizer and the thermal oxidizer is operating properly, except as specified in condition 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 336.1910, R 336.1901, R 336.1702(a), R 336.1205(1))
- 2. If the thermal oxidizer malfunctions, the permittee may operate EURC015 if it is equipped with a condenser and the condenser is installed and operating properly. When EURC015 is controlled by the condenser, the permittee shall not operate EURC015 unless the condenser exhaust gas temperature is maintained at 120°F or less.<sup>2</sup> (R 336.1910, R 336.1901, R 336.1702(a), R 336.1205(1))
- 3. The permittee shall not operate EURC015, unless a flash tank is installed and operating properly including routing the flash tank emissions to the glycol dehydrator reboiler burner and/or thermal oxidizer for destruction as fuel.<sup>2</sup> (R 336.1910, R 336.1901, R 336.1702(a), R 336.1205(1))
- 4. The permittee shall limit the hours of operation of EURC015 to 6800 hrs/12 month rolling time period.<sup>2</sup> (R 336.1702(a), R 336.1901, R 336.1205(1))
- 5. The permittee shall not use stripping gas in EURC015.<sup>2</sup> (R 336.1702(a), R 336.1205(1), R 336.1901)

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

#### V. TESTING/SAMPLING

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

 The permittee shall analyze the natural gas processed in EURC015 to determine its VOC and benzene content and composition once every five years. VOC and benzene 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. (R 336.1213(3)(a))

#### VI. MONITORING/RECORDKEEPING

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

- The permittee shall continuously monitor the operating temperature of the thermal oxidizer and record the operating temperature on a daily basis when EURC015 is operating.<sup>2</sup> (R 336.1205(1), R 336.1901, R 336.1702(a), R 336.1213(3)(a))
- 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 EURC015.<sup>2</sup> (R 336.1205(1), R 336.1901, R 336.1702(a) R 336.1213(3)(a))
- 3. The permittee shall calculate and record the VOC emission rate from EURC015 for each day, calendar month, and 12-month rolling time period using the equation in Appendix 7.<sup>2</sup> (R 336.1205(1), R 336.1901, R 336.1702(a) R 336.1213(3)(a))
- 4. The permittee shall calculate and record the benzene emission rate from EURC015 for each calendar month and 12-month rolling time period using the equation in Appendix 7.<sup>2</sup> (R 336.1205(1) R 336.1213(3)(a))
- 5. The permittee shall monitor and record the hours of operation of EURC015 for each calendar month and 12month rolling time period while the condenser is the primary control device and while the thermal oxidizer is the primary control device.<sup>2</sup> (R 336. R 336.1205(1), R 336.1901, R 336.1702(a) R 336.1213(3)(a))
- The permittee shall monitor and record the total hours of operation of the EURC015 for each calendar month and 12-month rolling time period using the equation in Appendix 7.<sup>2</sup> (R 336.1205(1), R 336.1901, R 336.1702(a) R 336.1213(3)(a))
- 7. The permittee shall monitor and record the amount of natural gas processed through EURC015 on a daily basis. (R 336.1205(1), R 336.1702(a) R 336.1213(3)(a))

See Appendix 7

# VII. <u>REPORTING</u>

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

#### See Appendix 8

# VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID		Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1.	SVRC015A	NA	35 <sup>1</sup>	R 336.1901
2.	SVRC015B	4 <sup>1</sup>	35 <sup>1</sup>	R 336.1901

# IX. OTHER REQUIREMENT(S)

NA

#### 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).

# EURC024 EMISSION UNIT CONDITIONS

### DESCRIPTION

EURC024 – Reed City Stray glycol dehydration system removes water from the natural gas. System includes flash vessel, heat exchangers and filters, distillation column and a reboiler surge tank.

Flexible Group ID: NA

# POLLUTION CONTROL EQUIPMENT

Thermal Oxidizer with Condenser as back up

#### I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	VOC	90 lbs/day <sup>2</sup>	Calendar day	EURC024	Conditions V.1, VI.3	R 336.1901 R 336.1702(a)
2.	VOC	15.4 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month.	EURC024	Conditions V.1, VI.3	R 336.1702(a)
3.	Benzene	less than 1 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month.	EURC024	Conditions V.1, VI.4	R 336.1205(1)

#### II. MATERIAL LIMIT(S)

NA

#### III. PROCESS/OPERATIONAL RESTRICTIONS

- The permittee shall not operate EURC024 unless it is equipped with a thermal oxidizer and the thermal oxidizer is installed and operating properly, except as specified in condition 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 336.1910, R 336.1901, R 336.1702(a), R 336.1205(1))
- 2. If the thermal oxidizer malfunctions, the permittee may operate EURC024 if it is equipped with a condenser and the condenser is installed and operating properly. The permittee shall not operate EURC024 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 EURC024's primary control device. When the condenser is the primary control device for EURC024, the permittee shall not operate EURC024 unless the condenser exhaust gas temperature is 115°F or less.<sup>2</sup> (R 336.1910, R 336.1901, R 336.1702(a), R 336.1205(1))
- 3. The permittee shall not operate EURC0024, unless a flash tank is installed and operating properly including routing the flash tank emissions to the glycol dehydrator reboiler burner and/or thermal oxidizer for destruction as fuel.<sup>2</sup> (R 336.1910, R 336.1901, R 336.1702(a), R 336.1205(1))
- 4. The permittee shall not use stripping gas in EURC024.<sup>2</sup> (R 336.1205(1), R 336.1901, R 336.1702(a), R 336.1213(3))

#### IV. DESIGN/EQUIPMENT PARAMETERS

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

#### V. TESTING/SAMPLING

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

 The permittee shall analyze the natural gas processed in EURC024 to determine its VOC and benzene content and composition once every five years. VOC and benzene 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. (R 336.1213(3)(a))

#### VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall continuously monitor the operating temperature of the thermal oxidizer and record the operating temperature on a daily basis when EURC024 is operating.<sup>2</sup> (R 336.1205(1), R 336.1901, R 336.1702(a), R 336.1213(3)(a))
- 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 EURC024.<sup>2</sup> (R 336.1205(1), R 336.1901, R 336.1702(a) R 336.1213(3)(a))
- 3. The permittee shall calculate and record the VOC emission rate from EURC024 for each day, calendar month, and 12-month rolling time period using the equation in Appendix 7.<sup>2</sup> (R 336.1205(1), R 336.1901, R 336.1702(a), R 336.1213(3)(a))
- The permittee shall calculate and record the benzene emission rate from EURC024 for each calendar month and 12-month rolling time period using the equation in Appendix 7.<sup>2</sup> (R 336.1205(1), R 336.1901, R 336.1702(a), R 336.1213(3)(a))
- 5. The permittee shall monitor and record the hours of operation of EURC024 for each calendar month and 12month rolling time period while the condenser is the primary control device.<sup>2</sup> (R 336.1205(1), R 336.1901, R 336.1702(a), R 336.1213(3)(a))
- 6. The permittee shall monitor and record the amount of natural gas processed through EURC024 on a daily basis.<sup>2</sup> (R 336.1205(1), R 336.1901, R 336.1702(a), R 336.1213(3)(a))

#### See Appendix 7

#### VII. <u>REPORTING</u>

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

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

#### See Appendix 8

# VIII. STACK/VENT RESTRICTION(S)

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

	Stack & Vent ID	Maximum Exhaust 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)

NA

#### 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).

# D. FLEXIBLE GROUP CONDITIONS

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

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

# FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGRC001	(9) Compressor engines.	EURC002, EURC003, EURC004, EURC005, EURC006, EURC007, EURC008, EURC011, EURC012
FGMACTZZZZ	(2) White Superior 660 Hp Engines subject to 40 CFR, Part 63, Subpart ZZZZ	EURC011, EURC012
FGMACTEMERGEN CY	One Caterpillar G379 4SRB 355 hp emergency generator and one Waukesha L1616GSIU 4SRB 475 hp emergency generator.	EURC019, EURC020
FGMACTHHH	(2) Glycol dehydration systems.	EURC015, EURC024
FGMACTDDDDD- EXISTINGGAS1	(2) Existing natural gas fired boilers and process Heaters.	EURC001, EURC025
FGMACTDDDDD- NEWGAS1	(2) New 25.5MMBtu natural gas fired gas withdrawal heaters.	EURC016, EURC017

# FGRC001 FLEXIBLE GROUP CONDITIONS

# DESCRIPTION

FGRC001; Four White Superior 8GT825 1000 hp natural gas fired 4SLB RICE, Two Ingersol-Rand KVS 2000hp natural gas fired 4SLB RICE, One Clark TCVD 16M 8600 hp natural gas fired 2SLB RIC, Two White Superior 8G825 660HP natural gas fired 4SRB RICE. E.

**Emission Units:** EURC002, EURC003, EURC004, EURC005, EURC006, EURC007, EURC008, EURC011, EURC012,

#### POLLUTION CONTROL EQUIPMENT

Non-selective catalytic reduction (NSCR) (EURC011 and EURC012)

#### 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 336.1201(3))`

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

NA

#### V. TESTING/SAMPLING

NA

#### VI. MONITORING/RECORDKEEPING

NA

#### VII. <u>REPORTING</u>

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

ROP No: MI-ROP-B3721-2014a Expiration Date: February 6, 2019 PTI No.: MI-PTI-B3721-2014a

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

#### See Appendix 8

# VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

# IX. OTHER REQUIREMENT(S)

NA

#### 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).

# FGMACTZZZZ FLEXIBLE GROUP CONDITIONS

# DESCRIPTION

The facility uses two, four stroke, rich burn, natural gas-fired reciprocating internal combustion compressor engines (RICE) with a site-rating of 660 horsepower each to compress natural gas to recycle gas captured from the storage field liquid handling system. These MACT subject engines are used as needed to regulate flow to and from the storage field.

**Emission Units:** EURC011 and EURC012

# POLLUTION CONTROL EQUIPMENT

Non-selective catalytic reduction (NSCR).

#### I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	Formaldehyde	76% reduction		EURC011 and	Conditions V.1,	40 CFR
	,			EURC012	VI.4	63.6600(a)

#### II. MATERIAL LIMIT(S)

NA

# III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall be in compliance with the applicable emission and operating limitations at all times, except the requirement to reduce formaldehyde emissions by 76 percent or more does not apply during periods of start-up. (40 CFR 63.6600, 40 CFR 63.6605(a), Table 1a to Subpart ZZZZ of Part 63)
- The permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standard applicable to all times other than startup in Condition I.1 above apply.
   (40 CFR 63.6625(h))
- The permittee shall not operate EURC011 or EURC012, unless the catalyst system is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes the following: (R 336.1213(3), 40 CFR 63.6600(a), 40 CFR 63.6605(b), Table 1b to Subpart ZZZZ of Part 63, Table 6 to Subpart ZZZZ of Part 63)
  - 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 EURC011 at no more than 75% load (+10 percent).
  - d. Operating EURC012 at no more than 87% load (+10 percent).

#### 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))

- 1. If the catalyst is changed, the permittee shall re-establish the operating parameters measured during the initial performance test and conduct a subsequent performance test to demonstrate compliance with the applicable emission limitation. The permittee shall determine compliance with the percent reduction requirements using Equation 1 in 40 CFR 63.6620(e). **(40 CFR 63.6620, 40 CFR 63.6640(b))**
- 2. If the permittee chooses to limit the concentration of formaldehyde in the stationary RICE exhaust, the permittee shall conduct performance tests semiannually as specified in Table 3, Item 3 in accordance with Table 4 Item 3 of Subpart ZZZZ. If the permittee chooses to comply with the ≥ 76 percent reduction formaldehyde emission limit, the permittee shall conduct performance tests when a catalyst is changed in accordance with Table 4 Item 2 of Subpart ZZZZ. (40 CFR 63.6615, 40 CFR 63.6620, 40 CFR 63.6640(b), Table 3 and Table 4 to Subpart ZZZZ of Part 63)

### VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall install a continuous parameter monitoring systems (CPMS) consisting of a catalyst inlet temperature monitor for EURC011 and EURC012. (40 CFR 63.6625(b), R 336.1213(3))
  - a. Operate and maintain each catalyst inlet temperature monitor in continuous operation according to the procedures in the site-specific monitoring plan.
  - b. The catalyst inlet temperature monitoring system must collect data at least once every 15-minutes
  - c. The temperature sensor must have a minimum tolerance of 2.8 degrees Celsius (5 degrees F) or 1 percent of the measurement range, whichever is larger.
  - d. The catalyst inlet temperature monitor performance evaluation, system accuracy audit, or other audit procedures specified in the site-specific monitoring plan must be conducted in accordance with the site specific monitoring plant at least annually.
- 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. 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 may not be used. All the valid data collected during all other periods must be used.
  (40 CFR 63.6625)
- 3. The permittee shall keep the following records which shall be made available to the Department upon request. (40 CFR 63.6655(a) and (b), R 336.1213(3))
  - a. A copy of each notification and report submitted to comply with Subpart ZZZZ, and the documentation supporting any notification.
  - b. Records of performance tests and evaluations as required in 40 CFR 63.10(b)(2)(viii).
  - c. For each CPMS, records described in 40 CFR 63.10(b)(2)(vi) through (xi).
  - d. For each CPMS, previous versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3).
  - e. Records of the occurrence and duration of each malfunction of process equipment or the air pollution control and monitoring equipment as required in 40 CFR 63.6655(a)(2).
  - f. Records of all required maintenance performed on the air pollution control and monitoring equipment.
  - g. Records of actions taken during periods of malfunction to minimize emissions in accordance with <u>63.6605(b)</u>, including corrective action to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation as required in 40 CFR 63.6655(a)(5).

- 4. The permittee shall demonstrate continuous compliance with each applicable emission and operating limitation according to methods specified in Table 6 to 40 CFR, Part 63, Subpart ZZZZ. The methods described below will be used to demonstrate compliance with the requirement to reduce formaldehyde emissions from EURC011 and EURC012 using NSCR. (40 CFR 63.6640(a) and Table 6 of Subpart ZZZZ of Part 63, R 336.1213(3)
  - a. Collect the catalyst inlet temperature data once every 15 minutes;
  - b. Reduce these data to 4-hour rolling averages;
  - c. Maintain the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature;
  - d. Measure the pressure drop across the catalyst once per month and demonstrate that the pressure drop across the catalyst does not change by more than two inches of water from the pressure drop established during the most recent performance test.
  - e. Monitoring of pressure drop across the catalysts for EURC011 and EURC12 shall comply with the United States Environmental Protection Agency (USEPA) approved Alternative Monitoring Methods.

#### See Appendix 3

#### VII. <u>REPORTING</u>

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 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))
- 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))
- No less than 60 days prior to testing, permittee must submit written notification of the intention to conduct performance testing and a complete site specific performance evaluation test plan shall be submitted to the AQD, as required in 63.7(b)(1). The final plan must be approved by the AQD prior to the scheduled testing. (40 CFR 63.7 (b)(i), 40 CFR 63.6645(g))
- 5. No less than 60 days following the last date of the test, permittee must submit a complete report of the test results to the AQD. (R 336. 2001(5))
- 6. The permittee shall submit to the AQD District Supervisor, a semi-annual compliance report, as specified in 40 CFR 63.6650 and Table 7 to Subpart ZZZZ of Part 63, which contains all deviations during the reporting period from any applicable emission limitation or operating limitation and all periods during which the CPMS for EURC011 or EURC012 was out of control as defined in 40 CFR 63.8(c)(7). If there were no deviations from any applicable emission limitations or operating limitations or no periods that the CPMS was out of control, the report shall contain a statement that there were no deviations and no periods during which the CPMS was out of control during the reporting period. (40 CFR 63.6640(b)40 CFR 63.6650(a), 40 CFR 63.6650(e), 40 CFR 63.8(c)(7))
- Each semi-annual compliance report must cover the semi-annual period from January 1 through June 30, or from July 1 through December 31. The reports must be postmarked or delivered to the AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. The compliance report must also contain the information, as specified in 40 CFR 63.6650 (c) and (e). (40 CFR 63.6650(b))

#### See Appendix 8

# VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

# IX. OTHER REQUIREMENT(S)

- 1. The permittee shall develop and maintain a site-specific monitoring plan that addresses the following requirements. (40 CFR 63.6625(b)(1))
  - a. Installation of the catalyst inlet temperature monitor or other interface at the appropriate location to obtain representative measurements.
  - b. Performance and equipment specifications for the sample interface, parametric signal analyzer, and the data collection and reduction systems.
  - c. Performance evaluation procedures and acceptance criteria.
  - d. Ongoing operation and maintenance procedures in accordance with the general requirements of 63.8(c)(1)(ii) and (c)(3).
  - e. Ongoing data quality assurance procedures in accordance with the general requirements of 63.8(d).
  - f. Ongoing recordkeeping and reporting procedures in accordance with the general requirements of 63.10(c), (e)(1), and (e)(2)(i).
- The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subpart A and Subpart ZZZZ, for Stationary Reciprocating Internal Combustion Engines. (40 CFR, Part 63, Subparts A and ZZZZ)

# FGMACTEMERGENCY FLEXIBLE GROUP CONDITIONS

# DESCRIPTION

One Caterpillar G379 4SRB 355hp emergency generator and one Waukesha L1616GSIU 4SRB 475 hp emergency generator.

Emission Units: EURC019, EURC020

#### POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

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

- 1. The permittee may operate FGMACTEMERGENCY as necessary during emergencies with no time limit. (40 CFR 63.6640(f)(1))
- 2. The permittee may operate FGMACTEMERGENCY for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the engine manufacturer or vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engines. Maintenance checks and readiness testing is limited to 100 hours per calendar year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year. (40 CFR 63.6640(f)(2)(i))
- 3. The permittee may operate FGMACTEMERGENCY for up to 50 hours per engine per calendar year in nonemergency situations. The 50 hours are counted as part of the 100 hours of operation allowed under condition III.2. The 50 hours cannot be used for peak shaving, or non-emergency demand response or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. (40 CFR 63.6640(f)(3))
- 4. The permittee must operate and maintain FGMACTEMERGENCY according to the manufacturer's emissionrelated written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR 63.6625(e))
- 5. The permittee must comply with the following operational requirements:
  - a. Change oil and filter every 500 hours of operation or annually, whichever comes first, except as allowed in condition III.6;
  - b. Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first and replace as necessary;
  - c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary

If FGMACTEMERGENCY is being operated during an emergency and it is not possible to shut down an engine to perform the work practice standards on the schedule required the work practice standard can be delayed until the emergency is over. The work practice should be performed as soon as practicable after the emergency has ended. The permittee must report any failure to perform the work practice on the schedule required. **(40 CFR 63.6602, 40 CFR, Part 63, Subpart ZZZZ, Table 2c, Item 6)** 

- 6. The permittee has the option of utilizing an oil analysis program in order to extend the specified oil change requirement in condition III.5. The oil analysis must be performed at the same frequency specified for changing the oil in condition III.5. The oil analysis shall test for the following limits:
  - a. Total Acid Number has increased by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new;
  - b. Viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or
  - c. Percent water content (by volume) is greater than 0.5%.

If any of the limits are exceeded, the permittee must change the oil within 2 business days of receiving the results of the analysis. If the engine is not in operation when the results of the analysis are received, the permittee must change the oil within 2 business days or before commencing operation, whichever is later. The analysis program must be part of the maintenance plan for FGMACTEMERGENCY. **(40 CFR 63.6625(j))** 

- The permittee shall minimize each 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.
   (40 CFR 63.6625(h))
- 8. The permittee must be in compliance with the emission limitations and operating limitations in this subpart that apply to FGMACTEMERGENCY at all times. **(40 CFR 63.6605(a))**
- 9. The permittee at all times must operate and maintain FGMACTEMERGENCY in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make 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 FGMACTEMERGENCY. (40 CFR 63.6605(b))

# IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip each engine in FGMACTEMERGENCY with a non-resettable hour meter. (R 336.1213(3), 40 CFR 63.6625(f))

# V. TESTING/SAMPLING

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 keep the following records: (40 CFR 63.6655)
  - a. A copy of each notification and report submitted to comply with Subpart ZZZZ of Part 63, including all documentation supporting any Initial Notification or Notification of Compliance status, according to the requirements of 40 CFR 63.10(b)(2)(xiv).
  - b. Records of the occurrence and duration of each malfunction of the engines of FGMACTEMERGENCY.
  - c. 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 equipment to its normal or usual manner of operation.
  - d. Records to demonstrate continuous compliance with operating limitations in condition III.5.
  - e. Keep records of the maintenance conducted on FGMACTEMERGENCY in order to demonstrate that FGMACTEMERGENCY are operated and maintained according to the maintenance plan.

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- f. Records of hours of operation recorded through the non-resettable hour meter. The permittee shall document how many hours were spent during emergency operation; including what classified the operation as emergency and how many hours were spent during non-emergency operation.
- 2. The permittee must keep records of the parameters that are analyzed as part of the oil analysis program in Condition III.6, the results of the analysis, and the oil changes for the engine. (40 CFR 63.6625(j))

### VII. <u>REPORTING</u>

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 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))
- Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

#### See Appendix 8

#### VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

#### IX. OTHER REQUIREMENT(S)

 The permittee shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR, Part 63, Subparts A and ZZZZ for Stationary Reciprocating Internal Combustion Engines by the initial compliance date of October 19, 2013. (40 CFR, Part 63, Subparts A and ZZZZ)

#### 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).

# FGMACTHHH FLEXIBLE GROUP CONDITIONS

# DESCRIPTION

Two affected small glycol dehydration units as defined in 40 CFR 63.1271 constructed prior to August 23, 2011 which must attain compliance with the requirements in 40 CFR, Part 63, Subpart HHH by October 15, 2015.

Emission Units: EURC015, EURC024

#### POLLUTION CONTROL EQUIPMENT

Condenser, thermal oxidizer

#### I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. BTEX	Calculated using the equation in Appendix 7	Annual	EURC015 EURC024	Conditions V.2,V.4, VI.9, V.5	40 CFR 63.1275(b)(1)(iii)

#### II. MATERIAL LIMIT(S)

NA

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

- 1. The process vents from EURC015 and EURC024 shall be vented to a control device or a combination of control devices through a closed-vent system. (40 CFR 63.1275(b)(1)(iii)(A))
- 2. The control device(s) shall be one of those specified below and must be designed and operated in accordance with the following requirements: (40 CFR 63.1281(f)(1))
  - a. A thermal oxidizer that reduces the concentration of BTEX to meet the emission limit in Condition I.1, or the TOC or total HAP concentration in the exhaust gases at the outlet of the incinerator is reduced to a level equal to or less than 20 ppmv on a dry basis corrected to 3% oxygen.
  - 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 by 95%.
- The permittee shall control HAP emissions from each GCG separator (flash tank) vent unless BTEX emissions from the reboiler vent and the flash tank are reduced to a level less than the limit in Condition I.1. (40 CFR 63.1275(c)(3))
- 4. The permittee shall operate and maintain 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. (40 CFR 63.1274(h))

- 5. The permittee shall operate each control device in accordance with the requirements specified below: (40 CFR 63.1281(f)(2))
  - a. Each control device used to comply with 40 CFR Part 63 Subpart HHH shall be operating at all times. More than one unit may be vented to a control device.
  - b. For each control device monitored in accordance with the requirements of Conditions VI.8 13, the permittee shall demonstrate compliance according to the requirements of Condition VI.2 (§ 63.1282(e)).
- 6. When using a condenser to demonstrate continuous compliance with emission limits the control device shall be operated at a maximum operating temperature established in accordance with the requirements of Condition VI.8. When using a thermal oxidizer to demonstrate continuous compliance with emission limits the control device shall be operated at the minimum operating temperature established in accordance with the requirements of Condition VI.8 or a minimum of 1400°F. (40 CFR 63.1282(e)(1))

# IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The closed vent system shall be designed and operated in accordance with the following requirements: (40 CFR 63.1281(c), 40 CFR 63.1283(c)(2)(iii))
  - a. The closed-vent system shall route all gases, vapors, and fumes emitted from the material in and emission unit to a control device that meets the requirements specified in Condition III.2.
  - b. The closed-vent system shall be designed and operated with no detectable emissions.
  - c. Any bypass devices in the closed-vent system that could divert emissions from entering the control device shall be equipped with a flow indicator at the inlet to the bypass device that takes readings every 15 minutes, and that sounds an alarm when the bypass device is open; or the bypass device valve at the inlet to the bypass device shall be secured using a car-seal or lock and key.
- 2. Each continuous parameter monitoring system (CPMS) shall meet the following specifications and requirements: (40 CFR 63.1283(d)(1))
  - a. Each CPMS shall measure data values at least once every hour and record either:
    - i. Each measured data value; or
    - ii. Each block average value for each 1-hour period or shorter periods calculated from all measured data values during each period. If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the hourly (or shorter period) block average instead of all measured values.
- 3. The permittee shall install a device equipped with a continuous recorder to measure the values of operating parameters appropriate for the control device as specified below. **(40 CFR 63.1283(d)(3))** 
  - a. For a thermal oxidizer, the temperature monitoring device shall have a minimum accuracy of ±2 percent of the temperature being monitored in °C, or ±2.5°C, whichever value is greater. The temperature sensor shall be installed at a location representative of the combustion zone temperature
  - b. For a condenser, the temperature monitoring device shall have a minimum accuracy of ±2 percent of the temperature being monitored in °C, or ±2.5°C, whichever value is greater. The temperature sensor shall be installed at a location in the exhaust vent stream from the condenser.

# V. TESTING/SAMPLING

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

- 1. Determination of the actual flow rate of natural gas to EURC015 and EURC024 shall be made using either of the following procedures: (40 CFR 63.1282(a)(1))
  - a. Install and operate a monitoring instrument that directly measures natural gas flowrate to EURC015 and EURC024 with an accuracy of ± 2 percent or better. The annual natural gas flowrate shall be converted to a daily average by dividing the annual flowrate by the number of days per year each EU processed natural gas.
  - b. Document to the AQD's satisfaction, the actual annual average natural gas flowrate to EURC015 and EURC024.

- 2. Determination of the actual average BTEX emissions from EURC015 and EURC024 with condenser and/or thermal oxidizer control device shall be made using the following procedure: **(40 CFR 63.1282(a)(2))** 
  - a. Use GRI-GLYCalc<sup>™</sup>, Version 3.0 or higher. Inputs to the model shall be representative of actual operating conditions of each glycol dehydration unit.
- 3. The Permittee shall perform "no detectable emissions" testing for closed vent systems using the test methods and procedures specified in 40 CFR 63.1282(b). **(40 CFR 63.1282(b))**
- 4. If the permittee chooses to conduct a performance test to demonstrate that a control device meets the requirements of Condition III.2 (40 CFR 1281(f)(1)) the permittee shall conduct emissions testing for compliance with the BTEX emission limit calculated using Equation 1 or the 20 ppmv TOC or Total HAP exhaust gas concentration reduction requirement using the following test methods and procedures: (40 CFR 63.1282(d)(3)
  - a. Method 1 or 1A, 40 CFR, Part 60, Appendix A, as appropriate, shall be used for selection of the sampling sites. The sampling site shall be located at the outlet of the combustion device.
  - b. The gas volumetric flowrate shall be determined using Method 2, 2A, 2C, or 2D, 40 CFR, Part 60, Appendix A, as appropriate.
  - c. To determine compliance with the BTEX emission limit or the 20 ppmv TOC or Total HAP exhaust gas concentration reduction requirement, the permittee shall use one of the following methods: Method 18, 40 CFR, Part 60, Appendix A; ASTM D6420-99 (Reapproved 2004); or any other method or data that have been validated according to the applicable procedures in Method 301, 40 CFR, Part 63, Appendix A.
  - d. The permittee shall conduct performance tests according to the following schedule:
    - i. An initial performance test shall be conducted no later than October 15, 2015.
    - ii. The first periodic performance test shall be conducted not later than 60 months after the initial performance test. Subsequent periodic performance tests shall be conducted at intervals no longer than 60 months following the previous periodic performance test or whenever a source desires to establish a new operating limit. Combustion control devices meeting either of the following criteria are not required to conduct periodic performance tests;
      - A. A combustion control device whose model is tested under, and meets the criteria of manufacturers performance test in 40 CFR 63.1282(g).
      - B. A combustion control device demonstrating during the performance test that combustion zone temperature is an indicator of destruction efficiency and operates at a minimum temperature of 1400 degrees F.
- 5. For condenser control devices the Permittee may use the procedures documented in the GRI report entitled "Atmospheric Rich/Lean method for Determining Glycol Dehydrator Emissions". (GRI-95/0368.1) as inputs for the model GRI-GLYCalc<sup>™</sup>, version 3.0 or higher, to generate a condenser performance curve as an alternative to the performance testing required in Condition V.4. **(40 CFR 63.1282(d)(5))**

#### VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall maintain records of the annual facility natural gas throughput each year. (40 CFR 63.1270(a)(3))
- 2. The permittee shall continuously monitor and record the temperature on the thermal oxidizer or condenser and calculate the daily average temperature for each operating day. (40 CFR 63.1282(e), 40 CFR 63.1283(d)(4))
  - a. Establish a site specific maximum (condenser) or minimum (thermal oxidizer) temperature to define the conditions at which the control device must be operated to continuously achieve compliance with the emission limit.
  - b. Calculate the daily average of the condenser or thermal oxidizer temperature readings in accordance with Condition VI.7.
  - c. Compliance is achieved when the daily average of the temperature readings calculated under Condition VI.2.b. is either equal to or greater than the minimum or equal to or less than the maximum monitoring value established under Condition VI.2.a.

- 3. When using a condenser as the control device the permittee may demonstrate compliance with BTEX emission reductions by complying with the following requirements: **(40 CFR 63.1282(f))** 
  - a. The permittee shall establish a site-specific condenser performance curve according to the procedures specified in Condition VI.8.d.
  - b. The permittee must calculate the daily average condenser outlet temperature in accordance with Condition VI.7.
  - c. The permittee shall determine the condenser efficiency for the current operating day using the daily average condenser outlet temperature and the condenser performance curve.
  - d. At the end of each operating day the permittee shall calculate the 30-day average BTEX emission reduction from the condenser efficiencies for the preceding 30 operating days.
  - e. Compliance is achieved if the average BTEX emission reduction is equal to or greater than the minimum percent reduction established in Condition VI.8.
- 4. For each closed-vent system, the permittee shall comply with the following requirements: (40 CFR 63.1283(c)(2-4))
  - a. Except for parts of the closed-vent system that are designated unsafe to inspect or difficult to inspect, each closed-vent system and each bypass device shall be inspected according to the procedures specified below according the following schedule:
    - i. For each closed-vent system joints, seams, or other connections that are permanently or semipermanently sealed (e.g., a welded joint between two sections of hard piping or a bolted or gasketed ducting flange):
      - A. Conduct an initial inspection to demonstrate that the closed-vent system operates with no detectable emissions.
      - B. Conduct annual visual inspections for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in piping; loose connections; or broken or missing caps or other closure devices.
    - ii. For closed-vent system components other than those specified in Condition VI.4.a.i above:
      - A. Conduct an initial inspection to demonstrate that the closed-vent system operates with no detectable emissions.
      - B. Conduct annual inspections to demonstrate that the components or connections operate with no detectable emissions.
      - C. Conduct annual visual inspections for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork; loose connections; or broken or missing caps or other closure devices.
    - iii. For each bypass device, except low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and safety devices, the permittee shall either:
      - A. At the inlet to the bypass device that could divert the steam away from the control device to the atmosphere, set the flow indicator to take a reading at least once every 15 minutes; or
      - B. If the bypass device valve installed at the inlet to the bypass device is secured in the non-diverting position using a car-seal or a lock-and-key type configuration, visually inspect the seal or closure mechanism at least once every month to verify that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass device.
  - b. In the event that a leak or defect is detected, the permittee shall repair the leak or defect as soon as practicable, except as provided in Condition VI.4.c.
    - i. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.
    - ii. Repair shall be completed no later than 15 calendar days after the leak is detected.
  - c. Delay of repair of a closed-vent system for which leaks or defects have been detected is allowed if the repair is technically infeasible without a shutdown, as defined in § 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.
- 5. Any parts of the closed-vent system that are designated, as described below, as unsafe to inspect are exempt from the inspection requirements of Condition VI.4 if:

#### (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 Condition VI.4.a.i or ii.

- b. The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.
- 6. Any parts of the closed-vent system that are designated, as described below, as difficult to inspect are exempt from the inspection requirements of Condition VI.4 if: (40 CFR 63.1283(c)(6))
  - a. The permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and
  - b. The permittee has a written plan that requires inspection of the equipment at least once every 5 years.
- 7. 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. (40 CFR 63.1283(d)(4))
- 8. For the control devices used to comply with 40 CFR Part 63 Subpart HHH, the permittee shall establish a minimum operating parameter value or a maximum operating parameter value, as appropriate for the control device, to define the conditions at which the control device must be operated to continuously achieve the emission limits in Section I of FGMACTHHH. Each minimum or maximum operating parameter value shall be established as follows: (40 CFR 63.1283(d)(5)(i))
  - a. If the permittee conducts performance tests to demonstrate that the control device achieves the applicable performance requirements, then the minimum operating parameter value or the 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.
  - b. If the permittee uses a condenser design analysis to demonstrate that the control device achieves the applicable performance requirements, then the minimum operating parameter value or the maximum operating parameter value shall be established based on the condenser design analysis and may be supplemented by the condenser manufacturer's recommendations.
  - c. If the permittee operates a control device where the performance test requirement was met under manufacturers' performance test to demonstrate that the control device achieves the applicable performance requirements, then the maximum inlet gas flowrate shall be established based on the performance test and supplemented, as necessary, by the manufacturer recommendations.
  - d. When using condensers as the control device the permittee shall also establish a condenser performance curve showing the relationship between condenser outlet temperature and condenser control efficiency. The curve shall be established using the procedures documented in the GRI report entiltled, "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 63.1283(d)(5)(ii))
- 9. A deviation 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 63.1283(d)(6)(i-iii))
  - a. When the daily average value of a monitored operating parameter is less than the minimum operating parameter limit (or, if applicable, greater than the maximum operating parameter limit) established for the operating parameter.
  - b. When the 30-day average condenser efficiency calculated according to the requirements of Condition VI.3.d is less than the identified 30-day required percent reduction.
  - c. When the monitoring data are not available for at least 75 percent of the operating hours in a day.
- A deviation occurs for a closed-vent system containing one or more bypass devices that could be used to divert all or a portion of the gases, vapors, or fumes from entering the control device when: (40 CFR 63.1283(d)(6)(iv))

- a. The flow indicator indicates that flow has been detected and that the stream has been diverted away from the control device to the atmosphere.
- b. If the seal or closure mechanism has been broken, the bypass line valve position has a changed, the key for the lock-and-key type lock has been checked out, or the car-seal has broken.
- 11. For each deviation, the permittee shall be deemed to have failed to have applied control in a manner that achieves the required operating parameter limits. Failure to achieve the required operating parameter limits is a violation of this standard. **(40 CFR 63.1283(d)(7))**
- Nothing in Conditions VI.8. through VI.13 shall be construed to allow or excuse a monitoring parameter deviation caused by any activity that violates other applicable provisions of this subpart. (40 CFR 63.1283(d)(9))
- 13. The permittee shall maintain the records specified in 40 CFR 63.10(b)(2). (40 CFR 63.1284(b)(2))
- 14. The permittee shall maintain the following records: (40 CFR 63.1284(b)(4), 40 CFR 63.1284(g))
  - a. Continuous records of the equipment operating parameters specified to be monitored in Conditions VI.8-10.
  - b. Records of the daily average value of each continuously monitored parameter for each operating day determined according to the procedures specified in Condition VI.8.
  - c. For condensers using reduction efficiency for compliance, records of the annual 30-day rolling average condenser efficiency determined in Condition VI.3.d shall be kept in addition to the daily averages.
  - d. The following records for a control device whose model is tested under the manufacturers' performance test:
    - i. All visible emission readings and flowrate calculations made during the compliance determination
    - ii. All hourly records and other recorded periods when the pilot flame is absent.
  - e. 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.
  - f. Where a seal or closure mechanism is used to comply with the closed vent bypass, hourly records of flow are not required. In such cases, the owner or operator shall record that the monthly visual inspection of the seals or closure mechanism has been done, and shall record the duration of all periods when the seal mechanism is broken, the bypass line valve position has changed, or the key for a lock-and-key type lock has been checked out, and records of any car-seal that has broken.
- 15. The permittee shall maintain records identifying all parts of the closed-vent system that are designated as unsafe to inspect in accordance with Condition VI.5, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment. (40 CFR 63.1284(b)(5))
- 16. The permittee shall maintain records identifying all parts of the closed-vent system that are designated as difficult to inspect in accordance with Condition VI.6, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment. (40 CFR 63.1284(b)(6))
- 17. The permittee shall maintain the following records for each inspection conducted in accordance with Condition VI.4 during which a leak or defect is detected. **(40 CFR 63.1284(b)(7))** 
  - a. The instrument identification numbers, operator name or initials, and identification of the equipment.
  - b. The date the leak or defect was detected and the date of the first attempt to repair the leak or defect.
  - c. Maximum instrument reading measured by the method specified in Condition V.3 after the leak or defect is successfully repaired or determined to be non-repairable.
  - d. "Repair delayed" and the reason for the delay if a leak or defect is not repaired within 15 calendar days after discovery of the leak or defect.
  - e. The name, initials, or other form of identification of the permittee (or designee) whose decision it was that repair could not be affected without a shutdown.
  - f. The expected date of successful repair of the leak or defect if a leak or defect is not repaired within 15 calendar days.
  - g. Dates of shutdowns that occur while the equipment is unrepaired.
  - h. The date of successful repair of the leak or defect.

- 18. For each inspection conducted in accordance with Condition VI.4 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 63.1284(b)(8))
- 19. The permittee shall maintain records of the occurrence and duration of each malfunction of process equipment or the air pollution control equipment and monitoring equipment. The permittee shall maintain records of actions taken during periods of malfunction to minimize emissions in accordance with Condition III.4 including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. (40 CFR 63.1284(f))

# VII. <u>REPORTING</u>

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 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))
- Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. The permittee shall submit the notification of the planned date of a performance test and site-specific test plan at least 60 days before the test. (40 CFR 63.1285(b)(3))
- 5. The permittee shall submit a Notification of Compliance Status Report as required under § 63.9(h) within 180 days after October 15, 2015. In addition to the information required under § 63.9(h) the Notification of Compliance Status Report shall include the information specified in Condition VII.5.a. through i. of this section. If an owner or operator submits the required information at different times, and/or different submittals, subsequent submittals may refer to previous submittals instead of duplicating and resubmitting the previously submitted information. (40 CFR 63.1285(d))
  - a. If a closed-vent system and a control device other than a flare are used to comply with § 63.1274, the owner or operator shall submit the information in Condition VII.5.a.iii. and the information in either Condition 5.a.i. or ii.
    - i. The condenser design analysis documentation specified in § 63.1282(d)(4) if the owner or operator elects to prepare a design analysis; or
    - ii. If the owner or operator is required to conduct a performance test, the performance test results including the information specified in Condition VII.5.a.ii.A. and B. Results of a performance test conducted prior to the compliance date of this subpart can be used provided that the test was conducted using the methods specified in § 63.1282(d)(3), and that the test conditions are representative of current operating conditions. If the owner or operator operates a combustion control device model tested under § 63.1282(g), an electronic copy of the performance test results shall be submitted via email to *Oil\_and\_Gas\_PT@EPA.GOV* unless the test results for that model of combustion control device are posted at the following Web site: *epa.gov/airquality/oilandgas/*.
      - A. The percent reduction of HAP or TOC, or the outlet concentration of HAP or TOC (parts per million by volume on a dry basis), determined as specified in § 63.1282(d)(3); and
      - B. The value of the monitored parameters specified in § 63.1283(d), or a site-specific parameter approved by the permitting agency, averaged over the full period of the performance test.
    - iii. The results of the closed-vent system initial inspections performed according to the requirements in § 63.1283(c)(2)(i) and (ii).
  - b. The owner or operator shall submit one complete test report for each test method used for a particular source.
    - i. For additional tests performed using the same test method, the results specified in Condition VII.5.a.ii. shall be submitted, but a complete test report is not required.

- ii. A complete test report shall include a sampling site description, description of sampling and analysis procedures and any modifications to standard procedures, quality assurance procedures, record of operating conditions during the test, record of preparation of standards, record of calibrations, raw data sheets for field sampling, raw data sheets for field and laboratory analyses, documentation of calculations, and any other information required by the test method.
- c. For each control device other than a flare used to meet the requirements of § 63.1274, the owner or operator shall submit the information specified in Condition VII.5.c.i. through iii. for each operating parameter required to be monitored in accordance with the requirements of § 63.1283(d).
  - i. The minimum operating parameter value or maximum operating parameter value, as appropriate for the control device, established by the owner or operator to define the conditions at which the control device must be operated to continuously achieve the applicable performance requirements of § 63.1281(d)(1) or (e)(3)(ii).
  - ii. An explanation of the rationale for why the owner or operator selected each of the operating parameter values established in § 63.1283(d)(5). This explanation shall include any data and calculations used to develop the value, and a description of why the chosen value indicates that the control device is operating in accordance with the applicable requirements of § 63.1281(d)(1), (e)(3)(ii), or (f)(1).
  - iii. A definition of the source's operating day for purposes of determining daily average values of monitored parameters. The definition shall specify the times at which an operating day begins and ends.
- Results of any continuous monitoring system performance evaluations shall be included in the Notification of Compliance Status Report.
- e. The owner or operator shall comply with all requirements for compliance status reports contained in the source's ROP, including reports required under 40 CFR, Part 63, Subpart HHH. Each time a notification of compliance status is required under this subpart, the owner or operator of such source shall submit the notification of compliance status to the appropriate permitting authority following completion of the relevant compliance demonstration activity specified in this subpart.
- f. The owner or operator shall submit an analysis demonstrating whether an affected source is a major source using the maximum throughput calculated according to § 63.1270(a).
- g. The owner or operator shall submit a statement as to whether the source has complied with the requirements of this subpart.
- h. If the owner or operator installs a combustion control device model tested under the manufacturer's performance test procedures in § 63.1282(g), the Notification of Compliance Status Report shall include the data listed under § 63.1282(g)(8).
- i. For each combustion control device model tested under § 63.1282(g), the information listed in Conditions VII.5.i.i. through vi. below.
  - i. Name, address and telephone number of the control device manufacturer.
  - ii. Control device model number.
  - iii. Control device serial number.
  - iv. Date the model of control device was tested by the manufacturer.
  - v. Manufacturer's HAP destruction efficiency rating.
  - vi. Control device operating parameters, maximum allowable inlet gas flowrate.
- 6. The Permittee shall prepare Periodic Reports in accordance with a. and b. below and submit them to the Administrator. **(40 CFR 63.1285(e))** 
  - a. The permittee shall submit Periodic Reports semiannually. The reports shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. The report shall include certification by a responsible official of truth, accuracy, and completeness.
  - b. The permittee shall include the following information and any other information as applicable in §63.1285(e)(2).
    - i. A description of all deviations as defined in Conditions VI.9-11 that have occurred during the 6-month reporting period, and the information described in §63.1285(e)(2)(ii).
    - ii. For each inspection conducted in accordance with Condition VI.4 during which a leak or defect is detected, the records described in Condition VI.18 must be included in the next Periodic Report.
    - iii. For each closed-vent system with a bypass line, records required under Condition VI.17.e and f.
    - iv. A statement identifying if there were no deviations during the reporting period.
    - v. Any change in compliance methods as described in §63.1282(e).
    - vi. The results of any periodic test conducted during the reporting period.

- Whenever a process change is made, or a change in any of the information submitted in the Notification of Compliance Status Report, the permittee shall submit a report within 180 days after the process change is made or as a part of the next Periodic Report, whichever is sooner. The report shall include: (40 CFR 63.1285(f))
  - a. A brief description of the process change;
  - b. A description of any modification to standard procedures or quality assurance procedures;
  - c. Revisions to any of the information reported in the original Notification of Compliance Status Report under Condition VII.5
  - d. Information required by the Notification of Compliance Status Report under Condition VII.5 for changes involving the addition of processes or equipment.
- 8. Within 60 days after the date of completing a performance test (defined in § 63.2) you must submit the results of the performance tests to EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). Performance test data must be submitted in the file format generated through use of EPA's Electronic Reporting Tool (ERT) (see *http://www.epa.gov/ttn/chief/ert/index.html*). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. All reports required by this subpart not subject to the above electronic reporting requirements must be sent to the Administrator at the appropriate address. The Administrator may request a report in any form suitable for the specific case (e.g., by commonly used electronic media such as Excel spreadsheet, on CD or hard copy). The Administrator retains the right to require submittal of reports in paper format. (40 CFR 63.1285(g))

### See Appendix 8

# VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

### IX. OTHER REQUIREMENT(S)

1. The permittee shall determine major source status using the maximum annual facility natural gas throughput calculated according to 40 CFR 63.1270(a)(1)(i) through (a)(1)(iv). As an alternative to calculating the maximum natural gas throughput, the owner or operator of a new or existing source may use the facility design maximum natural gas throughput to estimate the maximum potential emissions. (40 CFR 63.1270(a)(1))

- 2. The permittee shall determine the maximum values for other parameters used to calculate potential emissions as the maximum over the same period for which maximum throughput is determined. These parameters shall be based on an annual average or the highest single measured value. For estimating maximum potential emissions from glycol dehydration units, the glycol circulation rate used in the calculation shall be the unit's maximum rate under its physical and operational design consistent with the definition of potential to emit in 40 CFR 63.2. (40 CFR 63.1270(a)(4))
- 3. A site-specific monitoring plan must be prepared that addresses the monitoring system design, data collection, and the quality assurance and quality control elements. Each CPMS must be installed, calibrated, operated, and maintained in accordance with the procedures in your approved site-specific monitoring plan. The permittee may request approval of monitoring system quality assurance and quality control procedures alternative to those specified below and in your site-specific monitoring plan. **(40 CFR 63.1283(d)(1)(ii-iv))** 
  - a. The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;
  - b. Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements;
  - c. Equipment performance checks, system accuracy audits, or other audit procedures;
  - d. Ongoing operation and maintenance procedures in accordance with provisions in § 63.8(c)(1) and (c)(3);
  - e. Ongoing reporting and recordkeeping procedures in accordance with provisions in § 63.10(c), (e)(1), and (e)(2)(i).
  - f. The permittee must conduct the CPMS equipment performance checks, system accuracy audits, or other audit procedures specified in the site-specific monitoring plan at least once every 12 months.
  - g. The permittee must conduct a performance evaluation of each CPMS in accordance with the site-specific monitoring plan.
- The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR, Part 63, Subpart A and Subpart HHH, for Natural Gas Transmission and Storage Facilities by October 15, 2015. (40 CFR, Part 63, Subparts A and HHH)

### Footnotes:

<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).

# FGMACTDDDDD-EXISTING GAS1 FLEXIBLE GROUP CONDITIONS

# DESCRIPTION

Unit Designed to Burn Gas 1 Subcategory requirements for Existing Boilers and Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD with heat input values less than 50 mmbtu/hr.

**Emission Units:** EURC001 (8 MMBtu/hr) Kewanee boiler L3W-200-G, EURC025 (0.125 MMBtu/hr) Maintenance garage boiler.

### POLLUTION CONTROL EQUIPMENT

NA

### I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario		Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

#### II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

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

- The Permittee must conduct an initial performance tune-up no later than January 31, 2016 for EURC001 according to § 63.7540(a)(11). Subsequent biennial tune-ups must be conducted no more than 25 months after the previous tune-up. (40 CFR 63.7510(e), 40 CFR 63.7515(d), 40 CFR 63.7540(a)(11), 40 CFR, Part 63, Subpart DDDDD, Table 3.3)
- The Permittee must conduct an initial performance tune-up no later than January 31, 2016 for EURC025 according to § 63.7540(a)(12). Subsequent 5-year tune-ups must be conducted no more than 61 months after the previous tune-up. (40 CFR 63.7510(e), 40 CFR 63.7515(d), 40 CFR 63.7540(a)(12), 40 CFR, Part 63, Subpart DDDDD, Table 3.3)
- 3. The permittee shall complete a one-time energy assessment specified in Table 3.4(a) through (h) no later than January 31, 2016 for all Emission Units in FGMACTDDDDD. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet the energy assessment requirements, satisfies the energy assessment requirement. A facility that operates under an energy management program compatible with ISO 50001 that includes the affected units also satisfies the energy assessment requirement. The energy assessment must include the following:
  - a. A visual inspection of the boiler or process heater system.
  - b. An evaluation of operating characteristics of the boiler or process heater systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints.
  - c. An inventory of major energy use systems consuming energy from affected boilers and process heaters and which are under the control of the boiler/process heater owner/operator.
  - d. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage.

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- e. A review of the facility's energy management practices and provide recommendations for improvements consistent with the definition of energy management practices, if identified.
- f. A list of cost-effective energy conservation measures that are within the facility's control.
- g. A list of the energy savings potential of the energy conservation measures identified.
- A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.
   (40 CFR 63.7510(e), 40 CFR, Part 63, Subpart DDDDD, Table 3.4)

#### 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))

 The Permittee shall maintain 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 Semiannual Compliance report that was submitted, according to the requirements in § 63.10(b)(2)(xiv) and any records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in § 63.10(b)(2)(viii). (40 CFR 63.7555)

#### VII. <u>REPORTING</u>

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 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))
- 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. A compliance report containing the following information shall be submitted by January 31, 20018 and biennially thereafter for EURC001 and by January 31, 2021 and every 5 years thereafter for EURC025.
  - a. Company and Facility name and address.
  - b. Process unit information, emissions limitations, and operating parameter limitations.
  - c. Date of report and beginning and ending dates of the reporting period.
  - d. The total operating time during the reporting period.
  - e. Include the date of the most recent tune-up for EURC001 and EURC025. Include the date of the most recent burner inspection if it was not done biennially for EURC001, or on a 5-year period for EURC025 and was delayed until the next scheduled or unscheduled unit shutdown.

(40 CFR 63.7550(b), 40 CFR 63.7550(c)(5))

- 4. The permittee shall submit a Notification of Compliance Status (NOCS) following the initial compliance demonstration. The NOCS must contain the following:
  - a. A description of each Emission Unit including identification of which subcategories the EU is in and the design heat input capacity of the EU
  - b. The following certifications of compliance, as applicable, and signed by a responsible official:
    - i. "This facility complies with the required initial tune-up according to the procedures in § 63.7540(a)(10)(i) through (vi)."
    - ii. "This facility has had an energy assessment performed according to § 63.7530(e) and is an accurate depiction of the facility at the time of the assessment."
       (40 CFR 63.7530(d),(e) and (f), 40 CFR 63.7545(e))

#### See Appendix 8

### VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

### IX. OTHER REQUIREMENT(S)

 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 DDDDD: Industrial, Commercial, and Institutional Boilers and Process Heaters no later than January 31, 2016. (40 CFR, Part 63, Subpart DDDDD, 40 CFR 63.7495(b))

#### 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).

# FGMACTDDDDD-NEWGAS1 FLEXIBLE GROUP CONDITIONS

# DESCRIPTION

Unit Designed to Burn Gas 1 Subcategory requirements for New or Reconstructed Boilers and Process Heaters at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD. New and reconstructed boilers or process heaters must comply with this subpart upon startup.

Emission Units: EURC016 25.5 MMBtu gas withdrawal heater, EURC017 25.5 MMBtu gas withdrawal heater.

### POLLUTION CONTROL EQUIPMENT

NA

# I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario		Monitoring/ Testing Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

### II. MATERIAL LIMIT(S)

1. The permittee shall only burn fuels as allowed in the Unit Designed to Burn Gas 1 Subcategory definition in 40 CFR 63.7575. **(40 CFR 63.7499(I))** 

### III. <u>PROCESS/OPERATIONAL RESTRICTION(S)</u>

- 1. The permittee must meet the requirements in paragraphs (a)(1) and (3) of 40 CFR 63.7500, as listed below, except as provided in paragraphs (b) and (e) of 40 CFR 63.7500, stated below. **(40 CFR 63.7500(a))** 
  - a. The permittee must meet each work practice standard in Table 3 of 40 CFR Part 63, Subpart DDDDD that applies to FGMACTDDDDD-NEWGAS1. Boilers and process heaters in the Units Designed to Burn Gas 1 Subcategory with a heat input capacity of greater than 10 million Btu per hour (EURC016 and EURC017) must complete an annual tune-up as specified in 40 CFR 63.7540, stated in SC III.3. (40 CFR 63.7500(a)(1))
  - At all times, the permittee must operate and maintain FGMACTDDDDD-NEWGAS1, 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, (40 CFR 63.7500(a)(3))
- For new affected sources (as defined in §63.7490), you must demonstrate initial compliance with the requirement to conduct a tune-up within the applicable annual schedule as specified in §63.7540(a), as stated in SC III.4, upon startup. Thereafter, you are required to complete the applicable annual tune-up as specified in §63.7540(a). (40 CFR 63.7510(g))
- 3. The permittee must conduct an annual performance tune-up according to 40 CFR 63.7540(a)(10), stated in SC III.3.a; Each annual tune-up specified in 40 CFR 63.7540(a)(10) must be no more than 13 months after the previous tune-up. **(40 CFR 63.7515(d))**

- 4. The permittee must demonstrate continuous compliance with the work practice standards (Tune-ups) in Table 3 of 40 CFR Part 63, Subpart DDDDD that applies according to the methods specified in paragraphs (a)(10) through (13) of 40 CFR 63.7540, as listed below. **(40 CFR 63.7540(a))** 
  - a. If the boiler or process heater has a heat input capacity of 10 million Btu per hour or greater, the permittee must conduct an annual tune-up of the boiler or process heater to demonstrate continuous compliance as specified in paragraphs (a)(10)(i) through (vi) of 40 CFR 63.7540, as listed below. This frequency does not apply to units with continuous oxygen trim systems that maintain an optimum air to fuel ratio. (40 CFR 63.7540(a)(10))
    - i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may 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))
    - ii. 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))
    - iii. 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))
    - iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO<sub>x</sub> requirement to which the unit is subject. (40 CFR 63.7540(a)(10)(iv))
    - 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))
    - vi. Maintain on-site and submit, if requested by the Administrator, an annual report containing the information listed below. (40 CFR 63.7540(a)(10)(vi))
      - (1). 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))
      - (2). A description of any corrective actions taken as a part of the tune-up. (40 CFR 63.7540(a)(10)(vi)(B))
  - b. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. (40 CFR 63.7540(a)(13)
- 5. The permittee must be in compliance with the work practice standards of 40 CFR Part 63, Subpart DDDDD. These limits apply at all times. **(40 CFR 63.7505(a))**
- 6. If EURC016 or EURC017 have not operated since the previous tune-up and more than one year has passed since the previous tune-up, the permittee must complete a subsequent tune-up within 30 calendar days of startup for units that are not operating at the time of their scheduled tune-up. **(40 CFR 63.7515(g))**

# IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

# V. TESTING/SAMPLING

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

NA

#### VI. MONITORING/RECORDKEEPING

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

- 1. The permittee must keep records as listed below. (40 CFR 63.7555)
  - 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 report that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). (40 CFR 63.7555(a)(1))
  - b. The permittee must maintain records of the calendar date, time, occurrence and duration of each startup and shutdown. (40 CFR 63.7555(i))
  - c. The permittee must maintain records of the type(s) and amount(s) of fuels used during each startup and shutdown. (40 CFR 63.7555(j))
- 2. 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))
- 3. 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))
- 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, according to 40 CFR 63.10(b)(1). The permittee can keep the records off site for the remaining 3 years. (40 CFR 63.7560(c))

### VII. <u>REPORTING</u>

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 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 meet the notification requirements in 40 CFR 63.7545 according to the schedule in 40 CFR 63.7545 as stated in SC VII.9 and in Subpart A of 40 CFR 63. (40 CFR 63.7495(d))
- 5. The permittee must submit a signed statement in the Notification of Compliance Status report that indicates that the permittee conducted a tune-up of the unit. (40 CFR 63.7530(d))
- 6. The permittee must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.7545(e), stated in SC VII.9. (40 CFR 63.7530(f))
- The permittee must report each instance in which they did not meet a work practice standard in Table 3 of 40 CFR Part 63, Subpart DDDDD. These instances are deviations from the work practice standards. These deviations must be reported according to the requirements in 40 CFR 63.7550, cited in SC VII.10. (40 CFR 63.7540(b))
- 8. The permittee must submit to the Administrator all of the notifications in 40 CFR 63.9(b) through (h) that apply to the permittee by the dates specified. **(40 CFR 63.7545(a))**

- 9. The permittee must submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii). For the initial compliance demonstration for each boiler or process heater, the permittee must submit the Notification of Compliance Status before the close of business on the 60th day following the completion of all initial compliance demonstrations (tune-ups) for all boiler or process heaters at the facility according to 40 CFR 63.10(d)(2). The Notification of Compliance Status must only contain the information specified in paragraphs (e)(1) and (8) as stated below. (40 CFR 63.7545(e))
  - a. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with 40 CFR Part 63, Subpart DDDDD, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by the permittee or the EPA through a petition process to be a non-waste under 40 CFR 241.3, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of 40 CFR 241.3, and justification for the selection of fuel(s) burned during the compliance demonstration. (40 CFR 63.7545(e)(1))
  - b. In addition to the information required in 40 CFR 63.9(h)(2), your notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official: (40 CFR 63.7545(e)(8))
    - i. "This facility complies with the required initial tune-up according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi)." (40 CFR 63.7545(e)(8)(i))
- 10. The permittee must submit the compliance report in Table 9 of 40 CFR Part 63, Subpart DDDDD. (40 CFR 63.7550(a))
- 11. The permittee must submit each annual compliance report as specified in paragraphs (b)(3) and (4) of 40 CFR 63.7550, as listed below. **(40 CFR 63.7550(b))** 
  - a. Annual compliance reports must cover the 1 year periods from January 1 to December 31. (40 CFR 63.7550(b)(3))
  - b. Annual compliance reports must be postmarked or submitted no later than March 15. (40 CFR 63.7550(b)(4), (40 CFR 63.10(a)(5))
- 12. A compliance report must contain the following information depending on how the permittee chooses to comply with the limits set in this rule. (40 CFR 63.7550(c))
  - a. If the facility is subject to the requirements of a tune up they must submit a compliance report with the information in paragraphs (c)(5)(i) through (iv) and (xiv) of 40 CFR 63.7550. **(40 CFR 63.7550(c)(1))**
  - b. 40 CFR 63.7550(c)(5) is as follows:
    - i. Company and Facility name and address. (40 CFR 63.7550(c)(5)(i))
    - ii. Process unit information, emissions limitations, and operating parameter limitations. (40 CFR 63.7550(c)(5)(ii))
    - iii. Date of report and beginning and ending dates of the reporting period. (40 CFR 63.7550(c)(5)(iii))
    - iv. The total operating time during the reporting period. (40 CFR 63.7550(c)(5)(iv))
    - v. Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(10). 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))
- 13. The permittee must submit all reports required by Table 9 of 40 CFR Part 63, Subpart DDDDD to USEPA 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 40 CFR Part 63, Subpart DDDDD is not available in CEDRI at the time that the report is due the report the permittee must submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. At the discretion of the Administrator, the permittee must also submit these reports, to the Administrator in the format specified by the Administrator. (40 CFR 63.7550(h)(3))

See Appendix 8

# VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	NA

### IX. OTHER REQUIREMENT(S)

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

#### 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).

# E. NON-APPLICABLE REQUIREMENTS

At the time of the ROP issuance, the AQD has determined that no non-applicable requirements have been identified for incorporation into the permit shield provision set forth in the General Conditions in Part A pursuant to Rule 213(6)(a)(ii).

# **APPENDICES**

**Appendix 1.** Abbreviations and Acronyms The following is an alphabetical listing of abbreviations/acronyms that may be used in this permit.

	MM	Million
-	MSDS	Material Safety Data Sheet
P. Contraction of the second se	MW	Megawatts
British Thermal Unit	NA	Not Applicable
Degrees Celsius	NAAQS	National Ambient Air Quality Standards
Federal Clean Air Act	NESHAP	National Emission Standard for Hazardous Air Pollutants
Compliance Assurance Monitoring	NMOC	Non-methane Organic Compounds
Continuous Emission Monitoring	NOx	Oxides of Nitrogen
Code of Federal Regulations	NSPS	New Source Performance Standards
Carbon Monoxide	NSR	New Source Review
Continuous Opacity Monitoring	PM	Particulate Matter
Michigan Department of Environmental Quality	PM-10	Particulate Matter less than 10 microns in diameter
-	pph	Pound per hour
-	ppm	Parts per million
	ppmv	Parts per million by volume
Emission Unit	ppmw	Parts per million by weight
Degrees Fahrenheit	PS	Performance Specification
Flexible Group	PSD	Prevention of Significant Deterioration
Gallon of Applied Coating Solids	psia	Pounds per square inch absolute
General Condition	psig	Pounds per square inch gauge
Grains	PeTE	Permanent Total Enclosure
Hazardous Air Pollutant	PTI	Permit to Install
Mercury	RACT	Reasonable Available Control Technology
Hour	ROP	Renewable Operating Permit
Horsepower	SC	Special Condition
Hydrogen Sulfide	scf	Standard cubic feet
High Volume Low Pressure *	sec	Seconds
Identification (Number)	SCR	Selective Catalytic Reduction
Initial Risk Screening Level	SO <sub>2</sub>	Sulfur Dioxide
Initial Threshold Screening Level	SRN	State Registration Number
Lowest Achievable Emission Rate	TAC	Toxic Air Contaminant
Pound	Temp	Temperature
Meter	THC	Total Hydrocarbons
Maximum Achievable Control Technology	tpy	Tons per year
Michigan Air Emissions Reporting System	μg	Microgram
Malfunction Abatement Plan	VE	Visible Emissions
Michigan Department of Environmental Quality	VOC	Volatile Organic Compounds
Milligram		Year
-	•	
	Air Quality Division Actual cubic feet per minute Best Available Control Technology British Thermal Unit Degrees Celsius Federal Clean Air Act Compliance Assurance Monitoring Continuous Emission Monitoring Code of Federal Regulations Carbon Monoxide Continuous Opacity Monitoring Michigan Department of Environmental Quality Dry standard cubic foot Dry standard cubic meter United States Environmental Protection Agency Emission Unit Degrees Fahrenheit Flexible Group Gallon of Applied Coating Solids General Condition Grains Hazardous Air Pollutant Mercury Hour Horsepower Hydrogen Sulfide High Volume Low Pressure * Identification (Number) Initial Risk Screening Level Initial Threshold Screening Level Lowest Achievable Emission Rate Pound Meter Maximum Achievable Control Technology Michigan Air Emissions Reporting System Malfunction Abatement Plan Michigan Department of Environmental Quality	Actual cubic feet per minuteMSDSBest Available Control TechnologyMWBritish Thermal UnitNADegrees CelsiusNAAQSFederal Clean Air ActNESHAPCompliance Assurance MonitoringNOxCode of Federal RegulationsNSPSCarbon MonoxideNSRContinuous Emission MonitoringPMMichigan Department of Environmental QualityPM-10Dry standard cubic footpphDry standard cubic meterppmUnited States Environmental Protection AgencyppmvEmission UnitPSGallon of Applied Coating SolidspsiaGeneral ConditionpsigGrainsPeTEHazardous Air PollutantPTIMercuryRACTHourSCHydrogen SulfidescfHigh Volume Low Pressure *secIdentification (Number)SCRInitial Risk Screening LevelSRNLowest Achievable Emission RateTACPoundTempMeterTHCMaximum Achievable Control TechnologytpyMichigan Department of Environmental QualityVCC

\*For HVLP applicators, the pressure measured at the gun air cap shall not exceed 10 pounds per square inch gauge (psig).

# Appendix 2. Schedule of Compliance

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

### **Appendix 3. Monitoring Requirements**

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

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.

#### ROP No: MI-ROP-B3721-2014a Expiration Date: February 6, 2019 PTI No.: MI-PTI-B3721-2014a



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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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

# Appendix 4. Recordkeeping

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

# Appendix 5. Testing Procedures

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

# Appendix 6. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-B3721-2007. 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-B3721-2007a is being reissued as Source-Wide PTI No. MI-PTI-B3721-2014.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
NA	200900066	Remove EU00048 (exempt 7500 gallon methanol storage tank) and FGR290 from ROP.	FGR290
109-12	201200164	Add conditions from PTI 109-12, change in gas sampling frequency, replace "sweet" natural gas with "pipeline quality" natural gas.	EURC015, EURC024, FGRC001

# Appendix 7. Emission Calculations

#### EURCO24 and EURC015

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in EURC024, EURC015.

### A. Glycol Dehydration Systems, Tables EURC024 and EURC015

VOC emissions 
$$\left(\frac{\text{pounds}}{\text{day}}\right) = \frac{10^6 \text{ scuft of natural gas processed}}{\text{day}} \text{ x EF}$$
  
VOC emissions  $\left(\frac{\text{tons}}{\text{month}}\right) = \frac{10^6 \text{ scuft of natural gas processed}}{\text{month}} \text{ x EF x } \frac{1 \text{ ton}}{2000 \text{ pounds}}$   
Benzene emissions  $\left(\frac{\text{tons}}{\text{month}}\right) = \frac{10^6 \text{ scuft of natural gas processed}}{\text{month}} \text{ x EF x } \frac{1 \text{ ton}}{2000 \text{ pounds}}$ 

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<sup>™</sup> computer model as provided to the Air Quality Division by the permittee. However, EF shall be recalculated, using GRI-GLYCalc<sup>™</sup> Version 3.0 or higher, after

each gas sampling. Inputs to the GRI-GLYCalc<sup>™</sup> 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 EURC015

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

Where:

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

#### 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).

$$EL_{BTEX} = 3.10x10^{-4} * Throughput * C_{i,BTEX} * 365 \frac{days}{yr} * \frac{1 Mg}{1x10^6 grams}$$
 Equation 1

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;

C<sub>LBTEX</sub> = 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 the MDEQ, AQD, Report Certification form (EQP 5736) and MDEQ, 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.