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

EFFECTIVE DATE: July 7, 2021

**ISSUED TO** 

# **Howell Compressor Station**

State Registration Number (SRN): N5572

LOCATED AT

3990 Crooked Lake Road, Howell, Livingston County, Michigan

# RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-N5572-2021

Expiration Date: July 7, 2026

Administratively Complete ROP Renewal Application Due Between January 7, 2025 to January 7, 2026

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

# **SOURCE-WIDE PERMIT TO INSTALL**

Permit Number: MI-PTI-N5572-2021

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

Michigan Department of Environment, Great Lakes, and Energy

Brad Myott,	Lansing	District	Supervisor
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# **AUTHORITY AND ENFORCEABILITY**

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

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

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

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

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

# A. GENERAL CONDITIONS

# **Permit Enforceability**

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

#### **General Provisions**

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

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

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

# **Equipment & Design**

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

### **Emission Limits**

- 11. Unless otherwise specified in this ROP, the permittee shall comply with Rule 301, which states, in part, "Except as provided in Subrules 2, 3, and 4 of this rule, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following:"

  (R 336.1301(1))
  - a. A 6-minute average of 20% opacity, except for one 6-minute average per hour of not more than 27% opacity.
  - b. A limit specified by an applicable federal new source performance standard.

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

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

## Testing/Sampling

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

# Monitoring/Recordkeeping

16. Records of any periodic emission or parametric monitoring required in this ROP shall include the following information specified in Rule 213(3)(b)(i), where appropriate. (R 336.1213(3)(b))

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

## **Certification & Reporting**

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

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

## **Permit Shield**

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

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

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

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

### Revisions

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

### Reopenings

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

### Renewals

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

# **Stratospheric Ozone Protection**

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

# **Risk Management Plan**

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

# **Emission Trading**

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

# Permit to Install (PTI)

43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule.<sup>2</sup> (R 336.1201(1))

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

### Footnotes:

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

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

# **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
EUKVS6ICENGINE-1601	Model KVS-6; 1000 BHP, 4SLB natural gas-fired reciprocating internal combustion engine, drives a compressor unit to compress natural gas for transport between the storage field and the pipeline.	1955	FGENGINES
EUKVS6ICENGINE-1602	Model KVS-6; 1000 BHP,4SLB natural gas-fired reciprocating internal combustion engine, drives a compressor unit to compress natural gas for transport between the storage field and the pipeline.	1955	FGENGINES
EUKVS12ICENGINE-1603	Model KVS-6; 1000 BHP, 4SLB natural gas-fired reciprocating internal combustion engine, drives a compressor unit to compress natural gas for transport between the storage field and the pipeline.	1965	FGENGINES
EUKVS12ICENGINE-1604	Model KVS-6; 1000 BHP, 4SLB natural gas-fired reciprocating internal combustion engine, drives a compressor unit to compress natural gas for transport between the storage field and the pipeline.	1967	FGENGINES
EUDEHY	Glycol dehydration system processing gas from the Guelph (Brown Niagaran); contains a 1.5 MMBtu/hr natural gas fired burner and a 1,000- gallon TEG storage tank	TBD	FGMACTHHHSMALL FGMACTDDDDDSMALL
EUWB-HTR-1	10 MMBTU/hr, natural gas fired, Water Bath Heater #1 for heating withdrawal gas.	1968	FGMACTDDDDD
EUWB-HTR-2	10 MMBTU/hr, natural gas fired, water bath heater #2 for heating withdrawal gas.	1968	FGMACTDDDDD
EUWB-HTR-3  10 MMBTU/hr, natural gas fired, water bath heater #3 for heating withdrawal gas.		1968	FGMACTDDDDD

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUPLANT-HTR-1	Sivalss, Inc. HH-7230-T1, 4.0 MMBTU/hr, process heater.	2-22-2018	FGMACTDDDDD<10
EUGEN-1626	465 HP, diesel fired, compression ignition, emergency generator.	2005	FGMACTZZZZ
EURULE285(mm)	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(mm).	NA	FGRULE285(mm)

# EUDEHY EMISSION UNIT CONDITIONS

## **DESCRIPTION**

Glycol dehydration system processing gas from the Guelph (Brown Niagaran); contains a 1.5 MMBTU/hr natural gas-fired burner and a 1,000-gallon TEG storage tank.

Flexible Group ID: FGMACTHHHSMALL, FGMACTDDDDDSMALL.

## POLLUTION CONTROL EQUIPMENT

Process Heater (reboiler).

## I. EMISSION LIMIT(S)

NA

## II. MATERIAL LIMIT(S)

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

## III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not operate EUDEHY for more than 7,000 hours per 12-month rolling time period as determined at the end of each calendar month. <sup>2</sup> (R 336.1205, R 336.1225, R 336.1702(a))
- 2. The glycol recirculation rate for EUDEHY shall not exceed a maximum of 11.0 gallons per minute. <sup>2</sup> (R 336.1205, R 336.1225, R 336.1702(a))
- 3. Within 180 days of permit issuance, the permittee shall submit to the AQD District Supervisor, for review and approval, a preventative maintenance/malfunction abatement plan (PM/MAP) for EUDEHY. After approval of the PM/MAP by the AQD District Supervisor, the permittee shall not operate EUDEHY unless the PM/MAP, or an alternate plan approved by the AQD District Supervisor, is implemented, and maintained. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. At a minimum, the plan shall include:
  - a. Identification of the equipment and, if applicable, air-cleaning device and the supervisory personnel responsible for overseeing the inspection, maintenance, and repair.
  - b Description of the items or conditions to be inspected and frequency of the inspections or repairs.
  - c Identification of the equipment and if applicable, air-cleaning device, operating parameters that shall be monitored to detect a malfunction or failure, the normal operating range of these parameters and a description of the method of monitoring or surveillance procedures.
  - d Identification of the major replacement parts that shall be maintained in inventory for quick replacement.
  - e A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

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

# IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall not operate EUDEHY unless the flash tank exhaust gas and non-condensable regenerator exhaust gas are routed to the reboiler for destruction. <sup>2</sup> (R 336.1205, R 336.1225, R 336.1702(a), R 336.1910)

### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

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

### VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. (R 336.1205, R 336.1225, R 336.1702(a))
- 2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period hours of operation, for EUDEHY as required by SC III.1. The permittee shall keep all records on file at the facility and make them available to the Department upon request. <sup>2</sup> (R 336.1205, R 336.1702(a))
- 3. The permittee shall keep, in a satisfactory manner, records of the wet gas composition as determined through analysis of wet gas samples for EUDEHY, as required by SC V.1. The permittee shall keep all records on file at the facility and make them available to the Department upon request.<sup>2</sup> (R 336.1205, R 336.1225, R 336.1702(a))

# VII. REPORTING

- 1. The permittee shall submit all applicable notifications and reports required by 40 CFR 63.775 by the dates specified in 40 CFR 63.775. 2 (40 CFR 63.775)
- 2. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 3. 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))
- 4. 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))

## VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVDEHY	16 <sup>1</sup>	14.75 <sup>1</sup>	R 336.1225

# IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart HHH: Natural Gas Transmission and Storage Facilities. <sup>2</sup> (40 CFR Part 63, Subpart HHH)

# 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
FGENGINES	Four natural gas-fired reciprocating internal combustion engines.	EUKVS6-1601 EUKVS6-1602 EUKVS12-1603 EUKVS12-1604
FGCOLDCLEANERS	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 281(h) or Rule 285(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.	EUCOLDCLEANER
FGMACTDDDDD	Water Bath, Heaters subject to recordkeeping and reporting requirements of 40 CFR 63 Subpart DDDDD for New or Existing Process Heater equal or greater than 10 MMBTU/hr.	EUWB-HTR-1 EUWB-HTR-2 EUWB-HTR-3
FGMACTDDDDD<10	Process heater subject to recordkeeping and reporting requirements of 40 CFR 63, Subpart DDDDD for Existing or New Boiler Process Heater, Small Unit.	EUPLANT-HTR-1
FGMACTZZZZ	Emergency Engine subject to work practice standards, recordkeeping, and reporting requirements of 40 CFR 63 Subpart ZZZZ.	EUGEN-1626
FGMACTDDDDDSMALL	Requirements for a new boiler and process heater with a heat input capacity of <10 MMBTU/hr for major sources of HAP emissions per 40 CFR Part 63, Subpart DDDDD (Boiler MACT). These boilers or process heaters are designed to burn solid, liquid, or gaseous fuels.	EUDEHY
FGMACTHHHSMALL	Requirements for small new glycol dehydrators (<0.9 Mg/yr benzene emissions) at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart HHH.	EUDEHY
FGRULE285(mm)	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(mm).	EURULE285(mm)

# FGENGINES FLEXIBLE GROUP CONDITIONS

## **DESCRIPTION**

The facility uses four natural gas-fired reciprocating internal combustion engines which are used to drive compressors to compress natural gas for transport via a natural gas pipeline. These engines are needed to regulate flow to and from the storage field.

Emission Units: EUKVS6-1601, EUKVS6-1602, EUKVS12-1603, EUKVS12-1604

## POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

## III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

# IV. DESIGN/EQUIPMENT PARAMETER(S)

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

## 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. Permittee shall monitor and record the natural gas consumption for each emission unit in FGENGINES for each calendar month. (R 336.1213(3)(b))

## VII. REPORTING

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

# VIII. OTHER REQUIREMENT(S)

1. Permittee shall comply with all applicable requirements of 40 CFR 63, Subparts A and ZZZZ-National Emission Standards for Hazardous Air Pollutants from Stationary Reciprocating Internal Combustion Engines (RICE). (R 336.1213(3)(b), 40 CFR 63, Subpart ZZZZ)

# Footnotes:

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

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

# FGMACTDDDD FLEXIBLE GROUP CONDITIONS

## **DESCRIPTION**

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

Emission Units: EUWB-HTR-1, EUWB-HTR-2, EUWB-HTR-3

# **POLLUTION CONTROL EQUIPMENT**

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

# III. PROCESS/OPERATIONAL RESTRICTION(S)

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

2. If the unit is not operated on the required date for the tune-up, the tune-up must be conducted within 30 calendar days of startup. (40 CFR 63.7540(a)(13))

3. At all times, the permittee must operate and maintain each existing gas 1 boiler or process heater, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (40 CFR 63.7500(a)(3))

# IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

# V. TESTING/SAMPLING

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

NA

### VI. MONITORING/RECORDKEEPING

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

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

  (40 CFR 63.7560(c))

# VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. If the permittee intends to use a fuel other than natural gas, refinery gas, gaseous fuel subject to another subpart of 40 CFR Part 63, Part 60, Part 61, or Part 65, or Other Gas 1 fuel to fire the affected unit during a period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575, the permittee must submit a notification of alternative fuel use within 48 hours of the declaration of each period of natural gas curtailment or supply interruption, as defined in 40 CFR 63.7575. The notification must include the information as listed below.
  - a. Company name and address. (40 CFR 63.7545(f)(1))
  - b. Identification of the affected unit. (40 CFR 63.7545(f)(2))
  - c. Reason the permittee is unable to use natural gas or equivalent fuel, including the date when the natural gas curtailment was declared, or the natural gas supply interruption began. (40 CFR 63.7545(f)(3))
  - d. Type of alternative fuel that the permittee intends to use. (40 CFR 63.7545(f)(4))
  - e. Dates when the alternative fuel use is expected to begin and end. (40 CFR 63.7545(f)(5))
- 5. The permittee must submit boiler and process heater tune-up compliance reports to the appropriate AQD District Office. The reports must be postmarked or submitted by March 15<sup>th</sup> and must cover the period of January 1 through December 31 of the reporting year. For new units, the first report should cover the period of startup to December 31 of the reporting year. Compliance reports must also be submitted to EPA using the Compliance and Emissions Data Reporting Interface (CEDRI) which is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). (40 CFR 63.7550(b))
- 6. The permittee must submit a compliance report containing the following information.
  - a. Company and Facility name and address. (40 CFR 63.7550(c)(5)(i))
  - b. Process unit information, emissions limitations, and operating parameter limitations. (40 CFR 63.7550(c)(5)(ii))
  - c. Date of report and beginning and ending dates of the reporting period. (40 CFR 63.7550(c)(5)(iii))
  - Include the date of the most recent tune-up for each unit. Include the date of the most recent burner inspection if it was not done annually and was delayed until the next scheduled or unscheduled unit shutdown.
     (40 CFR 63.7550(c)(5)(xiv))
  - e. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. (40 CFR 63.7550(c)(5)(xvii))
- 7. The permittee must submit all reports required by Table 9 of this subpart electronically using CEDRI that is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, submit the report to the EPA Region V at the appropriate address listed in 40 CFR 63.13 and to the appropriate AQD District Office. (40 CFR 63.7550(h)(3))

See Appendix 8

# VIII. STACK/VENT RESTRICTION(S)

NA

# IX. OTHER REQUIREMENT(S)

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

## Footnotes:

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

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

# FGMACTDDDDD<10 FLEXIBLE GROUP CONDITIONS

## **DESCRIPTION**

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

**Emission Unit: EUPLANT-HTR-1** 

Equal to or less than 5 MMBTU/hr and only burns gaseous or light liquid fuels.

# **POLLUTION CONTROL EQUIPMENT**

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

# III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee must, for boilers or process heaters with a heat input capacity of less than or equal to 5 MMBTU/hr, conduct a 5-year tune-up according to 40 CFR 63.7540(a)(12). Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. The burner inspection may be delayed until the next scheduled or unscheduled unit shutdown, but each burner must be inspected at least once every 72 months. (40 CFR 63.7500(d) or (e), 40 CFR 63.7515(d), 40 CFR 63.7540(a)(12), 40 CFR Part 63, Subpart DDDDD, Table 3.1)
- 2. The permittee must conduct a tune-up of each boiler or process heater as specified in the following: (40 CFR 63.7540(a)(11) or (12))
  - a. As applicable, inspect the burner and clean or replace any components of the burner as necessary. The permittee may perform the burner inspection any time prior to the tune-up or may delay the burner inspection until the next scheduled unit shutdown. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment. (40 CFR 63.7540(a)(10)(i))
  - b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. (40 CFR 63.7540(a)(10)(ii))
  - c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. The permittee may delay the inspection until the next scheduled unit shutdown. (40 CFR 63.7540(a)(10)(iii))
  - d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any  $NO_X$  requirement to which the unit is subject. (40 CFR 63.7540(a)(10)(iv))
  - e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. (40 CFR 63.7540(a)(10)(v))

3. If the unit is not operated on the required date for the tune-up, the tune-up must be conducted within 30 calendar days of startup. (40 CFR 63.7540(a)(13))

4. At all times, the permittee must operate and maintain each existing small boiler or process heater, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. (40 CFR 63.7500(a)(3))

# IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

## V. TESTING/SAMPLING

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

NA

## VI. MONITORING/RECORDKEEPING

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

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

## VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. The permittee must submit boiler or process heater tune-up compliance reports to the appropriate AQD District Office and must be postmarked or submitted by March 15<sup>th</sup> of the year following the applicable 5-year period starting from January 1 of the year following the previous tune-up to December 31 (of the latest tune-up year).
  - Compliance reports must also be submitted to EPA using the Compliance and Emissions Data Reporting Interface (CEDRI) which is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). If

the reporting form is not available in CEDRI at the time the compliance report is due, a hardcopy of the compliance report shall be submitted to EPA Region 5. (40 CFR 63.7550(b), 40 CFR 63.7550(h)(3))

- 5. The permittee must include the following information in the compliance report. (40 CFR 63.7550(c)(1))
  - a. Company and Facility name and address. (40 CFR 63.7550(c)(5)(i))
  - b. Process unit information, emissions limitations, and operating parameter limitations. (40 CFR 63.7550(c)(5)(ii))
  - c. Date of report and beginning and ending dates of the reporting period. (40 CFR 63.7550(c)(5)(iii))
  - d. Include the date of the most recent tune-up for each unit. Include the date of the most recent burner inspection if it was not done biennially or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown. (40 CFR 63.7550(c)(5)(xiv))
  - e. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. (40 CFR 63.7550(c)(5)(xvii))

# See Appendix 8

# VIII. STACK/VENT RESTRICTION(S)

NA

# IX. OTHER REQUIREMENT(S)

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

#### 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**

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

**Emission Unit**: EUGEN-1626

# POLLUTION CONTROL EQUIPMENT

NA

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

NA

## II. MATERIAL LIMIT(S)

 The permittee shall burn only diesel fuel in each engine with a maximum sulfur content of 15 ppm (0.0015 percent) by weight and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent. (40 CFR 63.6604(b), 40 CFR 1090.305)

# III. PROCESS/OPERATIONAL RESTRICTION(S)

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

If the emergency engine is being operated during an emergency and it is not possible to shut down the engine to perform the management practice requirements on the schedule required, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State or local law has been abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law or which the risk was deemed unacceptable. (40 CFR 63.6602, 40 CFR Part 63, Subpart ZZZZ, Table 2c.1)

- 2. The permittee may utilize an oil analysis program in order to extend the specified oil change requirement in SC III.1. The oil analysis must be performed at the same frequency specified for changing the oil in SC III.1. (40 CFR 63.6625(i))
- 3. The permittee shall operate and maintain each engine in FGMACTZZZZ and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent

with good air pollution control practice for minimizing emissions. (40 CFR 63.6605, 40 CFR 63.6625(e), 40 CFR 63.6640(a), 40 CFR Part 63, Subpart ZZZZ, Table 6.9)

- 4. For each engine in FGMACTZZZZ, the permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply. (40 CFR 63.6625(h))
- 5. The permittee may operate each engine in FGMACTZZZZ for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per calendar year. (40 CFR 63.6640(f)(2))
- 6. Each engine in FGMACTZZZZ may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in **SC III.5**. The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for the permittee to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. **(40 CFR 63.6640(f)(3))**

# IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each engine in FGMACTZZZZ with non-resettable hours meters to track the operating hours. (40 CFR 63.6625(f))

## V. TESTING/SAMPLING

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

1. If using the oil analysis program, the permittee must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30% of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20% from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all these condemning limits are not exceeded, the permittee is not required to change the oil. If any of the limits are exceeded, the permittee must change the oil within 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the permittee must change the oil within 2 business days or before commencing operation, whichever is later. The permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. (40 CFR 63.6625(i))

#### VI. MONITORING/RECORDKEEPING

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

- 1. For each engine in FGMACTZZZZ, the permittee shall keep in a satisfactory manner the following:
  - a. A copy of each notification and report that was submitted to comply with 40 CFR Part 63, Subpart ZZZZ, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted,
  - b. Records of the occurrence and duration of each malfunction of operation or the air pollution control and monitoring equipment,
  - c. Records of performance tests and performance evaluations,

- d. Records of all required maintenance performed on the air pollution control and monitoring equipment,
- e. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

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

- 2. For each engine in FGMACTZZZZ, the permittee shall keep in a satisfactory manner, records to demonstrate continuous compliance with the operation and maintenance of the engine according to the manufacturer's emission-related operation and maintenance instructions; or of a maintenance plan that provides to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. The permittee shall keep all records on file and make them available to the department upon request. (40 CFR 63.6655(d), 40 CFR 63.6660, 40 CFR Part 63, Subpart ZZZZ, Table 6.9)
- 3. For each engine in FGMACTZZZZ, the permittee shall keep in a satisfactory manner, records of the maintenance conducted to demonstrate that the engine and after-treatment control device (if any) were operated and maintained according to the developed maintenance plan. The permittee shall keep all records on file and make them available to the department upon request. (40 CFR 63.6655(e), 40 CFR 63.6660)
- 4. The permittee shall monitor and record, the total hours of operation for each engine in FGMACTZZZZ on a monthly basis, and the hours of operation during emergency and non-emergency service that are recorded through the non-resettable hour meter for each engine in FGMACTZZZZ on a calendar year basis, in a manner acceptable to the AQD District Supervisor. The permittee shall document how many hours are spent for emergency operation including what classified the operation as emergency and how many hours are spent for non-emergency operation. The permittee shall keep all records on file and make them available to the department upon request. (40 CFR 63.6655(f), 40 CFR 63.6660)
- 5. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in FGMACTZZZZ, demonstrating that the fuel meets the requirement of SC II.1. The certification or test data shall include the name of the oil supplier or laboratory, the sulfur content, and cetane index or aromatic content of the fuel oil. The permittee shall keep all records on file and make them available to the department upon request. (R 336.1213(3), 40 CFR 1090.305)
- 6. The permittee's records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1). **(40 CFR 63.6660(a))**
- 7. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5-years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. (40 CFR 63.6660(b))

# VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. The permittee shall submit to the AQD District Supervisor, a semiannual compliance report, as specified in 40 CFR 63.6650, which contains all deviations during the reporting period from the operating limitations specified in SC III.1. If there are no deviations from any applicable emission limitations or operating limitations, the report shall contain a statement that there were no deviations during the reporting period. The first report shall cover the period beginning on the applicable compliance date specified in 40 CFR 63.6595 and ending on June 30 (postmarked or delivered by July 31) or December 31 (postmarked or delivered by January 31), whichever date

is the first date following the end of the first calendar half after the applicable compliance date. Each subsequent report must cover the semiannual period from January 1 through June 30, or from July 1 through December 31. The subsequent reports must be postmarked or delivered by July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period, except as allowed in 40 CFR 63.6650(b)(5). The compliance report must also contain the following information, as specified in 40 CFR 63.6650(c) and (d):

- a. Company name and address.
- b. Certification of the report by a responsible official.
- c. Date of report and beginning and ending dates of the reporting period.
- d. The number of malfunctions, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused the operating limitations specified in SC III.1 to be exceeded. The report must also include a description of actions taken by the permittee during a malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including actions taken to correct a malfunction.
- e. The total operating time of the RICE at which the deviation occurred during the reporting period.
- f. The number, duration, and cause of deviations and the corrective action taken.

A copy of the compliance report shall be kept on file for a period of at least five years (at least two years at the site) and made available to the Department upon request. (40 CFR 63.6640(b), 40 CFR 63.6650(b), (c), and (d), 40 CFR 63.6660)

# See Appendix 8

## VIII. STACK/VENT RESTRICTION(S)

NA

# IX. OTHER REQUIREMENT(S)

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

### Footnotes:

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

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

# FGMACTDDDDDSMALL FLEXIBLE GROUP CONDITIONS

# **DESCRIPTION**

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

**Emission Unit: EUDEHY** 

Equal to or less than 5 MMBTU/hr and only burns gaseous or light liquid fuels.

## POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

# III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee must, for boilers or process heaters with a heat input capacity of less than or equal to 5 MMBTU/hr, conduct a five-year tune-up according to 40 CFR 63.7540(a)(12). Each five-year tune-up must be conducted no more than 61 months after the previous tune-up. The burner inspection may be delayed until the next scheduled or unscheduled unit shutdown, but each burner must be inspected at least once every 72 months. <sup>2</sup> (40 CFR 63.7500(d) or (e), 40 CFR 63.7515(d), 40 CFR 63.7540(a)(12), 40 CFR Part 63, Subpart DDDDD, Table 3.1))
- 2. The permittee must conduct a tune-up of each process heater as specified in the following: (40 CFR 63.7540(a)(11) or (12))
  - a. As applicable, inspect the burner and clean or replace any components of the burner, as necessary. The permittee may perform the burner inspection any time prior to the tune-up or may delay the burner inspection until the next scheduled unit shutdown. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment. (40 CFR 63.7540(a)(10)(i))
  - b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. (40 CFR 63.7540(a)(10)(ii))
  - c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. The permittee may delay the inspection until the next scheduled unit shutdown. (40 CFR 63.7540(a)(10)(iii))
  - d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO<sub>x</sub> requirement to which the unit is subject. (40 CFR 63.7540(a)(10)(iv))
  - e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as

long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. <sup>2</sup> (40 CFR 63.7540(a)(10)(v))

- 3. If the unit is not operated on the required date for the tune-up, the tune-up must be conducted within 30 calendar days of startup. <sup>2</sup> (40 CFR 63.7540(a)(13))
- 4. At all times, the permittee must operate and maintain each existing small process heater, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. <sup>2</sup> (40 CFR 63.7500(a)(3))

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

NA

### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1203(3))

NA

# VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1203(3))

- 1. The permittee must keep a copy of each notification and report submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or two or five year compliance report or one-time energy assessment, as applicable, that the permittee submitted.<sup>2</sup> (40 CFR 63.7555(a)(1))
- 2. The permittee must keep the records in a form suitable and readily available for expeditious review. <sup>2</sup> (40 CFR 63.7560(a))
- 3. The permittee must keep each record for five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. 2 (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 two years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The permittee can keep the records off site for the remaining three years.<sup>2</sup> (40 CFR 63.7560(c))

### VII. REPORTING

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

which is accessed through the EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). If the reporting form is not available in CEDRI at the time the compliance report is due, a hardcopy of the compliance report shall be submitted to EPA Region 5.<sup>2</sup> (40 CFR 63.7550(b), 40 CFR 63.7550(h)(3))

- 5. The permittee must include the following information in the compliance report: (40 CFR 63.7550(c)(1))
  - a. Company and facility name and address. (40 CFR 63.7550(c)(5)(i))
  - b. Process unit information, emissions limitations, and operating parameter limitations.

# (40 CFR 63.7550(c)(5)(ii))

- c. Date of report and beginning and ending dates of the reporting period. (40 CFR 63.7550(c)(5)(iii))
- d. Include the date of the most recent tune-up for each unit. Include the date of the most recent burner inspection if it was not done biennially or on a five-year period and was delayed until the next scheduled or unscheduled unit shutdown. (40 CFR 63.7550(c)(5)(xiv))
- e. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.<sup>2</sup> (40 CFR 63.7550(c)(5)(xvii))

# VIII. STACK/VENT RESTRICTION(S)

NA

## IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable requirements of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and DDDDD for Industrial, Commercial, and Institutional Boilers and Process Heaters. <sup>2</sup> (40 CFR Part 63, Subparts A and DDDDD)

# FGMACTHHHSMALL FLEXIBLE GROUP CONDITIONS

## **DESCRIPTION**

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

Emission Unit: EUDEHY.

# POLLUTION CONTROL EQUIPMENT

Process Heater (reboiler).

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

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

### II. MATERIAL LIMIT(S)

NA

# III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The process vent from each glycol dehydration unit shall be vented to a control device or a combination of control devices through a closed-vent system except when the permittee is following the requirements of 40 CFR 1275(c). <sup>2</sup> (40 CFR 63.1275(b)(1)(iii)(A), 40 CFR 63.1275(c))
- 2. The control device used to meet the BTEX emission limit calculated in 40 CFR 63.1275(b)(1)(iii), shall be an enclosed combustion device (e.g. process heater) that is designed and operated in accordance with the following requirements. The vent stream shall be introduced into the flame zone of the process heater: (40 CFR 63.1281(f)(1))
  - a. The mass content of BTEX in the gases vented to the device is reduced as determined in accordance with 40 CFR 63.1282(d). **(40 CFR 63.1281(f)(1)(i)(A))** OR
  - b. The concentration of either TOC or total HAP in the exhaust gases at the outlet of the device is reduced to a level equal to or less than 20 parts per million by volume on a dry basis corrected to three percent oxygen as determined in accordance with the requirements of process heater 40 CFR 63.1282(e).<sup>2</sup> (40 CFR 63.1281(f)(1)(i)(B))
- 3. 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 this subpart shall be operating at all times. More than one unit may be vented to a control device. (40 CFR 63.1281(f)(2)(i))

b. For each control device monitored in accordance with requirements of 40 CFR 63.1283(d) the permittee shall demonstrate compliance according to the requirements of 40 CFR 63.1282(e) or (h).<sup>2</sup> (40 CFR 63.1281(f)(2)(ii))

- 4. In all cases where the provisions of 40 CFR 63, Subpart HHH require the permittee to repair leaks by a specified time after the leak is detected, it is a violation of 40 CFR 63, Subpart HHH to fail to take action to repair the leak(s) within the specified time. If action is taken to repair the leak(s) within the specified time, failure of that action to successfully repair the leak(s) is not a violation of this standard. However, if the repairs are unsuccessful, and a leak is detected, the permittee shall take further action as required by the applicable provisions of this subpart. <sup>2</sup> (40 CFR 63.1274(q))
- 5. At all times, the permittee must operate and maintain each glycol dehydrator, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. <sup>2</sup> (40 CFR 63.1274(h))
- 6. As an alternative to the requirements of paragraph 40 CFR 63.1275(b), the permittee may comply with one of the following: (40 CFR 63.1275(c))
  - a. The permittee shall control air emissions by connecting the process vent to a process natural gas line. (40 CFR 63.1275(c)(1))
  - b. Control of HAP emissions from a Gas-condensate-glycol (GCG) separator (flash tank) vent is not required if the permittee demonstrates, to the Administrator's satisfaction, that total emissions to the atmosphere from the glycol dehydration unit process vent are reduced by one of the levels specified in paragraph 40 CFR 63.1275(c)(3)(i) through (iv) through the installation and operation of controls as specified in paragraph 40 CFR 63.1275(b)(1). (40 CFR 63.1275(c)(3))
    - i. For each small new glycol dehydration unit, BTEX emissions are reduced to a level less than the limit calculated in Equation 2 of paragraph 40 CFR 63.1275(b)(1)(iii). 2 (40 CFR 63.1275(c)(3)(iv))

## IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall install and operate a continuous parameter monitoring system (CPMS) in accordance with the following 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.
    - ii. Each block average value for each one-hour period or shorter periods calculated from all measured data values during each period. If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the hourly (or shorter period) block average instead of all measured values.<sup>2</sup>
- 2. The permittee shall install, calibrate, operate, and maintain a device equipped with a continuous recorder to measure the values of operating parameters appropriate for the control device as specified below. (40 CFR 63.1283(d)(3))
  - a. For a process heater, a temperature monitoring device equipped with a continuous recorder. The temperature monitoring device shall have a minimum accuracy of plus or minus two (±2) percent of the temperature being monitored in Celsius, or plus or minus two and one-half (±2.5) degrees Celsius, whichever value is greater. The temperature sensor shall be installed at a location representative of the combustion zone temperature.<sup>2</sup>
- 3. The permittee shall not operate the glycol dehydration unit unless each process vent is connected to a control device or combination of control devices through a closed-vent system. The closed vent system shall be designed and operated in accordance with the following requirements: (40 CFR 63.1274(c), 40 CFR 63.1275(b)(1)(iii)(A), 40 CFR 63.1275(c), 40 CFR 63.1281(c), 40 CFR 63.1283(c)(2)(iii))

a. The closed-vent system shall route all gases, vapors, and fumes emitted from the material in an emission unit to a control device that meets the requirements specified in 40 CFR 63.1281(f). (40 CFR 63.1281(c)(1))

- b. The closed-vent system shall be designed and operated with no detectable emissions. (40 CFR 63.1281(c)(2))
- c. For each bypass device, except as provided for in 40 CFR 63.1281(c)(3)(iii), in the closed-vent system that could divert all or a portion of the gases, vapors, or fumes from entering the control device, the permittee shall either: (40 CFR 63.1281(c)(3)(i))
  - i. At the inlet to the bypass device that could divert the stream away from the control device to the atmosphere, properly install, calibrate, maintain, and operate a flow indicator that is capable of taking periodic readings and sounding an alarm when the bypass device is open such that the stream is being, or could be, diverted away from the control device to the atmosphere.
  - ii. Secure the bypass device valve installed at the inlet to the bypass device in the non-diverting position using a car-seal or lock-and-key type configuration.
- d. Low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and safety devices are not subject to the requirements of 40 CFR 63.1281(c)(3)(i). 2 (40 CFR 63.1281(c)(3)(ii))

### V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. Determination of the actual flow rate of natural gas to each glycol dehydration unit shall be made using either of the following procedures: (40 CFR 63.1282(a)(1))
  - a. The permittee shall install and operate a monitoring instrument that directly measures natural gas flowrate to each glycol dehydration unit with an accuracy of plus or minus two (±2) percent or better. The permittee shall convert the annual natural gas flowrate to a daily average by dividing the annual flowrate by the number of days per year the glycol dehydration unit processed natural gas.
  - b. The permittee shall document to the Administrator's satisfaction, the actual annual average natural gas flow rate to each glycol dehydration unit.<sup>2</sup>
- 2. Determination of actual average benzene or BTEX emissions from each glycol dehydration unit shall be made using the procedures of either 40 CFR 63.1282(a)(2) (i) or (ii) below. Emissions shall be determined either uncontrolled or with federally enforceable controls in place. (40 CFR 63.1282(a)(2))
  - a. The permittee shall determine actual average benzene or BTEX emissions using the model GRI-GLYCalcTM, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalcTM Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI-95/0368.1).
  - b. The permittee shall determine an average mass rate of benzene or BTEX emissions in kilograms per hour through direct measurement by performing three runs of Method 18 in 40 CFR part 60, Appendix A, or ASTM D6420-99 (Reapproved 2004) (incorporated by reference as specified in 40 CFR 63.14), as specified in 40 CFR 63.772(a)(1)(ii), or an equivalent method, and averaging the results of the three runs. Annual emissions in kilograms per year shall be determined by multiplying the mass rate by the number of hours the unit is operated per year. This result shall be converted to megagrams per year.
- 3. The permittee shall perform "no detectable emissions" testing for closed vent systems using the test methods and procedures specified in 40 CFR 63.1282(b). 2 (40 CFR 63.1282(b))
- 4. The permittee shall demonstrate that the process heater meets the requirements of 40 CFR 1281(f)(1) by conducting a performance test in accordance with the following test methods and procedures: (40 CFR 63.1282(c)(1), 40 CFR 63.1282(d)(3))
  - a. Method 1 or 1A, 40 CFR Part 60, Appendix A, as appropriate, shall be used for selection of the sampling sites. The sampling site shall be located at the outlet of the combustion device.

b. The gas volumetric flowrate shall be determined using Method 2, 2A, 2C, or 2D, 40 CFR Part 60, Appendix A, as appropriate.

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

#### VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

- 1. The permittee shall maintain records of the annual facility natural gas throughput each year.<sup>2</sup> (40 CFR 63.1270(a)(3))
- 2. The permittee shall comply with the requirements below in order to show compliance with 40 CFR 63.1281(f)(1)(i)(B): (40 CFR 63.1281(f)(1)(i)(B), 40 CFR 63.1282(e))
  - a. Establish a site-specific minimum monitoring parameter value according to the requirements of 40 CFR 63.1283(d)(5)(i) (SC VI.16).
  - b. The permittee shall calculate the daily average of the applicable monitored parameter in accordance with 40 CFR c. Compliance is achieved when the daily average of the monitoring parameter value calculated under paragraph 40 CFR 63.1282(e)(2) is equal to or greater than the minimum monitoring value established under paragraph 40 CFR 63.1282(e)(1). For inlet gas flowrate, compliance with the operating parameter limit is achieved when the value is equal to or less than the value established under the performance test conducted under 40 CFR 63.1282(d), as applicable.<sup>2</sup>
- 3. The permittee shall operate the CPMS at all times when the glycol dehydration system is operating except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, system accuracy audits and required zero and span adjustments). A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. Monitoring system repairs are required to be completed in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable.<sup>2</sup> (40 CFR 63.1282(e)(4))
- 4. Data recorded during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities may not be used in calculations used to

report emissions or operating levels. All the data collected during all other required data collection periods must be used in assessing the operation of the control device and associated control system.<sup>2</sup> (40 CFR 63.1282(e)(5))

- 5. Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required quality monitoring system quality assurance or quality control activities (including, as applicable, system accuracy audits and required zero and span adjustments), failure to collect required data is a deviation of the monitoring requirements.<sup>2</sup> (40 CFR 63.1282(e)(6))
- 6. Except as provided in paragraphs 40 CFR 63.1283(c)(5) and (6), the permittee shall inspect each closed-vent system and each bypass device according to the procedures and schedule specified below: (40 CFR 63.1274(c), 40 CFR 63.1283(c)(2))
  - a. For each closed-vent system joints, seams, or other connections that are permanently or semi-permanently sealed (e.g., a welded joint between two sections of hard piping or a bolted or gasketed ducting flange) the permittee shall: (40 CFR 63.1283(c)(2)(i))
    - i. Conduct an initial inspection according to 40 CFR 63.1282(b) to demonstrate that the closed-vent system operates with no detectable emissions.
    - ii. Conduct annual visual inspections for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes or gaps in piping, loose connections, or broken or missing caps or other closure devices.
  - b. For closed-vent system components other than those specified in 40 CFR 63.1283(c)(2)(i), the permittee shall: (40 CFR 63.1283(c)(2)(ii))
    - i. Conduct an initial inspection according to 40 CFR 63.1282(b) to demonstrate that the closed-vent system operates with no detectable emissions.
    - ii. Conduct annual inspections according to 40 CFR 63.1282(b) to demonstrate that the components or connections operate with no detectable emissions.
    - iii. Conduct annual visual inspections for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes or gaps in ductwork, loose connections, or broken or missing caps or other closure devices.
  - c. For each bypass device, except low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and safety devices, the permittee shall either: (40 CFR 63.1283(c)(2)(iii))
    - i. At the inlet to the bypass device that could divert the steam away from the control device to the atmosphere, set the flow indicator to take a reading at least once every 15 minutes.
    - ii. If the bypass device valve installed at the inlet to the bypass device is secured in the non-diverting position using a car-seal or a lock-and-key type configuration, visually inspect the seal or closure mechanism at least once every month to verify that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass device.<sup>2</sup>
- 7. In the event that a leak or defect is detected, the permittee shall repair the leak or defect as soon as practicable, except as provided in (40 CFR 63.1283(c)(4), 40 CFR 63.1274(c), 40 CFR 63.1283(c)(3))
  - a. A first attempt at repair shall be made no later than five calendar days after the leak is detected
  - b. Repair shall be completed no later than 15 calendar days after the leak is detected<sup>2</sup>
- 8. Delay of repair of a closed-vent system for which leaks, or defects have been detected is allowed if the repair is technically infeasible without a shutdown, as defined in 40 CFR 63.1271, or if the permittee determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be completed by the end of the next shutdown. <sup>2</sup> (40 CFR 63.1274(c), 40 CFR 63.1283(c)(4))
- 9. Any parts of the closed-vent system or cover that are designated, as described below, as unsafe to inspect are exempt from the inspection requirements of 40 CFR 63.1283(c)(2)(i) and (ii). (40 CFR 63.1274(c), 40 CFR 63.1283(c)(5))
  - a. The permittee determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with 40 CFR 63.1283(c)(2)(i) and (ii).

b. The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times. <sup>2</sup>

- 10. Any parts of the closed-vent system or cover that are designated, as described below, as difficult to inspect are exempt from the inspection requirements of 40 CFR 63.1283(c)(2)(i) and (ii) if: (40 CFR 63.1274(c), 40 CFR 63.1283(c)(6))
  - a. The permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than two meters above a support surface.
  - b. The permittee has a written plan that requires inspection of the equipment at least once every five years.<sup>2</sup>
- 11. A site-specific monitoring plan must be prepared that addresses the monitoring system design, data collection, and the quality assurance and quality control elements below. Each CPMS must be installed, calibrated, operated, and maintained in accordance with the procedures in the approved site-specific monitoring plan. Using the process described in 40 CFR 63.8(f)(4), the permittee may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in 40 CFR 63.1283(d)(1)(ii)(A)-(E), in the site-specific monitoring plan. (40 CFR 63.1274(c), 40 CFR 63.1283(d)(1)(ii))
  - a. The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations.
  - b. Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements.
  - c. Equipment performance checks, system accuracy audits, or other audit procedures.
  - d. Ongoing operation and maintenance procedures in accordance with provisions in 40 CFR 63.8(c)(1) and (c)(3).
  - e. Ongoing reporting and recordkeeping procedures in accordance with provisions in 40 CFR 63.10(c), (e)(1) and (e)(2)(i). <sup>2</sup>
- 12. 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. <sup>2</sup> (40 CFR 63.1274(c), 40 CFR 63.1283(d)(1)(iii))
- 13. The permittee shall conduct a performance evaluation of each CPMS in accordance with the site-specific monitoring plan. <sup>2</sup> (40 CFR 63.1274(c), 40 CFR 63.1283(d)(1)(iv))
- 14. 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. <sup>2</sup> (40 CFR 63.1283(d)(4))
- 15. For control devices used to comply with 40 CFR Part 63, Subpart HHH, the permittee shall establish a minimum operating parameter value or a maximum operating parameter value, as appropriate for the control device, to define the conditions at which the control device must be operated to continuously achieve the applicable performance requirements specified in 40 CFR 63.1281(f)(1). Each minimum or maximum operating parameter value shall be established as follows: (40 CFR 63.1282(e)(1), 40 CFR 63.1283(d)(5)(i))
  - a. If the permittee conducts performance tests in accordance with the requirements of 40 CFR 63.1282(d)(3) to demonstrate that the control device achieves the applicable performance requirements specified in 40 CFR 63.1281(f)(1), 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 in accordance with the requirements of 40 CFR 63.1282(d)(4) to demonstrate that the control device achieves the applicable performance requirements specified in 40 CFR 63.1281(f)(1), 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 40 CFR 63.1282(g) to demonstrate that the control device achieves the applicable performance requirements specified in 40 CFR 63.1281(f)(1), then the maximum inlet gas flowrate shall be established based on the performance test and supplemented, as necessary, by the manufacturer recommendations. <sup>2</sup>
- 16. For each excursion, the permittee shall be deemed to have failed to have applied control in a manner that achieves the required operating parameter limits. Failure to achieve the required operating parameter limits is a violation of this standard. <sup>2</sup> (40 CFR 63.1274(c), 40 CFR 63.1283(d)(7))
- 17. The permittee shall maintain files of all information (including all reports and notifications) required by this 40 CFR 63, Subpart HHH. The files shall be retained for at least five years following the date of each occurrence, measurement, maintenance, corrective action, report, or period. (40 CFR 63.1284(b)(1))
  - a. All applicable records shall be maintained in such a manner that they can be readily accessed.
  - b. The most recent 12 months of records shall be retained on site or shall be accessible from a central location by computer or other means that provides access within two hours after a request.
  - c. The remaining four years of records may be retained offsite.
  - d. Records may be maintained in hard copy or computer-readable form including, but not limited to, on paper, microfilm, computer, floppy disk, magnetic tape, or microfiche.<sup>2</sup>
- 18. The permittee shall maintain the records specified in 40 CFR 63.10(b)(2). 2 (40 CFR 63.1284(b)(2))
- 19. The permittee shall maintain records specified in 40 CFR 63.10(c) for each monitoring system in accordance with the requirements of 40 CFR 63.1283(d). Notwithstanding the previous sentence, monitoring data recorded during periods identified in paragraphs 40 CFR 63.1284(b)(3)(i) through (iv) shall not be included in any average or percent leak rate computed under 40 CFR Part 63 HHH. Records shall be kept of the times and durations of all such periods and any other periods during process or control device operation when monitors are not operating or failed to collect required data. (40 CFR 63.1284(b)(3))
  - a. Monitoring system breakdown, repairs, calibration checks, and zero (low-level) and high-level adjustments.
  - b. Periods of non-operation resulting in cessation of the emissions to which the monitoring applies.
  - c. Excursions due to invalid data as defined in 40 CFR 63.1283(d)(6)(iii). <sup>2</sup>
- 20. The permittee shall keep the following records up-to-date and readily accessible: (40 CFR 63.1274, 40 CFR 63.1284(b)(4), 40 CFR 63.1284(g), 40 CFR 63.1284(h))
  - a. Continuous record of the equipment operating parameters specified to be monitored under 40 CFR 63.1283(d) or specified by the Administrator in accordance with 40 CFR 63.1283(d)(3)(iii).
  - b. Records of the daily average value of each continuously monitored parameter for each operating day determined according to the procedures specified in 40 CFR 63.1283(d)(4) except as specified in paragraphs 40 CFR 63.1284(b)(4)(ii)(A) through (C).
  - c. Hourly records of the times and durations of all periods when the vent stream is diverted from the control device or the device is not operating.
  - d. Where a seal or closure mechanism is used to comply with 40 CFR 63.1281(c)(3)(i)(B), hourly records of flow are not required. In such cases, the permittee shall record that the monthly visual inspection of the seals or closure mechanism has been done and shall record the duration of all periods when the seal mechanism is broken, the bypass line valve position has changed, or the key for a lock-and-key type lock has been checked out, and records of any car-seal that has broken.<sup>2</sup>
- 21. The permittee shall maintain records identifying all parts of the closed-vent system that are designated as unsafe to inspect in accordance with 40 CFR 63.1283(c)(5), an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment. <sup>2</sup> (40 CFR 63.1283(c)(7), 40 CFR 63.1284(b)(5))

22. The permittee shall maintain records identifying all parts of the closed-vent system that are designated as difficult to inspect in accordance with 40 CFR 63.1283(c)(6), an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment. <sup>2</sup> (40 CFR 63.1283(c)(6), 40 CFR 63.1284(b)(6))

- 23. The permittee shall maintain the following records for each inspection conducted in accordance with 40 CFR 63.1283(c), during which a leak or defect is detected: (40 CFR 63.1283(c)(7), 40 CFR 63.1284(b)(7))
  - a. The instrument identification numbers, operator name or initials, and identification of the equipment.
  - b. The date the leak or defect was detected and the date of the first attempt to repair the leak or defect.
  - c. Maximum instrument reading measured by the method specified in 40 CFR 63.1282(b) after the leak or defect is successfully repaired or determined to be nonrepairable.
  - d. "Repair delayed" and the reason for the delay if a leak or defect is not repaired within 15 calendar days after discovery of the leak or defect.
  - e. The name, initials, or other form of identification of the owner or operator (or designee) whose decision it was that repair could not be 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. 2
- 24. For each inspection conducted in accordance with 40 CFR 63.1283(c) 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. <sup>2</sup> (40 CFR 63.1283(c)(7), 40 CFR 63.1284(b)(8))
- 25. The permittee shall maintain records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control equipment and monitoring equipment. The permittee shall maintain records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.1274(h), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. <sup>2</sup> (40 CFR 63.1274(c), 40 CFR 63.1284(f))

#### VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. The permittee shall submit the notification of the planned date of a performance test and site–specific test plan at least 60 days before the test. <sup>2</sup> (40 CFR 63.1285(b)(3))
- 5. The permittee shall submit a Notification of Compliance Status Report as required under 40 CFR 63.9(h) within 180 days after startup. In addition to the information required under 40 CFR 63.9(h) the Notification of Compliance Status Report shall include the information specified below. If an owner or operator submits the required information at different times, and/or different submittals, subsequent submittals may refer to previous submittals instead of duplicating and resubmitting the previously submitted information. (40 CFR 63.1285(b)(4), 40 CFR 63.1285(d))

- a. If a closed-vent system and a control device other than a flare are used to comply with 40 CFR 63.1274, the permitee shall submit the information in 40 CFR 63.1285(d)(1)(iii), and the information in either40 CFR 63.1285(d)(1)(i) or (ii). (40 CFR 63.1285(d)(1))
  - i. If the owner or operator is required to conduct a performance test, the performance test results including the information specified in 40 CFR 63.1285(d)(1)(ii) and in (A) and (B) below. Results of a performance test conducted prior to the compliance date of this subpart can be used provided that the test was conducted using the methods specified in 40 CFR 63.1282(d)(3), and that the test conditions are representative of current operating conditions. If the permittee operates a combustion control device model tested under 40 CFR 63.1282(g), an electronic copy of the performance test results shall be submitted via email to Oil\_and\_Gas\_PT@EPA.GOV unless the test results for that model of combustion control device are posted at the following Web site: epa.gov/airquality/oilandgas/.
    - A. The percent reduction of HAP or TOC, or the outlet concentration of HAP or TOC (parts per million by volume on a dry basis), determined as specified in 40 CFR 63.1282(d)(3).
    - B. The value of the monitored parameters specified in 40 CFR 63.1283(d), or a site-specific parameter approved by the permitting agency, averaged over the full period of the performance test.
  - ii. The results of the closed-vent system initial inspections performed according to the requirements in 40 CFR 63.1283(c)(2)(i) and (ii).
- b. The permittee shall submit one complete test report for each test method used for a particular source. (40 CFR 63.1285(d)(3))
  - i. For additional tests performed using the same test method, the results specified in 40 CFR 63.1285(d)(3)(ii), 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 40 CFR 63.1274, the permittee shall submit the information specified in 40 CFR 63.1285(d)(4)(i)-(iv), as applicable, below for each operating parameter required to be monitored in accordance with the requirements of 40 CFR 63.1283(d), (40 CFR 63.1285(d)(4))
  - i. An explanation of the rationale for why the permittee selected each of the operating parameter values established in 40 CFR 63.1283(d)(5). This explanation shall include any data and calculations used to develop the value, and a description of why the chosen value indicates that the control device is operating in accordance with the applicable requirements of 40 CFR 63.1281 (f)(1).
  - ii. 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.
- d. Results of any continuous monitoring system performance evaluations shall be included in the Notification of Compliance Status Report. (40 CFR 63.1285(d)(5))
- e. The permittee shall comply with all requirements for compliance status reports contained in the source's title V permit, including reports required under 40 CFR Part 63, Subpart HHH. Each time a notification of compliance status is required under 40 CFR Part 63, Subpart HHH, the permittee shall submit the notification of compliance status to the appropriate permitting authority following completion of the relevant compliance demonstration activity specified in this subpart. (40 CFR 63.1285(d)(6))
- f. The permittee shall submit an analysis demonstrating whether an affected source is a major source using the maximum throughput calculated according to 40 CFR 63.1270(a). (40 CFR 63.1285(d)(8))
- g. The permittee shall submit a statement as to whether the source has complied with the requirements of 40 CFR Part 63, Subpart HHH. (40 CFR 63.1285(d)(9))
- h. If the permittee installs a combustion control device model tested under the manufacturer's performance test procedures in 40 CFR 63.1282(g), the Notification of Compliance Status Report shall include the data listed under 40 CFR 63.1282(g)(8). **(40 CFR 63.1285(d)(11)**
- i. For each combustion control device model tested under 40 CFR 63.1282(g), the information listed in 40 CFR 63.1285(d)(12)(i)-(vi) below: **(40 CFR 63.1285(d)(12))** 
  - 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.<sup>2</sup>
- 6. The permittee shall prepare Periodic Reports in accordance with 40 CFR 63.1285(e)(1) and (2) below and submit them to the Administrator. (40 CFR 63.1285(e))
  - a. A permittee shall submit Periodic Reports semiannually beginning 60 calendar days after the end of the applicable reporting period. The first report shall be submitted no later than 240 days after the date the Notification of Compliance Status Report is due and shall cover the 6-month period beginning on the date the Notification of Compliance Status Report is due. (40 CFR 63.1285(e)(1))
  - b. The permittee shall include the following information and any other information as applicable in 40 CFR 63.1285(e)(2). (40 CFR 63.1285(e)(2))
    - i. The information required under 40 CFR 63.10(e)(3). For the purposes of 40 CFR Part 63, Subpart HHH and the information required under 40 CFR 63.10(e)(3), excursions (as defined in 40 CFR 63.1283(d)(6)) shall be considered excess emissions.
    - ii. A description of all excursions as defined in 40 CFR 63.1283(d)(6) that have occurred during the sixmonth reporting period, and the information described below.
      - A. For each excursion caused when the daily average value of a monitored operating parameter is less than the minimum operating parameter limit (or, if applicable, greater than the maximum operating parameter limit), as specified in 40 CFR 63.1283(d)(6)(i), the report must include the daily average values of the monitored parameter, the applicable operating parameter limit, and the date and duration of the period that the excursion occurred.
      - B. For each excursion caused by lack of monitoring data, as specified in 40 CFR 63.1283(d)(6)(iii), the report must include the date and duration of period when the monitoring data were not collected and the reason why the data were not collected.
      - C. For each excursion caused when the maximum inlet gas flowrate identified under 40 CFR 63.1282(g) is exceeded, the report must include the values of the inlet gas identified and the date and duration of the period that the excursion occurred.
      - D. For each excursion caused when visible emissions determined under 40 CFR 63.1282(h) exceed the maximum allowable duration, the report must include the date and duration of the period that the excursion occurred, repairs affected to the unit, and date the unit was returned to service.
    - iii. For each inspection conducted in accordance with 40 CFR 63.1283(c) during which a leak or defect is detected, the records described in condition 40 CFR 63.1284(b)(7) must be included in the next Periodic Report.
    - iv. For each closed-vent system with a bypass line subject to 40 CFR 63.1281(c)(3)(i)(A), records required under 40 CFR 63.1284(b)(4)(iii) of all periods when the vent stream is diverted from the control device through a bypass line. For each closed-vent system with a bypass line subject to 40 CFR 63.1281(c)(3)(i)(B), records required under 40 CFR 63.1284(b)(4)(iv) of all periods in which the seal or closure mechanism is broken, the bypass valve position has changed, or the key to unlock the bypass line valve was checked out.
      - A. A statement identifying there were no excursions during the reporting period if applicable.
      - B. A statement identifying no continuous monitoring system has been inoperative, out of control, repaired, or adjusted if applicable.
    - v. Any change in compliance methods as described in 40 CFR 63.1282(e).
    - vi. The results of any periodic test as required in 40 CFR 63.1282(d)(3) conducted during the reporting period.
    - vii. For combustion control device inspections conducted in accordance with 40 CFR 63.1283(b) for control devices complying with the manufacturer's performance testing, the records specified in 40 CFR 63.1284(h).
    - viii. Certification by a responsible official of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.<sup>2</sup>
- 7. Whenever a process change is made, or a change in any of the information submitted in the Notification of Compliance Status Report, the permittee shall submit a report within 180 days after the process change is made

or as a part of the next Periodic Report, whichever is sooner. The report shall include the following: (40 CFR 63.1285(f))

- a. A brief description of the process change.
- b. A description of any modification to standard procedures or quality assurance procedures.
- c. Revisions to any of the information reported in the original Notification of Compliance Status Report under 40 CFR 63.1285(d).
- d. Information required by the Notification of Compliance Status Report under 40 CFR 63.1285(d) for changes involving the addition of processes or equipment. <sup>2</sup>
- 8. Within 60 days after the date of completing a performance test (defined in 40 CFR 63.2) the permitee must submit the results of the performance tests to EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). Performance test data must be submitted in the file format generated through use of EPA's Electronic Reporting Tool (ERT) (see <a href="http://www.epa.gov/ttn/chief/ert/index.html">http://www.epa.gov/ttn/chief/ert/index.html</a>). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. 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))

# VIII. STACK/VENT RESTRICTION(S)

NA

# IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart HHH: Natural Gas Transmission and Storage Facilities. <sup>2</sup> (40 CFR Part 63, Subpart HHH)

# FGRULE285(2)(mm) FLEXIBLE GROUP CONDITIONS

# **DESCRIPTION**

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

Emission Unit: EURULE285(mm)

# POLLUTION CONTROL EQUIPMENT

NA

# I. EMISSION LIMIT(S)

NA

#### II. MATERIAL LIMIT(S)

NA

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

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

# IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

# V. TESTING/SAMPLING

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

NA

#### VI. MONITORING/RECORDKEEPING

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

# VII. REPORTING

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

4. For venting of natural gas for routine maintenance or relocation of transmission and distribution systems in amounts greater than 1,000,000 standard cubic feet, the permittee shall notify the AQD District Supervisor prior to a scheduled pipeline venting. (R 336.1285(2)(mm)(ii)(A))

- 5. For venting of natural gas for routine maintenance or relocation of transmission and distribution systems in amounts greater than 1,000,000 standard cubic feet, the permittee shall provide necessary notification in accordance with the Michigan gas safety standards, the federal pipeline and hazardous materials safety administration standards, and the federal energy regulatory commission standards, as applicable. The permittee is not required to copy the AQD on the notifications. (R 336.1285(2)(mm)(ii)(B))
- 6. For emergency venting of natural gas in amounts greater than 1,000,000 standard cubic feet per event, the permittee shall notify the pollution emergency alert system (PEAS) within 24 hours of an emergency pipeline venting. For purposes of this requirement, an emergency is considered an unforeseen event that disrupts normal operating conditions and poses a threat to human life, health, property, or the environment if not controlled immediately. (R 336.1285(2)(mm)(iv))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

#### Footnotes:

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

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

# **E. NON-APPLICABLE REQUIREMENTS**

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

# **APPENDICES**

**Appendix 1. Acronyms and Abbreviations** 

Appendix 1.	Common Acronyms		Dellutent / Management Abbreviations		
Common Acronyms  AQD Air Quality Division			Pollutant / Measurement Abbreviations acfm Actual cubic feet per minute		
BACT	Best Available Control Technology	BTU	British Thermal Unit		
	Clean Air Act	°C			
CAA		co	Degrees Celsius		
CAM	Compliance Assurance Monitoring		Carbon Monoxide		
CEM	Continuous Emission Monitoring	CO <sub>2</sub> e	Carbon Dioxide Equivalent		
CEMS	Continuous Emission Monitoring System	dscf	Dry standard cubic foot		
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter		
COM	Continuous Opacity Monitoring	°F	Degrees Fahrenheit		
Department/	Michigan Department of Environment,	gr	Grains		
department EGLE	Great Lakes, and Energy Michigan Department of Environment,	HAP Hg	Hazardous Air Pollutant Mercury		
LGLL	Great Lakes, and Energy	hr	Hour		
EU	Emission Unit	HP			
FG		H <sub>2</sub> S	Hydrogon Sulfido		
	Flexible Group	_	Hydrogen Sulfide Kilowatt		
GACS	Gallons of Applied Coating Solids	kW			
GC	General Condition	lb	Pound		
GHGs	Greenhouse Gases	m	Meter		
HVLP	High Volume Low Pressure*	mg	Milligram		
ID	Identification	mm	Millimeter		
IRSL	Initial Risk Screening Level	MM	Million		
ITSL	Initial Threshold Screening Level	MW	Megawatts		
LAER	Lowest Achievable Emission Rate	NMOC	Non-methane Organic Compounds		
MACT	Maximum Achievable Control Technology	NO <sub>x</sub>	Oxides of Nitrogen		
MAERS	Michigan Air Emissions Reporting System	ng	Nanogram		
MAP	Malfunction Abatement Plan	PM	Particulate Matter		
MSDS	Material Safety Data Sheet	PM10	Particulate Matter equal to or less than 10		
NA	Not Applicable	DMO 5	microns in diameter		
NAAQS	National Ambient Air Quality Standards	PM2.5	Particulate Matter equal to or less than 2.5		
NESHAP	National Emission Standard for Hazardous	pph	microns in diameter Pounds per hour		
INLOHAL	Air Pollutants	ppm	Parts per million		
NSPS	New Source Performance Standards	ppmv	Parts per million by volume		
NSR	New Source Review	ppmw	Parts per million by weight		
PS	Performance Specification	%	Percent		
PSD	Prevention of Significant Deterioration	psia	Pounds per square inch absolute		
PTE	Permanent Total Enclosure	psig	Pounds per square inch gauge		
PTI	Permit to Install	scf	Standard cubic feet		
RACT	Reasonable Available Control Technology	sec	Seconds		
ROP	Renewable Operating Permit	SO <sub>2</sub>	Sulfur Dioxide		
SC	Special Condition	TAC	Toxic Air Contaminant		
SCR	Selective Catalytic Reduction	Temp	Temperature		
SDS	Safety Data Sheet	THC	Total Hydrocarbons		
SNCR	Selective Non-Catalytic Reduction	tpy	Tons per year		
SRN	State Registration Number	μg	Microgram		
TEQ	Toxicity Equivalence Quotient	μm	Micrometer or Micron		
USEPA/EPA	United States Environmental Protection	VOC	Volatile Organic Compounds		
302.702.73	Agency	yr	Year		
VE	Visible Emissions				

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

# Appendix 2. Schedule of Compliance

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

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

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

# Appendix 4. Recordkeeping

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

# **Appendix 5. Testing Procedures**

There are no specific testing requirement plans or procedures for this ROP. Therefore, this appendix is not applicable.

#### Appendix 6. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-N5572-2015. 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-N5572-2015 is being reissued as Source-Wide PTI No. MI-PTI-N5572-20XX.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
72-20	NA	Glycol dehydration system processing gas from the Guelph (Brown Niagaran); contains a 1.5 MMBtu/hr natural gas fired burner and a 1,000-gallon TEG storage tank.	EUDEHY FGMACTHHHSMALL FGMACTDDDDDSMALL

#### **Appendix 7. Emission Calculations**

There are no specific emission calculations to be used for this ROP. Therefore, this appendix is not applicable.

# Appendix 8. Reporting

#### A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use the attached approved format 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.