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

EFFECTIVE DATE: January 22, 2020

ISSUED TO

CONSUMERS ENERGY COMPANY Consumers Energy – Muskegon River Compressor Station

State Registration Number (SRN): N2901

LOCATED AT

8613 Pine Road, Marion, Clare County, Michigan 49665

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-N2901-2020

Expiration Date: January 22, 2025

Administratively Complete ROP Renewal Application Due Between July 22, 2023 and July 22, 2024

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-N2901-2020

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

Chris Hare, Bay City District Supervisor

TABLE OF CONTENTS

AUTHORITY AND ENFORCEABILITY	3
A. GENERAL CONDITIONS	4
Permit Enforceability	4
General Provisions	
Equipment & Design	
Emission Limits	
Testing/Sampling	5
Monitoring/Recordkeeping	6
Certification & Reporting	
Permit Shield	
Revisions	
Reopenings	
Renewals	
Stratospheric Ozone Protection	
Risk Management Plan Emission Trading	
Permit to Install (PTI)	
B. SOURCE-WIDE CONDITIONS	
b. Soonce-wide conditions	
C. EMISSION UNIT SPECIAL CONDITIONS	. 12
EMISSION UNIT SUMMARY TABLE	
EUGLYCDEHY	
EUTURBINERT248	
EUAUXGEN3	
EURULE285(2)(mm)	
EUDEGREASER1	. 29
D. FLEXIBLE GROUP SPECIAL CONDITIONS	
FLEXIBLE GROUP SUMMARY TABLE	
FGCOMPRESSORS	
FGAUXGENS	
FGPROCESSHTRS	. 38
E. NON-APPLICABLE REQUIREMENTS	. 42
APPENDICES	. 43
Appendix 1. Acronyms and Abbreviations	. 43
Appendix 2. Schedule of Compliance	
Appendix 3. Monitoring Requirements	
Appendix 4. Recordkeeping	
Appendix 5. Testing Procedures	
Appendix 6. Permits to Install	
Appendix 7. Emission Calculations	
Appendix 8. Reporting	. 45

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 stateonly 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

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

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

Equipment & Design

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

Emission Limits

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

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

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

Testing/Sampling

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

Monitoring/Recordkeeping

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

Certification & Reporting

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

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

Permit Shield

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

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

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

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

Revisions

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

Reopenings

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

Renewals

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

Stratospheric Ozone Protection

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

Risk Management Plan

- 38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).
- 39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of 40 CFR Part 68, no later than the latest of the following dates as provided in 40 CFR 68.10(a):
 - 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.² (R 336.1201(1))
- 44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA.² (R 336.1201(8), Section 5510 of Act 451)
- 45. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by Subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, EGLE.² (R 336.1219)
- 46. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months of the original PTI issuance date, or has been interrupted for 18 months, the applicable terms and conditions from that PTI, as incorporated into the ROP, shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, EGLE, AQD, P. O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI.² (R 336.1201(4))

Footnotes:

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

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

B. SOURCE-WIDE CONDITIONS

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

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

C. EMISSION UNIT SPECIAL CONDITIONS

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

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

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUGLYCDEHY	Existing small natural gas triethylene glycol (TEG) dehydrator equipped with a thermal oxidizer to control VOC emissions, including the reboiler burner and reboiler still vent. This emission unit is subject to 40 CFR Part 63, Subpart HHH. (PTI 161-01)	09/17/2001	NA
EUTURBINERT248	Grandfathered natural gas fired turbine.	01/01/1963	NA
EUAUXGEN3 Natural gas-fired SI emergency RICE rated at 4.8 MMBTU/hr (>500 hp) that commenced construction or reconstruction before December 19, 2002. This emission unit is subject to 40 CFR Part 63, Subpart ZZZZ.		01/01/1994	NA
EURULE285(2)(mm) Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 285(2)(mm).		NA	NA
EUDEGREASER1	New cold cleaner placed into operation after July 1, 1979, with an air/vapor interface less than 10 square feet that is grandfathered or exempt from Rule 201 pursuant to Rule 278, Rule 278a, and Rule 281(2)(h) or Rule 285(2)(r)(iv).	10/21/1994 01/01/1996	NA
EUENGINE306	Grandfathered natural gas fired RICE; 9 MMBTU/hr	01/01/1949	FGCOMPRESSORS
EUENGINE316	Grandfathered natural gas fired RICE; 9 MMBTU/hr	01/01/1949	FGCOMPRESSORS
EUENGINE319	Grandfathered natural gas fired RICE; 9 MMBTU/hr	01/01/1949	FGCOMPRESSORS
EUENGINE320	Grandfathered natural gas fired RICE; 9 MMBTU/hr	01/01/1949	FGCOMPRESSORS
EUENGINEH9	Grandfathered natural gas fired RICE; 21 MMBTU/hr	01/01/1950	FGCOMPRESSORS
EUENGINEH10	Grandfathered natural gas fired RICE; 21 MMBTU/hr	01/01/1950	FGCOMPRESSORS
EUENGINEH11	Grandfathered natural gas fired RICE; 21 MMBTU/hr	01/01/1951	FGCOMPRESSORS
EUENGINEH12	Grandfathered natural gas fired RICE; 21 MMBTU/hr	01/01/1951	FGCOMPRESSORS
EUENGINET11	Grandfathered natural gas fired RICE; 24 MMBTU/hr	01/01/1957	FGCOMPRESSORS
EUENGINET12	Grandfathered natural gas fired RICE; 24 MMBTU/hr	01/01/1957	FGCOMPRESSORS
EUENGINE3-1	Grandfathered natural gas fired RICE; 24 MMBTU/hr	01/01/1973	FGCOMPRESSORS
EUENGINE3-2	Grandfathered natural gas fired RICE; 24 MMBTU/hr	01/01/1973	FGCOMPRESSORS
EUAUXGEN1A	Natural gas-fired SI emergency RICE rated at 3.8 MMBTU/hr (<500 hp). This emission unit is subject to 40 CFR Part 63, Subpart ZZZZ.	06/01/1999	FGAUXGENS
EUAUXGEN2A	Natural gas-fired SI emergency RICE rated at 3.8 MMBTU/hr (<500 hp). This emission unit is subject to 40 CFR Part 63, Subpart ZZZZ.	06/01/1999	FGAUXGENS

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Emission Unit ID	Emission Unit Description	Installation	Flexible Group ID	
	(Including Process Equipment & Control Device(s))	Date/	-	
		Modification		
		Date		
EUBLR9	Natural gas-fired boiler for building and process heat	01/01/1994	FGPROCESSHTRS	
	rated at 3.35 MMBTU/hr. This emission unit is			
	subject to 40 CFR Part 63, Subpart DDDDD.			
EUFUELHTR	Natural gas-fired fuel heater rated at 250,000 BTU/hr.	01/01/1994	FGPROCESSHTRS	
	This emission unit is subject to 40 CFR Part 63,			
	Subpart DDDDD.			
EUFUELHTR1	Natural gas-fired fuel heater rated at 450,000 BTU/hr.	01/01/1994	FGPROCESSHTRS	
	This emission unit is subject to 40 CFR Part 63,			
	Subpart DDDDD.			
EUREBOILER	Natural gas-fired reboiler burner associated with	09/17/2001	FGPROCESSHTRS	
	EUGLYCDEHY rated at 1 MMBTU/hr. This emission			
	unit is subject to 40 CFR Part 63, Subpart DDDDD.			

EUGLYCDEHY EMISSION UNIT CONDITIONS

DESCRIPTION

Existing small natural gas triethylene glycol (TEG) dehydrator equipped with a thermal oxidizer to control VOC emissions, including the reboiler burner and reboiler still vent. This emission unit is subject to 40 CFR Part 63, Subpart HHH – National Emission Standards for Hazardous Air Pollutants from Natural Gas Transmission and Storage Facilities. (PTI 161-01)

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

Thermal oxidizer

I. EMISSION LIMIT(S)

F	Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	Benzene	0.8 tons per year ¹	12- Month Rolling Time	EUGLYCDEHY	SC IV.1, V.1, VI.1,	R 336.1901
			Period		and VI.2	
2.	BTEX	Calculated using	Annual	EUGLYCDEHY	SC III.6, V.2, V.3,	40 CFR
		the equation in			V.5, VI.6, VI.14,	63.1274(c)(1),
		Appendix 7			and VI.28	40 CFR
						63.1275(b)(1)(iii)

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not process natural gas in EUGLYCDEHY unless the flash tank is installed, maintained, and operating properly. Proper operation requires routing the flash tank exhaust gas to the thermal oxidizer or reboiler burner for destruction.² (R 336.1910)
- 2. The permittee shall not process natural gas in EUGLYCDEHY unless the thermal oxidizer is installed, maintained, and operating properly. Proper operation of the thermal oxidizer requires a minimum VOC destruction efficiency of 98% (by weight), and a minimum retention time of 0.5 seconds.¹ (R 336.1901)
- 3. The permittee shall operate and maintain each glycol dehydration unit, including the associated air pollution control and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. (40 CFR 63.1274(h))
- The permittee shall connect the process vent to a control device through a closed-vent system. The closed vent system shall be designed and operated in accordance with the requirements of SC IV.2. (40 CFR 63.1274(c)(1), 40 CFR 63.1275(b)(1)(iii)(A))
- 5. The permittee shall operate the control device in accordance with the requirements specified below: (40 CFR 63.1274(c)(2), 40 CFR 63.1275(b)(1)(iii)(A), 40 CFR 63.1281(f)(1)(i)(A) & (f)(2), 40 CFR 63.1282(e)(1))
 - a. The thermal oxidizer must be designed and operated such that the mass content of BTEX in the gases vented to the device is reduced as determined in accordance with the requirements of SC V.5 and VI.6.
 - b. The thermal oxidizer shall be operating at all times. The permittee may vent more than one unit to the thermal oxidizer.

- c. The thermal oxidizer shall be operated at the site-specific minimum operating temperature established during the most recent compliance demonstration.
- 6. Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities, the CMS required in 40 CFR 63.1283(d) must be operated at all times EUGLYCDEHY is operating. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. Monitoring system repairs are required to be completed in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable. (40 CFR 63.1282(e)(4))

IV. DESIGN/EQUIPMENT PARAMETER(S)

- The permittee shall install a device equipped with a continuous recorder to continuously measure and record the combustion chamber temperature of the thermal oxidizer. For a thermal oxidizer, the temperature monitoring device shall have a minimum accuracy of ±2 percent of the temperature being monitored in °C, or ±2.5°C, whichever value is greater. The temperature sensor shall be installed at a location representative of the combustion zone temperature.² (40 CFR 63.1274(c)(2), 40 CFR 63.1283(d)(3)(i))
- 2. The closed vent system shall be designed and operated in accordance with the following requirements: (40 CFR 63.1274(c)(2), 40 CFR 63.1281(c))
 - a. The closed-vent system shall route all gases, vapors, and fumes emitted from the material in an emission unit to a control device that meets the requirements specified in SC III.5.
 - b. The closed-vent system shall be designed and operated with no detectable emissions.
 - c. Any bypass devices in the closed-vent system that could divert emissions from entering the control device shall be equipped with a flow indicator at the inlet to the bypass device that takes readings every 15 minutes, and that sounds an alarm when the bypass device is open; or secure the bypass device valve at the inlet to the bypass device in the non-diverting position using a car-seal or a lock-and-key type configuration.
- 3. The continuous parameter monitoring system (CPMS) shall measure data values at least once every hour and record either: (40 CFR 63.1274(c)(2), 40 CFR 63.1283(d)(1)(i))
 - a. Each measured data value; or
 - b. Each block average value for each 1-hour period or shorter periods calculated from all measured data values during each period. If values are measured more frequently than once per minute, a single value for each minute may be used to calculate the hourly (or shorter period) block average instead of all measured values.

V. TESTING/SAMPLING

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

- The permittee shall analyze the natural gas processed in EUGLYCDEHY to determine its composition. The analysis shall include analysis for nitrogen, carbon dioxide, C1 through C6 series, benzene, toluene, xylene, ethylbenzene, and hexane. The sampling shall occur at least once each calendar year. The permittee shall obtain a sample and conduct an analysis of the wet gas stream in accordance with methods that are standard in the natural gas industry. Any request for a change in the sample frequency must be submitted to the AQD District Supervisor for review and approval.¹ (R 336.1901)
- 2. 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. Install and operate a monitoring instrument that directly measures natural gas flow rate to each glycol dehydration unit with an accuracy of ± 2 percent or better. The annual natural gas flow rate shall be converted to a daily average by dividing the annual flow rate by the number of days per year each emission unit processed natural gas.
 - b. Document, to the AQD's satisfaction, the actual annual average natural gas flow rate to each glycol dehydration unit.
- 3. Determination of the actual average BTEX emissions from each glycol dehydration unit shall be made using GRI-GLYCalc[™], Version 3.0 or higher. Inputs to the model shall be representative of actual operating conditions of EUGLYCDEHY and may be determined using the procedures documented in the Gas Research Institute (GRI)

report entitled "Atmospheric Rich/Lean Method for Determining Glycol Dehydration Emissions" (GRI-95/0368.1). (40 CFR 63.1282(a)(2)(i))

- 4. The permittee shall perform "no detectable emissions" testing for closed vent systems using the test methods and procedures specified in 40 CFR 63.1282(b). **(40 CFR 63.1282(b))**
- 5. The permittee must conduct a performance test to demonstrate that the thermal oxidizer meets the requirements of SC III.5. The permittee shall conduct emissions testing for compliance with SC I.2 calculated using Equation 1 in Appendix 7 using the following test methods and procedures: **(40 CFR 63.1282(d)(3))**
 - a. Method 1 or 1A, 40 CFR Part 60, Appendix A, as appropriate, shall be used for selection of the sampling sites. The sampling site shall be located at the outlet of the combustion device.
 - b. The gas volumetric flow rate shall be determined using Method 2, 2A, 2C, or 2D, 40 CFR Part 60, Appendix A, as appropriate.
 - c. To determine compliance with SC I.2, the permittee shall use one of the following methods: Method 18, 40 CFR Part 60, Appendix A; ASTM D64200-99 (Reapproved 2004); or any other method or data that have been validated according to the applicable procedures in Method 301, 40 CFR Part 63, Appendix A. The BTEX emissions shall be calculated according to the procedures in 40 CFR 63.1282(d)(3)(v)(A) & (B).
 - d. The permittee shall conduct performance tests according to the following schedule:
 - i. An initial performance test shall be conducted no later than October 15, 2015;
 - ii. The first periodic performance test shall be conducted not later than 60 months after the initial performance test. Subsequent periodic performance tests shall be conducted at intervals no longer than 60 months following the previous periodic performance test or whenever a source desires to establish a new operating limit. Combustion control devices meeting either of the following criteria are not required to conduct periodic performance tests:
 - A. A control device whose model is tested under, and meets the criteria of manufacturers' performance test in 40 CFR 63.1282(g);
 - B. A combustion control device demonstrating during the performance test that combustion zone temperature is an indicator of destruction efficiency and operates at a minimum temperature of 1400 degrees F.
- 6. An alternate test method, or a modification to the approved EPA Test Method, may be specified in an AQD-approved Test Protocol. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. (R 336.1213(3), R 336.2001, R 336.2003, R 336.2004, 40 CFR 63.1285(b)(3))
- 7. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. (R 336.1213(3))

VI. MONITORING/RECORDKEEPING

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

- The permittee shall calculate the benzene emission rate from EUGLYCDEHY for each calendar month and 12-month rolling time period, using a method acceptable to the AQD District Supervisor. If GRI-GLYCalc (Version 3.0 or higher) is used to calculate the emission rates, the inputs to the model shall be representative of actual operating conditions of EUGLYCDEHY and shall include the most recent gas analysis data. Any request for a change in the calculation frequency must be submitted to the AQD District Supervisor for review and approval. Records of the benzene emission rate are for the purpose of compliance demonstration and shall be kept on file for a period of at least five years and made available to the Department upon request.¹ (R 336.1901)
- 2. The permittee shall keep the following records:¹ (R 336.1901)
 - a. Wet gas composition as determined through analysis of wet gas samples as required in SC V.1;
 - b. Records of the thermal oxidizer temperature.
- 3. The permittee shall estimate emissions for major source determination purposes using the maximum annual natural gas throughput calculated using the equation in Appendix 7. As an alternative to calculating the maximum

annual natural gas throughput, the permittee may use the facility design maximum annual natural gas throughput to estimate the maximum potential emissions. **(40 CFR 63.1270(a)(1))**

- 4. The permittee shall maintain records of the annual facility natural gas throughput each year. (40 CFR 63.1270(a)(3))
- 5. The permittee shall determine the maximum values for other parameters used to calculate potential emissions as the maximum over the same period for which maximum throughput is determined as specified in SC VI.3. These parameters shall be based on an annual average or the highest single measured value. For estimating maximum potential emissions from glycol dehydration units, the glycol circulation rate used in the calculation shall be the unit's maximum rate under its physical and operational design consistent with the definition of potential to emit in 40 CFR 63.2. (40 CFR 63.1270(a)(4))
- 6. The permittee shall continuously monitor and record the temperature in the thermal oxidizer and calculate the daily average temperature for each operating day. Compliance shall be demonstrated using the following requirements: (40 CFR 63.1274(c)(2), 40 CFR 63.1282(e)(1-3), 40 CFR 63.1283(d)(4))
 - a. Establish a site-specific minimum temperature to define the conditions at which the control device must be operated to continuously achieve compliance with SC I.2 according to the procedures in SC VI.14;
 - b. Calculate the daily average of the temperature readings in accordance with SC VI.13;
 - c. Compliance is achieved when the daily average of the temperature readings calculated under SC VI.6.b is greater than or equal to the minimum monitoring value established under SC VI.6.a.
- 7. Data recorded during monitoring system malfunctions, repairs associated with monitoring system malfunctions, or required monitoring system quality assurance or control activities may not be used in calculations used to report emissions or operating levels. All the data collected during all other required data collection periods must be used in assessing the operation of the control device and associated control system. (40 CFR 63.1282(e)(5))
- 8. Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required quality monitoring system quality assurance or quality control activities (including, as applicable, system accuracy audits and required zero and span adjustments), failure to collect required data is a deviation of the monitoring requirements. **(40 CFR 63.1282(e)(6))**
- 9. For each closed-vent system, the permittee shall comply with the following requirements: (40 CFR 63.1274(c)(2), 40 CFR 63.1283(c)(1-4))
 - a. Except for parts of the closed-vent system or cover that are designated unsafe to inspect or difficult to inspect, each closed-vent system and each bypass device shall be inspected according to the procedures specified below according the following schedule:
 - i. For each closed-vent system joints, seams, or other connections that are permanently or semipermanently sealed (e.g., a welded joint between two sections of hard piping or a bolted or gasketed ducting flange), the permittee shall:
 - A. Conduct an initial inspection according to the procedures in 40 CFR 63.1282(b) to demonstrate that the closed-vent system operates with no detectable emissions;
 - B. Conduct annual visual inspections for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in piping; loose connections; or broken or missing caps or other closure devices.
 - ii. For closed-vent system components other than those specified in SC VI.9.a.i:
 - A. Conduct an initial inspection according to the procedures in 40 CFR 63.1282(b) to demonstrate that the closed-vent system operates with no detectable emissions;
 - B. Conduct annual inspections according to the procedures in 40 CFR 63.1282(b) to demonstrate that the components or connections operate with no detectable emissions;
 - C. Conduct annual visual inspections for defects that could result in air emissions. Defects include, but are not limited to, visible cracks, holes, or gaps in ductwork; loose connections; or broken or missing caps or other closure devices.
 - iii. For each bypass device, except low leg drains, high point bleeds, analyzer vents, open-ended valves or lines, and safety devices, the permittee shall either:
 - A. At the inlet to the bypass device that could divert the steam away from the control device to the atmosphere, set the flow indicator to take a reading at least once every 15 minutes; or

- B. If the bypass device valve installed at the inlet to the bypass device is secured in the non-diverting position using a car-seal or a lock-and-key type configuration, visually inspect the seal or closure mechanism at least once every month to verify that the valve is maintained in the non-diverting position and the vent stream is not diverted through the bypass device.
- b. In the event that a leak or defect is detected, the permittee shall repair the leak or defect as soon as practicable, except as provided in SC VI.9.c.
 - i. A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.
 - ii. Repair shall be completed no later than 15 calendar days after the leak is detected.
- c. Delay of repair of a closed-vent system for which leaks or defects have been detected is allowed if the repair is technically infeasible without a shutdown, as defined in 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.
- 10. Any parts of the closed-vent system or cover that are designated, as described below, as unsafe to inspect are exempt from the inspection requirements of SC VI.9 if: (40 CFR 63.1274(c)(2), 40 CFR 63.1283(c)(5))
 - a. The permittee determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with SC VI.9;
 - b. The permittee has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.
- 11. Any parts of the closed-vent system or cover that are designated, as described below, as difficult to inspect are exempt from the inspection requirements of SC VI.9 if: (40 CFR 63.1274(c)(2), 40 CFR 63.1283(c)(6))
 - a. The permittee determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and
 - b. The permittee has a written plan that requires inspection of the equipment at least once every 5 years.
- 12. A site-specific monitoring plan must be prepared that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in 40 CFR 63.1283(d). Each CPMS must be installed, calibrated, operated, and maintained in accordance with the procedures in the approved site-specific monitoring plan. The permittee may request approval of monitoring system quality assurance and quality control procedures alternative to those specified below and in the site-specific monitoring plan: (40 CFR 63.1274(c)(2), 40 CFR 63.1283(d)(1)(ii-iv))
 - a. The performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer, and data acquisition and calculations;
 - b. Sampling interface (e.g., thermocouple) location such that the monitoring system will provide representative measurements;
 - c. Equipment performance checks, system accuracy audits, or other audit procedures;
 - d. Ongoing operation and maintenance procedures in accordance with provisions in 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).
 - f. The permittee must conduct the CPMS equipment performance checks, system accuracy audits, or other audit procedures specified in the site-specific monitoring plan at least once every 12 months.
 - g. The permittee must conduct a performance evaluation of each CPMS in accordance with the site-specific monitoring plan.
- 13. Using the data recorded by the monitoring system, except for inlet gas flow rate, the permittee must calculate the daily average value for each monitored operating parameter for each operating day. If EUGLYCDEHY operates continuously, the operating day is a 24-hour period. If EUGLYCDEHY does not operate continuously, the operating day is the total number of hours of control device operation per 24-hour period. Valid data points must be available for 75 percent of the operating hours in an operating day to compute the daily average. (40 CFR 63.1274(c)(2), 40 CFR 63.1283(d)(4))
- For the thermal oxidizer, the permittee shall establish a minimum operating parameter value to define the conditions at which the control device must be operated to continuously achieve the emission limit in SC I.2. The minimum operating parameter value shall be established as follows: (40 CFR 63.1274(c)(2), 40 CFR 63.1283(d)(5)(i))

- a. If the permittee conducts performance tests to demonstrate that the control device achieves the applicable performance requirements, then the minimum operating parameter value shall be established based on values measured during the performance test and supplemented, as necessary, by a control device's manufacturer's recommendations.
- b. 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 test requirements, then the maximum inlet gas flowrate shall be established based on the performance test and supplemented, as necessary, by the manufacturer's recommendations.
- 15. A deviation for a control device is determined to have occurred when the monitoring data or lack of monitoring data result in any one of the criteria specified below being met. When multiple operating parameters are monitored for the same control device and during the same operating day, and more than one of these operating parameters meets a deviation criterion specified below, then a single deviation is determined to have occurred for the control device for that operating day. (40 CFR 63.1274(c)(2), 40 CFR 63.1283(d)(6)(i & iii))
 - a. When the daily average value of the thermal oxidizer combustion chamber temperature is less than the minimum operating limit established;
 - b. When the monitoring data are not available for at least 75 percent of the operating hours in a day.
- A deviation occurs for a closed-vent system containing one or more bypass devices that could be used to divert all or a portion of the gases, vapors, or fumes from entering the control device when: (40 CFR 63.1274(c)(2), 40 CFR 63.1283(d)(6)(iv))
 - a. The flow indicator indicates that flow has been detected and that the stream has been diverted away from the control device to the atmosphere;
 - b. If the seal or closure mechanism has been broken, the bypass line valve position has changed, the key for the lock-and-key type lock has been checked out, or the car-seal has broken.
- 17. For each deviation, the permittee shall be deemed to have failed to have applied control in a manner that achieves the required operating parameter limits. Failure to achieve the required operating parameter limits is a violation of 40 CFR Part 63, Subpart HHH. (40 CFR 63.1274(c)(2), 40 CFR 63.1283(d)(7))
- Nothing in SC VI.12 through VI.17 shall be construed to allow or excuse a monitoring parameter deviation caused by any activity that violates other applicable provisions of 40 CFR Part 63, Subpart HHH. (40 CFR 63.1274(c)(2), 40 CFR 63.1283(d)(9))
- 19. All applicable records shall be maintained in such a manner that they can be readily accessed. The most recent 12 months of records shall be retained on site or shall be accessible from a central location by computer or other means that provides access within 2 hours after a request. The remaining 4 years of records may be retained offsite. Records may be maintained in hard copy or computer-readable form. (40 CFR 63.1284(b)(1))
- 20. The permittee shall maintain the records specified in 40 CFR 63.10(b)(2). (40 CFR 63.1274(c)(3), 40 CFR 63.1284(b)(2))
- 21. The permittee shall maintain the records specified in 40 CFR 63.10(c) for each monitoring system operated in accordance with the requirements of 40 CFR 63.1283(d). Notwithstanding the previous sentence, monitoring data recorded during periods identified below shall not be included in any average or percent leak rate computed under 40 CFR Part 63, Subpart 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 breakdowns, repairs, calibration checks, and zero (low-level) and high-level adjustments;
 - b. Periods of non-operation resulting in cessation of the emissions to which the monitoring applies; and
 - c. Deviations due to invalid data as defined in SC VI.15.
- 22. The permittee shall maintain the following records up to date and readily accessible: (40 CFR 63.1274(c)(3), 40 CFR 63.1284(b)(4), 40 CFR 63.1284(g))
 - a. Continuous records of the equipment operating parameters specified to be monitored in 40 CFR 63.1283(d);
 - b. Records of the daily average value of each continuously monitored parameter for each operating day determined according to the procedures specified in SC VI.13;
 - c. The following records for a control device whose model is tested under the manufacturers' performance test:

- i All visible emission readings and flow rate calculations made during the compliance determination;
- ii All hourly records and other recorded periods when the pilot flame is absent;
- d. Hourly records of the times and durations of all periods when the vent stream is diverted from the control device or the device is not operating;
- e. 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 owner or operator shall record that the monthly visual inspection of the seals or closure mechanism has been done, and shall record the duration of all periods when the seal mechanism is broken, the bypass line valve position has changed, or the key for a lock-and-key type lock has been checked out, and records of any car-seal that has broken.
- The permittee shall maintain records identifying all parts of the closed-vent system that are designated as unsafe to inspect in accordance with SC VI.10, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment. (40 CFR 63.1274(c)(3), 40 CFR 63.1284(b)(5))
- 24. The permittee shall maintain records identifying all parts of the closed-vent system that are designated as difficult to inspect in accordance with SC VI.11, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment. (40 CFR 63.1274(c)(3), 40 CFR 63.1284(b)(6))
- 25. The permittee shall maintain the following records for each inspection conducted in accordance with SC VI.9 through VI.11 during which a leak or defect is detected: **(40 CFR 63.1274(c)(3), 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 non-repairable;
 - d. "Repair delayed" and the reason for the delay if a leak or defect is not repaired within 15 calendar days after discovery of the leak or defect;
 - e. The name, initials, or other form of identification of the permittee (or designee) whose decision it was that repair could not be affected without a shutdown;
 - f. The expected date of successful repair of the leak or defect if a leak or defect is not repaired within 15 calendar days;
 - f. Dates of shutdowns that occur while the equipment is unrepaired;
 - g. The date of successful repair of the leak or defect.
- 26. For each inspection conducted in accordance with SC VI.9 through VI.11 during which no leaks or defects are detected, the permittee shall maintain a record that the inspection was performed, the date of the inspection, and a statement that no leaks or defects were detected. (40 CFR 63.1274(c)(3), 40 CFR 63.1284(b)(8))
- 27. The permittee shall maintain records of the occurrence and duration of each malfunction of process equipment or the air pollution control equipment and monitoring equipment. The permittee shall maintain records of actions taken during periods of malfunction to minimize emissions in accordance with SC III.3 including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. (40 CFR 63.1274(c)(3), 40 CFR 63.1284(f))
- 28. The permittee shall calculate and maintain records of the annual BTEX emissions as specified in SC I.2. and SC V.3. (R 336.1213(3))

See Appendix 7

VII. <u>REPORTING</u>

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

- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. The permittee shall submit a Notification of Compliance Status Report to the USEPA Administrator as required under 40 CFR 63.9(h) by April 12, 2016. In addition to the information required under 40 CFR 63.9(h), the Notification of Compliance Status Report shall include the information specified in 40 CFR 63.1285(d)(1) through (12). If the permittee 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 63.1274(c)(3), 40 CFR 63.1285(d))
- 5. The permittee shall submit Periodic Reports to the USEPA Administrator 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 63.1274(c)(3), 40 CFR 63.1285(e)(1))
- 6. The permittee shall include the information specified below in the semiannual Periodic Reports: (40 CFR 63.1274(c)(3), 40 CFR 63.1285(e)(2))
 - a. The information required under 40 CFR 63.10(e)(3);
 - b. A description of all deviations as defined in SC VI.15 and VI.16 that have occurred during the 6-month reporting period, and the information described in 40 CFR 63.1285(e)(2)(ii);
 - c. For each inspection conducted in accordance with SC VI.9 through VI.11 during which a leak or defect is detected, the records specified in SC VI.25 must be included in the next Periodic Report;
 - d. For each closed-vent system with a bypass line subject to 40 CFR 63.1281(c)(3)(i)(A), records required under SC VI.22 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 SC VI.22 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;
 - e. A statement identifying if there were no excursions during the reporting period;
 - f. A statement identifying if there were no instances in which the continuous monitoring system has been inoperative, out of control, repaired, or adjusted during the reporting period;
 - g. Any change in compliance methods as specified in 40 CFR 63.1282(e);
 - h. The results of any periodic test as required in SC V.5 conducted during the reporting period;
 - i. 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.
- Whenever a process change is made, or a change in any of the information submitted in the Notification of Compliance Status Report, the permittee shall submit a report within 180 days after the process change is made or as a part of the next Periodic Report, whichever is sooner. The report shall include: (40 CFR 63.1274(c)(3), 40 CFR 63.1285(f))
 - a. A brief description of the process change;
 - b. A description of any modification to standard procedures or quality assurance procedures;
 - c. Revisions to any of the information reported in the original Notification of Compliance Status Report under SC VII.4;
 - d. Information required by the Notification of Compliance Status Report under SC VII.4 for changes involving the addition of processes or equipment.
- 8. Within 60 days after the date of completing a performance test (defined in 40 CFR 63.2) the permittee must submit the results of the performance tests to EPA's WebFIRE database by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*http://www.epa.gov/cdx*). Performance test data must be submitted in the file format generated through use of EPA's Electronic Reporting Tool (ERT) (see *http://www.epa.gov/ttn/chief/ert/index.html*). Only data collected using test methods on the ERT Web site are subject to this requirement for submitting reports electronically to WebFIRE. All reports required by this subpart not subject to the above electronic reporting requirements must be sent to the Administrator at the appropriate address. The Administrator may request a report in any form suitable for the specific case (e.g., by commonly used electronic media such as Excel spreadsheet, on CD or

hard copy). The Administrator retains the right to require submittal of reports in paper format. (40 CFR 63.1274(c)(3), 40 CFR 63.1285(g))

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVGLYCDEHYD	29.5 ¹	35 ¹	R 336.1901

IX. OTHER REQUIREMENT(S)

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

Footnotes:

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

EUTURBINERT248 EMISSION UNIT CONDITIONS

DESCRIPTION

Grandfathered natural gas-fired turbine.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall only fire natural gas in the turbine at this facility. (R 336.1301(1))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall record the natural gas consumption rate for each calendar month. (R 336.1213(3)(b)

VII. <u>REPORTING</u>

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

EUAUXGEN3 EMISSION UNIT CONDITIONS

DESCRIPTION

Natural gas-fired SI emergency RICE rated at 4.8 MMBTU/hr (>500 hp) that commenced construction or reconstruction before December 19, 2002. This emission unit is subject to 40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall operate and maintain EUAUXGEN3 in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require any further efforts to reduce emissions if levels required by 40 CFR Part 63, Subpart ZZZZ have been achieved. (40 CFR 63.6605(b))
- 2. There is no time limit on the use of emergency stationary RICE in emergency situations. (40 CFR 63.6640(f)(1))
- 3. The permittee may operate EUAUXGEN3 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))
- 4. EUAUXGEN3 may operate up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing as provided in SC III.4. 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 non-emergency 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 install a non-resettable hour meter on EUAUXGEN3. (R 336.1213(3)(a)(ii))

V. TESTING/SAMPLING

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

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall track hours of operation recorded by the non-resettable hour meter and document the number of hours spent for emergency and non-emergency operation per calendar year. The conditions present which classified the operation as an emergency shall also be described. (R 336.1213(3)(a)(ii), 40 CFR 63.6640(f))

VII. <u>REPORTING</u>

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and ZZZZ, for Stationary Reciprocating Internal Combustion Engines by the initial compliance date. **(40 CFR 63.6595, 40 CFR Part 63, Subparts A and ZZZZ)**

Footnotes:

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

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

EURULE285(2)(mm) EMISSION UNIT CONDITIONS

DESCRIPTION

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

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

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

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

NA

VII. <u>REPORTING</u>

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

- 4. 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:

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

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

EUDEGREASER1 EMISSION UNIT CONDITIONS

DESCRIPTION

New cold cleaner placed into operation after July 1, 1979, with an air/vapor interface less than 10 square feet that is grandfathered or exempt from Rule 201 pursuant to Rule 278, Rule 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv).

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

1. The permittee shall not use cleaning solvents containing more than five percent by weight of the following halogenated compounds: methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chloroform, or any combination thereof. (R 336.1213(2))

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. Cleaned parts shall be drained for no less than 15 seconds or until dripping ceases. (R 336.1611(2)(b), R 336.1707(3)(b))
- 2. The permittee shall perform routine maintenance on each cold cleaner as recommended by the manufacturer. (R 336.1213(3))

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

- 1. The cold cleaner must meet one of the following design requirements:
 - a. The air/vapor interface of the cold cleaner is no more than ten square feet; (R 336.1281(h))
 - b. The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment. (R 336.1285(r)(iv))
- 2. The cold cleaner shall be equipped with a device for draining cleaned parts. (R 336.1611(2)(b), R 336.1707(3)(b))
- 3. All new and existing cold cleaners shall be equipped with a cover and the cover shall be closed whenever parts are not being handled in the cold cleaner. (R 336.1611(2)(a), R 336.1707(3)(a))
- 4. The cover of a new cold cleaner shall be mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia or if the solvent is agitated or heated. (R 336.1707(3)(a))
- 5. If the Reid vapor pressure of any solvent used in a new cold cleaner is greater than 0.6 psia; or, if any solvent used in a new cold cleaner is heated above 120 degrees Fahrenheit, then the cold cleaner must comply with at least one of the following provisions:
 - a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7; (R 336.1707(2)(a))
 - b. The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0; (R 336.1707(2)(b))

c. The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. (R 336.1707(2)(c))

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

- 1. For each new cold cleaner in which the solvent is heated, the solvent temperature shall be monitored and recorded at least once each calendar week during routine operating conditions. (R 336.1213(3))
- 2. The permittee shall maintain the following information on file for each cold cleaner: (R 336.1213(3))
 - a. A serial number, model number, or other unique identifier for each cold cleaner;
 - b. The date the unit was installed, manufactured or that it commenced operation;
 - c. The air/vapor interface area for any unit claimed to be exempt under Rule 281(h);
 - d. The applicable Rule 201 exemption;
 - e. The Reid vapor pressure of each solvent used;
 - f. If applicable, the option chosen to comply with Rule 707(2).
- 3. The permittee shall maintain written operating procedures for each cold cleaner. These written procedures shall be posted in an accessible, conspicuous location near each cold cleaner. (R 336.1611(3), R 336.1707(4))
- 4. As noted in Rule 611(2)(c) and Rule 707(3)(c), if applicable, an initial demonstration that the waste solvent is a safety hazard shall be made prior to storage in non-closed containers. If the waste solvent is a safety hazard and is stored in non-closed containers, verification that the waste solvent is disposed of so that not more than 20 percent, by weight, is allowed to evaporate into the atmosphere shall be made on a monthly basis. (R 336.1213(3), R 336.1611(2)(c), R 336.1707(3)(c))

VII. <u>REPORTING</u>

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

D. FLEXIBLE GROUP SPECIAL CONDITIONS

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

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

FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGCOMPRESSORS	Grandfathered natural gas-fired reciprocating internal combustion engines.	EUENGINE306 EUENGINE316 EUENGINE319 EUENGINE320 EUENGINEH9 EUENGINEH10 EUENGINEH11 EUENGINEH12 EUENGINET11 EUENGINET12 EUENGINE3-1 EUENGINE3-2
FGAUXGENS	Existing SI emergency RICE rated at <500 HP that commenced construction or reconstruction before June 12, 2006. The engines are subject to 40 CFR Part 63, Subpart ZZZZ.	
FGPROCESSHTRS	Existing small (<10 MMBTU) industrial process heaters fired by natural gas at a major source of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD.	EUBLR9 EUFUELHTR EUFUELHTR1 EUREBOILER

FGCOMPRESSORS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Grandfathered natural gas fired reciprocating internal combustion engines.

Emission Units: EUENGINE306, EUENGINE316, EUENGINE319, EUENGINE320, EUENGINEH9, EUENGINEH10, EUENGINEH11, EUENGINEH12, EUENGINET11, EUENGINET12, EUENGINE3-1, EUENGINE3-2

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall only fire natural gas in the reciprocating compressor engines at this facility. (R 336.1301(1))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

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

NA

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall record the natural gas consumption rate for each calendar month. (R 336.1213(3)(b))

VII. <u>REPORTING</u>

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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

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

FGAUXGENS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Existing SI emergency RICE rated at <500 HP that commenced construction or reconstruction before June 12, 2006. The engines are subject to 40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.

Emission Units: EUAUXGEN1A, EUAUXGEN2A

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. Each engine in FGAUXGENS shall be installed, maintained, and operated in a satisfactory manner. The permittee may petition the USEPA Administrator pursuant to the requirements of 40 CFR 63.6(g) for alternative work practices. The following are the work practices specified in 40 CFR Part 63, Subpart ZZZZ, Table 2c, Item 6:
 - 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 spark plugs every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
 - c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

If the emergency engine is being operated during an emergency and it is not possible to shut down the engine to perform the work practice standards on the schedule required, the work practice standard can be delayed until the emergency is over. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has been abated. Sources must report any failure to perform the work 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 63.6640(a), 40 CFR Part 63, Subpart ZZZZ, Table 2c, Item 6)**

- 2. The permittee may utilize an oil analysis program in order to extend the specified oil change requirement as specified in SC V.1. The oil analysis must be performed at the same frequency as oil changes are required. The oil analysis must be performed at the same frequency specified for changing the oil in Table 2c of 40 CFR Part 63, Subpart ZZZZ. (40 CFR 63.6625(j))
- The permittee shall install, maintain, and operate each engine in FGAUXGENS according to the manufacturer's emission-related written instructions or a plan developed by the facility 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. (40 CFR 63.6605(b), 40 CFR 63.6625(e), 40 CFR 63.6640(a), 40 CFR Part 63, Subpart ZZZZ, Table 6, Item 9)

- 4. The permittee shall minimize the time spent at idle during startup and minimize the startup time of each engine in FGAUXGENS 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. There is no time limit on the use of emergency stationary RICE in emergency situations. (40 CFR 63.6640(f)(1))
- 6. The permittee may operate each engine in FGAUXGENS 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))
- 7. Each engine in FGAUXGENS may operate up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing as provided in SC III.6. 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 non-emergency 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 install a non-resettable hour meter on each engine in FGAUXGENS. (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 in order to extend the specified oil change requirement in 40 CFR Part 63, Subpart ZZZZ, Table 2c, 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 Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid Number of the oil when new; Viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the 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(j))

VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall maintain a copy of each notification and report submitted, including supporting documentation. (40 CFR 63.6655(a)(1))
- 2. For each engine in FGAUXGENS, the permittee shall keep in a satisfactory manner, records of the occurrence and duration of each malfunction of operation. The permittee shall keep all records on file and make them available to the department upon request. (40 CFR 63.6655(a)(2), 40 CFR 63.6660)
- For each engine in FGAUXGENS, the permittee shall keep in a satisfactory manner, records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process 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)(5), 40 CFR 63.6660)

ROP No: MI-ROP-N2901-2020 Expiration Date: January 22, 2025 PTI No: MI-PTI-N2901-2020

- 4. For each engine in FGAUXGENS, the permittee shall keep in a satisfactory manner, records to demonstrate continuous compliance with the operating limitations in SC III.3. 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)
- 5. For each engine in FGAUXGENS, the permittee shall keep in a satisfactory manner, records of all maintenance performed on the monitoring equipment and engine. The permittee shall keep all records on file and make them available to the department upon request. (40 CFR 63.6655(a)(4), 40 CFR 63.6655(e), 40 CFR 63.6660)
- 6. For each engine in FGAUXGENS, the permittee shall monitor and record the total hours of operation per calendar year, recorded through the non-resettable hours meter, 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. **(40 CFR 63.6655(f))**

VII. <u>REPORTING</u>

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii), 40 CFR 63.6640(b))
- 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 annual and semiannual compliance reports must contain the following information: **(40 CFR 63.6650(c))** a. Company name and address;
 - b. Statement by a Responsible Official, with that official's name, title, and signature, certifying the accuracy of the content of the report;
 - c. Date of report and beginning and ending dates of the reporting period;
 - d. If there was a malfunction during the reporting period, the compliance report must include the number, duration, and a brief description of actions taken by an owner or operator during a malfunction to minimize emissions in accordance with SC III.3, including actions taken to correct a malfunction;
 - e. If there are no deviations from any operating limitations that apply, a statement that there were no deviations from the operating limitations during the reporting period.
- 5. For each deviation from an operating limitation that occurs, the permittee shall include the following additional information in the compliance report: (40 CFR 63.6650(d))
 - a. The total operating time of the stationary RICE at which the deviation occurred during the reporting period;
 - b. Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and ZZZZ, for Stationary Reciprocating Internal Combustion Engines by the initial compliance date. (40 CFR 63.6595, 40 CFR Part 63, Subparts A and ZZZZ)

- **Footnotes:** ¹ This condition is state only enforceable and was established pursuant to Rule 201(1)(b). ² This condition is federally enforceable and was established pursuant to Rule 201(1)(a).

FGPROCESSHTRS FLEXIBLE GROUP CONDITIONS

DESCRIPTION

Existing small (<10 MMBTU) industrial process heaters fired by natural gas at a major source of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD.

Emission Units:

≤5 MMBTU/hr	EUFUELHTR (0.25 MMBTU/hr) EUFUELHTR1 (0.45 MMBTU/hr)
	EUBLR9 (3.35 MMBTU/hr) EUREBOILER (1.00 MMBTU/hr)

POLLUTION CONTROL EQUIPMENT

NA

I. EMISSION LIMIT(S)

NA

II. MATERIAL LIMIT(S)

NA

III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee must meet the tune-up and energy assessment work practice standards for each applicable boiler or process heater at the source. (40 CFR 63.7500(a)(1), 40 CFR Part 63, Subpart DDDDD, Table 3, Nos. 1-4)
- 2. The permittee must operate and maintain affected sources in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the AQD 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))
- 3. The permittee may obtain approval from the Administrator to use an alternative to the tune-up and energy assessment work practice standards. (40 CFR 63.7500(b))
- 4. The permittee must:
 - a. Conduct a 5-year performance tune-up for boilers/process heaters ≤5 MMBTU/hr, according to 40 CFR 63.7540(a)(12) as stated in SC III.5. Each 5-year tune-up specified in 40 CFR 63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up. **(40 CFR 63.7515(d))**
 - b. Conduct the tune-up within 30 calendar days of startup, if the unit is not operating on the required date for a tune-up. (40 CFR 63.7540(a)(13))
 - c. Follow the procedures in SC VI.1 for all initial and subsequent tune-ups. (40 CFR 63.7540(a)(1), 40 CFR Part 63, Subpart DDDDD, Table 3)
- 5. Boiler or process heaters with a continuous oxygen trim system that maintains an optimum air to fuel ratio, or a heat input capacity of less than or equal to 5 million BTU per hour and the unit is in the units designed to burn gas 1; units designed to burn gas 2 (other); or units designed to burn light liquid subcategories must conduct a tune-up of the boiler or process heater every 5 years. 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 63.7540(a)(12), 40 CFR 63.7500(d), 40 CFR 63.7500(e))

- 6. The permittee must complete the initial tune ups on all affected units no later than January 31, 2016, except as provided in 40 CFR 63.7510(j) and 40 CFR 63.7540(a)(13). (40 CFR 63.7510(e))
- For affected sources (as defined in 40 CFR 63.7490) that have not operated since the previous compliance demonstration and more than one year has passed since the previous compliance demonstration, the permittee must complete a subsequent tune-up within 30 days of startup by following the procedures described in SC VI.1. (40 CFR 63.7515(g))
- The permittee must complete the one-time energy assessment no later than January 31, 2016. The energy assessment must be performed by a qualified energy assessor and must include the following: (40 CFR 63.7510(e), 40 CFR Part 63, Subpart DDDDD, Table 3, Item No. 4)
 - a. A visual inspection of the boiler or process heater system;
 - b. An evaluation of operating characteristics of the boiler or process heater systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints;
 - c. An inventory of major energy use systems consuming energy from affected boilers and process heaters and which are under the control of the boiler/process heater owner/operator;
 - d. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage;
 - e. A review of the facility's energy management practices and provides recommendations for improvements consistent with the definition of energy management practices, if identified;
 - f. A list of cost-effective energy conservation measures that are within the facility's control;
 - g. A list of the energy savings potential of the energy conservation measures identified;
 - h. A comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments.

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 demonstrate continuous compliance with the tune-up requirement by completing the following: (40 CFR 63.7540(a)(10))
 - a. Inspect the burner, and clean or replace any components of the burner as necessary (the permittee may delay the burner inspection until the next scheduled unit shutdown). 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))

- f. Maintain on-site and submit, if requested by the AQD, the most recent periodic report containing the information as listed below. (40 CFR 63.7540(a)(10)(vi))
 - i. 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))
 - ii. A description of any corrective actions taken as a part of the tune-up; (40 CFR 63.7540(a)(10)(vi)(B))
 - iii. 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))
- 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 semiannual compliance report that the permittee submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). (40 CFR 63.7555(a)(1))
- 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(a), (b), and (c))

VII. <u>REPORTING</u>

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. The permittee must submit a Notification of Compliance Status that includes each boiler or process heater before the close of business on the 60th day following the completion of the initial compliance demonstrations for all boiler or process heaters at the facility. The Notification of Compliance Status report must contain the following information: (40 CFR 63.7545(e))
 - a. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with 40 CFR Part 63, Subpart DDDDD, description of the fuel(s) burned; (40 CFR 63.7545(e)(1))
 - b. Certification(s) of compliance, as applicable, and signed by a Responsible Official: (40 CFR 63.7545(e)(8))
 - i. "This facility complies with the required initial tune-up according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi);" (40 CFR 63.7545(e)(8)(i))
 - ii. "This facility has had an energy assessment performed according to 40 CFR 63.7530(e)." (40 CFR 63.7545(e)(8)(ii))
- 5. The permittee must submit boiler tune-up compliance reports. The first compliance report shall cover the period January 31, 2016 thru December of the year in which the tune up was completed and must be postmarked or submitted no later than March 15th of the reporting year that immediately follows the year in which the tune-up was completed. Subsequent compliance reports must be postmarked or submitted by March 15th of the year following the tune-up and must cover the applicable 1, 2, or 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 be submitted using the Compliance and Emissions Data Reporting Interface (CEDRI) which is accessed through the EPA's Central Data Exchange (CDX) (*http://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 the state and EPA Region 5. At the discretion of the Administrator, the permittee must submit these reports, in the format specified by the Administrator. (40 CFR 63.7550(b), 40 CFR 63.10(a)(5), 40 CFR 63.7550(h)(3))

- 6. The permittee must include the following information in the compliance report: (40 CFR 63.7550(c), 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. The total operating time during the reporting period; (40 CFR 63.7550(c)(5)(iv))
 - e. 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, 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))
 - f. 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 report each instance in which the permittee did not meet each applicable operating limit in Tables 3 and 4 to 40 CFR Part 63, Subpart DDDDD. These instances are deviations from the operating limits, respectively, in 40 CFR Part 63, Subpart DDDDD. These deviations must be reported according to the requirements in 40 CFR 63.7550. **(40 CFR 63.7540(b))**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

- 1. The permittee must comply with 40 CFR Part 63, Subpart DDDDD no later than January 31, 2016, for existing boilers and process heaters, unless an extension has been granted per 40 CFR 63.6(i). (40 CFR 63.7495(b))
- 2. The permittee must be in compliance with the work practice standards (tune ups, energy assessment) in 40 CFR Part 63, Subpart DDDDD. (40 CFR 63.7505(a))
- 3. The permittee shall comply with the General Provisions in 40 CFR 63.1 through 63.15 apply to this source as indicated in Table 10 of 40 CFR Part 63, Subpart DDDDD. (40 CFR 63.7565, Table 10)
- 4. 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:

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

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

E. NON-APPLICABLE REQUIREMENTS

At the time of the ROP issuance, the AQD has determined that the requirements identified in the table below are not applicable to the specified emission unit(s) and/or flexible group(s). This determination is incorporated into the permit shield provisions set forth in the General Conditions in Part A pursuant to Rule 213(6)(a)(ii). If the permittee makes a change that affects the basis of the non-applicability determination, the permit shield established as a result of that non-applicability decision unit or flexible group.

Emission Unit/Flexible Group ID	Non-Applicable Requirement	Justification
EUTURBINERT248	40 CFR Part 60, Subpart GG	The turbine engine, EUTURBINERT248, at this facility is not subject to this subpart because it was constructed before October 3, 1977. 40 CFR Part 60, Subpart GG applies to certain stationary gas turbines which were constructed, modified, or reconstructed after October 3, 1977. The periodic repair or replacement of gas turbine components, including the gas generator, for overhaul or repair does not subject the facility to the requirements of Subpart GG unless the periodic replacement does meet the definition of "modification" as defined in 40 CFR 60.14 or "reconstruction" as defined in 40 CFR 60.15. Future modification and/or installation may be subject to this subpart.
FGCOMPRESSORS	40 CFR Part 63, Subpart ZZZZ – NESHAPs for Stationary RICE	"existing 2SLB or 4SLB stationary RICE, with a site rating of more than 500 BHP located at a major source of HAP emissions do not have to meet the requirements of this subpart and of Subpart A. Additionally, no initial notification was necessary." (40 CFR 63.6590(b)(3)(i)&(ii)) If these units are reconstructed, or new units are installed, they may be subject to this subpart.
EUAUXGEN3 FGCOMPRESSORS	40 CFR Part 60, Subpart JJJJ – Standards of Performance for Stationary Spark Ignition (SI) Internal Combustion Engines (ICE)	The existing engines were in operation prior to the regulatory applicability date, and none of the engines have been modified or reconstructed after June 12, 2006; therefore, these engines are not currently subject to this rule.
EUENGINE306 EUENGINE316 EUENGINE319 EUENGINE320	40 CFR Part 63, Subpart ZZZ – NESHAPs for Stationary RICE	"(3) The following stationary RICE do not have to meet the requirements of this subpart and of subpart A of this part, including initial notification requirements: (iv) Existing limited use stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions." (40 CFR 63.6590(b)(3)(iv))
EUTURBINERT248	40 CFR Part 63, Subpart YYYY	The turbine engine at this facility is not subject to this subpart because it was constructed before January 14, 2003. Pursuant to 40 CFR 63.6090(b)(4), existing stationary combustion turbines in all subcategories do not have to meet the requirements of this subpart and of Subpart A of this part. Additionally, no initial notification was necessary. If the unit is reconstructed, or new units are installed, they may be subject to this subpart.

APPENDICES

Appendix 1. Acronyms and Abbreviations

Common Acronyms			Pollutant / Measurement Abbreviations		
AQD Air Quality Division			Actual cubic feet per minute		
BACT	Best Available Control Technology	BTU	British Thermal Unit		
CAA	Clean Air Act	°C	Degrees Celsius		
CAM	Compliance Assurance Monitoring	CO	Carbon Monoxide		
CEM	Continuous Emission Monitoring	CO ₂ e	Carbon Dioxide Equivalent		
CEMS	Continuous Emission Monitoring System	dscf	Dry standard cubic foot		
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter		
СОМ	Continuous Opacity Monitoring	°F	Degrees Fahrenheit		
Department/	Michigan Department of Environment,	gr	Grains		
department	Great Lakes, and Energy	НАР	Hazardous Air Pollutant		
EGLE	Michigan Department of Environment,	Hg	Mercury		
	Great Lakes, and Energy	hr	Hour		
EU	Emission Unit	HP	Horsepower		
FG	Flexible Group	H_2S	Hydrogen Sulfide		
GACS	Gallons of Applied Coating Solids	kW	Kilowatt		
GC	General Condition	lb	Pound		
GHGs	Greenhouse Gases	m	Meter		
HVLP	High Volume Low Pressure*	mg	Milligram		
ID	Identification	mm	Millimeter		
IRSL	Initial Risk Screening Level	MM	Million		
ITSL	Initial Threshold Screening Level	MW	Megawatts		
LAER	Lowest Achievable Emission Rate	NMOC	Non-methane Organic Compounds		
MACT	Maximum Achievable Control Technology	NOx	Oxides of Nitrogen		
MAERS	Michigan Air Emissions Reporting System	ng	Nanogram		
MAP	Malfunction Abatement Plan	PM	Particulate Matter		
MSDS	Material Safety Data Sheet	PM10	Particulate Matter equal to or less than 10		
NA	Not Applicable		microns in diameter		
NAAQS	National Ambient Air Quality Standards	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter		
NESHAP	National Emission Standard for Hazardous	pph	Pounds per hour		
	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 ₂	Sulfur Dioxide		
SC	Special Condition	TAC	Toxic Air Contaminant		
SCR	Selective Catalytic Reduction	Temp	Temperature		
SNCR	Selective Non-Catalytic Reduction	THC	Total Hydrocarbons		
SRN	State Registration Number	tpy	Tons per year		
TEQ	Toxicity Equivalence Quotient	μg	Microgram		
USEPA/EPA	United States Environmental Protection	μm	Micrometer or Micron		
	Agency	VOC	Volatile Organic Compounds		
VE	Visible Emissions	yr	Year		

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

Appendix 2. Schedule of Compliance

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

Appendix 3. Monitoring Requirements

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

Appendix 4. Recordkeeping

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

Appendix 5. Testing Procedures

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-N2901-2014. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-N2901-2014 is being reissued as Source-Wide PTI No. MI-PTI-N2901-2020.

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

Appendix 7. Emission Calculations

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

SC I.2 (40 CFR 63.1275, Equation 1)

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

Where:

EL_{BTEX} = Unit-specific BTEX emission limit, megagrams per year;

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

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

C_{i,BTEX} = Annual average BTEX concentration of the natural gas at the inlet to the glycol dehydration unit, ppmv.

SC VI.2 (40 CFR 63.1270(a)(1))

$$Throughput = \frac{8760}{\left(\frac{1}{IR_{max}} + \frac{1}{WR_{max}}\right)}$$

Where:

Throughput = Maximum annual facility wide natural gas throughput in cubic meters per year IR_{max} = Maximum facility injection rate in cubic meters per hour WR_{max} = Maximum facility withdrawal rate in cubic meters per hour 8760 = Maximum hours of operation per year

Appendix 8. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

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

B. Other Reporting

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