

**MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION**

EFFECTIVE DATE: August 4, 2014

REVISION DATES: April 21, 2015, June 5, 2017

ISSUED TO:

**Breitburn Operating, LP – Wilderness CO2 CPF
and
Linn Operating, LLC – Hayes 29 CPF**

State Registration Number (SRN): N5831

LOCATED AT:

10875 Geronimo Trail, Gaylord, Otsego County, Michigan 49735

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-N5831-2014b

Expiration Date: August 4, 2019

Administratively Complete ROP Renewal Application Due Between:
February 4, 2018 and February 4, 2019

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

SOURCE-WIDE PERMIT TO INSTALL

Permit Number: MI-PTI-N5831-2014b

This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(5) of Act 451. Pursuant to Michigan Air Pollution Control Rule 214a, the terms and conditions herein, identified by the underlying applicable requirement citation of Rule 201(1)(a), constitute a federally enforceable PTI. The PTI terms and conditions do not expire and remain in effect unless the criteria of Rule 201(6) are met. Operation of all emission units identified in the PTI is subject to all applicable future or amended rules and regulations pursuant to Act 451 and the federal Clean Air Act.

Michigan Department of Environmental Quality

Shane Nixon, Cadillac District Supervisor

TABLE OF CONTENTS

AUTHORITY AND ENFORCEABILITY	4
SECTION 1 – Breitburn Operating, LP - Wilderness CO2 CPF.....	5
A. GENERAL CONDITIONS.....	6
Permit Enforceability	6
General Provisions.....	6
Equipment & Design	7
Emission Limits.....	7
Testing/Sampling	7
Monitoring/Recordkeeping	7
Certification & Reporting	8
Permit Shield	9
Revisions	10
Reopenings.....	10
Renewals.....	10
Stratospheric Ozone Protection	10
Risk Management Plan.....	11
Emission Trading	11
Permit To Install (PTI).....	11
B. SOURCE-WIDE CONDITIONS	13
C. EMISSION UNIT CONDITIONS	16
EMISSION UNIT SUMMARY TABLE.....	16
D. FLEXIBLE GROUP CONDITIONS.....	17
FLEXIBLE GROUP SUMMARY TABLE.....	17
FGCATENGINES.....	18
FGWAUKENGINES.....	22
FGRURALSIRICEMACT.....	27
E. NON-APPLICABLE REQUIREMENTS	30
APPENDICES	31
Appendix 1. Abbreviations and Acronyms.....	31
Appendix 2. Schedule of Compliance.....	32
Appendix 3. Monitoring Requirements	32
Appendix 4. Recordkeeping	32
Appendix 5. Testing Procedures	32
Appendix 6. Permits to Install.....	32
Appendix 7. Emission Calculations	33
Appendix 8. Reporting	33
SECTION 2 – LINN Operating, LLC - Hayes 29 CPF.....	34
A. GENERAL CONDITIONS.....	35
Permit Enforceability	35
General Provisions.....	35
Equipment & Design	36

Emission Limits	36
Testing/Sampling	36
Monitoring/Recordkeeping	37
Certification & Reporting	37
Permit Shield	38
Revisions	39
Reopenings.....	39
Renewals	39
Stratospheric Ozone Protection	40
Risk Management Plan.....	40
Emission Trading	40
Permit To Install (PTI)	40
B. SOURCE-WIDE CONDITIONS	42
C. EMISSION UNIT CONDITIONS	45
EMISSION UNIT SUMMARY TABLE	45
EUGLYCOLDEHYDRATOR	46
EUENGINEH29	49
EUMACTZZZZ	53
D. FLEXIBLE GROUP CONDITIONS.....	56
E. NON-APPLICABLE REQUIREMENTS	57
APPENDICES	58
Appendix 1. Abbreviations and Acronyms.....	58
Appendix 2. Schedule of Compliance.....	59
Appendix 3. Monitoring Requirements	59
Appendix 4. Recordkeeping	59
Appendix 5. Testing Procedures	59
Appendix 6. Permits to Install.....	59
Appendix 7. Emission Calculations	59
Appendix 8. Reporting	60

AUTHORITY AND ENFORCEABILITY

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

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

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

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

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

ROP No: MI-ROP-N5831-2014b
Expiration Date: August 4, 2019
PTI No: MI-PTI-N5831-2014b

SECTION 1 – Breitburn Operating, LP - Wilderness CO2 CPF

A. GENERAL CONDITIONS

Permit Enforceability

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

General Provisions

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

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

Equipment & Design

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

Emission Limits

11. Unless otherwise specified in this ROP, the permittee shall comply with Rule 301, which states, in part, "Except as provided in subrules 2, 3, and 4 of this rule, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following: **(R 336.1301(1))**
 - a. A 6-minute average of 20 percent opacity, except for one 6-minute average per hour of not more than 27 percent opacity.
 - b. A limit specified by an applicable federal new source performance standard.
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). **(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 states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**
19. A Responsible Official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604. **(R 336.1213(4)(c))**
20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. **(R 336.1213(3)(c))**
- a. For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
 - b. For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
 - c. For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.
22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following: **(R 336.1213(3)(c))**
- a. Submitting a certification by a Responsible Official with each report which states that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
 - b. Submitting, within 30 days following the end of a calendar month during which one or more prompt reports of deviations from the emissions allowed under the ROP were submitted to the department pursuant to Rule 213(3)(c)(ii), a certification by a Responsible Official which states that, "based on information and belief formed after reasonable inquiry, the statements and information contained in each of the reports submitted during the previous month were true, accurate, and complete". The certification shall include a listing of the reports that are being certified. Any report submitted pursuant to Rule 213(3)(c)(ii) that will be

certified on a monthly basis pursuant to this paragraph shall include a statement that certification of the report will be provided within 30 days following the end of the calendar month.

23. Semiannually for the term of the ROP as detailed in the special conditions, or more frequently if specified, the permittee shall submit certified reports of any required monitoring to the appropriate AQD District Office. All instances of deviations from ROP requirements during the reporting period shall be clearly identified in the reports. **(R 336.1213(3)(c)(i))**
24. On an annual basis, the permittee shall report the actual emissions, or the information necessary to determine the actual emissions, of each regulated air pollutant as defined in Rule 212(6) for each emission unit utilizing the emissions inventory forms provided by the department. **(R 336.1212(6))**
25. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the appropriate AQD District Office. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate AQD District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a Responsible Official in a manner consistent with the CAA. **(R 336.1912)**

Permit Shield

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

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

27. Nothing in this ROP shall alter or affect any of the following:
 - a. The provisions of Section 303 of the CAA, emergency orders, including the authority of the USEPA under Section 303 of the CAA. **(R 336.1213(6)(b)(i))**
 - b. The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this ROP issuance. **(R 336.1213(6)(b)(ii))**
 - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**
 - d. The ability of the USEPA to obtain information from a source pursuant to Section 114 of the CAA. **(R 336.1213(6)(b)(iv))**
28. The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
 - a. Operational flexibility changes made pursuant to Rule 215. **(R 336.1215(5))**
 - b. Administrative Amendments made pursuant to Rule 216(1)(a)(i)-(iv). **(R 336.1216(1)(b)(iii))**
 - c. Administrative Amendments made pursuant to Rule 216(1)(a)(v) until the amendment has been approved by the department. **(R 336.1216(1)(c)(iii))**
 - d. Minor Permit Modifications made pursuant to Rule 216(2). **(R 336.1216(2)(f))**
 - e. State-Only Modifications made pursuant to Rule 216(4) until the changes have been approved by the department. **(R 336.1216(4)(e))**

29. Expiration of this ROP results in the loss of the permit shield. If a timely and administratively complete application for renewal is submitted not more than 18 months, but not less than 6 months, before the expiration date of the ROP, but the department fails to take final action before the end of the ROP term, the existing ROP does not expire until the renewal is issued or denied, and the permit shield shall extend beyond the original ROP term until the department takes final action. **(R 336.1217(1)(c), R 336.1217(1)(a))**

Revisions

30. For changes to any process or process equipment covered by this ROP that do not require a revision of the ROP pursuant to Rule 216, the permittee must comply with Rule 215. **(R 336.1215, R 336.1216)**
31. A change in ownership or operational control of a stationary source covered by this ROP shall be made pursuant to Rule 216(1). **(R 336.1219(2))**
32. For revisions to this ROP, an administratively complete application shall be considered timely if it is received by the department in accordance with the time frames specified in Rule 216. **(R 336.1210(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:
- 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))**
 - If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. **(R 336.1217(2)(a)(ii))**
 - 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))**
 - 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(8))**

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 Part 68.10(a):
- June 21, 1999,
 - Three years after the date on which a regulated substance is first listed under 40 CFR Part 68.130, or
 - The date on which a regulated substance is first present above a threshold quantity in a process.
40. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.
41. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c)). **(40 CFR Part 68)**

Emission Trading

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

Permit To Install (PTI)

43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule. ² **(R 336.1201(1))**
44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA. ² **(R 336.1201(8), Section 5510 of Act 451)**
45. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by Subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, MDEQ. 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, or has been interrupted for 18 months,

the applicable terms and conditions from that PTI shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, MDEQ, AQD, P. O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI. 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.

SOURCE-WIDE CONDITIONS

POLLUTION CONTROL EQUIPMENT:

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	224 tons ²	12-month rolling time period, as determined at the end of each calendar month	NA	SC VI.2	R 336.1205(3)
2. CO	224 tons ²	12-month rolling time period, as determined at the end of each calendar month	NA	SC VI.2	R 336.1205(3)
3. Each Individual HAP	Less than 10 tons per year	12-month rolling time period, as determined at the end of each calendar month	NA	SC VI.3	R336.1213(2)(d)
4. Total HAPs	Less than 25 tons per year	12-month rolling time period, as determined at the end of each calendar month	NA	SC VI.3	R336.1213(2)(d)

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall only burn sweet natural gas in all natural gas fired equipment.² (R 336.1205(3))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years.² (R 336.1213(3)(b)(ii))

- The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month.² (R336.1205(3), R 336.213(3))

2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period CO and NOx emission calculation records for the Stationary Source, to demonstrate compliance with Special Conditions (SC) I.1 and I.2. The permittee shall keep all records on file at a location approved by the AQD District Supervisor and make them available upon request.² **(R336.1205(3), R 336.213(3))**
3. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period HAP emission calculation records for the Stationary Source, as required in SC I.3 and I.4 above. The permittee shall keep all records on file at a location approved by the AQD District Supervisor and make them available upon request. **(R336.1213(2)(d))**

See Appendix 7

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

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

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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).

C. EMISSION UNIT CONDITIONS

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

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

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUENGINE1	Remote 1,085 hp Caterpillar 3516 LE (low emission) reciprocating internal combustion engine (RICE)	11/01/92	FGCATENGINES
EUENGINE2	Remote 1,085 hp Caterpillar 3516 LE (low emission) RICE with oxidation catalyst	03/20/06	FGCATENGINES
EUENGINE3	Remote 1,085 hp Caterpillar 3516 LE (low emission) RICE with oxidation catalyst	03/20/06	FGCATENGINES
EUENGINE4	Remote 1,150 hp Caterpillar 3516 LE (low emission) RICE with oxidation catalyst	03/20/06	FGCATENGINES
EUENGINE5	Remote 1,478 hp Waukesha L-7042 GSI (rich burn) RICE, with 3-way catalytic converter and air to fuel ratio control (AFRC) On February 23, 2015, the facility revised minor modification application No. 201500014 to consider the engine "shut-in" and would test the engine within 90 days of bringing it back online. EUENGINE5 was shut down and placed in stand-by mode effective November 10, 2014.	11/01/92	FGWAUKENGINES
EUENGINE6	Remote 1,478 hp Waukesha L-7042 GSI (rich burn) RICE, with 3-way catalytic converter and AFRC	11/01/92	FGWAUKENGINES

D. FLEXIBLE GROUP CONDITIONS

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

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

FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGCATENGINES	Remote Caterpillar 3516 LE (low emission) reciprocating internal combustion engines (RICE)	EUENGINE1, EUENGINE2, EUENGINE3, and EUENGINE4,
FGWAUKENGINES	Remote 1,478 hp Waukesha L-7042 GSI (rich burn) RICE controlled by 3-way catalytic converters, subject to 40 CFR Part 64 Compliance Assurance Monitoring (CAM) requirements	EUENGINE5 and EUENGINE6
FGRURALSIRICEMACT	Existing non-emergency Spark Ignition (SI) 4 Stroke Lean Burn (4SLB) and existing non-emergency SI 4 Stroke Rich Burn (4SRB) stationary RICE with site ratings greater than 500 HP located at an area source of HAPs, that meet the definition of remote stationary RICE in 40 CFR 63.6675	EUENGINE1, EUENGINE2, EUENGINE3, EUENGINE4, EUENGINE5, and EUENGINE6

**FGCATENGINES
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION:

Four remote Caterpillar 3516 LE (low emission) RICE

Emission Units: EUENGINE1, EUENGINE2, EUENGINE3, and EUENGINE4

POLLUTION CONTROL EQUIPMENT:

Oxidation Catalyst (EUENGINE2, EUENGINE3, and EUENGINE4)

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	23.1 tons ²	12-month rolling time period, as determined at the end of each calendar month	EUENGINE1	SC V.1 and SC VI.7	R 336.1205(3)
1. CO	20.8 tons ²	12-month rolling time period, as determined at the end of each calendar month	EUENGINE1	SC V.1 and SC VI.7	R 336.1205(3)
2. NOx	23.1 tons ²	12-month rolling time period, as determined at the end of each calendar month	EUENGINE2	SC V.1 and SC VI.7	R 336.1205(3)
3. CO	4.5 tons ²	12-month rolling time period, as determined at the end of each calendar month	EUENGINE2	SC V.1 and SC VI.7	R 336.1205(3)
4. NOx	23.1 tons ²	12-month rolling time period, as determined at the end of each calendar month	EUENGINE3	SC V.1 and SC VI.7	R 336.1205(3)
5. CO	4.5 tons ²	12-month rolling time period, as determined at the end of each calendar month	EUENGINE3	SC V.1 and SC VI.7	R 336.1205(3)
6. NOx	24.4 tons ²	12-month rolling time period, as determined at the end of each calendar month	EUENGINE4	SC V.1 and SC VI.7	R 336.1205(3)
7. CO	4.2 tons ²	12-month rolling time period, as determined at the end of each calendar month	EUENGINE4	SC V.1 and SC VI.7	R 336.1205(3)

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate any engine equipped with an add-on control device for more than 200 hours per engine per year without that control device consistent with the malfunction abatement plan (MAP), (pursuant to SC III.2). The 200 hours shall include times after an engine change-out occurs and general maintenance performed as allowed by the MAP. The hours per year limit is based on a 12-month rolling time period as determined at the end of each calendar month.² **(R 336.1205(3), R 336.1225, R 336.1702(a))**
2. The permittee shall not operate FGCATENGINES unless the MAP, approved by the AQD District Supervisor, is implemented and maintained. The MAP shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. At a minimum the MAP shall include:
 - a. Identification of the equipment and, if applicable, air-cleaning device; and the supervisory personnel responsible for overseeing the inspection, maintenance, and repair.
 - b. Description of the items or conditions to be inspected and frequency of the inspections or repairs.
 - c. Description of the equipment and, if applicable, air-cleaning device; operating parameters that shall be monitored to detect a malfunction or failure, the normal operating range of these parameters and a description of the method of monitoring or surveillance procedures.
 - d. Identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - e. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the MAP within 45 days after such an event occurs and submit the revised plan for approval to the AQD District Supervisor. Should the AQD determine the MAP to be inadequate, the District Supervisor may request modification of the plan to address those inadequacies.² **(R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1910, R 336.1911, R 336.1912)**

3. The permittee shall not operate any engine that contains an add-on control device unless that device is installed, maintained, and operated in a satisfactory manner, except as provided in SC III.1. Satisfactory operation includes performing the manufacturer's recommended maintenance on the control device and operating in conjunction with the MAP specified in SC III.2.² **(R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1910)**
4. The permittee shall utilize a differential pressure gauge or manometer for any engine with an oxidation catalyst, to monitor the operation of the oxidation catalyst as an indicator of proper operation. The appropriate range defining the proper operation of the oxidation catalyst is identified in the MAP. **(R 336.1213(3)(a)(i))**
5. The permittee shall utilize a temperature gauge or thermocouple for any engine with an oxidation catalyst, to monitor the operation of the oxidation catalyst, as an indicator of proper operation. The appropriate temperature range defining the proper operation of the oxidation catalyst is identified in the MAP. **(R 336.1213(3)(a)(i))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install and calibrate a thermocouple in accordance with the manufacturer's recommendations for any engine with an oxidation catalyst. **(R 336.1213(3)(a)(iii))**

V. TESTING/SAMPLING

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

1. The permittee shall verify NOx and CO emissions from each engine in FGATENGINES, by testing at owners expense, within nine months of issuance of this permit, and thereafter within every five years, in accordance with Department requirements. **(R 336.1205(3), R 336.2001, R336.2003, R336.2004)**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall monitor, in a satisfactory manner, the natural gas usage from each engine included in FGATENGINES on a monthly basis. **(R 336.1205(3), R 336.1213(3))**
2. The permittee shall monitor and record the differential pressure gauge or monometer on any engine with an oxidation catalyst in FGATENGINES, on a monthly basis. **(R 336.1213(3)(a)(iii))**
3. The permittee shall monitor and record the inlet temperature and outlet temperature on any engine with an oxidation catalyst in FGATENGINES, on a daily basis. **(R 336.1213(3)(a)(iii))**
4. The permittee shall maintain a log of all maintenance activities conducted according to the PM/MAP. The permittee shall keep this log on file at a location approved by the district supervisor and make it available upon request.² **(R 336.1205(3), R 336.1231(3), R 336.1225, R 336.1702(a), R 336.1911)**
5. The permittee shall keep, in satisfactory manner, for any engine equipped with an add-on control device monthly and 12-month rolling time period records of the hours of each engine included in FGATENGINES is operated without the control device. The permittee shall keep all records on file at a location approved by the AQD District Supervisor and make them available upon request.² **(R 336.1205(3), R 336.1225, R 336.1702(a))**
6. The permittee shall keep, in a satisfactory manner, monthly fuel use records for each engine included in FGATENGINES. The permittee shall keep all records on file at a location approved by the AQD District Supervisor and make them available upon request.² **(R 336.1205(3), R 336.1213(3))**
7. The permittee shall keep, in a satisfactory manner, monthly and 12-monthly rolling time period NOx and CO emission calculation records, using the emission factors from the most recent performance test or vendor data if the vendor data is higher, for each engine included in FGATENGINES. The permittee shall keep all records on file at a location approved by the AQD District Supervisor and make them available upon request.² **(R 336.1205(3), R 336.1213(3))**
8. If any engine included in FGATENGINES is replaced with an equivalent-emitting or lower-emitting engine, the permittee shall maintain records of the engine make, model, serial number, horsepower and year manufactured for the replacement engine. The permittee shall keep all records on file at a location approved by the AQD District Supervisor and make them available upon request. **(R 336.1213(3))**

See Appendix 7

VII. REPORTING

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

4. The permittee shall submit two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor for approval at least 30 days prior to the anticipated test date. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing. **(R 336.12001(3), R 336.1213(3))**
5. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than 7 days prior to the anticipated test date. **(R 336.2001(4))**
6. The permittee shall submit two complete test reports of the test results to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, within 60 days following the last date of the test. **(R 336.2001(5), R 336.1213(3))**
7. If any engine included in FGCAENGINES is replaced with an equivalent-emitting or lower-emitting engine, the permittee shall notify the AQD District Supervisor of such change-out and submit acceptable emissions data to show that the alternate engine is equivalent-emitting or lower-emitting.² **(R 336.1205(3), R 336.1231(3), R 336.1225, R 336.1702(a), R 336.1911)**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVENGINE1	16 ¹	37.5 ¹	R 336.1225
2. SVENGINE2	16 ¹	37.5 ¹	R 336.1225
3. SVENGINE3	16 ¹	37.5 ¹	R 336.1225
4. SVENGINE4	16 ¹	37.5 ¹	R 336.1225

IX. OTHER REQUIREMENT(S)

NA

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).

**FGWAUKENGINES
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION:

Two remote 1,478 hp Waukesha L-7042 GSI (rich burn) RICE

Emission Unit: EUENGINE5 and EUENGINE6

POLLUTION CONTROL EQUIPMENT:

3-way catalytic converters

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	24.6 tons ²	12-month rolling time period, as determined at the end of each calendar month	EUENGINE5	SC V.1 and SC VI.11	R 336.1205(3)
2. CO	41.1 tons ²	12-month rolling time period, as determined at the end of each calendar month	EUENGINE5	SC V.1 and SC VI.11	R 336.1205(3)
3. NOx	24.6 tons ²	12-month rolling time period, as determined at the end of each calendar month	EUENGINE6	SC V.1 and SC VI.11	R 336.1205(3)
4. CO	41.1 tons ²	12-month rolling time period, as determined at the end of each calendar month	EUENGINE6	SC V.1 and SC VI.11	R 336.1205(3)

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall only burn sweet natural gas in FGWAUKENGINES.² (R 336.1205(3))
2. The permittee shall not operate any engine equipped with an add-on control device for more than 200 hours per engine per year without that control device consistent with the malfunction abatement plan (MAP), (pursuant to SC III.2). The 200 hours shall include times after an engine change-out occurs and general maintenance performed as allowed by the MAP. The hours per year limit is based on a 12-month rolling time period as determined at the end of each calendar month.² (R 336.1205(3), R 336.1225, R 336.1702(a))

3. The permittee shall not operate FGWAUKENGINES unless the MAP, approved by the AQD District Supervisor, is implemented and maintained. The MAP shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. At a minimum the MAP shall include:
 - a. Identification of the equipment and, if applicable, air-cleaning device; and the supervisory personnel responsible for overseeing the inspection, maintenance, and repair.
 - b. Description of the items or conditions to be inspected and frequency of the inspections or repairs.
 - c. Description of the equipment and, if applicable, air-cleaning device; operating parameters that shall be monitored to detect a malfunction or failure, the normal operating range of these parameters and a description of the method of monitoring or surveillance procedures.
 - d. Identification of the major replacement parts that shall be maintained in inventory for quick replacement.
 - e. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the MAP within 45 days after such an event occurs and submit the revised plan for approval to the AQD District Supervisor. Should the AQD determine the MAP to be inadequate, the District Supervisor may request modification of the plan to address those inadequacies.² (R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1910, R 336.1911, R 336.1912)

4. The permittee shall not operate any engine that contains an add-on control device unless that device is installed, maintained, and operated in a satisfactory manner, except as provided in SC III.1. Satisfactory operation includes performing the manufacturer's recommended maintenance on the control device and operating in conjunction with the MAP specified in SC III.2.² (R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1910)
5. The permittee shall utilize a differential pressure gauge or manometer for any engine with a catalytic converter, to monitor the operation of the catalytic converter as an indicator of proper operation. The appropriate range defining the proper operation of the catalytic converter is identified in the MAP. (R 336.1213(3)(a)(i))
6. The permittee shall utilize a temperature gauge or thermocouple for any engine with a catalytic converter, to monitor the operation of the catalytic converter, as an indicator of proper operation. The appropriate temperature range defining the proper operation of the catalytic converter is identified in the MAP. (R 336.1213(3)(a)(i))

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install and calibrate a thermocouple gauge in accordance with the manufacturer's recommendations. (40 CFR 64.3(b)(2)(a), (R 336.1213(3)(a)(iii))

V. TESTING/SAMPLING

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

1. The permittee shall verify NOx and CO emissions from EUENGINE5, by testing at owner's expense, within 90 days of start-up, and thereafter within every five years, in accordance with Department requirements. (R 336.1205(3), R 336.2001, R 336.2003, R 336.2004)
2. The permittee shall verify NOx and CO emissions from EUENGINE6, by testing at owner's expense, within nine months of issuance of this permit, and thereafter within every five years, in accordance with Department requirements. (R 336.1205(3), R 336.2001, R 336.2003, R 336.2004)

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall monitor, in a satisfactory manner, the natural gas usage from each engine included in FGWAUKENGINES on a monthly basis. (R 336.1205(3), R 336.1213(3))

2. The permittee shall utilize a differential pressure gauge or manometer to monitor the operation of the catalytic converter as an indicator of proper operation. The appropriate range defining the proper operation of the catalytic converter is identified in the MAP. **(40 CFR 64.6(c)(1)(i)), 40 CFR 64.6(c)(1)(ii), R 336.1213(3)(a)(i))**
3. The permittee shall monitor and record the differential pressure gauge or monometer on EUENGINE5 and EUENGINE6, on a monthly basis. **(40 CFR 64.6(c)(1)(iii), 40 CFR 64.6(c)(3), 40 CFR 64.7(c), R 336.1213(3)(a)(i))**
4. An excursion for NO_x and CO shall be a differential pressure gauge or manometer reading of 1.5 inches of water over or under the differential pressure under normal operating conditions identified in the MAP, which is determined when the catalytic converter is installed. **(40 CFR 64.6(c)(2), R 336.1213(3)(a)(i))**
5. The permittee shall utilize a temperature gauge or thermocouple to monitor the operation of the catalytic converter, as an indicator of proper operation. The appropriate temperature range defining the proper operation of the catalytic converter is identified in the MAP. **(40 CFR 64.6(c)(1)(i)), 40 CFR 64.6(c)(1)(ii), R 336.1213(3)(a)(i))**
6. The permittee shall monitor and record the inlet temperature and outlet temperature on EUENGINE5 and EUENGINE6, on a daily basis. **(40 CFR 64.6(c)(1)(iii), 40 CFR 64.6(c)(3), 40 CFR 64.7(c), R 336.1213(3)(a)(iii))**
7. An excursion for NO_x and CO shall be a temperature gauge or thermocouple reading less than 900°F at the inlet of the catalytic converter, or greater than 1250°F at the outlet of the catalytic converter, or the outlet temperature from the catalytic converter is less than the inlet temperature.² **(40 CFR 64.6(c)(2))**
8. The permittee shall maintain a log of all maintenance activities conducted according to the MAP. The permittee shall keep this log on file at a location approved by the district supervisor and make it available upon request.² **(R 336.1205(3), R 336.1213(3), R 336.1225, R 336.1702(a), R 336.1911)**
9. The permittee shall keep, in satisfactory manner, for any engine equipped with an add-on control device monthly and 12-month rolling time period records of the hours of each engine included in FGWAUKENGINES is operated without the control device. The permittee shall keep all records on file at a location approved by the AQD District Supervisor and make them available upon request.² **(R 336.1205(3), R 336.1225, R 336.1702(a))**
10. The permittee shall keep, in a satisfactory manner, monthly fuel use records for each engine included in FGWAUKENGINES. The permittee shall keep all records on file at a location approved by the AQD District Supervisor and make them available upon request.² **(R 336.1205(3), R 336.1213(3))**
11. The permittee shall keep, in a satisfactory manner, monthly and 12-monthly rolling time period NO_x and CO emission calculation records, using the emission factors from the most recent performance test or vendor data if the vendor data is higher, for each engine included in FGWAUKENGINES. The permittee shall keep all records on file at a location approved by the AQD District Supervisor and make them available upon request.² **(R 336.1205(3), R 336.1213(3))**
12. If any engine included in FGWAUKENGINES is replaced with an equivalent-emitting or lower-emitting engine, the permittee shall maintain records of the engine make, model, serial number, horsepower and year manufactured for the replacement engine. The permittee shall keep all records on file at a location approved by the AQD District Supervisor and make them available upon request. **(R 336.1213(3))**
13. Upon detecting an excursion or exceedance of the differential pressure, the permittee shall check sample lines, check RPM verses differential pressure and compare the reading to previous month's readings, remove the catalyst and replace gaskets, as necessary. Should the differential pressure still indicate an excursion (greater than 1.5 times the normal differential pressure), the catalyst shall be removed and washed or replaced. **(40 CFR 64.7(d))**
14. Upon detecting an excursion or exceedance of the temperature, the permittee shall check loading on the engine, check for a faulty gauge or thermocouple, and check for proper operation of the ignition system.

Should the above check be performed and the temperatures are still outside the specified ranges, the engine shall be shut down. **(40 CFR 64.7(d))**

See Appendix 7

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. Each semiannual report of monitoring and deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions or exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. **(40 CFR 64.9(a)(2)(i))**
5. The permittee shall submit two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor for approval at least 30 days prior to the anticipated test date. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing. **(R 336.12001(3), R 336.1213(3))**
6. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than 7 days prior to the anticipated test date. **(R 336.2001(4))**
7. The permittee shall submit two complete test reports of the test results to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, within 60 days following the last date of the test. **(R 336.2001(5), R 336.1213(3))**
8. If any engine included in FGWAUKENGINES is replaced with an equivalent-emitting or lower-emitting engine, the permittee shall notify the AQD District Supervisor of such change-out and submit acceptable emissions data to show that the alternate engine is equivalent-emitting or lower-emitting.² **(R 336.1205(3), R 336.1231(3), R 336.1225, R 336.1702(a), R 336.1911)**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVENGINE5	16 ¹	40 ¹	R 336.1225
2. SVENGINE6	16 ¹	40 ¹	R 336.1225

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable requirements of 40 CFR Part 64. **(40 CFR Part 64)**

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).

**FGRURALSIRICEMACT
 FLEXIBLE GROUP CONDITIONS**

DESCRIPTION:

Existing non-emergency Spark Ignition (SI) 4 Stroke Lean Burn (4SLB) and existing non-emergency SI 4 Stroke Rich Burn (4SRB) stationary RICE with site ratings greater than 500 HP located at an area source of HAPs, that meet the definition of remote stationary RICE in 40 CFR 63.6675.

Compliance date is October 19, 2013

Emission Unit: EUENGINE1, EUENGINE2, EUENGINE3, EUENGINE4, EUENGINE5, EUENGINE6

POLLUTION CONTROL EQUIPMENT:

NA

I. EMISSION LIMIT(S)

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

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall be in compliance with the emission limitations, operating limitations and other requirements of Subpart ZZZZ of Part 63 at all times after the promulgated compliance date in Subpart ZZZZ of Part 63. **(40 CFR 63.6605(a))**
2. The permittee shall operate and maintain any affected RICE, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require you to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.6605(b))**
3. The permittee shall comply with the following requirements, for each 4SLB and 4SRB remote stationary RICE with a site rating greater than 500 brake HP, by the applicable compliance date. **(40 CFR 63.6603(a) and Table 2d)**
 - a. Change oil and filter every 2,160 hours of operation or annually, whichever comes first, except as allowed in SC III.4.

- b. Inspect spark plugs every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.
 - c. Inspect all hoses and belts every 2,160 hours of operation or annually, whichever comes first, and replace as necessary.
4. The permittee may utilize an oil analysis program in order to extend the specified oil change requirement in 40 CFR 63.6603 and as listed in SC III.3. The oil analysis program must be performed at the same frequency as oil changes are required. The analysis program must analyze the parameters and keep records as required in Part 63.6625(j) for SI engines. **(40 CFR 63.6625(j))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. The permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in Table 2d of Subpart ZZZZ, apply. **(40 CFR 63.6625(h))**
- 2. The permittee shall operate and maintain the stationary RICE according to the manufacturer's emission-related written instructions or develop you own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air-pollution control practice for minimizing emissions. **(40 CFR 63.6640(a), Table 6)**

V. TESTING/SAMPLING

- 1. If using the oil analysis program for SI Engine(s), the permittee shall test for Total Acid Number, viscosity and percent water content. **(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. By the compliance date, and every 12 months thereafter, the permittee must evaluate the status of their existing stationary SI RICE and document that the SI RICE meets the definition of remote stationary RICE in 40 CFR 63.6675. 40 CFR 63.6675 defines Remote stationary RICE as stationary RICE meeting any of the following criteria:
 - a. Stationary RICE located in an offshore area that is beyond the line of ordinary low water along that portion of the coast of the United States that is in direct contact with the open seas and beyond the line marking the seaward limit of inland waters.
 - b. Stationary RICE located on a pipeline segment that meets both of the criteria in paragraphs (b)(i) and (ii) of this definition.
 - i. A pipeline segment with 10 or fewer buildings intended for human occupancy within 220 yards (200 meters) on either side of the centerline of any continuous 1-mile (1.6 kilometers) length of pipeline. Each separate dwelling unit in a multiple dwelling unit building is counted as a separate building intended for human occupancy.
 - ii. The pipeline segment does not lie within 100 yards (91 meters) of either a building or a small, well-defined outside area (such as a playground, recreation area, outdoor theater, or other place of public assembly) that is occupied by 20 or more persons on at least 5 days a week for 10 weeks in any 12 month period. The days and weeks need not be consecutive. The building or area is considered occupied for a full day if it is occupied for any portion of the day.
 - iii. For purposes of this paragraph (b), the term pipeline segment means all parts of those physical facilities through which gas moves in transportation, including but not limited to pipe, valves, and other appurtenance attached to pipe, compressor units, metering stations, regulator stations, delivery stations, holders, and fabricated assemblies. Stationary RICE located within 50 yards (46 m) of the pipeline segment providing power for equipment on a pipeline segment are part of the pipeline segment. Transportation of gas means the gathering, transmission, or distribution of gas by pipeline, or the storage of gas. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans.

- c. Stationary RICE that are not located on gas pipelines and that have or fewer buildings intended for human occupancy within a 0.25 mile radius around the engine. A building is intended for human occupancy if its primary use is for a purpose involving the presence of humans. **(40 CFR 63.6603(f), 63.6675)**
2. The permittee shall keep records of the initial and annual evaluation of the status of the engine required by SC VI.1. **(40 CFR 63.6603(f))**
3. If the evaluation of the status of the engine required by SC VI.1 indicates that the stationary RICE no longer meets the definition of remote stationary RICE in SC VI.1(a) through (c) and 40 CFR 63.6675, the permittee shall comply with all of the applicable requirements in 40 CFR Part 63, Subpart ZZZZ for existing nonemergency SI 4SLB and/or 4SRB stationary RICE with a site rating of more than 500 HP located at area sources of HAP that are not remote stationary RICE within one year of the evaluation. **(40 CFR 63.6603(f))**
4. The permittee shall keep records as required in SC IV.2 to show continuous compliance with each emission or operating limit that applies. **(40 CFR 63.6655(d), 63.6660)**
5. The permittee shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate that the permittee operated and maintained the stationary RICE and after-treatment control device (if any) according to the permittee's maintenance plan. **(40 CFR 63.6655(e), 63.6660)**
6. The permittee shall maintain, at a minimum, the following records by the compliance date:
 - a. A copy of each notification and report that is submitted to comply with 40 CFR Part 63, Subpart ZZZZ and the documentation supporting each notification and report. **(40 CFR 63.6655(a)(1))**
 - b. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. **(40 CFR 63.6655(a)(2))**
 - c. Records of all required maintenance performed on the air pollution control and monitoring equipment. **(40 CFR 63.6655(a)(4))**
 - d. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR §63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. **(40 CFR 63.6655(a)(5))**

VII. REPORTING

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

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart ZZZZ as they apply to FG-RURALSIRICEMACT. The permittee may choose an alternative compliance method not listed in FG-RURALSIRICEMACT by complying with all applicable provisions required by Subpart ZZZZ for the compliance option chosen. **(40 CFR 70.6(9), 40 CFR 63.9(j), 40 CFR Part 63, Subparts A and ZZZZ)**

E. NON-APPLICABLE REQUIREMENTS

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

APPENDICES

Appendix 1. Abbreviations and Acronyms

The following is an alphabetical listing of abbreviations/acronyms that may be used in this permit.

AQD	Air Quality Division	MM	Million
acfm	Actual cubic feet per minute	MSDS	Material Safety Data Sheet
BACT	Best Available Control Technology	MW	Megawatts
BTU	British Thermal Unit	NA	Not Applicable
°C	Degrees Celsius	NAAQS	National Ambient Air Quality Standards
CAA	Federal Clean Air Act	NESHAP	National Emission Standard for Hazardous Air Pollutants
CAM	Compliance Assurance Monitoring	NMOC	Non-methane Organic Compounds
CEM	Continuous Emission Monitoring	NOx	Oxides of Nitrogen
CFR	Code of Federal Regulations	NSPS	New Source Performance Standards
CO	Carbon Monoxide	NSR	New Source Review
COM	Continuous Opacity Monitoring	PM	Particulate Matter
department	Michigan Department of Environmental Quality	PM-10	Particulate Matter less than 10 microns in diameter
dscf	Dry standard cubic foot	pph	Pound per hour
dscm	Dry standard cubic meter	ppm	Parts per million
EPA	United States Environmental Protection Agency	ppmv	Parts per million by volume
EU	Emission Unit	ppmw	Parts per million by weight
°F	Degrees Fahrenheit	PS	Performance Specification
FG	Flexible Group	PSD	Prevention of Significant Deterioration
GACS	Gallon of Applied Coating Solids	psia	Pounds per square inch absolute
GC	General Condition	psig	Pounds per square inch gauge
gr	Grains	PeTE	Permanent Total Enclosure
HAP	Hazardous Air Pollutant	PTI	Permit to Install
Hg	Mercury	RACT	Reasonable Available Control Technology
hr	Hour	ROP	Renewable Operating Permit
HP	Horsepower	SC	Special Condition
H ₂ S	Hydrogen Sulfide	scf	Standard cubic feet
HVLP	High Volume Low Pressure *	sec	Seconds
ID	Identification (Number)	SCR	Selective Catalytic Reduction
IRSL	Initial Risk Screening Level	SO ₂	Sulfur Dioxide
ITSL	Initial Threshold Screening Level	SRN	State Registration Number
LAER	Lowest Achievable Emission Rate	TAC	Toxic Air Contaminant
lb	Pound	Temp	Temperature
m	Meter	THC	Total Hydrocarbons
MACT	Maximum Achievable Control Technology	tpy	Tons per year
MAERS	Michigan Air Emissions Reporting System	µg	Microgram
MAP	Malfunction Abatement Plan	VE	Visible Emissions
MDEQ	Michigan Department of Environmental Quality	VOC	Volatile Organic Compounds
mg	Milligram	yr	Year
mm	Millimeter		

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

Appendix 2. Schedule of Compliance

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

Appendix 3. Monitoring Requirements

This source is subject to the compliance assurance monitoring (CAM) program under 40 CFR 64.4(a). The CAM plan for this source is addressed in the malfunction abatement plan (MAP) required in Section D, SC III.1.

Appendix 4. Recordkeeping

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

Appendix 5. Testing Procedures

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

Appendix 6. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-N5831-2008. 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-N5831-2008a is being reissued as Source-Wide PTI No. MI-PTI-N5831-2014.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
NA	200900188	Added oxidation catalyst as control on EUENGINE2, EUENGINE3, and EUEGINE4 (was left out on original ROP)	EUENGINE2, EUENGINE3 and EUENGINE4

The following ROP amendments or modifications were issued after the effective date of ROP No. MI-ROP-N5831-2014.

Permit to Install Number	ROP Revision Application Number/Issuance Date	Description of Change	Corresponding Emission Unit(s) or Flexible Group(s)
NA	201500014/ April 21, 2015	On February 23, 2015, the facility revised minor modification application No. 201500014 to consider the engine "shut-in" and would test the engine within 90 days of bringing it back online. EUENGINE5 was shut down and placed in stand-by mode effective November 10, 2014.	EUENGINE5

Appendix 7. Emission Calculations

The permittee shall use the following procedure in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in FGCATENGINES, FGWAUKENGINES, and Source-Wide Conditions.

Procedures for Calculating Facility NO_x and CO Emissions

The permittee shall demonstrate compliance with the NO_x and CO emission limits by keeping track of all fuel usage for all equipment using such fuel at this facility and multiplying that fuel usage by an equipment-specific emission factor. The emission factors are typically expressed as a mass weight of pollutant per unit of fuel.

Each engine included in FGCATENGINES and FGWAUKENGINES: The permittee shall use emission factors from source specific testing (stack testing) or vendor data, for each engine included in FGCATENGINES and FGWAUKENGINES, including engine(s) from engine change-out(s), and during the hours operated without a catalyst. If other emission source values are used, the permittee shall obtain the approval of the AQD District Supervisor before using the emission factors to calculate emissions.

Fuel burning equipment at the facility: The permittee shall use emission factors contained in the most recent AP-42 (Compilation of Air Pollutant Emission Factors) or the most recent FIRE (Factor Information Retrieval) database if vendor or stack data is not available. If other emission source values are used, the permittee shall obtain the approval of the AQD District Supervisor before using the emission factors to calculate emissions.

The permittee shall document the source of each emission factor used in the calculations.

Appendix 8. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

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

B. Other Reporting

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

Section 2 – LINN Operating, LLC - Hayes 29 CPF

ROP No: MI-ROP-N5831-2014b

Expiration Date: August 4, 2019

PTI No: MI-PTI-N5831-2014b

SECTION 2 – LINN Operating, LLC - Hayes 29 CPF

A. GENERAL CONDITIONS

Permit Enforceability

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

General Provisions

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

5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information which is claimed by the permittee to be confidential, consistent with the requirements of the 1976 PA 442, MCL §15.231 et seq., and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the USEPA together with a claim of confidentiality. **(R 336.1213(1)(e))**
6. A challenge by any person, the Administrator of the USEPA, or the department to a particular condition or a part of this ROP shall not set aside, delay, stay, or in any way affect the applicability or enforceability of any other condition or part of this ROP. **(R 336.1213(1)(f))**
7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. **(R 336.1213(1)(g))**
8. This ROP does not convey any property rights or any exclusive privilege. **(R 336.1213(1)(h))**

Equipment & Design

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

Emission Limits

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

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

Certification & Reporting

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

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

Permit Shield

26. Compliance with the conditions of the ROP shall be considered compliance with any applicable requirements as of the date of ROP issuance, if either of the following provisions is satisfied. **(R 336.1213(6)(a)(i), R 336.1213(6)(a)(ii))**
- a. The applicable requirements are included and are specifically identified in the ROP.
 - b. The permit includes a determination or concise summary of the determination by the department that other specifically identified requirements are not applicable to the stationary source.
- Any requirements identified in Part E of this ROP have been identified as non-applicable to this ROP and are included in the permit shield.
27. Nothing in this ROP shall alter or affect any of the following:
- a. The provisions of Section 303 of the CAA, emergency orders, including the authority of the USEPA under Section 303 of the CAA. **(R 336.1213(6)(b)(i))**
 - b. The liability of the owner or operator of this source for any violation of applicable requirements prior to or at the time of this ROP issuance. **(R 336.1213(6)(b)(ii))**
 - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**
 - e. 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(8))**

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

Risk Management Plan

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

Emission Trading

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

Permit To Install (PTI)

43. The process or process equipment included in this permit shall not be reconstructed, relocated, or modified unless a PTI authorizing such action is issued by the department, except to the extent such action is exempt from the PTI requirements by any applicable rule. ² **(R 336.1201(1))**
44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA. ² **(R 336.1201(8), Section 5510 of Act 451)**

45. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by Subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, MDEQ. 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, or has been interrupted for 18 months, the applicable terms and conditions from that PTI shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, MDEQ, AQD, P. O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI. 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.

SOURCE-WIDE CONDITIONS

POLLUTION CONTROL EQUIPMENT:

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	224 tons ²	12-month rolling time period, as determined at the end of each calendar month	NA	SC VI.2	R 336.1205(3)
2. CO	224 tons ²	12-month rolling time period, as determined at the end of each calendar month	NA	SC VI.2	R 336.1205(3)
3. Each Individual HAP	Less than 10 tons per year	12-month rolling time period, as determined at the end of each calendar month	NA	SC VI.3	R 336.1213(2)(d)
4. Total HAPs	Less than 25 tons per year	12-month rolling time period, as determined at the end of each calendar month	NA	SC VI.3	R 336.1213(2)(d)

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

- The permittee shall only burn sweet natural gas in all natural gas fired equipment.² (R 336.1205(3))

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years.² (R 336.1213(3)(b)(ii))

- The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the last day of the calendar month, for the previous calendar month.² (R 336.1205(3), R 336.213(3))

2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period CO and NOx emission calculation records for the Stationary Source, to demonstrate compliance with Special Conditions (SC) I.1 and I.2. The permittee shall keep all records on file at a location approved by the AQD District Supervisor and make them available upon request.² **(R 336.1205(3), R 336.213(3))**
3. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period HAP emission calculation records for the Stationary Source, as required SC I.3 and I.4 above. The permittee shall keep all records on file at a location approved by the AQD District Supervisor and make them available upon request. **(R 336.1213(2)(d))**

See Appendix 7

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

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

IX. OTHER REQUIREMENT(S)

NA

Footnotes:

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).

C. EMISSION UNIT CONDITIONS

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

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

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUENGINEH29	Remote 1,085 hp Caterpillar G3516TALE (lean burn) reciprocating internal combustion engine (RICE) with oxidation catalyst	8/20/13	NA
EUGLYCOLDEHYDRATOR	Glycol dehydrator which removes water along with trace hydrocarbons from the gas stream. The water and hydrocarbons are controlled by a condenser.	11/01/92	NA
EUMACTZZZZ	Remote existing non-emergency spark ignition (SI) 4-stroke lean burn (4SLB) RICE (EUENGINEH29) Caterpillar 3516TALE (low emission) rated 1,085 hp located at an area source	08/20/13	NA

**EUGLYCOLDEHYDRATOR
 EMISSION UNIT CONDITIONS**

DESCRIPTION:

Glycol dehydrator system which removes water along with trace hydrocarbons from the gas stream.

Flexible Group ID: NA

POLLUTION CONTROL EQUIPMENT:

Condenser

I. EMISSION LIMIT(S)

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

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

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

1. If EUGLYCOLDEHYDRATOR meets the exception criteria in 40 CFR 63.764(e)(1)(i) for glycol dehydrators with actual annual average flow rate of natural gas less than 85,000 cubic meters (3,001,746 cubic feet) per day, the actual flow rate of natural gas shall be determined using either of the procedures below:
 - a. The permittee shall install and operate a monitoring instrument that directly measures natural gas flow rate to the glycol dehydration unit with an accuracy of plus or minus 2 percent or better. The permittee shall convert annual natural gas flow rate to a daily average by dividing the annual flow rate by the number of days per year the glycol dehydration unit processed natural gas. **(40 CFR 63.772(b)(1)(i))**

- b. The permittee shall document, to the AQD District Supervisor's satisfaction, the actual annual average natural gas flow rate to the glycol dehydration unit is less than 85,000 cubic meters per day. **(40 CFR 63.772(b)(1)(ii))**
- 2. As an alternative, if EUGLYCOLDEHYDRATOR meets the exemption criteria in 40 CFR 63.764(e)(1)(ii) for glycol dehydrators with actual average benzene emissions less than 0.90 megagram (0.99 ton) per year, the emissions shall be determined either uncontrolled, or with federally enforceable controls in place and using either of the procedures below:
 - a. The permittee shall determine actual average benzene emissions using the model GRI-GLYCalc™, Version 3.0 or higher, and the procedures presented in the associated GRI-GLYCalc™ Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit, and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI-95/0368.1). **(40 CFR 63.772(b)(2)(i))**
 - b. The permittee shall determine an average mass rate of benzene emissions in kilograms per hour through direct measurement using the methods in 40 CFR 63.772(a)(1)(i) or (ii), or an alternative method according to 40 CFR 63.7(f). Annual emissions in kilograms per year shall be determined by multiplying the mass rate by the number of hours the unit is operated by year. This result shall be converted to megagrams per year. **(40 CFR 63.772(b)(2)(ii))**
- 3. If EUGLYCOLDEHYDRATOR complies with the exemption criteria in 40 CFR 63.764(e)(1)(i) for glycol dehydrators with actual annual average flow rate of natural gas less than 85,000 cubic meters (3,001,746 cubic feet) per day, the permittee shall keep records of the actual annual average natural gas throughput (in terms natural gas flow rate to the glycol dehydration unit per day) as determined in accordance with SC VI.1. The permittee shall keep records on file at a location approved by the AQD District Supervisor for a period of at least five years and make it available to the Department upon request. **(40 CFR 63.774(d)(1)(i))**
- 4. As an alternative to SC VI.1, if EUGLYCOLDEHYDRATOR complies with the exemption criteria in 40CFR 63.764(e)(1)(ii) for glycol dehydrators with the actual average benzene emissions less than 0.90 megagram per year, the permittee shall keep records of the actual average benzene emissions (in terms of benzene emissions per year) as determined in accordance with SC VI.2. The permittee shall keep all records on file at a location approved by the AQD District Supervisor for a period of at least five years and make it available to the Department upon request. **(40 CFR 63.774(d)(1)(ii))**

VII. REPORTING

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

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

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

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

IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the National Emissions Standards for Hazardous Air Pollutants, 40 CFR Part 63, Subpart HH, as they apply to EUGLYCOLDEHYDRATOR. **(40 CFR Part 63, Subpart HH)**

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).

**EUENGINEH29
 EMISSION UNIT CONDITIONS**

DESCRIPTION:

One remote 1,085 hp Caterpillar G3516TALE (lean burn) RICE

Emission Unit: EUENGINEH29

POLLUTION CONTROL EQUIPMENT:

Oxidation Catalyst

I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	24.6 tons ²	12-month rolling time period, as determined at the end of each calendar month	EUENGINEH29	SC V.1 and SC VI.7	R 336.1205(3)
2. CO	41.1 tons ²	12-month rolling time period, as determined at the end of each calendar month	EUENGINEH29	SC V.1 and SC VI.7	R 336.1205(3)

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate any engine equipped with an add-on control device for more than 200 hours per engine per year without that control device consistent with the malfunction abatement plan (MAP), (pursuant to SC III.2). The 200 hours shall include times after an engine change-out occurs and general maintenance performed as allowed by the MAP. The hours per year limit is based on a 12-month rolling time period as determined at the end of each calendar month.² (R 336.1205(3), R 336.1225, R 336.1702(a))
2. The permittee shall not operate EUENGINEH29 unless the MAP, approved by the AQD District Supervisor, is implemented and maintained. The MAP shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. At a minimum the MAP shall include:
 - a. Identification of the equipment and, if applicable, air-cleaning device; and the supervisory personnel responsible for overseeing the inspection, maintenance, and repair.
 - b. Description of the items or conditions to be inspected and frequency of the inspections or repairs.
 - c. Description of the equipment and, if applicable, air-cleaning device; operating parameters that shall be monitored to detect a malfunction or failure, the normal operating range of these parameters and a description of the method of monitoring or surveillance procedures.
 - d. Identification of the major replacement parts that shall be maintained in inventory for quick replacement.

- e. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction at the time the plan is initially developed, the owner or operator shall revise the MAP within 45 days after such an event occurs and submit the revised plan for approval to the AQD District Supervisor. Should the AQD determine the MAP to be inadequate, the District Supervisor may request modification of the plan to address those inadequacies.² **(R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1910, R 336.1911, R 336.1912)**

3. The permittee shall not operate any engine that contains an add-on control device unless that device is installed, maintained, and operated in a satisfactory manner, except as provided in SC III.1. Satisfactory operation includes performing the manufacturer's recommended maintenance on the control device and operating in conjunction with the MAP specified in SC III.2.² **(R 336.1205(3), R 336.1225, R 336.1702(a), R 336.1910)**
4. The permittee shall utilize a differential pressure gauge or manometer to monitor the operation of the oxidation catalyst as an indicator of proper operation. The appropriate range defining the proper operation of the oxidation catalyst is identified in the MAP. **(R 336.1213(3)(a)(i))**
5. The permittee shall utilize a temperature gauge or thermocouple to monitor the operation of the oxidation catalyst, as an indicator of proper operation. The appropriate temperature range defining the proper operation of the oxidation catalyst is identified in the MAP. **(R 336.1213(3)(a)(i))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install and calibrate a thermocouple gauge in accordance with the manufacturer's recommendations. **(R 336.1213(3)(a)(iii))**

V. TESTING/SAMPLING

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

1. The permittee shall verify NO_x and CO emissions from EUENGINEH29, by testing at owner's expense, within nine months of issuance of this permit, and thereafter within every five years, in accordance with Department requirements. **(R 336.1205(3), R 336.2001, R 336.2003, R 336.2004)**

VI. MONITORING/RECORDKEEPING

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

1. The permittee shall monitor, in a satisfactory manner, the natural gas usage from each engine included in EUENGINEH29 on a monthly basis. **(R 336.1205(3), R 336.1213(3))**
2. The permittee shall monitor and record the differential pressure gauge or monometer on EUENGINEH29, on a monthly basis. **(R 336.1213(3)(a)(iii))**
3. The permittee shall monitor and record the inlet temperature and outlet temperature on EUENGINEH29, on a daily basis. **(R 336.1213(3)(a)(iii))**
4. The permittee shall maintain a log of all maintenance activities conducted according to the MAP. The permittee shall keep this log on file at a location approved by the district supervisor and make it available upon request.² **(R 336.1205(3), R 336.1213(3), R 336.1225, R 336.1702(a), R 336.1911)**
5. The permittee shall keep, in satisfactory manner, for any engine equipped with an add-on control device, monthly and 12-month rolling time period records of the hours of EUENGINEH29 is operated without the control device. The permittee shall keep all records on file at a location approved by the AQD District Supervisor and make them available upon request.² **(R 336.1205(3), R 336.1225, R 336.1702(a))**

6. The permittee shall keep, in a satisfactory manner, monthly fuel use records for EUENGINEH29. The permittee shall keep all records on file at a location approved by the AQD District Supervisor and make them available upon request.² **(R 336.1205(3), R 336.1213(3))**
7. The permittee shall keep, in a satisfactory manner, monthly and 12-monthly rolling time period NO_x and CO emission calculation records, using the emission factors from the most recent performance test or vendor data if the vendor data is higher, for EUENGINEH29. The permittee shall keep all records on file at a location approved by the AQD District Supervisor and make them available upon request.² **(R 336.1205(3), R 336.1213(3))**
8. If EUENGINEH29 is replaced with an equivalent-emitting or lower-emitting engine, the permittee shall maintain records of the engine make, model, serial number, horsepower and year manufactured for the replacement engine. The permittee shall keep all records on file at a location approved by the AQD District Supervisor and make them available upon request. **(R 336.1213(3))**

See Appendix 7

VII. REPORTING

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit two complete test protocols to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor for approval at least 30 days prior to the anticipated test date. The protocol shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing. **(R 336.12001(3), R 336.1213(3))**
5. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor no less than 7 days prior to the anticipated test date. **(R 336.2001(4))**
6. The permittee shall submit two complete test reports of the test results to the AQD, one to the Technical Programs Unit Supervisor and one to the District Supervisor, within 60 days following the last date of the test. **(R 336.2001(5), R 336.1213(3))**
7. If EUENGINEH29 is replaced with an equivalent-emitting or lower-emitting engine, the permittee shall notify the AQD District Supervisor of such change-out and submit acceptable emissions data to show that the alternate engine is equivalent-emitting or lower-emitting.² **(R 336.1205(3), R 336.1231(3), R 336.1225, R 336.1702(a), R 336.1911)**

See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
SVENGINEH29	16 ¹	40 ¹	R 336.1225

IX. OTHER REQUIREMENT(S)

NA

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).

EUMACTZZZZ
EUMACTZZZZ CONDITIONS

DESCRIPTION:

An existing remote, non-emergency spark ignition (SI) four stroke lean burn (4SLB), natural gas-fired reciprocating internal combustion compressor engine (RICE) with a site-rating of 1,085 horsepower at an area source

Emission Unit: EUENGINEH29

POLLUTION CONTROL EQUIPMENT:

Oxidation Catalyst

I. EMISSION LIMIT(S)

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

II. MATERIAL LIMIT(S)

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

III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate and maintain the stationary RICE and after-treatment control device (if any) according to the manufacturer's emission-related written instructions or develop your own maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 63.6625 (e), 40 CFR 63.6605 (a)(b))**
2. The permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup in 40 CFR Part 63, Subpart ZZZZ Table 2d apply. **(40 CFR 63.6625 (h))**

IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

V. TESTING/SAMPLING

NA

VI. MONITORING/RECORDKEEPING

1. Except for monitor malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall monitor continuously at all times that the stationary RICE is operating. **(40 CFR 63.6635 (a)(b))**
2. The Permittee shall not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities in data averages and calculations used to report emission or operating levels; however shall use all the valid data collected during all other periods. **(40 CFR 63.663(c))**
3. The Permittee shall keep maintain the following records, which shall be made available to the Administrator upon request: **(40 CFR 63.6655(a)(b)(d)(e))**
 - a. A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted, according to the requirement in 40 CFR 63.10(b)(2)(xiv).
 - b. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment.
 - c. Records of applicable performance tests and performance evaluations as required in §63.10(b)(2)(viii).
 - d. Records of all required maintenance performed on the air pollution control and monitoring equipment.
 - e. Records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
4. The permittee shall keep the records required in 40 CFR Part 63, Subpart ZZZZ Table 6 of this subpart to show continuous compliance with each applicable emission or operating limitation that applies.
5. The permittee shall keep records of the maintenance conducted on the stationary RICE in order to demonstrate that you operated and maintained the stationary RICE and after-treatment control device (if any) according to the Malfunction Abatement Plan for EUENGINEH29 subject to management practices as shown in 40 CFR Part 63, Subpart ZZZZ, Table 2d to this subpart.

VII. REPORTING

1. The Permittee shall report each instance in which the requirements in 40 CFR Part 63, Subpart ZZZZ Table 8 were not met. **(40 CFR 63.6640(e))**

VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
SVMACTZZZZ	16 ¹	40 ¹	R 336.1225

IX. OTHER REQUIREMENT(S)

1. The permittee shall evaluate the status of their stationary RICE every 12 months. **(40 CFR 63.6603(a))**
2. The permittee shall keep records of the initial and annual evaluation of the status of the engine. If the evaluation indicates that the stationary RICE no longer meets the definition of remote stationary RICE in 40 CFR 63.6675, Subpart ZZZZ, the owner or operator must comply with all of the requirements that are not remote stationary RICE within 1 year of the evaluation. **(40 CFR 63.6603(f))**

3. The permittee shall within 1 year of the evaluation comply with 40 CFR 63.6640 if the remote stationary RICE is reconstructed or rebuilt. Rebuilt stationary RICE means a stationary RICE that has been rebuilt as that term is defined in 40 CFR 94.11(a). **(40 CFR 63.6640(d))**
4. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subpart A and Subpart ZZZZ, for Stationary Reciprocating Internal Combustion Engines. **(40 CFR Part 63, Subparts A and ZZZZ)**

D. FLEXIBLE GROUP CONDITIONS

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

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

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 is no longer valid for that emission unit or flexible group.

Emission Unit/Flexible Group ID	Non-Applicable Requirement	Justification
EUENGINEH29	40 CFR Part 60, Subpart JJJJ	The Caterpillar 3516TALE RICE was manufactured prior to January 1, 2008, but installed at its current location on August 20, 2013, therefore 40 CFR Part 60, Subpart JJJJ is not applicable.

APPENDICES

Appendix 1. Abbreviations and Acronyms

The following is an alphabetical listing of abbreviations/acronyms that may be used in this permit.

AQD	Air Quality Division	MM	Million
acfm	Actual cubic feet per minute	MSDS	Material Safety Data Sheet
BACT	Best Available Control Technology	MW	Megawatts
BTU	British Thermal Unit	NA	Not Applicable
°C	Degrees Celsius	NAAQS	National Ambient Air Quality Standards
CAA	Federal Clean Air Act	NESHAP	National Emission Standard for Hazardous Air Pollutants
CAM	Compliance Assurance Monitoring	NMOC	Non-methane Organic Compounds
CEM	Continuous Emission Monitoring	NOx	Oxides of Nitrogen
CFR	Code of Federal Regulations	NSPS	New Source Performance Standards
CO	Carbon Monoxide	NSR	New Source Review
COM	Continuous Opacity Monitoring	PM	Particulate Matter
department	Michigan Department of Environmental Quality	PM-10	Particulate Matter less than 10 microns in diameter
dscf	Dry standard cubic foot	pph	Pound per hour
dscm	Dry standard cubic meter	ppm	Parts per million
EPA	United States Environmental Protection Agency	ppmv	Parts per million by volume
EU	Emission Unit	ppmw	Parts per million by weight
°F	Degrees Fahrenheit	PS	Performance Specification
FG	Flexible Group	PSD	Prevention of Significant Deterioration
GACS	Gallon of Applied Coating Solids	psia	Pounds per square inch absolute
GC	General Condition	psig	Pounds per square inch gauge
gr	Grains	PeTE	Permanent Total Enclosure
HAP	Hazardous Air Pollutant	PTI	Permit to Install
Hg	Mercury	RACT	Reasonable Available Control Technology
hr	Hour	ROP	Renewable Operating Permit
HP	Horsepower	SC	Special Condition
H ₂ S	Hydrogen Sulfide	scf	Standard cubic feet
HVLP	High Volume Low Pressure *	sec	Seconds
ID	Identification (Number)	SCR	Selective Catalytic Reduction
IRSL	Initial Risk Screening Level	SO ₂	Sulfur Dioxide
ITSL	Initial Threshold Screening Level	SRN	State Registration Number
LAER	Lowest Achievable Emission Rate	TAC	Toxic Air Contaminant
lb	Pound	Temp	Temperature
m	Meter	THC	Total Hydrocarbons
MACT	Maximum Achievable Control Technology	tpy	Tons per year
MAERS	Michigan Air Emissions Reporting System	µg	Microgram
MAP	Malfunction Abatement Plan	VE	Visible Emissions
MDEQ	Michigan Department of Environmental Quality	VOC	Volatile Organic Compounds
mg	Milligram	yr	Year
mm	Millimeter		

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

Appendix 2. Schedule of Compliance

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

Appendix 3. Monitoring Requirements

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

Appendix 4. Recordkeeping

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

Appendix 5. Testing Procedures

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

Appendix 6. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-N5831-2008. 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-N5831-2008a is being reissued as Source-Wide PTI No. MI-PTI-N5831-2014.

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 procedure in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in EUENGINEH29 and Source-Wide Conditions.

Procedures for Calculating Facility NOx and CO Emissions

The permittee shall demonstrate compliance with the NOx and CO emission limits by keeping track of all fuel usage for all equipment using such fuel at this facility and multiplying that fuel usage by equipment-specific emission factor. The emission factors are typically expressed as a mass weight of pollutant per unit of fuel.

EUENGINEH29: The permittee shall use emission factors from source specific testing (stack testing) or vendor data, for EUENGINEH29, including an engine from an engine change-out. If other emission source values are used, the permittee shall obtain the approval of the AQD District Supervisor before using the emission factors to calculate emissions.

Fuel burning equipment at the facility: The permittee shall use emission factors contained in the most recent AP-42 (Compilation of Air Pollutant Emission Factors) or the most recent FIRE (Factor Information Retrieval) database if vendor or stack data is not available. If other emission source values are used, the permittee shall obtain the approval of the AQD District Supervisor before using the emission factors to calculate emissions.

The permittee shall document the source of each emission factor used in the calculations.

Appendix 8. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

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

B. Other Reporting

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