

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

EFFECTIVE DATE: March 14, 2018

ISSUED TO

**Consumers Energy Company - White Pigeon Compressor Station**

State Registration Number (SRN): N5573

LOCATED AT

68536 A Road, Route 1, White Pigeon, Michigan 49099

**RENEWABLE OPERATING PERMIT**

Permit Number: MI-ROP-N5573-2018

Expiration Date: March 14, 2023

Administratively Complete ROP Renewal Application Due Between September 14, 2021 and September 14, 2022

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-N5573-2018

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

Michigan Department of Environmental Quality

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Mary A. Douglas, Kalamazoo District Supervisor

**TABLE OF CONTENTS**

**AUTHORITY AND ENFORCEABILITY ..... 3**

**A. GENERAL CONDITIONS..... 4**

Permit Enforceability ..... 4

General Provisions..... 4

Equipment & Design ..... 5

Emission Limits ..... 5

Testing/Sampling ..... 5

Monitoring/Recordkeeping ..... 6

Certification & Reporting ..... 6

Permit Shield ..... 7

Revisions ..... 8

Reopenings..... 8

Renewals..... 9

Stratospheric Ozone Protection ..... 9

Risk Management Plan ..... 9

Emission Trading ..... 9

Permit To Install (PTI) ..... 10

**B. SOURCE-WIDE CONDITIONS ..... 11**

**C. EMISSION UNIT CONDITIONS ..... 13**

EMISSION UNIT SUMMARY TABLE ..... 13

EUEMERGGEN ..... 14

EUHEATER ..... 17

EU285MM..... 19

**D. FLEXIBLE GROUP CONDITIONS..... 21**

FLEXIBLE GROUP SUMMARY TABLE ..... 21

FGAUXGENS ..... 22

FGENGINES..... 25

FGDEGREASERS ..... 33

**E. NON-APPLICABLE REQUIREMENTS ..... 35**

**APPENDICES ..... 36**

Appendix 1. Acronyms and Abbreviations ..... 36

Appendix 2. Schedule of Compliance ..... 37

Appendix 3. Monitoring Requirements ..... 37

Appendix 4. Recordkeeping ..... 37

Appendix 5. Testing Procedures ..... 37

Appendix 6. Permits to Install..... 37

Appendix 7. Emission Calculations ..... 37

Appendix 8. Reporting ..... 37

## **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 is state-only enforceable will be noted as such.

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

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

## A. GENERAL CONDITIONS

### Permit Enforceability

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

### General Provisions

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

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

### **Equipment & Design**

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

### **Emission Limits**

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

The grading of visible emissions shall be determined in accordance with Rule 303.
12. The permittee shall not cause or permit the emission of an air contaminant or water vapor in quantities that cause, alone or in reaction with other air contaminants, either of the following:
  - a. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.<sup>1</sup> **(R 336.1901(a))**
  - b. Unreasonable interference with the comfortable enjoyment of life and property.<sup>1</sup> **(R 336.1901(b))**

### **Testing/Sampling**

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

## Monitoring/Recordkeeping

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

## Certification & Reporting

18. Except for the alternate certification schedule provided in Rule 213(3)(c)(iii)(B), any document required to be submitted to the department as a term or condition of this ROP shall contain an original certification by a Responsible Official which 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 60604-3507. **(R 336.1213(4)(c))**
20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP: **(R 336.1213(3)(c))**
  - a. For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
  - b. For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
  - c. For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

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

## Permit Shield

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

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

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

### Revisions

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

### Reopenings

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

## Renewals

35. For renewal of this ROP, an administratively complete application shall be considered timely if it is received by the department not more than 18 months, but not less than 6 months, before the expiration date of the ROP. **(R 336.1210(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 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.<sup>2</sup> **(R 336.1201(1))**
44. The department may, after notice and opportunity for a hearing, revoke PTI terms or conditions if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of the PTI or is violating the department's rules or the CAA.<sup>2</sup> **(R 336.1201(8), Section 5510 of Act 451)**
45. The terms and conditions of a PTI shall apply to any person or legal entity that now or hereafter owns or operates the process or process equipment at the location authorized by the PTI. If a new owner or operator submits a written request to the department pursuant to Rule 219 and the department approves the request, this PTI will be amended to reflect the change of ownership or operational control. The request must include all of the information required by Subrules (1)(a), (b) and (c) of Rule 219. The written request shall be sent to the appropriate AQD District Supervisor, MDEQ.<sup>2</sup> **(R 336.1219)**
46. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months of the original PTI issuance date, or has been interrupted for 18 months, the applicable terms and conditions from that PTI, as incorporated into the ROP, shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, MDEQ, AQD, P.O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI.<sup>2</sup> **(R 336.1201(4))**

#### **Footnotes:**

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

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

## B. SOURCE-WIDE CONDITIONS

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

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

### SOURCE-WIDE CONDITIONS

#### 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 only fire natural gas in the compressor engines and generators at this facility. **(R 336.213(2))**

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

NA

#### V. TESTING/SAMPLING

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

NA

#### VI. MONITORING/RECORDKEEPING

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

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

#### VII. REPORTING

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

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

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:

<b>Stack &amp; Vent ID</b>	<b>Maximum Exhaust Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
NA	NA	NA	NA

### **IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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

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

### 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
EUDEGREASER1	Cold cleaner with air/vapor interface of less than 10 square feet in Plant 1 Auxiliary Building.	01-01-95/ NA	FGDEGREASERS
EUDEGREASER2	Cold cleaner with air/vapor interface of less than 10 square feet in Plant 2 Auxiliary Building.	01-01-95/ NA	FGDEGREASERS
EUDEGREASER3	Cold cleaner with air/vapor interface of less than 10 square feet in Plant 3 Auxiliary Building.	10-01-10/ NA	FGDEGREASERS
EUAUXGEN1	Natural gas-fired emergency RICE; 2.68 MMBTU/hr (<500 HP) in Plant 1 Auxiliary Building.	1964	FGAUXGENS
EUAUXGEN2	Natural gas-fired emergency RICE; 2.68 MMBTU/hr (<500 HP) in Plant 2 Auxiliary Building.	1965	FGAUXGENS
EUEMERGGEN	Natural gas-fired emergency generator - Caterpillar G3516B LE, 1818 HP in Plant 3 Auxiliary Building.	06-15-10/ NA	NA
EUHEATER	Natural gas-fired 3 MMBTU/HR hot water heater for building heat and hot water in Plant 3 Auxiliary Building. Unit is equipped with a low-NOx burner. Heats glycol/water mixture.	06-15-10/ NA	NA
EUENGINE1	Natural gas-fired spark ignition 4-stroke lean-burn reciprocating engine with a 2-way catalyst - Caterpillar G3608, 2370 HP.	06-28-10/ NA	FGENGINES
EUENGINE2	Natural gas-fired spark ignition 4-stroke lean-burn reciprocating engine with a 2-way catalyst - Caterpillar G3616, 4735 HP.	06-28-10/ NA	FGENGINES
EUENGINE3	Natural gas-fired spark ignition 4-stroke lean-burn reciprocating engine with a 2-way catalyst - Caterpillar G3616, 4735 HP.	06-28-10/ NA	FGENGINES
EUENGINE4	Natural gas-fired spark ignition 4-stroke lean-burn reciprocating engine with a 2-way catalyst - Caterpillar G3616, 4735 HP.	06-28-10/ NA	FGENGINES
EU285MM	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278, 278a, and 285(2)(mm). Routine or emergency venting of natural gas.	1962	NA

**EUEMERGGEN  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Natural gas-fired emergency generator - Caterpillar G3516B LE, 1818 HP in Plant 3 Auxiliary Building.

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMITS**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	0.5 g/HP-hr <sup>2</sup>	Average of 3 1-hour test runs	EUEMERGGEN	SC V.1	R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c), (d) and (j), 40 CFR Part 60, Subpart JJJJ, Table 1
2. CO	4.0 g/HP-hr	Average of 3 1-hour test runs	EUEMERGGEN	SC V.1	40 CFR Part 60, Subpart JJJJ, Table 1
3. VOC*	1.0 g/HP-hr	Average of 3 1-hour test runs	EUEMERGGEN	SC V.1	40 CFR Part 60, Subpart JJJJ, Table 1

\* When calculating emissions of VOC, emissions of formaldehyde should not be included

**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 RESTRICTIONS**

- The permittee must operate and maintain EUEMERGGEN to achieve the emission limits as required in §60.4233(e) over the entire life of the engine. **(40 CFR 60.4234)**
- The permittee shall only burn natural gas in EUEMERGGEN.<sup>2</sup> **(R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d))**
- The permittee shall not operate EUEMERGGEN for more than 500 hours per 12-month rolling time period as determined at the end of each calendar month.<sup>2</sup> **(R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d))**

4. The permittee may operate EUEMERGGEN for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing is limited to maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. **(40 CFR 60.4243(d))**
5. The permittee may operate EUEMERGGEN up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. Any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year as described in 40 CFR 60.4243 is prohibited. **(40 CFR 60.4243(d))**

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

NA

#### **V. TESTING/SAMPLING**

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

1. The permittee shall verify NO<sub>x</sub>, CO, and VOC emission rates from EUEMERGGEN every three years or 8,760 hours (tested on March 28, 2017), whichever comes first, by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method according to the procedures in 40 CFR 63.4244. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, including any modifications to the method in the test protocol that are proposed after initial submittal. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(40 CFR 60.4243(b)(2)(ii), R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

#### **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall keep, in a satisfactory manner, a log of the monthly and 12-month rolling time period hours of operation for EUEMERGGEN. The log shall include the reason (i.e., emergency, maintenance testing, readiness testing, etc.) The permittee shall keep all records on file for a period of at least five years and make them available to the Department upon request.<sup>2</sup> **(R 336.1205(1)(a)(ii)(B), R 336.1213(3))**
2. The permittee shall keep records of hours of operation that are sufficient to demonstrate compliance with conditions III.4-5 above. **(R 336.1213(3)(b))**
3. The permittee must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. **(40 CFR 60.4243(b)(2)(ii), R 336.1213(3))**
4. The permittee shall keep records of the following information:
  - a. All notifications submitted to comply with 40 CFR Part 60, Subpart JJJJ and all documentation supporting any notification.
  - b. Maintenance conducted on the engine. **(40 CFR 60.4245(a)(1) and (2), R 336.1213(3))**

**VII. REPORTING**

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

See Appendix 8

**VIII. STACK/VENT RESTRICTIONS**

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. SVEMERGGEN	22 <sup>2</sup>	35 <sup>2</sup>	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d))

**IX. OTHER REQUIREMENTS**

1. The permittee shall comply with all applicable provisions of the New Source Performance Standards as specified in 40 CFR Part 60, Subpart A and Subpart JJJJ, as they apply to EUEMERGGEN.<sup>2</sup> **(40 CFR Part 60, Subpart A and JJJJ)**
2. 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 EUEMERGGEN.<sup>2</sup> **(40 CFR Part 63, Subparts A and ZZZZ)**

**Footnotes:**

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

**EUHEATER  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Natural gas-fired 3 MMBTU/HR hot water heater for building heat and hot water in Plant 3 Auxiliary Building. Unit is equipped with a low-NOx burner. Heats glycol/water mixture.

Flexible Group ID: NA

**POLLUTION CONTROL EQUIPMENT**

Low-NOx Burner

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NO <sub>x</sub>	0.025 lb/MMBTU <sup>2</sup>	Hourly	EUHEATER	SC VI.1	R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c), (d) and (j)

**II. MATERIAL LIMIT(S)**

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Natural Gas	12.88 MMscf per year <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EUHEATER	SC VI.1	R 336.2803, R 336.2804, 40 CFR 52.21(c), and (d)

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

1. The permittee shall only burn natural gas in EUHEATER.<sup>2</sup> (R 336.1225, R 336.1702, R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d))

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

1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a device to monitor and record the natural gas usage for EUHEATER on a monthly basis.<sup>2</sup> (R 336.2803, R336.2804, 40 CFR 52.21(c) and (d))

**V. TESTING/SAMPLING**

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

NA

**VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period natural gas usage records for EUHEATER, as required by SC II.1. The permittee shall keep all records on file at the facility and make them available to the Department upon request.<sup>2</sup> (R 336.1205(1)(a)(ii)(D), R 336.1213(3))

**VII. REPORTING**

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

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. SVHEATER	8 <sup>2</sup>	35 <sup>2</sup>	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) and (d))

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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

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

**EU285MM  
EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rules 278, 278a, and 285(2)(mm). Routine or emergency venting of natural gas.

Flexible Group ID: NA

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

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

NA

**V. TESTING/SAMPLING**

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

NA

**VI. MONITORING/RECORDKEEPING**

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

NA

**VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. For venting of natural gas for routine maintenance or relocation of transmission and distribution systems in amounts greater than 1,000,000 standard cubic feet, the permittee shall notify the AQD District Supervisor prior to a scheduled pipeline venting. **(R 336.1285(2)(mm)(ii)(A))**
5. For venting of natural gas for routine maintenance or relocation of transmission and distribution systems in amounts greater than 1,000,000 standard cubic feet, the permittee shall provide necessary notification in accordance with the Michigan gas safety standards, the federal pipeline and hazardous materials safety administration standards, and the federal energy regulatory commission standards, as applicable. The permittee is not required to copy the AQD on the notifications. **(R 336.1285(2)(mm)(ii)(B))**
6. For emergency venting of natural gas in amounts greater than 1,000,000 standard cubic feet per event, the permittee shall notify the pollution emergency alert system (PEAS) within 24 hours of an emergency pipeline venting. For purposes of this requirement, an emergency is considered an unforeseen event that disrupts normal operating conditions and poses a threat to human life, health, property, or the environment if not controlled immediately. **(R 336.1285(2)(mm)(iv))**

See Appendix 8

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

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

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

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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

## 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
FGAUXGENS	Existing emergency spark ignition engines < 500 hp constructed before June 12, 2006, and have not been reconstructed. These units are subject to 40 CFR, Subpart ZZZZ.	EUAUXGEN1 EUAUXGEN2
FGENGINES	Natural gas fired, lean burn, 4-stroke, spark ignited reciprocating engines, each with a 2-way catalyst for control.	EUENGINE1 EUENGINE2 EUENGINE3 EUENGINE4
FGDEGREASERS	Any new cold cleaner (placed into operation after July 1, 1979) that is exempt from NSR permitting by R 336.1281(h) or R 336.1285 (r)(iv). New cold cleaners were placed into operation on or after July 1, 1979.	EUDEGREASER1 EUDEGREASER2 EUDEGREASER3, and any new degreasers that may be added in the future.

**FGAUXGENS  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Existing emergency spark ignition engines < 500 HP constructed before June 12, 2006, and have not been reconstructed. These units are subject to 40 CFR, Subpart ZZZZ.

**Emission Units:** EUAUXGEN1 and EUAUXGEN2

**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 RESTRICTIONS**

1. The permittee must be in compliance with the applicable emission limits and operating limits in 40 CFR Part 63, Subpart ZZZZ at all times. **(40 CFR 63.6605(a))**
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. **(40 CFR 63.6625(h))**
3. The permittee shall operate and maintain FGAUXGENS according to the manufacturer's emission-related operation and maintenance instructions or develop and follow a site-specific maintenance plan. The site-specific maintenance plan must provide, to the extent practicable, for the maintenance and operation of the engine in a manner consistent with good air pollution control practices for minimizing emissions. **(40 CFR 63.6605(b), 40 CFR 63.6625(e), 40 CFR 63.6640(a), 40 CFR Part 63, Subpart ZZZZ, Table 6.9)**
4. The permittee shall limit the operation of each unit in FGAUXGENS for maintenance checks and readiness testing provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Maintenance checks and readiness testing is limited to 100 hours per year. **(40 CFR 63.6640(f)(1)(ii))**
5. The permittee may operate each unit in FGAUXGENS up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to supply power to an electric grid except as described in 40 CFR 63.6640(f)(1)(iii). **(40 CFR 63.6640(f)(1)(iii))**

6. The permittee shall change oil and filter every 500 hours of operation or annually, whichever comes first. The permittee has the option to utilize an oil analysis program as described in 40 CFR 63.6625(j), in order to extend the specified oil change frequency requirement. **(40 CFR 63.6602, 40 CFR Part 63, Subpart ZZZZ, Table 2c.6)**
7. The permittee shall inspect spark plugs every 1,000 hours of operation or annually, whichever comes first. **(40 CFR 63.6602, 40 CFR Part 63, Subpart ZZZZ, Table 2c.6)**
8. The permittee shall inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. **(40 CFR 63.6602, 40 CFR Part 63, Subpart ZZZZ, Table 2c.6)**
9. If the engine is operating during an emergency & it is not possible to shut down the engine in order to perform the work practice requirements in III.1, 2 and 3 above, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under Federal, State, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under Federal, State, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable. **(40 CFR Part 63, Subpart ZZZZ, Table 2c)**

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

1. The permittee shall install a non-resettable hour meter if one is not already installed. **(40 CFR 63.6625(f))**

#### **V. TESTING/SAMPLING**

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

NA

#### **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall keep a copy of each notification and report that was submitted to comply with this 40 CFR Part 63, Subpart ZZZZ, including all supporting documentation. **(40 CFR 63.6655(a)(1))**
2. The permittee shall keep a record of the occurrence and duration of each malfunction of FGAUXGENS. **(40 CFR 63.6655(a)(2))**
3. The permittee shall keep a record 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 & air pollution control & monitoring equipment to its normal or usual manner of operation. **(40 CFR 63.6655(a)(5))**
4. The permittee shall maintain a log of all maintenance activities to demonstrate compliance with conditions III.2, 5, 6, 7, and 9 above. **(R 336.1213(3)(b), 40 CFR 63.6655(d) and (e))**
5. The permittee shall maintain a log of the hours of operation of each emission unit in FGAUXGEN using the non-resettable hour meter. The log shall document the reason for the operation, including how many hours are spent for emergency operation and what classified the operation as an emergency and how many hours are for non-emergency operation. If the engines are used for demand response operation the permittee must keep records of the notification of the emergency situation and the time the engine was operated as part of the demand response. The records shall be sufficient to demonstrate compliance with the conditions in III.3 and 4, above. **(R 336.1213(3)(b), 40 CFR 63.6640(f))**

**VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall report each instance in which each of the applicable emission limits and operating limits in Table 2c were not met. These instances are deviations and must be reported according to the requirements in §63.6650. **(63.6640(b))**

See Appendix 8

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

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

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

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall 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.<sup>2</sup> **(40 CFR Part 63, Subparts A and ZZZZ).**

**Footnotes:**

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

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

**FGENGINES  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Natural gas fired, lean burn, 4-stroke, spark ignited reciprocating engines, each with a 2-way catalyst for control.

**Emission Units:** EUENGINE1, EUENGINE2, EUENGINE3, EUENGINE4

**POLLUTION CONTROL EQUIPMENT**

2-way catalyst

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	0.5 g/HP-hr <sup>2</sup>	Average of 3 1-hour test runs	Each Engine in FGENGINES	SC V.4	R 336.2803, R 336.2804, R 336.2810, 40 CFR 52.21(c), (d) and (j), 40 CFR 60 Subpart JJJJ, Table 1
2. Carbon Monoxide	0.2 g/HP-hr <sup>2***</sup>	Average of 3 1-hour test runs	Each Engine in FGENGINES	SC V.5	R 336.1205(1), 40 CFR 60 Subpart JJJJ, Table 1
3. Carbon Monoxide or Formaldehyde	93% reduction in CO emissions or a formaldehyde concentration of ≤ 14 ppmvd at 15% O <sub>2</sub> <sup>2*</sup>	Average of 3 1-hour test runs	Each Engine in FGENGINES	SC IV.1, V.1 and VI.7	40 CFR 63.6600(b)
4. VOC**	1.0 g/HP-hr	Average of 3 1-hour test runs	Each Engine in FGENGINES	SC V.4	40 CFR 60 Subpart JJJJ, Table 1

\*This limit applies at 100% load (plus or minus 10% load) during all periods of operation except for periods of startup, shutdown, and malfunction. (40 CFR 60 Subpart ZZZZ, Table 2a, 40 CFR 63.6605(a)).

\*\* When calculating emissions of VOC, emissions of formaldehyde should not be included.

\*\*\* Owners and operators of new lean burn SI stationary engines with a site rating of greater than or equal to 250 brake HP located at a major source that are meeting the requirements of 40 CFR Part 63 Subpart ZZZZ, Table 2a do not have to comply with the CO emission standards in 40 CFR Part 60 Subpart JJJJ, Table 1, However, the permittee shall conduct performance tests in accordance with SC V.5.

**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 RESTRICTIONS**

1. The permittee shall implement and maintain a plan that describes how emissions will be minimized during all startups, shutdowns and malfunctions. The plan shall incorporate requirements listed in 40 CFR 63.6(e)(3). Deviations from the emission or operating limitations that occur during a period of startup, shutdown or malfunction are not violations if it is demonstrated that the startup, shutdown and malfunction plan was implemented.<sup>2</sup> **(40 CFR 63.6605(b))**
2. The permittee shall not operate FGEngines unless an approvable preventative maintenance/malfunction abatement plan (PM/MAP), or an alternate plan approved by the AQD District Supervisor, is implemented and maintained. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices. At a minimum the plan shall include:
  - a. Identification of the equipment and, if applicable, air-cleaning device and the supervisory personnel responsible for overseeing the inspection, maintenance and repair.
  - b. Description of the items or conditions to be inspected and frequency of the inspections or repairs.
  - c. Identification of the equipment and, if applicable, air-cleaning device, operating parameters that shall be monitored to detect a malfunction or failure, the normal operating range of these parameters and a description of the method of monitoring or surveillance procedures.
  - d. Identification of the major replacement parts that shall be maintained in inventory for quick replacement.
  - e. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If the plan fails to address, or inadequately addresses, an event that meets the characteristics of a malfunction at the time the plan is initially developed, the permittee shall revise the plan within 45 days after such an event occurs and submit the revised plan for approval to the AQD District Supervisor. Should the AQD determine that the PM/MAP to be inadequate, the AQD District Supervisor may request modification of the plan to address those inadequacies.<sup>2</sup> **(R 336.1702(a), R 336.1910, R 336.1911, R 336.1912, R 336.2803, R 36.2804, 40 CFR 52.21 (c) and (d), 40 CFR 63.6(e)(3))**

3. The permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standard in I.3 above apply. **(40 CFR 63.6625(h))**
4. The permittee shall keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engines in a manner consistent with good air pollution control practice for minimizing emissions. In addition, to demonstrate compliance, a performance test must be conducted every 8,760 hours or 3 years, whichever comes first, according to 40 CFR 60.4243(a)(2)(iii).<sup>2</sup> **(40 CFR 60.4243 (b)(2)(ii))**

**IV. DESIGN/EQUIPMENT PARAMETERS**

1. The permittee shall not operate any engine in FGEngines unless the associated oxidation catalyst system is installed, maintained, and operated in a satisfactory manner. Satisfactory operation includes the following:
  - a. Maintaining the catalyst so that the pressure drop across the catalyst does not change by more than two inches of water, at 100 percent load ( $\pm 10$  percent load), from the pressure drop measured during the initial performance test.<sup>2</sup> **(40 CFR 63.6600(b), 40 CFR 63.6640(a), 40 CFR Part 63, Subpart ZZZZ, Table 2b)**
  - b. Maintain the engine exhaust temperature so that the 4-hour rolling average catalyst inlet temperature is greater than or equal to 450°F and less than or equal to 1350°F.<sup>2</sup> **(40 CFR 63.6600(b), 40 CFR 63.6640(a), 40 CFR Part 63, Subpart ZZZZ, Table 2b)**

- c. Performing the manufacturer's recommended maintenance on the control device and operating it in conjunction with the PM/MAP.<sup>2</sup> **(R 336.1702(a), R 336.1910, R 336.2804, 40 CFR 52.21(d))**

## **V. TESTING/SAMPLING**

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

1. A performance test for CO conducted for 40 CFR Part 63 Subpart ZZZZ must be conducted semi-annually. After two consecutive passing events, the testing frequency can be changed to annually, unless results of any subsequent test indicate non-compliance with the CO or formaldehyde emission limitation or there has been a deviation from the catalyst pressure drop or catalyst inlet temperature operating limitation. If the catalyst is changed, the permittee shall reestablish the operating parameters measured during the initial test and conduct a subsequent test to demonstrate compliance with the percent reduction requirement using the equation in 40 CFR 63.6620(e). No less than 60 days prior to testing, a complete test plan shall be submitted to the AQD, as required in 63.7(b)(1). The final plan must be approved by the AQD prior to testing.<sup>2</sup> **(40 CFR 63.6615, 40 CFR 63.6620(a), 40 CFR 63.6640(a) and (b), 40 CFR 63.6645(g), 40 CFR Part 63, Subpart ZZZZ, Tables 2a, 3, and 6, R 336.1213(3), R 336.2001, R336.2003, R 336.2004)**
2. Compliance with SC I.3 above is based on the results of testing the average of three 1-hour runs conducted according to the requirements in 40 CFR 63.6620 and Table 4 of that subpart.<sup>2</sup> **(40 CFR 63.6600, 40 CFR 63.6620(b))**
3. For any CO performance tests conducted for an engine in FGENGINES, the permittee shall conduct three separate test runs, one hour each, and at any load condition within  $\pm 10$  percent of 100 percent load.<sup>2</sup> **(40 CFR 63.6620(d), 40 CFR Part 63, Subpart ZZZZ, Tables 4 and 6)**
4. Once every three years or 8,760 hours, whichever comes first, the permittee shall verify NO<sub>x</sub> and VOC emission factors used to calculate emissions for each engine in FGENGINES, by testing at owner's expense, in accordance with 40 CFR Part 60 Subpart JJJJ, Table 2. Any resulting increase in an emission factor shall be implemented to calculate NO<sub>x</sub> and VOC. Not less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan prior to testing. **(R 336.2003, R 336.2804, R 336.2803, 40 CFR 52.21(c) and (d), R 336.1213(3), 40 CFR 60.4243(b)(2)(ii), R 336.2003, R 336.2004, 40 CFR 60.8(d))**
5. Once every five years, the permittee shall verify the CO emission factor in SC I.2 used to calculate emissions for each engine in FGENGINES, by testing at owner's expense, in accordance with Dept. requirements (tested on March 31, 2017). Testing shall be performed using an approved EPA Method in 40 CFR Part 60, Appendix A. Any resulting increase in the emission factor shall be implemented to calculate CO. Not less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan prior to testing. **(R 336.2003, R 336.2001, R 336.2004, R 336.2804, R 336.2803, 40 CFR 52.21(c) and (d), R 336.1213(3), 40 CFR 60.8(d))**
6. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**
7. The permittee must submit a complete report of performance test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(R 336.2001(5))**

## **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall install, operate and maintain a continuous parameter monitoring system (CPMS) for each stationary RICE in FGENGINES, according to the requirements in 40 CFR 63.8 and 40 CFR 63.6635, to continuously monitor the operating parameters. The system shall include, but is not limited to:<sup>2</sup> **(40 CFR 63.6625(b), 40 CFR 63.6635, 40 CFR 63.6640(a), 40 CFR Part 63, Subpart ZZZZ, Table 6, R 336.1213(3))**
  - a. Operation and maintenance requirements described in 40 CFR 63.8(c).
  - b. A quality control program described in 40 CFR 63.8(d).
  - c. Performance evaluations described in 40 CFR 63.8(e).

- d. An alternative monitoring method may be requested and approved pursuant to 40 CFR 63.8(f).
  - e. Reduction of data as described in 40 CFR 63.8(g).
2. The permittee shall install, calibrate, maintain and operate, in a satisfactory manner, a device to monitor and record, on a continuous basis and according to the requirements in 40 CFR 63.6625(b) and 40 CFR 63.6635, the temperature at the inlet of the catalyst for each stationary RICE.<sup>2</sup> **(40 CFR 63.6625(b), 40 CFR 63.6635, 40 CFR 63.6640(a), 40 CFR Part 63, Subpart ZZZZ, Table 6, R 336.1213(3))**
  3. The permittee shall measure the pressure drop across the catalyst for each stationary RICE once per calendar month and demonstrate that the pressure drop is within the operating limitation established during the performance test.<sup>2</sup> **(40 CFR 63.6625(b), 40 CFR 63.6640(a), 40 CFR Part 63, Subpart ZZZZ, Table 6, R 336.1213(3))**
  4. In lieu of the CPMS specified in VI.1,2 and 3, the permittee can opt to install, calibrate, maintain and operate in a satisfactory manner, a continuous emission monitoring system (CEMS) to monitor and record the CO and either the O<sub>2</sub> or CO<sub>2</sub>, at both the inlet and outlet of the control device for each 4SLB engine, according to the procedures in 40 CFR 63.6625(a)(1) through (4) and 40 CFR 63.6635.<sup>2</sup> **(40 CFR 63.6625(a), 40 CFR 63.6635, 40 CFR 63.6640(a), R 336.1213(3))**
  5. For each stationary RICE with oxidation catalyst, the permittee shall keep, in a satisfactory manner, records of the 4-hour rolling average for each catalyst inlet temperature and the monthly pressure drop for each catalyst, as required by VI.2 and 3.<sup>2</sup> **(40 CFR 63.6655, 40 CFR 63.6660, 40 CFR Part 63, Subpart ZZZZ, Table 6, R 336.1213(3))**
  6. The permittee shall keep the following records:
    - a. A copy of each notification and report submitted to comply with 40 CFR Part 60 Subpart JJJJ and Part 63 Subpart ZZZZ, and the documentation supporting any notification.<sup>2</sup> **(40 CFR 60.4245(a)(1), 40 CFR 63.6655(a)(1))**
    - b. Records specified in 40 CFR 63.6(e)(3)(iii) through (v) related to startup, shutdown and malfunction.<sup>2</sup> **(40 CFR 63.6655(a)(2))**
    - c. Records of performance tests and evaluations as required in 40 CFR 63.10(b)(2)(viii).<sup>2</sup> **(40 CFR 63.6655(a)(3))**
    - d. For each CEMS or CPMS, records described in 40 CFR 63.10(b)(2)(vi) through (xi).<sup>2</sup> **(40 CFR 63.6655(b)(1))**
    - e. For each CEMS or CPMS, previous versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3).<sup>2</sup> **(40 CFR 63.6655(b)(2))**
    - f. For each CEMS or CPMS, requests for alternatives to the relative accuracy test as required in 40 CFR 63.8(f)(6)(i), if applicable.<sup>2</sup> **(40 CFR 63.6655(b)(3))**
    - g. Documentation from the manufacturer that each engine is certified to meet the emission limitations and information as required by other applicable regulation in 40 CFR 90, 1048, 1054 and 1060. **(40 CFR 60.4245(a)(3))**

All records shall be kept on file for a period of at least five years (at least two years at the site) and made available to the Department upon request.<sup>2</sup> **(40 CFR 63.6655, 40 CFR 63.6660)**

7. The permittee shall demonstrate continuous compliance with each applicable emission and operating limitation as specified in Table 6 to 40 CFR Part 63 Subpart ZZZZ, using the method(s) described below.<sup>2</sup> **(40 CFR 63.6640(a) and 40 CFR Part 63, Subpart ZZZZ, Table 6)**

For each	Complying with requirement to	You must demonstrate continuous compliance by
4SLB stationary RICE	Reduce CO emissions using an oxidation catalyst and using a CPMS.	i. Conducting semiannual performance tests for CO to demonstrate that the required CO percent reduction is achieved <sup>1</sup> ; and ii. Collecting the catalyst inlet temperature data according to 40 CFR 63.6625(b); and iii. Reducing these data to 4-hour rolling averages; and iv. Maintaining the 4-hour rolling averages within the operating limitations for the catalyst inlet temperature; and v. Measuring the pressure drop across the catalyst once per month and demonstrating that the pressure drop across the catalyst is within the operating limitation established during the performance test.
<sup>1</sup> After you have demonstrated compliance for two consecutive tests, you may reduce the frequency of subsequent performance tests to annually. If the results of any subsequent annual performance test indicate the stationary RICE is not in compliance with the CO emission limitation, or you deviate from any of your operating limitations, you must resume semiannual performance tests.		

8. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available, by request, by the last day of the calendar month for the previous calendar month, unless otherwise specified in any recordkeeping, reporting or notification special condition.<sup>2</sup> **(R 336.1201(3))**
9. The permittee shall maintain a log at the facility of all maintenance activities conducted according to the PM/MAP and make it available to the Department upon request.<sup>2</sup> **(R 336.1702(a), R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d), R 336.1213(3))**
10. The permittee shall keep records of all required maintenance performed on the engines, air pollution control and monitoring equipment.<sup>2</sup> **(40 CFR 60.4243(a)(1), 40 CFR 60.4243(b)(1), 40 CFR 60.4245(a)(2), 40 CFR 63.6655(a)(4), R 336.1213(3))**
11. The permittee shall keep at the facility, in a satisfactory manner, monthly fuel use records or engine output records (i.e., hp-hrs/month) for each engine included in FGENGINES. They shall be made available to the Department upon request.<sup>2</sup> **(R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d), R 336.1213(3))**
12. The permittee shall keep records of action 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))**
13. The permittee shall install, operate and maintain a CPMS as specified below: **(40 CFR 63.6625(b))**
  - a. A site-specific monitoring plan shall be prepared that addresses the monitoring system design, data collection, and the quality assurance and quality control elements outlined in 40 CFR 63.6625(b)(1)(i) through (v) and in § 63.8(d). As specified in § 63.8(f)(4), approval of an alternative to the procedures in the site-specific monitoring plan may be requested.
  - b. Each CPMS must be installed, operated, and maintained in continuous operation according to the procedures in the site-specific monitoring plan.
  - c. The CPMS must collect data at least once every 15 minutes (see also § 63.6635).
  - d. The temperature sensor used in the CPMS must have a minimum tolerance of 2.8°C (5°F) or 1% of the measurement range, whichever is larger.

- e. Performance evaluations, system accuracy audits, or other audit procedures specified in the site-specific monitoring plan must be conducted at least annually.

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports, including RATA reports, to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**
5. For each stationary RICE that uses a CPMS to comply with emission and operating limitations, the permittee shall submit to the AQD District Supervisor, a semi-annual compliance report, as specified in 40 CFR 63.6650, which contains all deviations during the reporting period from any applicable emission limitation or operating limitation and all period during which the CPMS was out of control as defined in 40 CFR 63.8(c)(7). If there were no deviations from any applicable emission limitations or operating limitations or not periods that the CPMS was out of control, the report shall contain a statement that there were no deviations and no periods during which the CPMS was out of control during the reporting periods. The report must cover the semi-annual period from January 1 through June 30, or from July 1 through December 31. The reports must be postmarked or delivered by September 15 or March 15, whichever is the first date following the end of the semiannual reporting period. The compliance report must also contain the following information, as specified in 40 CFR 63.6650(c) and (e):
  - a. Company name and address.
  - b. Certification of the report by a responsible official.
  - c. Date of report and beginning and ending dates of the reporting period.
  - d. The number of startups, shutdowns and malfunctions that occurred during the reporting period and demonstration that the Startup/Shutdown/Malfunction Plan was followed during such events.
  - e. If there were no deviations from any applicable emission or operating limitations under 40 CFR 63, Subpart ZZZZ during the reporting period, a statement that no such deviations occurred during the reporting period.
  - f. If there were no periods during which the continuous monitoring system (CMS), including CEMS and CPMS, was out of control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out of control during the reporting period.
  - g. An identification of each parameter monitored and whether CO or formaldehyde was monitored.
  - h. The date and time that each malfunction started and stopped.
  - i. The date, time and duration that each CPMS was out of control (as defined in 40 CFR 63.8(c)(7)) and the corrective actions taken.
  - j. The date, time and duration that each CPMS was inoperative, except for low-level and high-level checks.
  - k. The date and time that each deviation started and stopped and whether each deviation occurred during a period of malfunction or during another period.
  - l. A summary of the total duration of the deviations during the reporting period and the percent of the total duration during the total source operating time of that reporting period.
  - m. A breakdown of the total duration of deviations due to control equipment problems, process problems, other known causes and any unknown causes.
  - n. A summary of the total duration of CPMS downtime during the reporting period and the percent of the total duration of downtime during the total source operating time of that reporting period.
  - o. A brief description of the stationary RICE.
  - p. A brief description of the CMS.
  - q. The data of the latest CMS certification or audit.
  - r. A description of any changes in the CMS, processes or controls since the last reporting period.

A copy of the compliance report shall be kept on file for a period of at least five years (at least 2 years at the site) and made available to the Department upon request.<sup>2</sup> **(40 CFR 63.6640(b), 40 CFR 63.6650, 40 CFR 63.6600, 40 CFR Part 63, Subpart ZZZZ, Table 7)**

6. The permittee shall submit to the AQD District Supervisor, a startup, shutdown and malfunction report if actions addressing the startup, shutdown or malfunction were not consistent with the Startup/Shutdown/Malfunction Plan. Notification of the event and the actions taken during the event shall be submitted by fax or telephone within 2 working days after the event occurred. Within 7 working days after the event, the permittee shall submit a letter to the AQD District Supervisor which contains the information specified in 40 CFR 63.10(d)(5)(ii), including:
  - a. Company name and address.
  - b. Certification of the report by a responsible official.
  - c. Circumstances of the event.
  - d. Reasons for not following the Startup/Shutdown/Malfunction Plan.
  - e. Whether any excess emissions and/or parameter monitoring exceedances are believed to have occurred.
  - f. Actions taken to minimize emissions in conformance with 40 CFR 63.6(e)(1)(i).

Notwithstanding the preceding timelines for notifications, the owner or operator may make alternative reporting arrangements with the Department in accordance with 40 CFR 63.9(i). A copy of the compliance report shall be kept on file for a period of at least five years (at least 2 years at the site) and made available to the Department upon request.<sup>2</sup> **(40 CFR 63.6650, 40 CFR 63.6660, 40 CFR 63.10(d)(5)(ii))**

7. The permittee shall submit all applicable notifications specified in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4), and (f)(6), and 63.9(b) through (e), (g), and (h) by the dates specified.<sup>2</sup> **(40 CFR 63.6645(a))**
8. For a continuous compliance demonstration that includes a performance test, the permittee shall submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii), before the close of the 60th business day following completion of the performance test according to 40 CFR 63.10(d)(2) and shall include the following: **(40 CFR 63.6620(i))**
  - a. RICE manufacturer, model number, year of purchase, and the manufacturer's site-rated brake horsepower.
  - b. Ambient temperature, pressure and humidity during the performance test.
  - c. Average percent load for the RICE and assumptions made to estimate or calculate percent load during the performance test.
  - d. The model number of any measuring devices used during the test and the percent accuracy.
  - e. Performance test results.
9. The permittee shall report each instance in which requirements of Table 8 of Subpart ZZZZ are not met.<sup>2</sup> **(40 CFR 63.6640(e))**

See Appendix 8

**VIII. STACK/VENT RESTRICTIONS**

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	32 <sup>2</sup>	95 <sup>2</sup>	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
2. SVENGINE2	44 <sup>2</sup>	95 <sup>2</sup>	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
3. SVENGINE3	44 <sup>2</sup>	95 <sup>2</sup>	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)
4. SVENGINE4	44 <sup>2</sup>	95 <sup>2</sup>	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d)

## **IX. OTHER REQUIREMENTS**

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 for Stationary Reciprocating Internal Combustion Engines.<sup>2</sup> **(40 CFR Part 63, Subparts A and ZZZZ)**
2. The permittee shall comply with all applicable provisions of the New Source Performance Standards, as specified in 40 CFR Part 60, Subpart A and Subpart JJJJ, as they apply to each engine in FGENGINES.<sup>2</sup> **(40 CFR Part 60, Subparts A and JJJJ)**

### **Footnotes:**

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

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

## **FGDEGREASERS FLEXIBLE GROUP CONDITIONS**

### **DESCRIPTION**

Any new cold cleaner (placed in to operation after July 1, 1979) that is exempt from NSR permitting by R336.1281(h) or R336.1285 (r)(iv). New cold cleaners were placed into operation on or after July 1, 1979.

**Emission Units:** EUDEGREASER1, EUDEGREASER2, EUDEGREASER3, and any new degreasers that may be added in the future.

### **POLLUTION CONTROL EQUIPMENT**

NA

#### **I. EMISSION LIMIT(S)**

NA

#### **II. MATERIAL LIMIT(S)**

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

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

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

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

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

- b. The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0. **(R 336.1707(2)(b))**
- c. The cold cleaner must be controlled by a carbon adsorption system, condensation system, or other method of equivalent control approved by the AQD. **(R 336.1707(2)(c))**

#### **V. TESTING/SAMPLING**

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

NA

#### **VI. MONITORING/RECORDKEEPING**

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

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

#### **VII. REPORTING**

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

See Appendix 8

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

NA

#### **IX. OTHER REQUIREMENT(S)**

NA

### 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
EUENGINE1-1 EUENGINE1-2 EUENGINE1-5 EUENGINE1-6 EUENGINE2-1 EUENGINE2-2 EUENGINE2-5 EUENGINE2-6	40 CFR Part 63, Subpart ZZZZ, NESHAP for stationary reciprocating internal combustion engines	The existing units are not subject per Section 63.6590(b)(3)(i) and (ii); however, if these units are reconstructed, or new units are installed, they may become subject.

## APPENDICES

### Appendix 1. Acronyms and Abbreviations

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

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

**Appendix 2. Schedule of Compliance**

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

**Appendix 3. Monitoring Requirements**

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

**Appendix 4. Recordkeeping**

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

**Appendix 5. Testing Procedures**

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-N5573-2013. 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-N5573-2013 is being reissued as Source-Wide PTI No. MI-PTI-N5573-2018.

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

**Appendix 7. Emission Calculations**

Specific emission calculations to be used with monitoring, testing or recordkeeping data are detailed in the appropriate Source-Wide, Emission Unit and/or Flexible group Special Conditions. Therefore, this appendix is not applicable.

**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.