

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

EFFECTIVE DATE: June 7, 2021  
REVISION DATES: June 29, 2022, August 22, 2022, December 19, 2024

ISSUED TO

**Western Michigan University**

State Registration Number (SRN): K2131

LOCATED AT

1903 West Michigan Avenue, Kalamazoo, Kalamazoo County, Michigan 49008

**RENEWABLE OPERATING PERMIT**

Permit Number: MI-ROP-K2131-2021b

Expiration Date: June 7, 2026

Administratively Complete ROP Renewal Application Due Between  
December 7, 2024 and December 7, 2025

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

**SOURCE-WIDE PERMIT TO INSTALL**

Permit Number: MI-PTI-K2131-2021b

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

Michigan Department of Environment, Great Lakes, and Energy

*Monica Brothers*

Monica Brothers, Kalamazoo District Supervisor

# TABLE OF CONTENTS

<b>AUTHORITY AND ENFORCEABILITY .....</b>	<b>4</b>
<b>A. GENERAL CONDITIONS.....</b>	<b>5</b>
Permit Enforceability .....	5
General Provisions.....	5
Equipment & Design .....	6
Emission Limits.....	6
Testing/Sampling .....	6
Monitoring/Recordkeeping .....	7
Certification & Reporting .....	7
Permit Shield .....	8
Revisions .....	9
Reopenings.....	9
Renewals.....	10
Stratospheric Ozone Protection .....	10
Risk Management Plan.....	10
Emission Trading .....	10
Permit to Install (PTI) .....	11
<b>B. SOURCE-WIDE CONDITIONS .....</b>	<b>12</b>
<b>C. EMISSION UNIT SPECIAL CONDITIONS .....</b>	<b>13</b>
EMISSION UNIT SUMMARY TABLE.....	13
EUPABOILER-6.....	16
EU-02-PEAKGEN .....	19
EU-149-EMERGEN-01 .....	21
<b>D. FLEXIBLE GROUP SPECIAL CONDITIONS.....</b>	<b>25</b>
FLEXIBLE GROUP SUMMARY TABLE.....	25
FGBOILERS9&10 .....	27
FGPBTUHR-78U .....	31
FG-NSPS-III.....	36
FG-NSPS-JJJJ .....	41
FG4JEXEMPTENG.....	46
FG-EMGEN-GAS.....	51
FG-EMGEN-OIL.....	54
FGPARTSWASH .....	58
FGRULE290 .....	61
FGENGINES.....	64
<b>E. NON-APPLICABLE REQUIREMENTS .....</b>	<b>68</b>
<b>APPENDICES .....</b>	<b>69</b>
Appendix 1. Acronyms and Abbreviations.....	69
Appendix 2. Schedule of Compliance.....	70
Appendix 3. Monitoring Requirements .....	70
Appendix 4. Recordkeeping .....	70
Appendix 5. Testing Procedures .....	70
Appendix 6. Permits to Install.....	70

Appendix 7. Emission Calculations ..... 71  
Appendix 8. Reporting ..... 71

## AUTHORITY AND ENFORCEABILITY

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

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

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

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

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

## A. GENERAL CONDITIONS

### Permit Enforceability

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

### General Provisions

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

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

### **Equipment & Design**

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

### **Emission Limits**

11. Unless otherwise specified in this ROP, the permittee shall comply with Rule 301, which states, in part, "Except as provided in Subrules 2, 3, and 4 of this rule, a person shall not cause or permit to be discharged into the outer air from a process or process equipment a visible emission of a density greater than the most stringent of the following:"<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 state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. **(R 336.1213(3)(c))**
19. A Responsible Official shall certify to the appropriate AQD District Office and to the USEPA that the stationary source is and has been in compliance with all terms and conditions contained in the ROP except for deviations that have been or are being reported to the appropriate AQD District Office pursuant to Rule 213(3)(c). This certification shall include all the information specified in Rule 213(4)(c)(i) through (v) and shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the certification are true, accurate, and complete. The USEPA address is: USEPA, Air Compliance Data - Michigan, Air and Radiation Division, 77 West Jackson Boulevard, Chicago, Illinois 60604-3507. **(R 336.1213(4)(c))**
20. The certification of compliance shall be submitted annually for the term of this ROP as detailed in the special conditions, or more frequently if specified in an applicable requirement or in this ROP. **(R 336.1213(4)(c))**
21. The permittee shall promptly report any deviations from ROP requirements and certify the reports. The prompt reporting of deviations from ROP requirements is defined in Rule 213(3)(c)(ii) as follows, unless otherwise described in this ROP. **(R 336.1213(3)(c))**
  - a. For deviations that exceed the emissions allowed under the ROP, prompt reporting means reporting consistent with the requirements of Rule 912 as detailed in Condition 25. All reports submitted pursuant to this paragraph shall be promptly certified as specified in Rule 213(3)(c)(iii).
  - b. For deviations which exceed the emissions allowed under the ROP and which are not reported pursuant to Rule 912 due to the duration of the deviation, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe reasons for each deviation and the actions taken to minimize or correct each deviation.
  - c. For deviations that do not exceed the emissions allowed under the ROP, prompt reporting means the reporting of all deviations in the semiannual reports required by Rule 213(3)(c)(i). The report shall describe the reasons for each deviation and the actions taken to minimize or correct each deviation.

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

## Permit Shield

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

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

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

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

## Revisions

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

## Reopenings

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

## Renewals

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

## Stratospheric Ozone Protection

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

## Risk Management Plan

38. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall register and submit to the USEPA the required data related to the risk management plan for reducing the probability of accidental releases of any regulated substances listed pursuant to Section 112(r)(3) of the CAA as amended in 40 CFR 68.130. The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR Part 68, do not limit in any way the general duty provisions under Section 112(r)(1).
39. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall comply with the requirements of 40 CFR Part 68, no later than the latest of the following dates as provided in 40 CFR 68.10(a):
- 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, EGLE.<sup>2</sup> **(R 336.1219)**
46. If the installation, reconstruction, relocation, or modification of the equipment for which PTI terms and conditions have been approved has not commenced within 18 months of the original PTI issuance date, or has been interrupted for 18 months, the applicable terms and conditions from that PTI, as incorporated into the ROP, shall become void unless otherwise authorized by the department. Furthermore, the person to whom that PTI was issued, or the designated authorized agent, shall notify the department via the Supervisor, Permit Section, EGLE, AQD, P. O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI.<sup>2</sup> **(R 336.1201(4))**

### Footnotes:

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

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

## **B. SOURCE-WIDE CONDITIONS**

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

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

### C. EMISSION UNIT SPECIAL CONDITIONS

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

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

#### EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUPABOILER-6	65,000 pounds of steam per hour natural gas fired boiler, rated at 88 MMBTU/hr heat input.	01-01-1965 01-01-1991	NA
EUBOILER9	65,000 pounds of steam per hour natural gas and No. 2 oil fired boiler, rated at 90 MMBTU/hr heat input on gas and 88 MMBTU/hr heat input on oil.	01-01-2004	FGBOILERS9&10
EUBOILER10	65,000 pounds of steam per hour natural gas boiler and No. 2 fuel oil as backup, rated at 90 MMBTU/hr on gas and 88 MMBTU/hr heat input on oil.	06-20-2009	FGBOILERS9&10
EUPBTURBIN-7	Natural gas fired turbine, rated at 60 MMBTU/hr heat input.	07-01-1997 01-01-1998 06-17-2024	FGPBTUHR-78
EUPBTURBIN-8	Natural gas fired turbine, rated at 60 MMBTU/hr heat input.	07-01-1997 01-01-1998 06-28-2022	FGPBTUHR-78
EUPBHRSGEN-7	Natural gas fired heat recovery steam generator with duct burner rated at 85 MMBTU/hr heat input in fresh air firing mode and 50 MMBTU/hr heat input while supplementary firing with the turbine exhaust.	07-01-1997	FGPBTUHR-78
EUPBHRSGEN-8	Natural gas fired heat recovery steam generator with duct burner rated at 85 MMBTU/hr heat input in fresh air firing mode and 50 MMBTU/hr heat input while supplementary firing with the turbine exhaust.	07-01-1997	FGPBTUHR-78
EU-02-PEAKGEN	The power plant's natural gas fired peaking and black start generator. It has a heat input capacity of 7.6 MMBTU/hr (771 kW).	10-01-1998	NA
EU-001-EMERGEN-01	A 3.51 MMBTU/hr (250 kW) emergency generator fired by natural gas.	09-02-2015	FG4JEXEMPTENG
EU-13-EMERGEN-01	A 2.34 MMBTU/hr (200 kW) emergency generator fired by diesel fuel/No. 2 fuel oil manufactured in 1992.	1992	FG-EMGEN-OIL

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-15-EMERGEN-01	A 2.30 MMBTU/hr (200 kW) emergency generator fired by diesel fuel/No. 2 fuel oil manufactured in 2002.	2002	FG-EMGEN-OIL
EU-28-EMERGEN-01	A 1.12 MMBTU/hr (100 kW) emergency generator fired by diesel fuel/No. 2 fuel oil. This was previously EU-42-EMERGEN-01 manufactured in 2003.	2003	FG-EMGEN-OIL
EU-29-EMERGEN-01	A 3.16 MMBTU/hr (300 kW) emergency generator fired by diesel fuel/No. 2 fuel oil manufactured in 2002.	2002	FG-EMGEN-OIL
EU-29-EMERGEN-02	A 1.989 MMBTU/hr (165 kW) emergency generator fired by natural gas manufactured in 2011.	2011	FG-NSPS-JJJJ
EU-42-EMERGEN-02	A 2.69 MMBTU/hr (230kW) emergency generator fired by diesel fuel/No. 2 fuel oil manufactured in 2007.	2007	FG-NSPS-III
EU-44-EMERGEN-01	A 3.4 MMBTU/hr (350kW) emergency generator fired by diesel fuel/No. 2 fuel oil manufactured in 2006.	2006	FG-NSPS-III
EU-46-EMERGEN-01	A 0.69 MMBTU/hr (60 kW) emergency generator fired by diesel fuel/No. 2 fuel oil manufactured in 2003.	2003	FG-EMGEN-OIL
EU-56-EMERGEN-01	A 0.81 MMBTU/hr (60 kW) emergency generator fired by propane/natural gas manufactured in 2003.	2003	FG-EMGEN-GAS
EU-59-EMERGEN-01	A 1.58 MMBTU/hr (125 kW) emergency generator fired by natural gas manufactured in 2010.	2010	FG-NSPS-JJJJ
EU-61-EMERGEN-01	A 1.11 MMBTU/hr (100 kW) emergency generator fired by diesel fuel/No. 2 fuel oil manufactured in 1993.	1993	FG-EMGEN-OIL
EU-71-EMERGEN-01	A 0.81 MMBTU/hr (60 kW) emergency generator fired by propane/natural gas manufactured in 2001.	2001	FG-EMGEN-GAS
EU-72-EMERGEN-01	A 0.81 MMBTU/hr (60 kW) emergency generator fired by propane/natural gas manufactured in 2001.	2001	FG-EMGEN-GAS
EU-73-EMERGEN-01	A 1.29 MMBTU/hr (100 kW) emergency generator fired by propane/natural gas manufactured in 2001.	2001	FG-EMGEN-GAS
EU-75-EMERGEN-01	A 0.69 MMBTU/hr (60 kW) emergency generator fired by diesel fuel/No. 2 fuel oil manufactured in 2001.	2001	FG-EMGEN-OIL
EU-82-EMERGEN-01	A 3.4 MMBTU/hr (350kW) emergency generator fired by diesel fuel/No. 2 fuel oil manufactured in 2006.	2006	FG-NSPS-III
EU-107-EMERGEN-1	A 2.69 MMBTU/hr (230 kW) emergency generator fired by diesel fuel/No. 2 fuel oil manufactured in 1998.	1998	FG-EMGEN-OIL

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-138-EMERGEN-01	A 1,035 bhp (600kW) natural gas fired emergency engine manufactured after January 1, 2009.	01-23-2012	FG-NSPS-JJJJ
EU-145-EMERGEN-1	A 5.50 MMBTU/hr (500 kW) emergency generator fired by propane/natural gas manufactured in 2004.	2004	FG-EMGEN-GAS
EU-149-EMERGEN-01	A 2.75 MMBTU/hr (250kW) diesel fired emergency generator manufactured in May 2013.	05-2013	NA
EU-174-EMERGEN-01	A 4.18 MMBTU/hr (395 kW) emergency generator fired by natural gas.	05-23-2016	FG4JEXEMPTENG
EU-175-EMERGEN-01	A 3.51 MMBTU/hr (250 kW) emergency generator fired by natural gas.	09-18-2015	FG4JEXEMPTENG
EUPARTSWASH	Cold cleaners (5) installed after July 1, 1979.	1979	FGPARTSWASH
EU-90-PRESSR-2	Four-color web fed Rotogravure printing press using solvent based inks.	01-01-1987	FGRULE290
EU-90-PRESSF-2	Three-color web Comco flexographic printing press using water-based ink.	06-01-1999	FGRULE290
EU-ENGINE9	A 3,500 HP (2.5 MW) natural gas-fired reciprocating internal combustion engine (RICE) equipped with an oxidation catalyst to reduce CO and VOC emissions.	07-15-2020	FGENGINES
EU-ENGINE10	A 3,500 HP (2.5 MW) natural gas-fired RICE equipped with an oxidation catalyst to reduce CO and VOC emissions.	07-15/2020	FGENGINES

**EUPABOILER-6  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

65,000 pounds of steam per hour natural gas fired boiler, rated at 88 MMBTU/hr heat input.

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
1. NO <sub>x</sub>	0.140 pound per MMBTU's heat input <sup>2</sup>	Hourly	EUPABOILER-6	SC V.1	<b>R 336.1205(1)(a) &amp; (3)</b>
2. NO <sub>x</sub>	12.4 pph <sup>2</sup>	Hourly	EUPABOILER-6	SC V.1	<b>R 336.1205(1)(a) &amp; (3)</b>
3. CO	0.292 pound per MMBTU's heat input <sup>2</sup>	Hourly	EUPABOILER-6	SC V.2	<b>R 336.1205(1)(a) &amp; (3)</b>
4. CO	25.9 pph <sup>2</sup>	Hourly	EUPABOILER-6	SC V.2	<b>R 336.1205(1)(a) &amp; (3)</b>

**II. MATERIAL LIMIT(S)**

1. The permittee shall only burn natural gas in EUPABOILER-6.<sup>2</sup> **(R 336.1205(1)(a) & (3))**

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

NA

**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. Unless the AQD District Supervisor waives the requirement, the permittee shall verify NO<sub>x</sub> emission rates from EUPABOILER-6 by testing at owner's expense, in accordance with Department requirements. The testing shall be performed while the boiler load is at 90% or greater than the rated load capacity.<sup>2</sup> **(R 336.1205(3), R 336.2001, R 336.2003, R 336.2004)**
2. Unless the AQD District Supervisor waives the requirement, the permittee shall verify CO emission rates from EUPABOILER-6 by testing at owner's expense, in accordance with Department requirements. The testing shall be performed while the boiler load is at 90% or greater than the rated load capacity.<sup>2</sup> **(R 336.1205(3), R 336.2001, R 336.2003, R 336.2004)**

- The hourly emission rate during testing shall be determined by the average of the acceptable test runs performed. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
NOx	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. 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. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**

- Within 180 days of ROP renewal issuance and every five years from the date of the last test thereafter, unless the AQD District Supervisor waives the requirement, the permittee shall verify the NOx and CO emission rates from EUPABOILER-6. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
- The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 7 days of the time and place before performance tests are conducted. **(R 336.1213(3), R 336.2001(4))**

**VI. MONITORING/RECORDKEEPING**

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

- The permittee shall use the Energy Management System (EMS) to monitor and record the natural gas usage rate on a monthly basis. The natural gas usage rate shall be recorded using an approved format whereby the previous 12 months of data are displayed.<sup>2</sup> **(R 336.1205(1)(a) & (3))**

**VII. REPORTING**

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

See Appendix 8

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

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBOILERS6&10	132 <sup>2</sup>	185 <sup>2</sup>	<b>R 336.1225, 40 CFR 52.21(c) &amp; (d)</b>

**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).

## **EU-02-PEAKGEN EMISSION UNIT CONDITIONS**

### **DESCRIPTION**

The power plant's natural gas-fired peaking and black start generator. It has a heat input capacity of 7.6 MMBTU/hr (771 kW).

**Flexible Group ID:** NA

### **POLLUTION CONTROL EQUIPMENT**

Oxidation catalyst

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

NA

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

NA

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

1. The permittee shall minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. **(40 CFR 63.6625(h))**

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

1. The permittee must install, operate, and maintain an oxidation catalyst to reduce hazardous air pollutant (HAP) emissions from the stationary RICE. **(40 CFR 63.6603(a))**

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

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

1. The permittee must conduct annual compliance demonstrations with SC IV.1 to show that the average reduction of emissions of CO is 93 percent or more, or the average CO concentration is less than or equal to 47 ppmvd at 15 percent O<sub>2</sub>. **(40 CFR 63.6630(a) & (e), 40 CFR 63.6640(a) & (c))**
2. The permittee must install, operate, and maintain a continuous parameter monitoring system (CPMS) according to 40 CFR 63.6625(b) to continuously monitor catalyst inlet temperature according to the requirements in 40 CFR 63.6625(b); otherwise, the permittee must install equipment to automatically shut down the engine if the catalyst inlet temperature exceeds 1350 °F. **(40 CFR 63.6625(b), 40 CFR 63.6630(a) & (e), 40 CFR 63.6635)**

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

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

1. The permittee must record catalyst inlet temperature data according to 40 CFR 63.6625(b), reduce these data to 4-hour rolling averages, and maintain the 4-hour rolling averages within the limitation of >450 °F and ≤1350 °F; otherwise, the permittee must immediately shut down the engine if the catalyst inlet temperature exceeds 1350 °F. **(40 CFR 63.6640(a), 40 CFR 63.6655(d))**
2. The permittee shall maintain records of: **(40 CFR 63.6655)**
  - a. Each notification and report submitted to comply with 40 CFR Part 63, Subpart ZZZZ;

- b. The occurrence and duration of each malfunction of operation or the air pollution control and monitoring equipment or CPMS;
- c. Results of performance evaluations;
- d. All required maintenance performed on the air pollution control and monitoring equipment;
- e. Actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.6605(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation; and
- f. All required CPMS measurements, calibration checks, adjustments, and maintenance.

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee must submit a compliance report semiannually according to 40 CFR 63.6650, containing the results of the annual compliance demonstration, if conducted during the reporting period. If this compliance report is submitted along with, or as part of, the semiannual monitoring report listed under SC VII.2, it shall satisfy any obligation to report the same deviations in the semiannual monitoring report. **(40 CFR 63.6650)**

See Appendix 8

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

NA

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

1. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subparts A and ZZZZ, as they apply to EU-02-PEAKGEN. **(40 CFR 63.6595, 40 CFR 63.6605, 40 CFR Part 63, Subparts A & 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).

**EU-149-EMERGEN-01  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

A 2.75 MMBTU/hr (250kW) diesel fired emergency generator manufactured in May 2013.

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
1. NMHC+NO <sub>x</sub>	3.0 g/hp-hr	Hourly	EU-149-EMERGEN-01	SC V.1 SC V.2	<b>40 CFR 60.4205(b)</b>
2. CO	2.6 g/hp-hr	Hourly	EU-149-EMERGEN-01	SC V.1 SC V.2	<b>40 CFR 60.4205(b)</b>
3. PM	0.15 g/hp-hr	Hourly	EU-149-EMERGEN-01	SC V.1 SC V.2	<b>40 CFR 60.4205(b)</b>

**II. MATERIAL LIMIT(S)**

1. The permittee shall burn only diesel fuel, in EU-149-EMERGEN-01 with the maximum sulfur content of 15 ppm (0.0015 percent) by weight. **(R 336.1205(1)(a), R 336.1402(1), 40 CFR 60.4207(b), 40 CFR 80.510(b))**
2. Beginning June 1, 2012, the permittee shall only burn diesel fuel with either a minimum cetane index of 40 or a maximum aromatic content of 35% by volume. **(40 CFR 60.4207(b), 40 CFR 80.51(c))**

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

1. In order to be considered an emergency generator, the permittee must operate EU-149-EMERGEN-01 according to the requirements below. Any operation other than this is prohibited. If not operated according to these requirements, then the engine must meet all requirements in 40 CFR Part 60, Subpart IIII for non-emergency engines: **(40 CFR 60.4211(f))**
  - a. There is no time limit on the use of the emergency engine in emergency situations.
  - b. The permittee may operate EU-149-EMERGEN-01 for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by SC III.1.c counts as part of this 100 hours per calendar year.
    - i. FG-NSPS-III may be operated for maintenance checks and readiness testing, provided that the tests are recommended by Federal, State or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
  - c. The permittee may operate EU-149-EMERGEN-01 up to 50 hours per year in non-emergency situations, but these 50 hours of operation are counted towards the 100 hours per calendar year allowed in SC III.1.b. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand

response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the requirements in 40 CFR 60.4211(f)(3)(i) are met.

2. The permittee shall install, maintain, and operate EU-149-EMERGEN-01 according to the manufacturer's written instructions, or procedures developed by the owner/operator and approved by the engine manufacturer, over the entire life of the engine. **(40 CFR 60.4206, 40 CFR 60.4211)**
3. The permittee shall do all the following, except as permitted in 40 CFR 60.4211(g): **(40 CFR 60.4211(a))**
  - a. Operate and maintain EU-149-EMERGEN-01 and control device (if any) according to the manufacturer's emission-related written instructions;
  - b. Change only those emissions-related settings that are permitted by the manufacturer; and
  - c. Meet the requirements of 40 CFR Parts 89, 94 and/or 1068, as they apply to EU-149-EMERGEN-01.
4. The permittee shall not operate EU-149-EMERGEN-01 unless the engine is certified by the manufacturer to meet the applicable emission standards specified in 40 CFR 60.4201(a) for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications. **(40 CFR 60.4205(b), 40 CFR 60.4211(c))**
5. If the permittee does not install, configure, operate and maintain EU-149-EMERGEN-01 and control device(s), if any, according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, compliance must be demonstrated by keeping 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. (In addition, the requirements in SC V.2 must be met.) **(40 CFR 60.4211(g)(2))**

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

1. The permittee shall equip and maintain EU-149-EMERGEN-01 with non-resettable hours meters to track the operating hours. **(40 CFR 60.4209)**

#### **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 conduct an initial performance test for EU-149-EMERGEN-01 within one year after startup of the engine to demonstrate compliance with the emission limits in 40 CFR 60.4205 unless the engine has been certified by the manufacturer and the permittee maintains the engine as required by 40 CFR Part 60, Subpart IIII. If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4212. The hourly emission rate during testing shall be determined by the average of the acceptable test runs performed. No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **(R 336.2003, 40 CFR 60.4205, 40 CFR 60.4211, 40 CFR 60.4212)**
2. If the permittee does not install, configure, operate and maintain EU-149-EMERGEN-01 and control device(s), if any, according to the manufacturer's emission-related written instructions, or the emission-related settings are changed in a way that is not permitted by the manufacturer, compliance shall be demonstrated by conducting an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. The hourly emission rate during testing shall be determined by the average of the acceptable test runs performed. **(R 336.2003, 40 CFR 60.4211(g)(2))**

3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 7 days of the time and place before performance tests are conducted. **(R 336.1213(3), R 336.2001(4))**

## **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 record of testing required in SC V.1 or manufacturer's certification documentation indicating that EU-149-EMERGEN-01 meets the applicable emission limitations contained in the federal Standards of Performance for New Stationary Sources 40 CFR Part 60, Subpart IIII. The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4211)**
2. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in EU-149-EMERGEN-01, demonstrating that the fuel sulfur content meets the requirement of 40 CFR 80.510(b). The certification or test data shall include the name of the oil supplier or laboratory, and the sulfur content of the fuel oil. **(40 CFR 80.510(b))**
3. The permittee shall monitor and record the total hours of operation and the hours of operation during non-emergencies for EU-149-EMERGEN-01, on a monthly and 12-month rolling time period basis, in a manner acceptable to the AQD District Supervisor. The permittee shall document how many hours are spent for emergency operation of EU-149-EMERGEN-01, including what classified the operation as emergency and how many hours are spent for non-emergency operation. **(40 CFR 60.4211, 40 CFR 60.4214)**
4. If the permittee does not install, configure, operate, and maintain EU-149-EMERGEN-01 and control device(s), if any, according to the manufacturer's emission-related written instructions, or the emission-related settings are changed in a way that is not permitted by the manufacturer, records shall be kept as stated in SC III.5 and in accordance with 40 CFR 63.4211(g)(2). **(40 CFR 60.4211(g)(2))**

## **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 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))**

**See Appendix 8**

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

NA

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

1. The permittee shall comply with all provisions of the federal Standards of Performance for Stationary Compression Ignition Internal Combustion Engines of new Stationary Sources as specified in 40 CFR Part 60, Subparts A & IIII, as they apply to EU-149-EMERGEN-01. **(40 CFR Part 60, Subparts A & IIII)**

2. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines as specified in 40 CFR Part 63, Subparts A and ZZZZ, as they apply to EU-149-EMERGEN-01. **(40 CFR Part 63, Subparts A & 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).

## D. FLEXIBLE GROUP SPECIAL CONDITIONS

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

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

### FLEXIBLE GROUP SUMMARY TABLE

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

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGBOILERS9&10	Two natural gas-fired boilers with No. 2 fuel oil as backup. Each are rated at 65,000 pounds of steam per hour output, or 90 MMBTU/hr heat input while burning natural gas and 88 MMBTU/hr while burning oil. Each has low NOx burners (design as constructed for their respective installation dates).	EUBOILER9 EUBOILER10
FGPBTUHR-78	A grouping of turbine/heat recovery steam generator trains #7 and #8 that share applicable requirements.	EUPBTURBIN-7 EUPBTURBIN-8 EUPBHRGEN-7 EUPBHRGEN-8
FG-NSPS-III	Emergency generators fired by diesel fuel/No. 2 fuel oil, manufactured/installed on or after 2006.	EU-42-EMERGEN-02 EU-44-EMERGEN-01 EU-82-EMERGEN-01
FG-NSPS-JJJ	Emergency generators fired by natural gas, manufactured/installed on or after 2010.	EU-59-EMERGEN-01 EU-29-EMERGEN-02 EU-138-EMERGEN-01
FG4JEXEMPTENG	Emergency generators fired by natural gas, manufactured/installed on or after 2010. These engines were exempt from NSR permitting.	EU-001-EMERGEN-01 EU-174-EMERGEN-01 EU-175-EMERGEN-01
FG-EMGEN-GAS	Five emergency generators fired by propane/natural gas, manufactured/installed on or prior to 2004.	EU-56-EMERGEN-01 EU-71-EMERGEN-01 EU-72-EMERGEN-01 EU-73-EMERGEN-01 EU-145-EMERGEN-1
FG-EMGEN-OIL	Eight emergency generators fired by diesel fuel/No. 2 fuel oil, manufactured/installed on or prior to 2003.	EU-13-EMERGEN-01 EU-15-EMERGEN-01 EU-28-EMERGEN-01 EU-29-EMERGEN-01 EU-46-EMERGEN-01 EU-61-EMERGEN-01 EU-75-EMERGEN-01 EU-107-EMERGEN-1
FGPARTSWASH	Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, Rule 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.	EUPARTSWASH

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGRULE290	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 290. Emission units installed/modified before December 20, 2016, may show compliance with Rule 290 in effect at the time of installation/modification.	EU-90-PRESSR-2 EU-90-PRESSF-2
FGENGINES	Two (2) 3,500 HP (2.5 MW) natural gas-fired RICE that provide electricity to the WMU Kalamazoo Campus.	EU-ENGINE9 EU-ENGINE10

**FGBOILERS9&10  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Two natural gas-fired boilers with No. 2 fuel oil as backup. Each are rated at 65,000 pounds of steam per hour output, or 90 MMBTU/hr heat input while burning natural gas and 88 MMBTU/hr heat input while burning oil. Each has low NOx burners (design as constructed for their respective installation dates).

**Emission Units:** EUBOILER9, EUBOILER10

**POLLUTION CONTROL EQUIPMENT**

The EUBOILER9 and EUBOILER10 are both controlled with a low NOx burner design as constructed for their respective installation dates.

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	35.9 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EUBOILER9 EUBOILER10 (Each boiler individually)	SC VI.3	<b>R 336.1205(1)(a) &amp; (3), 40 CFR 52.21(c) &amp; (d)</b>
2. NOx	0.09 lb/MMBTU <sup>2</sup>	Hourly when firing natural gas	EUBOILER9 EUBOILER10	SC V.1	<b>R 336.1205(1)(a) &amp; (3), 40 CFR 52.21(c) &amp; (d)</b>
3. NOx	0.13 lb/MMBTU <sup>2</sup>	Hourly when firing No. 2 Fuel oil	EUBOILER9 EUBOILER10	SC V.1	<b>R 336.1205(1)(a) &amp; (3), 40 CFR 52.21(c) &amp; (d)</b>

4. Visible emissions from each boiler in FGBOILERS9&10, when burning No.2 fuel oil, shall not exceed 20% opacity except as specified in 40 CFR Part 60, Subparts A & Dc.<sup>2</sup> (**40 CFR 60.11, 40 CFR 60.43c, 40 CFR 60.45c, 40 CFR 60.47c**)

**II. MATERIAL LIMIT(S)**

1. The permittee shall burn only pipeline quality natural gas or No. 2 fuel oil in FGBOILERS9&10.<sup>2</sup> (**R 336.1205(1)(a) & (3)**)
2. As allowed by the definition of gas-fired boiler in 40 CFR 63.11237, the permittee shall only burn No. 2 fuel oil during periods of gas curtailment, gas supply interruption, startups, or periodic testing on liquid fuel. The periodic testing on liquid fuel shall not exceed a combined total of 48 hours, for each boiler, during any calendar year.<sup>2</sup> (**40 CFR 63.11237, 40 CFR Part 63, Subpart JJJJJJ**)
3. The sulfur content of all No. 2 fuel oil used in FGBOILERS9&10 shall not exceed 0.05 percent by weight.<sup>2</sup> (**R 336.1205(1)(a) & (3), R 336.1401, 40 CFR 52.21(c) & (d), 40 CFR 60.42c(d)**)

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

1. The permittee shall not operate either boiler in FGBOILERS9&10, while burning No. 2 fuel oil, for more than 252 hours per 12-month rolling time period as determined at the end of each calendar month.<sup>2</sup> (**R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d)**)

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

1. The permittee shall not operate any boiler in FGBOILERS9&10 unless the low NOx burner design of each boiler is installed, maintained, and operated in a satisfactory manner.<sup>2</sup> **(R 336.1205(1)(a) & (3))**

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

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

1. The permittee shall verify NOx emission rates while firing natural gas and No. 2 fuel oil from a representative boiler in FGBOILERS9&10, alternating between boilers for subsequent stack tests, by testing at owner's expense, in accordance with Department requirements. Testing when firing No. 2 fuel oil may be waived upon approval by the AQD District Supervisor.<sup>2</sup> **(R 336.1205, R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d))**
2. Testing shall be performed using an approved EPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. The hourly emission rate during testing shall be determined by the average of the acceptable test runs performed. 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. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
3. Within 180 days of ROP renewal issuance and every five years from the date of the last test thereafter, the permittee shall verify the NOx emission rates from FGBOILERS9&10, alternating between boilers for subsequent stack tests. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
4. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 7 days of the time and place before performance tests are conducted. **(R 336.1213(3), R 336.2001(4))**

#### **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 complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.<sup>2</sup> **(R 336.1205, 40 CFR 52.21(c) & (d))**
2. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period records of the amount of each fuel used on a monthly and 12-month rolling time period basis in each boiler in FGBOILERS9&10. 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) & (3), 40 CFR 52.21(c) & (d), 40 CFR 60.48c(g)(2))**
3. The permittee shall calculate and keep, in a satisfactory manner, separate records of monthly and 12-month rolling total NOx mass emissions for all fuels fired, for EUBOILER9 and EUBOILER10, as required by SC I.1, using the lb/MMBTU emission factors specified in SC I.2 and I.3, or emission factors derived from compliance testing for those emission factors as approved by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> **(R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d))**
4. The permittee shall keep, in a satisfactory manner, records of why each boiler in FGBOILERS9&10 was burning No. 2 Fuel Oil on a calendar year basis, along with the hours of operation each boiler in FGBOILERS9&10 operates for periodic testing while burning No. 2 fuel oil.<sup>2</sup> **(40 CFR 63.11225, 40 CFR Part 63, Subpart JJJJJJ)**

5. The permittee shall keep, in a satisfactory manner, records of the fuel supplier certification for the No. 2 fuel oil sulfur content for each shipment of fuel oil. As a minimum, the fuel supplier certification shall contain:<sup>2</sup> **(R 336.1205(1)(a) & (3), R 336.1401, 40 CFR 52.21(c) & (d), 40 CFR 60.8, 40 CFR 60.42c(h), 40 CFR 60.44c(h), 40 CFR 60.48c(f)(1))**
  - a. The name of the oil supplier;
  - b. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in 40 CFR 60.41c; and
  - c. The sulfur content or maximum sulfur content of the oil.
6. The permittee shall keep, in a satisfactory manner, records of the hours of operation for each boiler in FGBOILERS9&10 while burning No. 2 Fuel Oil on a monthly and 12-month rolling time period basis as determined at the end of each calendar month, as required by SC III.1.<sup>2</sup> **(R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d))**
7. The permittee shall monitor emissions and operating information for each boiler in FGBOILERS9&10 in accordance with the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and Dc. The permittee shall keep records of all source emissions data and operating information on file at the facility and make them available to the Department upon request.<sup>2</sup> **(R 336.1205(1)(a) & (3), 40 CFR Part 60, Subparts A & Dc)**

**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 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. When No. 2 fuel oil is burned in either boiler in FGBOILERS9&10, the permittee shall submit records of the No. 2 fuel oil supplier certifications as specified in SC VI.5, for the No. 2 fuel oil sulfur content, to the AQD District Supervisor in an acceptable format within 30 days following the end of the 6-month period in which the records were collected. The permittee shall include with the submittal a certified statement signed by their responsible official that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.<sup>2</sup> **(R 336.1205(1)(a) & (3), 40 CFR 52.21(c) & (d), 40 CFR 60.48c(e)(11), 40 CFR 60.48c(j))**

See Appendix 8

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

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

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBOILER9	54 <sup>2</sup>	140 <sup>2</sup>	40 CFR 52.21(c) & (d)
2. SVBOILERS6&10	132 <sup>2</sup>	185 <sup>2</sup>	R 336.1225, 40 CFR 52.21(c) & (d)

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A & Dc, as they apply to each boiler in FGBOILERS9&10.<sup>2</sup> **(40 CFR Part 60, Subparts A & Dc)**

**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).

**FGPBTUHR-78U  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

A grouping of turbine/heat recovery steam generator trains #7 and #8 that share applicable requirements.

**Emission Units:** EUPBTURBIN-7, EUPBTURBIN-8, EUPBHRSGEN-7, EUPBHRSGEN-8

**POLLUTION CONTROL EQUIPMENT**

The duct burners are controlled with a low NO<sub>x</sub> burner design as constructed for their respective installation dates.

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NO <sub>x</sub>	42 ppmv, corrected to 15% O <sub>2</sub> on a dry gas basis at ISO conditions <sup>2</sup>	Hourly <sup>a</sup>	EUPBTURBIN-7	SC V.2	40 CFR 52.21(j)
2. NO <sub>x</sub>	25 ppmv, corrected to 15% O <sub>2</sub> on a dry gas basis at ISO conditions <sup>2</sup>	Hourly <sup>a</sup>	EUPBTURBIN-7 EUPBTURBIN-8	SC V.1, SC V.2	40 CFR 52.21(c) & (d)
3. NO <sub>x</sub>	12.0 pph <sup>2</sup>	Hourly <sup>a</sup>	EUPBTURBIN-7 EUPBTURBIN-8	SC V.1, SC V.2	R 336.2810
4. NO <sub>x</sub>	192 ppmv, corrected to 15% O <sub>2</sub> on a dry gas basis at ISO conditions <sup>2</sup>	Hourly <sup>a</sup>	EUPBTURBIN-7 EUPBTURBIN-8	SC V.4	40 CFR 60.332(a)(2)
5. NO <sub>x</sub>	15.3 pph <sup>2</sup>	Hourly <sup>b</sup>	EUPBHRSGEN-7 EUPBHRSGEN-8	SC V.3	40 CFR 52.21(c) & (d)
6. NO <sub>x</sub>	25 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month <sup>c</sup>	EUPBTURBIN-7 EUPBTURBIN-8	SC VI.6	R 336.1205, 40 CFR 52.21(c) & (d)
7. NO <sub>x</sub>	44.7 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month <sup>b</sup>	EUPBHRSGEN-7 EUPBHRSGEN-8	SC VI.2	R 336.2810
8. CO	50 ppmv corrected to 15% O <sub>2</sub> on a dry gas basis at ISO conditions <sup>2</sup>	Hourly <sup>a</sup>	EUPBTURBIN-7 EUPBTURBIN-8	SC V.1, SC V.2	40 CFR 52.21(j)
9. CO	8.8 pph <sup>2</sup>	Hourly <sup>a</sup>	EUPBTURBIN-7 EUPBTURBIN-8	SC V.1, SC V.2	R 336.2810
10. CO	6.8 pph <sup>2</sup>	Hourly <sup>b</sup>	EUPBHRSGEN-7 EUPBHRSGEN-8	SC V.3	40 CFR 52.21

<sup>a</sup> From each individual turbine either operating alone or in conjunction with its respective duct burner

<sup>b</sup> From each individual duct burner, respectively, while operating in fresh air firing mode.

<sup>c</sup> From each individual turbine, not including the respective duct burner.

**II. MATERIAL LIMIT(S)**

Material	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. Sulfur content in natural gas	0.8% by weight <sup>2</sup>	At all times	EUPBTURBIN-7, EUPBTURBIN-8	SC VI.3, SC VI.4	<b>40 CFR 60.333(b)</b>

2. The permittee shall only burn natural gas in FGPBTUHR-78.<sup>2</sup> **(40 CFR 60.331(u), 40 CFR 60.333(b), 40 CFR 60.334(h), 40 CFR Part 60, Subpart GG)**

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

NA

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

- The permittee shall not operate any duct burner in FGPBTUHR-78 unless the low NO<sub>x</sub> burner design of each duct burner is installed, maintained, and operated in a satisfactory manner.<sup>2</sup> **(R 336.2810)**
- The design heat input capacity for EUPBTURBIN-8 shall not exceed, on a fuel heat input basis, 54 MMBTU per hour (LHV) at ISO site installed conditions, as described in the manufacturer's product documentation.<sup>2</sup> **(R 336.1205(1)(a), 40 CFR 52.21(c) & (d))**

**V. TESTING/SAMPLING**

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

- Within 180 days after restart, and thereafter every five years the permittee shall verify NO<sub>x</sub> and CO emission rates from EUPBTURBIN-7, while either operating alone or in conjunction with the respective duct burner, EUPBHRSGEN-7, by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
NO <sub>x</sub>	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A

The emission rate during testing shall be determined by the average of the acceptable test runs performed in accordance with the method requirements. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. 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. Verification of emission rates includes the submittal of 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.<sup>2</sup> **(R 336.2001, R 336.2003, R 336.2004, 40 CFR 52.21(c) & (d), 40 CFR 52.21(j))**

- The permittee shall verify NO<sub>x</sub> and CO emission rates every five years from the previous test, from each individual turbine unit, EUPBTURBIN-7 and EUPBTURBIN-8 of FGPBTUHR-78, while either operating alone or in conjunction with its respective duct burner, EUPBHRSGEN-7 or EUPBHRSGEN-8, by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
NO <sub>x</sub>	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A

The emission rate during testing shall be determined by the average of the acceptable test runs performed in accordance with the method requirements. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. 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. Verification of emission rates includes the submittal of 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.<sup>2</sup> **(R 336.2001, R 336.2003, R 336.2004, R 336.2810, 40 CFR 52.21(j))**

- Upon the request of the AQD District Supervisor, the permittee will be required to verify NO<sub>x</sub> and CO emission rates from each individual duct burner, EUPBHRSGEN-7 or EUPBHRSGEN-8, while operating in fresh air firing mode, in FGPBTUHR-78 by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
NO <sub>x</sub>	40 CFR Part 60, Appendix A
CO	40 CFR Part 60, Appendix A

The emission rate during testing shall be determined by the average of the acceptable test runs performed in accordance with the method requirements. An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. 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. Verification of emission rates includes the submittal of 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.<sup>2</sup> **(R 336.2001, R 336.2003, R 336.2004, R 336.2810)**

- Upon request of the AQD District Supervisor, the permittee shall verify the NO<sub>x</sub> emission rate from EUPBTURBIN-7 and EUPBTURBIN-8, alone or in conjunction with duct burners, at a minimum of four evenly-spaced load points, 30%, 50%, 75%, and 90-100% of peak load or at four evenly-spaced load points in the normal operating range of the gas turbine, including the minimum point in the operating range and 90-100% of peak load. Testing shall be performed in accordance with the applicable federal Reference Methods, 40 CFR Part 60, Appendix A, Method 7E or an alternate method approved in advance by the AQD. The emission rate during testing shall be determined by the average of the acceptable test runs performed in accordance with the method requirements. An alternate method, or a modification to the approved USEPA Method, may be specified in an AQD-approved Test Protocol. 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.<sup>2</sup> **(R 336.2001, R 336.2003, R 336.2004, 40 CFR 60.335(b)(2))**
- The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 7 days of the time and place before performance tests are conducted. **(R 336.1213(3), R 336.2001(4))**

## **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 complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.<sup>2</sup> **(R 336.2810)**
2. The permittee shall keep the following information on a monthly basis for FGPBTUHR-78:
  - a. A record of the hours of operation of the duct burners while operating in fresh air firing mode.
  - b. Records of the amount of natural gas used per month and 12-month rolling time period in the turbines and the duct burners, separated out by mode of operation.
  - c. NO<sub>x</sub> emission calculations from the duct burners, while operating in fresh air firing mode, determining the monthly emission rate in tons per calendar month.
  - d. NO<sub>x</sub> emission calculations from the duct burners, while operating in fresh air firing mode, determining the annual emission rate in tons per 12-month rolling time period as determined at the end of each calendar month.

An emission factor of 0.18 lb/MMBTU heat input shall be used in the calculation for NO<sub>x</sub> unless an alternate emission factor is approved by the AQD District Supervisor. The permittee shall keep the records in a format acceptable to the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> **(R 336.2810, 40 CFR 60.48c(g)(2))**

3. The permittee shall monitor the total sulfur content of the natural gas used in the turbines following the methods and frequency described in 40 CFR 60.334(h), except as provided in SC VI.4.<sup>2</sup> **(40 CFR 60.334(h))**
4. The permittee may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbines as required by 40 CFR 60.334(h), if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 CFR 60.331(u), regardless of whether an existing custom schedule approved by the administrator for Subpart GG requires such monitoring. The permittee shall use one of the following sources of information to make the required demonstration:<sup>2</sup> **(40 CFR 60.331(u), 40 CFR 60.334(h)(3))**
  - a. The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less:  
or
  - b. Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of Appendix D to Part 75 of this chapter is required.
5. The permittee shall monitor emissions and operating information for any portion of FGPBTUHR-78 in accordance with the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A, Dc, and GG. The permittee shall keep records of all source emissions data and operating information on file at the facility and make them available to the Department upon request.<sup>2</sup> **(40 CFR Part 60, Subparts A, Dc, & GG)**
6. The permittee shall calculate and record, in a satisfactory manner, monthly and 12-month rolling time period NO<sub>x</sub> emission calculations for EUPBTURBIN-8, as required by SC I.7. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> **(R 336.1205, 40 CFR 52.21(c) & (d))**

## **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 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. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification of EUPBTURBIN-7, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUPBTURBIN-7.<sup>2</sup> **(R 336.1201(7)(a))**

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 Diameter / Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVPBTURBIN7	54 <sup>2</sup>	136 <sup>2</sup>	<b>R 336.2803, R 336.2804</b>
2. SVPBTURBIN8	54 <sup>2</sup>	136 <sup>2</sup>	<b>R 336.2803, R 336.2804</b>
3. SVPBHRSGEN7	54 <sup>2</sup>	136 <sup>2</sup>	<b>R 336.2803, R 336.2804</b>
4. SVPBHRSGEN8	54 <sup>2</sup>	136 <sup>2</sup>	<b>R 336.2803, R 336.2804</b>

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A, Dc, and GG, as they apply to any unit in FGPBTUHR-78.<sup>2</sup> **(40 CFR Part 60, Subparts A, Dc, & GG)**

**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).

**FG-NSPS-III  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Emergency generators fired by diesel fuel/No. 2 fuel oil, manufactured/installed on or after year of 2006.

**Emission Units:** EU-42-EMERGEN-02, EU-44-EMERGEN-01, EU-82-EMERGEN-01

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. SO <sub>2</sub>	0.14 pph <sup>2</sup>	Hourly	EU-42-EMERGEN-02	SC V.1 SC VI.3	R 336.1205(3), R 336.1401, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
2. SO <sub>2</sub>	0.18 pph <sup>2</sup>	Hourly	EU-44-EMERGEN-01 EU-82-EMERGEN-01	SC V.1 SC VI.3	R 336.1205(3), R 336.1401, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
3. NO <sub>x</sub>	2.88 pph <sup>2</sup>	Hourly	EU-42-EMERGEN-02	SC V.2 SC V.3	R 336.1205(3), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
4. NO <sub>x</sub>	7.19 pph <sup>2</sup>	Hourly	EU-44-EMERGEN-01 EU-82-EMERGEN-01	SC V.2 SC V.3	R 336.1205(3), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
5. NO <sub>x</sub>	6.9 g/hp-hr <sup>2</sup>	Hourly	EU-44-EMERGEN-01 EU-82-EMERGEN-01	SC V.2 SC V.3	40 CFR 60.4205(a)
6. HC	1.0 g/hp-hr <sup>2</sup>	Hourly	EU-44-EMERGEN-01 EU-82-EMERGEN-01	SC V.2 SC V.3	40 CFR 60.4205(a)
7. CO	8.5 g/hp-hr <sup>2</sup>	Hourly	EU-44-EMERGEN-01 EU-82-EMERGEN-01	SC V.2 SC V.3	40 CFR 60.4205(a)
8. PM	0.40 g/hp-hr <sup>2</sup>	Hourly	EU-44-EMERGEN-01 EU-82-EMERGEN-01	SC V.2 SC V.3	40 CFR 60.4205(a)
9. NMHC+NO <sub>x</sub>	3.0 g/hp-hr <sup>2</sup>	Hourly	EU-42-EMERGEN-02	SC V.2 SC V.3	40 CFR 60.4205(b)
10. CO	2.6 g/hp-hr <sup>2</sup>	Hourly	EU-42-EMERGEN-02	SC V.2 SC V.3	40 CFR 60.4205(b)
11. PM	0.15 g/hp-hr <sup>2</sup>	Hourly	EU-42-EMERGEN-02	SC V.2 SC V.3	40 CFR 60.4205(b)

**II. MATERIAL LIMIT(S)**

- The permittee shall burn only diesel fuel, in FG-NSPS-III with the maximum sulfur content of 15 ppm (0.0015 percent) by weight.<sup>2</sup> (R 336.1205(1)(a), R 336.1402(1), 40 CFR 60.4207(b), 40 CFR 80.510(b))
- Beginning June 1, 2012, the permittee shall only burn diesel fuel with either a minimum cetane index of 40 or a maximum aromatic content of 35% by volume. (40 CFR 60.4207(b), 40 CFR 80.510(c))

3. The permittee shall burn only diesel fuel/No. 2 fuel oil in FG-NSPS-III.<sup>2</sup> **(R 336.1205(3), R 336.1401, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

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

1. The permittee shall not operate each unit in FG-NSPS-III for more than 500 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month.<sup>2</sup> **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
2. The permittee may operate each unit in FG-NSPS-III for no more than 100 hours per 12-month rolling time period as determined at the end of each calendar month for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per year. Each unit in FG-NSPS-III may operate 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 non-emergency power as part of a financial arrangement with another entity.<sup>2</sup> **(40 CFR 60.4211)**
3. The permittee shall install, maintain, and operate each unit of FG-NSPS-III according to the manufacturer's written instructions, or procedures developed by the owner/operator and approved by the engine manufacturer, over the entire life of the engine.<sup>2</sup> **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d), 40 CFR 60.4206, 40 CFR 60.4211)**
4. The permittee shall do all the following, except as permitted in 40 CFR 60.4211(g): **(40 CFR 60.4211(a))**
  - a. Operate and maintain each engine and control device (if any) in FG-NSPS-III according to the manufacturer's emission-related written instructions;
  - b. Change only those emissions-related settings that are permitted by the manufacturer; and
  - c. Meet the requirements of 40 CFR Parts 89, 94 and/or 1068, as they apply to FG-NSPS-III.
5. The permittee shall demonstrate compliance with the emission standards specified in Table 1 of 40 CFR Part 60, Subpart IIII for EU-44-EMERGEN-01 and EU-82-EMERGEN-01 according to one of the following methods: **(40 CFR 60.4205(a), 40 CFR 60.4211(b))**
  - a. Purchasing an engine certified according to 40 CFR Part 89 or 40 CFR Part 94, as applicable, to meet the emission standards for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications;
  - b. Keeping records of performance test results for each pollutant for a test conducted on a similar engine and using the same test methods specified in Subpart IIII;
  - c. Keeping records of engine manufacturer data indicating compliance with the standards;
  - d. Keeping records of control device vendor data indicating compliance with the standards;
  - e. Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specific in 40 CFR 60.4212, as applicable.
6. The permittee shall not operate EU-42-EMERGEN-02 unless the engine is certified by the manufacturer to meet the applicable emission standards specified in 40 CFR 60.4201(a) for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications. **(40 CFR 60.4205(b), 40 CFR 60.4211(c))**

- If the permittee does not install, configure, operate and maintain the engines in FG-NSPS-III and control device(s), if any, according to the manufacturer’s emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, compliance must be demonstrated by keeping 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. (In addition, the requirements in SC V.3 must be met.) **(40 CFR 60.4211(g)(2))**

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

- The permittee shall equip and maintain each unit in FG-NSPS-III with non-resettable hours meters to track the operating hours.<sup>2</sup> **(R 336.1205(1)(a) & (3), R 336.1225, 40 CFR 60.4209)**
- The nameplate capacity (total capacity) provided in the table below shall not be exceeded for each unit, as certified by the equipment manufacturer.<sup>2</sup> **(40 CFR Part 72.7)**

Equipment	Total Capacity – each unit	Underlying Applicable Requirements
EU-42-EMERGEN-02	230 kW <sup>2</sup>	<b>40 CFR Part 72.7</b>
EU-44-EMERGEN-01 EU-82-EMERGEN-01	350 kW <sup>2</sup>	<b>40 CFR Part 72.7</b>

**V. TESTING/SAMPLING**

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

- The permittee shall collect and analyze a No. 2 fuel oil sample once every 12 months or each delivery of fuel oil, whichever is less frequent by testing at owner’s expense, in accordance with Department requirements. The permittee shall use an approved EPA test method or equivalent as approved by the Air Quality Division. The permittee shall determine the fuel density, BTU per gallon or BTU/pound, and percent sulfur content of the No. 2 fuel oil. The permittee shall submit a complete report of the test results to the District Supervisor, AQD within 60 days following the last date of the analysis.<sup>2</sup> **(R 336.1205(3), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
- The permittee shall conduct an initial performance test for each unit in FG-NSPS-III within one year after startup of the engine to demonstrate compliance with the emission limits in 40 CFR 60.4205 unless the engines have been certified by the manufacturer and the permittee maintains the engine as required by 40 CFR Part 60, Subpart IIII. If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4212. No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test.<sup>2</sup> **(40 CFR 60.4211, 40 CFR 60.4212, 40 CFR Part 60, Subpart IIII)**
- If the permittee does not install, configure, operate and maintain the engines in FG-NSPS-III and control device(s), if any, according to the manufacturer’s emission-related written instructions, or the emission-related settings are changed in a way that is not permitted by the manufacturer, compliance shall be demonstrated by conducting an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated and maintained in accordance with the manufacturer’s emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer. The hourly emission rates shall be determined by the average of the acceptable test runs. **(R 336.2003, 40 CFR 60.4211(g)(2))**
- The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 7 days of the time and place before performance tests are conducted. **(R 336.1213(3), R 336.2001(4))**

## **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 complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.<sup>2</sup> **(R 336.1205(1)(a) & (3), R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))**
2. The permittee shall keep, in a satisfactory manner, a record of testing required in SC V.2 or manufacturer's certification documentation indicating that each unit in FG-NSPS-III meets the applicable emission limitations contained in the federal Standards of Performance for New Stationary Sources 40 CFR Part 60, Subpart III. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> **(40 CFR 60.4211)**
3. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in FG-NSPS-III, demonstrating that the fuel sulfur content meets the requirement of 40 CFR 80.510(b). The certification or test data shall include the name of the oil supplier or laboratory, and the sulfur content of the fuel oil.<sup>2</sup> **(R 336.1205(1)(a) & (3), 40 CFR 80.510(b))**
4. The permittee shall monitor and record the total hours of operation and the hours of operation during non-emergencies for each unit of FG-NSPS-III, on a monthly and 12-month rolling time period basis, in a manner acceptable to the AQD District Supervisor. The permittee shall document how many hours are spent for emergency operation of each unit of FG-NSPS-III, including what classified the operation as emergency and how many hours are spent for non-emergency operation.<sup>2</sup> **(R 336.1205(1)(a) & (3), 40 CFR 60.4211, 40 CFR 60.4214)**
5. If the permittee does not install, configure, operate and maintain the engines in FG-NSPS-III and control device(s), if any, according to the manufacturer's emission-related written instructions, or the emission-related settings are changed in a way that is not permitted by the manufacturer, records shall be kept as stated in SC III.7 and in accordance with 40 CFR 63.4211(g)(2). **(40 CFR 60.4211(g)(2))**

## **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 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))**

**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 Diameter/Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SV-42-EMERGEN-02	5.9 <sup>2</sup>	8.3 <sup>2</sup>	<b>R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) &amp; (d)</b>
2. SV-44-EMERGEN-01	6 <sup>2</sup>	8.5 <sup>2</sup>	<b>R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) &amp; (d)</b>
3. SV-82-EMERGEN-01	6 <sup>2</sup>	8.5 <sup>2</sup>	<b>R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) &amp; (d)</b>

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all provisions of the federal standards of Performance for new Stationary Sources as specified in 40 CFR Part 60, Subparts A & IIII, as they apply to FG-NSPS-III.2 **(40 CFR Part 60, Subparts A & IIII)**
2. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subparts A and ZZZZ, as they apply to FG-NSPS-III.2 **(40 CFR Part 63, Subparts A & 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).

**FG-NSPS-JJJJ  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Emergency generators fired by natural gas, manufactured/installed on or after 2010.

**Emission Units:** EU-29-EMERGEN-02, EU-59-EMERGEN-01, EU-138-EMERGEN-01

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NO <sub>x</sub>	0.85 pph <sup>2</sup>	Hourly	EU-59-EMERGEN-01	SC V.1	R 336.1205(3), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
2. NO <sub>x</sub>	0.496 pph <sup>2</sup>	Hourly	EU-29-EMERGEN-02	SC V.1	R 336.1205(1)(a) & (3), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
3. NO <sub>x</sub>	2.0 g/hp-hr <sup>2</sup>	Hourly	EU-59-EMERGEN-01 EU-29-EMERGEN-02 EU-138-EMERGEN-01 (each unit individually)	SC V.1 SC V.2 SC VI.2	40 CFR 60.4233(e)
4. CO	4.0 g/hp-hr <sup>2</sup>	Hourly	EU-59-EMERGEN-01 EU-29-EMERGEN-02 EU-138-EMERGEN-01 (each unit individually)	SC V.1 SC V.2 SC VI.2	40 CFR 60.4233(e)
5. VOC	1.0 g/hp-hr <sup>2</sup>	Hourly	EU-59-EMERGEN-01 EU-29-EMERGEN-02 EU-138-EMERGEN-01 (each unit individually)	SC V.1 SC V.2 SC VI.2	40 CFR 60.4233(e)

6. If the permittee installs a non-certified engine that is greater than or equal to 130 HP the permittee may choose to comply with the following emission standards for that engine: **(Table 1 of 40 CFR Part 60, Subpart JJJJ)**
- a. 160 ppmvd NO<sub>x</sub> at 15% oxygen and
  - b. 540 ppmvd CO at 15% oxygen and
  - c. 86 ppmvd VOC at 15% oxygen (not to include formaldehyde).

**II. MATERIAL LIMIT(S)**

1. The permittee shall burn only natural gas in each unit of FG-NSPS-JJJJ.<sup>2</sup> **(R 336.1205(3), R 336.2803, R 336.2804, 40 CFR 52.21(c))**

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

1. The permittee shall not operate each unit in FG-NSPS-JJJJ for more than 500 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month.<sup>2</sup> **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

2. The permittee may operate each unit in FG-NSPS-JJJJ for no more than 100 hours per 12-month rolling time period as determined at the end of each calendar month for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. Permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per year. Each unit in FG-NSPS-JJJJ may operate 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 non-emergency power as part of a financial arrangement with another entity.<sup>2</sup> **(40 CFR 60.4243)**
3. The permittee shall operate and maintain each unit in FG-NSPS-JJJJ such that it meets the emission limits in SC I.3, I.4, and I.5 over the entire life of the engine.<sup>2</sup> **(40 CFR 60.4243(b))**
4. If the permittee purchased a certified engine, according to procedures specified in 40 CFR Part 60, Subpart JJJJ, for the same model year, the permittee shall meet the following requirements for each unit in FG-NSPS-JJJJ.<sup>2</sup> **(40 CFR 60.4243(b)(1))**
  - a. Operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions,
  - b. Keep a maintenance plan and the permittee may only change those engine settings that are permitted by the manufacturer. If you do not operate and maintain the certified engine and control device according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine, and
  - c. Meet the requirements as specified in 40 CFR 1068 Subparts A through D.
5. If the permittee purchased a non-certified engine or a certified engine operating in a non-certified manner, the permittee shall keep a maintenance plan for each unit in FG-NSPS-JJJJ and shall, to the extent practicable, maintain and operate each engine in a manner consistent with good air pollution control practice for minimizing emissions.<sup>2</sup> **(40 CFR 60.4243(b)(2))**
6. If the certified engine is not operated and maintained according to the manufacturer's emission-related written instructions, the engine will be considered non-certified and compliance shall then be demonstrated per 40 CFR 60.4243(a)(2) as follows: **(40 CFR 60.4243(a)(2))**
  - a. For units in FG-NSPS-JJJJ that are greater than or equal to 100 HP and less than or equal to 500 HP, 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. In addition, the permittee must conduct an initial performance test within 1 year of engine startup to demonstrate compliance.
  - b. For units in FG-NSPS-JJJJ that are greater than 500 HP, 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. In addition, the permittee must conduct an initial performance test within 1 year of engine startup and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.
7. If the permittee has purchased a non-certified engine, compliance with the emission standards in 40 CFR 60.4233(d) or (e) shall be demonstrated according to the following: **(40 CFR 60.4243(b)(2))**
  - a. Testing shall be performed as applicable in 40 CFR 60.4244.
  - b. For units in FG-NSPS-JJJJ that are greater than 25 HP and less than or equal to 500 HP, the permittee shall keep a maintenance plan and to the extent practicable, maintain and operate the unit(s) in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee shall conduct an initial performance test to demonstrate compliance.

- c. For units in FG-NSPS-JJJJ that are greater than 500 HP, the permittee shall keep a maintenance plan and to the extent practicable, maintain and operate the unit(s) in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee shall conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

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

- 1. The nameplate capacity (total capacity) provided in the table below shall not be exceeded for each unit, as certified by the equipment manufacturer.

Equipment	Total Capacity – each unit	Underlying Applicable Requirements
EU-59-EMERGEN-01	125 kW <sup>2</sup>	<b>R 336.1205(1)(a) &amp; (3), 40 CFR 60.4230</b>
EU-29-EMERGEN-02	165 kW <sup>2</sup>	<b>R 336.1205(1)(a) &amp; (3), 40 CFR 60.4230</b>
EU-138-EMERGEN-01	1,035 bph <sup>2</sup>	<b>40 CFR 60.4230</b>

- 2. The permittee shall equip and maintain each unit in FG-NSPS-JJJJ with non-resettable hour meters to track the operating hours.<sup>2</sup> **(R 336.1205(1)(a) and (3), R 336.1225, 40 CFR 60.4237)**
- 3. The permittee shall not install an engine with a maximum power greater than 19 KW (25 hp) that does not meet the applicable requirements in 40 CFR 60.4233. **(40 CFR 60.4236(c))**
- 4. If an engine in FG-NSPS-JJJJ is modified or reconstructed the permittee shall comply with the applicable requirements in 40 CFR 60.4233(f) for that engine. **(40 CFR 60.4233(f))**

**V. TESTING/SAMPLING**

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

- 1. Upon request of the AQD District Supervisor, the permittee shall verify NOx, CO, and VOC emission rates from each unit in FG-NSPS-JJJJ, by testing at owner’s expense, in accordance with Department requirements. If testing is to be performed, the permittee must submit a complete stack-testing plan to the AQD. No less than 30 days prior to testing, the permittee must submit a complete stack-testing plan to the AQD. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test.<sup>2</sup> **(R 336.1205, R 336.2001, R 336.2003, R 336.2004, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
- 2. The permittee shall conduct an initial performance test for each unit in FG-NSPS-JJJJ within one year after startup of the engine to demonstrate compliance with the emission limits in 40 CFR 60.4233(e), unless the engines have been certified by the manufacturer as required by 40 CFR Part 60, Subpart JJJJ and the permittee maintains the engine as required by 40 CFR 60.4243(b)(1). If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4244. No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test.<sup>2</sup> **(40 CFR 60.4243, 40 CFR 60.4244, 40 CFR Part 60, Subpart JJJJ)**
- 3. If the permittee purchases a non-certified engine that is less than or equal to 500 HP or a certified engine that is not operated and maintained according to the manufacturer’s written emissions-related instructions, the permittee shall perform an initial performance test, but the permittee is not required to conduct subsequent performance testing unless the unit is rebuilt or undergoes major repair or maintenance. A rebuilt unit means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a). **(40 CFR 60.4243(f))**
- 4. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 7 days of the time and place before performance tests are conducted. **(R 336.1213(3), R 336.2001(4))**

## **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 complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.<sup>2</sup> **(R 336.1205(1)(a) & (3), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
2. The permittee shall keep, in a satisfactory manner, records of testing required in SC V.2, V.3 or manufacturer's certification and maintenance records documenting that each unit in FG-NSPS-JJJJ meets the applicable emission limitations contained in the federal Standards of Performance for New Stationary Sources 40 CFR Part 60, Subpart JJJJ. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> **(40 CFR 60.4245)**
3. The permittee shall monitor and record the total hours of operation and the hours of operation during non-emergencies for each unit of FG-NSPS-JJJJ, on a monthly and 12-month rolling time period basis, in a manner acceptable to the AQD District Supervisor. The permittee shall document how many hours are spent for emergency operation of each unit of FG-NSPS-JJJJ, including what classified the operation as emergency and how many hours are spent for non-emergency operation.<sup>2</sup> **(R 336.1205(1)(a) & (3), 40 CFR 60.4243)**
4. The permittee shall keep records of the following information for each unit in FG-NSPS-JJJJ.<sup>2</sup> **(40 CFR 60.4243(a)(1), 40 CFR 60.4245(a), 40 CFR 60.4245(b)(2))**
  - a. All notifications submitted to comply with 40 CFR Part 60, Subpart JJJJ and all documentation supporting any notification.
  - b. Maintenance conducted on each unit in FG-NSPS-JJJJ. The records shall adequately demonstrate compliance with either SC III.4 or III.5 above.
  - c. If each unit in FG-NSPS-JJJJ is a certified engine, documentation from the manufacturer that each unit in FG-NSPS-JJJJ is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable.
  - d. If a unit(s) in FG-NSPS-JJJJ is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR 60.4243(a)(2), documentation that each unit in FG-NSPS-JJJJ meets the emission standards.
5. The permittee shall keep records of the hours of operation of each unit in FG-NSPS-JJJJ sufficient to demonstrate compliance with 40 CFR 60.4243(d) and 60.4245(b). **(40 CFR 60.4243(d), 40 CFR 60.4245(b))**
6. For units in FG-NSPS-JJJJ that are greater than or equal to 500 HP manufactured on or after July 1, 2010, that do not meet the standards applicable to non-emergency engines, the permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For units in FG-NSPS-JJJJ that are greater than or equal to 130 HP and less than 500 HP manufactured on or after July 1, 2011, that do not meet the standards applicable to non-emergency engines, the permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For units in FG-NSPS-JJJJ that are greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, that do not meet the standards applicable to non-emergency engines, the permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. **(40 CFR 60.4245(b))**

## **VII. REPORTING**

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

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee must submit an initial notification as required in 40 CFR 60.7(a)(1), for each unit in FG-NSPS-JJJJ that is greater than or equal to 500 hp and has not been certified by an engine manufacturer to meet the emission standards in 40 CFR 60.4231. The notification must include the following information:<sup>2</sup> **(40 FR 60.4245(c))**
  - a. Name and address of the owner or operator;
  - b. The address of the effected source;
  - c. Each unit in FG-NSPS-JJJJ information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
  - d. Each unit in FG-NSPS-JJJJ emission control equipment; and
  - e. Fuel used for each unit in FG-NSPS-JJJJ.
5. The permittee shall submit any performance test 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))**

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 Diameter/ Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SV-59-EMERGEN-01	6 <sup>2</sup>	8 <sup>2</sup>	<b>R336.1225, R336.2803, R336.2804, 40 CFR 52.21 (c) &amp; (d)</b>
2. SV-29-EMERGEN-02	3 <sup>2</sup>	5.8 <sup>2</sup>	<b>R336.1225, R336.2803, R336.2804, 40 CFR 52.21 (c) &amp; (d)</b>
3. SV-138-EMERGEN-1a	8.25 <sup>2</sup>	11.8 <sup>2</sup>	<b>R336.1225, R336.2803, R336.2804, 40 CFR 52.21 (c) &amp; (d)</b>
4. SV-138-EMERGEN-1b	8.25 <sup>2</sup>	11.8 <sup>2</sup>	<b>R336.1225, R336.2803, R336.2804, 40 CFR 52.21 (c) &amp; (d)</b>

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with the provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and JJJJ, as they apply to each unit in FG-NSPS-JJJJ.<sup>2</sup> **(40 CFR Part 60, Subparts A and JJJJ)**
2. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subparts A and ZZZZ, as they apply to each unit in FG-NSPS-JJJJ.<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).

**FG4JEXEMPTENG  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Emergency generators fired by natural gas, manufactured/installed on or after 2010. These engines were exempt from NSR permitting.

**Emission Units:** EU-001-EMERGEN-01, EU-174-EMERGEN-01, EU-175-EMERGEN-01

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	2.0 g/hp-hr	Hourly	EU-001-EMERGEN-01 EU-174-EMERGEN-01 EU-175-EMERGEN-01 (each unit individually)	SC V.1 SC V.2 SC VI.2	<b>40 CFR 60.4233(e)</b>
2. CO	4.0 g/hp-hr	Hourly	EU-001-EMERGEN-01 EU-174-EMERGEN-01 EU-175-EMERGEN-01 (each unit individually)	SC V.1 SC V.2 SC VI.2	<b>40 CFR 60.4233(e)</b>
3. VOC	1.0 g/hp-hr	Hourly	EU-001-EMERGEN-01 EU-174-EMERGEN-01 EU-175-EMERGEN-01 (each unit individually)	SC V.1 SC V.2 SC VI.2	<b>40 CFR 60.4233(e)</b>

4. If the engine is a non-certified engine, greater than or equal to 130 HP, the permittee may choose to comply with the following emission standards for that engine: **(Table 1 of 40 CFR Part 60, Subpart JJJJ)**
  - a. 160 ppmvd NOx at 15% oxygen and
  - b. 540 ppmvd CO at 15% oxygen and
  - c. 86 ppmvd VOC at 15% oxygen (not to include formaldehyde).

**II. MATERIAL LIMIT(S)**

1. The permittee shall burn only natural gas in FG4JEXEMPTENG. **(40 CFR 60.4235)**

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

1. In order to be considered emergency generators, the permittee must operate FG4JEXEMPTENG according to the requirements below. Any operation other than this is prohibited. If not operated accordingly, then the engine must meet all requirements in 40 CFR Part 60, Subpart JJJJ for non-emergency engines. **(40 CFR 60.4243(d))**
  - a. There is no time limit on the use of the emergency engine in emergency situations.
  - b. The permittee may operate each FG4JEXEMPTENG for any combination of the purposes specified in SC III.1.b.i for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by SC III.1.c counts as part of the 100 hours per calendar year.



and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

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

1. The permittee shall equip and maintain each unit in FG4JEXEMPTENG with non-resettable hour meters to track the operating hours. **(40 CFR 60.4237)**
2. The permittee shall not install an engine with a maximum power greater than 19 KW (25 hp) that does not meet the applicable requirements in 40 CFR 60.4233. **(40 CFR 60.4236(c))**
3. If an engine in FG4JEXEMPTENG is modified or reconstructed the permittee shall comply with the applicable requirements in 40 CFR 60.4233(f) for that engine. **(40 CFR 60.4233(f))**

#### **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 conduct an initial performance test for each unit in FG4JEXEMPTENG within one year after startup of the engine to demonstrate compliance with the emission limits in 40 CFR 60.4233(e), unless the engines have been certified by the manufacturer as required by 40 CFR Part 60, Subpart JJJJ and the permittee maintains the engine as required by 40 CFR 60.4243(b)(1). If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4244. The hourly emission rates shall be determined by the average of the acceptable test runs. No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. The final plan must be approved by the AQD prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test. **(R 336.2003, 40 CFR 60.4243, 40 CFR 60.4244, 40 CFR Part 60, Subpart JJJJ)**
2. If the permittee purchases a non-certified engine that is less than or equal to 500 HP or a certified engine that is not operated and maintained according to the manufacturer's written emissions-related instructions, the permittee shall perform an initial performance test, but the permittee is not required to conduct subsequent performance testing unless the unit is rebuilt or undergoes major repair or maintenance. A rebuilt unit means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a). **(40 CFR 60.4243(f))**
3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 7 days of the time and place before performance tests are conducted. **(R 336.1213(3), R 336.2001(4))**

#### **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, records of testing required in SC V.1, V.2 or manufacturer's certification and maintenance records documenting that each unit in FG4JEXEMPTENG meets the applicable emission limitations contained in the federal Standards of Performance for New Stationary Sources 40 CFR Part 60, Subpart JJJJ. The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4245)**
2. The permittee shall monitor and record the total hours of operation and the hours of operation during non-emergencies for each unit of FG4JEXEMPTENG, on a monthly and 12-month rolling time period basis, in a manner acceptable to the AQD District Supervisor. The permittee shall document how many hours are spent for emergency operation of each unit of FG4JEXEMPTENG including what classified the operation as emergency and how many hours are spent for non-emergency operation. **(40 CFR 60.4243)**
3. The permittee shall keep records of the following information for each unit in FG4JEXEMPTENG: **(40 CFR 60.4243(a)(1), 40 CFR 60.4245(a), 40 CFR 60.4245(b)(2))**
  - a. All notifications submitted to comply with 40 CFR Part 60, Subpart JJJJ and all documentation supporting any notification.

- b. Maintenance conducted on each unit in FG4JEXEMPTENG. The records shall adequately demonstrate compliance with either SC III.3 or III.4 above.
  - c. If each unit in FG4JEXEMPTENG is a certified engine, documentation from the manufacturer that each unit in FG4JEXEMPTENG is certified to meet the emission standards and information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable.
  - d. If a unit(s) in FG4JEXEMPTENG is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR 60.4243(a)(2), documentation that each unit in FG-NSPS-JJJJ meets the emission standards.
4. The permittee shall keep records of the hours of operation of each unit in FG4JEXEMPTENG sufficient to demonstrate compliance with 40 CFR 60.4243(d) and 60.4245(b). **(40 CFR 60.4243(d), 40 CFR 60.4245(b))**
5. For units in FG4JEXEMPTENG that are greater than or equal to 500 HP manufactured on or after July 1, 2010, that do not meet the standards applicable to non-emergency engines, the permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For units in FG4JEXEMPTENG that are greater than or equal to 130 HP and less than 500 HP manufactured on or after July 1, 2011, that do not meet the standards applicable to non-emergency engines, the permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For units in FG4JEXEMPTENG that are greater than 25 HP and less than 130 HP manufactured on or after July 1, 2008, that do not meet the standards applicable to non-emergency engines, the permittee must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation; including what classified the operation as emergency and how many hours are spent for non-emergency operation. **(40 CFR 60.4245(b))**

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee must submit an initial notification as required in 40 CFR 60.7(a)(1), for each unit in FG4JEXEMPTENG that is greater than or equal to 500 hp and has not been certified by an engine manufacturer to meet the emission standards in 40 CFR 60.4231. The notification must include the following information: **(40 FR 60.4245(c))**
- a. Name and address of the owner or operator;
  - b. The address of the effected source;
  - c. Each unit in FG4JEXEMPTENG information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
  - d. Each unit in FG4JEXEMPTENG emission control equipment; and
  - e. Fuel used for each unit in FG4JEXEMPTENG.
5. The permittee shall submit any performance test 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))**

**See Appendix 8**

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

NA

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with the provisions of the federal Standards of Performance for Stationary Spark Ignition Internal Combustion Engines of New Stationary Sources as specified in 40 CFR Part 60, Subparts A and JJJJ, as they apply to each unit in FG4JEXEMPTENG. **(40 CFR Part 60, Subparts A and JJJJ)**
2. The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines as specified in 40 CFR Part 63, Subparts A and ZZZZ, as they apply to each unit in FG4JEXEMPTENG. **(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).

**FG-EMGEN-GAS  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Five emergency generators fired by propane/natural gas, manufactured/installed on or prior to 2004.

**Emission Units:** EU-56-EMERGEN-01, EU-71-EMERGEN-01, EU-72-EMERGEN-01, EU-73-EMERGEN-01, EU-145-EMERGEN-1

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NO <sub>x</sub>	2.53 pph <sup>2</sup>	Hourly	EU-56-EMERGEN-01, EU-71-EMERGEN-01, EU-72-EMERGEN-01 (each unit individually)	SC III.2 SC V.1	R 336.1205(3) R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
2. NO <sub>x</sub>	3.28 pph <sup>2</sup>	Hourly	EU-73-EMERGEN-01	SC III.2 SC V.1	R 336.1205(3) R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
3. NO <sub>x</sub>	3.50 pph <sup>2</sup>	Hourly	EU-145-EMERGEN-1	SC III.2 SC V.1	R 336.1205(3) R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

**II. MATERIAL LIMIT(S)**

1. The permittee shall burn only propane/natural gas in FG-EMGEN-GAS.<sup>2</sup> (R 336.1205(3), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))

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

1. The permittee shall not operate each unit in FG-EMGEN-GAS for more than 500 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month.<sup>2</sup> (R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))
2. The permittee shall install, maintain, and operate each unit in FG-EMGEN-GAS according to the manufacturer's written instructions, or procedures developed by the owner/operator and approved by the engine manufacturer, over the entire life of the engine.<sup>2</sup> (R 336.1205(1)(a) & (3), R 336.1225, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

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

1. The nameplate capacity (total capacity) provided in the table below shall not be exceeded for each unit, as certified by the equipment manufacturer.

Equipment	Total Capacity – each unit	Underlying Applicable Requirements
EU-56-EMERGEN-01 EU-71-EMERGEN-01 EU-72-EMERGEN-01	60 kW <sup>2</sup>	R 336.1205(1)(a) & (3)

Equipment	Total Capacity – each unit	Underlying Applicable Requirements
EU-73-EMERGEN-01	100 kW <sup>2</sup>	<b>R 336.1205(1)(a) &amp; (3)</b>
EU-145-EMERGEN-1	500 kW <sup>2</sup>	<b>R 336.1205(1)(a) &amp; (3)</b>

2. The permittee shall equip and maintain each unit in FG-EMGEN-GAS with non-resettable hours meters to track the operating hours.<sup>2</sup> **(R 336.1205(1)(a) & (3))**

**V. TESTING/SAMPLING**

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

1. Upon request of the AQD District Supervisor, the permittee shall verify NOx emission rates from FG-EMGEN-GAS by testing at the owner’s expense, in accordance with the Department requirements. The hourly emission rate during testing shall be determined by the average of the acceptable test runs performed. Testing shall be performed using an approved USEPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved USEPA Method, may be specified in an AQD-approved Test Protocol. 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. **(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 7 days of the time and place before performance tests are conducted. **(R 336.1213(3), R 336.2001(4))**

**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 complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.<sup>2</sup> **(R 336.1205(1)(a) and (3), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
2. The permittee shall monitor and record the hours of operation of each unit in FG-EMGEN-GAS, on a monthly and 12-month rolling time period basis, in a manner that is acceptable to the AQD District Supervisor.<sup>2</sup> **(R 336.1205(1)(a) & (3), R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

**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 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))**

**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 Diameter/ Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SV-56-EMERGEN-01	3.5 <sup>2</sup>	4.9 <sup>2</sup>	<b>R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) &amp; (d)</b>
2. SV-71-EMERGEN-01 3. SV-72-EMERGEN-01 4. SV-73-EMERGEN-01	3.5 <sup>2</sup>	5.58 <sup>2</sup>	<b>R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) &amp; (d)</b>
5. SV-145-EMERGEN-1 6. SV-145-EMERGEN-2	4 <sup>2</sup>	10.58 <sup>2</sup>	<b>R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) &amp; (d)</b>

**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).

**FG-EMGEN-OIL  
FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Eight emergency generators fired by diesel fuel/No. 2 fuel oil, manufactured/installed on or prior to 2003.

**Emission Units:** EU-13-EMERGEN-01, EU-15-EMERGEN-01, EU-28-EMERGEN-01, EU-29-EMERGEN-01, EU-46-EMERGEN-01, EU-61-EMERGEN-01, EU-75-EMERGEN-01, EU-107-EMERGEN-1

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. SO <sub>2</sub>	0.12 pph <sup>2</sup>	Hourly	EU-13-EMERGEN-01	SC V.1 SC V.2	R 336.1205(3), R 336.1401, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
2. SO <sub>2</sub>	0.13 pph <sup>2</sup>	Hourly	EU-15-EMERGEN-01	SC V.1 SC V.2	R 336.1205(3), R 336.1401, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
3. SO <sub>2</sub>	0.14 pph <sup>2</sup>	Hourly	EU-29-EMERGEN-01 EU-107-EMERGEN-1 of FG-EMGEN-OIL (each unit individually)	SC V.1 SC V.2	R 336.1205(3), R 336.1401, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
4. SO <sub>2</sub>	0.068 pph <sup>2</sup>	Hourly	EU-28-EMERGEN-01	SC V.1 SC V.2	R 336.1205(3), R 336.1401, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
5. SO <sub>2</sub>	0.041 pph <sup>2</sup>	Hourly	EU-46-EMERGEN-01 EU-75-EMERGEN-01 of FG-EMGEN-OIL (each unit individually)	SC V.1 SC V.2	R 336.1205(3), R 336.1401, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
6. SO <sub>2</sub>	0.063 pph <sup>2</sup>	Hourly	EU-61-EMERGEN-01	SC V.1 SC V.2	R 336.1205(3), R 336.1401, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
7. NO <sub>x</sub>	4.09 pph <sup>2</sup>	Hourly	EU-13-EMERGEN-01	SC III.2 SC V.2	R 336.1205(3), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
8. NO <sub>x</sub>	2.56 pph <sup>2</sup>	Hourly	EU-15-EMERGEN-01	SC III.2 SC V.2	R 336.1205(3), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
9. NO <sub>x</sub>	2.80 pph <sup>2</sup>	Hourly	EU-28-EMERGEN-01	SC III.2 SC V.2	R 336.1205(3), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
10. NO <sub>x</sub>	3.52 pph <sup>2</sup>	Hourly	EU-29-EMERGEN-01	SC III.2 SC V.2	R 336.1205(3), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
11. NO <sub>x</sub>	4.87 pph <sup>2</sup>	Hourly	EU-61-EMERGEN-01	SC III.2 SC V.2	R 336.1205(3), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
12. NO <sub>x</sub>	2.06 pph <sup>2</sup>	Hourly	EU-46-EMERGEN-01 EU-75-EMERGEN-01 of FG-EMGEN-OIL (each unit individually)	SC III.2 SC V.2	R 336.1205(3), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)
13. NO <sub>x</sub>	4.66 pph <sup>2</sup>	Hourly	EU-107-EMERGEN-1	SC III.2 SC V.2	R 336.1205(3), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d)

**II. MATERIAL LIMIT(S)**

1. The permittee shall not burn diesel fuel/No. 2 fuel oil with sulfur content greater than 0.05% in FG-EMEGEN-OIL.<sup>2</sup> (R 336.1205(3), R 336.1401, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))
2. The permittee shall burn only diesel fuel/No. 2 fuel oil in FG-EMGEN-OIL.<sup>2</sup> (R 336.1205(3), R 336.1401, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))

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

1. The permittee shall not operate each unit in FG-EMGEN-OIL for more than 500 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month.<sup>2</sup> (R 336.1205(1)(a) & (3), R 336.1225, R 336.1702(a), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))
2. The permittee shall install, maintain, and operate each unit in FG-EMGEN-OIL according to the manufacturer's written instructions, or procedures developed by the owner/operator and approved by the engine manufacturer, over the entire life of the engine.<sup>2</sup> (R 336.1205(1)(a) & (3), R 336.1225, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d))

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

1. The nameplate capacity (total capacity) provided in the table below shall not be exceeded for each unit, as certified by the equipment manufacturer.

Equipment	Total Capacity – each unit	Underlying Applicable Requirements
EU-46-EMERGEN-01 EU-75-EMERGEN-01	60 kW <sup>2</sup>	R 336.1205(1)(a) & (3)
EU-28-EMERGEN-01 EU-61-EMERGEN-01	100 kW <sup>2</sup>	R 336.1205(1)(a) & (3)
EU-13-EMERGEN-01 EU-15-EMERGEN-01	200 kW <sup>2</sup>	R 336.1205(1)(a) & (3)
EU-107-EMERGEN-1	230 kW <sup>2</sup>	R 336.1205(1)(a) & (3)
EU-29-EMERGEN-01	300 kW <sup>2</sup>	R 336.1205(1)(a) & (3)

2. The permittee shall equip and maintain each unit in FG-EMGEN-OIL with non-resettable hours meters to track the operating hours.<sup>2</sup> (R 336.1205(1)(a) & (3))

## **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 collect and analyze a No. 2 fuel oil sample once every 12 months or each delivery of fuel oil, whichever is less frequent by testing at owner's expense, in accordance with Department requirements. The permittee shall use an approved EPA test method or equivalent as approved by the Air Quality Division. The permittee shall determine the fuel density, BTU per gallon or BTU/pound, and percent sulfur content of the No. 2 fuel oil. The permittee shall submit a complete report of the test results to the AQD District Supervisor within 60 days following the last date of the analysis.<sup>2</sup> **(R 336.1205(3), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
2. Upon request of the AQD District Supervisor, the permittee shall verify NO<sub>x</sub> and SO<sub>2</sub> emission rates from each unit in FG-EMGEN-OIL by testing at the owner's expense, in accordance with the Department requirements. The hourly emission rate during testing shall be determined by the average of the acceptable test runs performed. Testing shall be performed using an approved USEPA Method listed in 40 CFR Part 60, Appendix A. An alternate method, or a modification to the approved USEPA Method, may be specified in an AQD-approved Test Protocol. 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. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 7 days of the time and place before performance tests are conducted. **(R 336.1213(3), R 336.2001(4))**

## **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 complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.<sup>2</sup> **(R 336.1205(1)(a) & (3), R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
2. The permittee shall keep a complete copy of the diesel fuel/No. 2 fuel oil analysis including the sulfur content in percent, as supplied by the vendor, for each shipment of diesel fuel/No. 2 fuel oil received. 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(3), R 336.1401, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**
3. The permittee shall monitor and record the hours of operation of each unit in FG-EMGEN-OIL, on a monthly and 12-month rolling time period basis, in a manner that is acceptable to the AQD District Supervisor.<sup>2</sup> **(R 336.1205(1)(a) & (3), R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

## **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 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))**

See Appendix 8

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

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

Stack & Vent ID	Maximum Exhaust Diameter/ Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-13-EMERGEN-01	5 <sup>2</sup>	7 <sup>2</sup>	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
2. SV-15-EMERGEN-01	6 <sup>2</sup>	9.16 <sup>2</sup>	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
3. SV-28-EMERGEN-01	6 <sup>2</sup>	8.3 <sup>2</sup>	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
4. SV-29-EMERGEN-01	6 <sup>2</sup>	12.66 <sup>2</sup>	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
5. SV-46-EMERGEN-01	3.5 <sup>2</sup>	7.9 <sup>2</sup>	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
6. SV-61-EMERGEN-01	5 <sup>2</sup>	1 <sup>2</sup>	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
7. SV-75-EMERGEN-01	3.5 <sup>2</sup>	7.1 <sup>2</sup>	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (d)
8. SV-107-EMERGEN-1	5 <sup>2</sup>	7.4 <sup>2</sup>	R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21(c) & (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).

## **FGPARTSWASH FLEXIBLE GROUP CONDITIONS**

### **DESCRIPTION**

Any cold cleaner that is grandfathered or exempt from Rule 201 pursuant to Rule 278, Rule 278a and Rule 281(2)(h) or Rule 285(2)(r)(iv). Existing cold cleaners were placed into operation prior to July 1, 1979. New cold cleaners were placed into operation on or after July 1, 1979.

**Emission Unit:** EUPARTSWASH

### **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

## FGRULE290 FLEXIBLE GROUP CONDITIONS

### DESCRIPTION

Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 290. Emission units installed/modified before December 20, 2016, may show compliance with Rule 290 in effect at the time of installation/modification.

**Emission Units installed on or after December 20, 2016:** NA

**Emission Units installed prior to December 20, 2016:** EU-90-PRESSR-2, EU-90-PRESSF-2

### POLLUTION CONTROL EQUIPMENT

NA

### I. EMISSION LIMIT(S)

1. Each emission unit that emits only noncarcinogenic volatile organic compounds or noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, if the total uncontrolled or controlled emissions of air contaminants are not more than 1,000 or 500 pounds per month, respectively. **(R 336.1290(2)(a)(i))**
2. Any emission unit for which CO<sub>2</sub> equivalent emissions are not more than 6,250 tons per month and for which the total uncontrolled or controlled emissions of all other air contaminants are not more than 1,000 or 500 pounds per month, respectively, and all the following criteria listed below are met: **(R 336.1290(2)(a)(ii))**
  - a. For toxic air contaminants, excluding noncarcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with initial threshold screening levels greater than or equal to 0.04 micrograms per cubic meter and less than 2.0 micrograms per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(2)(a)(ii)(A))**
  - b. For toxic air contaminants with initial risk screening levels greater than or equal to 0.04 microgram per cubic meter, the uncontrolled or controlled emissions shall not exceed 20 or 10 pounds per month, respectively. **(R 336.1290(2)(a)(ii)(B))**
  - c. The emission unit shall not emit any toxic air contaminants, excluding non-carcinogenic volatile organic compounds and noncarcinogenic materials which are listed in Rule 122(f) as not contributing appreciably to the formation of ozone, with an initial threshold screening level or initial risk screening level less than 0.04 microgram per cubic meter. **(R 336.1290(2)(a)(ii)(C))**
  - d. For total mercury, the uncontrolled or controlled emissions shall not exceed 0.01 pounds per month from emission units installed on or after December 20, 2016. **(R 336.1290(2)(a)(ii)(D))**
  - e. For lead, the uncontrolled or controlled emissions shall not exceed 16.7 pounds per month from emission units installed on or after December 20, 2016. **(R 336.1290(2)(a)(ii)(E))**
3. Any emission unit that emits only particulate air contaminants without initial risk screening levels and other air contaminants that are exempted under Rule 290(2)(a)(i) or Rule 290(2)(a)(ii), if all the following provisions are met: **(R 336.1290(2)(a)(iii))**
  - a. The particulate emissions are controlled by an appropriately designed and operated fabric filter collector or an equivalent control system which is designed to control particulate matter to a concentration of less than or equal to 0.01 pound of particulate per 1,000 pounds of exhaust gases and which does not have exhaust gas flow rate more than 30,000 actual cubic feet per minute. **(R 336.1290(2)(a)(iii)(A))**

- b. The visible emissions from the emission unit are not more than 5% opacity in accordance with the methods contained in Rule 303. **(R 336.1290(2)(a)(iii)(B))**
- c. The initial threshold screening level for each particulate toxic air contaminant, excluding nuisance particulate, is more than 2.0 micrograms per cubic meter. **(R 336.1290(2)(a)(iii)(C))**

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

NA

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

- 1. The provisions of Rule 290 apply to each emission unit that is operating pursuant to Rule 290. **(R 336.1290)**
- 2. The following requirements apply to emission units installed on or after December 20, 2016, utilizing control equipment:
  - a. An air cleaning device for volatile organic compounds shall be installed, maintained, and operated in accordance with the manufacturer's specifications. Examples include the following: **(R 336.1290(2)(b)(i), R 336.1910)**
    - i. Oxidizers and condensers equipped with a continuously displayed temperature indication device.
    - ii. Wet scrubbers equipped with a liquid flow rate monitor.
    - iii. Dual stage carbon absorption where the first canister is monitored for breakthrough and replaced if breakthrough is detected.
  - b. An air cleaning device for particulate matter shall be installed, maintained, and operated in accordance with the manufacturer's specifications or the permittee shall develop a plan that provides to the extent practicable for the maintenance and operation of the equipment in the manner consistent with good air pollution control practices for minimizing emissions. It shall also be equipped to monitor appropriate indicators of performance, for example, static pressure drop, water pressure, and water flow rate. **(R 336.1290(2)(b)(ii), R 336.1910)**

## **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 maintain records of the following information for each emission unit for each calendar month using the methods outlined in the EGLE, AQD Rule 290; Permit to Install Exemption Record form (EQP 3558) or in a format that is acceptable to the AQD District Supervisor. **(R 336.1213(3))**
  - a. Records identifying each air contaminant that is emitted. **(R 336.1213(3))**
  - b. Records identifying if each air contaminant is controlled or uncontrolled. **(R 336.1213(3))**
  - c. Records identifying if each air contaminant is either carcinogenic or non-carcinogenic. **(R 336.1213(3))**
  - d. Records identifying the ITSL and IRSL, if established, of each air contaminant that is being emitted under the provisions of Rules 290(2)(a)(ii) and (iii). **(R 336.1213(3))**

- e. Records of material use and calculations identifying the quality, nature, and quantity of the air contaminant emissions in sufficient detail to demonstrate that the actual emissions of the emission unit meet the emission limits outlined in this table and Rule 290. Volatile organic compound emissions from units installed on or after December 20, 2016, shall be calculated using mass balance, generally accepted engineering calculations, or another method acceptable to the AQD District Supervisor. **(R 336.1213(3), R 336.1290(2)(d))**
  - f. Records are maintained on file for the most recent 2-year period and are made available to the department upon request. **(R 336.1213(3), R 336.1290(2)(e))**
2. The permittee shall maintain an inventory of each emission unit that is exempt pursuant to Rule 290. This inventory shall include the following information. **(R 336.1213(3))**
    - a. The permittee shall maintain a written description of each emission unit as it is maintained and operated throughout the life of the emission unit. **(R 336.1290(2)(c), R 336.1213(3))**
    - b. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(2)(a)(iii), the permittee shall maintain a written description of the control device, including the designed control efficiency and the designed exhaust gas flow rate. **(R 336.1213(3))**
  3. For each emission unit that emits noncarcinogenic particulate air contaminants pursuant to Rule 290(2)(a)(iii), the permittee shall perform a monthly visible emission observation of each stack or vent during routine operating conditions. This observation need not be performed using Method 9. The permittee shall keep a written record of the results of each observation. **(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)**

NA

**IX. OTHER REQUIREMENT(S)**

NA

## FGENGINES FLEXIBLE GROUP CONDITIONS

### DESCRIPTION

Two (2) 3,500 HP (2.5 MW) natural gas-fired RICE that provide electricity to the WMU Kalamazoo Campus.

**Emission Units:** EU-ENGINE9, EU-ENGINE10

### POLLUTION CONTROL EQUIPMENT

Each engine is equipped with an oxidation catalyst.

### I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NO <sub>x</sub>	1.0 g/hp-hr or 82 ppmvd at 15% O <sub>2</sub> <sup>a, 2</sup>	Hourly	Each engine in FGENGINES	SC V.1	<b>40 CFR 60.4233(e), Table 1 to 40 CFR Part 60, Subpart JJJJ</b>
2. NO <sub>x</sub>	35.9 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	FGENGINES	SC VI.2 SC VI.3	<b>R 336.1205(1)(a) &amp; (3)</b>
3. CO	2.0 g/hp-hr or 270 ppmvd at 15% O <sub>2</sub> <sup>a, 2</sup>	Hourly	Each engine in FGENGINES	SC V.1	<b>40 CFR 60.4233(e), Table 1 to 40 CFR Part 60, Subpart JJJJ</b>
4. CO	72 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	FGENGINES	SC VI.2 SC VI.3	<b>R 336.1205(1)(a) &amp; (3)</b>
5. VOC	0.7 g/hp-hr or 60 ppmvd at 15% O <sub>2</sub> <sup>a, b, 2</sup>	Hourly	Each engine in FGENGINES	SC V.1	<b>40 CFR 60.4233(e), Table 1 to 40 CFR Part 60, Subpart JJJJ</b>
6. VOC	6.4 pph <sup>c, 2</sup>	Hourly	Each engine in FGENGINES	SC V.2	<b>R 336.1205(1)(a) &amp; (3), R 336.1702(a)</b>
7. VOC	30 tpy <sup>c, 2</sup>	12-month rolling time period as determined at the end of each calendar month	FGENGINES	SC VI.2 SC VI.3	<b>R 336.1205(1)(a) &amp; (3), R 336.1702(a)</b>

<sup>a</sup> Owners and operators may choose to comply with the emission standards in units of either g/hp-hr or ppmvd at 15% O<sub>2</sub>.

<sup>b</sup> For the purposes of 40 CFR Part 60, Subpart JJJJ, emissions of formaldehyde should not be included when calculating volatile organic compounds.

<sup>c</sup> This emission limit is for VOCs and the compliance demonstration must include formaldehyde.

### II. MATERIAL LIMIT(S)

1. The permittee shall burn only natural gas in FGENGINES.<sup>2</sup> **(R 336.1205(1)(a) & (3))**

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

1. The permittee shall operate and maintain each unit in FGENGINES such that it meets the emission limits in SC I.1, I.3, and I.5 over the entire life of the engine.<sup>2</sup> **(40 CFR 60.4234)**
2. The permittee shall implement and maintain a malfunction abatement plan (MAP) as described in Rule 911(2) for FGENGINES. The MAP shall, at a minimum, specify the following:

- a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
- b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
- c. 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 at any time the MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 90 days after such an event occurs. The permittee shall also amend the MAP within 90 days if new equipment is installed or upon request from the District Supervisor. The permittee shall submit the MAP and any amendments to the MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the MAP or amended MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.<sup>2</sup> **(R 336.1911)**

3. The permittee shall keep a maintenance plan for FGENGINES and shall, to the extent practicable, maintain and operate each unit in a manner consistent with good air pollution control practice for minimizing emissions.<sup>2</sup> **(40 CFR 60.4243(b)(2)(ii))**
4. The permittee shall not operate FGENGINES for more than 9,300 hours per 12-month rolling time period as determined at the end of each calendar month.<sup>2</sup> **(R 336.1205(1)(a) & (3))**

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

1. The nameplate capacity of each unit in FGENGINES shall not exceed 3,500 HP.<sup>2</sup> **(R 336.1205(1)(a) & (3))**
2. The permittee shall equip and maintain each unit in FGENGINES with a non-resettable hours meter to continuously monitor the operating hours of operation.<sup>2</sup> **(R 336.1205(1)(a) & (3))**
3. The permittee shall not operate each unit in FGENGINES unless each respective oxidation catalyst is installed, maintained, and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with an approved MAP for each unit in FGENGINES as required in SC III.2.<sup>2</sup> **(R 336.1205(1)(a) & (3), R 336.1225, R 336.1702, R 336.1910)**

#### **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:
  - a. Conduct an initial performance test within one year after startup of the engine.
  - b. Conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first thereafter to demonstrate compliance, unless an alternative schedule is approved.
  - c. The performance tests shall be conducted according to 40 CFR 60.4244 and Table 2 of 40 CFR Part 60 Subpart JJJJ.

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 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.<sup>2</sup> **(R 336.2001, 40 CFR 60.4243(b)(2)(ii), 40 CFR 60.4244, 40 CFR 60.4245(d), Table 2 of 40 CFR Part 60, Subpart JJJJ)**

2. Within one year of initial startup of FGENGINES, the permittee shall verify VOC pph emission rates from each unit in FGENGINES by testing at owner's expense, in accordance with Department requirements. The permittee shall verify emission rates once every five years thereafter. Upon approval of the AQD District Supervisor, subsequent testing may be conducted upon a representative engine in FGENGINES. However, the permittee shall not test the same representative unit in subsequent tests unless approved or requested by the AQD District Supervisor. Testing shall be performed using an approved EPA Method listed below.

Pollutant	Test Method Reference
VOCs	40 CFR Part 60, Appendix A, 40 CFR Part 63, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. Any test method(s) used must properly account for VOC emissions, which at a minimum, must include formaldehyde. 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.<sup>2</sup> (R 336.1205(1)(a) & (3), R 336.1702(a), R 336.1902, R 336.2001, R 336.2003, R 336.2004)

## **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.<sup>2</sup> (R 336.1205(1)(a) & (3))
2. The permittee shall calculate and record in a satisfactory manner monthly and 12-month rolling time period NO<sub>x</sub>, CO, and VOC mass emission records for FGENGINES, as required by SC I.2, I.4, and I.7. 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) & (3))
3. The permittee shall monitor and record in a satisfactory manner monthly and 12-month rolling time period hours of operation of FGENGINES, as required by SC III.4. 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) & (3))
4. The permittee shall keep, in a satisfactory manner, records of testing required in SC V.1 and maintenance records documenting that each unit in FGENGINES meets the applicable emission limitations contained in the federal Standards of Performance for New Stationary Sources 40 CFR Part 60, Subpart JJJJ. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> (40 CFR 60.4245)
5. The permittee shall keep records of the following information for each unit in FGENGINES:<sup>2</sup> (40 CFR 60.4243(b)(1), 40 CFR 60.4245(a))
  - a. All notifications submitted to comply with 40 CFR Part 60, Subpart JJJJ and all documentation supporting any notification.
  - b. Maintenance conducted on each unit in FGENGINES.
  - c. Documentation that each unit in FGENGINES meets the emission standards in 40 CFR 60.4233(e).

## **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))

- 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))**
- The permittee shall submit any performance test 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))**

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 Diameter/Dimensions (inches)</b>	<b>Minimum Height Above Ground (feet)</b>	<b>Underlying Applicable Requirements</b>
1. SVBOILERS6&10	132 <sup>2</sup>	185 <sup>2</sup>	<b>R 336.1225, 40 CFR 52.219(c) &amp; (d)</b>

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

- The permittee shall comply with the provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and JJJJ, as they apply to each unit in FGENGINES.<sup>2</sup> **(40 CFR Part 60, Subparts A and JJJJ)**
- The permittee shall comply with all provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subparts A and ZZZZ, as they apply to each unit in FGENGINES.<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).

## **E. NON-APPLICABLE REQUIREMENTS**

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

## APPENDICES

### Appendix 1. Acronyms and Abbreviations

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
CEMS	Continuous Emission Monitoring System	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
COM	Continuous Opacity Monitoring	°F	Degrees Fahrenheit
Department/ department	Michigan Department of Environment, Great Lakes, and Energy	gr	Grains
EGLE	Michigan Department of Environment, Great Lakes, and Energy	HAP	Hazardous Air Pollutant
EU	Emission Unit	Hg	Mercury
FG	Flexible Group	hr	Hour
GACS	Gallons of Applied Coating Solids	HP	Horsepower
GC	General Condition	H <sub>2</sub> S	Hydrogen Sulfide
GHGs	Greenhouse Gases	kW	Kilowatt
HVLP	High Volume Low Pressure*	lb	Pound
ID	Identification	m	Meter
IRSL	Initial Risk Screening Level	mg	Milligram
ITSL	Initial Threshold Screening Level	mm	Millimeter
LAER	Lowest Achievable Emission Rate	MM	Million
MACT	Maximum Achievable Control Technology	MW	Megawatts
MAERS	Michigan Air Emissions Reporting System	NMOC	Non-methane Organic Compounds
MAP	Malfunction Abatement Plan	NO <sub>x</sub>	Oxides of Nitrogen
MSDS	Material Safety Data Sheet	ng	Nanogram
NA	Not Applicable	PM	Particulate Matter
NAAQS	National Ambient Air Quality Standards	PM10	Particulate Matter equal to or less than 10 microns in diameter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
NSPS	New Source Performance Standards	pph	Pounds per hour
NSR	New Source Review	ppm	Parts per million
PS	Performance Specification	ppmv	Parts per million by volume
PSD	Prevention of Significant Deterioration	ppmw	Parts per million by weight
PTE	Permanent Total Enclosure	%	Percent
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-K2131-2015. Those ROP revision applications that are being issued concurrently with this ROP renewal are identified by an asterisk (\*). Those revision applications not listed with an asterisk were processed prior to this renewal.

Source-Wide PTI No MI-PTI-K2131-2015b is being reissued as Source-Wide PTI No. MI-PTI-K2131-2021b.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
23-19	NA	Installation of two (2) natural gas-fired RICE to provide electricity to the WMU Kalamazoo Campus.	EU-ENGINE9, EU-ENGINE10, FGENGINES

The following table lists the ROP amendments or modifications issued after the effective date of ROP No. MI-ROP-K2131-2021.

Permit to Install Number	ROP Revision Application Number - Issuance Date	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
39-22	202200122 / August 22, 2022	Incorporate the terms and conditions of PTI No. 39-22, which is for the replacement of the existing engine core of Turbine 8 (EUPBTURBIN-8) with the current version of the same model engine offered by the equipment manufacturer, due to an engine failure at Turbine 8 when a component within the compressor section of the turbine fractured and caused damage throughout the turbine engine, rendering the unit inoperable.	EUPBTURBIN-8, FGPBTUHR-78

Permit to Install Number	ROP Revision Application Number - Issuance Date	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
		The engine core will be about the same capacity of the existing engine core and emissions will be lower due to improved efficiency.	
68-24	202400119 / December 19, 2024	Incorporate PTI No. 68-24, which is to replace the existing engine core of turbine 7 with the current model engine offered by the equipment manufacturer. WMU elected to replace the engine core with the version of the same model of the former engine 7. The core engine is about the same capacity as the former engine core however the emissions are lower due to the better efficiency.	EUPBTURBIN-7, EUPBTURBIN-8, EUPBHRSGEN-7, EUPBHRSGEN-8 FGPBTUHR-78

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

**B. Other Reporting**

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