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

EFFECTIVE DATE: April 21, 2021

**ISSUED TO** 

# **General Motors LLC - Milford Proving Ground**

State Registration Number (SRN): A5262

LOCATED AT

3300 General Motors Road, Milford, Oakland County, Michigan 48380

# RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-A5262-2021

Expiration Date: April 21, 2026

Administratively Complete ROP Renewal Application Due Between October 21, 2024 and October 21, 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-A5262-2021

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

Michigan Department of Environment, Great Lakes, and Energy

Joyce Zhu, Warren District Supervisor

# **TABLE OF CONTENTS**

AUTHORITY AND ENFORCEABILITY	4
A. GENERAL CONDITIONS	5
Permit Enforceability	5
General Provisions.	
Equipment & Design	6
Emission Limits	6
Testing/Sampling	
Monitoring/Recordkeeping	
Certification & Reporting	
Permit Shield	
Revisions	
Reopenings	
Renewals	
Risk Management Plan	
Emission Trading	
Permit to Install (PTI)	
B. SOURCE-WIDE CONDITIONS	
C. EMISSION UNIT SPECIAL CONDITIONS	
EMISSION UNIT SUMMARY TABLE	
EU-BOILER5	
EU-BOILER6	
EU-GEN19	
EU-REMEDIATION	
EU-BURNPAD	
D. FLEXIBLE GROUP SPECIAL CONDITIONS	33
FLEXIBLE GROUP SUMMARY TABLE	
FG-BOILERS	
FG-ENGINEDYNOS	
FG-BACKUPGENS	
FG-OLDDATACTR	
FG-GASTANKS	
FG-RULE 287(2)(c)	
FG-MACT6HFG-RULE290	
FG-ROLE290FG-COLDCLEANERS	
FG-RICEMACT	
FG-SUBPARTIII	
FG-SUBPARTJJJJ	
E. NON-APPLICABLE REQUIREMENTS	
APPENDICES	
Appendix 1. Acronyms and Abbreviations	
Appendix 2. Schedule of Compliance	75

Appendix 3.	Monitoring Requirements	75
	Recordkeeping	
	Testing Procedures	
	Permits to Install	
Appendix 7.	Emission Calculations	76
Appendix 8.	Reporting	77

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

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

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

# **Testing/Sampling**

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

# Monitoring/Recordkeeping

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

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

# Certification & Reporting

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

22. For reports required pursuant to Rule 213(3)(c)(ii), prompt certification of the reports is described in Rule 213(3)(c)(iii) as either of the following: **(R 336.1213(3)(c))** 

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

### **Permit Shield**

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

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

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

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

### Revisions

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

### Reopenings

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

### Renewals

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

# **Stratospheric Ozone Protection**

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

# **Risk Management Plan**

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

# **Emission Trading**

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

# Permit to Install (PTI)

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

### Footnotes:

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

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

# **B. SOURCE-WIDE CONDITIONS**

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

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

# **SOURCE-WIDE CONDITIONS**

The source-wide conditions cover all boilers, heaters, and other combustion equipment including emergency generators. includes all process equipment source-wide including equipment covered by other permits, grand-fathered equipment and exempt equipment.

# **POLLUTION CONTROL EQUIPMENT**

NA

# I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Each Individual HAP	Less than 9.0 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	Source-Wide	SC VI.3	R 336.1205(3)
Aggregate     HAPs	Less than 22.5 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	Source-Wide	SC VI.3	R 336.1205(3)

# II. MATERIAL LIMIT(S)

1. The natural gas usage for Source-Wide equipment shall not exceed 1500 billion BTU per year based on a 12-month rolling time period as determined at the end of each calendar month.<sup>2</sup> (R 336.1205(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))

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 complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the 30th 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(3))
- The permittee shall keep a record of natural gas usage, in standard cubic feet and BTU heat input, on a 12-month rolling time period basis, as determined at the end of each calendar month for Source-Wide equipment.<sup>2</sup> (R 336.1205(3))

- 3. The permittee shall keep the following information on a calendar month basis for Source-Wide equipment:
  - a. Gallons or pounds of each HAP containing material used.
  - b. Where applicable, gallons or pounds of each HAP containing material reclaimed.
  - c. HAP content, in pounds per gallon or pounds per pound, of each HAP containing material used.
  - d. Individual and aggregate HAP emission calculations using a mass balance approach and emission factors as approved by the AQD District Supervisor for determining the monthly emission rate in tons per calendar month.
  - e. Individual and aggregate HAP emission calculations for Source-Wide equipment determining the annual emission rate of each in tons per 12-month rolling time period as determined at the end of each calendar month. For the first month following permit issuance, the calculations shall include the summation of emissions from the 11-month period immediately preceding the issuance date. For each month thereafter, calculations shall include the summation of emissions for the appropriate number of months prior to permit issuance plus the months following permit issuance for a total of 12 consecutive months.

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 336.1205(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

#### Footnotes:

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

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

# C. EMISSION UNIT 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
EU-GEN19	Cummins, propane-fired emergency engine with a 63 HP rating and located at Bldg. 43. Exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(2)(g). New engine as defined by ZZZZ (construction commenced after June 12, 2006) located at an area source of HAP emissions but manufactured before July 1, 2008 (manufactured in April of 2007), with a maximum engine power less than 500 HP. As of the issuance of this ROP, this engine does not appear to have regulatory requirements associated with 40 CFR Part 63, Subpart ZZZZ or 40 CFR Part 60, Subpart JJJJ.	2008	NA
EU-REMEDIATION	Soil vapor extraction wells, vacuum blower(s), and an air flow distribution system equipped with a catalytic oxidizer.	09-24-2014	NA
EU-BURNPAD	Area used for thermal testing.	August 2018	NA
EU-BOILER3	Natural gas-fired, 70 million BTU per hour (50,000 pounds of steam per hour) boiler.	1965	FG-BOILERS
EU-BOILER4	Natural gas-fired, 70 million BTU per hour (50,000 pounds of steam per hour) boiler.	1965	FG-BOILERS
EU-BOILER5	Natural gas-fired, 54 million BTU per hour (40,000 pounds of steam per hour) boiler. The boiler provides process steam and heat to the facility.	04-01-1993	FG-BOILERS
EU-BOILER6	Natural gas-fired, 54 million BTU per hour (40,000 pounds of steam per hour) boiler. The boiler provides process steam and heat to the facility. Boiler #6 is subject to New Source Performance Standards specified in 40 CFR Part 60, Subparts A and Dc.	09-20-1995	FG-BOILERS
EU-ENGINEDYNO1	Engine dynamometer #1 located within building #94.	12-01-1997	FG- ENGINEDYNOS

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification	Flexible Group ID
		Date	
EU-ENGINEDYNO2	Engine dynamometer #2 located within building #94.	12-01-1997	FG- ENGINEDYNOS
EU-ENGINEDYNO3	Engine dynamometer #3 located within building #94.	12-01-1997	FG- ENGINEDYNOS
EU-ENGINEDYNO4	Engine dynamometer #4 located within building #94.	12-01-1997	FG- ENGINEDYNOS
EU-ENGINEDYNO5	Engine dynamometer #5 located within building #94.	12-01-1997	FG- ENGINEDYNOS
EU-ENGINEDYNO6	Engine dynamometer #6 located within building #94.	12-01-1997	FG- ENGINEDYNOS
EU-ENGINEDYNO7	Engine dynamometer #7 located within building #94.	12-01-1997	FG- ENGINEDYNOS
EU-ENGINEDYNO8	Engine dynamometer #8 located within building #94.	12-01-1997	FG- ENGINEDYNOS
EU-ENGINEDYNO9	Engine dynamometer #9 located within building #94.	12-01-1997	FG- ENGINEDYNOS
EU-ENGINEDYNO10	Engine dynamometer #10 located within building #94.	12-01-1997	FG- ENGINEDYNOS
EU-DRUPS1	Compression Ignition Diesel fueled emergency generator engine located at the New Data Center (Building #136). 3490 kW rating and displacement <10 liters per cylinder. Subject to NESHAP ZZZZ and NSPS IIII.	04-21-2014	FG-BACKUPGENS
EU-DRUPS2	Compression Ignition Diesel fueled emergency generator engine located at the New Data Center (Building #136). 3490 kW rating and displacement <10 liters per cylinder. Subject to NESHAP ZZZZ and NSPS IIII.	04-21-2014	FG-BACKUPGENS
EU-DRUPS3	Compression Ignition Diesel fueled emergency generator engine located at the New Data Center (Building #136). 3490 kW rating and displacement <10 liters per cylinder. Subject to NESHAP ZZZZ and NSPS IIII.	11-10-2014/ 9-28-2017	FG-BACKUPGENS
EU-DRUPS4	Compression Ignition Diesel fueled emergency generator engine located at the New Data Center (Building #136). 3490 kW rating and displacement <10 liters per cylinder. Subject to NESHAP ZZZZ and NSPS IIII.	11-18-2014	FG-BACKUPGENS
EU-DRUPS5	Compression Ignition Diesel fueled emergency generator engine located at the New Data Center (Building #136). 3490 kW rating and displacement <10 liters per cylinder. Subject to NESHAP ZZZZ and NSPS IIII.	04-14-2016	FG-BACKUPGENS

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-DRUPS6	Compression Ignition Diesel fueled emergency generator engine located at the New Data Center (Building #136). 3490 kW rating and displacement <10 liters per cylinder. Subject to NESHAP ZZZZ and NSPS IIII.	02-19-2016	FG-BACKUPGENS
EU-GENERATOR1	Compression Ignition Diesel fueled emergency generator engine located at the New Data Center (Building #136). 2500 kW rating and displacement <10 liters per cylinder. Subject to NESHAP ZZZZ and NSPS IIII.	04-21-2014	FG-BACKUPGENS
EU-GENERATOR2	Compression Ignition Diesel fueled emergency generator engine located at the New Data Center (Building #136). 2500 kW rating and displacement <10 liters per cylinder. Subject to NESHAP ZZZZ and NSPS IIII.	04-21-2014	FG-BACKUPGENS
EU-GENERATOR3	Compression Ignition Diesel fueled emergency generator engine located at the New Data Center (Building #136). 2500 kW rating and displacement <10 liters per cylinder. Subject to NESHAP ZZZZ and NSPS IIII.	03-21-2016	FG-BACKUPGENS
EU-GENERATOR4	Compression Ignition Diesel fueled emergency generator engine located at the New Data Center (Building #136). 2500 kW rating and displacement <10 liters per cylinder. Subject to NESHAP ZZZZ and NSPS IIII.	03-21-2016	FG-BACKUPGENS
EU-GEN23	Cummins diesel-fueled emergency generator engine with a 3017 HP rating and located at Building 24.	2007	FG-OLDDATACTR, FG-SUBPARTIIII
EU-GEN24	Cummins diesel-fueled emergency generator engine with a 3017 HP rating and located at Building 24.	2007	FG-OLDDATACTR, FG-SUBPARTIIII
EU-GEN25	Cummins diesel-fueled emergency generator engine with a 3017 HP rating and located at Building 24 with a 3017 HP rating.	2007	FG-OLDDATACTR, FG-SUBPARTIIII
EU-GASTANK	Gasoline storage tanks of capacity greater than 2000 gallons (EU-UST1-40 and EU-AST125A) located throughout the plant.	1990-2018	FG-GASTANKS
EU-PAINTBOOTH1	Paint booths located in building #11 with a dry filter system for paint overspray particulate matter control.	01-01-1987	FG-RULE287(2)(c), FG-MACT6H
EU-PAINTBOOTH2	Paint booths located in building #25 with a dry filter system for paint overspray particulate matter control.	01-01-1987	FG-RULE287(2)(c), FG-MACT6H

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-PAINTBOOTH3	Paint booths located in building #70 with a dry filter system for paint overspray particulate matter control.	01-01-1987	FG-RULE287(2)(c), FG-MACT6H
EU-MISC ADHESIVES	Miscellaneous sealer and adhesive usage throughout facility.	01-01-2016	FG-RULE287(2)(c)
EU-TANKPURGE	Steam cleaning of fuel tanks.	Before 12-20- 2016	FG-RULE290
EU-AIRBAGS	Deployment of obsolete airbags	June 2016	FG-RULE290
EU-COLDCLEANERS	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.  All cold cleaners at Milford Proving Ground are placed into operation after July 1, 1979 and hence all cold cleaners are new cold	Various	FG- COLDCLEANERS
	cleaners subject to Rule 336.1707.		
EU-GEN1	Cummins, diesel-fueled emergency engine with a 134 HP rating and located at Bldg. 31. Exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(2)(g).	2006	FG-RICEMACT
EU-GEN2	Cummins, diesel-fueled emergency engine with a 402 HP rating and located at Bldg. 31. Exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(2)(g).	2006	FG-RICEMACT
EU-GEN3	Detroit Diesel, diesel-fueled emergency engine with a 133.33 HP rating and located at Bldg. 48. Exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(2)(g).	2000	FG-RICEMACT
EU-GEN4	Cummins, diesel-fueled emergency engine with a 201 HP rating and located at Bldg. 105. Exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(2)(g).	2003	FG-RICEMACT
EU-GEN6	CAT, diesel-fueled emergency engine with a 1006 HP rating and located at Bldg. 09. Exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(2)(g).	Prior to 2000	FG-RICEMACT
EU-GEN7	Allis Chalmers, diesel-fueled emergency engine with a 268 HP rating and located at Bldg. 19. Exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(2)(g).	2002	FG-RICEMACT

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-GEN8	Cummins, diesel-fueled emergency engine with a 134 HP rating and located at Bldg. 40. Exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(2)(g).	2001	FG-RICEMACT
EU-GEN9	Cummins, diesel-fueled emergency engine with a 134 HP rating and located at Bldg. 104. Exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(2)(g).	2002	FG-RICEMACT
EU-GEN10	CAT, diesel-fueled emergency engine with a 134 HP rating and located at Bldg. 94. Exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(2)(g).	Prior to 2000	FG-RICEMACT
EU-GEN11	Detroit Diesel, diesel-fueled emergency engine with a 402 HP rating and located at Bldg. 101. Exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(2)(g).	Prior to 2000	FG-RICEMACT
EU-GEN12	Detroit Diesel, diesel-fueled emergency engine with a 208 HP rating and located at Bldg. 69. Exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(2)(g).	Prior to 2000	FG-RICEMACT
EU-GEN21	John Deere, diesel-fueled fire pump engine with a 310 HP rating and located at Bldg. 48. Exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(g).	2002	FG-RICEMACT
EU-GEN22	Cummins, diesel-fueled fire pump engine with a 300 HP rating and located at Bldg. 115. Exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(g).	2002	FG-RICEMACT
EU-GEN18	Kohler, diesel-fueled emergency engine with a 64 HP rating and located at Bldg. 61.  Exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(2)(g).	2006	FG-SUBPARTIIII
EU-GEN14a	PSI International, propane-fired emergency engine with a 62 HP rating and located at Pickett Lake – Lift Station. Exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(2)(g).	December 2019	FG-SUBPARTJJJJ
EU-GEN15a	PSI International, propane-fired emergency engine with a 145 HP rating and located at Barnes Circle Bldg. 41 – Lift Station. Exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(2)(g).	December 2019	FG-SUBPARTJJJJ

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EU-GEN20	Cummins, propane-fired emergency engine with a 63 HP rating and located at Bldg. 103. Exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(2)(g).	2011	FG-SUBPARTJJJJ
EU-GEN30	Generac, natural gas-fired emergency engine with a 194 HP rating and located at ASTA. Exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(2)(g). Engine is fueled by natural gas.	2015	FG- SUBPARTJJJJ
EU-GEN31	Cummins, natural gas-fired emergency engine with a 268 HP rating and located at Well #8. Exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(2)(g). Engine is fueled by natural gas.	2015	FG- SUBPARRTJJJJ

# EU-BOILER5 EMISSION UNIT CONDITIONS

### **DESCRIPTION**

Natural gas-fired, 54 million BTU per hour (40,000 pounds of steam per hour) boiler. The boiler provides process steam and heat to the facility.

Flexible Group ID: FG-BOILERS

# **POLLUTION CONTROL EQUIPMENT**

NA

# I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	7.6 lb/hr <sup>2</sup>	Monthly average	EU-BOILER5	SC VI.3, Appendix 7a	R 336.1205, 40 CFR 52.21(c) and (d)
2. NOx	33.1 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EU-BOILER5	SC VI.2, Appendix 7a	R 336.1205, 40 CFR 52.21(c) and (d)

### II. MATERIAL LIMIT(S)

1. The permittee shall not burn any fuel other than pipeline quality sweet natural gas in EU-BOILER5.<sup>2</sup> (R 336.1205, 40 CFR 52.21(c) and (d))

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

1. The permittee shall operate and maintain EU-BOILER5 in a manner consistent with safety and good air pollution control practices for minimizing emissions. (R 336.1213(2))

# IV. DESIGN/EQUIPMENT PARAMETER(S)

NA

# V. TESTING/SAMPLING

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

NA

# VI. MONITORING/RECORDKEEPING

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

- 1. The permittee shall, on a calendar monthly basis, monitor natural gas usage for EU-BOILER5 using a meter dedicated to EU-BOILER5.<sup>2</sup> (R 336.1205, 40 CFR 52.21(c) and (d))
- 2. The permittee shall calculate NOx emission in tons per 12-month rolling time period, as determined at the end of each calendar month, for EU-BOILER5.2 (R 336.1205, 40 CFR 52.21(c) and (d))

- 3. The permittee shall determine emissions of NOx in pounds per hour from EU-BOILER5, per SC I.1, in accordance with Appendix 7a.<sup>2</sup> (R 336.1205, 40 CFR 52.21(c) and (d))
- 4. The permittee shall keep, in a satisfactory manner, records of any maintenance performed and any testing results for EU-BOILER5. (R 336.1213(3))

# See Appendix 7a

# VII. REPORTING

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

### See Appendix 8

# VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-09-BOILERS	60 <sup>2</sup>	150 <sup>2</sup>	40 CFR 52.21(c) and (d)

# IX. OTHER REQUIREMENT(S)

NA

### Footnotes:

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

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

# **EU-BOILER6 EMISSION UNIT CONDITIONS**

### **DESCRIPTION**

Natural gas-fired 54 million BTU per hour (40,000 pounds of steam per hour) boiler. The boiler provides process steam and heat to the facility. Boiler #6 is subject to New Source Performance Standards specified in 40 CFR Part 60, Subparts A and Dc.

Flexible Group ID: FG-BOILERS

# POLLUTION CONTROL EQUIPMENT

NA

# I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	7.6 lb/hr <sup>2</sup>	Monthly average	EU-BOILER6	SC VI.4, Appendix 7a	R 336.1205, 40 CFR 52.21(c) and (d)
2. NOx	33.1 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EU-BOILER6	SC VI.3, Appendix 7a	R 336.1205, 40 CFR 52.21(c) and (d)

### II. MATERIAL LIMIT(S)

1. The permittee shall not burn any fuel other than pipeline quality sweet natural gas in EU-BOILER6.2 (R 336.1205, 40 CFR 52.21(c) and (d))

# III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall operate and maintain EU-BOILER6 in a manner consistent with safety and good air pollution control practices for minimizing emissions. (R 336.1213(2))

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

NA

### V. TESTING/SAMPLING

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

NA

### VI. MONITORING/RECORDKEEPING

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

1. The permittee shall keep a record, in a format acceptable to AQD, of natural gas usage in standard cubic feet per calendar day, calendar month and year, based upon 12-month rolling time period, as determined at the end of each calendar month. Pursuant to USEPA's prior determinations, the daily fuel usage recordkeeping

requirements do not apply if and only if all the following three conditions are met at all times:<sup>2</sup> (40 CFR Part 60, Subpart Dc, 40 CFR 60.48c(g))

- a. The permittee shall use only pipeline quality sweet natural gas.
- b. The permittee shall, on a calendar monthly basis, monitor natural gas usage, separately by each boiler using a meter dedicated to each boiler.
- c. If the permittee intends to opt out of the daily fuel usage recordkeeping requirements, the responsible official shall first advise, in writing, the AQD District Supervisor that the permittee has decided to opt out of the daily fuel usage recordkeeping requirements.
- 2. The permittee shall comply with reporting and recordkeeping requirements of 40 CFR Part 60, Subpart Dc, 40 CFR 60.48c.<sup>2</sup> (40 CFR Part 60, Subpart Dc, 40 CFR 60.48c)
- 3. The permittee shall calculate NOx emissions in tons per 12-month rolling time period, as determined at the end of each calendar month, for EU-BOILER6.<sup>2</sup> (R 336.1205, 40 CFR 52.21(c) and (d))
- 4. The permittee shall determine emissions of NOx in pounds per hour from EU-BOILER6, per SC I.1, in accordance with Appendix 7a.<sup>2</sup> (R 336.1205, 40 CFR 52.21(c) and (d))
- 5. The permittee shall keep, in a satisfactory manner, records of any maintenance performed and any testing results for EU-BOILER6. (R 336.1213(3))

# See Appendix 7a

### VII. REPORTING

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

### See Appendix 8

# VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-09-BOILERS	60 <sup>2</sup>	150 <sup>2</sup>	40 CFR 52.21(c) and (d)

# IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with all provisions of the New Source Performance Standards specified in 40 CFR, Part 60, Subparts A and Dc, as they apply to EU-BOILER6.<sup>2</sup> (40 CFR 60 Subparts A and Dc)

### Footnotes:

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

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

# EU-GEN19 EMISSION UNIT CONDITIONS

# **DESCRIPTION**

Cummins, propane-fired emergency engine with a 63 HP rating and located at Bldg. 43. Exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(2)(g). New engine as defined by ZZZZ (construction commenced after June 12, 2006) located at an area source of HAP emissions but manufactured before July 1, 2008 (manufactured in April of 2007), with a maximum engine power less than 500 HP. As of the issuance of this ROP, this engine does not appear to have regulatory requirements associated with 40 CFR Part 63, Subpart ZZZZ or 40 CFR Part 60, Subpart JJJJ.

Flexible Group ID: NA

# **POLLUTION CONTROL EQUIPMENT**

NA

# I. EMISSION LIMIT(S)

NA

# II. MATERIAL LIMIT(S)

NA

# III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. At all times, the permittee must operate and maintain EU-GEN19 in a manner consistent with safety and good air pollution control practices for minimizing emissions. (R 336.1213(3))
- 2. The permittee shall not operate EU-GEN19 for more than 500 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month. (R 336.2803, R 336.2804, R336.1213(3))

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

1. The permittee shall install a non-resettable hour meter upon startup of EU-GEN19. (R 336.1213(3))

#### 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 monitor and record the hours of operation of EU-GEN19 based on a 12-month rolling time period. (R 336.1213(3))
- 2. The permittee shall keep records of the operation of EU-GEN19 in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee must record the time of operation of the engine and the reason the engine was in operation during that time. (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)

- 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 EU-GEN19, upon startup. (40 CFR Part 60, Subparts A and JJJJ, 40 CFR 63.6590)
- 2. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and ZZZZ, for Stationary Reciprocating Internal Combustion Engines by the initial compliance date. (40 CFR Part 63, Subparts A and ZZZZ)

# EU-REMEDIATION EMISSION UNIT CONDITIONS

### **DESCRIPTION**

Soil vapor extraction wells, vacuum blower(s), and an air flow distribution system equipped with a catalytic oxidizer.

Flexible Group ID: NA

### **POLLUTION CONTROL EQUIPMENT:**

Emissions are controlled by a catalytic oxidizer.

# I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Total VOC	10.0 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EU-REMEDIATION	SC VI.1, SC VI.2	R 336.1205, R 336.1225, R 336.1702(a)
2. Total Gasoline	10.0 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EU-REMEDIATION	SC VI.1, SC VI.2	R 336.1205, R 336.1225, R 336.1702(a)
3. BTEX	1.0 tpy <sup>1</sup>	12-month rolling time period as determined at the end of each calendar month	EU-REMEDIATION	SC VI.1, SC VI.2	R 336.1225

BTEX = Total combined benzene, toluene, ethylbenzene and xylene emissions.

### II. MATERIAL LIMIT(S)

NA

# III. PROCESS/OPERATIONAL RESTRICTION(S)

1. The permittee shall not operate EU-REMEDIATION unless the catalytic oxidizer is installed, maintained, and operated properly according to the manufacturer's specifications. Proper operation requires a minimum of 98 percent reduction of hydrocarbon emissions to the atmosphere. The oxidizer shall be operated at a minimum temperature of 600°F at the inlet of the catalyst bed and a maximum space velocity of 40,000 per hr<sup>-1</sup>.<sup>2</sup> (R 336.1702(a), R 336.1910)

# IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a temperature monitoring device to monitor and record the inlet temperature of the catalytic oxidizer catalyst bed on a continuous basis while EU-REMEDIATION is operating.<sup>2</sup> (R 336.1225, R 336.1702(a), R 336.1910)

## V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1213(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 monitor and record the gas flow rate and the VOC, gasoline or BTEX concentrations at the outlet of the soil vapor extraction system using Appendix 4. The monitoring frequency shall be once per week until four valid samples are obtained. Thereafter, the monitoring frequency shall be once per month for five months. Thereafter, the monitoring frequency shall be quarterly. The vapor stream(s) shall be analyzed using 40 CFR Part 60 Method 18, Measurement of Gaseous Organic Compound Emissions by Gas Chromatography or equivalent.<sup>2</sup> (R 336.1702(a), R 336.1225)
- 2. The permittee shall keep, in a satisfactory manner, monthly and annual records of the total VOC, gasoline and BTEX emissions from EU-REMEDIATION. Annual records shall be based on a 12-month rolling time period as determined at the end of each calendar month. All records, including Appendix 4, shall be kept on file for a period of at least five years and made available to the Department upon request.<sup>2</sup> (R 336.1205, R 336.1702(a), R 336.1225)
- 3. The permittee shall monitor and record the inlet temperature of the catalytic oxidizer catalyst bed on a continuous basis while EU-REMEDIATION is operating. Temperature data recording shall consist of measurements made at equally spaced intervals, not to exceed 15 minutes per interval.<sup>2</sup> (R 336.1225, R 336.1702(a), R 336.1910)
- 4. The permittee shall keep, in a satisfactory manner, records of the date, duration, and description of any malfunction of the control equipment, any maintenance performed, any replacement of catalyst or control equipment media and any testing results for EU-REMEDIATION. All records shall be kept on file for a period of at least five years and made available to the Department upon request.<sup>2</sup> (R 336.1702(a), R 336.1910)
- 5. The permittee shall keep a copy of the manufacturer's specification for the control device on file at the facility and make it available to the Department upon request.<sup>2</sup> (R 336.1225, R 336.1702(a), R 336.1910)
- 6. The permittee shall continuously monitor the inlet temperature to the catalytic oxidizer and record every 15 minutes for an hourly average, during operation of EU-REMEDIATION, as an indicator of proper operation of the catalytic oxidizer. The indicator range is a minimum inlet temperature to the catalytic oxidizer of 600°F. (40 CFR 64.6(c)(1)(i) and (ii))
- 7. The temperature monitor shall continuously monitor the inlet temperature to the catalytic oxidizer. The averaging period is hourly. The monitor shall be calibrated annually or per manufacturer recommendations. (40 CFR 64.6(c)(1)(iii))
- 8. A temperature excursion is defined as a failure to meet minimum inlet temperature to the catalytic oxidizer of 600°F during operation of EU-REMEDIATION. (40 CFR 64.6(c)(2))
- 9. A monitoring excursion is defined a failure to monitor and record temperature as required per EU-REMEDIATION, SC VI.3. (40 CFR 64.6(c)(2))
- 10. Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). If an excursion of the minimum inlet temperature to the catalytic oxidizer occurs, the permittee shall shut down EU-REMEDIATION and identify and correct the problem. If an excursion of the monitoring and recording of the

catalyst inlet temperature occurs, the permittee shall investigate the cause of the excursion and create a corrective action plan. (40 CFR 64.7(d))

- 11. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. (40 CFR 64.6(c)(3), 40 CFR 64.7(c))
- 12. The permittee shall properly maintain the monitoring system, including keeping necessary parts for routine repair of the monitoring equipment. (40 CFR 64.7(b))
- 13. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions. (40 CFR 64.9(b)(1))

### See Appendix 4

### VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. Each semiannual report of monitoring and deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. (40 CFR 64.9(a)(2)(i))
- 5. Each semiannual report of monitoring and deviations shall include summary information on monitor downtime. If there were no periods of monitor downtime in the reporting period, then this report shall include a statement that there were no periods of monitor downtime. (40 CFR 64.9(a)(2)(ii))

### 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-STCK1	10 <sup>1</sup>	30 <sup>1</sup>	R 336.1225

### IX. OTHER REQUIREMENT(S)

- 1. The permittee shall comply with all applicable requirements of 40 CFR Part 64. (40 CFR Part 64)
- 2. If the permittee identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the permittee shall promptly notify the AQD and if necessary, submit a proposed modification of the ROP and CAM Plan to address the necessary monitoring changes. Such a modification may include but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. (40 CFR 64.7(e))

### Footnotes:

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

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

# **EU-BURNPAD EMISSION UNIT CONDITIONS**

### **DESCRIPTION**

Area used for thermal testing.

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.	Benzene	24.77 pounds per year <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EU-BURNPAD	SC VI.1, SC VI.2	R 336.1205, R 336.1224, R 336.1225
2.	Acrylonitrile	2.69 pounds per year <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EU-BURNPAD	SC VI.1, SC VI.2	R 336.1205, R 336.1224, R 336.1225

3. Visible emissions from EU-BURNPAD shall not exceed a six-minute average of 20 percent opacity, except for one six-minute average per hour of not more than 27 percent opacity.<sup>2</sup> (R 336.1301)

### II. MATERIAL LIMIT(S)

NA

# III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall conduct no more than 20 thermal testing activities lasting no more than 20 minutes per test in a 12-month rolling time period as determined at the end of each calendar month.<sup>2</sup> (R 336.1205, R 336.1224, R 336.1225)
- 2. The permittee shall not burn refuse, garbage or any other waste material.<sup>2</sup> (R 336.1205, R 336.1224, R 336.1225, R 336.1310)

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

- 1. The permittee shall be present at all times when conducting a thermal test until the fire is completely extinguished.<sup>2</sup> (R 336.1205, R 336.1224, R 336.1225)
- 2. The permittee shall have available any necessary equipment (i.e. Fire extinguisher) to control the burn and to put out the fire if the need arises.<sup>2</sup> (R 336.1205, R 336.1224, R 336.1225)

## 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 calculate Benzene and Acrylonitrile emissions in pounds per 12-month rolling time period, as determined at the end of each calendar month, for EU-BURNPAD.<sup>2</sup> (R 336.1205, R 336.1224, R 336.1225)
- 2. The permittee shall keep, in a satisfactory manner, records of items used during thermal testing. These records shall include, but are not limited to:
  - a. Component being tested
  - b. Duration of test
  - c. Ignition source

The permittee shall keep the records on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request.<sup>2</sup> (R 336.1205, R 336.1224, R 336.1225)

- 3. The permittee shall perform visible emission observations at least once each thermal test that EU-BURNPAD is operating using Federal Reference Test Method 9 (40 CFR Part 60, Appendix A). A certified reader shall perform each reading. If excessive visible emissions are observed, extinguish the fire immediately.<sup>2</sup> (R 336.1301, R 336.1303)
- 4. The permittee shall keep, in a satisfactory manner, records of all visible emission readings for EU-BURNPAD. At a minimum, records shall include the date, time, name of observer/reader, whether the reader is certified, and status of visible emissions. The permittee shall keep all records on file at the facility and make them available to the Department upon request.<sup>2</sup> (R 336.1301, R 336.1303)

### 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

### Footnotes:

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

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

# 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
FG-BOILERS	Natural gas fired powerhouse boilers 3, 4, 5, and 6.	EU-BOILER3, EU-BOILER4,
		EU-BOILER5,
		EU-BOILER6
FG-ENGINEDYNOS	Ten engine dynamometers located within building #94	EU-ENGINEDYNO1,
TO ENGINEE THOS	(Noise and Vibration Center).	EU-ENGINEDYNO2,
	,	EU-ENGINEDYNO3,
		EU-ENGINEDYNO4,
		EU-ENGINEDYNO5,
		EU-ENGINEDYNO6,
		EU-ENGINEDYNO7,
		EU-ENGINEDYNO8,
		EU-ENGINEDYNO9,
		EU-ENGINEDYNO10
FG-BACKUPGENS	Ten diesel-fueled emergency generator engines. All	EU-DRUPS1,
	engines are designed to operate with injection timing	EU-DRUPS2,
	retardation (ITR) for the purpose of exhaust emissions	EU-DRUPS3,
	optimization. All engines are subject to NESHAP	EU-DRUPS4,
	ZZZZ and NSPS IIII.	EU-DRUPS5,
		EU-DRUPS6,
		EU-GENERATOR1,
		EU-GENERATOR2,
		EU-GENERATOR3,
FG-OLDDATACTR	Compression lanition discal finded arrangement	EU-GENERATOR4
FG-OLDDATACTR	Compression Ignition diesel-fueled emergency generator engines located at Building 24.	EU-GEN23, EU-GEN24,
	generator engines located at building 24.	EU-GEN25
FG-GASTANKS	Any existing (placed into operation before July 1,	EU-GEN25 EU-GASTANK
I G-GAGTAINIG	1979), new (placed into operation on or after July 1,	LO-GASTAINI
	1979), new (placed into operation of or after stry 1, 1979) or modified gasoline storage tank of capacity	
	greater than 2000 gallons that is exempt from the	
	requirements of Rule 201 pursuant to Rule 278 and	
	Rule 284(g).	

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FG-RULE 287(c)	Any emission unit that emits air contaminants and is exempt from the requirements of Rule 201 pursuant to Rule 278, Rule 278a and Rule 287(2)(c). Emission units installed/modified before December 20, 2016, may show compliance with Rule 287 in effect at the time of installation/modification.	EU-PAINTBOOTH1, EU-PAINTBOOTH2, EU-PAINTBOOTH3, EU-MISC ADHESIVES
FG-MACT6H	40 CFR Part 63, Subpart HHHHHH - National Emission Standards for Hazardous Air Pollutants for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources. Requirements applicable to paint stripping operations that involve the use of chemical strippers that contain methylene chloride (MeCl) in paint removal processes; Autobody refinishing operations that encompass motor vehicle and mobile equipment spray-applied surface coating operations; Spray application of coatings containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd), collectively referred to as the target HAP to any part or product made of metal or plastic, or combinations of metal and plastic that are not motor vehicles or mobile equipment.	EU-PAINTBOOTH1, EU-PAINTBOOTH2, EU-PAINTBOOTH3
FG-RULE290	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-TANKPURGE, EU-AIRBAGS
FG-COLDCLEANERS	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.	EU-COLDCLEANERS
FG-RICEMACT	40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at an area source of HAP emissions, existing emergency, compression ignition (CI) RICE equal to or less than 500 brake HP. A RICE is existing if the date of installation is before June 12, 2006.	EU-GEN1, EU-GEN2, EU-GEN3, EU-GEN4, EU-GEN6, EU-GEN7, EU-GEN8, EU-GEN9, EU-GEN10, EU-GEN11, EU-GEN12,EU-GEN21, EU-GEN22
FG-SUBPARTIIII	40 CFR Part 60, Subpart IIII requirements for Emergency Compression Ignition Internal Combustion Engines <30 l/cyl. constructed (ordered) after July 11, 2005 and manufactured after April 1, 2006.	EU-GEN18, EU-GEN23, EU-GEN24, EU-GEN25
FG-SUBPARTJJJJ	40 CFR Part 60, Subpart JJJJ requirements for Emergency Spark Ignition Internal Combustion Engines greater than 25 horsepower that commenced construction (ordered) after June 12, 2006 and were manufactured on or after January 1, 2009. Exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(2)(g).	EU-GEN14a, EU-GEN15a, EU-GEN20, EU-GEN30, EU-GEN31

# FG-BOILERS FLEXIBLE GROUP CONDITIONS

### **DESCRIPTION**

Natural gas fired powerhouse boilers 3, 4, 5, and 6.

Emission Units: EU-BOILER3, EU-BOILER4, EU-BOILER5, EU-BOILER6

### POLLUTION CONTROL EQUIPMENT

NA

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

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	0.14 lbs/MMBTU (60 ng/J) <sup>2</sup>	24-hour average	FG-BOILERS	SC V.1, SC VI.2, Appendix 7a	R 336.1205

# II. MATERIAL LIMIT(S)

1. The permittee shall not burn any fuel other than pipeline quality sweet natural gas in FG-BOILERS.<sup>2</sup> (R 336.1205)

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

1. The permittee shall operate and maintain each boiler in FG-BOILERS in a manner consistent with safety and good air pollution control practices for minimizing emissions. (R 336.1213(2))

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

NA

# V. TESTING/SAMPLING

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

1. Verification of nitrogen oxide (NOx) emission rates from FG-BOILERS by acceptable testing, at owner's expense, may be required for continued operation. If a test is required, the permittee shall submit a complete test plan to the AQD within 30 days of the written requirement for such verification. The test plan shall include stack testing procedures and the location of stack testing ports. 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 within 60 days following the last date of the test.<sup>2</sup> (R 336.1205, R 336.2001, R 336.2002, 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 keep a record of the total operating time of each boiler in FG-BOILERS on a 12-month rolling time period basis, as determined at the end of each calendar month.<sup>2</sup> (R 336.1205(3))
- 2. The permittee shall keep a record of the natural gas usage, in standard cubic feet and BTU heat input, per calendar month and per 12-month rolling time period for each boiler in FG-BOILERS.<sup>2</sup> (R 336.1205(3))

3. The permittee shall keep, in a satisfactory manner, records of any maintenance performed and any testing results for FG-BOILERS. (R 336.1213(3))

# See Appendix 7a

### 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

### Footnotes:

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

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

# FG-ENGINEDYNOS FLEXIBLE GROUP CONDITIONS

## **DESCRIPTION**

Ten engine dynamometers located within building #94 (Noise and Vibration Center).

**Emission Units:** EU-ENGINEDYNO1, EU-ENGINEDYNO2, EU-ENGINEDYNO3, EU-ENGINEDYNO4, EU-ENGINEDYNO5, EU-ENGINEDYNO6, EU-ENGINEDYNO7, EU-ENGINEDYNO8, EU-ENGINEDYNO9,

## **POLLUTION CONTROL EQUIPMENT**

NA

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

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. CO	1,498 lb/day <sup>2</sup>	Calendar day	FG-ENGINEDYNOS	SC VI.3, Appendix 7b	R 336.1205, 40 CFR 52.21(c) and (d)
2. CO	21.4 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month		SC VI.4, Appendix 7b	R 336.1205, 40 CFR 52.21(c) and (d)
3. NOx	4.4 lb/hr <sup>2</sup>	3-hour average	FG-ENGINEDYNOS	SC V.1, Appendix 7b	R 336.1205, 40 CFR 52.21(c) and (d)
4. NOx	1.0 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month		SC VI.4, Appendix 7b	R 336.1205, 40 CFR 52.21(c) and (d)
5. VOC	4.4 lb/hr <sup>2</sup>	3-hour average	FG-ENGINEDYNOS	SC V.1, Appendix 7b	R 336.1205, 40 CFR 52.21(c) and (d)
6. VOC	1.0 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month		SC VI.4, Appendix 7b	R 336.1205, 40 CFR 52.21(c) and (d)

## II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Fuel	10,000 gallons per year <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month		SC VI.1	R 336.1205, 40 CFR 52.21(c) and (d)
2. Fuel	350 gallons per day <sup>2</sup>		FG-ENGINEDYNOS	SC VI.2	R 336.1205, 40 CFR 52.21(c) and (d)

<sup>&</sup>lt;sup>a</sup> Daily fuel usage rates shall be calculated based upon monthly record-keeping prorated to a daily rate using days of operation per month records.

## 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. Verification of NOx and VOC emission rates from FG-ENGINEDYNOS by acceptable testing, at owner's expense, may be required for continued operation. If a test is required, the permittee shall submit a complete test plan to the AQD within 120 days of the written requirement for such verification. The test plan shall include stack testing procedures and the location of stack testing ports. 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 within 60 days following the last date of the test.<sup>2</sup> (R 336.2001, R 336.2002, 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 keep a record of the gallons of fuel burned per 12-month rolling time period, as determined at the end of each calendar month, for FG-ENGINEDYNOS.<sup>2</sup> (R 336.1205, 40 CFR 52.21(c) and (d))
- 2. The permittee shall keep a record of the gallons of fuel burned per day in FG-ENGINEDYNOS. Daily fuel usage rates shall be calculated based upon monthly record-keeping prorated to a daily rate using days of operation per month records.<sup>2</sup> (R 336.1205, 40 CFR 52.21(c) and (d))
- 3. The permittee shall calculate CO emissions in pounds per day for FG-ENGINEDYNOS, per SC I.1, based on daily fuel usage records that are maintained per SC VI.2.<sup>2</sup> (R 336.1205, 40 CFR 52.21(c) and (d))
- 4. The permittee shall calculate CO, NOx, and VOC emissions in tons per 12-month rolling time period, as determined at the end of each calendar month, for FG-ENGINEDYNOS.<sup>2</sup> (R 336.1205, 40 CFR 52.21(c) and (d))
- 5. The permittee shall monitor and record the total number of hours FG-ENGINEDYNOS is operated each calendar week. (R 336.1213(3))
- 6. The permittee shall monitor and record the gallons of fuel burned in FG-ENGINEDYNOS each calendar week. (R 336.1213(3))
- 7. The permittee shall calculate NOx and VOC emissions in pounds per hour for FG-ENGINEDYNOS based on weekly fuel usage records that are maintained per SC VI.6, the total number of hours FG-ENGINEDYNOS operated each calendar week, and the emission factors in Appendix 7b. (R 336.1213(3))

#### See Appendix 7b

## VII. REPORTING

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

3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))

## See Appendix 8

## VIII. STACK/VENT RESTRICTION(S)

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SV-94-ENGINEDYNOS	10 <sup>2</sup>	35 <sup>2</sup>	40 CFR 52.21(c) and (d)

## IX. OTHER REQUIREMENT(S)

NA

#### Footnotes:

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

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

## FG-BACKUPGENS FLEXIBLE GROUP CONDITIONS

## **DESCRIPTION**

Ten diesel-fueled emergency generator engines. All engines are designed to operate with injection timing retardation (ITR) for the purpose of exhaust emissions optimization. All engines are subject to NESHAP ZZZZ and NSPS IIII.

**Emission Units:** EU-DRUPS1, EU-DRUPS2, EU-DRUPS3, EU-DRUPS4, EU-DRUPS5, EU-DRUPS6, EU-GENERATOR1, EU-GENERATOR2, EU-GENERATOR3, EU-GENERATOR4

## **POLLUTION CONTROL EQUIPMENT**

NA

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

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	61.56 lb/hr <sup>2</sup>	Hourly	Each engine: EU-DRUPS1, EU-DRUPS2, EU-DRUPS3, EU-DRUPS4, EU-DRUPS5, EU-DRUPS6	SC V.1	40 CFR 52.21(c) and (d)
2. NOx	44.10 lb/hr²	Hourly	Each engine: EU-GENRATOR1 EU-GENERATOR2 EU-GENERATOR3 EU-GENERATOR4	SC V.1	40 CFR 52.21(c) and (d)
3. NMHC + NOx FEL	10.5 g/kW- hr <sup>2</sup>	Hourly	Each engine of FG-BACKUPGENS	SC V.1, SC V.2, SC VI.3	40 CFR 60.4205(b), 40 CFR 89.112(d), Table 2
4. CO	3.5 g/kW-hr <sup>2</sup>	Hourly	Each engine of FG-BACKUPGENS	SC V.1, SC V.2, SC VI.3	40 CFR 60.4205(b), 40 CFR 89.203(c), 40 CFR 89.112(a) Table 1
5. PM FEL	0.54 g/kW- hr <sup>2</sup>	Hourly	Each engine of FG-BACKUPGENS	SC V.1, SC V.2, SC VI.3	40 CFR 60.4205(b), 40 CFR 89.112(d), Table 2

## II. MATERIAL LIMIT(S)

1. The permittee shall burn only diesel fuel, in FG-BACKUPGENS 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, 40 CFR 80.510(b))

## III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall not operate each engine of FG-BACKUPGENS for more than 500 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month. The 500 hours includes the hours for the purpose of necessary maintenance checks and readiness testing as described in SC III.3.<sup>2</sup> (R 336.1205(1)(a) and (3), R 336.1225, R 336.1702(a), 40 CFR 52.21(c) and (d))
- 2. The permittee shall operate each pair of engines EU-DRUPS1 through EU-DRUPS6 and EU-GENERATOR1 through EU-GENERATOR4 according to either of the following scenarios (except during startup and shutdown):
  - a. Both engines in a pair operating up to 55% of the maximum load; or
  - b. Only one engine from each pair operating up to 100% load (a maximum of four engines operating from EU-DRUPS1 through EU-DRUPS6, and a maximum of two engines operating from EU-GENERATOR1 through EU-GENERATOR4).<sup>2</sup> (R 336.1205(1)(a) and (3), 40 CFR 52.21(c) and (d), 40 CFR 60.4205(b), 40 CFR 89.112(d))
- 3. The permittee may operate each engine of FG-BACKUPGENS for no more than 100 hours per calendar year for the purpose of necessary maintenance checks and readiness testing, provided that the tests are recommended by Federal, State, or local government, the manufacturer, the vendor, or the insurance company associated with the engine. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing. A petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency internal combustion engines beyond 100 hours per year. Each engine of FG-BACKUPGENS may operate up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per calendar year provided for maintenance and testing. The 50 hours per calendar 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)
- 4. Except as allowed by 40 CFR 60.4211(g), the permittee shall install, maintain, and operate each engine of FG-BACKUPGENS according to the manufacturer written instructions, or procedures developed by the owner/operator and approved by the engine manufacturer, over the entire life of the engine. If you do not operate and maintain the certified engine and control device (if applicable) according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine, and must demonstrate compliance as specified in SC III.5.2 (R336.1205(1)(a) and (3), R 336.1225, R 336.1911, 40 CFR 52.21(c) and (d), 40 CFR 60.4206, 40 CFR 60.4211))
- 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 uncertified engine 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 60.4211(g)(3))

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

- 1. The permittee shall equip and maintain each engine of FG-BACKUPGENS with a non-resettable hours meter to track the operating hours.<sup>2</sup> (R 336.1205(1)(a) and (3), R 336.1225, 40 CFR 60.4209)
- 2. The nameplate capacity of each engine EU-DRUPS1 through EU-DRUPS6 shall not exceed 3490 kW, and the nameplate capacity of each engine EU-GENERATOR1 through EU-GENERATOR4 shall not exceed 2500 kW, as certified by the equipment manufacturer.<sup>2</sup> (R 336.1205(1)(a) and (3), 40 CFR 60.4202, 40 CFR 89.112)

### 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, NMHC + NOx, CO and PM emission rates from one of more engines in FG-BACKUPGENS, 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 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 336.2001, R 336.2003, R 336.2004, 40 CFR 60.4211)

2. Unless the engines have been certified by the manufacturer as required by 40 CFR Part 60, Subpart IIII and the permittee maintains each engine as required by 40 CFR 60.4211, the permittee shall conduct an initial performance test for each engine in FG-BACKUPGENS, within one year after startup, or within one 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 one year after the permittee changes emission-related settings in a way that is not permitted by the manufacturer, of the engine to demonstrate compliance with the emission limits in 40 CFR 60.4205(b). If a performance test is required, the performance test 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. After conducting the initial performance test, the permittee shall conduct subsequent performance testing, for non-certified engines, every 8,760 hours or three years, whichever comes first. 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 336.2001, R 336.2003, R 336.2004, 40 CFR 60.4211(g), 40 CFR 60.4212)

#### 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), 40 CFR 52.21 (c) and (d))
- 2. The permittee shall monitor, record, and keep, in a satisfactory manner, records that demonstrate that the engines were operated according to the scenarios described in SC III.2. The records shall include the following:
  - a. Identification of engines in each pair
  - b. Dates and times when each engine was operated and the type of operation (startup, shutdown, emergency, maintenance and testing, non-emergency)
  - c. Loading for each engine during emergency operation, maintenance and testing, and non-emergency operation.<sup>2</sup> (R 336.1205(1)(a) and (3), 40 CFR 52.21(c) and (d))
- 3. For each engine of FG-BACKUPGENS, the permittee shall keep records to demonstrate compliance with emission standards as specified in 40 CFR 60.4205(b), according to one of the following methods:
  - a. Certified Engines—Keep manufacturer certification documentation indicating that meets the applicable emission limitations contained in the federal Standards of Performance for New Stationary Sources 40 CFR Part 60, Subpart IIII. The engine must be installed and configured according to the manufacturer's specifications.
  - b. Uncertified Engines (If the engine and control device is operated or maintained in a manner other than according to the manufacturer's emission-related written instructions, the engine becomes uncertified) as allowed by 40 CFR 60.4211(g)—Keep records of:
    - i. The maintenance plan and maintenance activities
    - ii. The initial performance test and subsequent performance tests, as required by 40 CFR 4211(g), according to the requirements specified in 40 CFR 60.4212, as applicable.

The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> (40 CFR 60.4211(c))

4. Starting with the model years in Table 5 to 40 CFR Part 60, Subpart IIII, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the permittee shall keep records of the operation of each engine of FG-BACKUPGENS in emergency and non-emergency service that are recorded through the non-resettable hour meter, on a calendar year basis. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.<sup>2</sup> (40 CFR 60.4211, 40 CFR 60.4214(b))

- 5. The permittee shall monitor and record the total hours of operation for each engine of FG-BACKUPGENS, on a monthly and 12-month rolling time period basis, in a manner acceptable to the District Supervisor, Air Quality Division.<sup>2</sup> R 336.1205(1)(a) and (3), R 336.1225, R 336.1702(a), 40 CFR 52.21(c) and (d))
- 6. 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-BACKUPGENS 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) and (3), 40 CFR 80.510(b))

#### VII. REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. (R 336.1213(3)(c)(ii))
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. The permittee shall submit a notification specifying whether each engine of FG-BACKUPGENS will be operated in a certified or a non-certified manner to the AQD District Supervisor, in writing, within 30 days following the initial startup of the engine and within 30 days of switching the manner of operation.<sup>2</sup> (40 CFR Part 60, Subpart IIII)

#### See Appendix 8

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

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

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVDRUPS1	202	29.62	R 336.1225, 40 CFR 52.21 (c) and (d)
2. SVDRUPS2	202	29.62	R 336.1225, 40 CFR 52.21 (c) and (d)
3. SVDRUPS3	202	29.62	R 336.1225, 40 CFR 52.21 (c) and (d)
4. SVDRUPS4	202	29.62	R 336.1225, 40 CFR 52.21 (c) and (d)
5. SVDRUPS5	20 <sup>2</sup>	29.62	R 336.1225, 40 CFR 52.21 (c) and (d)
6. SVDRUPS6	202	29.62	R 336.1225, 40 CFR 52.21 (c) and (d)

Stack & Vent ID	Maximum Exhaust Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
7. SVGENERATOR1	18 <sup>2</sup>	29.62	R 336.1225, 40 CFR 52.21 (c) and (d)
8. SVGENERATOR2	18 <sup>2</sup>	29.62	R 336.1225, 40 CFR 52.21 (c) and (d)
9. SVGENERATOR3	18 <sup>2</sup>	29.62	R 336.1225, 40 CFR 52.21 (c) and (d)
10. SVGENERATOR4	18 <sup>2</sup>	29.62	R 336.1225, 40 CFR 52.21 (c) and (d)

## 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 IIII, as they apply to each engine of FG-BACKUPGENS, upon startup.<sup>2</sup> (40 CFR Part 60, Subparts A and IIII, 40 CFR 63.6590)
- 2. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants, as specified in 40 CFR Part 63, Subparts A and ZZZZ, for Stationary Reciprocating Internal Combustion Engines by the initial compliance date.<sup>2</sup> (40 CFR Part 63, Subparts A and ZZZZ)

#### Footnotes:

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

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

## FG-OLDDATACTR FLEXIBLE GROUP CONDITIONS

### **DESCRIPTION**

Compression Ignition diesel-fueled emergency generator engines located at Building 24.

Emission Units: EU-GEN23, EU-GEN24, EU-GEN25

## POLLUTION CONTROL EQUIPMENT

NA

## I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. NOx	515 lb/1000 gal <sup>2</sup>	Hourly	FG-OLDDATACTR	SC V.1, SC VI.1, SC VI.4	R 336.1205(1)(a)

#### II. MATERIAL LIMIT(S)

- 1. The permittee shall burn only diesel fuel in FG-OLDDATACTR.<sup>1</sup> (R 336.1224, R336.1225)
- 2. If any electricity produced by FG-OLDDATACTR is sold to a utility power distribution system, the sulfur content of the diesel fuel used in FG-OLDDATACTR shall not exceed 0.05 percent by weight on an annual average. The annual average shall be calculated as specified in 40 CFR 72.7(d)(3).<sup>2</sup> (40 CFR Part 72.7)
- 3. The combined diesel fuel use for all units included in FG-OLDDATACTR shall not exceed 136,000 gallons per 12-month rolling time period.<sup>2</sup> (R 336.1205(1)(a), R 336.1220, R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) and (d))

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

- 1. The permittee shall operate FG-OLDDATACTR in accordance with manufacturer's recommendations for safe and proper operation to minimize emissions during periods of startup, shutdown and malfunction.<sup>2</sup> (R 336.1912)
- 2. The total capacity from each unit included in FG-OLDDATACTR shall not exceed 5 MW.2 (40 CFR Part 72.7)

#### 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. Verification of the NOx emission limit (515 pounds NOx per 1000 gallon fuel used) from one or more representative units of FG-OLDDATACTR, by testing at owner's expense, in accordance with Department requirements may be required. 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 the emission factor 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(1)(a), 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 install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the fuel use for FG-OLDDATACTR on a monthly basis.<sup>2</sup> (R 336.1205(1)(a), R 336.1220, R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) and (d))

- 2. The permittee shall keep, in a satisfactory manner, records of the date, duration, and description of any malfunction, any maintenance performed and any testing results for FG-OLDDATACTR. All records shall be kept on file for a period of at least five years and made available to the Department upon request.<sup>2</sup> (R 336.1912)
- 3. If any electricity produced by FG-OLDDATACTR is sold to a utility power distribution system, the permittee shall keep records of the sulfur content calculated in a percent by weight, on an annual average as required by SC II.2. All records shall be kept on file for a period of at least five years and made available to the Department upon request.<sup>2</sup> (40 CFR 72.7)
- 4. The permittee shall keep, in a satisfactory manner, monthly and 12-month rolling time period fuel use records for FG-OLDDATACTR. The records must indicate the total amount of fuel used in FG-OLDDATACTR. All records shall be kept on file for a period of at least five years and made available to the Department upon request.<sup>2</sup> (R 336.1205(1)(a), R 336.1220, R 336.1224, R 336.1225, R 336.1702(a), 40 CFR 52.21(c) and (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))

See Appendix 8

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

1. The exhaust gases from FG-OLDDATATCENTER shall be discharged unobstructed vertically upwards to the ambient air. (R 336.1225, 40 CFR 52.21(c) and (d))

## IX. OTHER REQUIREMENT(S)

1. The permittee shall comply with the applicable provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and IIII. (40 CFR Part 60, Subparts A and IIII)

#### 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-GASTANKS FLEXIBLE GROUP CONDITIONS

### **DESCRIPTION**

Any new (placed into operation on or after 7/1/79) or modified gasoline storage tank of capacity greater than 2000 gallons that is exempt from the requirements of Rule 201 pursuant to Rule 278 and Rule 284(2)(g).

**Emission Unit:** EU-GASTANK

#### POLLUTION CONTROL EQUIPMENT

Permanent submerged fill pipe, vapor balance system.

## I. EMISSION LIMIT(S)

NA

## II. MATERIAL LIMIT(S)

NA

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

- 1. The permittee shall not load or allow the loading of gasoline from a delivery vessel into any new stationary vessel of more than 2,000 gallons (7.57 cubic meters or 7,571 liters) capacity unless such stationary vessel is equipped with a permanent submerged fill pipe. (R 336.1703(1))
- 2. The permittee shall not load or allow the loading of gasoline from a delivery vessel into any new stationary vessel of more than 2,000 gallon capacity located at a gasoline dispensing facility unless such stationary vessel is controlled by a vapor balance system or an equivalent control system approved by the department. The vapor balance system shall capture displaced gasoline vapor and air by means of a vapor-tight collection line and shall be designed to return not less than 90%, by weight, of the displaced gasoline vapor from the stationary vessel to the delivery vessel. (R 336.1703(2))
- 3. The permittee shall, at all times, operate and maintain each gasoline storage tank in FG-GASTANKS, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. (40 CFR 63.11115(a))
- 4. The permittee shall not allow gasoline to be handled in a manner that would result in vapor releases to the atmosphere for extended periods of time. Measures to be taken include, but are not limited to, the following: (40 CFR 63.11116(a), 40 CFR 63.11117(a), 40 CFR 63.11118(a))
  - a. Minimize gasoline spills
  - b. Clean up spills as expeditiously as practicable
  - c. Cover all open gasoline containers and all gasoline storage tank fill-pipes with a gasketed seal when not in use
  - d. Minimize gasoline sent to open waste collection systems that collect and transport gasoline to reclamation and recycling devices, such as oil/water separators
- 5. The permittee shall only load gasoline into storage tanks by utilizing submerged filling, as defined in 40 CFR 63.11132, and as specified in 40 CFR 63.11117(b)(1), (b)(2), or (b)(3). The applicable distances in 40 CFR 63.11117(b)(1) and (2) shall be measured from the point in the opening of the submerged fill pipe that is the greatest distance from the bottom of the storage tank. (40 CFR 63.11117(b), 40 CFR 63.11118(a))

6. The permittee shall, for tanks with monthly throughput of 100,000 gallons or more, unload cargo tanks in compliance with the management practices in 40 CFR Part 63, Subpart CCCCCC, Table 2. (40 CFR 63.11118(d))

## IV. DESIGN/EQUIPMENT PARAMETER(S)

- 1. Each new stationary vessel with a capacity greater than 2000 gallons shall be equipped, maintained, or controlled with both the following: (R 336.1703(3))
  - a. An interlocking system or procedure to ensure that the vapor-tight collection line is connected before any gasoline can be loaded
  - b. A device to ensure that the vapor-tight collection line shall close upon disconnection so as to prevent release of gasoline vapor
- 2. The permittee shall install and operate a vapor balance system that meets the design criteria in 40 CFR Part 63, Subpart CCCCC, Table 1 on each gasoline storage tank, except gasoline storage tanks identified in 40 CFR 63.11118(c). (40 CFR 63.11118(b))

### 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 comply with the requirements in 40 CFR 63.11120(a)(1) and (2) at the time of installation, as specified in 40 CFR 63.11113(e), of a vapor balance system required under 40 CFR 63.11118(b)(1), and every three years thereafter. (40 CFR 63.11118(e), 40 CFR 63.11120(a))

#### 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 an updated record of the following for each storage vessel: (R 336.1213(3))
  - a. The identification (name, tank #, etc.)
  - b. Location within the plant
  - c. The capacity of the vessel
  - d. The date of installation / modification
  - e. The type of material contained in the vessel
  - f. Monthly and annual gasoline throughput
  - g. Whether the tank is equipped with a submerged fill pipe and vapor balance system
- 2. The permittee shall keep records of all tests performed under 40 CFR 63.11120(a) (SC V.1). (40 CFR 63.11118(b), 40 CFR 63.11125(a))
- 3. The permittee shall keep records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment. (40 CFR 63.11125(d)(1))
- 4. The permittee shall keep records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.11115(a), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. (40 CFR 63.11125(d)(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 a Notification of Compliance Status to the applicable USEPA Regional Office and the delegated State authority, as specified in 40 CFR 63.13, in accordance with the schedule specified in 40 CFR 63.9(h). The Notification of Compliance Status must be signed by a responsible official who must certify its accuracy, must indicate whether the source has complied with the requirements of this subpart, and must indicate whether the facility's throughput is determined based on the volume of gasoline loaded into all storage tanks or on the volume of gasoline dispensed from all storage tanks. (40 CFR 63.11124(b)(2))
- 5. The permittee shall submit a Notification of Performance Test, as specified in 40 CFR 63.9(e), prior to initiating testing required by 40 CFR 63.11120(a) and (b). (40 CFR 63.11124(b)(4))
- 6. The permittee shall submit additional notifications specified in 40 CFR 63.9, as applicable. **(40 CFR 63.11124(b)(5))**

See Appendix 8

## VIII. STACK/VENT RESTRICTION(S)

NA

#### IX. OTHER REQUIREMENT(S)

- 1. The permittee shall comply with the requirements of R 336.1703 for all gasoline tanks placed into operation on or after July 1, 1979. (R 336.1703)
- 2. The permittee shall comply with the applicable provisions of the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 63, Subparts A and CCCCCC, by the dates specified in 40 CFR 63.11113. (40 CFR Part 63, Subparts A and CCCCCC)

# FG-RULE 287(2)(c) 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 287(2)(c). Emission units installed/modified before December 20, 2016, may show compliance with Rule 287 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-PAINTBOOTH1, EU-PAINTBOOTH2, EU-PAINTBOOTH3, EU-MISC ADHESIVES

#### POLLUTION CONTROL EQUIPMENT

A dry filter system or water-wash system for paint overspray particulate matter control.

#### I. EMISSION LIMIT(S)

NA

#### II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Underlying Applicable Requirement
<ol> <li>Coatings</li> </ol>	200	Per month, as	Each emission	R 336.1287(2)(c)(i)
	Gallons	applied, minus	unit in	
	(minus water as	water, per	FG-RULE	
	`applied)	emission unit	287(2)(c)	

## III. PROCESS/OPERATIONAL RESTRICTION(S)

NA

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

1. Any exhaust system that serves only coating spray equipment shall be equipped with a properly installed and operating particulate control system. (R 336.1213(2), R 336.1287(2)(c)(ii), R 336.1910)

#### 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 287(2)(c), Permit to Install Exemption Record form (EQP 3562) or in a format acceptable to the AQD District Supervisor. (R 336.1213(3))

- a. Volume of coating used, as applied, minus water, in gallons. (R 336.1287(c)(iii))
- b. Documentation of any filter replacements for exhaust systems serving coating spray equipment. (R 336.1213(3))
- 2. The permittee shall maintain an updated list of emission units installed pursuant to Rule 336.1287 with description and date of installation. (R336.1213(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)

 The permittee shall comply with the applicable provisions of the National Emission Standards for Hazardous Air Pollutants, 40 CFR 63, Subpart A and Subpart HHHHHHH, by the dates specified in 40 CFR 63.11172. (40 CFR 63 Subparts A and HHHHHHH)

## FG-MACT6H FLEXIBLE GROUP CONDITIONS

#### **DESCRIPTION**

**40 CFR Part 63, Subpart HHHHHH** - National Emission Standards for Hazardous Air Pollutants for Paint Stripping and Miscellaneous Surface Coating Operations at Area Sources. Requirements applicable to paint stripping operations that involve the use of chemical strippers that contain methylene chloride (MeCl) in paint removal processes; Autobody refinishing operations that encompass motor vehicle and mobile equipment spray-applied surface coating operations; Spray application of coatings containing compounds of chromium (Cr), lead (Pb), manganese (Mn), nickel (Ni), or cadmium (Cd), collectively referred to as the target HAP to any part or product made of metal or plastic, or combinations of metal and plastic that are not motor vehicles or mobile equipment.

Emission Units: EU-PAINTBOOTH1, EU-PAINTBOOTH2, EU-PAINTBOOTH3

## **POLLUTION CONTROL EQUIPMENT**

A dry filter system or water-wash system for paint overspray particulate matter control.

## I. EMISSION LIMIT(S)

NA

## II. MATERIAL LIMIT(S)

NA

## III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee shall implement management practices to minimize the evaporative emissions of MeCl. The management practices must address, at a minimum, the practices in SC III.a. through SC III.e, as applicable, for each emission unit in FG-MACT6H: (40 CFR 63.11173(a)
  - a. Evaluate each application to ensure there is a need for paint stripping (e.g., evaluate whether it is possible to re-coat the piece without removing the existing coating).
  - b. Evaluate each application where a paint stripper containing MeCl is used to ensure that there is no alternative paint stripping technology that can be used.
  - c. Reduce exposure of all paint strippers containing MeCl to the air.
  - d. Optimize application conditions when using paint strippers containing MeCl to reduce MeCl evaporation (e.g., if the stripper must be heated, make sure that the temperature is kept as low as possible to reduce evaporation).
  - e. Practice proper storage and disposal of paint strippers containing MeCl (e.g., store stripper in closed, airtight containers).
- 2. The permittee shall meet the following requirements for each motor vehicle and mobile equipment surface coating operation and each miscellaneous surface coating operation: (40 CFR 63.11173(e), 40 CFR 63.11173(g))
  - a. All painters must be certified that they have completed training in the proper spray application of surface coatings and the proper setup and maintenance of spray equipment. The minimum requirements for training and certification are described in 40 CFR 63.11173(f). All new and existing personnel at an affected motor vehicle and mobile equipment or miscellaneous surface coating source, including contract personnel, who spray apply surface coatings, as defined in 40 CFR 63.11180, must be trained by the dates specified in paragraphs 40 CFR 63.11173(g)(1) and (2).

b. All paint spray gun cleaning must be done so that an atomized mist or spray of gun cleaning solvent and paint residue is not created outside of a container that collects used gun cleaning solvent.

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

- 1. The permittee shall meet the following requirements for each motor vehicle and mobile equipment surface coating operation and each miscellaneous surface coating operation: (40 CFR 63.11173(e)(2))
  - a. All spray-applied coatings must be applied in a spray booth, preparation station, or mobile enclosure that meets the requirements of 40 CFR 63.11173(e)(2)(i) and either 40 CFR 63.11173(e)(2)(ii), (e)(2)(iii), or (e)(2)(iv).
  - b. All spray-applied coatings must be applied with a high volume, low pressure (HVLP) spray gun, electrostatic application, airless spray gun, air-assisted airless spray gun, or an equivalent technology that is demonstrated by the spray gun manufacturer to achieve transfer efficiency comparable to one of the spray gun technologies listed above for a comparable operation, and for which written approval has been obtained from the Administrator.

#### V. TESTING/SAMPLING

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

NA

## VI. MONITORING/RECORDKEEPING

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

- 1. The permittee must maintain copies of annual usage of paint strippers containing MeCl on site at all times. (40 CFR 63.11173(c))
- 2. The permittee shall keep the following records: (40 CFR 63.11177)
  - a. Certification that each painter has completed the training specified in 40 CFR 63.11173(f) with the date the initial training and the most recent refresher training was completed. (40 CFR 63.11177(a))
  - b. Documentation of the filter efficiency of any spray booth exhaust filter material, according to the procedure in 40 CFR 63.11173(e)(3)(i). **(40 CFR 63.11177(b))**
  - c. Documentation from the spray gun manufacturer that each spray gun with a cup capacity equal to or greater than 3.0 fluid ounces (89 cc) that does not meet the definition of an HVLP spray gun, electrostatic application, airless spray gun, or air assisted airless spray gun, has been determined by the Administrator to achieve a transfer efficiency equivalent to that of an HVLP spray gun, according to the procedure in 40 CFR 63.11173(e)(4). (40 CFR 63.11177(c))
  - d. Copies of any notification submitted as required by 40 CFR 63.11175 and copies of any report submitted as required by 40 CFR 63.11176. (40 CFR 63.11177(d))
  - e. Records of paint strippers containing MeCl used for paint stripping operations, including the MeCl content of the paint stripper used. Documentation needs to be sufficient to verify annual usage of paint strippers containing MeCl (e.g., material safety data sheets or other documentation provided by the manufacturer or supplier of the paint stripper, purchase receipts, records of paint stripper usage, engineering calculations). (40 CFR 63.11177(e))
  - f. Records of any deviation from the requirements in 40 CFR 63.11173, 40 CFR 63.11174, 40 CFR 63.11175, or 40 CFR 63.11176. These records must include the date and time period of the deviation, and a description of the nature of the deviation and the actions taken to correct the deviation. (40 CFR 63.11177(f))
  - g. Records of any assessments of source compliance performed in support of the initial notification, notification of compliance status, or annual notification of changes report. (40 CFR 63.11177(g))
  - h. Records of any assessments of source compliance performed in support of the initial notification, notification of compliance status, or annual notification of changes report. (40 CFR 63.11177(h))

## VII. REPORTING

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

- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. (R 336.1213(3)(c)(i))
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. (R 336.1213(4)(c))
- 4. The permittee shall submit the notifications and reports in 40 CFR 63.11175 and 40 CFR 63.11176 that are applicable to the source. (40 CFR 63.11175, 40 CFR 63.11176)

## See Appendix 8

VIII. STACK/VENT RESTRICTION(S)

NA

IX. OTHER REQUIREMENT(S)

NA

# FG-RULE290 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-TANKPURGE, EU-AIRBAGS

#### POLLUTION CONTROL EQUIPMENT

NA

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

- 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 CO2 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 <u>on or after</u> 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. <u>DESIGN/EQUIPMENT PARAMETER(S)</u>

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 two-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))
- 4. The permittee shall maintain an updated list of emission units installed pursuant to Rule 336.1290 with description and date of installation. (R336.1213(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

## FG-COLDCLEANERS 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: EU-COLDCLEANERS** 

## **POLLUTION CONTROL EQUIPMENT**

NA

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

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

# FG-RICEMACT FLEXIBLE GROUP CONDITIONS

## **DESCRIPTION**

40 CFR Part 63, Subpart ZZZZ – National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at an area source of HAP emissions, existing emergency, compression ignition (CI) RICE. A RICE is existing if the date of installation is before June 12, 2006.

**Emission Units:** EU-GEN1, EU-GEN2, EU-GEN3, EU-GEN4, EU-GEN6, EU-GEN7, EU-GEN8, EU-GEN9, EU-GEN10, EU-GEN11, EU-GEN12, EU-GEN22

#### **POLLUTION CONTROL EQUIPMENT**

NA

#### I. EMISSION LIMIT(S)

NA

## II. MATERIAL LIMIT(S)

1. The permittee shall burn only diesel fuel in each engine with a maximum sulfur content of 15 ppm (0.0015 percent) by weight and a minimum Cetane index of 40 or a maximum aromatic content of 35 volume percent. (40 CFR 63.6604(b), 40 CFR 80.510(b))

## III. PROCESS/OPERATIONAL RESTRICTION(S)

- 1. The permittee must comply with the requirements in Item 4 of Table 2d of 40 CFR Part 63, Subpart ZZZZ which apply to each engine in FG-RICEMACT as specified in the following:
  - a. Change oil and filter every 500 hours of operation or annually, whichever comes first, except as allowed in SC III.2:
  - b. Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
  - c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

If the emergency engine is being operated during an emergency and it is not possible to shut down the engine to perform the management practice requirements on the schedule required, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the management practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The management practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under Federal, State or local law has been abated. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law or which the risk was deemed unacceptable. (40 CFR 63.6603(a), 40 CFR Part 63, Subpart ZZZZ, Table 2d.4)

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

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

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

## IV. DESIGN/EQUIPMENT PARAMETER(S)

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

#### V. TESTING/SAMPLING

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

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

## VI. MONITORING/RECORDKEEPING

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

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

e. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.

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

- 2. For each engine in FG-RICEMACT, the permittee shall keep in a satisfactory manner, records to demonstrate continuous compliance with the operation and maintenance of the engine according to the manufacturer's emission-related operation and maintenance instructions; or of a maintenance plan that provides to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. The permittee shall keep all records on file and make them available to the department upon request. (40 CFR 63.6655(d), 40 CFR 63.6660, 40 CFR Part 63, Subpart ZZZZ, Table 6.9)
- 3. For each engine in FG-RICEMACT, the permittee shall keep in a satisfactory manner, records of the maintenance conducted to demonstrate that the engine and after-treatment control device (if any) were operated and maintained according to the developed maintenance plan. The permittee shall keep all records on file and make them available to the department upon request. (40 CFR 63.6655(e), 40 CFR 63.6660)
- 4. The permittee shall monitor and record, the total hours of operation for each engine in FG-RICEMACT on a monthly basis, and the hours of operation during emergency and non-emergency service that are recorded through the non-resettable hour meter for each engine FG-RICEMACT on a calendar year basis, in a manner acceptable to the AQD District Supervisor. The permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for emergency operation. The permittee shall keep all records on file and make them available to the department upon request. (40 CFR 63.6655(f), 40 CFR 63.6660)
- 5. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in FG-RICEMACT, demonstrating that the fuel meets the requirement of SC II.1. The certification or test data shall include the name of the oil supplier or laboratory, the sulfur content, and cetane index or aromatic content of the fuel oil. The permittee shall keep all records on file and make them available to the department upon request. (40 CFR 80.510(b))
- 6. The permittee's records must be in a form suitable and readily available for expeditious review according to 40 CFR 63.10(b)(1). **(40 CFR 63.6660(a))**
- 7. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for five years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. (40 CFR 63.6660(b))

#### VII. REPORTING

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

the period beginning on the applicable compliance date specified in 40 CFR 63.6595 and ending on June 30 (postmarked or delivered by July 31) or December 31 (postmarked or delivered by January 31), whichever date is the first date following the end of the first calendar half after the applicable compliance date. Each subsequent report must cover the semiannual period from January 1 through June 30, or from July 1 through December 31. The subsequent reports must be postmarked or delivered by July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period, except as allowed in 40 CFR 63.6650(b)(5). The compliance report must also contain the following information, as specified in 40 CFR 63.6650(c) and (d):

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

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

See Appendix 8

## VIII. STACK/VENT RESTRICTION(S)

NA

#### IX. OTHER REQUIREMENT(S)

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

# FG-SUBPARTIIII FLEXIBLE GROUP CONDITIONS

## **DESCRIPTION**

40 CFR Part 60, Subpart IIII requirements for Emergency Compression Ignition Internal Combustion Engines <30 l/cyl. constructed (ordered) after July 11, 2005 and manufactured after April 1, 2006.

#### **Emission Units:**

Pre-2007 model year CI internal combustion engine with maximum engine power less than 100 HP EU-GEN18

2007 model year and later CI internal combustion engine greater than 3,000 HP EU-GEN23, EU-GEN24, EU-GEN25

## **POLLUTION CONTROL EQUIPMENT**

NA

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

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	HC	1.3 g/kW-hr	Hourly	EU-GEN23,	SC V.1,	40 CFR 60.4205(b)
				EU-GEN24,	SC VI.2,	40 CFR 60.4202(b)(1),
				EU-GEN25	SC VI.4,	40 CFR Part 60, Subpart
					SC VI.5	IIII, Table 1
2.	NOx	9.2 g/kW-hr	Hourly	EU-GEN18,	SC V.1,	40 CFR 60.4205(a),
				EU-GEN23,	SC VI.2,	40 CFR 60.4205(b)
				EU-GEN24,	SC VI.4,	40 CFR 60.4202(b)(1),
				EU-GEN25	SC VI.5	40 CFR Part 60, Subpart
						IIII, Table 1
3.	CO	11.4 g/kW-hr	Hourly	EU-GEN23,	SC V.1,	40 CFR 60.4205(b)
			-	EU-GEN24,	SC VI.2,	40 CFR 60.4202(b)(1),
				EU-GEN25	SC VI.4,	40 CFR Part 60, Subpart
					SC VI.5	IIII, Table 1
4.	PM	0.54 g/kW-hr	Hourly	EU-GEN23,	SC V.1,	40 CFR 60.4205(b)
		_		EU-GEN24,	SC VI.2,	40 CFR 60.4202(b)(1),
				EU-GEN25	SC VI.4,	40 CFR Part 60, Subpart
					SC VI.5	IIII, Table 1

## II. MATERIAL LIMIT(S)

1. The permittee shall burn only diesel fuel with a maximum sulfur content of 15 ppm (0.0015 percent) by weight in each FG-SUBPARTIIII. (40 CFR 60.4207(b), 40 CFR 80.510(b))

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

1. The permittee shall operate and maintain each engine and control device, if installed, in FG-SUBPARTIIII according to the manufacturer's emission related 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(a)(1))

2. The permittee may change only emission related settings that are permitted by the manufacturer. (40 CFR 60.4211(a)(2))

- 3. The permittee must meet applicable requirements specified in 40 CFR 89, 94, and/or 1068 as they apply. (40 CFR 60.4211(a)(3))
- 4. Each engine in FG-SUBPARTIIII shall be certified by the manufacturer to the emission standards in 40 CFR 60.4205 for the same model year and maximum engine power. Each engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in 40 CFR 60.4211(g). (40 CFR 60.4211(b), 40 CFR 60.4211(c))
- 5. If the permittee does not install, configure, operate, and maintain an engine in FG-SUBPARTIIII according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee must demonstrate compliance as follows: (40 CFR 60.4211(g))
  - a. The permittee shall keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR 60.4211(g)(1), 40 CFR 60.4211(g)(3))
  - b. The permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year after an engine is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the permittee changes emission-related settings in a way that is not permitted by the manufacturer. (40 CFR 60.4211(g)(1), 40 CFR 60.4211(g)(3))
  - c. For EU-GEN23, EU-GEN24, EU-GEN-25, in addition to the requirements in SC III.5.a and SC III.5.b, the permittee shall conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards. (40 CFR 60.4211(g)(3))
- 6. The permittee shall not operate any engine in FG-SUBPARTIIII for more than 500 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month. (R 336.2803, R 336.2804, R 336.1213(3))
- 7. The permittee shall operate each engine in FG-SUBPARTIIII in compliance with the requirements in 40 CFR 60.4211(f) (SC III.7.a through 7.b) in order for an engine to be considered emergency stationary engine. (40 CFR 63.4211(f))
  - a. The permittee may operate each engine in FG-SUBPARTIIII for any combination of purposes specified in 40 CFR 63.4211(f)(2)(i) through (iii) (SC 7.a.i. through 7.a.iii) for a maximum of 100 hours per calendar year for maintenance checks and readiness testing and emergency demand response. Any operation for non-emergency situations as allowed in SC III.7.b counts as part of the 100 hours. (40 CFR 63.4211(f)(2))
    - i. 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. (40 CFR 63.4211(f)(2)(i))
    - ii. Emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see 40 CFR 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3. (40 CFR 63.4211(f)(2)(ii))
    - iii. Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of five percent or greater below standard voltage or frequency. (40 CFR 63.4211(f)(2)(iii))
  - b. The permittee may operate each engine in FG-SUBPARTIIII for up to 50 hours per calendar year in non-emergency situations. These 50 hours of operation are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response. Except as provided in paragraph 40 CFR 63.4211(f)(3)(i), 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 an electric grid or otherwise supply power as part of a financial arrangement with another entity. (40 CFR 63.4211(f)(3))

8. If the permittee does not operate an engine in FG-SUBPARTIIII according to the requirements in paragraphs 40 CFR 60.4211(f)(1) through (3) (SC III.7), The engine will not be considered an emergency engine under 40 CFR Part 60, Subpart IIII, and must meet all requirements for non-emergency engines. (40 CFR 63.4211(f))

## IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall equip and maintain each engine in FG-SUBPARTIIII with a non-resettable hours meter to track operating hours. (40 CFR 60.4209(a))

#### V. TESTING/SAMPLING

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

- 1. If the permittee is required to conduct performance testing because an engine in FG-SUBPARTIIII is not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the performance tests shall be conducted according to 40 CFR 60.4212. (40 CFR 60.4211(g), 40 CFR 60.4212)
- 2. 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)

#### 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, fuel supplier certification records or fuel sample test data, for diesel fuel used in FG-SUBPARTIIII, demonstrating that the fuel 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 60.4207, 40 CFR 80.510(b))
- 2. The permittee shall keep certification documentation from the manufacturer indicating that each engine in FG-SUBPARTIIII meets the applicable emission limitations contained in 40 CFR 60.4205. (40 CFR 60.4211(b), 40 CFR 60.4211(c))
- 3. The permittee shall keep records of the hours of operation of each engine in FG-SUBPARTIIII, recorded through the non-resettable hour meter. The permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. (40 CFR 60.4211(f))
- 4. The permittee shall keep records of the manufacturer's emission-related written instructions and records demonstrating that the engine has been maintained according to those instructions, as specified in SC III.1 for each engine in FG-SUBPARTIIII. (40 CFR 60.4206, 40 CFR 60.4211(a)(1))
- 5. If the permittee does not install, configure, operate, and maintain an engine in FG-SUBPARTIIII according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee shall keep records of the maintenance plan, as required by (40 CFR 60.4211(g) (SC III.5.a), maintenance activities conducted, and documentation of performance testing required in 40 CFR 60.4211(g). (40 CFR 60.4211(g))
- 6. The permittee shall monitor and record the hours of operation of the emergency generators based on a 12-month rolling time period. (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)

- 1. The permittee shall comply with the applicable provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and IIII. (40 CFR Part 60, Subparts A and IIII)
- 2. The permittee shall comply with the applicable provisions of the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 63, Subparts A and ZZZZ, by the dates specified in 40 CFR 63.6595. **(40 CFR Part 63, Subparts A and ZZZZ)**

# FG-SUBPARTJJJJ FLEXIBLE GROUP CONDITIONS

## **DESCRIPTION**

40 CFR 60, Subpart JJJJ requirements for Emergency Spark Ignition Internal Combustion Engines greater than 25 horsepower that commenced construction (ordered) after June 12, 2006 and were manufactured on or after January 1, 2009. Exempt from the requirements of Rule 201 pursuant to Rules 278 and 285(2)(g).

Emission Units: EU-GEN14a, EU-GEN15a, EU-GEN20, EU-GEN30, EU-GEN31

## **POLLUTION CONTROL EQUIPMENT**

NA

#### I. EMISSION LIMIT(S)

	Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1.	HC+NOx	13.4 g/kW-hr	Hourly	EUGEN14a,	SC V.1,	40 CFR 60.4233(c),
				EU-GEN20	SC VI.2, SC VI.3,	40 CFR 63.4231(b),
					SC VI.4	40 CFR 90.103 Table 1
2.	CO	519 g/kW-hr	Hourly	EUGEN14a,	SC V.1,	40 CFR 60.4233(c),
				EU-GEN20	SC VI.2, SC VI.3,	40 CFR 63.4231(b),
					SC VI.4	40 CFR 90.103 Table 1
3.	HC+NOx	2.7 g/kW-hr	Hourly	EUGEN15a	SC V.1,	40 CFR 60.4233(c),
			-		SC VI.2,	40 CFR 63.4231(b),
					SC VI.3, SC VI.4	40 CFR 1048
4.	CO	4.4 g/kW-hr	Hourly	EUGEN15a	SC V.1,	40 CFR 60.4233(c),
					SC VI.2, SC VI.3,	40 CFR 63.4231(b),
					SC VI.4	40 CFR 1048
5.	NOx	2.0 g/HP-hr	Hourly	EU-GEN30,	SC V.1,	40 CFR 60.4233(e),
				EU-GEN31	SC VI.2, SC VI.3,	40 CFR Part 60, Subpart
					SC VI.4	JJJJ, Table 1
6.	CO	4.0 g/HP-hr	Hourly	EU-GEN30,	SC V.1,	40 CFR 60.4233(e),
				EU-GEN31	SC VI.2, SC VI.3,	40 CFR Part 60, Subpart
					SC VI.4	JJJJ, Table 1
7.	VOC	1.0 g/HP-hr	Hourly	EU-GEN30,	SC V.1,	40 CFR 60.4233(e),
				EU-GEN31	SC VI.2, SC VI.3,	40 CFR Part 60, Subpart
					SC VI.4	JJJJ, Table 1

### II. MATERIAL LIMIT(S)

- 1. The permittee shall burn only pipeline natural gas in EU-GEN30 and EU-GEN31. (40 CFR 60.4233(e))
- 2. The permittee shall burn only burn only propane in EU-GEN20, EU-GEN14a, and EU-GEN15a. (40 CFR 60.4233(c))

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

1. The permittee shall operate and maintain each engine in FG-SUBPARTJJJJ such that it achieves the emission standards as required in 40 CFR 60.4233 over the entire life of the engine. **(40 CFR 60.4234)** 

2. Each engine in FG-SUBPARTJJJJ shall be certified by the manufacturer to the emission standards in 40 CFR 60.4233 (SC I.1 through SC I.7) applicable to that engine and the permittee shall meet one of the requirements in SC III.2.a or SC III.2.b: (40 CFR 60.4234(a), 40 CFR 60.4234)(b)(1))

- a. If the permittee operates and maintains EU-GEN14a, EU-GEN15a, EU-GEN20, EU-GEN30, and EU-GEN31 according to the manufacturer's emission-related written instructions, the permittee shall keep records of conducted maintenance to demonstrate compliance, only adjust engine settings according to and consistent with the manufacturer's emission-related written instructions, and meet the requirements specified in 40 CFR 1068, Subparts A through D, as they apply. (40 CFR 60.4234(a)(1), 40 CFR 60.4234)(b)(1))
- b. If the permittee does not operate and maintain EU-GEN14a, EU-GEN15a, EU-GEN20, EU-GEN30, EU-GEN31 according to the manufacturer's emission-related written instructions, the permittee shall: (40 CFR 60.4234(a)(2), 40 CFR 60.4234)(b)(1))
  - i. Keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. (40 CFR 60.4234(a)(2)(i) and (ii))
  - ii. For EU-GEN14a, EU-GEN15a, EU-GEN30, and EU-GEN31, conduct an initial performance test, specified in SC V.1, within 1 year of the engine no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after changing emission-related settings in a way that is not permitted by the manufacturer. (40 CFR 60.4243(a)(2)(ii))
- 3. The permittee shall not operate any engine in FG-SUBPARTJJJJ for more than 500 hours per year on a 12-month rolling time period basis as determined at the end of each calendar month. (R 336.2803, R 336.2804, R 336.1213(3))
- 4. The permittee shall operate each engine in FG-SUBPARTJJJJ in compliance with the requirements in 40 CFR 60.4234(d)(1) through (d)(3) (SC III.4) in order for an engine to be considered emergency stationary engine: (40 CFR 63.4243(d))
  - a. The permittee may operate each engine in FG-SUBPARTJJJJ for any combination of purposes specified in 40 CFR 63.4234(d)(2)(i) through (iii) (SC III.4.a.i through SC III.4.a.iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed in SC III.4.b counts as part of the 100 hours. (40 CFR 63.4243(d)(2))
    - i. 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. (40 CFR 63.4243(d)(2)(i))
    - ii. Emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see 40 CFR 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3. (40 CFR 63.4243(d)(2)(ii))
    - iii. Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of five percent or greater below standard voltage or frequency. (40 CFR 63.4243(d)(2)(iii))
  - b. The permittee may operate each engine in FG-ENGINESUBPARTJJJJ for up to 50 hours per calendar year in non-emergency situations. These 50 hours of operation are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response in SC III.3.a. Except as provided in paragraph 40 CFR 60.4243(d)(3)(i), 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 an electric grid or otherwise supply power as part of a financial arrangement with another entity. (40 CFR 63.4243(d)(3))
- 5. If the permittee does not operate an engine in FG-SUBPARTJJJJ according to the requirements in paragraphs 40 CFR 60.4243(d)(1) through (3) (SC III.4), the engine will not be considered an emergency engine under 40 CFR Part 60, Subpart JJJJ, and must meet all requirements for non-emergency engines. (40 CFR 63.4243(d))

## IV. DESIGN/EQUIPMENT PARAMETER(S)

1. The permittee shall install a non-resettable hour meter upon startup of each engine in FG-SUBPARTJJJJ. (40 CFR 60.4237)

#### V. TESTING/SAMPLING

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

- 1. If the permittee is required to conduct performance testing because an engine in FG-SUBPARTJJJJ is not installed, configured, operated, and maintained according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the performance tests shall be conducted according to 40 CFR 60.4244. (40 CFR 60.4244)
- 2. 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)

#### 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 records of all notifications submitted to comply with 40 CFR Part 60, Subpart JJJJ and all documentation supporting any notification. (40 CFR 60.4245(a)(1))
- 2. The permittee shall keep records of the manufacturer's emission-related written instructions for each engine in FG-SUBPARTJJJJ and records demonstrating that each engine has been maintained according to those instructions as specified in SC III.2.a. (40 CFR 60.4243(a)(1), 40 CFR 60.4245(a)(2))
- 3. The permittee shall keep documentation from the manufacturer that each engine in FG-SUBPARTJJJJ is certified to meet the applicable emissions standards in 40 CFR 60.4233 and the information as required in 40 CFR Parts 90, 1048, 1054, and 1060, as applicable. (40 CFR 60.4245(a)(3))
- 4. If the permittee does not install, configure, operate, and maintain an engine in FG-SUBPARTJJJJ is according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee shall keep records of the maintenance plan, as required by 40 CFR 60.4243(a)(2) (SC III.2.b.i), maintenance activities conducted, and documentation of performance testing required in 40 CFR 60.4243(a) (SC III.4.b.ii). (40 CFR 60.4245(a)(4))
- 5. The permittee shall keep records of the hours of operation of each engine in FG-SUBPARTJJJJ that is recorded through each engine's non-resettable hour meter. The permittee shall document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. (40 CFR 60.4245(b)
- 6. The permittee shall monitor and record the hours of operation of the emergency generators based on a 12-month rolling time period. (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))

4. If the permittee is required to conduct performance testing, the permittee must submit a copy of each performance test as conducted in 40 CFR 60.4244 within 60 days after the test has been completed. (40 CFR 60.4245(d)). If the permittee is required to conduct performance testing, the permittee must submit a copy of each performance test as conducted in 40 CFR 60.4244 within 60 days after the test has been completed. (40 CFR 60.4245(d))

See Appendix 8

## VIII. STACK/VENT RESTRICTION(S)

NA

## IX. OTHER REQUIREMENT(S)

- 1. The permittee shall comply with the applicable provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and JJJJ. (40 CFR Part 60, Subparts A and JJJJ)
- 2. The permittee shall comply with the applicable provisions of the National Emission Standards for Hazardous Air Pollutants, 40 CFR Part 63, Subparts A and ZZZZ, by the dates specified in 40 CFR 63.6595. **(40 CFR Part 63, Subparts A and ZZZZ)**

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

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

## **APPENDICES**

**Appendix 1. 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/	Michigan Department of Environment,	gr	Grains
department	Great Lakes, and Energy	HAP	Hazardous Air Pollutant
EGLE	Michigan Department of Environment,	Hg	Mercury
	Great Lakes, and Energy	hr	Hour
EU	Emission Unit	HP	Horsepower
FG	Flexible Group	$H_2S$	Hydrogen Sulfide
GACS	Gallons of Applied Coating Solids	kW	Kilowatt
GC	General Condition	lb	Pound
GHGs	Greenhouse Gases	m	Meter
HVLP	High Volume Low Pressure*	mg	Milligram
ID	Identification	mm	Millimeter
IRSL	Initial Risk Screening Level	MM	Million
ITSL	Initial Threshold Screening Level	MW	Megawatts
LAER	Lowest Achievable Emission Rate	NMOC	Non-methane Organic Compounds
MACT	Maximum Achievable Control Technology	$NO_x$	Oxides of Nitrogen
MAERS	Michigan Air Emissions Reporting System	ng	Nanogram
MAP	Malfunction Abatement Plan	PM	Particulate Matter
MSDS	Material Safety Data Sheet	PM10	Particulate Matter equal to or less than 10
NA	Not Applicable		microns in diameter
NAAQS	National Ambient Air Quality Standards	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
NESHAP	National Emission Standard for Hazardous	pph	Pounds per hour
Nepe	Air Pollutants New Source Performance Standards	ppm	Parts per million
NSPS NSR	New Source Review	ppmv	Parts per million by volume
PS	Performance Specification	ppmw %	Parts per million by weight Percent
PSD	Prevention of Significant Deterioration	psia	Pounds per square inch absolute
PTE	Permanent Total Enclosure	•	Pounds per square inch gauge
PTI	Permit to Install	psig scf	Standard cubic feet
RACT	Reasonable Available Control Technology	sec	Seconds
ROP	Renewable Operating Permit	SO <sub>2</sub>	Sulfur Dioxide
SC	Special Condition	TAC	Toxic Air Contaminant
SCR	Selective Catalytic Reduction	Temp	Temperature
SNCR	Selective Catalytic Reduction  Selective Non-Catalytic Reduction	THC	Total Hydrocarbons
SRN	State Registration Number	tpy	Tons per year
TEQ	Toxicity Equivalence Quotient		Microgram
USEPA/EPA	United States Environmental Protection	μg μm	Micrometer or Micron
JOLI A/LFA	Agency	VOC	Volatile Organic Compounds
i		V 0 0	Volatile Organie Compounds

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

## Appendix 2. Schedule of Compliance

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

## **Appendix 3. Monitoring Requirements**

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

## Appendix 4. Recordkeeping

The permittee shall use the following approved formats and procedures for the recordkeeping requirements referenced in EU-REMEDIATION. Alternative formats must be approved by the AQD District Supervisor.

PERMITTEE (SOURCE NAME	·)	CONTACT PERSON		
LOCATION		COUNTY		
RECORDKEEPING PERIOD:		PTI NUMBER	POLLUTANT(S)	
Start Date:	End Date:			

DATE	AIR VOLUME FLOW RATE (cubic feet/minute) (V)	INLET CONCENTRATION (milligrams / cubic meter)* (C)	CONTROL EFFICIENCY (Percent) (Es)	EMISSIONS** (pounds/hour) (Ps)
1. EXAMPLE	1,000	10,000	95	1.9

<sup>\*</sup>Parts per million in air is by volume and does not equal milligrams per liter.

BASIC EQUATION TO CALCULATE EMISSIONS:  $P_S = V * C * (100 - E_S) * 3.75 * 10^{-8}$ 

Signature:	Date:
	Telephone No.

## **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-A5262-2015. 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-A5262-2015a is being reissued as Source-Wide PTI No. MI-PTI-A5262-2021.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
97-12A	201600066	Incorporate PTI 97-12A into ROP	EU-REMEDIATION
85-18	202000122*	Incorporate PTI 85-18 into ROP	EU-BURNPAD

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

a. The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in EU-BOILER5, EU-BOILER6, and FG-BOILERS.

EU	NOx Emission Factor
EU-BOILER3, EU-BOILER4,	100 lb/MMCF
EU-BOILER5, EU-BOILER6	Source: MAERS EF for SCC 1-03-006-02

b. The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in FG-ENGINEDYNOS.

<sup>\*\*</sup>Emissions of VOC, gasoline or BTEX. Identify which pollutant the emissions are being calculated for.

EU	CO Emission Factor	NOx Emission Factor	VOC Emission Factor
Gas Dynos	3.123 lbs/gal	0.14 lbs/gal	0.165 lbs/gal
	NOx, CO & VOC EF established by AAMA in 1994 from automotive engine testing		
Diesel Dynos	0.130 lbs/gal	0.604 lbs/gal	0.049 lbs/gal
	Source: MAERS EFs for SCC 2-04-004-02		

## 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.