|  |  |  |
| --- | --- | --- |
|  | **MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY**  **AIR QUALITY DIVISION** |  |
| EFFECTIVE DATE: May 18, 2023  ISSUED TO  **AEP Cook Nuclear Plant**  State Registration Number (SRN): B4252  LOCATED AT  One Cook Place, Bridgman, Berrien County, Michigan 49106 | | |
| **RENEWABLE OPERATING PERMIT**  Permit Number: MI-ROP-B4252-2023  Expiration Date: May 18, 2028  Administratively Complete ROP Renewal Application  Due Between November 18, 2026 and November 18, 2027  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-B4252-2023  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 PTl 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

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Brad Myott, Field Operations Manager**TABLE OF CONTENTS**

[AUTHORITY AND ENFORCEABILITY 3](#_Toc135293913)

[A. GENERAL CONDITIONS 4](#_Toc135293914)

[Permit Enforceability 4](#_Toc135293915)

[General Provisions 4](#_Toc135293916)

[Equipment & Design 5](#_Toc135293917)

[Emission Limits 5](#_Toc135293918)

[Testing/Sampling 5](#_Toc135293919)

[Monitoring/Recordkeeping 6](#_Toc135293920)

[Certification & Reporting 6](#_Toc135293921)

[Permit Shield 7](#_Toc135293922)

[Revisions 8](#_Toc135293923)

[Reopenings 8](#_Toc135293924)

[Renewals 9](#_Toc135293925)

[Stratospheric Ozone Protection 9](#_Toc135293926)

[Risk Management Plan 9](#_Toc135293927)

[Emission Trading 9](#_Toc135293928)

[Permit to Install (PTI) 10](#_Toc135293929)

[B. SOURCE-WIDE CONDITIONS 11](#_Toc135293930)

[C. EMISSION UNIT SPECIAL CONDITIONS 12](#_Toc135293931)

[EMISSION UNIT SUMMARY TABLE 12](#_Toc135293932)

[EU-BOILER1 14](#_Toc135293933)

[D. FLEXIBLE GROUP SPECIAL CONDITIONS 17](#_Toc135293934)

[FLEXIBLE GROUP SUMMARY TABLE 17](#_Toc135293935)

[FG-EMERDIESELS 19](#_Toc135293936)

[FG-ENGINES 21](#_Toc135293937)

[FG-MACTZZZZ≤500 24](#_Toc135293938)

[FG-MACTZZZZ>500 28](#_Toc135293939)

[FG-MACTJJJJJJ 32](#_Toc135293940)

[FG-NSPSIIII 36](#_Toc135293941)

[FG-RULE287(2)(c) 39](#_Toc135293942)

[FG-COLDCLEANERS 41](#_Toc135293943)

[E. NON-APPLICABLE REQUIREMENTS 44](#_Toc135293944)

[APPENDICES 45](#_Toc135293945)

[Appendix 1. Acronyms and Abbreviations 45](#_Toc135293946)

[Appendix 2. Schedule of Compliance 46](#_Toc135293947)

[Appendix 3. Monitoring Requirements 46](#_Toc135293948)

[Appendix 4. Recordkeeping 46](#_Toc135293949)

[Appendix 5. Testing Procedures 46](#_Toc135293950)

[Appendix 6. Permits to Install 46](#_Toc135293951)

[Appendix 7. Emission Calculations 46](#_Toc135293952)

[Appendix 8. Reporting 47](#_Toc135293953)

# 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))**
   1. 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.
   2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the ROP.
   3. Inspect, at reasonable times, any of the following:
      1. Any stationary source.
      2. Any emission unit.
      3. Any equipment, including monitoring and air pollution control equipment.
      4. Any work practices or operations regulated or required under the ROP.
   4. 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

1. Any collected air contaminants shall be removed as necessary to maintain the equipment at the required operating efficiency. The collection and disposal of air contaminants shall be performed in a manner so as to minimize the introduction of contaminants to the outer air. Transport of collected air contaminants in Priority I and II areas requires the use of material handling methods specified in Rule 370(2).2 **(R 336.1370)**
2. 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

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

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

1. 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:
   1. Injurious effects to human health or safety, animal life, plant life of significant economic value, or property.1 **(R 336.1901(a))**
   2. Unreasonable interference with the comfortable enjoyment of life and property.1**(R 336.1901(b))**

## Testing/Sampling

1. The department may require the owner or operator of any source of an air contaminant to conduct acceptable performance tests, at the owner’s or operator’s expense, in accordance with Rule 1001 and Rule 1003, under any of the conditions listed in Rule 1001(1).2 **(R 336.2001)**
2. 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))**
3. 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

1. 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))**
   1. The date, location, time, and method of sampling or measurements.
   2. The dates the analyses of the samples were performed.
   3. The company or entity that performed the analyses of the samples.
   4. The analytical techniques or methods used.
   5. The results of the analyses.
   6. The related process operating conditions or parameters that existed at the time of sampling or measurement.
2. 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

1. 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))**
2. 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))**
3. 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))**
4. 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))**
   1. 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).
   2. 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.
   3. 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.
5. 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))**
   1. 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.
   2. 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.
6. 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))**
7. 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))**
8. The permittee shall provide notice of an abnormal condition, start-up, shutdown, or malfunction that results in emissions of a hazardous or toxic air pollutant which continue for more than one hour in excess of any applicable standard or limitation, or emissions of any air contaminant continuing for more than two hours in excess of an applicable standard or limitation, as required in Rule 912, to the appropriate AQD District Office. The notice shall be provided not later than two business days after the start-up, shutdown, or discovery of the abnormal conditions or malfunction. Notice shall be by any reasonable means, including electronic, telephonic, or oral communication. Written reports, if required under Rule 912, must be submitted to the appropriate AQD District Supervisor within 10 days after the start-up or shutdown occurred, within 10 days after the abnormal conditions or malfunction has been corrected, or within 30 days of discovery of the abnormal conditions or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5) and shall be certified by a Responsible Official in a manner consistent with the CAA.2 **(R 336.1912)**

## Permit Shield

1. 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))**
   1. The applicable requirements are included and are specifically identified in the ROP.
   2. 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.

1. Nothing in this ROP shall alter or affect any of the following:
   1. 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))**
   2. 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))**
   3. The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. **(R 336.1213(6)(b)(iii))**
2. The ability of the USEPA to obtain information from a source pursuant to Section 114 of the CAA. **(R 336.1213(6)(b)(iv))**
3. The permit shield shall not apply to provisions incorporated into this ROP through procedures for any of the following:
   1. Operational flexibility changes made pursuant to Rule 215. **(R 336.1215(5))**
   2. Administrative Amendments made pursuant to Rule 216(1)(a)(i)-(iv). **(R 336.1216(1)(b)(iii))**
   3. 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))**
   4. Minor Permit Modifications made pursuant to Rule 216(2). **(R 336.1216(2)(f))**
   5. State-Only Modifications made pursuant to Rule 216(4) until the changes have been approved by the department. **(R 336.1216(4)(e))**
4. 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

1. 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)**
2. 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))**
3. 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))**
4. 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

1. A ROP shall be reopened by the department prior to the expiration date and revised by the department under any of the following circumstances:
   1. 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))**
   2. If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. **(R 336.1217(2)(a)(ii))**
   3. 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))**
   4. If the department determines that the ROP must be revised to ensure compliance with the applicable requirements. **(R 336.1217(2)(a)(iv))**

## Renewals

1. 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

1. 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.
2. 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

1. 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).
2. 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):
   1. June 21, 1999,
   2. Three years after the date on which a regulated substance is first listed under 40 CFR 68.130, or
   3. The date on which a regulated substance is first present above a threshold quantity in a process.
3. 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.
4. 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

1. 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)

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

**Footnotes:**

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

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

# B. SOURCE-WIDE CONDITIONS

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

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

# C. EMISSION UNIT SPECIAL CONDITIONS

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

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

## EMISSION UNIT SUMMARY TABLE

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

| **Emission Unit ID** | **Emission Unit Description**  **(Including Process Equipment & Control Device(s))** | **Installation**  **Date/**  **Modification Date** | **Flexible Group ID** |
| --- | --- | --- | --- |
| EU-1ABEDG | 1-OME-150AB – Unit 1 AB emergency diesel generator engine (35.088 MMBTU/hr). | 01-01-1971 | FG-EMERDIESELS  FG-MACTZZZZ>500 |
| EU-1CDEDG | 1-OME-150CD – Unit 1 CD emergency diesel generator engine (35.088 MMBTU/hr). | 01-01-1971 | FG-EMERDIESELS  FG-MACTZZZZ>500 |
| EU-2ABEDG | 2-OME-150AB – Unit 2 AB emergency diesel generator engine (35.088 MMBTU/hr). | 01-01-1971 | FG-EMERDIESELS  FG-MACTZZZZ>500 |
| EU-2CDEDG | 2-OME-150CD – Unit 2 CD emergency diesel generator engine (35.088 MMBTU/hr). | 01-01-1971 | FG-EMERDIESELS  FG-MACTZZZZ>500 |
| EU-BOILER1 | Alternate plant space heating boiler – No. 2 fuel oil (28.56 MMBTU/hr heat input). | 06-10-2009 | FG-MACTJJJJJJ |
| EU-12-EP-DG-1 | 5,000 kW supplemental diesel generator 1. | 02-16-2005 | FG-ENGINES  FG-MACTZZZZ>500 |
| EU-12-EP-DG-2 | 5,000 kW supplemental diesel generator 2. | 02-16-2005 | FG-ENGINES  FG-MACTZZZZ>500 |
| EU-SECDIESELGEN | Detroit Diesel generator set – 550 kW, full load fuel consumption – 37.5 gph, estimated heat input @ 138,000 BTU/gal – 5,175,000 BTU/hr. | 01-01-1971 | FG-MACTZZZZ≤500 |
| EU-DSLFIREPUMP1 | Cummins Model NTA855 – 400 hp, fuel consumption 20.9 gph, estimated heat input @138,000 BTU/gal – 2,884,200 BTU/hr. | 12-01-1992 | FG-MACTZZZZ≤500 |
| EU-DSLFIIREPUMP2 | Cummins Model NTA855 – 400 hp, fuel consumption 20.9 gph, estimated heat input @138,000 BTU/gal – 2,884,200 BTU/hr. | 12-01-1992 | FG-MACTZZZZ≤500 |
| EU-TRGCTRDSLGEN | Detroit Diesel 550 hp diesel engine 12.7 L displacement Model Series YDDXL, estimated fuel consumption @ 138,000 BTU/gal – 23.0 gal/hr, estimated heat input – 3,174,000 BTU/hr. | 01-01-2001 | FG-MACTZZZZ≤500 |
| EU-MAINGATEDSLGEN | Mitsubishi 16.0 liter displacement 400 kW generator electrical output, estimated fuel consumption: 30.2 gph, estimated heat input @ 138,000 BTU/gal – 4,167,600 BTU/hr. | 12-01-2004 | FG-MACTZZZZ≤500 |
| EU-COMTWRPRGEN | 33 kW Kohler propane fired generator set Model 30RZG, 4.3 L GM Vortec spark ignition engine, estimated heat input – 370,000 BTU/hr. | 10-01-2002 | FG-MACTZZZZ≤500 |
| EU-DRYCASKDSLGEN | Generac 80 kW diesel generator set, 132 hp @ 1800 RPM, fuel consumption – 6.5 gph, heat input @ 138,000 BTU/gal – 897,000 BTU/hr. | 10-01-2011 | FG-NSPSIIII |
| EU-U1DISGENERATOR | 2020 Model Year Cummins C15 D6 24.3 hp Diesel Engine 15 kW Emergency Generator used for igniting hydrogen flares in an emergency. Installed as exempt under Rule 285(2)(g). EPA Certificate of Conformity LKBXL02.2FCC-043 | 06-01-2021 | FG-NSPSIIII |
| EU-U2DISGENERATOR | 2020 Model Year Cummins C15 D6 24.3 hp Diesel Engine 15 kW Emergency Generator used for igniting hydrogen flares in an emergency. Installed as exempt under Rule 285(2)(g). EPA Certificate of Conformity LKBXL02.2FCC-043 | 07-01-2021 | FG-NSPSIIII |
| EU-PAINTSHOP | Paint shop that supports plant operations. Emission controls include a spray booth with filtration and a limitation of 200 gallons or less per month of paints and coatings being used. | 06-01-1998 | FG-RULE287(2)(c) |
| EU-COLDCLEANER1 | A parts cleaner station with closeable covers located in the plant and elsewhere on site. They may be relocated from time to time depending on maintenance needs. | 01-01-1980 | FG-COLDCLEANERS |
| EU-COLDCLEANER2 | A parts cleaner station with closeable covers located in the plant and elsewhere on site. They may be relocated from time to time depending on maintenance needs. | 01-01-1980 | FG-COLDCLEANERS |
| EU-COLDCLEANER3 | A parts cleaner station with closeable covers located in the plant and elsewhere on site. They may be relocated from time to time depending on maintenance needs. | 01-01-1980 | FG-COLDCLEANERS |
| EU-COLDCLEANER4 | A parts cleaner station with closeable covers located in the plant and elsewhere on site. They may be relocated from time to time depending on maintenance needs. | 01-01-1980 | FG-COLDCLEANERS |
| EU-COLDCLEANER5 | A parts cleaner station with closeable covers located in the plant and elsewhere on site. They may be relocated from time to time depending on maintenance needs. | 01-01-1980 | FG-COLDCLEANERS |

## EU-BOILER1

**EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Alternate plant space heating boiler – No. 2 fuel oil (28.56 MMBTU/hr heat input).

**Flexible Group ID:** FG-MACTJJJJJJ

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

| **Pollutant** | **Limit** | **Time Period/ Operating Scenario** | **Equipment** | **Monitoring/**  **Testing Method** | **Underlying Applicable Requirements** |
| --- | --- | --- | --- | --- | --- |
| 1. SO2 | 0.31 lb/MMBTU2,\*,α | Hourly | EU-BOILER1 | SC V.1  SC VI.1 | **R 336.1401** |
| 1. SO2 | 20 tpy2 | 12-month rolling time period as determined at the end of each calendar month | EU-BOILER1 | SC VI.2 | **R 336.1205(1)(a)(ii)(D)**  **R 336.1401**  **40 CFR 52.21(c) and (d)** |
| 1. NOx | 0.15 lb/MMBTU2 | Hourly | EU-BOILER1 | SC V.1 | **R 336.2803**  **R 336.2804** |
| 1. NOx | 11 tpy2 | 12-month rolling time period as determined at the end of each calendar month | EU-BOILER1 | SC VI.2 | **R 336.1205(1)(a)(ii)(D)**  **R 336.2803**  **R 336.2804**  **40 CFR 52.21(c) and (d)** |

\* Equivalent to using fuel oil with a 0.30% sulfur content and higher heating value of 136,000 BTU/gal.

α In accordance with Rule 213(2) and Rule 213(6), compliance with this streamlined emission limit shall be considered compliance with the SO2 emission limit in/established by R 336.1401; and also compliance with the SO2 emission limit in/established by 40 CFR Part 60.42c(d), an additional applicable requirement that has been subsumed within this condition.

1. Visible emissions from EU-BOILER1 shall not exceed a six-minute average of 20 percent opacity, except as specified in R 336.1301(1)(a).2 **(R 336.1301, R 336.1331, 40 CFR 60.43c)**

**II. MATERIAL LIMIT(S)**

1. The sulfur content of the No. 2 fuel oil used in EU-BOILER1 shall not exceed 0.30 percent by weight.2 **(R 336.1201(3), R 336.1225, R 336.1401)**

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

1. The SO2 emission limits shall apply at all times, including periods of start-up, shut-down, and malfunctions.2 **(R 336.1205, R 336.1401)**

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

NA

**V. TESTING/SAMPLING**

1. Upon request of the AQD District Supervisor, the permittee shall verify NOx and SO2 emission rates from   
   EU-BOILER1 by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

|  |  |
| --- | --- |
| **Pollutant** | **Test Method Reference** |
| NOx | 40 CFR Part 60, Appendix A |
| SO2 | 40 CFR Part 60, Appendix A |

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, 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, in a satisfactory manner, the maximum sulfur content, density, and higher heating value of the fuel from each supplier. If supplier certification is used for this purpose, records of certification must contain the name of the supplier and a statement from the supplier that the oil complies with the requirements of 40 CFR 60.48c.2 **(R 336.1205, R 336.1225, R 336.1331, R 336.1702, R 336.1901)**
2. The permittee shall keep in a satisfactory manner, calculated on a monthly basis, 12-month rolling time period emission calculation records for SO2 and NOx for EU-BOILER1. All records shall be kept on file and made available to the Department upon request.2 **(R 336.1205(1)(a))**

**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 orreceived 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))**

1. 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))**
2. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

**See Appendix 8**

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

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

| **Stack & Vent ID** | **Maximum Exhaust Diameter / Dimensions**  **(inches)** | **Minimum Height Above Ground**  **(feet)** | **Underlying Applicable Requirements** |
| --- | --- | --- | --- |
| 1. SVBOILER1 | 242 | 222 | **R 336.1225**  **R 336.2803**  **R 336.2804**  **40 CFR 52.21(c) and (d)** |

**IX. OTHER REQUIREMENT(S)**

1. The facility shall comply with all the applicable provisions of 40 CFR Part 60, Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units. **(40 CFR Part 60, Subpart Dc)**

**Footnotes:**

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

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

# D. FLEXIBLE GROUP SPECIAL CONDITIONS

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

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

## FLEXIBLE GROUP SUMMARY TABLE

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

| **Flexible Group ID** | **Flexible Group Description** | **Associated**  **Emission Unit IDs** |
| --- | --- | --- |
| FG-EMERDIESELS | Four 3,500 kW large bore emergency diesel generators located inside the main building. | EU-1ABEDG  EU-1CDEDG  EU-2ABEDG  EU-2CDEDG |
| FG-ENGINES | Two 5,000 kW large bore supplemental diesel generators. | EU-12-EP-DG-1  EU-12-EP-DG-2 |
| FG-MACTZZZZ≤500 | **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, spark ignition (SI) RICE equal to or less than 500 bhp. A RICE is existing if the date of installation is before June 12, 2006. | EU-SECDIESELGEN  EU-DSLFIREPUMP1  EU-DSLFIREPUMP2  EU-TRGCTRDSLGEN  EU-MAINGATEDSLGEN  EU-COMTWRPRGEN |
| FG-MACTZZZZ>500 | **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, spark ignition (SI) RICE greater than 500 brake hp. A RICE is existing if the date of installation is before June 12, 2006. | EU-1ABEDG  EU-1CDEDG  EU-2ABEDG  EU-2CDEDG  EU-12-EP-DG-1  EU-12-EP-DG-2 |
| FG-MACTJJJJJJ | Requirements for an existing large(≥10 MMBTU/hr) oil-fired industrial, commercial, or institutional boiler that is equipped with an oxygen trim system and is located at an area source of hazardous air pollutants per 40 CFR Part 63, Subpart JJJJJJ. | EU-BOILER1 |
| FG-NSPSIIII | Emergency reciprocating internal combustion engines (RICE) at the facility subject to 40 CFR Part 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.  EU-DRYCASKDSLGEN is rated at 132 HP (80 kilowatts (kW)) diesel-fueled emergency engine with a model year of 2011 or later, and a displacement of 4.5 liters/cylinder.  EU-U1DISGENERATOR and EU-U2DISGENERATOR are each rated at 24.3 hp (15 kW) diesel-fueled emergency engines with a model year of 2011 or later, and displacements of 1.65 liters/cylinder. | EU-DRYCASKDSLGEN  EU-U1DISGENERATOR  EU-U2DISGENERATOR |
| FG-RULE287(2)(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-PAINTSHOP |
| 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-COLDCLEANER1  EU-COLDCLEANER2  EU-COLDCLEANER3  EU-COLDCLEANER4  EU-COLDCLEANER5 |

## FG-EMERDIESELS

**FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Four 3,500 kW large bore emergency diesel generators located inside the main building.

**Emission Units:**  EU-1ABEDG, EU-1CDEDG, EU-2ABEDG, EU-2CDEDG

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

| **Pollutant** | **Limit** | **Time Period/Operating Scenario** | **Equipment** | **Monitoring/**  **Testing Method** | **Underlying Applicable Requirements** |
| --- | --- | --- | --- | --- | --- |
| 1. SO2 | 0.33 lb/MMBTU2,\* | 24-hour average | EU-1ABEDG  EU-1CDEDG  EU-2ABEDG  EU-2CDEDG | SC V.1, SC VI.1 | **R 336.1401**  **40 CFR 52.21(c) and (d)** |

\*This is equivalent to using oil with a 0.3% sulfur content and heat value of 18,000 BTUs per pound.

1. Visible emissions from the emergency generators in FG-EMERDIESELS shall not exceed a 6-minute average of 20% opacity, except as specified in Rule 301(1)(a).2 **(R 336.1301)**

**II. MATERIAL LIMIT(S)**

NA

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

1. The permittee shall not operate the emergency generators in FG-EMERDIESELS when electric power is available, except during periods of maintenance checks and operator training.2 **(R 336.1225, R 336.1702, 40 CFR 52.21(c) and (d))**

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

NA

**V. TESTING/SAMPLING**

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

1. Upon request of the AQD District Supervisor, the permittee shall verify SO2 emission rates from one or more representative units of FG-EMERDIESELS by testing at owner's expense, in accordance with the Department requirements. Testing shall be performed using an approved EPA Method listed in:

|  |  |
| --- | --- |
| **Pollutant** | **Test Method Reference** |
| SO2 | 40 CFR Part 60, Appendix A |

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, 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 oil used in FG-EMERDIESELS, demonstrating that the fuel meets the requirement of SC l.1. The certification or test data shall include the name of the oil supplier or laboratory, the sulfur content, and the heating value of the fuel oil. The permittee shall keep all records on file and make them available to the department upon request. **(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 orreceived 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 orreceived by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

1. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

**See Appendix 8**

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

NA

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all 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)**

**Footnotes:**

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

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

## FG-ENGINES

**FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Two 5,000 kW large bore supplemental diesel generators.

**Emission Units:** EU-12-EP-DG-1, EU-12-EP-DG-2

**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 gal2 | Hourly | FG-ENGINES | 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-ENGINES.1 **(R 336.1224, R 336.1225)**
2. If any electricity produced by FG-ENGINES is sold to a utility power distribution system, the sulfur content of the diesel fuel used in FG-ENGINES 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).2 **(40 CFR 72.7)**
3. The combined diesel fuel use for all units included in FG-ENGINES shall not exceed 136,000 gallons per 12-month rolling time period.2 **(R 336.1205(1)(a), 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-ENGINES in accordance with manufacturer's recommendations for safe and proper operation to minimize emissions during periods of start-up, shutdown, and malfunction.2 **(R 336.1912)**
2. The total capacity from each unit included in FG-ENGINES shall not exceed 5 MW.2 **(40 CFR 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-ENGINES, by testing at owner’s expense, in accordance with Department requirements may be required. No less than 60 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.2 **(R 336.1205(1)(a), R 336.2001, R 336.2003, R 336.2004)**
2. Testing shall be performed using an approved EPA Method listed in:

|  |  |
| --- | --- |
| **Pollutant** | **Test Method Reference** |
| NOx | 40 CFR Part 60, Appendix A |

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD approved Test Protocol and must meet the requirements of the federal Clean Air Act, all applicable state and federal rules and regulations, and be within the authority of the AQD to make the change. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing, 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 install, calibrate, maintain, and operate in a satisfactory manner, a device to monitor and record the fuel use for FG-ENGINES on a monthly basis.2 **(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-ENGINES. All records shall be kept on file and made available to the Department upon request.2 **(R 336.1912)**
3. If any electricity produced by FG-ENGINES is sold to a utility power distribution system, the permittee shall keep records of the sulfur content calculated in percent by weight, on an annual average as required by SC II.2. All records shall be kept on file and made available to the Department upon request.2 **(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-ENGINES. The records must indicate the total amount of fuel use in FG-ENGINES.2 **(R 336.1205(1)(a), 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 orreceived 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 orreceived by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

1. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

**See Appendix 8**

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

The exhaust gases from the stacks listed in the table below shall be discharged unobstructed vertically upwards to the ambient air.2 **(R 336.1225, 40 CFR 52.21(c) and (d))**

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall not replace or modify FG-ENGINES, or any portion of FG-ENGINES, unless all of the following conditions are met:2 **(R 336.1201a(1))**
   1. The permittee shall update the general permit submitting a new Process Information Form (EQP5787) to the Permit Section and District Supervisor identifying the existing and new equipment a minimum of 10 days before the equipment is replaced or modified.
   2. The permittee shall continue to meet all general permit to install applicability criteria after the replacement or modification is complete.
   3. The permittee shall keep all records of the date and description of the replacement or modification.

2. 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)**

**Footnotes:**

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

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

## FG-MACTZZZZ≤500

**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 a 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.

**Emission Units:** EU-SECDIESELGEN, EU-DSLFIREPUMP1, EU-DSLFIREPUMP2, EU-TRGCTRDSLGEN,   
EU-MAINGATEDSLGEN, EU-COMTWRPRGEN

**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 1090.305)**

**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-MACTZZZZ≤500 as specified in the following:

1. Change oil and filter every 500 hours of operation or annually, whichever comes first, except as allowed in SC III.2;
2. Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
3. 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 lll.1. The oil analysis must be performed at the same frequency specified for changing the oil in SC lll.1. **(40 CFR 63.6625(i))**

3. The permittee shall operate and maintain each engine in FG-MACTZZZZ≤500 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-MACTZZZZ≤500, 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-MACTZZZZ≤500 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-MACTZZZZ≤500 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 lll.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-MACTZZZZ≤500 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 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the permittee must change the oil within 2 business days or before commencing operation, whichever is later. The permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. **(40 CFR 63.6625(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-MACTZZZZ≤500, the permittee shall keep in a satisfactory manner the following:

1. 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,
2. Records of the occurrence and duration of each malfunction of operation or the air pollution control and monitoring equipment,
3. Records of performance tests and performance evaluations,
4. Records of all required maintenance performed on the air pollution control and monitoring equipment,
5. 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-MACTZZZZ≤500, 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 develop and follow 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-MACTZZZZ≤500, 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-MACTZZZZ≤500 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 in FG-MACTZZZZ≤500 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 non-emergency operation. The permittee shall keep all records on file and make them available to the department upon request. **(R 336.1213(3) 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 diesel fuel oil used in FG-MACTZZZZ≤500, demonstrating that the fuel meets the requirement of SC ll.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. **(R 336.1213(3), 40 CFR 1090.305)**

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 5-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 orreceived 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 orreceived by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

**See Appendix 8**

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

NA

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable 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-MACTZZZZ>500

**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 greater than 500 brake hp. A RICE is existing if the date of installation is before June 12, 2006.

**Emission Units:** EU-1ABEDG, EU-1CDEDG, EU-2ABEDG, EU-2CDEDG, EU-12-EP-DG-1, EU-12-EP-DG-2

**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 1090.305)**

**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-MACTZZZZ>500 as specified in the following:

1. Change oil and filter every 500 hours of operation or annually, whichever comes first, except as allowed in SC III.2;
2. Inspect the air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary; and
3. 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 lll.1. The oil analysis must be performed at the same frequency specified for changing the oil in SC lll.1. **(40 CFR 63.6625(j))**

3. The permittee shall operate and maintain each engine in FG-MACTZZZZ>500 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-MACTZZZZ>500, 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-MACTZZZZ>500 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-MACTZZZZ>500 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 lll.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-MACTZZZZ>500 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 2 business days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the permittee must change the oil within 2 business days or before commencing operation, whichever is later. The permittee must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. **(40 CFR 63.6625(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-MACTZZZZ>500, the permittee shall keep in a satisfactory manner the following:

1. 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,
2. Records of the occurrence and duration of each malfunction of operation or the air pollution control and monitoring equipment,
3. Records of performance tests and performance evaluations,
4. Records of all required maintenance performed on the air pollution control and monitoring equipment,
5. 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-MACTZZZZ>500, 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 develop and follow 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-MACTZZZZ>500, 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-MACTZZZZ>500 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 in FG-MACTZZZZ>500 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 non-emergency operation. The permittee shall keep all records on file and make them available to the department upon request. **(R 336.1213(3), 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 diesel fuel oil used in FG-MACTZZZZ>500, demonstrating that the fuel meets the requirement of SC ll.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. **(R 336.1213(3), 40 CFR 1090.305)**

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 5-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 orreceived 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 orreceived by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

**See Appendix 8**

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

NA

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable 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-MACTJJJJJJ

**FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Requirements for an existing large(≥10 MMBTU/hr) oil-fired industrial, commercial, or institutional boiler that is equipped with an oxygen trim system and is located at an area source of hazardous air pollutants per 40 CFR Part 63, Subpart JJJJJJ.

**Emission Unit:** EU-BOILER1

**POLLUTION CONTROL EQUIPMENT**

Oxygen analyzer and trim systems

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

NA

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

1. Each boiler in FG-MACTJJJJJJ with an oxygen trim system that maintains an optimum air-to-fuel ratio must conduct a tune-up every 5 years as specified in SC III.3. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. The permittee may delay the burner inspection and inspection of the system controlling the air-to-fuel ratio until the next scheduled unit shutdown, but the permittee must inspect each burner and system controlling the air-to-fuel ratio at least once every 72 months. **(40 CFR 63.11223(c), 40 CFR Part 63, Subpart JJJJJJ, Table 2.14)**

2. For each boiler in FG-MACTJJJJJJ, the permittee must conduct the tune-up while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up. **(40 CFR 63.11223(a))**

3. The permittee must conduct a tune-up of each boiler in FG-MACTJJJJJJ to demonstrate continuous compliance as specified below:

a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary. **(40 CFR 63.11223(b)(1))**

b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. **(40 CFR 63.11223(b)(2))**

c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. **(40 CFR 63.11223(b)(3))**

d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject. **(40 CFR 63.11223(b)(4))**

e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. **(40 CFR 63.11223(b)(5))**

f. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup. **(40 CFR 63.11223(b)(7))**

4. At all times, the permittee must operate and maintain each boiler in FG-MACTJJJJJJ, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by 40 CFR Part 63, Subpart JJJJJJ have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. **(40 CFR 63.11205(a))**

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

NA

**V. TESTING/SAMPLING**

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

NA

**VI. MONITORING/RECORDKEEPING**

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

1. The permittee must maintain the records specified below:

a. The permittee must keep a copy of each notification and report that was submitted to comply with 40 CFR Part 63, Subpart JJJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted. **(40 CFR 63.11225(c)(1))**

b. The permittee must keep records to document conformance with the work practices, emission reduction measures, and management practices required by 40 CFR 63.11223, as listed below:

i. Records must identify each boiler in FG-MACTJJJJJJ, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned. **(40 CFR 63.11225(c)(2)(i))**

ii. For operating units that combust non-hazardous secondary materials that have been determined not to be solid waste pursuant to 40 CFR 241.3(b)(1), the permittee must keep a record which documents how the secondary material meets each of the legitimacy criteria under 40 CFR 241.3(d)(1). If the permittee combusts a fuel that has been processed from a discarded non-hazardous secondary material pursuant to 40 CFR 241.3(b)(4), the permittee must keep records as to how the operations that produced the fuel satisfies the definition of processing in 40 CFR 241.2 and each of the legitimacy criteria in 40 CFR 241.3(d)(1). If the fuel received a non-waste determination pursuant to the petition process submitted under 40 CFR 241.3(c), the permittee must keep a record that documents how the fuel satisfies the requirements of the petition process. For operating units that combust non-hazardous secondary material as fuel per 40 CFR 241.4, the permittee must keep records documenting that the material is a listed non-waste under 40 CFR 241.4(a). **(40 CFR 63.11225(c)(2)(ii))**

iii. The permittee must maintain a copy of the energy assessment report for each boiler in FG-MACTJJJJJJ. **(40 CFR 63.11225(c)(2)(iii))**

c. Records of the occurrence and duration of each malfunction of the boiler. **(40 CFR 63.11225(c)(4))**

d. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR 63.11205(a), including corrective actions to restore the malfunctioning boiler to its normal or usual manner of operation. **(40 CFR 63.11225(c)(5))**

2. The permittee must maintain on-site and submit, if requested by the Administrator, a report containing the information listed below.

a. The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of each boiler in FG-MACTJJJJJJ. **(40 CFR 63.11223(b)(6)(i))**

b. A description of any corrective actions taken as a part of the tune-up of each boiler in FG-MACTJJJJJJ. **(40 CFR 63.11223(b)(6)(ii))**

c. The type and amount of fuel used over the 12 months prior to the tune-up of each boiler in FG-MACTJJJJJJ, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. **(40 CFR 63.11223(b)(6)(iii))**

3. The permittee must keep the records in a form suitable and readily available for expeditious review. The permittee must keep each record for 5 years following the date of each recorded action. The permittee must keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. The permittee may keep the records off site for the remaining 3 years. **(40 CFR 63.11225(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 orreceived 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 orreceived by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

4. The permittee must prepare, by March 1 of the year after the calendar year during which a tune-up is completed, and submit to the delegated authority upon request, a 5-year compliance report containing the information specified below:

a. Company name and address. **(40 CFR 63.11225(b)(1))**

b. Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of 40 CFR Part 63, Subpart JJJJJJ. The permittee’s notification must include the following certifications of compliance, as applicable, and signed by a responsible official: **(40 CFR 63.11225(b)(2))**

i. “This facility complies with the requirements in 40 CFR 63.11223 to conduct 5-year tune-up, as applicable, of each boiler in FG-MACTJJJJJJ.” **(40 CFR 63.11225(b)(2)(i))**

ii. For units that do not qualify for a statutory exemption as provided in Section 129(g)(1) of the Clean Air Act: “No secondary materials that are solid waste were combusted in any affected unit.” **(40 CFR 63.11225(b)(2)(ii))**

**See Appendix 8**

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

NA

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources as specified in 40 CFR Part 63, Subparts A and JJJJJJ. **(40 CFR Part 63, Subparts, A and JJJJJJ)**

## FG-NSPSIIII

**EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Emergency reciprocating internal combustion engines (RICE) at the facility subject to 40 CFR Part 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

EU-DRYCASKDSLGEN is rated at 132 HP (80 kilowatts (kW)) diesel-fueled emergency engine with a model year of 2011 or later, and a displacement of 4.5 liters/cylinder.

EU-U1DISGENERATOR and EU-U2DISGENERATOR are each rated at 24.3 hp (15 kW) diesel-fueled emergency engines with a model year of 2011 or later, and displacements of 1.65 liters/cylinder.

**Emission Units:** EU-DRYCASKDSLGEN, EU-U1DISGENERATOR, EU-U2DISGENERATOR

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

| **Pollutant** | **Limit** | **Time Period / Operating Scenario** | **Equipment** | **Monitoring / Testing Method** | **Underlying Applicable Requirements** |
| --- | --- | --- | --- | --- | --- |
| 1. NMHC + NOx | 4.0  g/kW-hr | Hourly | EU-DRYCASKDSLGEN | SC V.1  SC VI.2 | **40 CFR 89.112(a),**  **40 CFR 1039** |
| 2. NMHC + NOx | 7.5  g/kW-hr  or  5.6  g/hp-hr | Hourly | EU-U1DISGENERATOR, and  EU-U2DISGENERATOR, each individually | SC V.1  SC VI.2 | **40 CFR 60.4202;**  **40 CFR Part 60, Subpart IIII, Table 2** |
| 3. CO | 3.5  g/kW-hr | Hourly | EU-DRYCASKDSLGEN | SC V.1  SC VI.2 | **40 CFR 89.112(a),**  **40 CFR 1039** |
| 4. CO | 6.6  g/kW-hr  or  4.9  g/hp-hr | Hourly | EU-U1DISGENERATOR,  and  EU-U2DISGENERATOR, each individually | SC V.1  SC VI.2 | **40 CFR 60.4202;**  **40 CFR Part 60, Subpart IIII, Table 2** |
| 5. PM | 0.2  g/kW-hr | Hourly | EU-DRYCASKDSLGEN | SC V.1  SC VI.2 | **40 CFR 89.112(a),**  **40 CFR 1039** |
| 6. PM | 0.40  g/kW-hr  or  0.30  g/hp-hr | Hourly | EU-U1DISGENERATOR,  and  EU-U2DISGENERATOR, each individually | SC V.1  SC VI.2 | **40 CFR 60.4202;**  **40 CFR Part 60, Subpart IIII, Table 2** |

**II. MATERIAL LIMIT(S)**

1. The permittee shall burn only diesel fuel in each engine in FG-NSPSIIII 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 60.4207,** **40 CFR 1090.305)**

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

1. The permittee may operate each engine in FG-NSPSIIII 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 60.4211(f)(2))**

2. The permittee may operate each engine in FG-NSPSIIII up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted as part of the 100 hours per calendar year provided for maintenance and testing as provided in 40 CFR 60.4211(f)(2). Except as provided in 40 CFR 60.4211(f)(3)(i), 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 a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. **(40 CFR 60.4211(f)(3))**

3. If the permittee purchased a certified engine, according to procedures specified in 40 CFR Part 60, Subpart IIII, for the same model year, the permittee shall meet the following requirements for each engine in FG-NSPSIIII:

a. Operate and maintain the certified engine and control device according to the manufacturer’s emission-related written instructions,

b. Change only those emission-related settings that are permitted by the manufacturer, and

c. Meet the requirements as specified in 40 CFR 1068, as they apply to the engine.

If not operating and maintaining the certified engine and control device according to the manufacturer’s emission-related written instructions, the engine will be considered a non-certified engine. **(40 CFR 60.4211(a) & (c))**

4. 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 engine in FG-NSPSIIII and shall, 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)(3))**

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

1. The permittee must equip and maintain each engine in FG-NSPSIIII with non-resettable hours meters to track the operating hours. **(40 CFR 60.4209)**

**V. TESTING/SAMPLING**

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

1. If any engine in FG-NSPSIIII 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 permittee must demonstrate compliance as follows:

* 1. Conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.
  2. If a performance test is required, the performance tests shall be conducted according to 40 CFR 60.4212.

No less than 30 days prior to testing, a complete test plan shall be submitted to the AQD. The permittee must submit a complete report of the test results to the AQD Technical Programs Unit and District Office within 60 days following the last date of the test. **(40 CFR 60.4211(g)(1) & (2), 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 keep, in a satisfactory manner, the following records for each engine in FG-NSPSIIII:

a. For each certified engine: The permittee shall keep records of the manufacturer certification documentation.

b. For each uncertified engine: The permittee shall keep records of testing required in SC V.1.

The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4211)**

2. The permittee shall keep, in a satisfactory manner, the following records of maintenance activity for each engine in FG-NSPSIIII:

a. For each certified engine: 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.3.

b. For each uncertified engine: The permittee shall keep records of a maintenance plan, as required by SC III.4, and maintenance activities.

The permittee shall keep all records on file and make them available to the Department upon request. **(40 CFR 60.4211)**

3. The permittee shall monitor and record, the total hours of operation for each engine in FG-NSPSIIII on a monthly and 12-month rolling time period basis, and the hours of operation during emergency and non-emergency service that are recorded through the non-resettable hour meter for each engine in FG-NSPSIIII, 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 of each engine in FG-NSPSIIII, including what classified the operation as emergency and how many hours are spent for non-emergency operation. **(40 CFR 60.4211, 40 CFR 60.4214)**

4. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for diesel fuel oil used in FG-NSPSIIII, demonstrating that the fuel meets the requirement of 40 CFR 1090.305. 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. **(R 336.1213(3), 40 CFR 60.4207(b), 40 CFR 1090.305)**

**VII. REPORTING**

1. The permittee shall submit a notification specifying whether each engine of FG-NSPSIIII 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. **(R 336.1213(3), 40 CFR Part 60, Subpart IIII)**

**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 IIII, as they apply to each engine of FG-NSPSIIII. **(40 CFR Part 60, Subparts A and IIII)**

2. The permittee shall comply with the provisions of the National Emission Standards for Hazardous Air Pollutants as specified in 40 CFR Part 63, Subparts A and ZZZZ, as they apply to each engine of FG-NSPSIIII. **(40 CFR 63.6590(c), 40 CFR Part 63, Subparts A and ZZZZ)**

## FG-RULE287(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-PAINTSHOP

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Material** | **Limit** | **Time Period/Operating Scenario** | **Equipment** | **Underlying Applicable Requirement** |
| 1. Coatings | 200 Gallons/month  (minus water as applied) | Calendar month | Each emission unit | **R 336.1287(2)(c)(i)** |

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

NA

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

1. Any exhaust system installed on or after December 20, 2016, that serves only coating spray equipment shall be equipped with a dry filter control or water wash control which is installed, maintained, and operated in accordance with the manufacturer’s specifications, or the permittee develops a plan which provides to the extent practicable for the maintenance and operation of the equipment in a manner consistent with good air pollution control practices for minimizing emissions. All emission units installed before December 20, 2016, with an exhaust system that serves only coating spray equipment must have a properly installed and operated 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(2)(c)(iii))**

b. Documentation of any filter replacements or maintenance of water wash control for exhaust systems serving coating spray equipment or other documentation included in a plan developed by the owner or operator of the equipment. **(R 336.1213(3))**

**VII. REPORTING**

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

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

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

**See Appendix 8**

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

NA

**IX. OTHER REQUIREMENT(S)**

NA

## 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 Units:** EU-COLDCLEANER1, EU-COLDCLEANER2, EU-COLDCLEANER3, EU-COLDCLEANER4,

EU-COLDCLEANER5

**POLLUTION CONTROL EQUIPMENT**

NA

**I. EMISSION LIMIT(S)**

NA

**II. MATERIAL LIMIT(S)**

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

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

1. Cleaned parts shall be drained for no less than 15 seconds or until dripping ceases. **(R 336.1611(2)(b), R 336.1707(3)(b))**

2. The permittee shall perform routine maintenance on each cold cleaner as recommended by the manufacturer. **(R 336.1213(3))**

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

1. The cold cleaner must meet one of the following design requirements:

a. The air/vapor interface of the cold cleaner is no more than ten square feet. **(R 336.1281(2)(h))**

b. The cold cleaner is used for cleaning metal parts and the emissions are released to the general in-plant environment. **(R 336.1285(2)(r)(iv))**

2. The cold cleaner shall be equipped with a device for draining cleaned parts. **(R 336.1611(2)(b), R 336.1707(3)(b))**

3. All new and existing cold cleaners shall be equipped with a cover and the cover shall be closed whenever parts are not being handled in the cold cleaner. **(R 336.1611(2)(a), R 336.1707(3)(a))**

4. The cover of a new cold cleaner shall be mechanically assisted if the Reid vapor pressure of the solvent is more than 0.3 psia or if the solvent is agitated or heated. **(R 336.1707(3)(a))**

5. If the Reid vapor pressure of any solvent used in a new cold cleaner is greater than 0.6 psia; or, if any solvent used in a new cold cleaner is heated above 120 degrees Fahrenheit, then the cold cleaner must comply with at least one of the following provisions:

a. The cold cleaner must be designed such that the ratio of the freeboard height to the width of the cleaner is equal to or greater than 0.7. **(R 336.1707(2)(a))**

b. The solvent bath must be covered with water if the solvent is insoluble and has a specific gravity of more than 1.0. **(R 336.1707(2)(b))**

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

**V. TESTING/SAMPLING**

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

NA

**VI. MONITORING/RECORDKEEPING**

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

1. For each new cold cleaner in which the solvent is heated, the solvent temperature shall be monitored and recorded at least once each calendar week during routine operating conditions. **(R 336.1213(3))**

2. The permittee shall maintain the following information on file for each cold cleaner: **(R 336.1213(3))**

a. A serial number, model number, or other unique identifier for each cold cleaner.

b. The date the unit was installed, manufactured or that it commenced operation.

c. The air/vapor interface area for any unit claimed to be exempt under Rule 281(2)(h).

d. The applicable Rule 201 exemption.

e. The Reid vapor pressure of each solvent used.

f. If applicable, the option chosen to comply with Rule 707(2).

1. The permittee shall maintain a current listing from the manufacturer of the chemical composition of each material, including the weight percent of each component, used in each cold cleaner. The data may consist of Safety Data Sheets, manufacturer's formulation data, or both as deemed acceptable by the AQD District Supervisor. The permittee shall keep all records on file and make them available to the Department upon request. **(R 336.1213(3))**
2. 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))**
3. As noted in Rule 611(2)(c) and Rule 707(3)(c), if applicable, an initial demonstration that the waste solvent is a safety hazard shall be made prior to storage in non-closed containers. If the waste solvent is a safety hazard and is stored in non-closed containers, verification that the waste solvent is disposed of so that not more than 20 percent, by weight, is allowed to evaporate into the atmosphere shall be made on a monthly basis. **(R 336.1213(3), R 336.1611(2)(c), R 336.1707(3)(c))**

**VII. REPORTING**

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

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

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

**See Appendix 8**

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

NA

**IX. OTHER REQUIREMENT(S)**

NA

# E. NON-APPLICABLE REQUIREMENTS

At the time of the ROP issuance, the AQD has determined that 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 | CO2e | Carbon Dioxide Equivalent |
| CEMS | Continuous Emission Monitoring System | dscf | Dry standard cubic foot |
| CFR | Code of Federal Regulations | dscm | Dry standard cubic meter |
| COM | Continuous Opacity Monitoring | °F | Degrees Fahrenheit |
| Department/  department | Michigan Department of Environment, Great Lakes, and Energy | gr | Grains |
| HAP | Hazardous Air Pollutant |
| EGLE | Michigan Department of Environment, Great Lakes, and Energy | Hg | Mercury |
| hr | Hour |
| EU | Emission Unit | HP | Horsepower |
| FG | Flexible Group | H2S | Hydrogen Sulfide |
| GACS | Gallons of Applied Coating Solids | kW | Kilowatt |
| GC | General Condition | lb | Pound |
| GHGs | Greenhouse Gases | m | Meter |
| HVLP | High Volume Low Pressure\* | mg | Milligram |
| ID | Identification | mm | Millimeter |
| IRSL | Initial Risk Screening Level | MM | Million |
| ITSL | Initial Threshold Screening Level | MW | Megawatts |
| LAER | Lowest Achievable Emission Rate | NMOC | Non-methane Organic Compounds |
| MACT | Maximum Achievable Control Technology | NOx | Oxides of Nitrogen |
| MAERS | Michigan Air Emissions Reporting System | ng | Nanogram |
| MAP | Malfunction Abatement Plan | PM | Particulate Matter |
| MSDS | Material Safety Data Sheet | PM10 | Particulate Matter equal to or less than 10 microns in diameter |
| NA | Not Applicable |
| 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 Air Pollutants | pph | Pounds per hour |
| ppm | Parts per million |
| NSPS | New Source Performance Standards | ppmv | Parts per million by volume |
| NSR | New Source Review | ppmw | Parts per million by weight |
| PS | Performance Specification | % | Percent |
| PSD | Prevention of Significant Deterioration | psia | Pounds per square inch absolute |
| PTE | Permanent Total Enclosure | psig | Pounds per square inch gauge |
| PTI | Permit to Install | scf | Standard cubic feet |
| RACT | Reasonable Available Control Technology | sec | Seconds |
| ROP | Renewable Operating Permit | SO2 | Sulfur Dioxide |
| SC | Special Condition | TAC | Toxic Air Contaminant |
| SCR | Selective Catalytic Reduction | Temp | Temperature |
| SDS | Safety Data Sheet | THC | Total Hydrocarbons |
| SNCR | Selective Non-Catalytic Reduction | tpy | Tons per year |
| SRN | State Registration Number | µg | Microgram |
| TEQ | Toxicity Equivalence Quotient | µm | Micrometer or Micron |
| USEPA/EPA | United States Environmental Protection Agency | VOC | Volatile Organic Compounds |
| yr | Year |
| VE | Visible Emissions |  |  |

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

## Appendix 2. Schedule of Compliance

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

## Appendix 3. Monitoring Requirements

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

## Appendix 4. Recordkeeping

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

## Appendix 5. Testing Procedures

There are no specific testing requirement plans or procedures for this ROP. Therefore, this appendix is not applicable.

## Appendix 6. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-B4252-2018. 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-B4252-2018a is being reissued as Source-Wide PTI No. MI-PTI-B4252-2023.

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

## Appendix 7. Emission Calculations

There are no specific emission calculations to be used for this ROP. Therefore, this appendix is not applicable.

## Appendix 8. Reporting

**A. Annual, Semiannual, and Deviation Certification Reporting**

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

**B. Other Reporting**

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