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|  | **MICHIGAN DEPARTMENT OF ENVIRONMENT, GREAT LAKES, AND ENERGY****AIR QUALITY DIVISION** |  |
| EFFECTIVE DATE: December 19, 2023ISSUED TO**Genesee Power Station Limited Partnership**State Registration Number (SRN): N3570LOCATED ATG-5310 NorthDort Highway, Flint, Genesee County, Michigan 48505 |
|  |
| **RENEWABLE OPERATING PERMIT**Permit Number: MI-ROP-N3570-2023Expiration Date: December 19 2028Administratively Complete ROP Renewal Application Due Between June 19, 2027 and June 19, 2028This 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. |

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| **SOURCE-WIDE PERMIT TO INSTALL**Permit Number: MI-PTI-N3570-2023This 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

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Robert Byrnes, Lansing District Supervisor **TABLE OF CONTENTS**

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# 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** |
| --- | --- | --- | --- |
| EUBOILER | The 35 MW net (40 MW gross) electric generation group consists of the wood biomass boiler, a selective non-catalytic reduction (SNCR) system, a mechanical multi-cyclone separator (MMS), and an electrostatic precipitator (ESP). The boiler has a spreader-stoker design and is rated at 523 MMBTU/hr, and able to produce 345,000 pounds steam/hr. | 12-02-1992 /01-11-2011 | FGMACTDDDDD |
| EUFIREPUMP | Emergency diesel fuel-fired engine for backup power to fire pump (265 hp, 7.0 liters/cylinder) located at a major source of HAP emissions, existing emergency, combustion ignition (CI) reciprocating internal combustion engine (RICE) less than 500 brake hp. | 01-01-1996 | FGFIREPUMP |
| EUEMERGGEN | 500 kW emergency backup generator (750 HP) located at a major source of HAP emissions, existing emergency, combustion ignition (CI) reciprocating internal combustion engine (RICE) greater than 500 brake hp. | 01-01-1996 | FGEMERGGEN |

## EUBOILER

**EMISSION UNIT CONDITIONS**

**DESCRIPTION**

The 35 MW net (40 MW gross) electric generation group consists of the wood biomass boiler, a selective non-catalytic reduction (SNCR) system, a mechanical multi-cyclone separator (MMS), and an electrostatic precipitator (ESP). The boiler has a spreader-stoker design and is rated at 523 MMBTU/hr, and able to produce 345,000 pounds steam/hr.

**Flexible Group ID:** FGMACTDDDDD

**POLLUTION CONTROL EQUIPMENT**

1. Selective non-catalytic reduction system for NOX removal.
2. Mechanical multi-cyclone separator for entrained particulate removal.
3. Electrostatic precipitator for entrained particulate removal.

**I. EMISSION LIMIT(S)**

| **Pollutant** | **Limit** | **Time Period/Operating Scenario** | **Equipment** | **Monitoring/****Testing Method** | **Underlying Applicable Requirements** |
| --- | --- | --- | --- | --- | --- |
| 1. Visible Emissions
 | 10% Opacity2,a | 6-minute average except one 6-minute average per hour of not more than 20% | EUBOILER | SC VI.2 | **R 336.1301(1)(c), R 336.2810, 40 CFR 52.21(j)** |
| 1. PM
 | 0.03 lb/MMBTU heat input2,b | Hourly | EUBOILER | SC V.1 | **R 336.1331(1)(c), R 336.2810, 40 CFR 52.21(j)**  |
| 1. PM
 | 15.7 pph2 | Hourly | EUBOILER | SC V.1 | **R 336.2810, 40 CFR 52.21(j)** |
| 1. SO2
 | 106 tpy2 | 12-month rolling time period determined at the end of each month | EUBOILER | SC VI.5 | **R 336.1205(3)** |
| 1. SO2
 | 35.4 pph2 | 24-hour rolling average as determined each hour the boiler operates | EUBOILER | SC VI.3,SC VI.4 | **R 336.2803,****R 336.2804,****40 CFR 52.21(c)****& (d)** |
| 1. NOX
 | 0.20 lb/MMBTU heat input2 | 24-hr rolling average as determined each hour that the boiler operates, excluding periods of startup and shutdownc | EUBOILER | SC VI.3,SC VI.4 | **R 336.2810,****40 CFR 52.21(j)** |
| 1. NOX
 | 104.6 pph2 | 24-hr rolling average as determined each hour that the boiler operates | EUBOILER | SC VI.3,SC VI.4 | **R 336.2803,****R 336.2804,****R 336.2810,****40 CFR 52.21(c),****(d) & (j)** |
| 1. CO
 | 0.35 lb/MMBTU heat input2 | 24-hr rolling average as determined each hour that the boiler operates, excluding periods of startup and shutdownc | EUBOILER | SC VI.3,SC VI.4 | **40 CFR 52.21(j)** |
| 1. CO
 | 183.1 pph2 | 24-hr rolling average as determined each hour that the boiler operates | EUBOILER | SC VI.3,SC VI.4 | **R 336.2810**,**40 CFR 52.21(j)** |
| 1. Beryllium (Be) Compounds
 | 0.006 pph1 | Hourly | EUBOILER | SC V.5 | **R 336.1225** |
| 1. Benzo(a)pyrene (BaP)
 | 0.0053 pph1 | Hourly | EUBOILER | SC V.5 | **R 336.1225** |
| 1. Total Gaseous Non-Methane Organics (TGNMO), measured as total carbon
 | 15.7 pph2 | Hourly | EUBOILER | SC V.1 | **R 336.1702(a)** |
| 1. Total Gaseous Non-Methane Organics (TGNMO), measured as total carbon
 | 0.03 lb/MMBTU heat input2 | Hourly | EUBOILER | SC V.1 | **R 336.1702(a)** |
| 1. Arsenic (As)
 | 0.0265 pph1 | Hourly | EUBOILER | SC V.3 | **R 336.1225** |
| 1. Chromium (as total Cr)
 | 0.0864 pph1 | Hourly | EUBOILER | SC V.3 | **R 336.1225** |
| 1. Lead (Pb)
 | 0.5 pph2 | Hourly | EUBOILER | SC V.3 | **R 336.2810**,**40 CFR 52.21(j)** |
| 1. Mercury (Hg)
 | 0.0047 pph1 | Hourly | EUBOILER | SC V.3 | **R 336.1225** |
| 1. Mercury (Hg)
 | 0.000009 lb/MMBTU heat input1 | Hourly | EUBOILER | SC V.3 | **R 336.1225** |
| 1. Hydrogen Chloride (HCl)
 | 47.1 pph1 | Hourly | EUBOILER | SC V.3 | **R 336.1225** |
| 1. Hydrogen Chloride (HCl)
 | 0.09 lb/MMBTU heat input1 | Hourly | EUBOILER | SC V.3 | **R 336.1225** |
| 1. Acrolein
 | 0.053 pph1 | Hourly | EUBOILER | SC V.3 | **R 336.1225** |

a In accordance with R 336.1213(2) and R 336.1213(6), compliance with this streamlined opacity limit shall be considered compliance with the opacity limit established by **R 336.1301(1)(c)**, **R 336.2810,** and **40 CFR 52.21(j)**; and also compliance with the opacity limit in **40 CFR 60.43b(f)** an additional applicable requirement that has been subsumed within this condition.

b In accordance with R 336.1213(2) and R 336.1213(6), compliance with this streamlined PM limit shall be considered compliance with the PM limit established by **R 336.1331(1)(c)**, **R 336.2810**,and **40 CFR 52.21(j)**; and also compliance with the PM limit in **40 CFR 60.43b(c)** an additional applicable requirement that has been subsumed within this condition.

c Startup is defined as the period of time from initiation of combustion firing until the unit reaches steady state operation. Shutdown is defined as that period of time from the initial lowering of the boiler output until the point at which the combustion process has stopped.

**II. MATERIAL LIMIT(S)**

| **Material** | **Limit** | **Time Period/Operating Scenario** | **Equipment** | **Monitoring/****Testing Method** | **Underlying Applicable Requirements** |
| --- | --- | --- | --- | --- | --- |
| 1. Natural Gas
 | 10% of Annual Capacity, this is equivalent to 464 MMcf/yr2 | Annual Capacity factor shall be basedon a 12-month rolling average | EUBOILER | SC VI.8 | **40 CFR 60.44b**  |
| 1. Tire-derived fuel (TDF)
 | 20 tons per calendar day2 | Daily | EUBOILER | SC VI.9 | **R 336.1205(1)(a)**,**R 336.2803**,**R 336.2804**,**40 CFR 52.21(c) & (d)** |

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

1. The permittee shall burn only natural gas, tire-derived fuel, and high quality wood waste, as defined by the Fuel Procurement and Monitoring Plan, in EUBOILER.2 **(R 336.1201(3))**
2. The permittee shall not operate EUBOILER unless the Fuel Procurement and Monitoring Plan (FPMP) is being utilized at all times to ensure that only acceptable fuels, as limited in SCs II.1 and II.2, and as defined in the FPMP, is being burned in the boiler and to prevent unacceptable waste from being burned in the boiler. The plan shall, at a minimum, specify the following:

a. A description of all fuels to be burned.

b Inspection and sorting procedures and protocol used to eliminate prohibited materials and minimize
non-wood and unacceptable wood waste.

c. Procedures for rejecting and/or removing unacceptable wood waste and residue materials.

d. Supplier qualification, processing and inspection procedures for each supplier of source separated wood.

e. Auditing procedures including records of fuel specification, load identification, quality control of load and fuel pile.

f. Odor minimization.

The permittee shall amend the FPMP within 45 days, if any changes are deemed necessary or upon request from the District Supervisor. The permittee shall submit any amendments to the FPMP to the AQD District Supervisor for review and approval.2 **(R 336.1225**, **R 336.1301(1)(c)**, **R 336.1331**, **R 336.1901)**

1. The permittee shall not operate EUBOILER unless the Preventative Maintenance and Malfunction Abatement Plan (PM/MAP) as described in Rule 911, for EUBOILER, including ID fan, tubular air heater, economizer tubes, and soot blowing equipment, the selective non-catalytic reduction (SNCR) system, the mechanical multi-cyclone separator, and the ESP is being implemented and maintained. If at any time the PM/MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the PM/MAP within 45 days after such an event occurs. The permittee shall submit the PM/MAP and any amendments to the AQD District Supervisor for review and approval. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.2 **(R 336.1225, R 336.1331**, **R 336.1702(a)**, **R 336.1910, R 336.1911**, **R 336.2803**, **R 336.2803**, **40 CFR 52.21(c)** **and (d))**
2. The permittee shall not operate EUBOILER unless the program for continuous fugitive emissions control for all material handling operations and material storage areas, all plant roadways, and the plant yard, as specified in the approved Fugitive Dust Control Plan, has been implemented and is maintained.2 **(R 336.1371**, **R 336.1372**, **Act 451, Section 324.5524)**

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

1. The permittee shall not operate EUBOILER unless the selective non-catalytic reduction (SNCR) system for NOX removal, and the mechanical multi-cyclone separator and the electrostatic precipitator for removal of entrained particles, are installed and operating in a satisfactory manner.2 **(R 336.1910)**

**V. TESTING/SAMPLING**

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

1. The permittee shall verify the total gaseous non-methane organics (TGNMO) and PM emission rates from EUBOILER, by testing at owner's expense, in accordance with Department requirements. Testing is required once every five years and may be coordinated with the ROP renewal issuance. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan prior to testing. The permittee shall notify the District Supervisor or the Technical Programs Unit no less than 7 days prior to the anticipated test date. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test.2 **(R  336.1331(1)(a)**, **R 336.1702(a)**, **R 336.2001**, **R 336.2003**, **R 336.2004**, **R 336.2810**, **40 CFR 52.21(j))**
2. Testing shall be performed using an approved EPA method listed in:

|  |  |
| --- | --- |
| **Pollutant** | **Test Method Reference** |
| PM | 40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules |
| TGNMO (VOC) | 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. 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)**

1. The permittee shall verify the As, Cr, Pb, Hg, HCl and acrolein emission rates from EUBOILER by testing at owner's expense, in accordance with Department requirements. Testing is required once every five years and may be coordinated with the ROP renewal issuance. No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan prior to testing. Testing procedures and the location of stack testing ports shall be in accordance with Federal Reference Methods and Method 1 or Method 1A, respectively, 40 CFR Part 60 Appendix A. The permittee shall notify the District Supervisor or the Technical Programs Unit no less than 7 days prior to the anticipated test date. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of the test.2 **(R 336.1225**, **R 336.2001**, **R 336.2003**, **R 336.2004)**
2. Testing shall be performed using an approved USEPA Method listed in:

|  |  |
| --- | --- |
| **Pollutant** | **Test Method Reference** |
| VOC | 40 CFR Part 60, Appendix A |
| Metals | 40 CFR Part 60, Appendix A; 40 CFR Part 61, Appendix B; 40 CFR Part 63, Appendix A |
| Hydrogen Chloride | 40 CFR Part 60, Appendix A |
| Mercury | 40 CFR Part 60, Appendix A; 40 CFR Part 61, Appendix B; 40 CFR Part 63, Appendix A |

An alternate method, or a modification to the approved USEPA 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)**

1. Upon request of the AQD District Supervisor, the permittee shall verify the Be and BaP emission rates from EUBOILER, by testing at owner's expense, in accordance with Department requirements. Testing shall be performed using an approved USEPA Method listed in:

|  |  |
| --- | --- |
| **Pollutant** | **Test Method Reference** |
| VOC | 40 CFR Part 60, Appendix A |
| Metals | 40 CFR Part 60, Appendix A; 40 CFR Part 61, Appendix B; 40 CFR Part 63, Appendix A |

An alternate method, or a modification to the approved USEPA 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)**

1. The permittee shall verify the TGNMO, PM, As, Cr, Pb, Hg, HCl, and acrolein emission rates from EUBOILER, at a minimum, once every five years. **(R 336.1213(3)**, **R 336.2001**, **R 336.2003**, **R 336.2004)**
2. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days before performance tests are conducted of the time and place. **(R 336.1213(3))**
3. The permittee shall test the bottom ash and fly ash once per calendar year in accordance with the approved ash testing plan. No less than seven days prior to testing, the permittee shall submit written notification to the AQD. The results of the test shall be submitted to the AQD in an acceptable format within 60 days following completion of the test.2 **(R 336.1201(3))**

**VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall complete all required calculations/records in a format acceptable to the AQD District Supervisor by the last day of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition. **(R 336.1213(3))**
2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the opacity from EUBOILER on a continuous basis. The opacity monitor shall be operated in accordance with procedures outlined in Appendix 3.2 **(R 336.2810, 40 CFR 52.21(j)**, **40 CFR 60.48b(a) & (e)(1))**
3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the SO2, NOx, CO and oxygen from EUBOILER on a continuous basis. The monitors shall be operated in accordance with procedures outlined in Appendix 3.2 **(R 336.2810**, **40 CFR 52.21(j))**
4. The permittee shall keep, in a satisfactory manner, 24-hour rolling average SO2, NOX, and CO emission records for EUBOILER. The permittee shall keep all records on file and make them available to the Department upon request.2 **(R 336.2810, 40 CFR 52.21(j))**
5. The permittee shall keep, in a satisfactory manner, monthly and previous 12-month SO2 emission calculation records for EUBOILER, as required by SC I.4. The permittee shall keep all records on file and make them available upon request of the Department.2 **(R 336.1205)**
6. The permittee shall keep, in a satisfactory manner, records of the occurrence and duration of each startup, shutdown, or malfunction of EUBOILER, any malfunction of the air pollution control equipment, and any periods during which a continuous monitoring system or monitoring device is inoperative.2 **(R 336.2810**, **40 CFR 52.21(j)**, **40 CFR 60.7)**
7. The permittee shall keep, in a satisfactory manner, records of the opacity for EUBOILER. The permittee shall keep all records on file and make them available to the Department upon request.2  **(R 336.2810, 40 CFR 52.21(j)**, **40 CFR 60.49b(f))**
8. The permittee shall keep, in a satisfactory manner, records of the amount of each fuel combusted during each day and calculate the annual capacity factor individually for each fuel type. Fuel type is defined in
40 CFR 63.7575. The annual capacity factor is determined on a 12-month rolling average basis, with a new annual capacity factor calculated at the end of each calendar month. Annual capacity factor is defined in
40 CFR 60.41b as the ratio between the actual heat input to a steam generating unit from applicable fuels during a 12-month period and the potential heat input to the steam generating unit had it been operated for 8,760 hours during a 12-month period at the maximum steady state design heat input capacity. The permittee shall keep all records on file and make them available to the Department upon request.2 **(40 CFR 60.49b(d))**
9. The permittee shall keep, in a satisfactory manner, daily records of the amount of tire-derived fuel fired in EUBOILER. The permittee shall keep all records on file and make them available to the Department upon request.2 **(R 336.1205(1)(a)**, **R 336.2803**, **R 336.2804**, **40 CFR 52.21(c) and (d))**
10. The permittee shall maintain all monitoring and recordkeeping requirements outlined in the approved FPMP. The permittee shall keep all records on file and make them available to the Department upon request.2 **(R 336.1225**, **R 336.1301(1)(c)**, **R 336.1331**, **R 336.1901)**

**See Appendices 3 and 4**

**VII. REPORTING**

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

2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked 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 or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**

1. Quarterly reporting of the “Excess Emissions and Monitoring Systems Performance Report” and the “Summary Report” as specified in 40 CFR 60.7(c) and (d), for opacity, SO2, NOX, and CO (excess emissions shall be based on the limits identified in Section I). Due April 30 for reporting period January 1 to March 31, July 30 for reporting period April 1 to June 30, October 30 for reporting period July 1 to September 30, and January 30 for reporting period October 1 to December 31.2 **(R 336.1201(3)**, **40 CFR 60.7)**
2. Quarterly reporting of the “Data Assessment Report” as set forth in 40 CFR 60, Appendix F for the gas continuous monitoring systems. Due April 30 for reporting period January 1 to March 31, July 30 for reporting period April 1 to June 30, October 30 for reporting period July 1 to September 30, and January 30 for reporting period October 1 to December 31.2 **(R 336.1201(3))**
3. The permittee shall submit any performance test reports including RATA reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c)**, **R 336.2001(5))**
4. The permittee shall submit all fuel contracts to the AQD. These contracts shall include specifications that require the fuel supplier(s) to furnish only high quality wood waste. **(R 336.1201(3))**

**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. SVBOILER
 | 97.22 | 2202 | **R 336.1225, R 336.2803,****R 336.2804,** **40 CFR 52.21(c) & (d)** |

**IX. OTHER REQUIREMENT(S)**

1. The permittee shall comply with all provisions of the federal Standards of Performance for New Stationary Sources as specified in 40 CFR Part 60, Subparts A and Db for Industrial-Commercial-Institutional Steam Generating Units. **(40 CFR Part 60, Subparts A and Db)**
2. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NOX Annual Trading Program, as specified in 40 CFR Part 97, Subpart AAAAA, and identified in Appendix 9. **(40 CFR Part 97, Subpart AAAAA)**
3. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule NOX Ozone Season Group 3 Trading program, as specified in 40 CFR Part 97, Subpart GGGGG, and identified in Appendix 9. **(40 CFR Part 97, Subpart GGGGG)**
4. The permittee shall comply with the provisions of the Cross-State Air Pollution Rule SO2 Group 1 Trading Program, as specified in 40 CFR Part 97, Subpart CCCCC, and identified in Appendix 9. **(40 CFR Part 97, Subpart CCCCC)**

**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** |
| --- | --- | --- |
| FGFIREPUMP | **40 CFR Part 63, Subpart ZZZZ** - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major 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.  | EUFIREPUMP |
| FGEMERGGEN | **40 CFR Part 63, Subpart ZZZZ** - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE), located at a major 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 December 19, 2002. | EUEMERGGEN |
| FGMACTDDDDD | Stoker/sloped grate/other wet biomass/bio-based unit requirements for existing boilers at major sources of HAP emissions per 40 CFR Part 63, Subpart DDDDD. The existing boiler must comply with the subpart no later than January 31, 2016, except as provided in 40 CFR 63.6(i). | EUBOILER |

## FGFIREPUMP

**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 major 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 Unit:**  EUFIREPUMP

**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 1 of Table 2c of 40 CFR Part 63, Subpart ZZZZ which apply to each engine in FGFIREPUMP 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 63.6602**, **40 CFR Part 63, Subpart ZZZZ, Table 2c.1)**

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 FGFIREPUMP 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 FGFIREPUMP, 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 FGFIREPUMP 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 FGFIREPUMP 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)(3))**

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

1. The permittee shall equip and maintain each engine in FGFIREPUMP 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 FGFIREPUMP, 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 FGFIREPUMP, 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 FGFIREPUMP, 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 FGFIREPUMP 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 FGFIREPUMP 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 each delivery of diesel fuel oil used in FGFIREPUMP, 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)**

## FGEMERGGEN

**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 major 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 December 19, 2002.

**Emission Unit:** EUEMERGGEN

**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 shall operate and maintain each engine in FGEMERGGEN and after-treatment control device (if any) in a manner consistent with good air pollution control practices for minimizing emissions. **(40 CFR 63.6605)**

2. For each engine in FGEMERGGEN, 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))**

3. The permittee may operate each engine in FGEMERGGEN 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))**

4. Each engine in FGEMERGGEN 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.3**. 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)(3))**

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

1. The permittee shall equip and maintain each engine in FGEMERGGEN with non-resettable hours meters to track the operating hours. **(R 336.1213(3))**

**V. TESTING/SAMPLING**

NA

**VI. MONITORING/RECORDKEEPING**

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

1. For each engine in FGEMERGGEN, 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))**

2. The permittee shall monitor and record, the total hours of operation for each engine in FGEMERGGEN 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 FGEMERGGEN 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))**

3. The permittee shall keep, in a satisfactory manner, fuel supplier certification records or fuel sample test data, for each delivery of diesel fuel oil used in FGEMERGGEN, 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. **(40 CFR 80.510(b))**

4. 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))**

5. 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)**

## FGMACTDDDDD

**FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Stoker/sloped grate/other designed to burn wet biomass fuel requirements for existing boilers and process heaters rated at 10 MMBTU/hr or greater at major sources of Hazardous Air Pollutants per 40 CFR Part 63, Subpart DDDDD. These existing boilers or process heaters burn at least 10 percent biomass or bio-based solids on an annual heat input basis in combination with solid fossil fuels, liquid fuels, or gaseous fuels.

**Emission Unit:** EUBOILER

**POLLUTION CONTROL EQUIPMENT**

1. Selective non-catalytic reduction system for NOX removal.
2. Mechanical multi-cyclone separator for entrained particulate removal.
3. Electrostatic precipitator for entrained particulate removal.

**I. EMISSION LIMIT(S)**

| **Pollutant** | **Limit** | **Time Period/ Operating Scenario** | **Equipment** | **Monitoring/****Testing Method** | **Underlying Applicable Requirements** |
| --- | --- | --- | --- | --- | --- |
| 1. Hydrogen Chloride (HCl)
 | 2.2 x 10-2 lb/MMBTU of heat input \*, A | Hourly | EUBOILER | SC V.2 | **40 CFR 63.7500,** **40 CFR Part 63, Subpart DDDDD,** **Table 15.1.a** |
| 1. Hydrogen Chloride (HCl)
 | 2.0 x 10-2 lb/MMBTU of heat input \*, B | Hourly | EUBOILER | SC V.2 | **40 CFR 63.7500,** **40 CFR Part 63, Subpart DDDDD,** **Table 2.1.a** |
| 1. Mercury
 | 5.7 x 10-6 lb/MMBTU of heat input \*, A | Hourly | EUBOILER | SC V.2 | **40 CFR 63.7500,** **40 CFR Part 63, Subpart DDDDD,** **Table 15.1.b** |
| 1. Mercury
 | 5.4 x 10-6 lb/MMBTU of heat input \*, B | Hourly | EUBOILER | SC V.2 | **40 CFR 63.7500,** **40 CFR Part 63, Subpart DDDDD,** **Table 2.1.b** |
| 1. Filterable PM
 | 3.7 x 10-2 lb /MMBTU heat input \*, A | Hourly | EUBOILER | SC V.2SC VI.1SC VI.2 | **40 CFR 63.7500,** **40 CFR Part 63, Subpart DDDDD,** **Table 15.7.b** |
| 1. Filterable PM
 | 3.4 x 10-2 lb /MMBTU heat input \*, B | Hourly | EUBOILER | SC V.2SC VI.1SC VI.2 | **40 CFR 63.7500,** **40 CFR Part 63, Subpart DDDDD,** **Table 2.7.b** |
| 1. CO
 | 720 ppmv on a dry gas basis corrected to 3% O2 \*, A | 30-day rolling average  | EUBOILER | SC VI.1SC VI.2 | **40 CFR 63.7500,** **40 CFR Part 63, Subpart DDDDD,** **Table 15.7.a** |
| 1. CO
 | 720 ppmv on a dry gas basis corrected to 3% O2 \*, B | 30-day rolling average  | EUBOILER | SC VI.1SC VI.2 | **40 CFR 63.7500,** **40 CFR Part 63, Subpart DDDDD,** **Table 2.7.a** |

\* The emission limits apply at all times except during startup and shutdown.

A – These emission limits apply before October 6, 2025

B – These emission limits apply on or after October 6, 2025.

**II. MATERIAL LIMIT(S)**

NA

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

1. The permittee must meet the work practice standard according to Table 3 of 40 CFR Part 63, Subpart DDDDD. During startup and shutdown, the permittee must only follow the work practice standards according to items 5 and 6 in Table 3 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7500(f), 40 CFR 63.7530(h), 40 CFR 63.7540(d))**
2. The permittee must operate and maintain each existing stoker/sloped grate/other designed to burn wet biomass fuel unit in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the AQD 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 Part 63.7500(a)(3))**
3. The permittee shall conduct an annual tune up of each boiler or process heater as specified in SC III.4. The annual tune-up shall be no more than 13 months after the previous tune-up. **(40 CFR 63.7515(d),** **40 CFR Part 63, Subpart DDDDD, Table 3.3)**
4. The permittee shall conduct a tune up of each boiler or process heater as specified below.
	1. As applicable, inspect the burner, and clean or replace any components of the burner as necessary. The permittee may perform the burner inspection any time prior to the tune up or may delay the burner inspection until the next scheduled or unscheduled unit shutdown. Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. **(40 CFR 63.7540(a)(10)(i))**
	2. 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 63.7540(a)(10)(ii))**
	3. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown).Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. **(40 CFR 63.7540(a)(10)(iii))**
	4. Optimize total emissions of CO. This optimization should be consistent with the manufacturer’s specifications, if available, and with any NOX requirement to which the unit is subject.  **(40 CFR 63.7540(a)(10)(iv))**
	5. 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 63.7540(a)(10)(v))**
5. If a boiler or process heater is not operating on the required date for a tune-up, the permittee must conduct a tune-up within 30 calendar days of startup of that boiler or process heater. **(40 CFR 63.7540(a)(13))**
6. The permittee shall maintain the 30-day rolling average operating load of each unit such that it does not exceed 110 percent of the highest hourly average operating load recorded during the performance test. **(40 CFR** **63.7540(a), 40 CFR Part 63, Subpart DDDDD, Table 4.7)**

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

1. The permittee must install, certify, operate, and maintain continuous emission monitoring systems for CO and oxygen (O2) (or carbon dioxide (CO2)) in a satisfactory manner device(s) to monitor and record the output of the system. The monitor shall be operated in accordance with 40 CFR Part 60, Appendix B, and the site-specific monitoring plan. The methodology used to calculate the CO emissions and the methodology used to account for any CO2 being added to or removed from the emissions gas stream shall be detailed and approved in the site-specific monitoring plan developed according to 40 CFR 63.7505(d). **(40 CFR 63.7505(d), 40 CFR 63.7525(a))**
2. The permittee must install, operate, certify, and maintain each COMS and record opacity for all the 6-minute averages (and daily block averages as applicable) for periods during which the COMS is not out of control. The monitor shall be operated in accordance with the procedures in 40 CFR Part 60, Appendix B and the site-specific monitoring plan. The permittee shall not exceed an opacity of 10 percent or the highest hourly average opacity reading measured during the most recent performance test run demonstrating compliance with the PM emission limitation (daily block average). **(40 CFR 63.7525(c), 40 CFR 63.7540(a),** **40 CFR Part 63,** **Subpart DDDDD, Table 4.4.a)**

**V. TESTING/SAMPLING**

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

1. The permittee must demonstrate compliance with all applicable emission limits using performance stack testing, fuel analysis, or continuous monitoring systems (CMS) as defined in Table 8 of 40 CFR Part 63 Subpart DDDDD, where applicable. **(40 CFR 63.7505(c))**
2. The permittee shall verify HCl, mercury, and PM emission rates from EUBOILER 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** |
| HCl | 40 CFR Part 63, Subpart DDDDD, Table 5.3 |
| Mercury | 40 CFR Part 63, Subpart DDDDD, Table 5.4 |
| PM | 40 CFR Part 63, Subpart DDDDD, Table 5.1 |

Any alternate method, or a modification to the test methods in 40 CFR Part 63, Subpart DDDDD, Table 5 must be approved by EPA per 40 CFR 63.7570(b)(2). No less than 30 days prior to testing, the permittee shall submit a complete test plan to the AQD Technical Programs Unit and District Office. The AQD must approve the final plan prior to testing. 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. This report must also verify that the operating limits for each boiler or process heater have not changed or provide documentation of revised operating limits established during the performance test. **(40 CFR 63.7515(a)** **and (f), 40 CFR 63.7520,** **40 CFR Part 63, Subpart DDDDD, Table 7)**

1. The permittee shall verify the HCl, mercury, and PM emission rates from each emission unit annually. Annual performance tests must be completed no more than 13 months after the previous performance test. If the performance tests for HCl, mercury, and PM for at least 2 consecutive years show that emissions are at or below 75 percent of the emission limit for the pollutant, and if there are no changes in the operation of the individual boiler or process heater or air pollution control equipment that could increase emissions, the permittee may choose to conduct performance tests for the pollutant every third year. Each such performance test must be conducted no more than 37 months after the previous performance test. **(40 CFR 63.7515(a), (b), and (c))**
2. For any boiler or process heater that has not operated for more than one year since the previous compliance demonstration, the permittee must complete the subsequent compliance demonstration no later than 180 days after the re-start of the affected source. **(40 CFR 63.7515(g))**
3. If a performance test shows emissions exceeded the emission limit or 75 percent of the emission limit in SC I.1 through SC I.6 for a pollutant, the permittee must conduct annual performance tests for that pollutant until all performance tests over a consecutive 2-year period meet the required level (at or below 75 percent of the emission limit in SC I.1 through SC I.6). **(40 CFR 63.7515(c))**

6. The permittee must submit a Notification of Intent to conduct a performance test at least 60 days before the performance test is scheduled to begin. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor. **(R 336.1213(3)**, **40 CFR 63.7545(d))**

7. The permittee must conduct performance tests at representative operating load conditions while burning the type of fuel or mixture of fuels that has the highest content of chlorine and mercury, and the permittee must demonstrate compliance and establish the operating limits based on these performance tests. These requirements could result in the need to conduct more than one performance test. Following each performance test and until the next performance test, the permittee must comply with the operating limit for operating load conditions specified in Table 4 of 40 CFR Part 63, Subpart DDDDD. **(40 CFR 63.7520(c))**

**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 develop, implement, and maintain a site-specific monitoring plan according to the requirements listed below, for the use of any CMS (including CEMS, COMS, or Continuous Parameter Monitoring System (CPMS)) used to comply with 40 CFR Part 63, Subpart DDDDD.

a. For each CMS, the permittee must develop, and submit to the Administrator for approval upon request, a site-specific monitoring plan that addresses design, data collection, and the quality assurance and quality control elements outlined in 40 CFR 63.8(d) and the elements as listed below.

1. Installation of the CMS sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (e.g., on or downstream of the last control device). **(40 CFR 63.7505(d)(1)(i))**
2. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems. **(40 CFR 63.7505(d)(1)(ii))**
3. Performance evaluation procedures and acceptance criteria (e.g., calibrations, accuracy audits, analytical drift). **(40 CFR 63.7505(d)(1)(iii))**

b. In the site-specific monitoring plan, the permittee must also address the items listed below.

i. Ongoing operation and maintenance procedures. **(40 CFR 63.7505(d)(2)(i))**

ii. Ongoing data quality assurance procedures. **(40 CFR 63.7505(d)(2)(ii))**

iii. Ongoing recordkeeping and reporting procedures. **(40 CFR 63.7505(d)(2)(iii))**

c. The permittee must conduct a performance evaluation of each CMS in accordance with the site-specific monitoring plan. **(40 CFR 63.7505(d)(3))**

d. The permittee must operate and maintain the CMS in continuous operation according to the site-specific monitoring plan. **(40 CFR 63.7505(d)(4))**

2. The permittee must operate the monitoring system and collect data at all required intervals at all times that each boiler or process heater is operating and compliance is required, except for periods of monitoring system malfunctions or out of control periods (see 40 CFR 63.8(c)(7)), and required monitoring system quality assurance or control activities, including, as applicable, calibration checks, required zero and span adjustments, and scheduled CMS maintenance as defined in the site-specific monitoring plan. A monitoring system malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring system to provide valid data. Monitoring system failures that are caused in part by poor maintenance or careless operation are not malfunctions. The permittee is required to complete monitoring system repairs in response to monitoring system malfunctions or out-of-control periods and to return the monitoring system to operation as expeditiously as practicable. **(40 CFR 63.7535(b))**

3. The permittee may not use data recorded during periods of startup and shutdown, monitoring system malfunctions or out-of-control periods, repairs associated with monitoring system malfunctions or out-of-control periods, or required monitoring system quality assurance or control activities in data averages and calculations used to report emissions or operating levels. The permittee must record and make available upon request results of CMS performance audits and dates and duration of periods when the CMS is out of control to completion of the corrective actions necessary to return the CMS to operation consistent with the site-specific monitoring plan. The permittee must use all the data collected during all other periods in assessing compliance and the operation of the control device and associated control system. **(40 CFR 63.7535(c))**

4. Except for periods of monitoring system malfunctions, repairs associated with monitoring system malfunctions, and required monitoring system quality assurance or quality control activities (including, as applicable, system accuracy audits, calibration checks, and required zero and span adjustments), failure to collect required data is a deviation of the monitoring requirements. In calculating monitoring results, do not use any data collected during periods of startup and shutdown, when the monitoring system is out of control as specified in the site-specific monitoring plan, while conducting repairs associated with periods when the monitoring system is out of control, or while conducting required monitoring system quality assurance or quality control activities. The permittee must calculate monitoring results using all other monitoring data collected while the process is operating. The permittee must report all periods when the monitoring system is out of control in the annual report. **(40 CFR 63.7535(d))**

5. The permittee must keep records as listed below.

a. A copy of each notification and report that the permittee submitted to comply with 40 CFR Part 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that the permittee submitted. **(40 CFR 63.7555(a)(1))**

b. Records of performance tests, fuel analyses, or other compliance demonstrations and performance evaluations. **(40 CFR 63.7555(a)(2))**

6. For each CEMS, COMS, and continuous monitoring system the permittee must keep the following records listed below.

a. Records described in 40 CFR 63.10(b)(2)(vii) through (xi). **(40 CFR 63.7555(b)(1))**

b. Monitoring data for continuous opacity monitoring system during a performance evaluation. **(40 CFR 63.7555(b)(2))**

c. Previous (*i.e.,* superseded) versions of the performance evaluation plan. **(40 CFR 63.7555(b)(3))**

d. Request for alternatives to relative accuracy test for CEMS. **(40 CFR 63.7555(b)(4))**

e. Records of the date and time that each deviation started and stopped. **(40 CFR 63.7555(b)(5))**

7. The permittee must keep the records required in Table 8 of 40 CFR Part 63, Subpart DDDDD including records of all monitoring data and calculated averages for applicable operating limits, such as opacity and operating load to show continuous compliance with each emission limit and operating limit that applies to the permittee. **(40 CFR 63.7555(c))**

8. For each boiler or process heater, the permittee must keep the applicable records as listed below.

1. The permittee must keep records of monthly fuel use by each boiler or process heater, including the type(s) of fuel and amount(s) used. **(40 CFR 63.7555(d)(1))**
2. A copy of all calculations and supporting documentation of maximum chlorine fuel input, using Equation 7 of 40 CFR 63.7530, that were done to demonstrate continuous compliance with the HCl emission limit, for sources that demonstrate compliance through performance testing. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum chlorine fuel input or HCl emission rates. The permittee can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, the permittee must calculate chlorine fuel input for each boiler and process heater. **(40 CFR 63.7555(d)(3))**
3. A copy of all calculations and supporting documentation of maximum mercury fuel input, using Equation 8 of 40 CFR 63.7530, that were done to demonstrate continuous compliance with the mercury emission limit. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum mercury fuel input or mercury emission rates. The permittee can use the results from one fuel analysis for multiple boilers and process heaters provided they are all burning the same fuel type. However, the permittee must calculate mercury fuel input, or mercury emission rates, for each boiler and process heater. **(40 CFR 63.7555(d)(4))**
4. If the permittee chooses to stack test less frequently than annually, the permittee must keep a record that documents that the emissions in the previous stack tests were less than 75 percent of the applicable emission limit, and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the relevant pollutant to increase within the past year. **(40 CFR 63.7555(d)(5))**
5. Records of the occurrence and duration of each malfunction of the boiler or process heater, or of the associated air pollution control and monitoring equipment. **(40 CFR 63.7555(d)(6))**
6. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler or process heater, air pollution control, or monitoring equipment to its normal or usual manner of operation. **(40 CFR 63.7555(d)(7))**
7. The permittee must maintain records of the calendar date, time, occurrence and duration of each startup and shutdown. **(40 CFR 63.7555(d)(9))**
8. The permittee must maintain records of the type(s) and amount(s) of fuels used during each startup and shutdown. **(40 CFR 63.7555(d)(10))**
9. Records must be in a form suitable and readily available for expeditious review. **(40 CFR 63.7560(a))**
10. The permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. **(40 CFR 63.7560(b))**
11. The permittee must keep each record on site, or they must be accessible from on-site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record. The permittee can keep the records off site for the remaining 3 years. **(40 CFR 63.7560(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 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 must submit the following reports that applies to 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. A semiannual compliance report must contain the information below depending on how the facility chooses to comply with the limits set in this rule. **(40 CFR 63.7550(a), 40 CFR 63.7550(b), 40 CFR 63.7550(c))**
	1. If the facility is subject to the requirements of a tune-up, they must submit a compliance report with the information in SC VII.4.e.i through iii, xiii, and xvi. **(40 CFR 63.7550(c)(1))**
2. If a facility is complying with the fuel analysis, they must submit a compliance report with the information in SC VII.4.e.i through iii, v, viii, ix, xi, xiv, and xv. **(40 CFR 63.7550(c)(2))**
3. If a facility is complying with the applicable emissions limit with performance testing, they must submit a compliance report with the information in SC VII.4.e.i through iii, v, vi, vii, ix, xi, xiv, and xv. **(40 CFR 63.7550(c)(3))**
4. If a facility is complying with an emissions limit using a CMS the compliance report must contain the following information in SC VII.4.e.i through iii, iv, v, ix through xi, xiii through xv. **(40 CFR 63.7550(c)(4))**
5. The compliance reports must contain the following information, as applicable:
	1. Company and Facility name and address. **(40 CFR 63.7550(c)(5)(i))**
	2. Process unit information, emissions limitations, and operating parameter limitations. **(40 CFR 63.7550(c)(5)(ii))**
	3. Date of report and beginning and ending dates of the reporting period. **(40 CFR 63.7550(c)(5)(iii))**
	4. If the permittee uses a CMS, the permittee must include the monitoring equipment manufacturer(s) and model numbers and the date of the last CMS certification or audit. **(40 CFR 63.7550(c)(5)(v))**
	5. The total fuel use by each individual boiler or process heater subject to an emission limit within the reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by the EPA or the basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure. **(40 CFR 63.7550(c)(5)(vi))**
	6. If the permittee is conducting performance tests once every 3 years consistent with 40 CFR 63.7515(b) or (c), the date of the last 2 performance tests and a statement as to whether there have been any operational changes since the last performance test that could increase emissions. **(40 CFR 63.7550(c)(5)(vii))**
	7. A statement indicating that the permittee burned no new types of fuel in an individual boiler or process heater subject to an emission limit. **(40 CFR 63.7550(c)(5)(viii))**
	8. A summary of any monthly fuel analyses conducted to demonstrate compliance according to 40 CFR 63.7521 and 40 CFR 63.7530 for individual boilers or process heaters subject to emission limits, and any fuel specification analyses conducted according to 40 CFR 63.7521(f) and 63.7530(g). **(40 CFR 63.7550(c)(5)(x))**
	9. If there are no deviations from any emission limits or operating limits in 40 CFR Part 63, Subpart DDDDD that apply to the permittee, a statement that there were no deviations from the emission limits or operating limits during the reporting period. **(40 CFR 63.7550(c)(5)(xi))**
	10. If there were no deviations from the monitoring requirements including no periods during which the CMS were out of control as specified in 40 CFR 63.8(c)(7), a statement that there were no deviations and no periods during which the CMS were out of control during the reporting period. **(40 CFR 63.7550(c)(5)(xii))**
	11. If a malfunction occurred during the reporting period, the report must include the number, duration, and a brief description for each type of malfunction which occurred during the reporting period and which caused or may have caused any applicable emission limitation to be exceeded. The report must also include a description of actions taken by the permittee during a malfunction of a boiler, process heater, or associated air pollution control device or CMS to minimize emissions in accordance with 40 CFR 63.7500(a)(3), including actions taken to correct the malfunction. **(40 CFR 63.7550(c)(5)(xiii))**
	12. Include the date of the most recent tune-up for each unit subject to the requirement to conduct an annual tune-up according to 40 CFR 63.7540(a)(10). Include the date of the most recent burner inspection if it was not done on an annual period and was delayed until the next scheduled or unscheduled unit shutdown. **(40 CFR 63.7550(c)(5)(xiv))**
	13. For each reporting period, the compliance reports must include all of the calculated 30-day rolling average values for CO CEMS. **(40 CFR 63.7550(c)(5)(xvi))**
	14. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. **(40 CFR 63.7550(c)(5)(xvii))**
	15. For each instance of startup or shutdown include the information required to be monitored, collected, or recorded. **(40 CFR 63.7550(c)(5)(xviii))**
6. For each deviation from an emission limit or operating limit in 40 CFR Part 63, Subpart DDDDD that occurs at an individual boiler or process heater where not using a CMS to comply with that emission limit or operating limit, or from the work practice standards for periods of startup and shutdown, the compliance report must additionally contain the following information:

a. A description of the deviation and which emission limit or operating limit, or work practice standard from which deviated. **(40 CFR 63.7550(d)(1))**

b. Information on the number, duration, and cause of deviations (including unknown cause), as applicable, and the corrective action taken. **(40 CFR 63.7550(d)(2))**

c. If the deviation occurred during an annual performance test, provide the date the annual performance test was completed.  **(40 CFR 63.7550(d)(3))**

6. For each deviation from an emission limit, operating limit, monitoring requirement, and the site-specific monitoring plan occurring at an individual boiler or process heater where using a CMS to comply with that emission limit or operating limit, the compliance report must additionally contain the following information:

a. The date and time that each deviation started and stopped and description of the nature of the deviation (i.e., what deviated from). **(40 CFR 63.7550(e)(1))**

b. The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks. **(40 CFR 63.7550(e)(2))**

1. The date, time, and duration that each CMS was out of control, including the information in 40 CFR 63.8(c)(8). **(40 CFR 63.7550(e)(3))**

d. The date and time that each deviation started and stopped. **(40 CFR 63.7550(e)(4))**

e. A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period. **(40 CFR 63.7550(e)(5))**

f. A characterization of the total duration of the deviations during the reporting period into those that are due to control equipment problems, process problems, other known causes, and other unknown causes. **(40 CFR 63.7550(e)(6))**

g. A summary of the total duration of CMS's downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period. **(40 CFR 63.7550(e)(7))**

h. A brief description of the source for which there was a deviation. **(40 CFR 63.7550(e)(8))**

i. A description of any changes in CMSs, processes, or controls since the last reporting period for the source for which there was a deviation. **(40 CFR 63.7550(e)(9))**

7. The permittee must submit the reports according to the procedures listed below:

a. Within 60 days after the date of completing each performance test, submit the results of the performance tests, including any associated fuel analyses, required by 40 CFR Part 63, Subpart DDDDD by using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through the EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://www.epa.gov/cdx)). Performance test data must be submitted in the file format generated through use of the EPA's Electronic Reporting Tool (ERT) (see <http://www.epa.gov/ttn/chief/ert/index.html>). For any performance test conducted using test methods that are not listed on the ERT Web site, the owner or operator shall submit the results of the performance test to the Administrator. **(40 CFR 63.7550(h)(1))**

b. Within 60 days after the date of completing each CEMS performance evaluation test (defined in 40 CFR 63.2), submit the relative accuracy test audit (RATA) data to the EPA's CDX ([www.epa.gov/cdx](http://www.epa.gov/cdx)) by using CEDRI as mentioned in paragraph 40 CFR 63.7550(h)(1). Only RATA pollutants that are supported by the ERT (as listed on the ERT Web site) are subject to this requirement. For any performance evaluations with no corresponding RATA pollutants listed on the ERT Web site, the owner or operator shall submit the results of the performance evaluation to the Administrator. **(40 CFR 63.7550(h)(2))**

c. The permittee must submit all reports required by Table 9 of 40 CFR Part 63, Subpart DDDDD electronically using CEDRI that is accessed through the EPA's CDX ([www.epa.gov/cdx](http://www.epa.gov/cdx)). However, if the reporting form specific to 40 CFR Part 63, Subpart DDDDD is not available in CEDRI at the time that the report is due, submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. The permittee must begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. At the discretion of the Administrator, submit these reports, to the Administrator in the format specified by the Administrator. **(40 CFR 63.7550(h)(3))**

1. The permittee must report the results of performance tests and the associated fuel analyses within 60 days after the completion of the performance tests. This report must also verify that the operating limits for each boiler or process heater have not changed or provide documentation of revised operating limits established according to Table 7 to 40 CFR Part 63, Subpart DDDDD, as applicable. The reports for all subsequent performance tests must include all applicable information required in 40 CFR 63.7550. The permittee shall submit any performance test reports (including RATA reports) to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5), 40 CFR 63.7515(f))**

**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 DDDDD for Industrial, Commercial, and Institutional Boilers and Process Heaters. **(40 CFR Part 63, Subparts A and DDDDD)**

# 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).

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| **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 2.5microns 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

The following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced in **EUBOILER**.

* 1. **Wood Fuel Sampling and Visual Inspection** – The permittee shall follow the procedures identified in the Fuel Procurement and Monitoring Plan (FPMP).Appendix A of the plan is a protocol for visually determining acceptability with the fuel quality criteria set forth there.
	2. **Continuous Opacity Monitoring System (COMS) Requirements**
		1. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.
		2. The COMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and PS 1 of Appendix B, 40 CFR Part 60.
		3. The permittee shall perform the COMS quality assurance set forth in 40 CFR Part 60, Appendix F, Procedure 3, or a method acceptable to AQD. Within 30 days after the completion of the Procedure 3, the results shall be submitted to the AQD.
		4. In accordance with 40 CFR 60.7(c) and (d), the permittee shall submit two copies of an excess emission report (EER) and summary report in an acceptable format to Air Quality Division, within 30 days following the end of each calendar quarter. The Summary Report shall follow the format of Figure 1 in 40 CFR 60.7(d). The EER shall include the following information:
	3. A report of each exceedance above the emission limit. This includes the date, time, magnitude, cause, and corrective actions of all occurrences during the reporting period.

b. A report of all periods of COMS downtime and corrective action.

1. A report of the total operating time of EUBOILER during the reporting period.
2. If no exceedances or COMS downtime occurred during the reporting period, the permittee shall report that fact.

All monitoring data shall be kept on file for a period of at least five years and made available to the AQD upon request.

**3.3 Continuous Emission Monitoring System (CEMS) for SO2, NOX, CO and O2 and Continuous Emission Rate Monitoring System (CERMS) for SO2, NOX and CO Requirements:**

3.3.1 Within 60 days of completion of testing, the permittee shall submit to the AQD two copies of the final report demonstrating the CEMS/CERMS complies with the requirements of the corresponding Performance Specifications (PS) in the following table:

| **Pollutant** | **Applicable PS** |
| --- | --- |
| SO2 | 2 |
| NOx | 2 |
| CO | 4 |
| O2 | 3 |
| CERMS | 6 |

3.3.2 The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.

3.3.3 The CEMS/CERMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and PS 2, 3, 4, and 6 of Appendix B, 40 CFR Part 60.

3.3.4 Each calendar quarter, the permittee shall perform the Quality Assurance Procedures of the CEMS/CERMS set forth in Appendix F of 40 CFR Part 60. Within 30 days following the end of each calendar quarter, the permittee shall submit the results to the AQD in the format of the data assessment report (Figure 1, Appendix F)

3.3.5 In accordance with 40 CFR 60.7(c) and (d), the permittee shall submit two copies of an excess emission report (EER) and summary report in an acceptable format to the AQD, within 30 days following the end of each calendar quarter. The Summary Report shall follow the format of Figure 1 in 40 CFR 60.7(d). The EER shall include the following information:

a. A report of each exceedance above the limits specified in the conditions of this permit. This includes the date, time, magnitude, cause and corrective actions of all occurrences during the reporting period.

b. A report of all periods of CEMS/CERMS downtime and corrective action.

c. A report of the total operating time of the EUBOILER during the reporting period.

d. A report of any periods that the CEMS/CERMS exceeds the instrument range.

e. If no exceedances or CEMS/CERMS downtime occurred during the reporting period, the permittee shall report that fact.

All monitoring data shall be kept on file for a period of at least five years and made available to the AQD upon request.

## Appendix 4. Recordkeeping

The permittee shall use the following approved formats and procedures for the recordkeeping requirements referenced in **EUBOILER**.Alternative formats or procedures must be approved by the AQD District Supervisor.

**4.1** Records for all incoming loads of fuel shall be in accordance with the Fuel Procurement and Monitoring Plan (FPMP). These records shall include:

4.1.1 A record of the supplier/driver, net weight, fuel classification, time, date, and identification for each load delivered.

 4.1.2 A record of the inspector, acceptance classification, and county of origin for each load.

4.1.3 Maintain as a record any correspondence to suppliers about material quality and/or about corrective actions to meet quality standards.

4.1.4 A report should be written following a field inspection of any fuel supplier. The monitoring of any corrective or remedial action will be maintained in written form.

4.1.5 Daily Records of the fuel storage piles size including the dates the piles were initiated and consumed.

 4.1.6 Daily records of fuel burned.

 4.1.7 Monthly records of total deliveries, total consumption, and ending inventory of fuel.

4.1.8 Maintain as a record the completed standard data form used for each sampling and inspection activity as per Appendix B of the **Fuel Procurement and Monitoring Plan**.

* + 1. A monthly summary of data from each sampling and inspection activity completed per Appendix C.

## Appendix 5. Testing Procedures

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

## Appendix 6. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-N3570-2018. 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-N3570-2018 is being reissued as Source-Wide PTI No. MI-PTI-N3570-2023.

|  |  |  |  |
| --- | --- | --- | --- |
| **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

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

## Appendix 8. Reporting

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

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

**B. Other Reporting**

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

## Appendix 9. Cross State Air Pollution Rule (CSAPR) Trading Program Title V Requirements

**Description of CSAPR Monitoring Provisions**

The CSAPR subject unit, and the unit-specific monitoring provisions, at this source is identified in the following table. This unit is subject to the requirements for the CSAPR NOX Annual Trading Program, CSAPR NOX Ozone Season Group 3 Trading Program, and CSAPR SO2 Group 1 Trading Program, which are included below as Sections I, II, and III, respectively.

Each unit will use one of the following as the monitoring methodology for each parameter as provided below and shall comply with the general monitoring, recordkeeping, reporting and other requirements in conditions 1 through 5 below and in paragraph (b) of Sections I, II, and III:

* Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR Part 75, Subpart B (for SO2 monitoring) or 40 CFR Part 75, Subpart H (for NOX monitoring)
* Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR Part 75, Appendix D
* Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR Part 75, Appendix E
* Low Mass Emissions (LME) excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19
* EPA-approved alternative monitoring system requirements pursuant to 40 CFR Part 75, Subpart E

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| --- |
| Unit ID: 01 (EUBOILER) |
| Parameter | Monitoring Methodology |
| SO2 | CEMS requirements pursuant to 40 CFR Part 75, Subpart B |
| NOX | CEMS requirements pursuant to 40 CFR Part 75, Subpart H |
| Heat Input | CEMS requirements pursuant to 40 CFR Part 75, Subpart B and 40 CFR Part 75, Subpart H |

1. The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR 97.430 through 97.435 (CSAPR NOX Annual Trading Program), 97.1030 through 97.1035 (CSAPR NOX Ozone Season Group 3 Trading Program), and 97.630 through 97.635 (CSAPR SO2 Group 1 Trading Program). The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable CSAPR trading programs.
2. Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA’s website at https://www.epa.gov/airmarkets/monitoring-plans-part-75-sources.
3. Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR Part 75, Subpart E and 40 CFR 75.66 and 97.435 (CSAPR NOX Annual Trading Program), 97.1035 (CSAPR NOX Ozone Season Group 3 Trading Program), and/or 97.635 (CSAPR SO2 Group 1 Trading Program). The Administrator’s response approving or disapproving any petition for an alternative monitoring system is available on the EPA’s website at https://www.epa.gov/airmarkets/part-75-petition-responses.
4. Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR 97.430 through 97.434 (CSAPR NOX Annual Trading Program), 97.1030 through 97.1034 (CSAPR NOX Ozone Season Group 3 Trading Program), and/or 97.630 through 97.634 (CSAPR SO2 Group 1 Trading Program) must submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR 75.66 and 97.435 (CSAPR NOX Annual Trading Program), 97.1035 (CSAPR NOX Ozone Season Group 3 Trading Program), and/or 97.635 (CSAPR SO2 Group 1 Trading Program). The Administrator’s response approving or disapproving any petition for an alternative to a monitoring, recordkeeping, or reporting requirement is available on the EPA’s website at https://www.epa.gov/airmarkets/part-75-petition-responses.
5. The descriptions of monitoring applicable to the unit included above meet the requirement of 40 CFR 97.430 through 97.434 (CSAPR NOX Annual Trading Program), 97.1030 through 97.1034 (CSAPR NOX Ozone Season Group 3 Trading Program), and 97.630 through 97.634 (CSAPR SO2 Group 1 Trading Program), and therefore minor permit modification procedures, in accordance with 40 CFR 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B), may be used to add or change this unit’s monitoring system description.

**SECTION I: CSAPR NOX Annual Trading Program requirements (40 CFR 97.406)**

1. **Designated representative requirements.**

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.413 through 97.418.

1. **Emissions monitoring, reporting, and recordkeeping requirements.**
2. The owners and operators, and the designated representative, of each CSAPR NOX Annual source and each CSAPR NOX Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.430 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.431 (initial monitoring system certification and recertification procedures), 97.432 (monitoring system out-of-control periods), 97.433 (notifications concerning monitoring), 97.434 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.435 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
3. The emissions data determined in accordance with 40 CFR 97.430 through 97.435 shall be used to calculate allocations of CSAPR NOX Annual allowances under 40 CFR 97.411(a)(2) and (b) and 97.412 and to determine compliance with the CSAPR NOX Annual emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.
4. **NOX emissions requirements.**
5. CSAPR NOX Annual emissions limitation.
	1. As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NOX Annual source and each CSAPR NOX Annual unit at the source shall hold, in the source's compliance account, CSAPR NOX Annual allowances available for deduction for such control period under 40 CFR 97.424(a) in an amount not less than the tons of total NOX emissions for such control period from all CSAPR NOX Annual units at the source.
	2. If total NOX emissions during a control period in a given year from the CSAPR NOX Annual units at a CSAPR NOX Annual source are in excess of the CSAPR NOX Annual emissions limitation set forth in paragraph (c)(1)(i) above, then:
		1. The owners and operators of the source and each CSAPR NOX Annual unit at the source shall hold the CSAPR NOX Annual allowances required for deduction under 40 CFR 97.424(d); and
		2. The owners and operators of the source and each CSAPR NOX Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart AAAAA and the Clean Air Act.
6. CSAPR NOX Annual assurance provisions.
	1. If total NOX emissions during a control period in a given year from all CSAPR NOX Annual units at CSAPR NOX Annual sources in the state and Indian country within the borders of such State exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative’s share of such NOX emissions during such control period exceeds the common designated representative’s assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NOX Annual allowances available for deduction for such control period under 40 CFR 97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.425(b), of multiplying— (A) The quotient of the amount by which the common designated representative’s share of such NOX emissions exceeds the common designated representative’s assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state and Indian country within the borders of such statefor such control period, by which each common designated representative’s share of such NOX emissions exceeds the respective common designated representative’s assurance level; and (B) The amount by which total NOX emissions from all CSAPR NOX Annual units at CSAPR NOX Annual sources in the state and Indian country within the borders of such statefor such control period exceed the state assurance level.
	2. The owners and operators shall hold the CSAPR NOX Annual allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
	3. Total NOX emissions from all CSAPR NOX Annual units at CSAPR NOX Annual sources in the State and Indian country within the borders of such stateduring a control period in a given year exceed the state assurance level if such total NOX emissions exceed the sum, for such control period, of the state NOX Annual trading budget under 40 CFR 97.410(a) and the state’s variability limit under 40 CFR 97.410(b).
	4. It shall not be a violation of 40 CFR Part 97, Subpart AAAAA or of the Clean Air Act if total NOX emissions from all CSAPR NOX Annual units at CSAPR NOX Annual sources in the State and Indian country within the borders of such State during a control period exceed the state assurance level or if a common designated representative’s share of total NOXemissions from the CSAPR NOX Annual units at CSAPR NOX Annual sources in the state and Indian country within the borders of such stateduring a control period exceeds the common designated representative’s assurance level.
	5. To the extent the owners and operators fail to hold CSAPR NOX Annual allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
		1. The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
		2. Each CSAPR NOX Annual allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart AAAAA and the Clean Air Act.
7. Compliance periods.
	1. A CSAPR NOX Annual unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.
	2. A CSAPR NOX Annual unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.
8. Vintage of allowances held for compliance.
	1. A CSAPR NOX Annual allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a CSAPR NOX Annual allowance that was allocated for such control period or a control period in a prior year.
	2. A CSAPR NOX Annual allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a CSAPR NOX Annual allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
9. Allowance Management System requirements. Each CSAPR NOX Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart AAAAA.
10. Limited authorization. A CSAPR NOX Annual allowance is a limited authorization to emit one ton of NOX during the control period in one year. Such authorization is limited in its use and duration as follows:
	1. Such authorization shall only be used in accordance with the CSAPR NOX Annual Trading Program; and
	2. Notwithstanding any other provision of 40 CFR Part 97, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
11. Property right. A CSAPR NOX Annual allowance does not constitute a property right.
12. **Title V permit revision requirements.**
	1. No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NOX Annual allowances in accordance with 40 CFR Part 97, Subpart AAAAA.
	2. This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.430 through 97.435, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, Subpart E). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.406(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).
13. **Additional recordkeeping and reporting requirements.**
14. Unless otherwise provided, the owners and operators of each CSAPR NOX Annual source and each CSAPR NOX Annual unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
	1. The certificate of representation under 40 CFR 97.416 for the designated representative for the source and each CSAPR NOX Annual unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.416 changing the designated representative.
	2. All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart AAAAA.
	3. Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NOX Annual Trading Program.
15. The designated representative of a CSAPR NOX Annual source and each CSAPR NOX Annual unit at the source shall make all submissions required under the CSAPR NOX Annual Trading Program, except as provided in 40 CFR 97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR Parts 70 and 71.
16. **Liability*.***
	1. Any provision of the CSAPR NOX Annual Trading Program that applies to a CSAPR NOX Annual source or the designated representative of a CSAPR NOX Annual source shall also apply to the owners and operators of such source and of the CSAPR NOX Annual units at the source.
	2. Any provision of the CSAPR NOX Annual Trading Program that applies to a CSAPR NOX Annual unit or the designated representative of a CSAPR NOX Annual unit shall also apply to the owners and operators of such unit.
17. **Effect on other authorities*.***

No provision of the CSAPR NOX Annual Trading Program or exemption under 40 CFR 97.405 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NOX Annual source or CSAPR NOX Annual unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

1. **Effect on units in Indian country.**

Notwithstanding the provisions of paragraphs (a) through (g) above, paragraphs (a) through (g) shall be deemed not to impose any requirements on any source or unit, or any owner, operator, or designated representative with regard to any source or unit, in Indian country within the borders of the state.

**SECTION II: CSAPR NOX Ozone Season Group 3 Trading Program Requirements (40 CFR 97.1006)**

1. **Designated representative requirements.**

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.1013 through 97.1018.

1. **Emissions monitoring, reporting, and recordkeeping requirements.**
2. The owners and operators, and the designated representative, of each CSAPR NOX Ozone Season Group 3 source and each CSAPR NOX Ozone Season Group 3 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.1030 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.1031 (initial monitoring system certification and recertification procedures), 97.1032 (monitoring system out-of-control periods), 97.1033 (notifications concerning monitoring), 97.1034 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.1035 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
3. The emissions data determined in accordance with 40 CFR 97.1030 through 97.1035 shall be used to calculate allocations of CSAPR NOX Ozone Season Group 3 allowances under 40 CFR 97.1011(a)(2) and (b) and 97.1012 and to determine compliance with the CSAPR NOX Ozone Season Group 3 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.1030 through 97.1035 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.
4. **NOX emissions requirements.**
5. CSAPR NOX Ozone Season Group 3 emissions limitation.
	1. As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NOX Ozone Season Group 3 source and each CSAPR NOX Ozone Season Group 3 unit at the source shall hold, in the source's compliance account, CSAPR NOX Ozone Season Group 3 allowances available for deduction for such control period under 40 CFR 97.1024(a) in an amount not less than the tons of total NOX emissions for such control period from all CSAPR NOX Ozone Season Group 3 units at the source.
	2. If total NOX emissions during a control period in a given year from the CSAPR NOX Ozone Season Group 3 units at a CSAPR NOX Ozone Season Group 3 source are in excess of the CSAPR NOX Ozone Season Group 3 emissions limitation set forth in paragraph (c)(1)(i) above, then:
		1. The owners and operators of the source and each CSAPR NOX Ozone Season Group 3 unit at the source shall hold the CSAPR NOX Ozone Season Group 3 allowances required for deduction under 40 CFR 97.1024(d); and
		2. The owners and operators of the source and each CSAPR NOX Ozone Season Group 3 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart GGGGG and the Clean Air Act.
6. CSAPR NOX Ozone Season Group 3 assurance provisions.
	1. If total NOX emissions during a control period in a given year from all CSAPR NOX Ozone Season Group 3 units at CSAPR NOX Ozone Season Group 3 sources in the state and Indian country within the borders of such stateexceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative’s share of such NOX emissions during such control period exceeds the common designated representative’s assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NOX Ozone Season Group 3 allowances available for deduction for such control period under 40 CFR 97.1025(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.1025(b), of multiplying—
		1. The quotient of the amount by which the common designated representative’s share of such NOX emissions exceeds the common designated representative’s assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state and Indian country within the borders of such statefor such control period, by which each common designated representative’s share of such NOX emissions exceeds the respective common designated representative’s assurance level; and
		2. The amount by which total NOX emissions from all CSAPR NOX Ozone Season Group 3 units at CSAPR NOX Ozone Season Group 3 sources in the state and Indian country within the borders of such statefor such control period exceed the state assurance level.
	2. The owners and operators shall hold the CSAPR NOX Ozone Season Group 3 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
	3. Total NOX emissions from all CSAPR NOX Ozone Season Group 3 units at CSAPR NOX Ozone Season Group 3 sources in the state and Indian country within the borders of such stateduring a control period in a given year exceed the state assurance level if such total NOX emissions exceed the sum, for such control period, of the State NOX Ozone Season Group 3 trading budget under 40 CFR 97.1010(a) and the state’s variability limit under 40 CFR 97.1010(b).
	4. It shall not be a violation of 40 CFR Part 97, Subpart GGGGG or of the Clean Air Act if total NOX emissions from all CSAPR NOX Ozone Season Group 3 units at CSAPR NOX Ozone Season Group 3 sources in the state and Indian country within the borders of such stateduring a control period exceed the state assurance level or if a common designated representative’s share of total NOX emissions from the CSAPR NOX Ozone Season Group 3 units at CSAPR NOX Ozone Season Group 3 sources in the state and Indian country within the borders of such stateduring a control period exceeds the common designated representative’s assurance level.
	5. To the extent the owners and operators fail to hold CSAPR NOX Ozone Season Group 3 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
		1. The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
		2. Each CSAPR NOX Ozone Season Group 3 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart GGGGG and the Clean Air Act.
7. Compliance periods.
	1. A CSAPR NOX Ozone Season Group 3 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.1030(b) and for each control period thereafter.
	2. A CSAPR NOX Ozone Season Group 3 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.1030(b) and for each control period thereafter.
8. Vintage of allowances held for compliance.
	1. A CSAPR NOX Ozone Season Group 3 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a CSAPR NOX Ozone Season Group 3 allowance that was allocated for such control period or a control period in a prior year.
	2. A CSAPR NOX Ozone Season Group 3 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a CSAPR NOX Ozone Season Group 3 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
9. Allowance Management System requirements. Each CSAPR NOX Ozone Season Group 3 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart GGGGG.
10. Limited authorization. A CSAPR NOX Ozone Season Group 3 allowance is a limited authorization to emit one ton of NOX during the control period in one year. Such authorization is limited in its use and duration as follows:
	1. Such authorization shall only be used in accordance with the CSAPR NOX Ozone Season Group 3 Trading Program; and
	2. Notwithstanding any other provision of 40 CFR Part 97, Subpart GGGGG, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
11. Property right. A CSAPR NOX Ozone Season Group 3 allowance does not constitute a property right.
12. **Title V permit revision requirements*.***
13. No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NOX Ozone Season Group 3 allowances in accordance with 40 CFR Part 97, Subpart GGGGG.
14. This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.1030 through 97.1035, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, Subpart E). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.1006(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).
15. **Additional recordkeeping and reporting requirements*.***
16. Unless otherwise provided, the owners and operators of each CSAPR NOX Ozone Season Group 3 source and each CSAPR NOX Ozone Season Group 3 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
	1. The certificate of representation under 40 CFR 97.1016 for the designated representative for the source and each CSAPR NOX Ozone Season Group 3 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.1016 changing the designated representative.
	2. All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart GGGGG.
	3. Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NOX Ozone Season Group 3 Trading Program.
17. The designated representative of a CSAPR NOX Ozone Season Group 3 source and each CSAPR NOX Ozone Season Group 3 unit at the source shall make all submissions required under the CSAPR NOX Ozone Season Group 3 Trading Program, except as provided in 40 CFR 97.1018. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR Parts 70 and 71.
18. **Liability*.***
19. Any provision of the CSAPR NOX Ozone Season Group 3 Trading Program that applies to a CSAPR NOX Ozone Season Group 3 source or the designated representative of a CSAPR NOX Ozone Season Group 3 source shall also apply to the owners and operators of such source and of the CSAPR NOX Ozone Season Group 3 units at the source.
20. Any provision of the CSAPR NOX Ozone Season Group 3 Trading Program that applies to a CSAPR NOX Ozone Season Group 3 unit or the designated representative of a CSAPR NOX Ozone Season Group 3 unit shall also apply to the owners and operators of such unit.
21. **Effect on other authorities*.***

No provision of the CSAPR NOX Ozone Season Group 3 Trading Program or exemption under 40 CFR 97.1005 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NOX Ozone Season Group 3 source or CSAPR NOX Ozone Season Group 3 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

1. **Effect on units in Indian country.**

Notwithstanding the provisions of paragraphs (a) through (g) above, paragraphs (a) through (g) shall be deemed not to impose any requirements on any source or unit, or any owner, operator, or designated representative with regard to any source or unit, in Indian country within the borders of the state.

**SECTION III: CSAPR SO2 Group 1 Trading Program requirements (40 CFR 97.606)**

1. **Designated representative requirements.**

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.613 through 97.618.

1. **Emissions monitoring, reporting, and recordkeeping requirements.**
2. The owners and operators, and the designated representative, of each CSAPR SO2 Group 1 source and each CSAPR SO2 Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.630 (general requirements, including installation, certification, and data accounting, compliance deadlines, reporting data, prohibitions, and long-term cold storage), 97.631 (initial monitoring system certification and recertification procedures), 97.632 (monitoring system out-of-control periods), 97.633 (notifications concerning monitoring), 97.634 (recordkeeping and reporting, including monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.635 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
3. The emissions data determined in accordance with 40 CFR 97.630 through 97.635 shall be used to calculate allocations of CSAPR SO2 Group 1 allowances under 40 CFR 97.611(a)(2) and (b) and 97.612 and to determine compliance with the CSAPR SO2 Group 1 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.630 through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.
4. **SO2 emissions requirements.**
5. CSAPR SO2 Group 1 emissions limitation.
	1. As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR SO2 Group 1 source and each CSAPR SO2 Group 1 unit at the source shall hold, in the source's compliance account, CSAPR SO2 Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) in an amount not less than the tons of total SO2 emissions for such control period from all CSAPR SO2 Group 1 units at the source.
	2. If total SO2 emissions during a control period in a given year from the CSAPR SO2 Group 1 units at a CSAPR SO2 Group 1 source are in excess of the CSAPR SO2 Group 1 emissions limitation set forth in paragraph (c)(1)(i) above, then:
		1. The owners and operators of the source and each CSAPR SO2 Group 1 unit at the source shall hold the CSAPR SO2 Group 1 allowances required for deduction under 40 CFR 97.624(d); and
		2. The owners and operators of the source and each CSAPR SO2 Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation 40 CFR Part 97, Subpart CCCCC and the Clean Air Act.
6. CSAPR SO2 Group 1 assurance provisions.
	1. If total SO2 emissions during a control period in a given year from all CSAPR SO2 Group 1 units at CSAPR SO2 Group 1 sources in the state and Indian country within the borders of such state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative’s share of such SO2 emissions during such control period exceeds the common designated representative’s assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR SO2 Group 1 allowances available for deduction for such control period under 40 CFR 97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.625(b), of multiplying—
		1. The quotient of the amount by which the common designated representative’s share of such SO2 emissions exceeds the common designated representative’s assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state and Indian country within the borders of such statefor such control period, by which each common designated representative’s share of such SO2 emissions exceeds the respective common designated representative’s assurance level; and
		2. The amount by which total SO2 emissions from all CSAPR SO2 Group 1 units at CSAPR SO2 Group 1 sources in the state and Indian country within the borders of such statefor such control period exceed the state assurance level.
	2. The owners and operators shall hold the CSAPR SO2 Group 1 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.
	3. Total SO2 emissions from all CSAPR SO2 Group 1 units at CSAPR SO2 Group 1 sources in the state and Indian country within the borders of such state during a control period in a given year exceed the state assurance level if such total SO2 emissions exceed the sum, for such control period, of the state SO2 Group 1 trading budget under 40 CFR 97.610(a) and the state’s variability limit under 40 CFR 97.610(b).
	4. It shall not be a violation of 40 CFR Part 97, Subpart CCCCC or of the Clean Air Act if total SO2 emissions from all CSAPR SO2 Group 1 units at CSAPR SO2 Group 1 sources in the state and Indian country within the borders of such stateduring a control period exceed the state assurance level or if a common designated representative’s share of total SO2 emissions from the CSAPR SO2 Group 1 units at CSAPR SO2 Group 1 sources in the state and Indian country within the borders of such state during a control period exceeds the common designated representative’s assurance level.
	5. To the extent the owners and operators fail to hold CSAPR SO2 Group 1 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
		1. The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
		2. Each CSAPR SO2 Group 1 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR Part 97, Subpart CCCCC and the Clean Air Act.
7. Compliance periods.
	1. A CSAPR SO2 Group 1 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.
	2. A CSAPR SO2 Group 1 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.630(b) and for each control period thereafter.
8. Vintage of allowances held for compliance.
	1. A CSAPR SO2 Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a CSAPR SO2 Group 1 allowance that was allocated for such control period or a control period in a prior year.
	2. A CSAPR SO2 Group 1 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year must be a CSAPR SO2 Group 1 allowance that was allocated for a control period in a prior year or the control period in the given year or in the immediately following year.
9. Allowance Management System requirements. Each CSAPR SO2 Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR Part 97, Subpart CCCCC.
10. Limited authorization. A CSAPR SO2 Group 1 allowance is a limited authorization to emit one ton of SO2 during the control period in one year. Such authorization is limited in its use and duration as follows:
	1. Such authorization shall only be used in accordance with the CSAPR SO2 Group 1 Trading Program; and
	2. Notwithstanding any other provision of 40 CFR Part 97, Subpart CCCCC, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
11. Property right. A CSAPR SO2 Group 1 allowance does not constitute a property right.
12. **Title V permit revision requirements.**
13. No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR SO2 Group 1 allowances in accordance with 40 CFR Part 97, Subpart CCCCC.
14. This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 40 CFR 97.630 through 97.635, and the requirements for a continuous emission monitoring system (pursuant to 40 CFR Part 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR Part 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR Part 75, Subpart E). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this title V permit using minor permit modification procedures in accordance with 40 CFR 97.606(d)(2) and 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).
15. **Additional recordkeeping and reporting requirements.**
16. Unless otherwise provided, the owners and operators of each CSAPR SO2 Group 1 source and each CSAPR SO2 Group 1 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Administrator.
	1. The certificate of representation under 40 CFR 97.616 for the designated representative for the source and each CSAPR SO2 Group 1 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.616 changing the designated representative.
	2. All emissions monitoring information, in accordance with 40 CFR Part 97, Subpart CCCCC.
	3. Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR SO2 Group 1 Trading Program.
17. The designated representative of a CSAPR SO2 Group 1 source and each CSAPR SO2 Group 1 unit at the source shall make all submissions required under the CSAPR SO2 Group 1 Trading Program, except as provided in 40 CFR 97.618. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR Parts 70 and 71.
18. **Liability.**
19. Any provision of the CSAPR SO2 Group 1 Trading Program that applies to a CSAPR SO2 Group 1 source or the designated representative of a CSAPR SO2 Group 1 source shall also apply to the owners and operators of such source and of the CSAPR SO2 Group 1 units at the source.
20. Any provision of the CSAPR SO2 Group 1 Trading Program that applies to a CSAPR SO2 Group 1 unit or the designated representative of a CSAPR SO2 Group 1 unit shall also apply to the owners and operators of such unit.
21. **Effect on other authorities.**

No provision of the CSAPR SO2 Group 1 Trading Program or exemption under 40 CFR 97.605 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR SO2 Group 1 source or CSAPR SO2 Group 1 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

**(h) Effect on units in Indian country.**

Notwithstanding the provisions of paragraphs (a) through (g) above, paragraphs (a) through (g) shall be deemed not to impose any requirements on any source or unit, or any owner, operator, or designated representative with regard to any source or unit, in Indian country within the borders of the state.