

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

EFFECTIVE DATE: June 22, 2021  
REVISION DATE: September 13, 2021

ISSUED TO

**L'Anse Warden Electric Company, LLC**

State Registration Number (SRN): B4260

LOCATED AT

157 South Main Street, L'Anse, Baraga County, Michigan 49946

**RENEWABLE OPERATING PERMIT**

Permit Number: MI-ROP-B4260-2021a

Expiration Date: June 22, 2026

Administratively Complete ROP Renewal Application Due Between  
December 22, 2024 and December 22, 2025

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

**SOURCE-WIDE PERMIT TO INSTALL**

Permit Number: MI-PTI-B4260-2021a

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

Michigan Department of Environment, Great Lakes, and Energy

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Christopher Ethridge, Field Operations Manager

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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))**
  - a. Enter, at reasonable times, a stationary source or other premises where emissions-related activity is conducted or where records must be kept under the conditions of the ROP.
  - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of the ROP.
  - c. Inspect, at reasonable times, any of the following:
    - i. Any stationary source.
    - ii. Any emission unit.
    - iii. Any equipment, including monitoring and air pollution control equipment.
    - iv. Any work practices or operations regulated or required under the ROP.
  - d. As authorized by Section 5526 of Act 451, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the ROP or applicable requirements.
5. The permittee shall furnish to the department, within a reasonable time, any information the department may request, in writing, to determine whether cause exists for modifying, revising, or revoking the ROP or to determine compliance with this ROP. Upon request, the permittee shall also furnish to the department copies of any records that are required to be kept as a term or condition of this ROP. For information which is claimed by the permittee to be confidential, consistent with the requirements of the 1976 PA 442, MCL §15.231 et seq., and known as the Freedom of Information Act, the person may also be required to furnish the records directly to the USEPA together with a claim of confidentiality. **(R 336.1213(1)(e))**

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

### **Equipment & Design**

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

### **Emission Limits**

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

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

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

### **Testing/Sampling**

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

## Monitoring/Recordkeeping

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

## Certification & Reporting

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

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

## Permit Shield

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

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

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

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

## Revisions

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

## Reopenings

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

## Renewals

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

## Stratospheric Ozone Protection

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

## Risk Management Plan

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

## Emission Trading

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

### **Permit to Install (PTI)**

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

#### **Footnotes:**

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

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

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

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

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

## SOURCE-WIDE CONDITIONS

### DESCRIPTION

The following conditions apply source-wide to all process equipment including equipment covered by other permits, grand-fathered equipment, and exempt equipment for an electrical generating facility which burns wood chips, creosote treated railroad ties, wood fines and bark, tire derived fuel (TDF), engineered fuel pellets and natural gas; fuel aggregation facility (FAF), fuel storage piles; yards, driveways, fuel and ash handling procedures.

### POLLUTION CONTROL EQUIPMENT

Multicyclone followed by three (series) section electrostatic precipitator (ESP);  
 Dry Sorbent Injection (DSI) System is utilized, for additional HCl control, when burning engineered fuel pellets

### I. EMISSION LIMIT(S)

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Each Individual HAP	9.5 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	Source-Wide	SC V.1 SC VI.3	<b>R 336.1205(1)</b>
2. Aggregate HAPs	Less than 20.0 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	Source-Wide	SC V.1 SC VI.3	<b>R 336.1205(3)</b>

### II. MATERIAL LIMIT(S)

NA

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

- The permittee shall not operate the facility (including EUBOILER#1, EUSORBENT, EUFUEL, and EUFAF) unless the fugitive emissions control plan (FECF) for all plant roadways, the plant yard, all material storage piles, and all material handling operations has been submitted, and is implemented and maintained. The permittee shall submit any amendments to the FECF to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the plan, or amended plan shall be considered approved.<sup>2</sup> **(R 336.1371, R 336.1372, Act 451 324.5524)**

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

NA

### V. TESTING/SAMPLING

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

- At least once every five years, the permittee shall verify HCl, and HAP emission rates from EUBOILER#1 by testing at owner's expense, in accordance with Department requirements. For determining compliance with the individual and aggregate HAP limits; HCl, Pb, Arsenic, Manganese, Nickel, and Cresol Isomers are at a minimum to be tested. Testing shall be performed using an approved EPA Method listed in:

Pollutant	Test Method Reference
Metals	40 CFR Part 60, Appendix A; 40 CFR Part 61, Appendix B; 40 CFR Part 63, Appendix A
HAPs	40 CFR Part 63, Appendix A
Hydrogen Chloride	40 CFR Part 60, Appendix A

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 60 days prior to testing, the permittee shall submit two complete test plans to the AQD Technical Programs Unit Supervisor and the District Supervisor. The plans shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing. 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. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit Supervisor and the District Supervisor within 60 days following the last date of testing.<sup>2</sup> **(R 336.1205, R 336.2001, R 336.2003, R 336.2004)**

2. Within 180 days of permit issuance, the permittee shall verify the HCl and HAP (Lead, Arsenic, Manganese, Nickel, and Cresol Isomers, at a minimum) emission rates from EUBOILER#1. Thereafter, the permittee shall verify HCl and HAP emissions, at a minimum, every three years from the date of the last test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
3. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

## **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the end of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.<sup>2</sup> **(R 336.1205(1) and (3), R 336.1371, R 336.1372, Act 451 324.5524)**
2. The permittee shall record and keep records as required by the FECP. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> **(R 336.1371, R 336.1372, Act 451 324.5524)**
3. The permittee shall keep the following information on a monthly basis:
  - a. The quantity of each HAP containing material used or emitted.
  - b. The HAP emission factor of each HAP containing material used or emitted. (Emission factors are to be based on testing at the facility or as approved by the AQD District Supervisor.)
  - c. Individual and aggregate HAP emission calculations determining the monthly emission rate of each in tons per calendar month.
  - d. Individual and aggregate HAP emission calculations determining the annual emission rate of each in tons per 12-month rolling time period as determined at the end of each calendar month.

The permittee shall keep the records in a format acceptable to the AQD District Supervisor and as outlined in Appendix 7 and the approved Fuel Procurement and Monitoring Plan (FPMP). The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> **(R 336.1205(1) and (3))**

**See Appendix 7**

## **VII. REPORTING**

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

2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports to the AQD Technical Programs Unit and District Office, in a format approved by the AQD. **(R 336.1213(3)(c), R 336.2001(5))**

**See Appendix 8**

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

NA

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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

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

### C. EMISSION UNIT SPECIAL CONDITIONS

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

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

#### EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Including Process Equipment & Control Device(s))	Installation Date/ Modification Date	Flexible Group ID
EUFUEL	Fuel handling and storage equipment, road(s), and storage areas.	1959 05/30/2008	FGFUEL
EUBOILER#1	Boiler with capability of burning tire derived fuel (TDF), creosote treated railroad ties, wood chips, wood fines and bark, engineered fuel pellets and natural gas. The boiler has a maximum heat input rating of 324 million BTU per hour and will produce steam and electricity. The existing electrical generator is rated at 22.0 megawatts. The boiler is controlled by a multicyclone followed by a three (series) section electrostatic precipitator. While burning engineered fuel pellets, dry sorbent injection (DSI) will be utilized.	1959 1974 04/15/2008 10/26/2011	FGBOILERMACT-6J
EUSORBENT	Delivery, unloading, storage, and handling of dry sorbent material or super sack system. Dry sorbent is delivered by enclosed tanker truck and conveyed pneumatically to the storage silo. The load-in conveying air discharges through a high efficiency cartridge fabric filter	2019	NA
EUFAC	Wood (whole and processed), wood chips, wood fines and bark are delivered to adjacent FAF for temporary storage prior to transfer to the facility. Whole wood is processed at the FAF using a horizontal grinder.	05/30/2008	FGFUEL

**EUBOILER#1**  
**EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Boiler with capability of burning tire derived fuel (TDF), creosote treated railroad ties, wood chips, wood fines and bark, engineered fuel pellets and natural gas. The boiler has a maximum heat input rating of 324 million BTU per hour and will produce steam and electricity. The existing electrical generator is rated at 22.0 megawatts. The boiler is controlled by a multicyclone followed by a three (series) section electrostatic precipitator (ESP). While burning engineered fuel pellets, dry sorbent injection (DSI) will be utilized.

**Flexible Group ID:** FGBOILERMACT-6J

**POLLUTION CONTROL EQUIPMENT**

Multicyclone followed by an ESP  
 DSI system will be utilized while burning engineered fuel pellets

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Visible Emissions	20% opacity <sup>2</sup>	6-minute average	EUBOILER#1	SC VI.7	R 336.1301(1)(c)
2. PM	0.06 lb/MMBTU heat input <sup>2</sup>	Hourly	EUBOILER#1	SC V.1	R 336.1205 R 336.1331(1)(c)
3. PM	19.2 pph <sup>2</sup>	Hourly	EUBOILER#1	SC V.1	R 336.1205
4. PM10	15.4 pph <sup>2</sup>	Hourly	EUBOILER#1	SC V.1	R 336.1205 40 CFR 52.21(c) & (d)
5. SO <sub>2</sub>	290 pph <sup>2</sup>	Hourly	EUBOILER#1	SC V.1 SC VI.1 SC VI.4	R 336.1205 40 CFR 52.21 (c)&(d)
6. NO <sub>x</sub>	145 pph <sup>2</sup>	Hourly	EUBOILER#1	SC V.1	R 336.1205 40 CFR 52.21(c) & (d)
7. CO	0.3 lb/MMBTU except for startup and shutdown <sup>2</sup>	24-hr rolling average as determined each hour the boiler operates	EUBOILER#1	SC VI.3.c SC VI.6	R 336.2810 40 CFR 52.21(j)
8. CO	97.2 pph <sup>2</sup>	Hourly	EUBOILER#1	SC VI.3.c SC VI.6	40 CFR 52.21(j) R 336.2804 R 336.2810
9. VOC	50 ppmvd at 7% O <sub>2</sub> (as methane) except for startup and shutdown <sup>2</sup>	Hourly	EUBOILER#1	SC V.1	R 336.1205 R 336.1702(a)
10. VOC	9.1 pph <sup>2</sup>	Hourly	EUBOILER#1	SC V.1	R 336.1205 R 336.1702(a)
11. Lead (Pb)	0.02 pph <sup>2</sup>	Hourly	EUBOILER#1	SC V.1 SC VI.1 SC VI.4	R 336.1205

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
12. Hydrogen Chloride (HCl)	2.17 pph <sup>2</sup>  – or –  9.5 tpy <sup>2</sup>	Hourly  -or-  12 month rolling average as determined at the end of each calendar month if using a CPMS	EUBOILER#1	SC V.1 SC VI.1 SC VI.2 SC VI.4  – or –  SC VI.1 SV VI.2 SC VI.4	R 336.1205 R 336.1224 R 336.1225

## II. MATERIAL LIMIT(S)

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Natural Gas	Less than 25% of annual heat input**2	12-month rolling time period as determined at the end of each calendar month	EUBOILER#1	SC VI.1 SC VI.3	R 336.1205 18 CFR 292.204(b)(2)
2. TDF	70.0 tons/day “as received” *2	Calendar Day	EUBOILER#1	SC VI.1 SC VI.3 SC VI.4	R 336.1205
3. TDF	24,000 tpy “as received” *2	12-month rolling time period as determined at the end of each calendar month	EUBOILER#1	SC VI.1 SC VI.3 SC VI.4	R 336.1205
4. Creosote treated railroad ties	408.0 tons/day “as received” *2	Calendar Day	EUBOILER#1	SC VI.1 SC VI.3 SC VI.4	R 336.1205
5. Creosote treated railroad ties	72,078 tpy “as received” *2	12-month rolling time period as determined at the end of each calendar month	EUBOILER#1	SC VI.1 SC VI.3 SC VI.4	R 336.1205
6. Fines & Bark	129.6 tons/day “as received” *2	Calendar Day	EUBOILER#1	SC VI.1 SC VI.3 SC VI.4	R 336.1205
7. Fines & Bark	44,280 tpy “as received” *2	12-month rolling time period as determined at the end of each calendar month	EUBOILER#1	SC VI.1 SC VI.3 SC VI.4	R 336.1205
8. Engineered Fuel Pellets	144.0 tons/day “as received” *2	Calendar Day	EUBOILER#1	SC VI.1 SC VI.4	R 336.1205 R 336.1225
9. Engineered Fuel Pellets	50,000 tpy <sup>2</sup>	12-month rolling time period as determined at the end of each calendar month	EUBOILER#1	SC VI.1 SC VI.4	R 336.1205 R 336.1225

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
10. Chlorine content of rail road ties	400 ppm <sup>1</sup>	Instantaneous	EUBOILER#1	SC III.2 SC III.4 SC III.5 SC III.7 SC VI.4	<b>R 336.1224</b> <b>R 336.1225</b>

\*"as received" means the heating value of the solid fuel, including all moisture and ash forming materials present.

\*\*Use of natural gas by a facility, under section 3(17)(B) of the Federal Power Act (18 CFR 292), is limited to the minimum amounts of fuel required for ignition, startup, testing, flame stabilization, and control uses, and the minimum amounts of fuel required to alleviate or prevent unanticipated equipment outages, and emergencies, directly affecting the public health, safety, or welfare, which would result from electric power outages. Such fuel use may not, in the aggregate, exceed 25 percent of the total energy input of the facility during the 12-month period beginning with the date the facility first produces electric energy and any calendar year subsequent to the year in which the facility first produces electric energy as referenced in 18 CFR 292.204(a)(2).

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

1. The maximum heat input for EUBOILER#1 shall not exceed 2,656,800 MMBTU per year based on a 12-month rolling time period as determined at the end of each calendar month.<sup>2</sup> **(R 336.1205(3), R 336.1225, R 336.2810, 40 CFR 52.21(j))**
2. The permittee shall burn only the fuels described in SC II.1 through SC II.9, and fuels defined in an approved Fuel Procurement and Monitoring Plan (FPMP) for EUBOILER#1.<sup>2</sup> **(R 336.1205, R 336.1225)**
3. The permittee shall not burn TDF while burning engineered fuel pellets, except when changing to or from fuel blends that include engineered fuel pellets.<sup>2</sup> **(R 336.1205, R 336.1225)**
4. The permittee shall not operate EUBOILER#1 unless an acceptable plan that describes how emissions will be minimized during all startups, shutdowns and malfunctions has been submitted to the AQD District Supervisor. The plan shall incorporate procedures recommended by the equipment manufacturer as well as incorporating standard industry practices.<sup>2</sup> **(R 336.1911, R 336.1912, R 336.2802, 40 CFR 52.21)**
5. The permittee shall operate EUBOILER#1 according to an approved FPMP. The permittee shall utilize the FPMP at all times to ensure that only fuel, as defined in Section II (Material Limits listed above), is being burned in EUBOILER#1 and to prevent unacceptable fuel from being burned in EUBOILER#1. The plan shall, at a minimum, specify the following:
  - a. A description of fuel to be burned.
  - b. Inspection and sorting procedures and protocol used to eliminate prohibited fuels and minimize unacceptable fuel.
  - c. Procedures for rejecting and/or removing unacceptable fuel, including determination of whether wood has been treated with pentachlorophenol.
  - d. Supplier qualification, processing and inspection procedures for each supplier of source separated fuel.
  - e. Auditing procedures including records of fuel specification, load identification, quality control of load and fuel pile(s).
  - f. Odor minimization.

The permittee shall submit any amendments to the FPMP 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.<sup>2</sup> **(R 336.1205, R 336.1225)**

- 6. The permittee shall not operate EUBOILER#1, (including the hydro grate biomass fuel burning surface, boiler overfired air system, ID fan, air heater, boiler tubes, boiler tube cleaning equipment, multicyclone, electrostatic precipitators, CO monitoring equipment and DSI system) unless a preventative maintenance and malfunction abatement plan (PM/MAP) as described in Rule 911(2), for has been implemented and maintained. The PM/MAP shall, at a minimum, specify the following:
  - a. A complete preventative maintenance program including identification of the supervisory personnel responsible for overseeing the inspection, maintenance, and repair of air-cleaning devices, a description of the items or conditions that shall be inspected, the frequency of the inspections or repairs, and an identification of the major replacement parts that shall be maintained in inventory for quick replacement.
  - b. An identification of the source and air-cleaning device operating variables that shall be monitored to detect a malfunction or failure, the normal operating range of these variables, and a description of the method of monitoring or surveillance procedures.
  - c. A description of the corrective procedures or operational changes that shall be taken in the event of a malfunction or failure to achieve compliance with the applicable emission limits.

If at any time the 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 also amend the PM/MAP within 45 days, if new equipment is installed or upon request from the AQD District Supervisor. The permittee shall submit the PM/MAP and any amendments to the PM/MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the PM/MAP or amended PM/MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.<sup>2</sup> (R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))

- 7. The permittee shall not process, store, or combust any wood, or any materials, which have been treated with pentachlorophenol coating or preservative.<sup>1</sup> (R 336.1224, R 336.1225)

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

- 1. The permittee shall not operate EUBOILER#1 unless the boiler overfired air system, multicyclone, and the electrostatic precipitator are installed and operating in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with an approved PM/MAP as required in SC III.6.<sup>2</sup> (R 336.1910, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))
- 2. The permittee shall not burn fuel blends containing the engineered fuel pellets in EUBOILER#1 unless the DSI system is installed and operating in a satisfactory manner. Satisfactory manner includes operating and maintaining the DSI system in accordance with an approved PM/MAP as required in SC III.6.<sup>2</sup> (R 336.1205, R 336.1213, R 336.1225, R 336.1910, R 336.1911)
- 3. The permittee shall install, calibrate, maintain and operate in a satisfactory manner a device to monitor and record the DSI rate for EUBOILER#1 on a continuous basis.<sup>2</sup> (R 336.1205, R 336.1224, R 336.1225)

**V. TESTING/SAMPLING**

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

- 1. At least once every five years the permittee shall verify PM, PM10, SO<sub>2</sub>, NO<sub>x</sub>, HCl, lead, and VOC emission rates from EUBOILER#1 by testing at owner's expense, in accordance with the Department requirements. The hourly emission rate shall be determined by the average of three test runs per the method requirements. 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
PM10	40 CFR Part 51, Appendix M
NO <sub>x</sub>	40 CFR Part 60, Appendix A

<b>Pollutant</b>	<b>Test Method Reference</b>
SO <sub>2</sub>	40 CFR Part 60, Appendix A
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

An alternate method, or a modification to the approved EPA Method, may be specified in an AQD-approved Test Protocol. No less than 60 days prior to testing, the permittee shall submit two complete test plans to the AQD Technical Programs Unit Supervisor and the District Supervisor. The plans shall describe the test method(s) and the maximum routine operating conditions, including targets for key operational parameters associated with air pollution control equipment to be monitored and recorded during testing. 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. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit Supervisor and the District Supervisor within 60 days following the last date of testing.

If VOC testing shows the total annualized emissions are greater than 9.0 tons per year, the permittee shall perform additional testing to determine styrene, benzene, acetaldehyde, and toluene emission rates; for comparison to the facility's HAP emission limit. VOC emissions shall be calculated by multiplying VOC emissions in pounds per hour by 8200 hours per year.<sup>2</sup> **(R 336.1205, R 336.1702, R 336.2001, R 336.2003, R 336.2004)**

2. The permittee shall verify the PM, PM<sub>10</sub>, SO<sub>2</sub>, NO<sub>x</sub>, lead, and VOC emission rates from EUBOILER#1, at a minimum, every five years from the date of the last test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
3. The permittee shall perform one HCl emission test by June 19, 2021. Verification of emission rates includes the submittal of a complete report of the test results to the AQD Technical Programs Unit Supervisor and the District Supervisor within 60 days following the last date of testing.<sup>2</sup> **(R 336.1205, R 336.2001, R 336.2003, R 336.2004)**
4. The permittee shall verify the HCl emission rates from EUBOILER#1, at a minimum, every three years from the date of the last test. **(R 336.1213(3), R 336.2001, R 336.2003, R 336.2004)**
5. The permittee shall perform sampling and analysis of each solid fuel as described in the AQD approved FPMP. Results will be reviewed to verify that no excessive changes in fuel quality, beyond typical variation, have occurred that may impact compliance with permit limits as demonstrated during the compliance demonstration. The permittee shall maintain a copy of all calculations and supporting documentation.<sup>2</sup> **(R 336.1205, R 336.2001, R 336.2003, R 336.2004)**
6. The permittee shall notify the AQD Technical Programs Unit Supervisor and the District Supervisor not less than 30 days of the time and place before performance tests are conducted. **(R 336.1213(3))**

## **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor and make them available by the end of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.<sup>2</sup> **(R 336.1205, R 336.1224, R 336.1225, R 336.2810, 40 CFR 52.21(c), (d), and (j))**
2. The permittee shall install, calibrate, maintain and operate in a satisfactory manner, a Compliance Monitoring System (CMS) per the requirements of an approved Performance Specification or an alternative method approved by the AQD for HCl monitoring. The permittee shall include at a minimum the following requirements for HCl monitoring:<sup>2</sup> **(R 336.1205, R 336.1911)**
  - a. The CMS that will include provisions for alternative monitoring in the event that the CMS is not operational or is out of control. The alternative monitoring shall, require verification of alternative operating parameters if new operating parameters are introduced.
  - b. The CMS will describe the process monitors and include data from stack testing allowing the correlation between emissions and HCl information available from the continuous monitor.

- c. The CMS will include monitor maintenance activities as well as ongoing calibration activities to ensure compliance with HCl limits.
  - d. A CMS will include using the reagent injection rate from a process monitor.
  - e. Emission factors developed through use of the CMS, including the HCl levels in ppm or lb/hr necessary to maintain compliance and correlating reagent injection rates used in the calculations, will be recorded and kept onsite.
  - f. The permittee shall submit any amendment to the CMS (i.e. continuous parameter monitoring system (CPMS)) to AQD District Supervisor for review and approval. A monitoring plan and testing plan shall be submitted at least 90 days prior to any testing or implementation. Upon approval of the amended plan by the AQD District Supervisor, the permittee shall implement the amended CMS.
3. The permittee shall monitor and keep records, in a satisfactory manner, of the following:
- a. The amount and type of each fuel combusted in EUBOILER#1 on a daily, monthly and 12-month rolling basis, as determined at the end of each calendar month.
  - b. The heat input of each fuel combusted in EUBOILER#1 on a monthly and 12-month rolling basis, as determined at the end of each calendar month.
  - c. The permittee shall keep, in a satisfactory manner, hourly and 24-hour rolling average CO emission records for EUBOILER#1, as required by SC I.7 and I.8.

The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> **(R 336.1205, R 336.1224, R 336.1225, R 336.2810, 40 CFR 52.21(c), (d), and (j))**

4. The permittee shall keep, in a satisfactory manner, the FPMP records and information for EUBOILER#1, as required by SC II.2 through SC II.10 including records of the sulfur, lead, and chlorine content of each fuel burned in EUBOILER#1. The permittee shall keep all records on file and make them available to the Department upon request. Alternative formats or procedures must be approved by the AQD District Supervisor.<sup>2</sup> **(R 336.1205(1)(a), R 336.1224, R 336.1225)**
5. The permittee shall keep, in a satisfactory manner, the records and information associated with the PM/MAP for EUBOILER#1, as required by SC III.6. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> **(R 336.1205, R 336.1225, R 336.1910)**
6. The permittee shall calibrate, maintain, and operate in a satisfactory manner a CEMS to monitor and record the CO emissions from EUBOILER#1 on a continuous basis. The permittee shall operate the CEMS to meet the timelines, requirements, and reporting detailed in Appendix 3.<sup>2</sup> **(R 336.2810, 40 CFR 52.21(j))**
7. The permittee shall calibrate, maintain, and operate in a satisfactory manner a COMS to monitor and record the visible emissions from EUBOILER#1 on a continuous basis. The permittee shall operate the COMS to meet the timelines, requirements, and reporting detailed in Appendix 3.<sup>2</sup> **(R 336.1301)**
8. The permittee shall monitor and record, in a satisfactory manner, the DSI injection rate for EUBOILER#1 on an hourly basis. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> **(R 336.1205, R 336.1910)**
9. For EUBOILER#1, the permittee shall maintain the following records on a daily basis:
- a. Calendar date.
  - b. Hours of boiler operation.
  - c. The magnitude, in actual percent opacity, of all 6-minute averages of opacity greater than the applicable opacity standard for each hour of operation (all allowable exceptions are to be deducted before determining the excess averages of opacity). Average values shall be obtained by integration over the averaging period or by arithmetically averaging a minimum of 24 equally spaced, instantaneous opacity measurements per 6 minutes.
  - d. The date and time identifying each period during which the continuous monitoring system was inoperative, except for zero and span checks, and the nature of repairs or adjustments made. If the continuous monitoring system has not been inoperative, repaired, or adjusted, and if no excess emissions occurred, a statement attesting to this fact.

- e. Identification of times when COMS data was excluded from an average opacity calculation and a reason why data was excluded.

The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup>  
**(R 336.1205, R 336.1301, R 336.2170)**

10. The permittee shall utilize COMS-recorded opacity as an indicator of the proper operation of the electrostatic precipitator. The appropriate range of opacity defining proper function of the ESP is 0-10 percent opacity. Six-minute average values shall be based on 36 or more equally spaced instantaneous opacity measurements per six-minute period. **(40 CFR 64.6(c)(1)(i) and (ii))**
11. An excursion for the indicator range shall be defined as a daily block average opacity value greater than 10 percent opacity. **(40 CFR 64.6(c)(1), 40 CFR 64.6(c)(2))**
12. The permittee shall operate the COMS during all required periods when EUBOILER#1 is operating. Data recorded during monitoring malfunctions, repairs, and QA/QC operations shall not be used to demonstrate compliance with 40 CFR Part 64. **(40 CFR 64.6(c)(3), 40 CFR 64.7(c))**
13. The permittee shall continuously monitor the lb/hr reagent injection rate of the DSI system and the ton per hour pellet feed rate to EUBOILER#1 and record these data hourly as indicators of proper operation of the DSI system for comparison to acceptable operating ranges identified in the PM/MAP. Acceptable operating ranges will be defined through stack testing or manufacturer's recommended operation and both testing information and operating ranges will be included in the PM/MAP. The PM/MAP will also identify periods of operation (i.e., startup, shutdown, DSI system maintenance, etc.) where these operating ranges will not apply as well as define expected responses to operation outside of the acceptable operating ranges. **(40 CFR 64.6(c)(1)(i and ii))**
14. An excursion for the DSI injection rate is an hourly sorbent throughput less than 90 percent of the indicator range as identified in the PM/MAP. **(40 CFR 64.6(c)(2))**
15. The DSI sorbent throughput monitor shall continuously monitor the sorbent injection rate. The averaging period is hourly. The monitor shall be calibrated per the manufacture's recommendation, but no less than annually. **(40 CFR 64.6(c)(1)(iii))**
16. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the permittee shall conduct all monitoring, including the COMS and the monitor on the DSI system, in continuous operation (or shall collect data at all required intervals) at all times that EUBOILER#1 is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations or fulfilling a minimum data availability requirement, if applicable. The permittee shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. **(40 CFR 64.6(c)(3), 40 CFR 64.7(c))**
17. Upon detecting an excursion or exceedance, the permittee shall restore operation of EUBOILER#1 (including the ESP and DSI system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). The cause of the excursion or exceedance shall be investigated, corrective action(s) taken, and an excursion summary reported. In the event of an excursion of more than 10 percent opacity, based on a 24-hour block average, the permittee shall examine and correct the electrostatic precipitator in accordance with the PM/MAP. **(40 CFR 64.7(d))**
18. The permittee shall properly maintain the COMS and DSI system, including keeping necessary parts for routine repair of the monitoring equipment. **(40 CFR 64.7(b))**

19. The permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan and any activities undertaken to implement a quality improvement plan, and other information such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions. **(R 336.1213(3), R 336.2170(2), 40 CFR 64.9(b)(1))**

See Appendices 3 and 7

**VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee shall submit any performance test reports (including RATA reports) to the AQD Technical Programs Unit and District Office, in a format approved by the AQD.<sup>2</sup> **(R 336.2001(5))**
5. Reporting for CAM requirements:
  - a. Each semiannual report of monitoring and deviations shall include summary information on the number, duration and cause of excursions and/or exceedances and the corrective actions taken. If there were no excursions and/or exceedances in the reporting period, then this report shall include a statement that there were no excursions and/or exceedances. **(40 CFR 64.9(a)(2)(i))**
  - b. Each semiannual report of monitoring and deviations shall include summary information on monitor downtime. If there were no periods of monitor downtime in the reporting period, then this report shall include a statement that there were no periods of monitor downtime. **(40 CFR 64.9(a)(2)(ii))**

See Appendix 8

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

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

Stack & Vent ID	Maximum Exhaust Diameter / Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
1. SVBOILER#1	90 <sup>2</sup>	147 <sup>2</sup>	R 336.1225 R 336.2803 R 336.2804 40 CFR 52.21 (c) & (d)

**IX. OTHER REQUIREMENT(S)**

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

2. The permittee shall comply with all applicable requirements of 40 CFR Part 64. **(40 CFR Part 64)**
3. The permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources as specified in 40 CFR Part 63, Subparts A and JJJJJJ.<sup>2</sup> **(40 CFR Part 63, Subparts A and JJJJJJ)**

**Footnotes:**

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

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

**EUSORBENT  
 EMISSION UNIT CONDITIONS**

**DESCRIPTION**

Delivery, unloading, storage, and handling of dry sorbent material or super sack system. Dry sorbent is delivered by enclosed tanker truck and conveyed pneumatically to the storage silo. The load-in conveying air discharges through a high efficiency cartridge fabric filter.

**Flexible Group ID:** NA

**POLLUTION CONTROL EQUIPMENT**

High efficiency cartridge fabric filter (bin vent).

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Visible Emissions	10 percent opacity <sup>2</sup>	6-minute average	Fabric filter for EUSORBENT	SC III.1 SC VI.1 SC VI.2	<b>R 336.1301(1)(c)</b>

**II. MATERIAL LIMIT(S)**

NA

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

- The permittee shall not operate EUSORBENT unless a PM/MAP as described in Rule 911(2), is 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 also amend the PM/MAP within 45 days, if new equipment is installed or upon request from the AQD District Supervisor. The permittee shall submit the PM/MAP and any amendments to the PM/MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the PM/MAP or amended PM/MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.<sup>2</sup> **(R 336.1225, R 336.1331, R 336.1702(a), R 336.1910, R 336.1911, R 336.2803, R 336.2804, 40 CFR 52.21(c) and (d))**

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

- The permittee shall not transfer sorbent into the storage silo unless the high efficiency cartridge fabric filter (bin vent) is installed, maintained and operated in a satisfactory manner. Satisfactory manner includes operating and maintaining each control device in accordance with an approved PM/MAP as required in SC III.1.<sup>2</sup> **(R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**

**V. TESTING/SAMPLING**

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

NA

**VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall keep, in a satisfactory manner, all records and information associated with the PM/MAP for EUSORBENT, as required by SC III.1. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> **(R 336.1331, R 336.1910, R 336.1911, 40 CFR 52.21(c) and (d))**
2. The permittee shall perform and document non-certified visible emissions observations on a daily basis when operating. If during the observation there are any visible emissions detected, a USEPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, USEPA Method 9 observations that are performed, the reason for any visible emissions in excess of 10% opacity observed, and any corrective actions taken shall be kept on file and made available to the Department upon request.<sup>2</sup> **(R 336.1301(1)(c))**

**VII. REPORTING**

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

See Appendix 8

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

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. SVSORBENTSILO	24 <sup>2</sup>	40 <sup>2</sup>	40 CFR 52.21 (c) & (d)

**IX. OTHER REQUIREMENT(S)**

NA

**Footnotes:**

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

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

## 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
FGBOILERMACT-6J	Conditions for any existing large ( $\geq 10$ MMBTU/hr) biomass-fired industrial, commercial or institutional boiler (equipped with an oxygen trim system) as defined in 40 CFR 63.11237 (excluding seasonal and limited-use boilers) that is located at, or is part of, an area source of hazardous air pollutants (HAP), as defined in 40 CFR 63.2, except as specified in 40 CFR 63.11195.	EUBOILER#1
FGFUEL	Fuel handling, processing and storage equipment, road(s), and storage pile(s) located at the L'Anse Warden Electric Company, LLC (LWEC) Generating Station and the Fuel Aggregation Facility (FAF). The solid fuels handled include TDF, engineered fuel pellets, processed wood, wood chips, and wood fines and bark. TDF is delivered directly to the LWEC. Wood (whole and processed), wood chips, wood fines and bark are delivered to the FAF for temporary storage prior to transfer to the facility. Whole wood is processed at the FAF using a horizontal grinder.	EUFUEL, EUFAF

## **FGBOILERMACT-6J FLEXIBLE GROUP CONDITIONS**

### **DESCRIPTION**

Conditions for any existing large ( $\geq 10$  MMBTU/hr) biomass-fired industrial, commercial or institutional boiler (equipped with an oxygen trim system) as defined in 40 CFR 63.11237 (excluding seasonal and limited-use boilers) that is located at, or is part of, an area source of hazardous air pollutants (HAP), as defined in 40 CFR 63.2, except as specified in 40 CFR 63.11195.

**Emission Unit:** EUBOILER#1

### **POLLUTION CONTROL EQUIPMENT**

Multicyclone followed by an ESP  
DSI system will be utilized while burning engineered fuel pellets

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

NA

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

NA

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

1. The permittee must comply with each work practice standard, emission reduction measure, and management practice specified in Table 2 to 40 CFR Part 63, Subpart JJJJJJ that applies to the permittee's boiler.<sup>2</sup> **(40 CFR 63.11201(b))**
2. For affected sources subject to the work practice standard or the management practices of a tune-up, the permittee must conduct a performance tune-up according to paragraph (b) of 40 CFR 63.11223, stated in SC III.4, and keep records as required in 40 CFR 63.11225(c), stated in SC VI.1, to demonstrate continuous compliance. The permittee must conduct the tune-up while burning the type of fuel (or fuels in the case of boilers that routinely burn two types of fuels at the same time) that provided the majority of the heat input to the boiler over the 12 months prior to the tune-up.<sup>2</sup> **(40 CFR 63.11223(a))**
3. The permittee must conduct a tune-up of the boiler biennially to demonstrate continuous compliance as specified in paragraphs (b)(1) through (7) of 40 CFR 63.11223, as listed below. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up.<sup>2</sup> **(40 CFR 63.11223(b))**
  - a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may delay the burner inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). 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 63.11223(b)(1))**
  - b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available. **(40 CFR 63.11223(b)(2))**
  - c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown, not to exceed 36 months from the previous inspection). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection. **(40 CFR 63.11223(b)(3))**

- d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any nitrogen oxide requirement to which the unit is subject. **(40 CFR 63.11223(b)(4))**
- e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. **(40 CFR 63.11223(b)(5))**
- f. Maintain on-site and submit, if requested by the Administrator, a report containing the information in paragraphs (b)(6)(i) through (iii) of 40 CFR 63.11223, as listed below. **(40 CFR 63.11223(b)(6))**
  - i. The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler. **(40 CFR 63.11223(b)(6)(i))**
  - ii. A description of any corrective actions taken as a part of the tune-up of the boiler. **(40 CFR 63.11223(b)(6)(ii))**
  - iii. The type and amount of fuel used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. **(40 CFR 63.11223(b)(6)(iii))**
- g. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup. **(40 CFR 63.11223(b)(7))**

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

NA

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

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

NA

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

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

1. The permittee must maintain the records specified in paragraphs (c)(1) through (7) of 40 CFR 63.11225, as listed below.<sup>2</sup> **(40 CFR 63.11225(c))**
  - a. As required in 40 CFR 63.10(b)(2)(xiv), the permittee must keep a copy of each notification and report that the permittee submitted to comply with 40 CFR Part 63, Subpart JJJJJ and all documentation supporting any Initial Notification or Notification of Compliance Status that the permittee submitted. **(40 CFR 63.11225(c)(1))**
  - b. The permittee must keep records to document conformance with the work practices, emission reduction measures, and management practices required by 40 CFR 63.11214 and 63.11223 as specified in paragraphs (c)(2)(i) through (vi) of 40 CFR 63.11225, as applicable. **(40 CFR 63.11225(c)(2))**
    - i. Records must identify each boiler, the date of tune-up, the procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned. **(40 CFR 63.11225(c)(2)(i))**
    - ii. For each boiler required to conduct an energy assessment, the permittee must keep a copy of the energy assessment report. **(40 CFR 63.11225(c)(2)(iii))**
  - c. Records of the occurrence and duration of each malfunction of the boiler. **(40 CFR 63.11225(c)(4))**
  - d. Records of actions taken during periods of malfunction to minimize emissions in accordance with the general duty to minimize emissions in 40 CFR 63.11205(a), stated in SC IX.4, including corrective actions to restore the malfunctioning boiler to its normal or usual manner of operation. **(40 CFR 63.11225(c)(5))**
2. The permittee's records must be in a form suitable and readily available for expeditious review. The permittee must keep each record for 5 years following the date of each recorded action. The permittee must keep each record on-site or be accessible from a central location by computer or other means that instantly provide access at the site for at least 2 years after the date of each recorded action. The permittee may keep the records off site for the remaining 3 years.<sup>2</sup> **(40 CFR 63.11225(d))**

## **VII. REPORTING**

1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. **(R 336.1213(3)(c)(ii))**
2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for reporting period July 1 to December 31 and September 15 for reporting period January 1 to June 30. **(R 336.1213(3)(c)(i))**
3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. **(R 336.1213(4)(c))**
4. The permittee must submit the notifications specified in 40 CFR 63.11225(a)(1) through (5), as listed below, to the administrator.<sup>2</sup> **(40 CFR 63.11225(a))**
  - a. The permittee must submit all of the notifications in 40 CFR 63.7(b); 40 CFR 63.8(e) and (f); and 40 CFR 63.9(b) through (e), (g), and (h) that apply to the permittee by the dates specified except as specified in 40 CFR 63.11225(a)(2) and (4). **(40 CFR 63.11225(a)(1))**
  - b. An Initial Notification must be submitted within 120 days after the source becomes subject to the standard. **(40 CFR 63.11225(a)(2))**
  - c. The permittee must submit the Notification of Compliance Status no later than 120 days after the applicable compliance date specified in 40 CFR 63.11196. The permittee must submit the Notification of Compliance Status in accordance with 40 CFR 63.11225(a)(4)(i) and (vi), as listed below. The Notification of Compliance Status must include the information and certification(s) of compliance in 40 CFR 63.11225(a)(4)(i) through (v), as applicable, and signed by a responsible official. **(40 CFR 63.11225(a)(4))**
    - i. The permittee must submit the information required in 40 CFR 63.9(h)(2), except the information listed in 40 CFR 63.9(h)(2)(i)(B), (D), (E), and (F). **(40 CFR 63.11225(a)(4)(i))**
    - ii. "This facility complies with the requirements in 40 CFR 63.11214 to conduct an initial tune-up of the boiler." **(40 CFR 63.11225(a)(4)(ii))**
    - iii. "This facility has had an energy assessment performed according to 40 CFR 63.11214(c)." **(40 CFR 63.11225(a)(4)(iii))**
    - iv. For units that do not qualify for a statutory exemption as provided in Section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit." **(40 CFR 63.11225(a)(4)(v))**
    - v. The notification must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://www.epa.gov/cdx)). However, if the reporting form specific to 40 CFR Part 63, Subpart JJJJJJ is not available in CEDRI at the time that the report is due, the written Notification of Compliance Status must be submitted to the Administrator at the appropriate address listed in 40 CFR 63.13. **(40 CFR 63.11225(a)(4)(vi))**
5. The permittee must prepare, by March 1 of each year, and submit to the delegated authority upon request, an annual compliance certification report for the previous calendar year containing the information specified in 40 CFR 63.11225(b)(1) through (4). For boilers that are subject only to a requirement to conduct a biennial tune-up according to 40 CFR 63.11223(a) and not subject to emission limits or operating limits, the permittee may prepare only a biennial compliance report as specified in 40 CFR 63.11225(b)(1) and (2), as listed below.<sup>2</sup> **(40 CFR 63.11225(b))**
  - a. Company name and address. **(40 CFR 63.11225(b)(1))**
  - b. Statement by a responsible official, with the official's name, title, phone number, email address, and signature, certifying the truth, accuracy and completeness of the notification and a statement of whether the source has complied with all the relevant standards and other requirements of 40 CFR Part 63, Subpart JJJJJJ. The permittee's notification must include the following certification(s) of compliance, as applicable, and signed by a responsible official: **(40 CFR 63.11225(b)(2))**
    - i. "This facility complies with the requirements in 40 CFR 63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler." **(40 CFR 63.11225(b)(2)(i))**
    - ii. For units that do not qualify for a statutory exemption as provided in Section 129(g)(1) of the Clean Air Act: "No secondary materials that are solid waste were combusted in any affected unit." **(40 CFR 63.11225(b)(2)(ii))**

6. If the permittee has switched fuels or made a physical change to the boiler resulting in the applicability of a different subcategory within 40 CFR Part 63, Subpart JJJJJJ, or becomes exempt from 40 CFR Part 63, Subpart JJJJJJ, the permittee must provide notice of the date upon which the permittee switched fuels or made the physical change within 30 days of the change. The notification must identify.<sup>2</sup> **(40 CFR 63.11225(g))**
  - a. The name of the owner or operator of the affected source, the location of the source, the boiler(s) that have switched fuels, were physically changed, or took a permit limit, and the date of the notice. **(40 CFR 63.11225(g)(1))**
  - b. The date upon which the fuel switch, physical change, or permit limit occurred. **(40 CFR 63.11225(g)(2))**

See Appendix 8

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

NA

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

1. If the permittee owns or operates an existing affected boiler, the permittee must achieve compliance with the applicable provisions in 40 CFR Part 63, Subpart JJJJJJ as specified in paragraphs (a)(1) and (3) in 40 CFR 63.11196.<sup>2</sup> **(40 CFR 63.11196(a))**
2. At all times the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by this standard have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.<sup>2</sup> **(40 CFR 63.11205(a))**
3. For affected boilers that switch fuels or make a physical change to the boiler that results in the applicability of a different subcategory within 40 CFR Part 63, Subpart JJJJJJ or the boiler becoming subject to 40 CFR Part 63, Subpart JJJJJJ, the permittee must demonstrate compliance within 180 days of the effective date of the fuel switch or the physical change. Notification of such changes must be submitted according to 40 CFR 63.11225(g).<sup>2</sup> **(40 CFR 63.11210(h))**
4. In accordance, as applicable, with a state implementation plan or a federal implementation plan addressing the requirements of 40 CFR Part 60, Subpart DDDD, the permittee shall:
  - a. Maintain documentation that the boiler qualifies as a small power-production facility under section 3(17)(C) of the Federal Power Act (16 U.S.C. 796(17)(C)).
  - b. Maintain documentation that the boiler combusts only natural gas and non-hazardous secondary material which is homogeneous waste (not including refuse-derived fuel) to produce electricity.
  - c. Submit notification as required by the state or federal implementation plan that the facility is a qualifying small power-production facility combusting homogeneous waste.<sup>2</sup> **(40 CFR 60.2740(v), 40 CFR 60.2555(e))**

### **Footnotes:**

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

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

**FGFUEL  
 FLEXIBLE GROUP CONDITIONS**

**DESCRIPTION**

Fuel handling, processing and storage equipment, road(s), and storage pile(s) located at the L'Anse Warden Electric Company, LLC (LWEC) Generating Station and the Fuel Aggregation Facility (FAF). The solid fuels handled include tire derived fuel (TDF), creosote treated railroad ties (CTRT) (whole and processed), wood chips, engineered fuel pellets, and wood fines and bark. TDF is delivered directly to the LWEC. CTRT (whole and processed), wood chips, wood fines and bark are delivered to the FAF for temporary storage prior to transfer to the facility. Whole CTRT is processed at the FAF using a horizontal grinder.

**Emission Units:** EUFUEL, EUFAF

**POLLUTION CONTROL EQUIPMENT**

Water spray bar on the horizontal grinder

**I. EMISSION LIMIT(S)**

Pollutant	Limit	Time Period/Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Visible Emissions	5% opacity <sup>2</sup>	6-minute average	Any road, outside storage pile and material handling activity associated with FGFUEL	SC III.1 SC VI.2 SC VI.3	R 336.1301(1)(c)

**II. MATERIAL LIMIT(S)**

NA

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

1. The permittee shall not operate FGFUEL including the fuel handling and storage equipment unless a PM/MAP as described in R 336.1911(2) has been submitted and is 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 also amend the PM/MAP within 45 days, if new equipment is installed or upon request from the AQD District Supervisor. The permittee shall submit the PM/MAP and any amendments to the PM/MAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the PM/MAP or amended PM/MAP shall be considered approved. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.<sup>2</sup> (R 336.1911)

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

NA

**V. TESTING/SAMPLING**

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

NA

## **VI. MONITORING/RECORDKEEPING**

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

1. The permittee shall complete all required calculations in a format acceptable to the AQD District Supervisor by the end of the calendar month, for the previous calendar month, unless otherwise specified in any monitoring/recordkeeping special condition.<sup>2</sup> **(R 336.1301(1)(c), R 336.1911)**
2. The permittee shall keep, in a satisfactory manner, all records and information associated with the PM/MAP for FGFUEL, as required by SC III.1. The permittee shall keep all records on file and make them available to the Department upon request.<sup>2</sup> **(R 336.1911)**
3. The permittee shall perform and document non-certified visible emissions observations on a daily basis when operating. If during the observation there are any visible emissions detected, a USEPA Method 9 certified visible emissions observation shall be conducted for a minimum of 15 minutes to determine the actual opacity from that emission point. Records of the non-certified visible emissions observations, USEPA Method 9 observations that are performed, the reason for any visible emissions in excess of 5% observed, and any corrective actions taken shall be kept on file and made available to the Department upon request.<sup>2</sup> **(R 336.1301(1)(c))**

## **VII. REPORTING**

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

See Appendix 8

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

NA

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

NA

### **Footnotes:**

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

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

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

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

## APPENDICES

### Appendix 1. Acronyms and Abbreviations

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	acfm	Actual cubic feet per minute
BACT	Best Available Control Technology	BTU	British Thermal Unit
CAA	Clean Air Act	°C	Degrees Celsius
CAM	Compliance Assurance Monitoring	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO <sub>2</sub> e	Carbon Dioxide Equivalent
CEMS	Continuous Emission Monitoring System	dscf	Dry standard cubic foot
CFR	Code of Federal Regulations	dscm	Dry standard cubic meter
COM	Continuous Opacity Monitoring	°F	Degrees Fahrenheit
Department/ department	Michigan Department of Environment, Great Lakes, and Energy	gr	Grains
DSI	Dry Sorbent Injection	HAP	Hazardous Air Pollutant
EGLE	Michigan Department of Environment, Great Lakes, and Energy	Hg	Mercury
ESP	Electrostatic Precipitator	hr	Hour
EU	Emission Unit	HP	Horsepower
FG	Flexible Group	H <sub>2</sub> S	Hydrogen Sulfide
GACS	Gallons of Applied Coating Solids	kW	Kilowatt
GC	General Condition	lb	Pound
GHGs	Greenhouse Gases	m	Meter
HVLP	High Volume Low Pressure*	mg	Milligram
ID	Identification	mm	Millimeter
IRSL	Initial Risk Screening Level	MM	Million
ITSL	Initial Threshold Screening Level	MW	Megawatts
LAER	Lowest Achievable Emission Rate	NMOC	Non-methane Organic Compounds
MACT	Maximum Achievable Control Technology	NO <sub>x</sub>	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	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
NAAQS	National Ambient Air Quality Standards	pph	Pounds per hour
NESHAP	National Emission Standard for Hazardous Air Pollutants	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	SO <sub>2</sub>	Sulfur Dioxide
SC	Special Condition	TAC	Toxic Air Contaminant
SCR	Selective Catalytic Reduction	Temp	Temperature
SNCR	Selective Non-Catalytic Reduction	THC	Total Hydrocarbons
SRN	State Registration Number	tpy	Tons per year
TEQ	Toxicity Equivalence Quotient	µg	Microgram
USEPA/EPA	United States Environmental Protection Agency	µm	Micrometer or Micron
VE	Visible Emissions	VOC	Volatile Organic Compounds
		yr	Year

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

## Appendix 2. Schedule of Compliance

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

## Appendix 3. Monitoring Requirements

The following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced in EUBOILER#1.

### CO Monitoring-Continuous Emission Monitoring System (CEMS) Requirements

1. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.
2. The CEMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and PS 3 and 4 of Appendix B to 40 CFR Part 60.
3. Each calendar quarter, the permittee shall perform the Quality Assurance Procedures of the CEMS 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 of 40 CFR Part 60, Appendix F).**
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 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 0.3 lb/MMBTU based on a 24-hour rolling average as determined each hour that EUBOILER#1 operates (SC I.7). 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 downtime and corrective action.
  - c. A report of the total operating time of the EUBOILER#1 during the reporting period.
  - d. A report of any periods that the CEMS exceeds the instrument range.
  - e. If no exceedances or CEMS downtime occurred during the reporting period, the permittee shall report that fact.

### 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 and Procedure 3 of Appendix F, 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 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:
  - a. A report of each exceedance above 20 percent. 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.
  - c. A report of the total operating time of the EUBOILER#1 during the reporting period.

- d. If no exceedances or COMS downtime occurred during the reporting period, the permittee shall report that fact.

#### Appendix 4. Recordkeeping

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

#### Appendix 5. Testing Procedures

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

#### Appendix 6. Permits to Install

The following table lists any PTIs issued or ROP revision applications received since the effective date of the previously issued ROP No. MI-ROP-B4260-2011. 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-B4260-2011 is being reissued as Source-Wide PTI No. MI-PTI-B4260-2021a.

Permit to Install Number	ROP Revision Application Number	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
128-18	201900080	Allow the addition of engineered fuel pellets to the fuel materials list and the burning of up to 50,000 tons per year of the fuel pellets in EUBOILER#1 and the installation of a DSI system to control HCl emissions while burning the engineered fuel pellets.	SOURCE-WIDE CONDITIONS EUBOILER#1 EUSORBENT FGFUEL
67-16	201600198	Remove the ability to burn pentachlorophenol treated wood and added FGBOILERMACT-6J	EUBOILER#1 FGBOILERMACT-6J

The following table lists the ROP amendments or modifications issued after the effective date of ROP No. MI-ROP-B4260-2021.

Permit to Install Number	ROP Revision Application Number - Issuance Date	Description of Equipment or Change	Corresponding Emission Unit(s) or Flexible Group(s)
128-18A	202100058 / September 13, 2021	This Minor Modification was to incorporate PTI 128-18A into the ROP, which was to fix an apparent mistake in a PTI condition regarding the diluent gas used for CEMS in EUBOILER#1.	EUBOILER#1 EUSORBENT FGBOILERMACT-6J FGFUEL Source-Wide

#### Appendix 7. Emission Calculations

The permittee shall use the following calculations in conjunction with monitoring, testing or recordkeeping data to determine compliance with the applicable requirements referenced in EUBOILER#1.

Natural gas usage is monitored continuously but tracked on a monthly basis. Other fuels are weighed as they are placed in the bunker and fuel usage for the boiler is compiled on a monthly basis. Monthly heat input is calculated based on monthly fuel consumption using these typical heating values:

Natural gas:	1000 btu/scf
Tire-derived fuel	31.1 MMBtu/ton (as received)
Railroad ties	12.7 MMBtu/ton (as received)
Fines/bark	8.7 MMBtu/ton (as received)
Wood chips	10.1 MMBtu/ton (as received)
Engineered fuel pellets	23 MMBtu/ton (as received)

Emissions are calculated as follows:

$$\text{Emissions (lb/month)} = \text{Monthly heat input (MMBtu/month)} \times \text{Emission Factor for each fuel (lb/MMBtu)}$$

Twelve month rolling total emissions are calculated by adding the previous 12 months of emissions data by pollutant.

In general, emission factors are developed from stack testing, as stack testing is performed using a representative fuel blend.

**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.