PERMIT TO INSTALL

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<th>Pollutant / Measurement Abbreviations</th>
</tr>
</thead>
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<tr>
<td>AQD</td>
<td>acfm Actual cubic feet per minute</td>
</tr>
<tr>
<td>BACT</td>
<td>BTU British Thermal Unit</td>
</tr>
<tr>
<td>CAA</td>
<td>°C Degrees Celsius</td>
</tr>
<tr>
<td>CAM</td>
<td>CO Carbon Monoxide</td>
</tr>
<tr>
<td>CEM</td>
<td>CO₂e Carbon Dioxide Equivalent</td>
</tr>
<tr>
<td>CFR</td>
<td>dscf Dry standard cubic foot</td>
</tr>
<tr>
<td>COM</td>
<td>dscm Dry standard cubic meter</td>
</tr>
<tr>
<td>Common Acronyms</td>
<td>°F Degrees Fahrenheit</td>
</tr>
<tr>
<td>Department/department Michigan Department of Environmental Quality</td>
<td>gr Grains</td>
</tr>
<tr>
<td>EU Emission Unit</td>
<td>HAP Hazardous Air Pollutant</td>
</tr>
<tr>
<td>FG Flexible Group</td>
<td>Hg Mercury</td>
</tr>
<tr>
<td>GACS Gallons of Applied Coating Solids</td>
<td>hr Hour</td>
</tr>
<tr>
<td>GC General Condition</td>
<td>HP Horsepower</td>
</tr>
<tr>
<td>GHGs</td>
<td>H₂S Hydrogen Sulfide</td>
</tr>
<tr>
<td>HVLP High Volume Low Pressure*</td>
<td>kW Kilowatt</td>
</tr>
<tr>
<td>ID Identification</td>
<td>lb Pound</td>
</tr>
<tr>
<td>IRSL Initial Risk Screening Level</td>
<td>m Meter</td>
</tr>
<tr>
<td>ITSL Initial Threshold Screening Level</td>
<td>mg Milligram</td>
</tr>
<tr>
<td>LAER Lowest Achievable Emission Rate</td>
<td>mm Millimeter</td>
</tr>
<tr>
<td>MACT Maximum Achievable Control Technology</td>
<td>MM Million</td>
</tr>
<tr>
<td>MAERS Michigan Air Emissions Reporting System</td>
<td>MW Megawatts</td>
</tr>
<tr>
<td>MAP Malfunction Abatement Plan</td>
<td>NMOC Non-methane Organic Compounds</td>
</tr>
<tr>
<td>MDEQ Michigan Department of Environmental Quality</td>
<td>NOₓ Oxides of Nitrogen</td>
</tr>
<tr>
<td>MSDS Material Safety Data Sheet</td>
<td>ng Nanogram</td>
</tr>
<tr>
<td>NA Not Applicable</td>
<td>PM Particulate Matter</td>
</tr>
<tr>
<td>NAAQS National Ambient Air Quality Standards</td>
<td>PM10 Particulate Matter equal to or less than 10 microns in diameter</td>
</tr>
<tr>
<td>NESHAP National Emission Standard for Hazardous Air Pollutants</td>
<td>PM2.5 Particulate Matter equal to or less than 2.5 microns in diameter</td>
</tr>
<tr>
<td>NSPS New Source Performance Standards</td>
<td>pph Pounds per hour</td>
</tr>
<tr>
<td>NSR New Source Review</td>
<td>ppm Parts per million</td>
</tr>
<tr>
<td>PS Performance Specification</td>
<td>ppmv Parts per million by volume</td>
</tr>
<tr>
<td>PSD Prevention of Significant Deterioration</td>
<td>ppmw Parts per million by weight</td>
</tr>
<tr>
<td>PTE Permanent Total Enclosure</td>
<td>psia Pounds per inch absolute</td>
</tr>
<tr>
<td>PTI Permit to Install</td>
<td>psig Pounds per square inch gauge</td>
</tr>
<tr>
<td>RACT Reasonable Available Control Technology</td>
<td>scf Standard cubic feet</td>
</tr>
<tr>
<td>ROP Renewable Operating Permit</td>
<td>sec Seconds</td>
</tr>
<tr>
<td>SC Special Condition</td>
<td>SO₂ Sulfur Dioxide</td>
</tr>
<tr>
<td>SCR Selective Catalytic Reduction</td>
<td>TAC Toxic Air Contaminant</td>
</tr>
<tr>
<td>SNCR Selective Non-Catalytic Reduction</td>
<td>Temp Temperature</td>
</tr>
<tr>
<td>SRN State Registration Number</td>
<td>THC Total Hydrocarbons</td>
</tr>
<tr>
<td>TEQ Toxicity Equivalence Quotient</td>
<td>tpy Tons per year</td>
</tr>
<tr>
<td>USEPA/EPA United States Environmental Protection Agency</td>
<td>μg Microgram</td>
</tr>
<tr>
<td>VE Visible Emissions</td>
<td>μm Micrometer or Micron</td>
</tr>
<tr>
<td>VOC Volatile Organic Compounds</td>
<td>yr Year</td>
</tr>
</tbody>
</table>

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

1. The process or process equipment covered by this permit shall not be reconstructed, relocated, or modified, unless a Permit to Install authorizing such action is issued by the Department, except to the extent such action is exempt from the Permit to Install requirements by any applicable rule. (R 336.1201(1))

2. If the installation, construction, reconstruction, relocation, or modification of the equipment for which this permit has been approved has not commenced within 18 months, or has been interrupted for 18 months, this permit shall become void unless otherwise authorized by the Department. Furthermore, the permittee or the designated authorized agent shall notify the Department via the Supervisor, Permit Section, Air Quality Division, Michigan Department of Environmental Quality, P.O. Box 30260, Lansing, Michigan 48909-7760, if it is decided not to pursue the installation, construction, reconstruction, relocation, or modification of the equipment allowed by this Permit to Install. (R 336.1201(4))

3. If this Permit to Install is issued for a process or process equipment located at a stationary source that is not subject to the Renewable Operating Permit program requirements pursuant to R 336.1210, operation of the process or process equipment is allowed by this permit if the equipment performs in accordance with the terms and conditions of this Permit to Install. (R 336.1201(6)(b))

4. The Department may, after notice and opportunity for a hearing, revoke this Permit to Install if evidence indicates the process or process equipment is not performing in accordance with the terms and conditions of this permit or is violating the Department’s rules or the Clean Air Act. (R 336.1201(8), Section 5510 of Act 451, PA 1994)

5. The terms and conditions of this Permit to Install 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 this Permit to Install. If the new owner or operator submits a written request to the Department pursuant to R 336.1219 and the Department approves the request, this permit 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 R 336.1219 and shall be sent to the District Supervisor, Air Quality Division, Michigan Department of Environmental Quality. (R 336.1219)

6. Operation of this equipment shall not result in the emission of an air contaminant which causes injurious effects to human health or safety, animal life, plant life of significant economic value, or property, or which causes unreasonable interference with the comfortable enjoyment of life and property. (R 336.1901)

7. 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 Department. The notice shall be provided not later than two business days after start-up, shutdown, or discovery of the abnormal condition or malfunction. Written reports, if required, must be filed with the Department 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 condition or malfunction, whichever is first. The written reports shall include all of the information required in Rule 912(5). (R 336.1912)

8. Approval of this permit does not exempt the permittee from complying with any future applicable requirements which may be promulgated under Part 55 of 1994 PA 451, as amended or the Federal Clean Air Act.

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

10. Operation of this equipment may be subject to other requirements of Part 55 of 1994 PA 451, as amended and the rules promulgated thereunder.
11. Except as provided in subrules (2) and (3) or unless the special conditions of the Permit to Install include
an alternate opacity limit established pursuant to subrule (4) of R 336.1301, the permittee shall not cause
or permit to be discharged into the outer air from a process or process equipment a visible emission of
density greater than the most stringent of the following. The grading of visible emissions shall be determined
in accordance with R 336.1303. (R 336.1301)
   a) A six-minute average of 20 percent opacity, except for one six-minute average per hour of not more
      than 27 percent opacity.
   b) A visible emission limit specified by an applicable federal new source performance standard.
   c) A visible emission limit specified as a condition of this Permit to Install.

12. 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 R 336.1370(2). (R 336.1370)

13. The Department may require the permittee to conduct acceptable performance tests, at the permittee’s
(R 336.2001)
## EMISSION UNIT SUMMARY TABLE

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

<table>
<thead>
<tr>
<th>Emission Unit ID</th>
<th>Emission Unit Description (Process Equipment &amp; Control Devices)</th>
<th>Installation Date / Modification Date</th>
<th>Flexible Group ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>EUFUEL</td>
<td>Fuel handling and storage equipment, road(s), and storage areas.</td>
<td>1959 / 5/30/2008</td>
<td>FGFUEL</td>
</tr>
<tr>
<td>EUBOILER#1</td>
<td>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.</td>
<td>1959 / 04/15/2008 / 10/26/2011</td>
<td>FGBOILERMACT-6J</td>
</tr>
<tr>
<td>EUSORBENT</td>
<td>Delivery, unloading, storage, and handling of dry sorbent material or super sack system. Dry sorbent 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</td>
<td>2017 / TBD</td>
<td>NA</td>
</tr>
<tr>
<td>EUFAF</td>
<td>Wood (whole and processed), wood chips, wood fines and bark are delivered to adjacent Fuel Aggregation Facility (FAF) for temporary storage prior to transfer to the facility. Whole wood is processed at the FAF using a horizontal grinder.</td>
<td>5/30/2008</td>
<td>FGFUEL</td>
</tr>
</tbody>
</table>

Changes to the equipment described in this table are subject to the requirements of R 336.1201, except as allowed by R 336.1278 to R 336.1290.
The following conditions apply to:

**EUBOILER#1**

**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. EUBOILER#1 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.

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

**POLLUTATION CONTROL EQUIPMENT:** 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.

### I. EMISSION LIMITS

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Limit</th>
<th>Time Period / Operating Scenario</th>
<th>Equipment</th>
<th>Testing / Monitoring Method</th>
<th>Underlying Applicable Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Visible Emissions</td>
<td>20 percent opacity</td>
<td>6-minute average</td>
<td>EUBOILER#1</td>
<td>SC VI.7</td>
<td>R 336.1301(1)(c)</td>
</tr>
<tr>
<td>2. PM</td>
<td>0.06 lb/MMBTU heat input</td>
<td>Hourly</td>
<td>EUBOILER#1</td>
<td>SC V.1</td>
<td>R 336.1205, R 336.1331(1)(c)</td>
</tr>
<tr>
<td>3. PM</td>
<td>19.2 pph</td>
<td>Hourly</td>
<td>EUBOILER#1</td>
<td>SC V.1</td>
<td>R 336.1205</td>
</tr>
<tr>
<td>4. PM10</td>
<td>15.4 pph</td>
<td>Hourly</td>
<td>EUBOILER#1</td>
<td>SC V.1</td>
<td>R 336.1205 40 CFR 52.21(c) &amp; (d)</td>
</tr>
<tr>
<td>5. SO₂</td>
<td>290 pph</td>
<td>Hourly</td>
<td>EUBOILER#1</td>
<td>SC V.1, SC VI.1, SC VI.4</td>
<td>R 336.1205 40 CFR 52.21(c) &amp; (d)</td>
</tr>
<tr>
<td>6. NOₓ</td>
<td>145 pph</td>
<td>Hourly</td>
<td>EUBOILER#1</td>
<td>SC V.1</td>
<td>R 336.1205 40 CFR 52.21(c) &amp; (d)</td>
</tr>
<tr>
<td>7. CO</td>
<td>0.3 lb/MMBTU except for startup and shutdown</td>
<td>24-hr rolling average as determined each hour the boiler operates</td>
<td>EUBOILER#1</td>
<td>SC VI.3.c, SC VI.6</td>
<td>R 336.2810 40 CFR 52.21(j)</td>
</tr>
<tr>
<td>8. CO</td>
<td>97.2 pph</td>
<td>Hourly</td>
<td>EUBOILER#1</td>
<td>SC VI.3.c, SC VI.6</td>
<td>40 CFR 52.21(j) R 336.2804, R 336.2810</td>
</tr>
<tr>
<td>9. VOC</td>
<td>50 ppmvd at 7% O₂ (as methane) except for startup and shutdown</td>
<td>Hourly</td>
<td>EUBOILER#1</td>
<td>SC V.1</td>
<td>R 336.1205 R 336.1702(a)</td>
</tr>
<tr>
<td>10. VOC</td>
<td>9.1 pph</td>
<td>Hourly</td>
<td>EUBOILER#1</td>
<td>SC V.1</td>
<td>R 336.1205 R 336.1702(a)</td>
</tr>
<tr>
<td>11. Lead (Pb)</td>
<td>0.02 pph</td>
<td>Hourly</td>
<td>EUBOILER#1</td>
<td>SC V.1, SC VI.1, SC V.3, SC VI.4</td>
<td>R 336.1205</td>
</tr>
<tr>
<td>Pollutant</td>
<td>Limit</td>
<td>Time Period / Operating Scenario</td>
<td>Equipment</td>
<td>Testing / Monitoring Method</td>
<td>Underlying Applicable Requirements</td>
</tr>
<tr>
<td>---------------------------------</td>
<td>----------------</td>
<td>----------------------------------</td>
<td>-----------------</td>
<td>-------------------------------</td>
<td>-----------------------------------</td>
</tr>
<tr>
<td>12. Hydrogen Chloride (HCl)</td>
<td>2.17 pph</td>
<td>Hourly</td>
<td>EUBOILER#1</td>
<td>SC V.1, SC VI.1, SC VI.2, SC VI.4</td>
<td>R 336.1205, R 336.1224, R 336.1225</td>
</tr>
<tr>
<td></td>
<td>– or – 9.5 tpy</td>
<td>-or-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>12 month rolling average as determined at the end of each calendar month if using a CPMS</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### II. MATERIAL LIMITS

<table>
<thead>
<tr>
<th>Material</th>
<th>Limit</th>
<th>Time Period / Operating Scenario</th>
<th>Equipment</th>
<th>Testing / Monitoring Method</th>
<th>Underlying Applicable Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Natural Gas</td>
<td>Less than 25% of annual heat input**</td>
<td>12-month rolling time period as determined at the end of each calendar month</td>
<td>EUBOILER#1</td>
<td>SC VI.1, SC VI.3</td>
<td>R 336.1205, 18 CFR 292.204(b)(2)</td>
</tr>
<tr>
<td>2. TDF</td>
<td>96.0 tons/day &quot;as received&quot; *</td>
<td>Calendar Day</td>
<td>EUBOILER#1</td>
<td>SC VI.1, SC VI.3, SC VI.4</td>
<td>R 336.1205</td>
</tr>
<tr>
<td>3. TDF</td>
<td>32,800 tpy &quot;as received&quot; *</td>
<td>12-month rolling time period as determined at the end of each calendar month</td>
<td>EUBOILER#1</td>
<td>SC VI.1, SC VI.3, SC VI.4</td>
<td>R 336.1205</td>
</tr>
<tr>
<td>4. Creosote treated railroad ties</td>
<td>408.0 tons/day &quot;as received&quot; *</td>
<td>Calendar Day</td>
<td>EUBOILER#1</td>
<td>SC VI.1, SC VI.3, SC VI.4</td>
<td>R 336.1205</td>
</tr>
<tr>
<td>5. Creosote treated railroad ties</td>
<td>72,078 tpy &quot;as received&quot; *</td>
<td>12-month rolling time period as determined at the end of each calendar month</td>
<td>EUBOILER#1</td>
<td>SC VI.1, SC VI.3, SC VI.4</td>
<td>R 336.1205</td>
</tr>
<tr>
<td>6. Fines &amp; Bark</td>
<td>129.6 tons/day &quot;as received&quot; *</td>
<td>Calendar Day</td>
<td>EUBOILER#1</td>
<td>SC VI.1, SC VI.3</td>
<td>R 336.1205</td>
</tr>
<tr>
<td>7. Fines &amp; Bark</td>
<td>44,280 tpy &quot;as received&quot; *</td>
<td>12-month rolling time period as determined at the end of each calendar month</td>
<td>EUBOILER#1</td>
<td>SC VI.1, SC VI.3</td>
<td>R 336.1205</td>
</tr>
<tr>
<td>8. Engineered Fuel Pellets</td>
<td>144.0 tons/day &quot;as received&quot; *</td>
<td>Calendar Day</td>
<td>EUBOILER#1</td>
<td>SC VI.1</td>
<td>R 336.1205, R 336.1225,</td>
</tr>
<tr>
<td>9. Engineered Fuel Pellets</td>
<td>50,000 tpy</td>
<td>12-month rolling time period as determined at the end of each calendar month</td>
<td>EUBOILER#1</td>
<td>SC VI.1</td>
<td>R 336.1205, R 336.1225,</td>
</tr>
</tbody>
</table>
**III. PROCESS/OPERATIONAL RESTRICTIONS**

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. (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 SCs II.1 through 9, and fuels defined in an approved Fuel Procurement and Monitoring Plan (FPMP) for EUBOILER#1. (R 336.1205, R 336.1225)

3. 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. (R 336.1911, R 336.1912, R 336.2802, 40 CFR 52.21)

4. 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. (R 336.1205, R 336.1225)
5. 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, and CO monitoring equipment) 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 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. ([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)]

6. The permittee shall not process, store, or combust any wood, or any materials, which have been treated with pentachlorophenol coating or preservative. ([R 336.1224, R 336.1225])

IV. DESIGN/EQUIPMENT PARAMETERS

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.5. ([R 336.1910, 40 CFR 52.21 (c) & (d), R 336.2803, R 336.2804])

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. ([R 336.1205, 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 dry sorbent injection rate for EUBOILER#1 on a continuous basis. ([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 336.1201(3)]]

1. At least once every five years, the permittee shall verify PM, PM10, SO2, NOx, HCl, lead, and VOC emission rates from EUBOILER#1 by testing at owner's expense, in accordance with 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:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Test Method Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>PM</td>
<td>40 CFR Part 60, Appendix A; Part 10 of the Michigan Air Pollution Control Rules</td>
</tr>
<tr>
<td>PM10</td>
<td>40 CFR Part 51, Appendix M</td>
</tr>
<tr>
<td>NOx</td>
<td>40 CFR Part 60, Appendix A</td>
</tr>
<tr>
<td>SO2</td>
<td>40 CFR Part 60, Appendix A</td>
</tr>
<tr>
<td>Pollutant</td>
<td>Test Method Reference</td>
</tr>
<tr>
<td>-------------------</td>
<td>-------------------------------------------</td>
</tr>
<tr>
<td>VOC</td>
<td>40 CFR Part 60, Appendix A; Part 51, Appendix M</td>
</tr>
<tr>
<td>Metals</td>
<td>40 CFR Part 60, Appendix A; Part 61, Appendix B; Part 63, Appendix A</td>
</tr>
<tr>
<td>Hydrogen Chloride</td>
<td>40 CFR Part 60, Appendix A</td>
</tr>
</tbody>
</table>

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.  

\[(R\ 336.1205, R\ 336.1702, R\ 336.2001, R\ 336.2003, R\ 336.2004, 40\ CFR\ 52.21(c)\ and\ (d))\]

2. The permittee shall perform one HCI emission test by June 21, 2020. 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.  

\[(R\ 336.1205, R\ 336.2001, R\ 336.2003, R\ 336.2004,)\]

3. The permittee shall perform sampling and analysis of each solid fuel as described in the MDEQ 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.  

\[(R\ 336.1205, R\ 336.2001, R\ 336.2003, R\ 336.2004)\]

VI. MONITORING/RECORDKEEPING
Records shall be maintained on file for a period of five years.  

\[(R\ 336.1201(3))\]

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.  

\[(R\ 336.1205, \ R\ 336.1224, \ R\ 336.1225, \ R\ 336.2810, 40\ CFR\ 52.21(c), (d), and (j))\]

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:
   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.  

\[(R\ 336.1205, R\ 336.1911)\]
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.6 and I.7.

   The permittee shall keep all records on file and make them available to the Department upon request.
   (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 III.2 and SC III.4 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.
   (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/PM/MAP for EUBOILER#1, as required by SC III.5. The permittee shall keep all records on file and make
   them available to the Department upon request.  (R 336.1205, R 336.1225, R 336.1910)

6. The permittee shall calibrate, maintain, and operate in a satisfactory manner a device to monitor and record
   the CO emissions and carbon dioxide (CO2) diluent from EUBOILER#1 on a continuous basis. The permittee
   shall operate the CEM system to meet the timelines, requirements, and reporting detailed in Appendix B.
   (R 336.2810, 40 CFR 52.21(j))

7. The permittee shall calibrate, maintain, and operate in a satisfactory manner a device to monitor and record
   the visible emissions from EUBOILER#1 on a continuous basis. The permittee shall operate the COM system
   to meet the timelines, requirements, and reporting detailed in Appendix B.  (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.  (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 COM 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.
   (R 336.1205, R 336.1301, R 336.2170)

VII. REPORTING

1. The permittee shall submit any performance test reports (including RATA reports) to the AQD Technical
   Programs Unit and District Office, in a format approved by the AQD.  (R 336.2001(5))
VIII. STACK/VENT RESTRICTIONS

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

<table>
<thead>
<tr>
<th>Stack &amp; Vent ID</th>
<th>Maximum Exhaust Diameter/Dimensions (inches)</th>
<th>Minimum Height Above Ground (feet)</th>
<th>Underlying Applicable Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. SVBOILER#1</td>
<td>90</td>
<td>147</td>
<td>R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) &amp; (d)</td>
</tr>
</tbody>
</table>

IX. OTHER REQUIREMENTS

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

Footnotes:

1This condition is state only enforceable and was established pursuant to Rule 201(1)(b).
The following conditions apply to:

**EUSORBENT**

**DESCRIPTION:** Delivery, unloading, storage, and handling of dry sorbent material or super sack system. Dry sorbent delivered by enclosed tanker truck and conveyed pneumatically to the storage silo.

Flexible Group ID: NA

**POLLUTION CONTROL EQUIPMENT:** The load-in conveying air discharges through a high efficiency cartridge fabric filter (bin vent).

### I. EMISSION LIMITS

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Limit</th>
<th>Time Period / Operating Scenario</th>
<th>Equipment</th>
<th>Testing / Monitoring Method</th>
<th>Underlying Applicable Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Visible Emissions</td>
<td>10 percent opacity</td>
<td>6-minute average</td>
<td>Fabric filter for EUSORBENT</td>
<td>SC VI.1, SC VI.2</td>
<td>R 336.1301(1)(c)</td>
</tr>
</tbody>
</table>

### II. MATERIAL LIMITS

NA

### III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate EUSORBENT unless a preventative maintenance and malfunction abatement plan (PM/MAP) as described in Rule 911(2), has been submitted within 60 days of permit issuance, 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 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. *(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 PARAMETERS

1. 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. *(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 336.1201(3))*

NA
VI. MONITORING/RECORDKEEPING
Records shall be maintained on file for a period of five years. (R 336.1201(3))

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. (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. (R 336.1301(1)(c))

VII. REPORTING

1. Within 30 days after completion of the installation, construction, reconstruction, relocation, or modification authorized by this Permit to Install, the permittee or the authorized agent pursuant to Rule 204, shall notify the AQD District Supervisor, in writing, of the completion of the activity. Completion of the installation, construction, reconstruction, relocation, or modification is considered to occur not later than commencement of trial operation of EUSORBENT. (R 336.1201(7)(a))

VIII. STACK/VENT RESTRICTIONS

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

<table>
<thead>
<tr>
<th>Stack &amp; Vent ID</th>
<th>Maximum Exhaust Diameter/Dimensions (inches)</th>
<th>Minimum Height Above Ground (feet)</th>
<th>Underlying Applicable Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. SVSORBENTSIL</td>
<td>24</td>
<td>40</td>
<td>40 CFR 52.21 (c) &amp; (d)</td>
</tr>
</tbody>
</table>

IX. OTHER REQUIREMENTS

NA

Footnotes:
1This condition is state only enforceable and was established pursuant to Rule 201(1)(b).
**FLEXIBLE GROUP SUMMARY TABLE**

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

<table>
<thead>
<tr>
<th>Flexible Group ID</th>
<th>Flexible Group Description</th>
<th>Associated Emission Unit IDs</th>
</tr>
</thead>
<tbody>
<tr>
<td>FGBOILERMACT-6J</td>
<td>Conditions for any existing large (≥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.</td>
<td>EUBOILER#1</td>
</tr>
<tr>
<td>FGFUEL</td>
<td>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), 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.</td>
<td>EUFUEL, EUFAF</td>
</tr>
<tr>
<td>FGFACILITY</td>
<td>All process equipment source-wide including equipment covered by other permits, grandfathered equipment and exempt equipment.</td>
<td>All emission units</td>
</tr>
</tbody>
</table>
The following conditions apply to:

FGBOILERMCT-6J

DESCRIPTION: Conditions for any existing large (≥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 Units: EUBOILER#1

I. EMISSION LIMITS

NA

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

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 JJJJJJJ that applies to the permittee’s boiler. (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 Section 63.11223, stated in SC III.4, and keep records as required in Section 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. (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 Section 63.11223, as listed below. Each biennial tune-up must be conducted no more than 25 months after the previous tune-up. (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 Section 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))

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

NA

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. The permittee must maintain the records specified in paragraphs (c)(1) through (7) of Section 63.11225, as listed below. (40 CFR 63.11225(c))
   a. As required in Section 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 JJJJJJJ 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 Sections 63.11214 and 63.11223 as specified in paragraphs (c)(2)(i) through (vi) of Section 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 Section 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. (40 CFR 63.11225(d))
VII. REPORTING

1. The permittee must submit the notifications specified in 40 CFR 63.11225(a)(1) through (5), as listed below, to the administrator. (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. "This facility complies with the requirements in Section 63.11214 to conduct an initial tune-up of the boiler." (40 CFR 63.11225(a)(4)(i))
      ii. "This facility has had an energy assessment performed according to Section 63.11214(c)." (40 CFR 63.11225(a)(4)(ii))
      iii. "This facility complies with the requirements in Section 63.11223 to conduct a biennial or 5-year tune-up, as applicable, of each boiler." (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)(iv))
      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). 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))

2. 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. (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 Section 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))

3. 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. (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))
VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

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 JJJJJ as specified in paragraphs (a)(1) and (3) in 40 CFR 63.11196. (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. (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 JJJJJ or the boiler becoming subject to 40 CFR Part 63, Subpart JJJJJ, 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). (40 CFR 63.11210(h))

Footnotes:
1This condition is state only enforceable and was established pursuant to Rule 201(1)(b).
The following conditions apply to:

FGFUEL

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), processed wood, wood chips, engineered fuel pellets, 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.

Emission Units: EUFUEL, EUFAF

POLLUTION CONTROL EQUIPMENT
Water spray bar on the horizontal grinder

I. EMISSION LIMITS

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

II. MATERIAL LIMITS
NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate FGFUEL including the fuel handling and storage equipment unless a preventative maintenance and malfunction abatement plan (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 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. (R 336.1911)

IV. DESIGN/EQUIPMENT PARAMETERS
NA

V. TESTING/SAMPLING
Records shall be maintained on file for a period of five years. (R 336.1201(3))
NA
VI.  MONITORING/RECORDKEEPING
Records shall be maintained on file for a period of five years.  (R 336.1201(3))

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.  (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.  (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.  (R 336.1301(1)(c))

VII.  REPORTING
NA

VIII.  STACK/VENT RESTRICTIONS
NA

IX.  OTHER REQUIREMENTS
NA

Footnotes:
1This condition is state only enforceable and was established pursuant to Rule 201(1)(b).
The following conditions apply Source-Wide to: FGFACILITY

I. EMISSION LIMITS

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

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. The permittee shall not operate the facility (including EUBOILER#1, EUSORBENT, EUFUEL, and EUFAF) unless the fugitive emissions control plan (FECP) 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 FECP 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. (R 336.1371, R 336.1372, Act 451 324.5524)

IV. DESIGN/EQUIPMENT PARAMETERS

NA

V. TESTING/SAMPLING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

1. 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:

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Test Method Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>HAPs</td>
<td>40 CFR Part 63, Appendix A</td>
</tr>
<tr>
<td>Hydrogen Chloride</td>
<td>40 CFR Part 60, Appendix A</td>
</tr>
</tbody>
</table>

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. (R 336.1205, R 336.2001, R 336.2003, R 336.2004)

VI. MONITORING/RECORDKEEPING

Records shall be maintained on file for a period of five years. (R 336.1201(3))

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. (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 fugitive emissions control plan (FECP). The permittee shall keep all records on file and make them available to the Department upon request. (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 the Appendix A and the Fuel Procurement and Monitoring Plan (FPMP). The permittee shall keep all records on file and make them available to the Department upon request. (R 336.1205(1) and (3))

VII. REPORTING

NA

VIII. STACK/VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA

Footnotes:
1This condition is state only enforceable and was established pursuant to Rule 201(1)(b).
Appendix A
Example Emissions 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 EU-BOILER#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:

Emissions (lb/month) = Monthly heat input (MMBtu/month) x 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.
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.6). 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.
APPENDIX C
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 an annual audit of the COMS using the procedures set forth in USEPA Publication 450/4-92-010, “Performance Audits Procedures for Opacity Monitors”, or a procedure acceptable to AQD. Within 30 days after the completion of the audit, the results of the annual audit shall be submitted to the AQD.

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