

Michigan Department of Natural Resources and Environment Air Quality Division

Effective Date: January 1, 2011

Issued To:

L'ANSE WARDEN ELECTRIC COMPANY LLC

Located At:

157 S. Main Street, L'Anse, Michigan 49862

State Registration Number (SRN): B4260

RENEWABLE OPERATING PERMIT

Permit Number: MI-ROP-B4260-2011

Expiration Date: December 31, 2015

Administratively Complete ROP Renewal Application Due Between June 30, 2014 and June 30, 2015

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 Michigan Air Pollution Control Rule 210(1), 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-B4260-2011

This Permit to Install (PTI) is issued in accordance with and subject to Section 5505(5) of Act 451. Pursuant to Michigan Air Pollution Control Rule 214a, 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 Natural Resources and Environment Air Quality Division

Brian D. Brady, Upper Peninsula District Supervisor

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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 Natural Resources and Environment (MDNRE) 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 will be identified for each ROP term or condition. All terms and conditions that are included in a Permit to Install (PTI), are streamlined or subsumed, 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. [R336.1213(5)]
- Those conditions that are hereby incorporated in a state-only enforceable Source-wide Permit to Install (PTI) pursuant to Rule 201(2)(d) are designated by footnote one. [R336.1213(5)(a), R336.1214a(5)]
- Those conditions that are hereby incorporated in federally enforceable Source-wide PTI No. MI-PTI-B4260-2011 pursuant to Rule 201(2)(c) are designated by footnote two. [R336.1213(5)(b), R336.1214a(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. [R336.1213(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. [R336.1213(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 Rules 215 and 216. [R336.1213(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: [R336.1213(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 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. [R336.1213(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. [R336.1213(1)(f)]
- 7. The permittee shall pay fees consistent with the fee schedule and requirements pursuant to Section 5522 of Act 451. [R336.1213(1)(g)]
- 8. This ROP does not convey any property rights or any exclusive privilege. [R336.1213(1)(h)]

Equipment and 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). [R336.1370]
- 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. [R336.1910]

Emission Limits

- 11. Except as provided in subrules 2, 3, and 4 of Rule 301, 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 Rule 301(1)(a) or (b) unless otherwise specified in this ROP. The grading of visible emissions shall be determined in accordance with Rule 303: [R336.1301(1) in pertinent part, R336.1303]
 - 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.
- 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. [R336.1901(a)]
 - b. Unreasonable interference with the comfortable enjoyment of life and property. [R336.1901(b)]

Testing and 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). [R336.2001]
- 14. Any required performance testing shall be conducted in accordance with Rule 1001(2), Rule 1001(3) and Rule 1003. [R336.2001(2), R336.2001(3), R336.2003(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. [R336.2001(4)]

Monitoring and 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: [R336.1213(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. [R336.1213(1)(e), R336.1213(3)(b)(ii)]

Certification and 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 states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. [R336.1213(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, IL 60604. [R336.1213(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. [R336.1213(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: [R336.1213(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: [R336.1213(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. [R336.1213(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. [R336.1212(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. [R336.1912]

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: [R336.1213(6)(a)(i), R336.1213(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 EPA under Section 303 of the CAA. [R336.1213(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. [R336.1213(6)(b)(ii)]
 - c. The applicable requirements of the acid rain program, consistent with Section 408(a) of the CAA. [R336.1213(6)(b)(iii)]
 - d. The ability of the EPA to obtain information from a source pursuant to Section 114 of the CAA. [R336.1213(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. [R336.1215(5)]
 - b. Administrative amendments made pursuant to Rule 216(1)(a)(i)-(iv). [R336.1216(1)(b)(iii)]
 - c. Administrative amendments made pursuant to Rule 216(1)(a)(v) until the amendment has been approved by the department. [R336.1216(1)(c)(iii)]
 - d. Minor permit modifications made pursuant to Rule 216(2). [R336.1216(2)(f)]
 - e. State-only modifications made pursuant to Rule 216(4) until the changes have been approved by the department. [R336.1216(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. [R336.1217(1)(c), R336.1217(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. **[R336.1215, R336.1216]**
- 31. A change in ownership or operational control of a stationary source covered by this ROP shall be made pursuant to Rule 216(1). [R336.1219(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. **[R336.1210(9)]**

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. [R336.1216(1)(c)(iii), R336.1216(2)(d), R336.1216(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. [R336.1217(2)(a)(i)]
 - b. If additional requirements pursuant to Title IV of the CAA become applicable to this stationary source. [R336.1217(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. [R336.1217(2)(a)(iii)]
 - d. If the department determines that the ROP must be revised to ensure compliance with the applicable requirements. [R336.1217(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. [R336.1210(7)]

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 Part 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 Part 68 no later than the latest of the following dates as provided in 68.10(a):
 - a. June 21, 1999,
 - b. Three years after the date on which a regulated substance is first listed under 68.130, or
 - c. The date on which a regulated substance is first present above a threshold quantity in a process.
- 40. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall submit any additional relevant information requested by any regulatory agency necessary to ensure compliance with the requirements of 40 CFR Part 68.
- 41. If subject to Section 112(r) of the CAA and 40 CFR Part 68, the permittee shall annually certify compliance with all applicable requirements of Section 112(r) as detailed in Rule 213(4)(c). [40 CFR Part 68]

Emission Trading

42. Emission averaging and emission reduction credit trading are allowed pursuant to any applicable interstate or regional emission trading program that has been approved by the Administrator of the USEPA as a part of Michigan's State Implementation Plan. Such activities must comply with Rule 215 and Rule 216. [R336.1213(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.² [R336.1201(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.² [R336.1201(8), Section 5510 of Act 451, PA 1994]
- 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, MDNRE.² [R336.1219]

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, or has been interrupted for 18 months, the applicable terms and conditions from that PTI 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, MDNRE, AQD, P.O. Box 30260, Lansing, Michigan 48909, if it is decided not to pursue the installation, reconstruction, relocation, or modification of the equipment allowed by the terms and conditions from that PTI.² [R336.1201(4)]

Alternative Operating Scenarios

47. The permittee shall maintain contemporaneous records at the facility of any changes from one operating scenario to another. This includes recording in a log the scenario under which it is operating and any additional information associated with the scenario in question, including, but not limited to: batch records, fuel records, operating schedule, or process records. [R336.1213(8)(a)]

Compliance Assurance Monitoring (CAM)

48. This ROP contains requirements based upon 40 CFR Part 64 - Compliance Assurance Monitoring. These requirements may be identified by underlying applicable requirements citing 40 CFR Part 64.

Footnotes:

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

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

B. SOURCE-WIDE CONDITIONS

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

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

C. EMISSION UNIT 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 and Control Devices)	Installation or Modification Date	Table
EU-FUEL	Fuel Handling and Storage Equipment, road(s), and storage pile(s). The solid fuels handled at the facility include tire derived fuel (TDF), railroad ties, wood chips, and wood fines and bark. {Permit to Install #168-07B}	1959 5/30/2008	E-1.1
EU-BOILER#1	Boiler #1 with capability of burning tire derived fuel (TDF), railroad ties, wood chips, wood fines and bark, and natural gas. Boiler #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. Boiler #1 is controlled by a multicyclone followed by a three (series) section electrostatic precipitator. {Permit to Install #168-07B}	1959 1974 4/15/2008	E-1.2
EU-ASH	Ash Handling and Storage Equipment. Collected ash from the multicyclone and electrostatic precipitator is screw-conveyed to a collecting hopper from which it transferred to the ash silo via bucket elevator. Air vented from the ash silo is ducted to the inlet of the electrostatic precipitator. Water spray bar and pug mill on the ash loadout operation. {Permit to Install #168-07B}	1959	E-1.3

Table E-1.1 EU-FUEL EMISSION UNIT CONDITIONS

PROCESS AND CONTROL EQUIPMENT

Emission Units: Fuel handling and Storage Equipment, road(s), and storage pile(s). The solid fuels handled at the facility include tire derived fuel (TDF), railroad ties, wood chips, and wood fines and bark. {Permit to Install #168-07B}

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
 Opacity 	5 percent ²	Test Protocol will	Any road, outside storage pile,	SC III.2,	R336.1301(c),
	-	specify averaging	and material handling activity	SC VI.2	Act 451 324.5524
		time period.	associated with EUFUEL		

II. MATERIAL LIMITS

NA

III. PROCESS OR OPERATIONAL RESTRICTIONS

- 1. The permittee shall operate and maintain EUFUEL according to the most current version of the *Preventive Maintenance and Malfunction Abatement Plan* (PMMAP) as described in Rule 336.1911(2) for EUFUEL. This will include fuel handling and storage equipment. The PMMAP shall include keeping a Daily Operating Log which details equipment problems found, repairs done and/or corrective action taken, and scheduled and completed maintenance on the equipment listed above. The permittee shall submit any amendments to the PMMAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the PMMAP or amended PMMAP shall be considered approved.² [R336.1225, R336.1331, R336.1702(a), R336.1910, R336.1911, R336.2803, R336.2804, 40 CFR 52.21(c) and (d)]
- 2. The permittee shall operate and maintain EUFUEL according to the *Program for Continuous Fugitive Emissions Control* as described in Rules 336.1371 and 336.1372 and Act 451 324.5524, for all material handling operations and material storage areas, all plant roadways, and the plant yard. This program is included in the facility *Preventative Maintenance and Malfunction Abatement Program* (PMMAP) as Appendix A. The permittee shall submit any amendments to the program to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the Program, or amended Program, shall be considered approved.² [R336.1205, R336.1371, R336.1372, R336.1901, R336.2803, R336.2804, 40 CFR 52.21(c) and (d), Act 451 324.5524]

IV. DESIGN OR EQUIPMENT PARAMETERS

NA

V. TESTING AND SAMPLING

NA

VI. MONITORING AND RECORDKEEPING

Records shall be maintained on file for a period of five years. [R336.1213(3)(b)(ii)]

- 1. The permittee shall keep, in a satisfactory manner, all records and information associated with the *Preventive Maintenance and Malfunction Abatement Plan* (PMMAP) for EUFUEL, as required by SC III.1. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² [R336.1205, R336.1901, R336.2803, R336.2804, 40 CFR 52.21(c) and (d)]
- The permittee shall keep, in a satisfactory manner, records and information associated with the *Program for Continuous Fugitive Emissions Control* for EUFUEL, as required by SC III.2. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² [R336.1205, R336.1371, R336.1372, R336.1901, R336.2803, R336.2804, 40 CFR 52.21(c) and (d), Act 451 324.5524]

VII. CERTIFICATION AND REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. See Appendix 8. [R336.1213(3)(c)(ii)]
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. See Appendix 8. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the reporting period July 1 to December 31 and by September 15 for the reporting period January 1 to June 30. [R336.1213(3)(c)(i)]
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. See Appendix 8. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. [R336.1213(4)(c)]

VIII. STACK OR VENT RESTRICTIONS

NA

IX. OTHER REQUIREMENTS

NA

Footnotes:

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

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

Table E-1.2 EU-BOILER#1 EMISSION UNIT CONDITIONS

PROCESS AND CONTROL EQUIPMENT

Emission Units: Boiler #1 with capability of burning tire derived fuel (TDF), railroad ties, wood chips, wood fines and bark, and natural gas. Boiler #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. The boiler is controlled by a multicyclone followed by a three (series) section electrostatic precipitator. **{Permit to Install #168-07B}**

I. <u>EMISSION LIMITS</u>

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
1. PM	0.06 lb/MMBTU heat input ²	Test Protocol *	EUBOILER#1	SC V.1	R 336.1205 R 336.1331
2. PM	19.2 pph ²	Test Protocol *	EUBOILER#1	SC V.1	R 336.1205
3. PM-10	15.4 pph ²	Test Protocol *	EUBOILER#1	SC V.1	R 336.1205 40 CFR52.21 (c) & (d)
4. SO ₂	290 pph ²	Test Protocol *	EUBOILER#1	SC V.1, SC V.2, SC VI.2	R 336.1205
5. NOx	145 pph ²	Test Protocol *	EUBOILER#1	SC V.1	R 336.1205
6. CO	0.3 lb/MMBTU ² **	24-hr rolling average as determined each hour that EUBOILER#1 operates	EUBOILER#1	SC VI.7	R 336.2810 40 CFR 52.21(j)
7. CO	97.2 pph ²	Test Protocol *	EUBOILER#1	SC VI.7	R 336.2810 40 CFR 52.21(j)
8. VOC	50 ppmvd at 7% O ₂ (as methane) ² **	Test Protocol *	EUBOILER#1	SC V.1	R 336.1205 R 336.1702
9. VOC	9.1 pph ²	Test Protocol *	EUBOILER#1	SC V.1	R 336.1205 R 336.1702
10. Lead (Pb)	0.02 pph ²	Test Protocol *	EUBOILER#1	SC V.1, SC VI.2	R 336.1205
11. Hydrogen Chloride (HCl	,	Test Protocol *	EUBOILER#1	SC V.1, SC V.2, SC VI.2	R 336.1224 R 336.1225
12. Hydrogen Chloride (HCI	9.5 tons per year ²	Test Protocol *	EUBOILER#1	SC V.1, SC V.2, SC VI.2	R 336.1205(3)
13. Aggregate HAPs	Less than 20.0 tpy ²	Based on a 12-month rolling time period as determined at the end of each calendar month	EUBOILER#1	SC VI.3	R 336.1205(3)

^{*} Test protocol will specify averaging time period.

^{**} Except for startup, malfunction and shutdown.

II. MATERIAL LIMITS

Material	Limit	Time Period / Operating Scenario	Equipment	Monitoring / Testing Method	Underlying Applicable Requirements
Natural Gas	Less than 50% of annual heat input ²	Annual	EUBOILER#1	SC VI.1	R 336.1205
2. TDF	4.0 tons/hr ²	Daily	EUBOILER#1	SC VI.1	R 336.1205
3. TDF	32,800 tpy ²	Based on a 12-month rolling time period as determined at the end of each calendar month	EUBOILER#1	SC VI.1	R 336.1205
4. Railroad Ties	20.1 tons/hr ²	Daily	EUBOILER#1	SC VI.1	R 336.1205
5. Railroad Ties	72,078 tpy ²	Based on a 12-month rolling time period as determined at the end of each calendar month	EUBOILER#1	SC VI.1	R 336.1205
6. Fines & Bark	5.4 tons/hr ²	Daily	EUBOILER#1	SC VI.1	R 336.1205
7. Fines & Bark	44,280 tpy ²	Based on a 12-month rolling time period as determined at the end of each calendar month Gas, are determined on an "as	EUBOILER#1	SC VI.1	R 336.1205

III. PROCESS OR OPERATIONAL RESTRICTIONS

- 1. The maximum heat input for EUBOILER#1 shall not exceed 2,656,800 MMBTU per calendar year, based on 8200 hours per calendar year. [R336.1205(3), R336.1225, R336.2810, 40 CFR 52.21(j)]
- 2. The permittee shall burn only natural gas and fuel defined in the *Fuel Procurement and Monitoring Plan* (FPMP) in EUBOILER#1.² [R336.1205, R336.1225]
- 3. During startup, the permittee shall start with natural gas followed by the other fuels to EUBOILER#1.² [R336.1205(3), R336.1225]
- 4. The permittee shall operate EUBOILER#1 according to the *Fuel Procurement and Monitoring Plan* (FPMP). The permittee shall utilize the FPMP at all times to ensure that only fuel, as defined in the FPMP, is being burned in EUBOILER#1 and to prevent unacceptable waste 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.
 - 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.² [R336.1205, R336.1225]

5. The permittee shall operate and maintain EUBOILER#1 according to the *Preventive Maintenance and Malfunction Abatement Plan* (PMMAP) as described in Rule 336.1911(2), for EUBOILER#1, including the hydrograte biomass fuel burning surface, boiler overfired air system, ID fan, air heater, economizer tubes, soot blowing equipment, multicyclone, electrostatic precipitator, and the CO monitoring equipment. The PMMAP shall include keeping a Daily Operating Log which details equipment problems found, repairs done and/or corrective action taken, and scheduled and completed maintenance on the equipment listed above. If at any time the PMMAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the PMMAP within 45 days after such an event occurs. The permittee shall also amend the PMMAP within 45 days if new equipment is installed or upon request from the District Supervisor. Until an amended plan is approved, the permittee shall implement corrective procedures or operational changes to achieve compliance with all applicable emission limits.² [R336.1225, R336.1331, R336.1702(a), R336.1910, R336.1911, R336.2803, R336.2804, 40 CFR 52.21(c) and (d)]

IV. DESIGN OR 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.² [R336.1910]

V. TESTING AND SAMPLING

Records shall be maintained on file for a period of five years. [R336.1213(3)(b)(ii)]

- 1. By April 16, 2013, the permittee shall verify PM, PM-10, SO2, NOx, lead, HCl, and VOC emission rates from EUBOILER#1 by testing at owner's expense, in accordance with Department requirements. No less than 60 days prior to testing, the permittee shall submit a complete test plan to the AQD. The AQD must approve the final plan prior to testing. Verification of emission rates includes the submittal of a complete report of the test results to the AQD within 60 days following the last date of testing.² [R336.1205, R336.2001, R336.2003, R336.2004, R336.2810, 40 CFR 52.21(j)]
- 2. The permittee shall conduct a compliance demonstration, through fuel analysis, for the following:
 - a) SO2 and HCl emission rates to demonstrate compliance with the SO2 and HCl emission limits. Supporting documentation should include results of any fuel analyses and basis for the estimates of maximum chlorine fuel input and the corresponding HCl emission rates.

The permittee shall maintain a copy of all calculations and supporting documentation on file at the facility, in a format acceptable to the AQD District Supervisor, and make them available to the Department upon request.² [R336.1205, R336.1225]

3. The permittee shall perform periodic sampling and analysis of each solid fuel as described in the DNRE approved *Fuel Procurement and Monitoring Plan* (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.² [R336.1201(3), R336.1205, R336.1331, R336.2001, R336.2003, R336.2004]

VI. MONITORING AND RECORDKEEPING

Records shall be maintained on file for a period of five years. [R336.1213(3)(b)(ii)]

- 1. The permittee shall monitor and keep records, in a satisfactory manner, of the following:
 - a. The amount of natural gas, by volume, burned in EUBOILER#1
 - b. The annual heat input of natural gas burned in EUBOILER#1
 - c. The type and amount of each fuel, by weight, burned in EUBOILER#1

The permittee shall demonstrate compliance with the daily average feed rate, and the annual feed rate based on a monthly average of each fuel by an acceptable method as approved by the AQD District Supervisor.² [R336.1205, R336.1225]

- 2. The permittee shall obtain and keep records of the sulfur, lead, and chlorine content of each fuel burned in EUBOILER #1.² [R336.1205, R336.1224, R336.1225]
- 3. The permittee shall keep records and calculations of monthly and annual HAP emissions utilizing the emission factors from the compliance demonstration or the most recent emissions testing. Additionally, the permittee shall keep records and calculations of monthly and annual emissions of all non-tested HAP utilizing AQD approved emission factors. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² [R336.1205(3)]
- 4. The permittee shall monitor and keep records of, in a satisfactory manner, the maximum heat input per calendar month and year for EUBOILER#1.² [R336.1205, R336.1224, R336.1225]
- 5. The permittee shall keep, in a satisfactory manner, the *Fuel Procurement and Management Plan* (FPMP) records and information for EUBOILER#1, as required by SC III.2 and SC III.4. The permittee shall keep all records on file at the facility and make them available to the Department upon request. Alternative formats or procedures must be approved by the AQD District Supervisor. [R336.1205(1)(a), R336.1205(3), R336.1224, R336.1225, R336.1331, R336.1702, R336.1901]

6. The permittee shall keep, in a satisfactory manner, the *Preventive Maintenance and Malfunction Abatement Plan* (PMMAP) records and information for EUBOILER#1, as required by SC III.5. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² [R336.1205, R336.1225, R336.1702, R336.1901, R336.1910]

- 7. The permittee shall install, calibrate, maintain, and operate in a satisfactory manner a device to monitor and record the CO emissions and (CO2) diluent from EUBOILER#1 on a continuous basis. The permittee shall install and operate the Continuous Emission Monitoring System (CEMS) to meet the timelines, requirements, and reporting detailed in Appendix 3A, and shall use the CEMS data for determining compliance with SC I.6 and SC I.7.² [R336.2810, 40 CFR 52.21(j)]
- 8. The permittee shall install, 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 install and operate the Continuous Opacity Monitoring System (COMS) to meet the timelines, requirements, and reporting detailed in Appendix 3B, and shall use the COMS data for determining compliance with General Condition No. 11.² [R336.301]
- 9. The permittee shall calculate and keep records of PM, PM-10, SO2, NOx, VOC, and lead emissions from EUBOILER#1 in tons per calendar year. The calculations and records shall be kept in the format and timeframes described in Appendix 4, or an alternative format acceptable to the AQD Permit Section Supervisor. The permittee shall keep all records on file and make them available to the Department upon request.² [R336.1205, R336.2802(4)(c), R336.2810, 40 CFR 52.21(j)]

VII. CERTIFICATION AND REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. See Appendix 8. [R336.1213(3)(c)(ii)]
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. See Appendix 8. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the reporting period July 1 to December 31 and by September 15 for the reporting period January 1 to June 30. [R336.1213(3)(c)(i)]
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. See Appendix 8. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. [R336.1213(4)(c)]
- 4. The permittee shall calculate and keep records of the annual emissions of PM, PM-10, SO₂, NOx, CO, VOC, and lead from EUBOILER#1 in tons per year on a calendar year basis. Records shall be kept in the format described in Appendix 4, or an alternate format acceptable to the AQD Permit Section Supervisor. Calculations and record keeping shall begin the month in which regular operations of EUBOILER#1 resume and shall continue for 10 years. The permittee shall submit this information to the AQD Permit Section Supervisor within 60 days following the end of each reporting year.

The report shall contain the following information:

- a) The calendar year actual emission of criteria pollutants, as described in Appendix 4, exceed the baseline actual emissions (BAE) by a significance level as defined in R 336.1119(e), and
- b) The calendar year actual emissions differ from the pre-construction projection.
- c) The name, address, and telephone number of the facility.
- d) The annual emissions as calculated pursuant to this condition.
- e) Any other information the owner or operator wishes to include (i.e., an explanation why emissions differ from the pre-construction projection).² [R336.2818, 40 CFR 52.21(r)(6)(c)(iii)]

- 5. The permittee shall submit records of the annual emission of PM, PM-10, SO2, NOx, CO, VOC, and lead from EUBOILER#1 in tons per calendar year. Records shall be kept in the format described in Appendix 4, or an alternative form acceptable to both the AQD Permit Section Supervisor and the AQD District Supervisor. The records shall be transmitted within 60 days following the end of each recordkeeping year if either of the following occur:
 - a) The yearly annual emission of PM, PM-10, SO2, NOx, CO, VOC, and lead exceed the baseline actual emissions (BAE) by a significant amount, and/or
 - b) The year's actual emissions differ from the pre-construction projection.

The report shall contain the name, address, and telephone number of the facility (major stationary source); the annual emissions as calculated pursuant to EUBOILER#1, and any other information the owner or operator wishes to include (i.e., an explanation why emissions differ from the pre-construction projection).² [R336.1205, R336.2802(4)(c), R336.2810, R336.2818, 40 CFR 52.21(j), 40 CFR 52.21(r)(6)(c)(iii)]

IX. STACK OR 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:

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

X. OTHER REQUIREMENTS

1. 40 CFR Part 64 Compliance Assurance Monitoring (CAM) requirements for particulate matter (PM) are specified in Appendix 3B.9 as a part of the Continuous Opacity Monitoring System requirements.

[40 CFR Part 64]

Footnotes:

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

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

Table E-1.3 EU-ASH EMISSION UNIT CONDITIONS

PROCESS AND CONTROL EQUIPMENT

Emission Units: Ash Handling and Storage Equipment. Collected ash from the multicyclone and electrostatic precipitator is screw-conveyed to a collecting hopper from which it transferred to the ash silo via bucket elevator. Air vented from the ash silo is ducted to the inlet of the electrostatic precipitator. Water spray bar and pug mill on the ash loadout operation. *{Permit to Install #168-07B}*

I. EMISSION LIMITS

Pollutant	Limit	Time Period / Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
	pounds of exhaust gases,	specify averaging	Each individual exhaust stack in EUASH	SC IV.1	R 336.1331

II. MATERIAL LIMITS

NA

III. PROCESS OR OPERATIONAL RESTRICTIONS

- 1. The permittee shall operate and maintain EUASH according to the most current version of the *Preventive Maintenance and Malfunction Abatement Plan* (PMMAP) as described in Rule 336.1911(2), including the ash silo. The PMMAP shall include the keeping of a Daily Operating Log which details equipment problems found, repairs done and/or corrective action taken, and scheduled and completed maintenance on the equipment listed above. The permittee shall submit any amendments to the PMMAP to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the PMMAP or amended PMMAP shall be considered approved.² [R336.1301, R336.1331, R336.1910, R336.1911, R336.2803, R336.2804, 40 CFR 52.21(c) and (d)]
- 2. The permittee shall operate EUASH according to the *Program for Continuous Fugitive Emissions Control* as described in Rules 336.1371 and 336.1372 and Act 451 324.5524 for all material handling operations. This program is included in the facility *Preventative Maintenance and Malfunction Abatement Program* (PMMAP) as Appendix A. The permittee shall submit any amendments to the Program to the AQD District Supervisor for review and approval. If the AQD does not notify the permittee within 90 days of submittal, the Program or amended Program shall be considered approved.² [R336.1205, R336.1371, R336.1372, R336.1901, R336.2803, R336.2804, 40 CFR 52.21(c) and (d), Act 451 324.5524]

IV. <u>DESIGN OR EQUIPMENT PARAMETERS</u>

NΑ

V. TESTING AND SAMPLING

NA

VI. MONITORING AND RECORDKEEPING

Records shall be maintained on file for a period of five years. [R336.1213(3)(b)(ii)]

- 1. The permittee shall keep, in a satisfactory manner, all records and information associated with the *Preventive Maintenance and Malfunction Abatement Plan* (PMMAP) for EUASH, as required by SC III.1. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² [R336.1205, R336.1910]
- The permittee shall keep, in a satisfactory manner, records and information associated with the *Program for Continuous Fugitive Emissions Control* for EUASH, as required by SC III.2. The permittee shall keep all records on file at the facility and make them available to the Department upon request.² [R336.1205, R 336.1371, R336.1372, R336.1901, R336.2803, R336.2804, 40 CFR 52.21 (c) and (d), Act 451 324.5524]

VII. CERTIFICATION AND REPORTING

- 1. Prompt reporting of deviations pursuant to General Conditions 21 and 22 of Part A. See Appendix 8. [R336.1213(3)(c)(ii)]
- 2. Semiannual reporting of monitoring and deviations pursuant to General Condition 23 of Part A. See Appendix 8. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the reporting period July 1 to December 31 and by September 15 for the reporting period January 1 to June 30. [R336.1213(3)(c)(i)]
- 3. Annual certification of compliance pursuant to General Conditions 19 and 20 of Part A. See Appendix 8. The report shall be postmarked or received by the appropriate AQD District Office by March 15 for the previous calendar year. [R336.1213(4)(c)]

VIII. STACK OR VENT RESTRICTIONS

NΑ

IX. OTHER REQUIREMENTS

NΑ

Footnotes:

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

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

D. FLEXIBLE GROUP 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.

E. NON-APPLICABLE REQUIREMENTS

At the time of issuance of this Renewal Operating Permit, the Air Quality Division 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. Abbreviations and Acronyms

AQD	Air Quality Division	MM	Million
Acfm	Actual cubic feet per minute	MSDS	Material Safety Data Sheet
BACT	Best Available Control Technology	MW	Megawatts
BTU	British Thermal Unit	NA	Not Applicable
°C	Degrees Celsius	NAAQS	National Ambient Air Quality Standards
CAA	Federal Clean Air Act	NESHAP	National Emission Standard for Hazardous Air Pollutants
CAM	Compliance Assurance Monitoring	NMOC	Non-methane Organic Compounds
CEM	Continuous Emission Monitoring	NOx	Oxides of Nitrogen
CFR	Code of Federal Regulations	NSPS	New Source Performance Standards
СО	Carbon Monoxide	NSR	New Source Review
СОМ	Continuous Opacity Monitoring	PM	Particulate Matter
Department	Michigan Department of Natural Resources and Environment	PM-10	Particulate Matter less than 10 microns in diameter
Dscf	Dry standard cubic foot	pph	Pound per hour
Dscm	Dry standard cubic meter	ppm	Parts per million
EPA	United States Environmental Protection Agency	ppmv	Parts per million by volume
EU	Emission Unit	ppmw	Parts per million by weight
°F	Degrees Fahrenheit	PS	Performance Specification
FG	Flexible Group	PSD	Prevention of Significant Deterioration
GACS	Gallon of Applied Coating Solids	psia	Pounds per square inch absolute
gr	Grains	psig	Pounds per square inch gauge
HAP	Hazardous Air Pollutant	PeTE	Permanent Total Enclosure
Hg	Mercury	PTI	Permit to Install
Hr	Hour	RACT	Reasonable Available Control Technology
HP	Horsepower	ROP	Renewable Operating Permit
H₂S	Hydrogen Sulfide	SC	Special Condition
HVLP	High Volume Low Pressure	scf	Standard cubic feet
ID	Identification (Number)	sec	Seconds
IRSL	Initial Risk Screening Level	SCR	Selective Catalytic Reduction
ITSL	Initial Threshold Screening Level	SO_2	Sulfur Dioxide
LAER	Lowest Achievable Emission Rate	SRN	State Registration Number
lb	Pound	TAC	Toxic Air Contaminant
m	Meter	Temp	Temperature
MACT	Maximum Achievable Control Technology	THC	Total Hydrocarbons
MAERS	Michigan Air Emissions Reporting System	tpy	Tons per year
MAP	Malfunction Abatement Plan	μg	Microgram
MDNRE	Michigan Department of Natural Resources and Environment	VE	Visible Emissions
mg	Milligram	VOC	Volatile Organic Compounds
mm	Millimeter	yr	Year

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. [R336.1213(4)(a), R336.1119(a)(ii)]

Appendix 3. Monitoring Requirements

The following monitoring procedures, methods, or specifications are the details to the monitoring requirements identified and referenced in the EUBOILER#1 table. The permittee shall keep all monitoring data on file for a period of at least five years and make them available to the AQD upon request.² [R336.1213(3)]

APPENDIX 3.A

CO Monitoring - Continuous Emission Monitoring System (CEMS) Requirements

- 1. Within 30 calendar days after commencement of trial operation, the permittee shall submit two copies of a Monitoring Plan to the AQD, for review and approval. The Monitoring Plan shall include drawings or specifications showing proposed locations and descriptions of the required CEMS.
- 2. Within 150 calendar days after commencement of trial operation, the permittee shall submit two copies of a complete test plan for the CEMS to the AQD for approval.
- 3. Within 180 calendar days after commencement of trial operation, the permittee shall complete the installation and testing of the CEMS.
- 4. Within 60 days of completion of testing, the permittee shall submit to the AQD two copies of the final report demonstrating the CEMS complies with the requirements of Performance Specification (PS) 3 and 4a.
- 5. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.
- 6. 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 4a of Appendix B to 40 CFR Part 60.
- 7. 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, Appendix F).
- 8. 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 3.B Continuous Opacity Monitoring System (COMS) Requirements

- 1. Within 30 calendar days after commencement of trial operation, the permittee shall submit two copies of a Monitoring Plan to the AQD for review and approval. The Monitoring Plan shall include drawings or specifications showing proposed locations and descriptions of the required COMS.
- 2. Within 150 calendar days after commencement of trial operation, the permittee shall submit two copies of a complete test plan for the COMS to the AQD for approval.
- 3. Within 180 calendar days after commencement of trial operation, the permittee shall complete the installation and testing of the COMS.
- 4. Within 60 days of completion of testing, the permittee shall submit to the AQD two copies of the final report demonstrating the COMS complies with the requirements of Performance Specification (PS) 1.
- 5. The span value shall be 2.0 times the lowest emission standard or as specified in the federal regulations.
- 6. The COMS shall be installed, calibrated, maintained, and operated in accordance with the procedures set forth in 40 CFR 60.13 and PS 1 of Appendix B, 40 CFR Part 60.
- 7. 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.
- 8. 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.
- 9. Whenever EUBOILER#1 is operating, the permittee shall carry out a 40 CFR Part 64 Compliance Assurance Monitoring (CAM) program for particulate matter (PM) as follows. Upon detection of a 6-minute average opacity in excess of 20 percent (except for one 6-minute average per hour of not more than 27 percent opacity), the permittee shall promptly determine whether corrective action is needed. If corrective action is needed, the permittee shall restore operation of EUBOILER#1 and associated dust collection equipment to their normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution practice for minimizing emissions. The permittee shall keep a summary record of all 6-minute averages of opacity greater than 20 percent (except for one 6-minute average per hour of not more than 27 percent opacity), including the cause if known, and corrective action taken. The permittee shall submit these records with the quarterly reports required by Appendix 3.B.8 above.

[40 CFR Part 64, 40 CFR 64.1, 40 CFR 64.6(c)(2), 40 CFR 64.7(d)]

Appendix 4. Recordkeeping

The permittee shall use the following approved formats and procedures for the recordkeeping requirements referenced in EUBOILER#1.² [R336.1213(3)]

Recordkeeping Provisions for PSD Source Using Actual to Projected-Actual Applicability Test

All information in this Appendix shall be maintained pursuant to R 336.2818 and 40 CFR 52.21(r)(6)(i) for 10 years after the emission units identified in Table C resume normal operation, and shall be made available to the Department upon request.

- A. Project Description: The project is to totally replace coal with tire derived fuel (TDF), railroad ties, wood chips, wood fines/bark, and natural gas, and to increase the maximum heat input of EUBOILER#1 from 249 MMBTU/hr to 324 MMBTU/hr.
- B. Applicability Test Description: Modifications are not subject to PSD, except for CO. Actual to projected actual applicability test as described in the table below was used to demonstrate that PSD does not apply to these modifications.

Table C

		El	EMISSIONS (tpy)		
Emission Unit / Flexible Group ID	Pollutant	Baseline Actual Emissions (tpy)	Projected Actual Emissions (tpy)	Excluded Emissions (tpy)	Reason for Exclusion
EUBOILER #1	PM	0.44	80.1	120.7	EUBOILER#1 was capable of accommodating emissions up to 120.7 TPY, based on burning coal up to its existing capacity of 249 MMBtu/hr. The projected emission increase of -40.05 tpy < significant level of 25 tpy.
EUBOILER #1	PM-10	0.44	63.5	109.2	EUBOILER#1 was capable of accommodating emissions up to 109.2 TPY, based on burning coal up to its existing capacity of 249 MMBtu/hr. The projected emission increase of -46.14 tpy < significant level of 15 tpy.
EUBOILER #1	SO ₂	0.035	738	2065.9	EUBOILER#1 was capable of accommodating emissions up to 2065.9 TPY, based on burning coal up to its existing capacity of 249 MMBtu/hr. The projected emission increase of -1328 tpy < significant level of 40 tpy.
EUBOILER #1	NOx	10.9	595	1009.8	EUBOILER#1 was capable of accommodating emissions up to 1009.8 TPY, based on burning coal up to its existing capacity of 249 MMBtu/hr. The projected emission increase of -425.75 tpy < significant level of 40 tpy.

EMISSIONS (tpy)

Emission Unit / Flexible Group ID	Pollutant	Baseline Actual Emissions (tpy)	Projected Actual Emissions (tpy)	Excluded Emissions (tpy)	Reason for Exclusion
EUBOILER #1	СО	4.8	399	22.9	EUBOILER#1 was capable of accommodating emissions up to 22.9 TPY, based on burning coal up to its existing capacity of 249 MMBtu/hr. The projected emission increase of 371.27 tpy > significant level of 100 tpy.
EUBOILER #1	VOC	0.32	37.3	2.74	EUBOILER#1 was capable of accommodating emissions up to 2.74 TPY, based on burning coal up to its existing capacity of 249 MMBtu/hr. The projected emission increase of 34.24 tpy < significant level of 40 tpy.
EUBOILER #1	Pb	0.17	0.043	0.02	EUBOILER#1 was capable of accommodating emissions up to 0.02 TPY, based on burning coal up to its existing capacity of 249 MMBtu/hr. The projected emission increase of 0.023 tpy < significant level of 0.6 tpy.

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 Permits to Install issued since July 1, 2004, the effective date of previously issued Renewable Operating Permit #MI-ROP-B4260-2004.

Permit to Install Number	Description of Equipment
#168-07	Permit to Install #168-07 was Issued October 29, 2007 to authorize the conversion of existing Boiler #1 from coal firing to the burning of wood chips, railroad ties, tire derived fuel, paper sludge, mill ash, wood fines and bark, and natural gas.
#168-07A	Permit to Install #168-07A was issued May 30, 2008, a modification of conditions of Permit #168-07 to increase the allowed proportion of natural gas firing, and to change the fuel definition from "hardwood chips" to "wood chips" in the 324 million BTU per hour biomass fueled Boiler #1.
#168-07B	Permit to Install #168-07B was issued April 16, 2010, a modification of conditions of Permit #168-07A to increase the allowed amount of fines and bark and tire derived fuel, and to remove mill sludge and mill ash from the list of fuels permitted to be burned in Boiler #1.

Appendix 7. Emission Calculations

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

Appendix 8. Reporting

A. Annual, Semiannual, and Deviation Certification Reporting

The permittee shall use the MDNRE Report Certification form (EQP 5736) and MDNRE 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.