

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY
AIR QUALITY DIVISION

October 31, 2016

PERMIT TO INSTALL
67-16

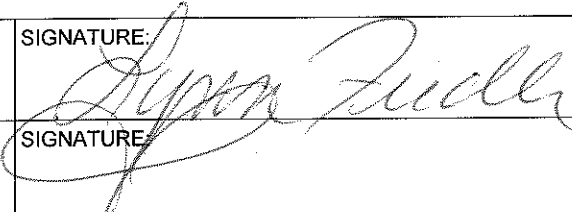
ISSUED TO
L'Anse Warden Electric Company

LOCATED AT
157 South Main Street
L'Anse, Michigan

IN THE COUNTY OF
Baraga

STATE REGISTRATION NUMBER
B4260

The Air Quality Division has approved this Permit to Install, pursuant to the delegation of authority from the Michigan Department of Environmental Quality. This permit is hereby issued in accordance with and subject to Section 5505(1) of Article II, Chapter I, Part 55, Air Pollution Control, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. Pursuant to Air Pollution Control Rule 336.1201(1), this permit constitutes the permittee's authority to install the identified emission unit(s) in accordance with all administrative rules of the Department and the attached conditions. Operation of the emission unit(s) identified in this Permit to Install is allowed pursuant to Rule 336.1201(6).

DATE OF RECEIPT OF ALL INFORMATION REQUIRED BY RULE 203: April 18, 2016	
DATE PERMIT TO INSTALL APPROVED: October 31, 2016	SIGNATURE: 
DATE PERMIT VOIDED:	SIGNATURE:
DATE PERMIT REVOKED:	SIGNATURE:

PERMIT TO INSTALL

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Common Abbreviations / Acronyms

Common Acronyms		Pollutant / Measurement Abbreviations	
AQD	Air Quality Division	acfm	Actual cubic feet per minute
BACT	Best Available Control Technology	BTU	British Thermal Unit
CAA	Clean Air Act	°C	Degrees Celsius
CAM	Compliance Assurance Monitoring	CO	Carbon Monoxide
CEM	Continuous Emission Monitoring	CO ₂ e	Carbon Dioxide Equivalent
CFR	Code of Federal Regulations	dscf	Dry standard cubic foot
COM	Continuous Opacity Monitoring	dscm	Dry standard cubic meter
Department/ department	Michigan Department of Environmental Quality	°F	Degrees Fahrenheit
EU	Emission Unit	gr	Grains
FG	Flexible Group	HAP	Hazardous Air Pollutant
GACS	Gallons of Applied Coating Solids	Hg	Mercury
GC	General Condition	hr	Hour
GHGs	Greenhouse Gases	HP	Horsepower
HVLP	High Volume Low Pressure*	H ₂ S	Hydrogen Sulfide
ID	Identification	kW	Kilowatt
IRSL	Initial Risk Screening Level	lb	Pound
ITSL	Initial Threshold Screening Level	m	Meter
LAER	Lowest Achievable Emission Rate	mg	Milligram
MACT	Maximum Achievable Control Technology	mm	Millimeter
MAERS	Michigan Air Emissions Reporting System	MM	Million
MAP	Malfunction Abatement Plan	MW	Megawatts
MDEQ	Michigan Department of Environmental Quality	NMOC	Non-methane Organic Compounds
MSDS	Material Safety Data Sheet	NO _x	Oxides of Nitrogen
NA	Not Applicable	ng	Nanogram
NAAQS	National Ambient Air Quality Standards	PM	Particulate Matter
NESHAP	National Emission Standard for Hazardous Air Pollutants	PM10	Particulate Matter equal to or less than 10 microns in diameter
NSPS	New Source Performance Standards	PM2.5	Particulate Matter equal to or less than 2.5 microns in diameter
NSR	New Source Review	pph	Pounds per hour
PS	Performance Specification	ppm	Parts per million
PSD	Prevention of Significant Deterioration	ppmv	Parts per million by volume
PTE	Permanent Total Enclosure	ppmw	Parts per million by weight
PTI	Permit to Install	psia	Pounds per square inch absolute
RACT	Reasonable Available Control Technology	psig	Pounds per square inch gauge
ROP	Renewable Operating Permit	scf	Standard cubic feet
SC	Special Condition	sec	Seconds
SCR	Selective Catalytic Reduction	SO ₂	Sulfur Dioxide
SNCR	Selective Non-Catalytic Reduction	TAC	Toxic Air Contaminant
SRN	State Registration Number	Temp	Temperature
TEQ	Toxicity Equivalence Quotient	THC	Total Hydrocarbons
USEPA/EPA	United States Environmental Protection Agency	tpy	Tons per year
VE	Visible Emissions	µg	Microgram
		µm	Micrometer or Micron
		VOC	Volatile Organic Compounds
		yr	Year

*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 expense, in accordance with R 336.2001 and R 336.2003, under any of the conditions listed in R 336.2001. **(R 336.2001)**

SPECIAL CONDITIONS

EMISSION UNIT SUMMARY TABLE

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

Emission Unit ID	Emission Unit Description (Process Equipment & Control Devices)	Installation Date / Modification Date	Flexible Group ID
EUBOILER#1	Boiler with capability of burning tire derived fuel (TDF), creosote treated railroad ties, wood chips, wood fines and bark, 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. The boiler is controlled by a multicyclone followed by a three (series) section electrostatic precipitator.	1959 1974 04/15/2008 10/26/2011	FGBOILERMACT-6J
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, 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. The boiler is controlled by a multicyclone followed by a three (series) section electrostatic precipitator.

Flexible Group ID: FGBOILERMACT-6J

POLLUTION CONTROL EQUIPMENT: Multicyclone followed by an electrostatic precipitator (ESP).

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
1. PM	0.06 lb/MMBTU heat input	Test Protocol *	EUBOILER#1	SC V.1	R 336.1205 R 336.1331
2. PM	19.2 pph	Test Protocol *	EUBOILER#1	SC V.1	R 336.1205
3. PM-10	15.4 pph	Test Protocol *	EUBOILER#1	SC V.1	R 336.1205 40 CFR 52.21 (c) & (d)
4. SO ₂	290 pph	Test Protocol *	EUBOILER#1	SC V.1 SC V.2 SC VI.2	R 336.1205
5. NO _x	145 pph	Test Protocol *	EUBOILER#1	SC V.1	R 336.1205
6. CO	0.3 lb/MMBTU except for startup and shutdown	24-hr rolling average as determined each hour EUBOILER#1 operates	EUBOILER#1	SC VI.7	R 336.2810 40 CFR 52.21(j)
7. CO	97.2 pph	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) except for startup and shutdown	Test Protocol *	EUBOILER#1	SC V.1	R 336.1205 R 336.1702
9. VOC	9.1 pph	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)	2.17 pph	Test Protocol *	EUBOILER#1	SC V.1 SC V.2 SC VI.2	R 336.1224 R 336.1225
12. HCl	9.5 tons per year	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	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.

II. MATERIAL LIMITS

Material	Limit	Time Period/ Operating Scenario	Equipment	Monitoring/ Testing Method	Underlying Applicable Requirements
1. Natural Gas	Less than 50% of annual heat input	12-month rolling time period as determined at the end of each calendar month	EUBOILER#1	SC VI.2	R 336.1205
2. TDF	4.0 tons/hr "as received"*	Calendar Day Average	EUBOILER#1	SC VI.2	R 336.1205
3. TDF	32,800 tpy "as received"*	12-month rolling time period as determined at the end of each calendar month	EUBOILER#1	SC VI.2	R 336.1205
4. Railroad Ties	17 tons/hr "as received"*	Calendar Day Average	EUBOILER#1	SC VI.2	R 336.1205
5. Railroad Ties	72,078 tpy "as received"*	12-month rolling time period as determined at the end of each calendar month	EUBOILER#1	SC VI.2	R 336.1205
6. Fines & Bark	5.4 tons/hr "as received"*	Calendar Day Average	EUBOILER#1	SC VI.2	R 336.1205
7. Fines & Bark	44,280 tpy "as received"*	12-month rolling time period as determined at the end of each calendar month	EUBOILER#1	SC VI.2	R 336.1205
8. Chlorine content of railroad ties.	400 ppm	Instantaneous	EU-BOILER#1	SC III.3 SC V.3	R 336.1224 R 336.1225

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

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 natural gas and fuels defined in an approved *Fuel Procurement and Monitoring Plan* (FPMP) for EUBOILER#1. **(R 336.1205, R 336.1225)**

During startup, the permittee shall start with natural gas followed by the other fuels to EUBOILER#1. **(R 336.1205(3), R 336.1225)**

3. 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 SC II Material Limits, 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, including determination of whether railroad ties have 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.

4. 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 operate and maintain EUBOILER#1 according to the MAP as described in R 336.1911(2), for EUBOILER#1, including the hydrograte biomass fuel burning surface, boiler overfired air system, ID fan, air heater, boiler tubes, boiler tube cleaning equipment, multicyclone, electrostatic precipitator, and the CO monitoring equipment. The MAP 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 MAP fails to address or inadequately addresses an event that meets the characteristics of a malfunction, the permittee shall amend the MAP within 45 days after such an event occurs. The permittee shall also amend the MAP 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. **(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 railroad ties, or any materials, which have been treated with pentachlorophenol coating or preservative. **(R 336.1205(3))**
7. The permittee shall not operate EUBOILER#1 unless a program for continuous fugitive emissions control for all plant roadways, the plant yard, all material storage piles, and all material handling operations has been submitted to the AQD District Supervisor and is approved, implemented, and maintained. The plan shall identify the specific measures to be taken to prevent fugitive dust and the frequency of these measures. **(R 336.1372, Act 451 324.5524)**

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. **(R 336.1910)**

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, PM-10, SO₂, NO_x, lead, 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 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. 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, R 336.2810, 40 CFR 52.21(j))**
2. No later than 120 days following the most recent stack test for HCl from EU-BOILER#1 and continuing quarterly thereafter, the permittee shall submit two copies of a test plan for HCl from EU-BOILER#1 to the AQD Upper Peninsula District Supervisor and the Technical Programs Unit Supervisor for approval prior to testing. After four (4) consecutive quarterly testing events demonstrating compliance with the EU-BOILER#1 HCl emission limits, the Company shall perform two (2) HCl emission test on a semi-annual basis, followed by one HCl emission test within the next three years. 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, R 336.2810, 40 CFR 52.21(j))**

3. The permittee shall conduct a monthly compliance demonstration, through fuel analysis, for the following: 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 perform all analyses in accordance with an approved fuel procurement management plan. 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. **(R 336.1205, R 336.1225)**

4. 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 336.1331, 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 336.1901, R 336.2810, 40 CFR 52.21(j))**
2. 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 solid fuel, by weight, burned in EUBOILER#1.
 - d. The annual heat input of each solid fuel burned in EUBOILER#1.

The permittee shall demonstrate compliance with the calendar day average for each solid fuel, and based on a monthly and a 12-month rolling time period as determined at the end of each calendar month by an acceptable method as approved by the AQD District Supervisor. **(R 336.1205, R 336.1224, R 336.1225)**

3. The permittee shall obtain and keep records of the sulfur, lead, and chlorine content of each fuel burned in EUBOILER #1. **(R 336.1205, R 336.1224, R 336.1225)**
4. 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. **(R 336.1205(3))**
5. 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. 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. **(R 336.1205(1)(a), R 336.1205(3), R 336.1224, R 336.1225, R 336.1331, R 336.1702, R 336.1901)**
6. The permittee shall keep, in a satisfactory manner, the MAP 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. **(R 336.1205, R 336.1225, R 336.1702, R 336.1901, R 336.1910)**

7. The permittee shall 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. **(R 336.2810, 40 CFR 52.21(j))**
8. 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 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 GC 11. **(R 336.1301, 40 CFR 64.6(c)(1)(i),(ii),(iii), 40 CFR 64.3(d)(2))**
9. The permittee shall calculate and keep records of PM, PM-10, SO₂, NO_x, 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. **(R 336.1205, R 336.2802(4)(c), R 336.2810, 40 CFR 52.21(j))**

VII. REPORTING

1. The permittee shall calculate and keep records of the annual emissions of PM, PM-10, SO₂, NO_x, 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. 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).
 - 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). **(R 336.2818, 40 CFR 52.21(r)(6)(c)(iii))**
2. The permittee shall submit records of the annual emission of PM, PM-10, SO₂, NO_x, 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 occurs:
 - a. The yearly annual emission of PM, PM-10, SO₂, NO_x, 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). **(R 336.1205, R 336.2802(4)(c), R 336.2810, R 336.2818, 40 CFR 52.21(j), 40 CFR 52.21(r)(6)(c)(iii))**

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:

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

IX. OTHER REQUIREMENTS

1. The permittee shall repair SVBOILER#1 to remove corroded sections of the stack or to make any other necessary repairs which would have impact on the proper dispersion of the emissions from SVBOILER#1. Such repairs shall not modify the maximum exhaust diameter or minimum height above ground specified in special condition VIII.1. The permittee shall provide written notification to the AQD District Supervisor of the following:
 - a. Date when repairs will be initiated.
 - b. Date when repairs have been completed.

Notifications shall be at least five days prior to initiating repairs, and no later than five days after repairs have been completed. The stack repairs shall be completed no later than September 30, 2017. **(R 336.1225, R 336.2803, R 336.2804, 40 CFR 52.21 (c) & (d))**

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.

Flexible Group ID	Flexible Group Description	Associated Emission Unit IDs
FGBOILERMACT-6J	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.	EUBOILER#1

The following conditions apply to: FGBOILERMACT-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

POLLUTION CONTROL EQUIPMENT:

I. EMISSION LIMITS

Pollutant	Limit	Time Period/ Operating Scenario	Equipment	Testing / Monitoring Method	Underlying Applicable Requirements
NA	NA	NA	NA	NA	NA

II. MATERIAL LIMITS

NA

III. PROCESS/OPERATIONAL RESTRICTIONS

1. 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))**

2. 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))**
 - g. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of startup. **(40 CFR 63.11223(b)(7))**

IV. DESIGN/EQUIPMENT 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 JJJJJJ 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

NA

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:

Stack & Vent ID	Maximum Exhaust Diameter/Dimensions (inches)	Minimum Height Above Ground (feet)	Underlying Applicable Requirements
NA	NA	NA	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 JJJJJJ as specified in paragraphs (a)(1) and (3) of Section 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 JJJJJJ or the boiler becoming subject to 40 CFR Part 63, Subpart JJJJJJ, the permittee must demonstrate compliance within 180 days of the effective date of the fuel switch or the physical change. Notification of such changes must be submitted according to Section 63.11225(g), stated in SC VII.8. **(40 CFR 63.11210(h))**
4. No later than February 7, 2018 and in accordance, as applicable, with a state implementation plan or a federal implementation plan addressing the requirements of 40 CFR Part 60, Subpart DDDD, permittee shall:
 - a. Maintain documentation that EUBoiler#1 qualifies as a small power-production facility under section 3(17)(C) of the Federal Power Act (16 U.S.C. 796(17)(C)).
 - b. Maintain documentation that EUBoiler#1 combusts only natural gas and non-hazardous secondary material which is homogeneous waste (not including refuse-derived fuel) to produce electricity.
 - c. Submit notification as required by the state or federal implementation plan that the facility is a qualifying small power-production facility combusting homogeneous waste. **(40 CFR 60.2740(v), 40 CFR 60.2555(e))**

Footnotes:

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