



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



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**Covanta Maine, LLC – Jonesboro  
Penobscot County  
Jonesboro, Maine  
A-127-70-C-R**

**Departmental  
Findings of Fact and Order  
Part 70 Air Emission License  
Renewal**

**FINDINGS OF FACT**

After review of the Part 70 License renewal application, staff investigation reports and other documents in the applicant’s file in the Bureau of Air Quality, pursuant to 38 M.R.S.A, §344 and §590, the Maine Department of Environmental Protection (Department) finds the following facts:

**I. REGISTRATION**

**A. Introduction**

FACILITY	Covanta Maine, LLC – Jonesboro
LICENSE TYPE	Part 70 License Renewal
NAICS CODES	4911
NATURE OF BUSINESS	Electrical Power Generation
FACILITY LOCATION	Route 1A, Jonesboro, Maine

Covanta Maine, LLC – Jonesboro (CMJ) is an electrical power generation facility consisting of a 361.5 MMBtu/hr circulating fluidized bed boiler serving a generator with a maximum generating capacity of 27 megawatts (MW). Emissions are controlled by a multiple centrifugal cyclone separator (multiclone) followed by an electrostatic precipitator (ESP).

CMJ has the potential to emit more than 100 tons per year (TPY) of nitrogen oxides (NO<sub>x</sub>), and more than 100,000 tons of carbon dioxide equivalents (CO<sub>2</sub>e); therefore, the source is a major source for criteria pollutants. CMJ does not have the potential to emit more than 10 TPY of a single hazardous air pollutant (HAP) or more than 25 TPY of combined HAP, therefore, the source is not a major source for HAP.

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**B. Emission Equipment**

The following emission units are addressed by this Part 70 License:

**Boilers**

<u>Equipment</u>	<u>Maximum Heat Input Capacity</u> (MMBtu/hr)	<u>Max. Firing Rate</u>	<u>Fuel Type, % sulfur</u>	<u>Mfr. Date</u>	<u>Install Date</u>	<u>Stack #</u>
Boiler 1	361.5	21.27 tph 320 gph	Biomass Fuel Propane Waste Oil	1985	1986	1

**Generators**

<u>Equipment</u>	<u>Maximum Heat Input Capacity</u> (MMBtu/hr)	<u>Max. Firing Rate</u> (gal/hr)	<u>Fuel Type, % sulfur</u>	<u>Install Date</u>	<u>Stack #</u>
Emergency Generator	2.54	19.7	Diesel, 0.0015%	1986	2
Fire Pump	1.9	10.4	Diesel, 0.0015%	1986	3

CMJ has additional insignificant activities which do not need to be listed in the emission equipment tables above. The list of insignificant activities can be found in the Part 70 license application and in Appendix B of *Part 70 Air Emission License Regulations*, 06-096 CMR 140 (as amended).

**C. Application Classification**

The application for CMJ does not include the licensing of increased emissions or the installation of new or modified equipment; therefore, the license is considered to be a Part 70 License renewal issued under 06-096 CMR 140 (as amended).

#### **D. Facility Description**

The CMJ plant consists of a fuel handling system and a circulating fluidized bed (CFB) wood-fired boiler with a multi-cyclone followed by an electrostatic precipitator. The boiler serves a 27 megawatt generator.

Biomass fuel (bark and wood chips, hereafter referred to as “wood chips”) is received from enclosed trailer vans and off-loaded by hydraulic dumper lifts into a receiving hopper. The wood is belt-conveyed through a magnetic separator and a disc screen classifier. Any oversized wood is “hogged” to wood size specifications. The chips are conveyed to the fuel yard where a front-end loader is used to manage the storage pile and to feed the chip reclaimer.

The reclaimed chips are conveyed to a fuel metering bin located at the front of the boiler. Fuel is fed to the boiler by four parallel trains consisting of a triple screw metering feeder, a rotary seal valve and an injector screw feeder. The chips enter a bed of refractory sand which is fluidized by the combustion air. The mixing action of the sand promotes efficient combustion.

Propane is used to heat the primary air, which raises the fluidized bed temperature to that required to ignite the main fuel. Primary and over-fire air are supplied by a single forced draft fan and are heated in a tubular heater.

Combustion gases from the boiler pass through a multi-clone followed by an electrostatic precipitator and vent through a 136 foot above ground level (AGL) stack.

Ash from all collection points except the bed drain and the ESP hoppers is re-injected pneumatically into the boiler. Ash from the bed drain is collected by a mechanical (screw) system and stored in the ash storage building. Ash from the ESP is stored in a 30 cubic yard silo which vents to a baghouse. Ash from the silo is wetted before discharge to enclosed trucks and is then transferred to the ash storage building. Ash is disposed of in accordance with Department Rules.

The chip storage pile does not exceed 40 feet above ground level in height and is not a point of concern for fugitive particulate matter (PM) emissions due to the chip size and the high moisture content of the chips. When necessary, the pile surface is wetted to prevent fugitive PM emissions from exceeding 5% opacity.

**E. General Facility Requirements**

CMJ is subject to the following state and federal regulations listed below, in addition to the regulations listed for specific units as described further in this license.

<b>CITATION</b>	<b>REQUIREMENT TITLE</b>
06-096 CMR 101	Visible Emissions
06-096 CMR 102	Open Burning
06-096 CMR 103	Fuel Burning Equipment Particulate Emission Standard
06-096 CMR 106	Low Sulfur Fuel
06-096 CMR 109	Emergency Episode Regulation
06-096 CMR 110	Ambient Air Quality Standard
06-096 CMR 116	Prohibited Dispersion Techniques
06-096 CMR 117	Source Surveillance
06-096 CMR 137	Emission Statements
06-096 CMR 138	Reasonably Available Control Technology for Facilities that Emit Nitrogen Oxides
06-096 CMR 140	Part 70 Air Emission License Regulations
06-096 CMR 143	New Source Performance Standards
06-096 CMR 144	National Emission Standards for Hazardous Air Pollutants (NESHAP)
40 CFR Part 60, Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
40 CFR Part 63, Subpart ZZZZ	National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
40 CFR Part 63, Subpart JJJJJ	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources
40 CFR Part 64	Compliance Assurance Monitoring
40 CFR Part 70	State Operating Permit Programs

## F. Units of Measurement and Abbreviations

The following units of measurement are used in this license:

gph	gallons per hour
lb/hr	pounds per hour
lb/MMBtu	pounds per million British thermal units
MMBtu/hr	million British Thermal Units per hour
ppm	parts per million
tons/day	tons per day
tph	tons per hour
tpy	tons per year

The following abbreviations are used in this license:

AGL	above ground level
BACT	best available control technology
BPT	best practical treatment
CAA	Clean Air Act
CAM	compliance assurance monitoring
CDX	EPA Central Data Exchange
CEDRI	Compliance and Emissions Data Reporting Interface
CEM	continuous emissions monitor
CEMS	continuous emissions monitoring system
CFB	circulating fluidized bed
CFC	chlorofluorohydrocarbon
CFR	Code of Federal Regulations
CGA	cylinder gas audit
CI ICE	compression ignition internal combustion engine
CMJ	Covanta Maine LLC – Jonesboro
CMR	Code of Maine Regulations
CO	carbon monoxide
CO <sub>2</sub>	carbon dioxide
CO <sub>2</sub> e	carbon dioxide equivalents
COM	continuous opacity monitor
COMS	continuous opacity monitoring system
DEP	Department of Environmental Protection
EPA	Environmental Protection Agency
ESP	electrostatic precipitator
GHG	greenhouse gas
HAP	hazardous air pollutant
IPCC	International Panel on Climate Change

MMBtu	million British thermal units
MRSA	Maine Revised Statutes Annotated
MW	megawatts
NERC	North American Electric Reliability Corporation
NESHAP	National Emission Standards for Hazardous Air Pollutants
NOCS	notification of compliance status
NO <sub>x</sub>	nitrogen oxides
NSPS	New Source Performance Standards
O <sub>2</sub>	oxygen
PM	particulate matter
PM <sub>10</sub>	particulate matter - particles with an aerodynamic diameter less than or equal to a nominal 10 micrometers
RACT	Reasonably Available Control Technology
RATA	Relative Accuracy Testing Audit
SO <sub>2</sub>	sulfur dioxide
VOC	volatile organic compound
%S	percent sulfur, by weight

## II. BEST PRACTICAL TREATMENT (BPT) AND EMISSION STANDARDS

### A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in 06-096 CMR 100 (as amended). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emission from the source being considered; and
- the economic feasibility for the type of establishment involved.

## **B. NO<sub>x</sub> RACT (Reasonably Available Control Technology)**

*Reasonably Available Control Technology for Facilities that Emit Nitrogen Oxides*, 06-096 CMR 138 (as amended) is applicable to sources that have the potential to emit quantities of NO<sub>x</sub> equal to or greater than 100 tons per year. Boiler 1 is determined to be meeting NO<sub>x</sub> RACT because its fluidized bed design provides uniform combustion temperatures and minimizes hot flame regions conducive to thermal NO<sub>x</sub> formation. It was determined Boiler 1 meets the 0.3 lb/MMBtu NO<sub>x</sub> RACT limit. The NO<sub>x</sub> RACT requirements are incorporated in this renewal.

## **C. Stack Testing for Particulate Matter**

The previous license had a requirement to stack test Boiler 1 for particulate matter once every two years. Since the issuance of the initial Part 70 air emission license, the statutory requirement of 38 MRSA §589, Sub-section 2 has been revised as follows: “A person is not required to conduct stack tests for particulate matter on a source monitored by a continuous monitoring device for opacity as specified by 40 Code of Federal Regulations, Part 60, Appendix B, specification 1 or appropriate surrogate parameters as required by the commissioner more frequently than once every 5 years unless visible emissions, operating parameters or other information indicates the source may be operating out of compliance with any applicable emission standard or unless there are more stringent federal requirements. If visible emissions, operating parameters or other information indicates potential noncompliance with an air emission standard or if there are more stringent federal requirements, the Department may require additional stack tests.” The revised timeframe for PM stack testing is incorporated into this renewal for Boiler 1 since this unit is required to monitor for opacity. The first stack test for particulate matter shall be required six (6) months after issuance of this renewal license.

## **D. Boiler 1**

Boiler 1 is a Babcock & Wilcox model CFB 0001, circulating fluidized bed boiler, manufactured in 1985 and installed in 1986, with a maximum design heat input capacity of 361.5 MMBtu/hr. The boiler fires biomass and uses propane for startup and flame stabilization. Boiler 1 serves a generator with a maximum generating capacity of 27 MW.

The operation and maintenance of a multiple centrifugal cyclone separator followed by an electrostatic precipitator is used to control particulate emissions from Boiler 1. CMJ shall operate, at a minimum, the number of ESP chambers and the number of fields per chamber that operated during the most recent demonstration of compliance with the licensed particulate emissions.

A continuous emissions monitoring system (CEMS) is used at CMJ to demonstrate compliance with NO<sub>x</sub> emission rates. A continuous opacity monitor (COM) is used to demonstrate compliance with opacity requirements. An oxygen (O<sub>2</sub>) CEM is used to measure diluent oxygen in the flue gas.

Emissions exit through Stack #1 which has an inside diameter of 114 inches and an above ground level height of 136 feet.

1. New Source Performance Standards (NSPS)

Boiler 1 is subject to the New Source Performance Standards (NSPS) titled *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*, 40 CFR Part 60, Subpart Db. These standards apply to steam generating units with a heat input capacity of 100 MMBtu/hr or more that are constructed after June 9, 1989.

2. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

Boiler 1 is subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63 Subpart JJJJJ). The unit is considered an existing biomass boiler.

A summary of the currently applicable federal 40 CFR Part 63 Subpart JJJJJ requirements is listed below. Notification forms and additional rule information can be found on the following website:

<http://www.epa.gov/ttn/atw/boiler/boilerpg.html>.

a. Compliance Dates, Notifications, and Work Practice Requirements

i. Initial Notification of Compliance

An Initial Notification submittal to EPA was due no later than January 20, 2014. [40 CFR Part 63.11225(a)(2)]

Covanta submitted this report September 7, 2011.



ii. Boiler Tune-Up Program

- (a) A boiler tune-up program was to be implemented to include the initial tune-up of applicable boilers no later than March 21, 2014. [40 CFR Part 63.11196(a)(1)]

Covanta completed the initial tune-up December 18, 2013.

- (b) The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:
1. As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted; not to exceed 36 months from the previous inspection for boilers greater than 5 MMBtu/hr or 72 months from the previous inspection for oil fired boilers less than 5 MMBtu/hr, boilers with oxygen trim system, seasonal boilers, and limited use boilers. [40 CFR Part 63.11223(b)(1)]
  2. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 CFR Part 63.11223(b)(2)]
  3. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted; not to exceed 36 months from the previous inspection for boilers greater than 5 MMBtu/hr or 72 months from the previous inspection for oil fired boilers less than 5 MMBtu/hr, boilers with oxygen trim system, seasonal boilers, and limited use boilers. [40 CFR Part 63.11223(b)(3)]
  4. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 CFR Part 63.11223(b)(4)]
  5. Measure three (3), one (1) hour average concentrations in the effluent stream of carbon monoxide (CO) in parts per million by volume (ppmv), and oxygen in volume percent, before and after 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 Part 63.11223(b)(5)]

6. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up. [40 CFR Part 63.11223(b)(7)]
- (c) After conducting the initial boiler tune-up, a Notification of Compliance Status was to be submitted to EPA no later than July 19, 2014. [40 CFR Part 63.11225(a)(4) and 40 CFR Part 63.11214(b)]

Covanta completed the electronic notification June 24, 2014.

- (d) The facility shall implement a boiler tune-up program after the initial tune-up and initial compliance report (called a Notification of Compliance Status) has been submitted.
  1. Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. See chart below:

<b>Boiler Category</b>	<b>Tune-Up Frequency</b>
<b>New or Existing Oil, Biomass and Coal fired boilers that are not designated as "Boilers with less frequent tune up requirements" listed below</b>	Every 2 years

[40 CFR Part 63.11223(a) and Table 2]

2. The tune-up compliance report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the three (3), one (1)-hour average concentrations of CO in the effluent stream (ppmv) and oxygen in volume percent, measured at high fire or typical operating load, before and after the boiler tune-up, a description of any corrective actions taken as part of the tune-up of the boiler, and the types and amounts of fuels used over the 12 months prior to the tune-up of the boiler. [40 CFR Part 63.11223(b)(6)]

The compliance report shall also include the company name and address; a compliance statement signed by a responsible official certifying truth, accuracy, and completeness; and a description of any deviations and corrective actions. [40 CFR Part 63.11225(b)]

iii. Energy Assessment

Boiler 1 is subject to the energy assessment requirement as follows:

- (a) A one-time energy assessment was to be performed by a qualified energy assessor on the applicable boilers no later than March 21, 2014. [40 CFR Part 63.11196(a)(3)]

Covanta completed the assessment March 21, 2014.

- (b) The energy assessment shall include a visual inspection of the boiler system; an evaluation of operating characteristics of the affected boiler systems, specifications of energy use systems, operating and maintenance procedures, and unusual operating constraints; an inventory of major energy use systems consuming energy from affected boiler(s) and which are under control of the boiler owner or operator; a review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage; a list of major energy conservation measures that are within the facility's control; a list of the energy savings potential of the energy conservation measures identified; and a comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments. [40 CFR Part 63, Table 2(4)]
- (c) A Notification of Compliance Status (NOCS) was to be submitted to EPA no later than July 19, 2014. [40 CFR Part 63.11225(a)(4) and 40 CFR Part 63.11214(c)]

Covanta completed the electronic submittal June 24, 2014.

b. Recordkeeping

Records shall be maintained consistent with the requirements of 40 CFR Part 63 Subpart JJJJJ including the following [40 CFR Part 63.11225(c)]: copies of notifications and reports with supporting compliance documentation; identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned; documentation of fuel type(s) used monthly by each boiler; the occurrence and duration of each malfunction of the boiler; and actions taken during periods of malfunction to minimize emissions and actions taken to restore the malfunctioning boiler to its usual manner of operation. Records shall be in a form suitable and readily available for expeditious review.

Note: EPA will require submission of Notification of Compliance Status reports for tune-ups and energy assessments through their electronic reporting system. However, the system will not be in place until October 2013, so sources may submit the written NOCS to the EPA Administrator. [63.1125(a)(4)(vi)]

3. Emission Limits and Streamlining

For Boiler 1, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below.

<u>Pollutant</u>	<u>Applicable Emission Standard(s)</u>	<u>Origin and Authority</u>	<u>Licensed Emission Limit(s)</u>
PM	0.03 lb/MMBtu	06-096 BACT (A-91-70-A-I, issued 09/05/2006)	0.03 lb/MMBtu *
	0.30 lb/MMBtu	06-096 CMR 103, §2.A.(3)(b)	
	0.20 lb/MMBtu	40 CFR Part 60, Subpart Db, §60.43b(c)(2)	
	0.03 lb/MMBtu	06-096 CMR 140, BPT	
	0.40 lb/MMBtu	AP-42 Table 1.6-1 and 06-096 CMR 140, BPT	
	10.85 lb/hr	06-096 BACT (A-91-70-A-I, issued 09/05/2006)	10.85 lb/hr
PM <sub>10</sub>	0.032 lb/MMBtu	06-096 CMR 140, BPT	0.03 lb/MMBtu
	10.85 lb/hr	06-096 CMR 140, BPT	10.85 lb/hr
SO <sub>2</sub>	0.025 lb/MMBtu	AP-42 Table 1.6-1	0.025 lb/MMBtu
	11.0 lb/hr	06-096 BACT (A-91-70-A-I, issued 09/05/2006)	11.0 lb/hr
NO <sub>x</sub>	0.30 lb/MMBtu	06-096 CMR 138, §3.B.(3) (one hour average)	0.30 lb/MMBtu
	0.30 lb/MMBtu	06-096 CMR 140, BPT	
	108.45 lb/hr	06-096 CMR 140, BPT	108.45 lb/hr
CO	0.17 lb/MMBtu	AP-42 Table 1.6-2 and 06-096 CMR 140, BPT	0.17 lb/MMBtu
	61.46 lb/hr	AP-42 Table 1.6-2 and 06-096 CMR 140, BPT	61.46 lb/hr
VOC	0.017 lb/MMBtu	AP-42 Table 1.6-3 and 06-096 CMR 140, BPT	0.017 lb/ MMBtu
	36.2 lb/hr	06-096 BACT (A-91-70-A-I, issued 09/06/2006)	36.2 lb/hr
Visible Emissions	30% opacity on a 6-minute block average basis	06-096 CMR 101, §2(B)(1)(e)	20% opacity on a 6-minute block average basis, except for one 6-minute period per hour of not more than 27% opacity
	20% opacity on a 6-minute block average basis, except for one 6-minute period per hour of not more than 27% opacity	40 CFR Part 60, Subpart Db, §60.42b(f)	

Table Notes: \* streamlining requested  
 % S = percent fuel sulfur, by weight

4. Emission Limit Compliance Methods

Compliance with the emission limits associated with Boiler 1 shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

<u>Pollutant</u>	<u>Applicable Emission Limit</u>	<u>Compliance Method</u>	<u>Frequency</u>
PM	0.03 lb/MMBtu	40 CFR Part 60, App. A, Method 5	Every 5 years, with the first to be conducted six (6) months after issuance of license renewal.
	10.85 lb/hr		
PM <sub>10</sub>	0.03 lb/MMBtu	40 CFR Part 60, App. A, Method 5 or EPA Test Method 201 or 201A	As requested
	10.85 lb/hr		
SO <sub>2</sub>	0.025 lb/MMBtu	40 CFR Part 60, App. A, Method 6	As requested
	9.0 lb/hr		
NO <sub>x</sub>	0.3 lb/MMBtu	NO <sub>x</sub> CEMS on a 24-hour block average basis; midnight to midnight	Continuous (in accordance with 40 CFR Part 60, App. B)
	108.45 lb/hr	40 CFR Part 60, App. A, Method 7	As requested
CO	0.17 lb/MMBtu	40 CFR Part 60, App. A, Method 10	As requested
	61.46 lb/hr		
VOC	0.017 lb/MMBtu	40 CFR Part 60, App. A, Method 25 or 25A	As requested
	36.2 lb/hr		
Visible Emissions	20 % opacity on a 6-minute block average basis, except for one 6-minute period per hour of not more than 27% opacity	COMS on a 6-minute block average basis	Continuous (in accordance with 40 CFR Part 60, App. B)

5. Periodic/Parameter Monitoring

CMJ shall monitor and record parameters for Boiler 1 and its associated air pollution control equipment as indicated in the following table(s) whenever the equipment is operating. Periodic monitoring requirements that are required for CAM are indicated as such.

<u>Parameter</u>	<u>Units of Measure</u>	<u>Monitoring Tool/Method</u>	<u>Frequency</u>
Wood fuel use	Tons	Interpolation Table	Daily, monthly, and 12-month rolling total
Propane use	Gallons	Tank gauge readings and purchase records	Daily, monthly, and 12-month rolling total
Operating time	Hours	CEM data acquisition system (DAS) or boiler control system (DCS)	Daily, monthly, and 12-month rolling total
Steam production	Pounds per hour	Steam flow meter	Continuously
Steam temperature	Degrees Fahrenheit	Thermocouple	Continuously

<u>Parameter</u>	<u>Units of Measure</u>	<u>Monitoring Tool/Method</u>	<u>Frequency</u>
Gas pressure drop across multiclone	Pounds per square inch (gauge) or inches water (gauge)	Pressure gauges	Once per shift
Inlet gas temperature	Degrees Fahrenheit	Thermocouple	Once per shift

<u>Parameter</u>	<u>Units of Measure</u>	<u>Monitoring Tool/Method</u>	<u>Frequency</u>
Primary Voltage	Volts or kilovolts	Volt meter	Once per day
Secondary Voltage	Volts or kilovolts	Volt meter	Once per day
Primary Current	Amps	Amp meter	Once per day
Secondary Current	Amps	Amp meter	Once per day

6. Parameter Monitors

There are no Parameter Monitors required for Boiler 1.

7. CEMS and COMS

For Boiler 1, the table below lists the required continuous emission monitoring systems and the continuous opacity monitoring systems.

<u>Pollutant and Continuous Monitor</u>	<u>Unit of Measurement</u>	<u>Origin and Authority</u>
NO <sub>x</sub> CEMS	lb/MMBtu	06-096 CMR 117 and 06-096 CMR 138
O <sub>2</sub> CEMS	%	06-096 CMR 117
Opacity COMS	%	06-096 CMR 117

**E. Emergency Generator and Fire Pump**

CMJ operates 2.54 MMBtu/hr, 362 horsepower, diesel-fired Emergency Generator, and a 1.9 MMBtu/hr, 270 horsepower, diesel-fired Fire Pump. Both units were installed in June 1986.

1. New Source Performance Standards (NSPS)

The federal regulation 40 CFR Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE) is NOT applicable to the Emergency Generator or Fire Pump as the units were installed in June 1986.

2. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

The federal regulation 40 CFR Part 63, Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines* is applicable to the Emergency Generator and the Fire Pump. The units are considered existing, emergency stationary reciprocating internal combustion engines at an area HAP source and are not subject to New Source Performance Standards regulations. EPA's August 9, 2010 memo (*Guidance Regarding Definition of Residential, Commercial, and Institutional Emergency Stationary RICE in the NESHAP for Stationary RICE*) specifically does not exempt these units from the federal requirements.



a. Emergency Definition:

Emergency stationary RICE means any stationary reciprocating internal combustion engine that meets all of the following criteria:

- (1) The stationary RICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the case of fire or flood, etc.
- (2) Paragraph (1) above notwithstanding, the emergency stationary RICE may be operated for any combination of the purposes specified below for a maximum of 100 hours per calendar year:
  - (i) Maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.
  - (ii) Emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
  - (iii) Periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

- (3) Paragraphs (1) and (2) above notwithstanding, emergency stationary RICE may be operated for up to 50 hours per calendar year in non-emergency situations. These 50 hours are counted as part of the 100 hours per calendar year for maintenance checks and readiness testing, emergency demand response, and periods of voltage deviation or low frequency, as provided in paragraph (2) above.

The 50 hours per calendar year for non-emergency situations cannot be used for peak shaving, non-emergency demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity, except provided in the following paragraphs:

- (i) Prior to May 3, 2014, the 50 hours per year for non-emergency situations can be used for peak shaving or non-emergency demand response to generate income for a facility, or to otherwise supply power as part of a financial arrangement with another entity if the engine is operated as part of a peak shaving (load management program) with the local distribution system operator and the power is provided only to the facility itself or to support the local distribution center.
- (ii) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
- (a) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
  - (b) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
  - (c) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
  - (d) The power is provided only to the facility itself or to support the local transmission and distribution system.
  - (e) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

The Emergency Generator and Fire Pump shall be limited to the usage outlined in §63.6640(f) and therefore may be classified as an existing emergency stationary RICE as defined in 40 CFR Part 63, Subpart ZZZZ. Failure to comply with all of the requirements listed in §63.6640(f) may cause these engines to not be considered emergency engines and therefore subject to all the requirements for non-emergency engines.

b. 40 CFR Part 63, Subpart ZZZZ Requirements:

(1) Operation and Maintenance Requirements;

	<u>Compliance Dates</u>	<u>Operating Limitations*</u> (40 CFR §63.6603(a) and Table 2(d))
Compression ignition units:	No later than May 3, 2013	- Change oil and filter every 500 hours of operation or annually, whichever comes first;
Emergency Generator		- Inspect the air cleaner every 1000 hours of operation or annually, whichever comes first, and replace as necessary; and
Fire Pump		- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

The Emergency Generator and Fire Pump shall be operated and maintained according to the manufacturer’s emission-related written instructions or CMJ shall develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR §63.6625(e)]

(2) Optional Oil Analysis Program

CMJ has the option of utilizing an oil analysis program which complies with the requirements of §63.6625(i) in order to extend the specified oil change requirement. If this option is used, CMJ must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR §63.6625(i)]

(3) Optional Oil Analysis Program

A non-resettable hour meter shall be installed and operated on the Emergency Generator and the Fire Pump. [40 CFR §63.6625(f)]

(4) Startup Idle and Startup Time Minimization requirements

During periods of startup the facility must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR §63.6625(h) & 40 CFR Part 63, Subpart ZZZZ Table 2d]

(5) Annual Time Limit for Maintenance and Testing

The Emergency Generator and the Fire Pump shall each be limited to 100 hours per year for maintenance checks and readiness testing, emergency demand response, and periods of voltage or frequency deviation from standards. Up to 50 hours per year of the 100 hours per year may be used in non-emergency situations (this does not include peak shaving, non-emergency demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity unless the conditions in §63.6640(f)(4)(ii) are met). [40 CFR §63.6640(f)]

(6) Recordkeeping

CMJ shall keep records that include maintenance conducted on the Emergency Generator and the Fire Pump, and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the hours spent for emergency operation, including what classified the operation as emergency and how many hours spent for non-emergency. If the generators are operated during a period of demand response or deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in §63.6640(f)(4)(ii), CMJ must keep records of the notification of the emergency situation, and the date, start time, and end time of generator operation for these purposes. [40 CFR §63.6655(e) and (f)]

(7) Requirements for Demand Response Availability Over 15 Hours per Year

If CMJ operates or is contractually obligated to be available for more than 15 hours per calendar year in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in §63.6640(f)(4)(ii), the facility shall submit an annual report containing the information in §63.6650(h)(1)(i) through (ix). The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year. The annual report must be submitted electronically using the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) ([www.epa.gov/cdx](http://www.epa.gov/cdx)). However, if the reporting form is not available in CEDRI at the time that the report is due, the written report must be submitted to the following address:

Director, Office of Ecosystem Protection  
U.S. Environmental Protection Agency  
5 Post Office Square, Suite 100  
Boston, MA 02109-3912

[40 CFR §63.6650(h)]

3. Emission Limits and Streamlining

For the Emergency Generator and the Fire Pump, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below.

**Emergency Generator**

<u>Pollutant</u>	<u>Applicable Emission Standard(s)</u>	<u>Origin and Authority</u>	<u>Licensed Emission Limits</u>
PM	0.79 lb/hr	06-096 CMR 140, BPT	0.79 lb/hr
PM <sub>10</sub>	0.79 lb/hr	06-096 CMR 140, BPT	0.79 lb/hr
SO <sub>2</sub>	0.01 lb/hr	06-096 CMR 140, BPT	0.01 lb/hr
NO <sub>x</sub>	11.20 lb/hr	AP-42 Table 3.3-1 dated 10/96 (4.41 lb/MMBtu) and 06-096 CMR 140, BPT	11.20 lb/hr
CO	2.41 lb/hr	AP-42 Table 3.3-1 dated 10/96 (0.95 lb/MMBtu) and 06-096 CMR 140, BPT	2.41 lb/hr
VOC	0.89 lb/hr	AP-42 Table 3.3-1 dated 10/96 (0.36 lb/MMBtu) and 06-096 CMR 140, BPT	0.89 lb/hr
Visible Emissions	20% opacity on a 6-min block average except for no more than two 6-minute block averages in a 3-hour period	06-096 CMR 101	20% opacity on a 6-min block avg. except for no more than two 6-minute block averages in a 3-hour period

**Fire Pump**

<u>Pollutant</u>	<u>Applicable Emission Standard(s)</u>	<u>Origin and Authority</u>	<u>Licensed Emission Limits</u>
PM	0.59 lb/hr	06-096 CMR 140, BPT	0.59 lb/hr
PM <sub>10</sub>	0.59 lb/hr	06-096 CMR 140, BPT	0.59 lb/hr
SO <sub>2</sub>	0.01 lb/hr		0.01 lb/hr
NO <sub>x</sub>	8.38 lb/hr	AP-42 Table 3.3-1 dated 10/96 (4.41 lb/MMBtu) and 06-096 CMR 140, BPT	8.38 lb/hr
CO	1.81 lb/hr	AP-42 Table 3.3-1 dated 10/96 (0.95 lb/MMBtu) and 06-096 CMR 140, BPT	1.81 lb/hr
VOC	0.68 lb/hr	AP-42 Table 3.3-1 dated 10/96 (0.36 lb/MMBtu) and 06-096 CMR 140, BPT	0.68 lb/hr
Visible Emissions	20% opacity on a 6-min block average, except for no more than two 6-minute block averages in a 3-hour period	06-096 CMR 101	20% opacity on a 6-min block avg, except for no more than two 6-minute block averages in a 3-hour period

The Emergency Generator and the Fire Pump shall each be limited to 100 hours of non-emergency operation a year, based on a calendar year. There is no hour limit on emergency operation.

4. Emission Limit Compliance Methods

Compliance with the emission limits associated with the emergency generator and the fire pump shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

5. Periodic/Parameter Monitoring

CMJ shall monitor and record parameters for the Emergency Generator and the Fire Pump as indicated in the following table whenever the equipment is operating.

<u>Parameter</u>	<u>Units of Measure</u>	<u>Monitoring Tool/Method</u>	<u>Frequency</u>
Fuel oil sulfur content	Percent sulfur, by weight	Fuel receipts from supplier	As fuel is purchased
Operating time	Hours	Hour Meter	Monthly and 12-month rolling total
Type of Operation (emergency, maintenance, et cetera)	N/A	Logbook	As occurs

6. Parameter Monitors

There are no Parameter Monitors required for the Emergency Generator or the Fire Pump.

7. CEMS and COMS

There are no CEMS or COMS required for the Emergency Generator or the Fire Pump.

**F. Facility Annual Emissions**

1. Total Annual Emissions

CMJ is licensed for the following annual emissions, based on a 12-month rolling total. The tons per year limits were calculated based on the following:

- Boiler 1 wood use of 170,968 tons per year (8,500 Btu/lb, 5.56% moisture, or equivalent) based on 8,040 hours per year of operation.
- Boiler 1 propane use of 250,000 gallons per year.
- Emergency Generator based on the operating limit of 100 hours per year.
- Fire Pump based on the operating limit of 100 hours per year.



**Total Licensed Annual Emissions for the Facility**  
**Tons per year**  
 (Used to calculate the annual license fee)

	<u>PM</u>	<u>PM<sub>10</sub></u>	<u>SO<sub>2</sub></u>	<u>NO<sub>x</sub></u>	<u>CO</u>	<u>VOC</u>
Boiler 1	43.6	43.6	44.2	-	247.1	145.3
Emer. Generator	0.2	0.2	0.01	-	0.6	0.2
Fire Pump	0.2	0.2	0.01	-	0.5	0.2
<b>Total TPY</b>	<b>44.0</b>	<b>44.0</b>	<b>44.47</b>	<b>249.9</b>	<b>248.2</b>	<b>145.7</b>

<u>Pollutant</u>	<u>Tons per year</u>
Single HAP	9.9
Total HAP	24.9

2. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011, through ‘Tailoring’ revisions made to EPA’s *Approval and Promulgation of Implementation Plans*, 40 CFR Part 52, Subpart A, §52.21 Prevention of Significant Deterioration of Air Quality rule. Greenhouse gases, as defined in 06-096 CMR 100 (as amended), are the aggregate group of the following gases: Carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO<sub>2</sub>e).

Based on the facility’s fuel use limit(s), the worst case emission factors from AP-42, IPCC (Intergovernmental Panel on Climate Change), and *Mandatory Greenhouse Gas Reporting*, 40 CFR Part 98, and the global warming potentials contained in 40 CFR Part 98, CMJ is above the major source threshold of 100,000 tons of CO<sub>2</sub>e per year.

**III.AMBIENT AIR QUALITY ANALYSIS**

CMJ previously submitted an ambient air quality analysis demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards (see license A-91-70-A-I, issued on September 5<sup>th</sup>, 2001). An additional ambient air quality analysis is not required for this Part 70 License.

### ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this source:

- will receive Best Practical Treatment;
- will not violate applicable emissions standards; and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants the Part 70 License A-91-70-C-R pursuant to 06-096 CMR 140 and the preconstruction permitting requirements of 06-096 CMR 115 and subject to the standard and specific conditions below.

All federally enforceable and State-only enforceable conditions in existing air licenses previously issued to CMJ pursuant to the Department's preconstruction permitting requirements in 06-096 CMR 108 or 115 have been incorporated into this Part 70 license, except for such conditions that the Department has determined are obsolete, extraneous or otherwise environmentally insignificant, as explained in the findings of fact accompanying this permit. As such, the conditions in this license supersede all previously issued air license conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in 06-096 CMR 115 for making such changes and pursuant to the applicable requirements in 06-096 CMR 140.

For each standard and specific condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only.**

Severability. The invalidity or unenforceability of any provision, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

## STANDARD STATEMENTS

- (1) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both; [06-096 CMR 140]
- (2) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege; [06-096 CMR 140]
- (3) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable. [06-096 CMR 140]
- (4) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license; [06-096 CMR 140]
- (5) Notwithstanding any other provision in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 140]
- (6) Compliance with the conditions of this Part 70 license shall be deemed compliance with any Applicable requirement as of the date of license issuance and is deemed a permit shield, provided that:
  - A. Such Applicable and state requirements are included and are specifically identified in the Part 70 license, except where the Part 70 license term or condition is specifically identified as not having a permit shield; or
  - B. The Department, in acting on the Part 70 license application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 license includes the determination or a concise summary, thereof.

Nothing in this section or any Part 70 license shall alter or affect the provisions of Section 303 of the CAA (emergency orders), including the authority of EPA under Section 303; the liability of an owner or operator of a source for any violation of Applicable requirements prior to or at the time of permit issuance; or the ability of EPA to obtain information from a source pursuant to Section 114 of the CAA.

The following requirements have been specifically identified as not applicable based upon information submitted by the licensee in an application dated March 1, 2006.

<u>Source</u>	<u>Citation</u>	<u>Description</u>	<u>Basis for Determination</u>
Boiler 1	40 CFR Parts 72 and 73	Acid Rain Provisions	CMJ is exempt from the Acid Rain Program
Boiler 1	40 CFR Part 60.45(j)	Compliance and performance test methods and procedures for sulfur dioxide	CMJ fires only propane as its secondary fuel
Boiler 1	40 CFR Part 60.44b	There is no NSPS NO <sub>x</sub> limit if the affected facility has an annual capacity factor less than 10% for firing oil in combination with wood.	Boiler 1 has an annual capacity factor less than 10% for waste oil firing.
Boiler 1	40 CFR Part 60.42b	Standard for sulfur dioxide	Boiler 1 does not fire coal or oil
Boiler 1	40 CFR Part 75	Compliance Assurance Monitoring	CAM Plan not required because of CEMS and COMS
Boiler 1	Chapter 117	Source Surveillance RATA requirements	The timeframe for a RATA to be performed has been altered due to these units being peaking units.
Emergency Generator	Chapter 103, Section 2(B)(4)(c)	Particulate emission limit for fuel burning equipment > 3.0 MMBtu/hr.	Not applicable, unit is < 3.0 MMBtu/hr.
Emergency Generator	40 CFR 60, Subsection III	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines	Emergency Generator was manufactured and installed prior to April 2006
Fire Pump	Chapter 103, Section 2(B)(4)(c)	Particulate emission limit for fuel burning equipment > 3.0 MMBtu/hr.	Not applicable, unit is < 3.0 MMBtu/hr.

[06-096 CMR 140]

- (7) The Part 70 license shall be reopened for cause by the Department or EPA, prior to the expiration of the Part 70 license, if:
- A. Additional Applicable requirements under the CAA become applicable to a Part 70 major source with a remaining Part 70 license term of 3 or more years. However, no opening is required if the effective date of the requirement is later than the date on which the Part 70 license is due to expire, unless the original Part 70 license or any of its terms and conditions has been extended pursuant to 06-096 CMR 140;
  - B. Additional requirements (including excess emissions requirements) become applicable to a Title IV source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the Part 70 license;
  - C. The Department or EPA determines that the Part 70 license contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Part 70 license; or
  - D. The Department or EPA determines that the Part 70 license must be revised or revoked to assure compliance with the Applicable requirements.

The licensee shall furnish to the Department within a reasonable time any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the Part 70 license or to determine compliance with the Part 70 license.

[06-096 CMR 140]

- (8) No license revision or amendment shall be required, under any approved economic incentives, marketable licenses, emissions trading and other similar programs or processes for changes that are provided for in the Part 70 license.  
[06-096 CMR 140]

#### **STANDARD CONDITIONS**

- (1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions and this license (38 MRSA §347-C).

- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 140. [06-096 CMR 140]
- (3) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 140]  
**Enforceable by State-only**
- (4) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to 38 MRSA §353-A.
- (5) The licensee shall maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 140]  
**Enforceable by State-only**
- (6) The licensee shall retain records of all required monitoring data and support information for a period of at least six (6) 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 for continuous monitoring instrumentation, and copies of all reports required by the Part 70 license. The records shall be submitted to the Department upon written request or in accordance with other provisions of this license. [06-096 CMR 140]
- (7) The licensee shall comply with all terms and conditions of the air emission license. The submission of notice of intent to reopen for cause by the Department, the filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for the renewal of a Part 70 license or amendment shall not stay any condition of the Part 70 license. [06-096 CMR 140]
- (8) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:

- A. perform stack testing under circumstances representative of the facility's normal process and operating conditions:
  - 1. within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions;
  - 2. to demonstrate compliance with the applicable emission standards; or
  - 3. pursuant to any other requirement of this license to perform stack testing.
- B. install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
- C. submit a written report to the Department within thirty (30) days from date of test completion.

[06-096 CMR 140]

**Enforceable by State-only**

- (9) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicates emissions in excess of the applicable standards, then:
  - A. within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department;
  - B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
  - C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 CMR 140]

**Enforceable by State-only**

(10) The licensee shall maintain records of all deviations from license requirements. Such deviations shall include, but are not limited to malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emission unit itself that is not consistent with the terms and conditions of the air emission license.

A. The licensee shall notify the Commissioner within 48 hours of a violation of any emission standard and/or a malfunction or breakdown in any component part that causes a violation of any emission standard, and shall report the probable cause, corrective action, and any excess emissions in the units of the applicable emission limitation.

B. The licensee shall submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component part causes a violation of any emission standard, together with any exemption requests.

Pursuant to 38 MRSA § 349(9), the Commissioner may exempt from civil penalty an air emission in excess of license limitations if the emission occurs during start-up or shutdown or results exclusively from an unavoidable malfunction entirely beyond the control of the licensee and the licensee has taken all reasonable steps to minimize or prevent any emission and takes corrective action as soon as possible. There may be no exemption if the malfunction is caused, entirely or in part, by poor maintenance, careless operation, poor design or any other reasonably preventable condition or preventable equipment breakdown. The burden of proof is on the licensee seeking the exemption under this subsection.

C. All other deviations shall be reported to the Department in the facility's semiannual report.

[06-096 CMR 140]

(11) Upon the written request of the Department, the licensee shall establish and maintain such records, make such reports, install, use, and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 140]

(12) The licensee shall submit semiannual reports of any required periodic monitoring. All instances of deviations from Part 70 license requirements must be clearly identified in such reports. All required reports must be certified by a responsible official. [06-096 CMR 140]



- (13) The licensee shall submit a compliance certification to the Department and EPA at least annually, or more frequently if specified in the applicable requirement or by the Department. The compliance certification shall include the following:
- A. The identification of each term or condition of the Part 70 license that is the basis of the certification;
  - B. The compliance status;
  - C. Whether compliance was continuous or intermittent;
  - D. The method(s) used for determining the compliance status of the source, currently and over the reporting period; and
  - E. Such other facts as the Department may require to determine the compliance status of the source.
- [06-096 CMR 140]

#### **SPECIFIC CONDITIONS**

(14) **Boiler 1**

- A. Allowable Fuels
  - 1. Boiler 1 is licensed to fire biomass fuel (meaning bark and wood chips) and propane. [06-096 CMR 140, BPT and 06-096 CMR 860]
  - 2. CMJ shall maintain records of the quantity of each fuel consumed on a daily, monthly and 12-month rolling total basis. [06-096 CMR 140, BPT]
- B. Boiler 1 steam production shall be limited to 240,000 pounds per hour, at 1450 psig, averaged over a two (2) hour period. CMJ shall monitor and record steam flow continuously for Boiler 1. “Continuously” is defined as equally spaced data points with at least one data point for each successive fifteen (15) minute period. A minimum of three (3) evenly spaced data points constitutes a valid hour.

The steam flow monitor must record accurate and reliable data. If the parameter monitor is recording accurate and reliable data less than 98% of the source operating time within any quarter of the calendar year, the Department may initiate enforcement action and may include in that enforcement action any period of time that the parameter monitor was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction of the Department that the failure of the system to record accurate and reliable data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions.

[06-096 CMR 140, BPT]

C. Wood Use

The maximum amount of wood fired in Boiler 1 shall not exceed 170,968 tons per year (8,500 Btu/lb, 5.56% moisture, or equivalent) based on 8,040 hours per year of operation.

D. Propane Use

The maximum heat input capacity from propane in Boiler 1 for boiler start-up and flame stabilization shall not exceed 30.0 MMBtu/hr (320 gallons per hour). Propane use shall be documented by the propane tank gauge readings and company propane delivery records. The maximum 12-month rolling total of propane fired in Boiler 1 shall not exceed 250,000 gallons.

E. Boiler 1 Emission Limits

1. Emissions from Boiler 1 shall not exceed the following limits:

<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>Origin and Authority</u>	<u>Enforceability</u>
PM	0.03	06-096 CMR 140, BPT	-
PM <sub>10</sub>	0.03	06-096 CMR 140, BPT	<b>Enforceable by State-only</b>
NO <sub>x</sub>	0.3	06-096 CMR 140, BPT, NO <sub>x</sub> RACT	-
CO	0.17	BACT (A-91-72-A-N)	-

NO<sub>x</sub>: The 0.30 pound per million Btu limit is based on a 24-hour daily block average measured with a CEM. A 24-hour block average shall be defined as midnight to midnight. In accordance with 06-096 CMR 138 §3(O), periods of start-up, shut-down, equipment malfunction and fuel switching shall not be included in determining the 24-hour daily block arithmetic average emission rates. CMJ shall maintain the NO<sub>x</sub> CEM in accordance with 06-096 CMR 117. The CEM shall meet the monitoring requirements of Condition (21). Boiler 1 shall be equipped with an oxygen (O<sub>2</sub>) CEM that meets the criteria of Condition (21).

<u>Pollutant</u>	<u>lb/hr</u>	<u>Origin and Authority</u>	<u>Enforceability</u>
PM	10.85	40 CFR Part 60, App. A	-
PM <sub>10</sub>	10.85	40 CFR Part 60, App. A	<b>State Only</b>
SO <sub>2</sub>	11.0	40 CFR Part 60, App. A	-
NO <sub>x</sub>	108.45	40 CFR Part 60, App. A	-
CO	62.2	40 CFR Part 60, App. A	-
VOC	36.2	40 CFR Part 60, App. A	-

2. Visible emissions from Boiler 1 shall not exceed 20% opacity on a six (6)-minute block average basis, except no more than one (1), six (6)-minute period per hour of not more than 27%, subject to the exemptions listed in 06-096 CMR 101, Section 3(E) and 40 CFR 60.43B(g). The opacity limit shall not apply during a total of 4 hours during the period of cold startup or shutdown provided records are available to demonstrate that the unit was being operated to minimize emissions. [06-096 CMR 101]

F. Compliance Methods

Compliance with the emission limits listed above shall be demonstrated in accordance with the following methods and frequencies, or other methods and frequencies as approved by the Department [06-096 CMR 140]:

<u>Pollutant</u>	<u>Unit of Emission Standard</u>	<u>Compliance Method</u>	<u>Frequency</u>
PM	lb/MMBtu and lb/hr	40 CFR Part 60, App. A, Method 5	Once every five years
PM <sub>10</sub>	lb/MMBtu and lb/hr	40 CFR Part 60, App. A, Method 5, or EPA Test Method 201 or 201A	As requested
SO <sub>2</sub>	lb/hr	40 CFR Part 60, App. A, Method 6	As requested
NO <sub>x</sub>	lb/MMBtu	NO <sub>x</sub> CEMS on a 24-hour block average basis; midnight to midnight	Continuous
	lb/hr	40 CFR Part 60, App. A, Method 7	As requested
CO	lb/hr	40 CFR Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 CFR Part 60, App. A, Method 25 or 25A	As requested

G. Visible Emissions monitoring requirement

Visible emissions shall be limited to 20% opacity on a six (6)-minute block average basis, except for one (1), six (6)-minute period per hour of not more than 27% opacity. Compliance shall be determined by monitoring with a COMS on a six (6)-minute block average basis.

- H. Emissions from Boiler 1 shall vent to Stack 1 which shall be at least 136 feet AGL. [06-096 CMR 140, BPT, A-91-72-A-N]

I. Control Equipment

Particulate matter (PM, PM10) emissions from Boiler 1 shall be controlled by the operation and maintenance of a multiple centrifugal cyclone separator followed by an electrostatic precipitator.

CMJ shall operate, at a minimum, the number of ESP chambers and number of fields per chamber that operated during the most recent demonstration of compliance with the licensed particulate emission limits.

Data for the following points in the ESP shall be recorded once per day during operation:

- 1) Primary and secondary voltages on each field
- 2) Primary and secondary current on each field.

[06-096 CMR 140, BPT]

Upon written notification to the Department, and in accordance with the Bureau of Air Quality's Air Emission Compliance Test Protocol, CMJ may perform additional particulate emission testing to demonstrate compliance with alternative operating scenarios, but under no circumstance shall CMJ be relieved of its obligation to meet its licensed emission limits.

[06-096 CMR 140, BPT]

J. NO<sub>x</sub> Emissions

CMJ shall emit no more than 249.9 tons of NO<sub>x</sub> per year, based on a 12-month rolling total.

CMJ shall determine the annual NO<sub>x</sub> emissions from Boiler 1 as follows:

$$\text{NO}_x \text{ lb/MMBtu} = (\text{NO}_x \text{ ppm}) \times (20.9) / (20.9 - \% \text{ O}_2) \times (1.194510^{-7}) \times (9240)$$

NO<sub>x</sub> ppm and % O<sub>2</sub> are from the CEM. The conversion factor for ppm NO<sub>x</sub>, 1.194510<sup>-7</sup>, and the F factor for wood, 9240, are both from 40 CFR Part 60, Method 19.

$$\text{NO}_x \text{ Tons Per Year (TPY)} = ((\text{NO}_x \text{ lb/MMBtu}) \times (\text{Boiler Heat Rate/megawatt}) \times (\text{megawatts generated})) / 2000$$

NO<sub>x</sub> lb/MMBtu is from the CEM.

Boiler Heat Rate is from Babcock & Wilcox as accepted by Plant Owners.

Megawatts generated will be from Bangor Hydro Electric metering.

[A-91-70-A-I]

K. Opacity Limit

CMJ shall operate Boiler 1 such that opacity does not exceed 20% over a six (6) minute average except for not more than one (1), six (6) minute period per hour of not more than 27%, subject to the exemptions listed in 06-096 CMR 101, Section 3 and 40 CFR Part 60.43b(g).

Compliance with the opacity limit shall be demonstrated by means of a continuous opacity monitoring system. The COM shall be installed and certified on the breaching of the ESP to the stack. CMJ shall maintain the COM in accordance with Condition (18). [06-096 CMR 140, BPT]

L. Boiler 1 is subject to 40 CFR Part 60 Subparts A and Db; CMJ shall comply with the notification and record keeping requirements of 40 CFR Part 60.7.

40 CFR Part 60 Subpart Db requires maintaining records of the amount of each fuel combusted each day and calculation of annual capacity factor individually for wood and propane for each semiannual period. CMJ shall maintain monthly fuel used records and determine an annual capacity factor on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.

Compliance shall be demonstrated by recording the propane use on an hourly basis.

M. Boiler 1 is subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63 Subpart JJJJJ). A summary of the currently applicable federal 40 CFR Part 63 Subpart JJJJJ requirements is listed below. Notification forms and additional rule information can be found on the following website:

<http://www.epa.gov/ttn/atw/boiler/boilerpg.html>.

a. Compliance Dates, Notifications, and Work Practice Requirements

i. Initial Notification of Compliance

An Initial Notification submittal to EPA is due no later than January 20, 2014. [40 CFR Part 63.11225(a)(2)]

Covanta completed this submittal September 7, 2011.

ii. Boiler Tune-Up Program

- (a) A boiler tune-up program shall be implemented to include the initial tune-up of applicable boilers no later than March 21, 2014. [40 CFR Part 63.11196(a)(1)]

Covanta completed the initial tune-up December 18, 2013.

- (b) The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:
1. As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted; not to exceed 36 months from the previous inspection for boilers greater than 5 MMBtu/hr or 72 months from the previous inspection for oil fired boilers less than 5 MMBtu/hr, boilers with oxygen trim system, seasonal boilers, and limited use boilers. [40 CFR Part 63.11223(b)(1)]
  2. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 CFR Part 63.11223(b)(2)]
  3. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted; not to exceed 36 months from the previous inspection for boilers greater than 5 MMBtu/hr or 72 months from the previous inspection for oil fired boilers less than 5 MMBtu/hr, boilers with oxygen trim system, seasonal boilers, and limited use boilers. [40 CFR Part 63.11223(b)(3)]
  4. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 CFR Part 63.11223(b)(4)]
  5. Measure the concentration in the effluent stream of carbon monoxide (CO) in parts per million by volume (ppmv), and oxygen in volume percent, before and after 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 Part 63.11223(b)(5)]
  6. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up. [40 CFR Part 63.11223(b)(7)]

- (c) After conducting the initial boiler tune-up, a Notification of Compliance Status shall be submitted to EPA no later than July 19, 2014. [40 CFR Part 63.11225(a)(4) and 40 CFR Part 63.11214(b)]

Covanta completed the notification June 24, 2014.

- (d) The facility shall implement a boiler tune-up program after the initial tune-up and initial compliance report (called a Notification of Compliance Status) has been submitted.

1. Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. See chart below:

Boiler Category	Tune-Up Frequency
<b>New or Existing Oil, Biomass and Coal fired boilers that are not designated as "Boilers with less frequent tune up requirements" listed below</b>	Every 2 years

[40 CFR Part 63.11223(a) and Table 2]

2. The tune-up compliance report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the concentration of CO in the effluent stream (ppmv) and oxygen in volume percent, measured at high fire or typical operating load, before and after the boiler tune-up, a description of any corrective actions taken as part of the tune-up of the boiler, and the types and amounts of fuels used over the 12 months prior to the tune-up of the boiler. [40 CFR Part 63.11223(b)(6)]

The compliance report shall also include the company name and address; a compliance statement signed by a responsible official certifying truth, accuracy, and completeness; and a description of any deviations and corrective actions. [40 CFR Part 63.11225(b)]

iii. Energy Assessment

Boiler 1 is subject to the energy assessment requirement as follows:

- (a) A one-time energy assessment shall be performed by a qualified energy assessor on the applicable boilers no later than March 21, 2014. [40 CFR Part 63.11196(a)(3)]

Covanta completed the assessment March 21, 2014.

- (b) The energy assessment shall include a visual inspection of the boiler system; an evaluation of operating characteristics of the affected boiler systems, specifications of energy use systems, operating and maintenance procedures, and unusual operating constraints; an inventory of major energy use systems consuming energy from affected boiler(s) and which are under control of the boiler owner or operator; a review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage; a list of major energy conservation measures that are within the facility's control; a list of the energy savings potential of the energy conservation measures identified; and a comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments. [40 CFR Part 63, Table 2(4)]
- (c) A Notification of Compliance Status (NOCS) shall be submitted to EPA no later than July 19, 2014. [40 CFR Part 63.11225(a)(4) and 40 CFR Part 63.11214(c)]

Covanta completed the notification June 24, 2014.



b. Recordkeeping

Records shall be maintained consistent with the requirements of 40 CFR Part 63 Subpart JJJJJ including the following [40 CFR Part 63.11225(c)]: copies of notifications and reports with supporting compliance documentation; identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned; documentation of fuel type(s) used monthly by each boiler; the occurrence and duration of each malfunction of the boiler; and actions taken during periods of malfunction to minimize emissions and actions taken to restore the malfunctioning boiler to its usual manner of operation. Records shall be in a form suitable and readily available for expeditious review.

N. Waste Oil

CMJ may burn up to 500 gallons per year of waste oil in Boiler 1. The waste oil shall be fed into the boiler mixed with the wood chips on the boiler feed belt. Only waste oil generated on-site that meets the Department's criteria for specification or off-specification waste oil may be burned. CMJ shall maintain records of the amount of waste oil burned in Boiler 1 on a 12-month rolling total basis. [06-096 CMR 140, BPT] **Enforceable by State Only.**

O. Wood Chip Storage and Handling

Should wind action or handling of wood chips result in visible emissions in excess of 5% opacity, the chips shall be controlled to eliminate visible emission in excess of 5% opacity on a six (6) minute average. [06-096 CMR 140, BPT] **Enforceable by State Only.**

P. Preventative Maintenance Log

A log for Boiler 1 shall be maintained showing preventative maintenance actions being performed. [06-096 CMR 140, BPT] **[Enforceable by State Only.]**

Q. Periodic Monitoring

CMJ shall monitor and record parameters for Boiler 1 and its associated air pollution control equipment as indicated in the following table(s) whenever the equipment is operating. [06-096 CMR 140, BPT]

If a monitor is recording accurate and reliable data less than 90% of the source operating time within any quarter of the calendar year, the Department may initiate enforcement action and may include in that enforcement action any period of time that the monitor was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction of the Department that the failure of the system to record accurate and reliable data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions.

<b>Boiler 1</b>			
<b><u>Parameter</u></b>	<b><u>Units of Measure</u></b>	<b><u>Monitoring Tool/Method</u></b>	<b><u>Frequency</u></b>
Wood fuel use	Tons	Calculated from interpolation tables developed for Boiler 1 by Babcock & Wilcox using MW-hr generated & boiler heat rate	Daily, monthly, and 12-month rolling total
Propane Use	Gallons	Readings from propane tank gauge and purchase records	Daily, monthly, and 12-month rolling total
Operating time	Hours	CEM Data Acquisition System (DAS) or Boiler control system (DCS)	Monthly, and 12-month rolling total
Steam production	Pounds per hour	Steam flow meter	Continuously
Steam temperature	Degrees Fahrenheit	Thermocouple	Continuously

<b>Multiclone on Boiler 1</b>			
<u>Parameter</u>	<u>Units of Measure</u>	<u>Monitoring Tool/Method</u>	<u>Frequency</u>
Gas pressure drop across multiclone	Pounds per square inch (gauge) or inches water (gauge)	Pressure gauges	Once per shift
Inlet gas temperature	Degrees Fahrenheit	Thermocouple	Once per shift

<b>ESP on Boiler 1</b>			
<u>Parameter</u>	<u>Units of Measure</u>	<u>Monitoring Tool/Method</u>	<u>Frequency</u>
Primary Voltage	Volts or kilovolts	Volt meter	Once per shift
Secondary Voltage	Volts or kilovolts	Volt meter	Once per shift
Primary Current	Amps	Amp meter	Once per shift
Secondary Current	Amps	Amp meter	Once per shift
Gas pressure drop across ESP	Pounds per square inch (gauge)	Pressure gauges	Once per shift

R. CEMS and COMS

CMJ shall operate and maintain the following continuous emission monitoring systems (CEMS) and the continuous opacity monitoring systems (COMS) for Boiler 1:

<u>Pollutant and Continuous Monitor</u>	<u>Unit of Measurement</u>	<u>Origin and Authority</u>
NO <sub>x</sub> CEMS	lb/MMBtu	06-096 CMR 117 and 06-096 CMR 138
O <sub>2</sub> CEMS	%	06-096 CMR 117
Opacity COMS	%	06-096 CMR 117

(15) **Emergency Generator and Fire Pump**

A. Allowable Fuel and Operation

1. The Emergency Generator and the Fire Pump are licensed to fire diesel fuel. [06-096 CMR 140, BPT]
2. The Emergency Generator and Fire Pump are each limited to 100 hours per year total non-emergency operation, based on a calendar year. There is no hour limit on emergency operation.

Compliance shall be demonstrated by a written log of all Emergency Generator and Fire Pump operating hours. [06-096 CMR 115]

B. Fuel Sulfur Content

1. The fuel oil sulfur content for the Emergency Generator and the Fire Pump shall be limited to 0.0015% sulfur. [06-096 CMR 140, BPT]
2. Fuel sulfur content compliance shall be demonstrated by fuel delivery receipts from the supplier documenting the type of fuel delivered and the sulfur content of the fuel. [06-096 CMR 140, BPT]

C. Emission Limits

Emissions shall not exceed the following limits [06-096 CMR 115, BPT]:

<u>Unit</u>	<u>PM</u> (lb/hr)	<u>PM<sub>10</sub></u> (lb/hr)	<u>SO<sub>2</sub></u> (lb/hr)	<u>NO<sub>x</sub></u> (lb/hr)	<u>CO</u> (lb/hr)	<u>VOC</u> (lb/hr)
Emergency Generator	0.79	0.79	0.01	11.20	2.41	0.89
Fire Pump	0.59	0.59	0.01	8.38	1.81	0.68

D. Visible Emissions

Visible emissions from each of the Emergency Generator and the Fire Pump shall not exceed 20% opacity on a six (6)-minute block average, except for no more than two (2), six (6)-minute block averages in a three (3) hour period. [06-096 CMR 101]

E. The Emergency Generator and the Fire Pump shall meet the applicable requirements of 40 CFR Part 63, Subpart ZZZZ, including the following:

1. No later than May 3, 2013, CMJ shall have met the following operational limitations for each of the compression ignition Emergency Generator and Fire Pump:
  - a. Change the oil and filter annually,
  - b. Inspect the air cleaner annually, and
  - c. Inspect the hoses and belts annually and replace as necessary.

A log shall be maintained documenting compliance with the operational limitations.

[40 CFR §63.6603(a) and Table 2(d); and 06-096 CMR 115]

2. Oil Analysis Program

CMJ has the option of utilizing an oil analysis program which complies with the requirements of §63.6625(i) in order to extend the specified oil change requirement. If this option is used, CMJ must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR §63.6625(i)]

3. Non-Resettable Hour Meter

A non-resettable hour meter shall be installed and operated on each of the Emergency Generator and the Fire Pump. [40 CFR §63.6625(f)]

4. Maintenance, Testing, and Non-Emergency Operating Situations

- a. The Emergency Generator and the Fire Pump shall each be limited to 100 hours per year for maintenance checks and readiness testing, emergency demand response, and periods of voltage or frequency deviation from standards. Up to 50 hours per year of the 100 hours per year may be used in non-emergency situations (this does not include peak shaving, non-emergency demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity unless the conditions in §63.6640(f)(4)(ii) are met). These limits are based on a calendar year. Compliance shall be demonstrated by a written log of all generator operating hours. [40 CFR §63.6640(f) and 06-096 CMR 115]

- b. CMJ shall keep records that include maintenance conducted on the Emergency Generator and the Fire Pump and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the hours spent for emergency operation, including what classified the operation as emergency and how many hours spent for non-emergency. If the engines are operated during a period of demand response or deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in §63.6640(f)(4)(ii), the CMJ must keep records of the notification of the emergency situation, and the date, start time, and end time of generator operation for these purposes. [40 CFR §63.6655(e) and (f)]
5. The Emergency Generator and Fire Pump shall be operated and maintained according to the manufacturer's emission-related written instructions, or CMJ shall develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engines in a manner consistent with good air pollution control practice for minimizing emissions. [40 CFR §63.6625(e)]
6. During periods of startup the facility must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations apply. [40 CFR §63.6625(h) & 40 CFR Part 63, Subpart ZZZZ Table 2d]
7. If CMJ operates or is contractually obligated to be available for more than 15 hours per calendar year in a demand response program, during a period of deviation from standard voltage or frequency, or supplying power during a non-emergency situation as part of a financial arrangement with another entity as specified in §63.6640(f)(4)(ii), the facility shall submit an annual report containing the information in §63.6650(h)(1)(i) through (ix). The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year. The annual report must be submitted electronically using the Compliance and Emissions Data Reporting Interface that is accessed through EPA's Central Data Exchange ([www.epa.gov/cdx](http://www.epa.gov/cdx)). However, if the reporting form is not available in CEDRI at the time that the report is due, the written report must be submitted to the following address:

Director, Office of Ecosystem Protection  
U.S. Environmental Protection Agency  
5 Post Office Square, Suite 100  
Boston, MA 02109-3912

[40 CFR §63.6650(h)]

(16) **Fugitive Emissions**

Visible emissions from a fugitive emission source, including stockpiles, roadways and ash, shall be controlled by wetting with water, calcium chloride or any other methods as approved by the Bureau of Air Quality.

Visible emissions shall not exceed 10 percent opacity, on a six (6)-minute block average basis, except for no more than one (1), six (6)-minute block average in a one (1)-hour period. [06-096 CMR 101]

(17) **General Process Sources**

Visible emissions from any general process source shall not exceed an opacity of 20% on a six (6)-minute block average basis, except for no more than one (1), six (6)-minute block average in a one (1)-hour period. [06-096 CMR 101]

(18) **CEMS, COMS and Parameter Monitor General Requirements** [06-096 CMR 140 and 117, BPT]

The CEMS, COMS and parameter monitors required by this license shall be the primary means of demonstrating compliance with emission standards set by this Order, statute, state or federal regulation, as applicable. CMJ shall comply with the following:

All CEMS and COMS shall meet the sampling and performance criteria specified in 40 CFR Part 51, Appendix P, and shall be operated in accordance with 40 CFR Part 60, Appendix B and F, and Chapter 117 of the Department's regulations.

- A. If the CEMS for the gaseous emissions is recording accurate and reliable data less than 90% of the source operating time within any quarter of the calendar year, the Department may initiate enforcement action and may include in that enforcement action any period of time that the CEMS was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction of the Department that the failure of the system to record accurate and reliable data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions.
- B. If the COMS is recording accurate and reliable data less than 95% of the source operating time within any quarter of the calendar year, the Department may initiate enforcement action and may include in that enforcement action any period of time that the COMS was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction of the Department that the failure of the system to record accurate and reliable data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions.
- C. CMJ shall conduct Relative Accuracy Testing (RATA) and/or Performance Audits in accordance with Chapter 117 of the Department's regulations unless the unit has not had 168 operating hours, as defined in 40 CFR Part 72, in a quarter than that quarter shall be excluded in determining the deadline for the next RATA. If the RATA has not been completed by the end of the eighth calendar quarter since the quarter of the last RATA, then the RATA must be completed within a 720 unit operating hour grace period following the end of the eighth successive elapsed calendar quarter, or the data from the CEMS will become invalid.
- D. CMJ shall perform a cylinder gas audit (CGA) in accordance with 40 CFR Part 60, Appendix F, if Boiler 1 is run during the quarter. CGA's may be conducted at any load. Upon request of CMJ, DEP may waive the requirement of Chapter 117 that notice be provided 10 days in advance of a CGA and the requirement of Chapter 117 and 40 CFR Part 60, Appendix F, that CGA's must be conducted no less than 60 days apart.
- E. CMJ shall develop and maintain an updated quality assurance plan for all CEMS and COMS in accordance with 40 CFR Part 60, Appendix F and Chapter 117 of the Department's regulations.

**Enforceable by State-only**



(19) **CEMS and COMS Recordkeeping**

For all the CEMS and COMS, equipment parameter monitoring and recording, required by this license, the licensee shall maintain records of the most current six year period and the records shall include:

- A. Documentation which shows monitor operational status during all source operating time, including specific for calibration and audits;
- B. A complete data set of all monitored parameters as specified in this license. All parameter records shall be made available to the Bureau of Air Quality upon request.
- C. Documentation that all CEMS and COMS are continuously accurate, reliable and operated in accordance with 06-096 CMR 117 (as amended), 40 CFR Part 51, Appendix P, and 40 CFR Part 60, Appendices B and F;
- D. Records of all measurements, performance evaluations, calibration checks, and maintenance or adjustments for each CEMS and COMS as required by 40 CFR Part 51 Appendix P; and
- E. Records or other data indicative of compliance with the applicable emission standards for those periods when the CEMS or COMS were not in operation or produced invalid data. Methods allowed by 40 CFR Part 75 may be used to demonstrate compliance with applicable emission standards. In the event the Department does not concur with the licensee's compliance determination, the licensee shall, upon the Department's request, provide additional data, and shall have the burden of demonstrating that the data is indicative of compliance with the applicable standard, and
- F. A 24-hour block average shall be calculated as the arithmetic average of not more than 24 one-hour block periods. Only one 24-hour block average shall be calculated for one day, beginning at midnight. A valid 24-hour block average must contain at least 12 hours during which operation occurred. Hours in which no operation occurs shall not be included in the 24-hour block average.

[06-096 CMR 140]

**Enforceable by State-only**

(20) **Quarterly Reporting**

The licensee shall submit a Quarterly Report to the Bureau of Air Quality within 30 days after the end of each calendar quarter, detailing the following, for the control equipment, parameter monitors, Continuous Emission Monitoring Systems, and Continuous Opacity Monitoring Systems required by this license.  
[06-096 CMR 117]

- A. All control equipment downtimes and malfunctions;
- B. All CEMS or COMS downtimes and malfunctions;
- C. All parameter monitor downtimes and malfunctions;
- D. All excess events of emission and operational limitations set by this Order, Statute, state or federal regulations, as appropriate. The following information shall be reported for each excess event;
  - 1. Standard exceeded;
  - 2. Date, time, and duration of excess event;
  - 3. Amount of air contaminant emitted in excess of the applicable emission standard expressed in the units of the standard;
  - 4. A description of what caused the excess event;
  - 5. The strategy employed to minimize the excess event; and
  - 6. The strategy employed to prevent reoccurrence.
- E. A report certifying there were no excess emissions, if that is the case.

(21) **Semiannual Reporting** [06-096 CMR 140]

- A. The licensee shall submit to the Bureau of Air Quality semiannual reports which are due on **January 31<sup>st</sup>** and **July 31<sup>st</sup>** of each year. The facility's designated responsible official must sign this report.
- B. The semiannual report shall be considered on-time if the postmark of the submittal is before the due date or if the report is received by the DEP within seven calendar days of the due date.
- C. Each semiannual report shall include a summary of the periodic monitoring required by this license.
- D. Each semiannual report shall include the annual capacity factor of Boiler 1 for each fuel.
- E. All instances of deviations from license requirements and the corrective action taken must be clearly identified and provided to the Department in summary form for each six-month interval.

(22) **Annual Compliance Certification**

CMJ shall submit an annual compliance certification to the Department in accordance with Standard Condition (13) of this license. The annual compliance certification is due January 31 of each year. The facility's designated responsible official must sign this report.

The annual compliance certification shall be considered on-time if the postmark of the submittal is before the due date or if the report is received by the Department within seven calendar days of the due date. Certification of compliance is to be based on the stack testing or monitoring data required by this license. Where the license does not require such data, or the license requires such data upon request of the Department and the Department has not requested the testing or monitoring, compliance may be certified based upon other reasonably available information such as the design of the equipment or applicable emission factors. [06-096 CMR 140]

(23) **Annual Emission Statement**

In accordance with *Emission Statements*, 06-096 CMR 137 (as amended), the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of either:

- A. A computer program and accompanying instructions supplied by the Department; or
- B. A written emission statement containing the information required in 06-096 CMR 137.

The emission statement must be submitted by the date as specified in 06-096 CMR 137.

[06-096 CMR 137]

(24) **General Applicable State Regulations**

The licensee is subject to the State regulations listed below.

<u>Origin and Authority</u>	<u>Requirement Summary</u>	<u>Enforceability</u>
06-096 CMR 102	Open Burning	-
06-096 CMR 109	Emergency Episode Regulation	-
06-096 CMR 110	Ambient Air Quality Standard	-
06-096 CMR 116	Prohibited Dispersion Techniques	-
38 MRS §585-B, §§5	Mercury Emission Limit	Enforceable by State-only

(25) **Units Containing Ozone Depleting Substances**

When repairing or disposing of units containing ozone depleting substances, the licensee shall comply with the standards for recycling and emission reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioning units in Subpart B. Examples of such units include refrigerators and any size air conditioners that contain CFCs.

[40 CFR, Part 82, Subpart F]

(26) **Expiration of a Part 70 license**

A. CMJ shall submit a complete Part 70 renewal application at least 6 months prior, but no more than 18 months prior, to the expiration of this air license.

B. Pursuant to Title 5 MRSA §10002, and 06-096 CMR 140, the Part 70 license shall not expire and all terms and conditions shall remain in effect until the Department takes final action on the renewal application of the Part 70 license. An existing source submitting a complete renewal application under 06-096 CMR 140 prior to the expiration of the Part 70 license will not be in violation of operating without a Part 70 license. **Enforceable by State-only**

DONE AND DATED IN AUGUSTA, MAINE THIS 14 DAY OF April, 2015.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Cone for  
PATRICIA W. AHO, COMMISSIONER

**The term of this license shall be five (5) years from the signature date above.**

[Note: If a complete renewal application as determined by the Department, is submitted at least 6 months prior to but no earlier than 18 months prior to the expiration of this license, then pursuant to Title 5 MRSA §10002, all terms and conditions of the Part 70 license shall remain in effect until the Department takes final action on the renewal of the Part 70 license.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 03/03/2006

Date of application acceptance: 03/16/2006

Date filed with the Board of Environmental Protection:

This Order prepared by N. Lynn Cornfield, PE, Bureau of Air Quality.

