



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE  
GOVERNOR

PATRICIA W. AHO  
COMMISSIONER

**Sanford Sewerage District  
York County  
Sanford, Maine  
A-1066-71-A-N (SM)**

**Departmental  
Findings of Fact and Order  
Air Emission License  
After-the-Fact**

After review of the air emissions license 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 Department finds the following facts:

**I. REGISTRATION**

A. Introduction

The Sanford Sewerage District Waste Water Treatment Plant located at 192 Gavel Road, Sanford, Maine has requested an after-the-fact air emissions license for an existing source from the Maine Department of Environmental Protection. The air emissions license is for fuel burning equipment associated with their waste water treatment facility.

B. Emission Equipment

The following equipment is addressed in this air emission license:

**Boilers**

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (gal/hr)</u>	<u>Fuel Type, % sulfur</u>	<u>Install. Date</u>	<u>Stack #</u>
Boiler #1	1.27*	9.27	# 2 Fuel Oil, 0.5%	2005	1

\* based on a fuel heat value of 0.137 MMBtu/gal

In addition, the Sanford Sewerage District (SSD) has two boilers firing #2 Fuel Oil each with a heat input capacity of 0.53 MMBtu/hr which are considered insignificant activities.

AUGUSTA  
17 STATE HOUSE STATION  
AUGUSTA, MAINE 04333-0017  
(207) 287-7688 FAX: (207) 287-7826  
RAY BLDG., HOSPITAL ST.

BANGOR  
106 HOGAN ROAD, SUITE 6  
BANGOR, MAINE 04401  
(207) 941-4570 FAX: (207) 941-4584

PORTLAND  
312 CANCO ROAD  
PORTLAND, MAINE 04103  
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE  
1235 CENTRAL DRIVE, SKYWAY PARK  
PRESQUE ISLE, MAINE 04679-2094  
(207) 764-0477 FAX: (207) 760-3143

**Generators**

<u>Equipment</u>	<u>Kilowatt (kW)</u>	<u>Firing Rate (gal/hr)</u>	<u>Fuel Type, % sulfur</u>	<u>Install. Date</u>	<u>Stack #</u>
Generator #1	750	~54	diesel, 0.0015 %	3/2005	1
Generator #2	300	~22	diesel, 0.0015 %	9/1980	1

C. Application Classification

The Sanford Sewerage District (SSD) is classified as an existing source that is applying for its first air emission license, after the fact. A source is considered a major source based on whether or not expected emissions exceed the "Significant Emission Levels" as defined in the Department's regulations. The emissions for the new source are determined by the maximum future license allowed emissions, as follows:

<b>Pollutant</b>	<b>Max. Future License (TPY)</b>	<b>Sig. Level</b>
PM	0.98	100
PM <sub>10</sub>	0.98	100
SO <sub>2</sub>	2.87	100
NO <sub>x</sub>	9.91	100
CO	2.45	100
VOC	0.43	50

The Department has determined the facility is a synthetic minor source and the application has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (as amended). With a fuel limit for No. 1 boiler of 81,200 gallons/year and the limitation of 500 hours of operation by each generator, the facility is license below the major source thresholds and is considered a synthetic minor.

D. Regulatory Review

Provided in this section is a summary of State and Federal air regulations that apply to the existing emission sources at SSD. The facility currently utilizes and has selected specific equipment that will achieve compliance with the following State and Federal air regulations.

*06-096 CMR 101 Visible Emission Regulation*

This rule establishes opacity limitations for emissions from several categories of air contaminant sources. The existing oil-fired boiler and generators are subject to Section (2)(B)(1)(b), which limits visible emissions from any unit firing #2 fuel oil to an opacity of 20 percent on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 3-hour period.

*06-096 CMR 106 Low Sulfur Fuel Regulation*

This rule establishes the maximum sulfur content of fossil fuels allowed to be burned in various air quality control regions in the state unless the source is equipped with SO<sub>2</sub> controls or is subject to more stringent sulfur limitations by other requirements. SSD is subject to this rule because existing oil-fired boilers each burn a liquid fossil fuel. As such, SSD is limited to a fuel sulfur content of 2.0% by weight in its liquid fossil fuels, however, the BACT analysis has required a more stringent limit.

*06-096 CMR 115 Major and Minor Source Air Emission License Regulations*

This rule specifies who must obtain an air emission license, describes the information an applicant must submit for a license, and describes the standards and criteria that must be complied with during and following the air licensing process. For minor sources such as SSD, 06-096 CMR 115 (as amended) serves as an operating licensing program and a pre-construction license review program.

Federal Air Regulations

*New Source Performance Standards (NSPS)*

40 CFR Part 60 Subpart Dc – SSD's existing boilers are rated below 10 MMBtu/hr and therefore are not subject to the *New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, for units greater than 10 MMBtu/hr manufactured after June 9, 1989.

40 CFR Part 60, Subpart IIII – 40 CFR 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines* is applicable to the generators ordered after July 11, 2005 and manufactured after April 1, 2006. Since the No. 1 generator was installed in 2005 and the No. 2 generator was installed in 1980 they are not subject to Subpart IIII.

*National Emissions Standards for Hazardous Air Pollutants (NESHAP)*

40 CFR Part 63 Subpart JJJJJJ – *National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial, Commercial, and Institutional Boilers.*

At present, Boiler #1 (and SSD's two smaller boilers) are not subject to this regulation.

40 CFR Part 63 Subpart JJJJJJ, finalized on March 21, 2011, exempts boilers that meet the criteria of hot water heaters. The definition of a hot water heater is as follows:

*Hot water heater* means a closed vessel with a capacity of no more than 120 U.S. gallons in which water is heated by combustion of gaseous or liquid fuel and is withdrawn for use external to the vessel at pressures not exceeding 160 psig, including the apparatus by which the heat is generated and all controls and devices necessary to prevent water temperatures from exceeding 210 degrees Fahrenheit (99 degrees Celsius).

In December 2011, EPA proposed amendments to Subpart JJJJJJ, including the following revised definition of hot water heater:

*Hot water heater* means a closed vessel with a capacity of no more than 120 U.S. gallons in which water is heated by combustion of gaseous or liquid fuel and hot water is withdrawn for use external to the vessel. Hot water boilers (i.e., not generating steam) combusting gaseous or liquid fuel with a heat input capacity of less than 1.6 million Btu per hour are included in this definition.

SSD's boiler(s) meets the hot water heater definition in the original rule as well as the definition in the proposed amendments, therefore these boilers are exempted from Subpart JJJJJJ.

Changes to the exemption criteria and/or to the hot water heater definition provided for in the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63 Subpart JJJJJJ) may result in SSD's boilers becoming subject to this rule at a later date.

40 CFR Part 63 Subpart ZZZZ - *National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines.* SSD is subject to this federal regulation, the requirements of which are described in (Best Practical Treatment Analysis) Section II C.

## II. BEST PRACTICAL TREATMENT (BPT)

### 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 *Definitions Regulation*, 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 new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 CMR 100 (as amended). BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

### B. Boiler # 1

SSD operates Boiler #1 for heat and to produce hot water. The boiler is rated at 1.27 MMBtu/hr and fires #2 fuel oil. The boiler was installed in 2005 and exhausts through its own stack.

#### 1. BACT Findings

The BACT emission limits for the boiler were based on the following:

PM/PM <sub>10</sub>	–	0.15 lb/hr based on 0.12 lb/MMBtu/hr (BACT)
SO <sub>2</sub>	–	0.65 lb/hr based on firing ASTM D396 #2 fuel oil (0.5% sulfur);
NO <sub>x</sub>	–	0.15 lb/MMBtu; 0.19 lb/hr based on an emission factor of 20 lb/1000 gallons from AP -42, Table 1.3-1, dated 5/10;
CO	–	0.05 lb/hr based on a emission factor of 5 lb/1000 gal, AP-42, Table 1.3-1, dated 5/10;
VOC	–	0.003 lb/hr based on an emission factor of 0.34 lb/1000 gal, AP-42, Table 1.3-3, dated 5/10;
Opacity	–	Visible emissions from the boiler shall not exceed 20% opacity on a 6 minute block average, except for no more than one (1) six (6) minute block average in a 3 hour period based on 06-096 CMR 101.

SSD shall be limited to firing 81,200 gallons/yr of #2 fuel oil.

The BACT emission limits for Boiler #1 is the following:

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1 (1.27 MMBtu/hr) #2 fuel	0.15	0.15	0.65	0.19	0.05	0.003

Until December 31, 2015, the fuel oil fired in Boiler 1 shall be ASTM D396 compliant #2 fuel oil (maximum sulfur content of 0.5% by weight). Per 38 MRSA §603-A(2)(A)(3), beginning January 1, 2016, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.005% by weight (50 ppm), and beginning January 1, 2018, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.0015% by weight (15 ppm).

#### *Periodic Monitoring*

Periodic monitoring for the boiler shall include recordkeeping to document fuel use on a calendar year basis. Documentation shall include the type of fuel used and sulfur content of the fuel.

#### C. Generators #1 and #2

SSD operates two diesel generators. Generator #1 is rated at 750 kW (7.32 MMBtu/hr) firing diesel and Generator #2 is rated at 300 kW (2.93 MMBtu/hr) and both are used as emergency generators firing diesel. The generators were manufactured in 2004 and 1980, respectively. Under "normal" circumstances these generators are operated as an emergency generators; SSD also intends to take part in the ISO New England Emergency Demand Response Program.

SSD shall operate Generator #1, firing diesel fuel with a maximum sulfur content of 0.0015%, at a maximum rate of 54 gallons per hour.

##### 1. BACT Findings for Generator # 1 for firing diesel fuel:

The BACT emission limits for Generator #1 are based on the following:

- PM/PM<sub>10</sub> – 0.12 lb/MMBtu; 0.88 lb/hr based on 06-096 CMR 103;
- SO<sub>2</sub> – 0.01 lb/hr based on firing 0.0015% sulfur,
- NO<sub>x</sub> – 3.2 lb/MMBtu; 23.41 lb/hr based on an emission factor from AP-42, Table 3.4-1 (dated 10/96)
- CO – 0.85 lb/MMBtu, 6.22 lb/hr based on an emission factor from AP-42, Table 3.4-1 (dated 10/96)

- VOC – 0.09 lb/MMBtu, 0.66 lb/hr AP-42, Table 3.4-1 (dated 10/96)
- Opacity – visible emissions from Generator #1 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 3-hour period based on 06-096 CMR 101.

2. BACT Findings for Generator # 2 for firing diesel fuel:

The BACT emission limits for Generator #2 are based on the following:

- Diesel
- PM/PM<sub>10</sub> – 0.12 lb/MMBtu, 0.35 lb/hr based on 06-096 CMR 103 (BACT)
- SO<sub>2</sub> – 0.01 lb/hr based on firing 0.0015% sulfur, 0.002 lb/MMBtu;
- NO<sub>x</sub> – 4.41 lb/MMBtu; 12.9 lb/hr based on emission factors from AP-42, Table 3.3-1 (dated 10/96);
- CO – 0.95 lb/MMBtu; 2.78 lb/hr based on emission factors from AP-42, Table 3.3-1 (dated 10/96);
- VOC – 0.35 lb/MMBtu; 1.02 lb/hr based on emission factors from AP-42, Table 3.3-1 (dated 10/96);
- Opacity – visible emissions from Generator #2 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 3-hour period based on 06-096 CMR 101.

Unit	PM (lb/mmbtu)
Generator #1 7.32 MMBtu/hr, Diesel	0.12
Generator #2 2.93 MMBtu/hr, Diesel	0.12

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1 7.32 MMBtu/hr, Diesel	0.88	0.88	0.01	23.41	6.22	0.66
Generator #2 2.93 MMBtu/hr, Diesel	0.35	0.35	0.01	12.9	2.78	1.02

The Generators shall be limited to 500 hours of operation a year, based on a 12-month rolling total. SSD shall keep records of the hours of operation for each unit.

Sanford Sewerage District has requested Generators #1 and #2 be permitted to respond to the ISO New England's Demand Response Program (the "ISO Program").

*ISO Demand Response:*

Due to the potential for tight electricity supplies, ISO New England has taken several precautionary steps to ensure the reliability of the region-wide bulk power system. One of those steps is the implementation of the Demand Response Program. This program offers financial incentives to customers, such as SSD, to reduce electricity demand during peak periods. This program can significantly improve the reliability of the region-wide bulk power system and hopefully allow ISO New England to avoid drastic measures, such as brown outs.

In order for SSD to participate in the Demand Response Program, they need to start their generators and run them prior to, or in lieu of, loss of off-site power. SSD will only operate in this manner if there is a documented request from ISO New England under their emergency OP-4 procedures. ISO New England's OP-4 is a procedure which establishes criteria and guidelines for actions during capacity deficiencies. OP-4 is implemented when there is determined to be a serious threat to the integrity of the bulk power system.

SSD shall only be permitted to operate their generators in response to an OP-4 emergency for a total of no more than 60 hours per calendar year.

However, if EPA does not change Subpart ZZZZ (discussed below), which currently limits OP-4 operation to 15 hours/year (each) after May 3, 2013, then SSD is required to meet what is required per the rule at that time.

3. 40 CFR Part 63, Subpart ZZZZ

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 generators listed above. The units are considered existing, stationary reciprocating internal combustion engines at an area source of hazardous air pollutants (HAP) and are not subject to New Source Performance Standards regulations. EPA's August 9, 2010 memo specifically does not exempt these units from the federal requirements.

**Emergency Definition:**

Emergency stationary reciprocating internal combustion engine (RICE) is defined in 40 CFR Part 63, Subpart ZZZZ as any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. 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. Stationary RICE used for peak shaving are not considered emergency stationary RICE. Stationary RICE used to supply power to an electric grid or that supply non-emergency power as part of a financial arrangement with another entity are not considered to be emergency engines, except as permitted under §63.6640(f).

§63.6640(f) limits maintenance checks and readiness testing of the units to 100 hours per year. Emergency stationary RICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph, as long as the power provided by the financial arrangement is limited to emergency power.

Effective May 3, 2013, based on the emergency definition, Generators #1 and #2 cannot be considered 'emergency' for purposes of 40 CFR Part 63, Subpart ZZZZ if used under the operational scenario SSD requested, unless EPA modifies the 15 hour per year demand response limit. The units will still be limited to 500 hours/per year each in back up situations for state purposes with the allowance of 60 hours/year each for ISO New England demand response.

40 CFR Part 63, Subpart ZZZZ for non-emergency units has a May 3<sup>rd</sup>, 2013 compliance date for the applicable emission limitations and operating limitations

If after reconsideration of the regulations by EPA, Generator #1 and #2 continue to be designated as a non-emergency generator, SSD shall comply with the following applicable emission limitations and operating limitations by May 3, 2013:

	<b>Operating Limitations* (40 CFR §63.6603(a), 63.6625(g), 63.6625 (h) and Table 2(d))</b>
Compression ignition (diesel): Generator #1	Limit CO to 23 ppmvd at 15% O <sub>2</sub> or reduce CO by 70% or more (unit is > 500 hp)
	Existing non-emergency engines ≥ 300 HP that is not equipped with a closed crankcase ventilation system, you must comply with either paragraph (1) or (2) of this section: (1) Install a closed crankcase ventilation system that prevents crankcase emissions from being emitted to the atmosphere, or (2) Install an open crankcase filtration emission control system that reduces emissions from the crankcase by filtering the exhaust stream to remove oil mist, particulates, and metals.

\* Note: Due to the 500 hour operation limit on each generator, the inspections and oil/filter changes shall be performed annually to meet the requirements of 40 CFR Part 63, Subpart ZZZZ

If SSD designates the generators as emergency generators listed in Subpart ZZZZ, they must meet the operating limitations below:  
 (Note: EPA is reconsidering the 15 hour per year emergency demand response limit).

	<b>Operating Limitations* (40 CFR §63.6603(a), 63.6625 (h) and Table 2(d))</b>
Compression ignition (diesel) units:	<ul style="list-style-type: none"> <li>- Change oil and filter every 500 hours of operation or annually, whichever comes first;</li> <li>- Inspect the air cleaner every 1000 hours of operation or annually, whichever comes first;</li> <li>- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary</li> </ul>

The Generators shall be operated and maintained according to the manufacturer's emission-related written instructions or SSD 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)]

A non-resettable hour meter shall be installed and operated on each generator. [40 CFR §63.6625(f)]

The Generators shall be limited to 100 hours/year for maintenance and testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving or generating income or a financial arrangement with another entity). A maximum of 15 hours per year (of the 50 hours/year) may be used as part of a demand response program. [40 CFR §63.6640(f)(1)]

SSD shall keep records that include maintenance conducted on the two generators and the hours of operation of each engines 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 used for demand response operation, SSD must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response. [40 CFR §63.6655(e) and (f)]

D. Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20%, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour.

E. Annual Emissions

SSD shall be restricted to the following annual emissions, based on a calendar year basis. The tons per year limits were calculated based on 81,200 gal/yr fuel oil on Boiler No. 1 and 500 hrs/yr for each generator:

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

	PM	PM <sub>10</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
Boiler #1	0.67	0.67	2.86	0.83	0.2	0.01
Generator #1	0.22	0.22	0.003	5.85	1.55	0.16
Generator #2	0.09	0.09	0.001	3.23	0.69	0.26
<b>Total TPY</b>	<b>0.98</b>	<b>0.98</b>	<b>2.87</b>	<b>9.91</b>	<b>2.45</b>	<b>0.43</b>

### III. AMBIENT AIR QUALITY ANALYSIS

According to 06-096 CMR 115, the level of air quality analyses required for a minor new source shall be determined on a case-by case basis. Based on the information available in the file and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source.

### ORDER

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

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

The Department hereby grants Air Emission License A-1066-71-A-N pursuant the following conditions.

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 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 (38 M.R.S.A. §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 115. [06-096 CMR 115]
- (3) 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 115]

- (4) 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 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353-A. [06-096 CMR 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 115]
- (7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]
- (8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]
- (9) The licensee shall comply with all terms and conditions of the air emission license. 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 a renewal of a license or amendment shall not stay any condition of the license. [06-096 CMR 115]
- (10) 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 115]
- (11) 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 to demonstrate compliance with the applicable emission standards 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; or

2. 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 115]

- (12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate 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; and
- 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 115]

- (13) Notwithstanding any other provisions 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 115]

- (14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emission and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation.

[06-096 CMR 115]

- (15) Upon written request from 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 a 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 115]

**SPECIFIC CONDITIONS**

(16) **Boiler # 1**

A. Fuel

1. Total fuel use for Boiler # 1 shall not exceed 81,200 gal/yr of #2 fuel oil, based on calendar year basis. [06-096 CMR 115, BACT]
2. Until December 31, 2015, the #2 fuel oil fired in the boiler shall be ASTM D396 compliant (max. sulfur content of 0.5% by weight). [06-096 CMR 115, BACT]
3. Beginning January 1, 2016, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.005% by weight (50 ppm). [38 MRSA §603-A(2)(A)(3)]
4. Beginning January 1, 2018, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.0015% by weight (15 ppm). [38 MRSA §603-A(2)(A)(3)]
5. Compliance shall be demonstrated by fuel records from the supplier showing the quantity, type, and the percent sulfur of the fuel delivered (if applicable). Records of annual fuel use shall be kept on calendar year basis. [06-096 CMR 115, BACT]

B. Emissions shall not exceed the following [06-096 CMR 115, BACT]:

Emission Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	0.15	0.15	0.65	0.19	0.05	0.003

- C. Visible emissions from Boiler # 1 shall not exceed 20% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block average in a continuous 3-hour period. [06-096 CMR 101]

(17) **Generators**

- A. Generators #1 & #2 are each limited to 500 hours per year total operation, based on a 12 month rolling total. Compliance shall be demonstrated by a written log of all generator operating hours. [06-096 CMR 115]

B. The fuel oil sulfur content for Generators #1 & #2 shall be limited to 0.0015% sulfur. Compliance shall be demonstrated by fuel records from the supplier documenting the type of fuel delivered and the sulfur content of the fuel. [06-096 CMR 115, BACT]

C. Emissions shall not exceed the following [06-096 CMR 115, BACT]:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Generator #1	PM	0.12	06-096 CMR 103 2(A)(1)
Generator #2	PM	0.12	06-096 CMR 115, BACT

D. Emissions from the generators shall not exceed the following [06-096 CMR 115, BACT]:

Emission Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator # 1 (7.31 MMBtu/hr)	0.88	0.88	0.01	23.41	6.22	0.66
Generator # 2 (2.93 MMBtu/hr)	0.35	0.35	0.01	12.9	2.78	1.02

E. Visible Emissions

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

F. Generator #1 & #2 shall meet the following requirements:

1. Each generator may be used for generator maintenance purposes, situation arising from sudden and reasonably unforeseeable events beyond the control of SSD, during times when the regional electrical power system is predicted to be at or near its annual peak and for ISO NE demand response purposes. [06-096 CMR 115, BACT]
2. Each generator shall be limited to 500 hours per year of operation on a 12 month rolling total basis. Within the 500 hour per year operating limit, it shall be limited to no more than 60 hours peak load reduction operation for each 12 month rolling total. [06-096 CMR 115, BACT]
3. A non-resettable hour meter shall be operated and maintained. SSD shall keep records of generator use on a monthly and 12 month rolling total basis. [06-096 CMR 115, BACT]

4. Generator #1 and #2 shall meet the applicable requirements of 40 CFR Part 63 Subpart ZZZZ depending on the use (non-emergency or emergency). [40 CFR Part 63, Subpart ZZZZ]

(18) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20%, except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20% in any one (1) hour. [06-096 CMR 101]

- (19) SSD shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S.A. §605).

DONE AND DATED IN AUGUSTA, MAINE THIS 2<sup>nd</sup> DAY OF January, 2012.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Melanie L. L...  
PATRICIA W. LAMO, COMMISSIONER

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

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 10/04/2011

Date of application acceptance: 10/14/2011

Date filed with the Board of Environmental Protection:

This Order prepared by Lisa P. Higgins, Bureau of Air Quality.



