



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

JAMES P. BROOKS
ACTING COMMISSIONER

**Town of Falmouth
Falmouth School Department
Cumberland County
Falmouth, Maine
A-805-71-D-R/A (SM)**

**Departmental
Findings of Fact and Order
Air Emission License**

After review of the air emissions license renewal and amendment applications, 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 Town of Falmouth, Falmouth School Department has applied to renew the Air Emission License permitting the operation of emission sources associated with their High School and Middle School. Falmouth School Department has also requested the addition of an emergency generator to the air emission license.

The Falmouth School Department is located at 51 Woodville Road in Falmouth.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate (gal/hr)	Fuel Type	Stack #
Boiler 1	4.4	31.4	#2 fuel oil, ASTM D396 (0.5% s)	1
Boiler 2	4.4	31.4	#2 fuel oil, ASTM D396 (0.5% s)	1
Boiler 3	4.2	30.0	#2 fuel oil, ASTM D396 (0.5% s)	2
Boiler 4	4.2	30.0	#2 fuel oil, ASTM D396 (0.5% s)	3
Boiler 5	9.9	1 ton/hr	Wood chips (45% moisture)	4

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

Emergency Generator

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Kilowatt (kW)</u>	<u>Firing Rate (gal/hr)</u>	<u>Fuel Type, % sulfur</u>	<u>Stack #</u>
Generator 1*	2.5	500	18	Diesel, 0.0015% sulfur	5

* new to the license

C. Application Classification

The application for Falmouth School Department is considered to be a combined renewal of current licensed emission units and a modification (due to the addition of the emergency generator). A modification of a minor source is considered a major modification based on whether or not expected emission increases exceed the "Significant Emission Levels" as defined in the Department's regulations. The emission increases are determined by subtracting the current licensed emissions preceding the modification from the maximum future licensed allowed emissions, as follows:

<u>Pollutant</u>	<u>Current License (TPY)</u>	<u>Future License (TPY)</u>	<u>Net Change (TPY)</u>	<u>Sig. Level</u>
PM	6.4	6.6	0.2	100
PM ₁₀	6.4	6.6	0.2	100
SO ₂	17.8	17.8	-	100
NO _x	12.1	14.9	2.8	100
CO	5.8	6.3	0.5	100
VOC	0.2	0.6	0.4	50

This modification is determined to be a minor modification and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (as amended). With the fuel limit on the boilers and the operating hour restriction on the emergency generator, the facility is licensed below the major source thresholds and is considered a synthetic minor.

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 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 emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

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

B. Boilers 1-4

Boilers 1-4 are package boilers firing #2 fuel oil meeting the criteria of ASTM D396 (0.5% max. sulfur) and are used for heating and hot water needs. Boilers 1 and 2 are each rated at 4.4 MMBtu/hr and were manufactured in 1980 and 1963, respectively. Boilers 3 and 4 are each rated at 4.2 MMBtu/hr and were both manufactured in 2000. The four boilers shall be limited to a total of 500,000 gallons/year of #2 fuel oil.

Based on the size of the each of the boilers, they 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.

1. BPT Findings

The BPT emission limits for each of the boilers were based on the following:

PM/PM₁₀ – 0.12 lb/MMBtu based on *Fuel Burning Equipment Particulate Emission Standard* 06-096 CMR 103 (as amended)

SO₂ –based on firing ASTM D396 #2 fuel oil (0.5% sulfur); 0.5036 lb/MMBtu

NO_x – 0.3 lb/MMBtu based on previous licenses

CO – 5 lb/1000 gal, AP-42, Table 1.3-1, dated 9/98

VOC – 0.2 lb/1000 gal, AP-42, Table 1.3-3, dated 9/98

Opacity – Visible emissions from each boiler firing fuel oil 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.

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler 1 (4.4 MMBtu/hr)	0.53	0.53	2.22	1.32	0.16	0.01
Boiler 2 (4.4 MMBtu/hr)	0.53	0.53	2.22	1.32	0.16	0.01
Boiler 3 (4.2 MMBtu/hr)	0.50	0.50	2.12	1.26	0.15	0.01
Boiler 4 (4.2 MMBtu/hr)	0.50	0.50	2.12	1.26	0.15	0.01

Periodic Monitoring

Periodic monitoring for the boilers shall include recordkeeping to document fuel use both on a monthly and 12 month rolling total basis. Documentation shall include the type of fuel used and the sulfur content. Records shall be maintained to documents compliance with the 500,000 gallon/yr #2 fuel limit.

2. 40 CFR Part 63 Subpart JJJJJ

The boilers are 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 units are each rated under 10 MMBtu/hr and are thus not subject to PM, CO, or mercury emission limits from 40 CFR Part 63 Subpart JJJJJ.

For informational purposes, a summary of the applicable federal 40 CFR Part 63 Subpart JJJJJ requirements are listed below. The Maine Department of Environmental Protection has not taken delegation of this area source MACT (Maximum Achievable Control Technology) rule promulgated by EPA, however Falmouth School Department is still subject to the requirements.

- a. An initial notification must be submitted to EPA no later than September 17, 2011. [40 CFR Part 63.11225(a)(2)]
- b. A boiler tune-up program shall be implemented to include the tune-up of the applicable boilers by March 21, 2012. [40 CFR Part 63.11196(a)(1)]
- c. A Notification of Compliance Status shall be submitted to EPA no later than 120 days after conducting the initial boiler tune-up. [40 CFR Part 63.11225(a)(4)] The Notification of Compliance Status form developed by EPA may be used to submit the required information. This notice can be found near the bottom of the page on the following website: <http://www.epa.gov/ttn/atw/boiler/boilerpg.html>.
- d. After the initial tune-up and initial compliance report has been submitted, the facility shall implement a biennial boiler tune-up program and submit

biennial compliance reports. The following are requirements of the boiler tune-up program:

- i. Each biennial tune-up shall be conducted no more than 25 months after the previous tune-up. [40 CFR Part 63.11223(a)]
- ii. Each biennial tune-up shall include the following, as applicable:
 - (a) Inspection of the burner, cleaning/replacing any component of the burner, as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted; however, the burner must be inspected at least once every 36 months. [40 CFR Part 63.11223(b)(1)]
 - (b) Inspection of the flame pattern, and adjustment of the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 CFR Part 63.11223(b)(2)]
 - (c) Inspection of the system controlling the air-to-fuel ratio, to ensure proper calibration and that it is functioning properly. [40 CFR Part 63.11223(b)(3)]
 - (d) Optimization of total emissions of CO, consistent with manufacturer's specifications. [40 CFR Part 63.11223(b)(4)]
 - (e) Measurement of concentration in the effluent stream of CO in parts per million (ppm), by volume, and oxygen in volume percent, before and after adjustments are made. [40 CFR Part 63.11223(b)(5)]
- iii. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within one week of start-up. [40 CFR Part 63.11223(b)(7)]
- e. 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 compliance reports; 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.

C. Boiler 5

Boiler 5 is a 9.9 MMBtu/hr wood fired boiler located in a building next to the high school. The boiler fires wood chips and is controlled by multi-cyclones. Boiler 5 shall be limited to 1500 tons/year of wet wood (45% moisture content, 4950 Btu/lb heat content, or equivalent), based on a 12 month rolling total.

Due to its size, the boiler is 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.

1. BPT Findings

The BPT emission limits for Boiler 5 were based on the following:

PM/PM₁₀ – 0.30 lb/MMBtu based on 06-096 CMR 103; 2.97 lb/hr
SO₂ – 0.025 lb/MMBtu based on AP-42 factors, Table 1.6-2, dated 9/03; 0.25 lb/hr
NO_x - 0.22 lb/MMBtu based on AP-42 factors, Table 1.6-2, dated 9/03; 2.18 lb/hr
CO – 0.6 lb/MMBtu based on AP-42 factors, Table 1.6-2, dated 9/03; 5.94 lb/hr
VOC - 0.017 lb/MMBtu based on AP-42 factors, Table 1.6-3, dated 9/03; 0.17 lb/hr

Opacity - Visible emissions from the boiler shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block average in a continuous 3-hour period.

Periodic Monitoring

Periodic monitoring for Boiler 5 shall include recordkeeping of fuel use on a monthly and 12 month rolling total basis. Documentation shall include delivery records, including receipts, of wood chip truck deliveries and the total deliveries each month to represent the fuel consumed for the month. This method is conservative, and the accuracy over a 12 month period is expected to be within a couple of truckloads of actual consumption. Records shall be maintained to documents compliance with the 1500 tons/year of wet wood (45% moisture content, 4950 Btu/lb heat content) fuel limit.

2. 40 CFR Part 63 Subpart JJJJJ

The boiler 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 rated under 10 MMBtu/hr and are thus not subject to PM, CO, or mercury emission limits from 40 CFR Part 63 Subpart JJJJJ. The federal requirements for Boilers 1-4 listed in this license (section II (B)(2), as applicable) also apply to Boiler 5.

D. Generator 1

Generator 1 is a 2.5 MMBtu/hr (500 kW) emergency diesel generator manufactured in 2007. The generator shall fire 0.0015% sulfur diesel fuel.

Generator 1 was ordered after July 11, 2005 and manufactured after April 1, 2006. Therefore, Generator 1 is subject to federal regulation New Source Performance Standards 40 CFR Part 60, Subpart IIII, *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*.

Generator 1 meets federal regulation Maximum Achievable Control Technology 40 CFR Part 63, Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines* since the unit is subject to 40 CFR Part 60, Subpart IIII (in addition to being an emergency engine at an institutional facility).

1. BPT Findings

The BACT emission limits for the emergency generator were based on the following:

PM/PM₁₀ – 0.31 lb/MMBtu, AP-42, Table 3.3-1 (dated 10/96); 0.78 lb/hr
SO₂ – based on firing 0.0015% sulfur, 0.00154 lb/MMBtu; 0.004 lb/hr
NO_x – 4.41 lb/MMBtu, AP-42, Table 3.3-1 (dated 10/96); 11.03 lb/hr
CO – 0.95 lb/MMBtu, AP-42, Table 3.3-1 (dated 10/96); 2.38 lb/hr
VOC – 0.36 lb/MMBtu, AP-42, Table 3.3-1 (dated 10/96); 1.5 lb/hr
Opacity – Visible emissions from the diesel 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.

The emergency generator shall be limited to 500 hours of operation a year, based on a 12 month rolling total. Falmouth School Department shall keep records of the hours of operation of the unit.

2. 40 CFR Part 60, Subpart IIII

40 CFR Part 60, Subpart IIII is applicable to the emergency generator.

Emergency Definition:

Emergency stationary internal combustion engine is defined in 40 CFR Part 60, Subpart IIII as any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary ICE 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 ICE used to pump water in the case of fire or flood, etc. Stationary CI ICE used to supply power to an electric grid or that supply power as part of a financial arrangement with another entity are not considered to be emergency engines.

40 CFR Part 60, Subpart III Requirements:

The generator shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in 40 CFR §60.4202. [40 CFR §60.4205(b)]

The diesel fuel fired in the generator shall not exceed 15 ppm sulfur (0.0015% sulfur). [40 CFR §60.4207(b)]

A non-resettable hour meter shall be installed and operated on the generator. [40 CFR §60.4209(a)]

The generator shall be operated and maintained according to the manufacturer's written instructions or procedures developed by Falmouth School Department that are approved by the engine manufacturer. Falmouth School Department may only change those settings that are permitted by the manufacturer. [40 CFR §60.4211(a)]

The generator shall be limited to 100 hours/year for maintenance and testing. [40 CFR §60.4211(e)]

No initial notification is required for emergency engines. [40 CFR §60.4214(b)]

E. Annual Emissions

Falmouth School Department shall be restricted to the following annual emissions on a 12 month rolling total, based on 500,000 gallons/year #2 fuel oil, 1500 tons/year of wet wood (45% moisture content, 4950 Btu/lb heat content), and 500 hours of generator operation :

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

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Boilers 1-4 (oil)	4.20	4.20	17.63	10.50	1.25	0.05
Boiler 5 (wood)	2.23	2.23	0.19	1.63	4.46	0.13
Generator #1	0.19	0.19	0.001	2.76	0.59	0.38
Total TPY	6.6	6.6	17.8	14.9	6.3	0.6

III. AMBIENT AIR QUALITY ANALYSIS

According to 06-096 CMR 115, the level of air quality analyses required for a renewal source shall be determined on a case-by case basis. Modeling and monitoring are not required for a renewal if the total emissions of any pollutant released do not exceed the following:

<u>Pollutant</u>	<u>Tons/Year</u>
PM	25
PM ₁₀	25
SO ₂	50
NO _x	100
CO	250

Based on the total facility licensed emissions, Falmouth School Department is below the emissions level required for modeling and monitoring.

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-805-71-D-R/A subject to 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. [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) **Boilers 1-4**

- A. Total fuel use for the facility's oil fired boilers shall not exceed 500,000 gal/yr of #2 fuel oil meeting the requirements of ASTM D396. Compliance shall be demonstrated by fuel records from the supplier showing the type and quantity of fuel delivered. Records of annual fuel use shall be kept on a monthly and 12-month rolling total basis. [06-096 CMR 115, BPT]

B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler 1	PM	0.12	06-096 CMR 103, Section 2(B)(1)(a)
Boiler 2	PM	0.12	06-096 CMR 103, Section 2(B)(1)(a)
Boiler 3	PM	0.12	06-096 CMR 103, Section 2(B)(1)(a)
Boiler 4	PM	0.12	06-096 CMR 103, Section 2(B)(1)(a)

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

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler 1 (4.4 MMBtu/hr)	0.53	0.53	2.22	1.32	0.16	0.01
Boiler 2 (4.4 MMBtu/hr)	0.53	0.53	2.22	1.32	0.16	0.01
Boiler 3 (4.2 MMBtu/hr)	0.50	0.50	2.12	1.26	0.15	0.01
Boiler 4 (4.2 MMBtu/hr)	0.50	0.50	2.12	1.26	0.15	0.01

D. Visible emissions from each of the boilers shall each 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) **Boiler 5**

A. Total wood fuel use for Boiler 5 shall not exceed 1500 tons/yr of wet wood (45% moisture), or equivalent. Compliance shall be demonstrated by monthly deliveries, including the number of wood chip truckloads delivered and the weight of wood per delivery. Records of annual fuel use shall be kept on a monthly and 12-month rolling total basis. [06-096 CMR 115, BPT]

B. Falmouth School Department shall operate a multi-cyclone on Boiler 5 for particulate matter control. Falmouth School Department shall maintain a log detailing all routine and non-routine maintenance on the multi-clone. The log shall include the date and maintenance description. [06-096 CMR 115, BPT]

C. Emissions from Boiler 5 shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #5	PM	0.3	06-096 CMR 103, Section 2(B)(4)(a)

D. Emissions from Boiler 5 shall not exceed the following [06-096 CMR 115, BPT]:

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler 5 (9.9 MMBtu/hr)	2.97	2.97	0.25	2.18	5.94	0.17

E. Visible emissions from Boiler 5 shall not exceed 20% opacity on a six (6) minute block average, except for no more than two (2) six (6) minute block average in a continuous 3-hour period. [06-096 CMR 115, BPT]

(18) **Emergency Generator #1**

A. The emergency generator is 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, BACT]

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

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator 1 (2.5 MMBtu/hr) diesel, 0.00015% S	0.78	0.78	0.004	11.03	2.38	1.5

C. Visible emissions from the emergency generator 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 continuous 3-hour period. [06-096 CMR 101]

D. The emergency generator shall meet the applicable requirements of 40 CFR Part 60, Subpart IIII, including the following:

1. The generator shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in §60.4202. [40 CFR §60.4205(b)]

2. The diesel fuel fired in the generator shall not exceed 15 ppm sulfur (0.0015% sulfur). Compliance with the fuel sulfur content limit shall be based on fuel records from the supplier documenting the type of fuel delivered and the sulfur content of the fuel. [40 CFR §60.4207(b) and 06-096 CMR 115]
 3. A non-resettable hour meter shall be installed and operated on the generator. [40 CFR §60.4209(a)]
 4. The generator shall be limited to 100 hours/year for maintenance and testing. This limit is based on a 12 month rolling total. Compliance shall be demonstrated by a written log of all generator operating hours. [40 CFR §60.4211(e) and 06-096 CMR 115]
 5. The generator shall be operated and maintained according to the manufacturer's written instructions or procedures developed by Falmouth School Department that are approved by the engine manufacturer. Falmouth School Department may only change those settings that are permitted by the manufacturer. [40 CFR §60.4211(a)]
- (19) Falmouth School Department 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 31st DAY OF May, 2011.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Melanie Brooks
JAMES P. BROOKS, ACTING 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: February 1, 2010

Date of application acceptance: February 4, 2010

Date filed with the Board of Environmental Protection:

This Order prepared by Kathleen E. Tarbuck, Bureau of Air Quality.



