



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

PAUL MERCER
COMMISSIONER

**Town of Millinocket – Stearns High School
Penobscot County
Millinocket, Maine
A-117-71-J-M (SM)**

**Departmental
Findings of Fact and Order
Air Emission License
Amendment #1**

FINDINGS OF FACT

After review of the air emission license amendment application, staff investigation reports and other documents in the applicant’s file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes Annotated (M.R.S.A.), §344 and §590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

Town of Millinocket – Stearns High School (SHS) was issued Air Emission License A-117-71-I-R on April 15, 2015, permitting the operation of emission sources associated with their educational facility.

SHS has requested a minor revision to their license in order to increase their fuel limit from 50,000 gallons per year to 150,000 gallons per year.

The equipment addressed in this license amendment is located at 199 State Street, Millinocket, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license amendment:

Boilers

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate (gal/hr)	Fuel Type, % sulfur	Date of Manuf./ Install	Stack #
Boiler #1	8.4	59.8	Distillate fuel, 0.5%	2011/2011	1
Boiler #2	3.5	24.7	Distillate fuel, 0.5%	2011/2012	2

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106 HOGAN ROAD, SUITE 6
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312 CANCO ROAD
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PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
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C. Definitions

Distillate Fuel means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396, diesel fuel oil numbers 1 or 2, as defined in ASTM D975, kerosene, as defined in ASTM D3699, biodiesel as defined in ASTM D6751, or biodiesel blends as defined in ASTM D7467.

D. Application Classification

This amendment will increase emissions by less than 4 ton/year for each single pollutant not including greenhouse gases (GHG) and less than 8 ton/year for all pollutants combined not including GHG. Therefore, this modification is determined to be a minor revision and has been processed as such.

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.

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.

B. Minor Revision Description

Boiler #1 is a Cleaver Brooks unit, rated at 8.4 MMBtu per hour, and exhausts through Stack #1. Boiler #1 was manufactured and installed in 2011.

Boiler #2 is a Buderus G615, rated at 3.5 MMBtu per hour, and exhausts through Stack #2. Boiler #2 was manufactured in 2011 and installed in 2012.

Due to the severity and extreme cold of the previous few winters, SHS is running very close to their current fuel limit and has thus requested the increase of their licensed fuel limit from 50,000 to 150,000 gallons per year. If the entire quantity of fuel is used and using emission factors from Air Emission License A-117-71-I-R (April 15, 2015), emissions from the facility would increase by the following amounts on an annual basis:

<u>Pollutant</u>	<u>Current License (TPY)</u>	<u>Future License (TPY)</u>	<u>Net Change (TPY)</u>
PM	0.3	0.8	+0.5
PM ₁₀	0.3	0.8	+0.5
SO ₂	1.8	5.3	+3.5
NO _x	1.2	3.7	+2.5
CO	0.1	0.4	+0.3
VOC	0.1	0.1	-
Total:	3.8	11.1	+7.3

SHS shall be limited to 150,000 gallons per year of distillate fuel on a calendar year total basis.

Fuel Sulfur Content Requirements

Boilers #1 and #2 are licensed to fire distillate fuel which, by definition, has a sulfur content of 0.5% or less by weight. Per 38 M.R.S.A. §603-A(2)(A)(3), as of July 1, 2018, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm). Therefore, beginning July 1, 2018, the distillate fuel purchased or otherwise obtained for use in Boilers #1 and #2 shall not exceed 0.0015% by weight (15 ppm).

1. 40 CFR Part 63, Subpart JJJJJ

In addition to the requirements of 40 CFR Part 63, Subpart JJJJJ as specified in Air Emission License A-117-71-I-R, the following requirement shall be added to the end of Section (II)(B)(4)(b):

EPA requires submission of Notification of Compliance Status reports for tune-ups and energy assessments through their electronic reporting system.
[63.11225(a)(4)(vi)]

C. Annual Emissions

1. Total Annual Emissions

SHS shall be restricted to the following annual emissions, based on a calendar year total. The tons per year limits were calculated based on a facility fuel limit of 150,000 gallons of distillate fuel per year fired in the boilers:

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

	PM	PM₁₀	SO₂	NO_x	CO	VOC
Boilers #1 & #2	0.8	0.8	5.3	3.7	0.4	0.1
Total TPY	0.8	0.8	5.3	3.7	0.4	0.1

III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source shall be determined by the Department on a case-by case basis. In accordance with 06-096 CMR 115, an ambient air quality impact analysis is not required for a minor source if the total licensed annual emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

Pollutant	Tons/Year
PM ₁₀	25
SO ₂	50
NO _x	50
CO	250

The total licensed annual emissions for the facility are below the emission levels contained in the table above and there are no extenuating circumstances; therefore, an ambient air quality impact analysis is not required as part of this license.

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, and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License amendment A-117-71-J-M subject to the conditions found in Air Emission License A-117-71-I-R and 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.

SPECIFIC CONDITIONS

The following shall replace Condition (16)(A-B) of Air Emission License A-117-71-I-R:

(16) **Boilers #1 and #2**

A. Fuel

1. Total fuel use for the boilers shall not exceed 150,000 gallons per year of distillate fuel, based on a calendar year total basis. [06-096 CMR 115, BPT]
2. Prior to July 1, 2018, SHS shall fire distillate fuel with a maximum sulfur content not to exceed 0.5% by weight in Boilers #1 and #2. [06-096 CMR 115, BPT]
3. Beginning July 1, 2018, SHS shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm) for use in Boilers #1 and #2. [06-096 CMR 115, BPT]
4. 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 a monthly and calendar year total basis. [06-096 CMR 115, BPT]

B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boilers #1 and #2 [each]	PM	0.08	06-096 CMR 115, BPT

The following shall be added to Condition (16)(E) of Air Emission License A-117-71-I-R:

(16) **Boilers #1 and #2**

- E. Boiler MACT (40 CFR Part 63, Subpart JJJJJ) Requirements for Boilers #1 and #2 [incorporated under 06-096 CMR 115, BPT]
4. Records shall be maintained consistent with the requirements of 40 CFR Part 63, Subpart JJJJJ including the following [40 CFR Part 63.11225(c)]:
 - (a) Copies of notifications and reports with supporting compliance documentation;

- (b) 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;
- (c) Records of the occurrence and duration of each malfunction of each applicable boiler; and
- (d) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

Records shall be in a form suitable and readily available for expeditious review. EPA requires submission of Notification of Compliance Status reports for tune-ups and energy assessments through their electronic reporting system. [63.11225(a)(4)(vi)]

DONE AND DATED IN AUGUSTA, MAINE THIS 10 DAY OF March, 2016.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: *Paul Mercer*
PAUL MERCER, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-117-71-I-R.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 1/26/2016

Date of application acceptance: 1/26/2016

Date filed with the Board of Environmental Protection:

This Order prepared by Jonathan E. Rice, Bureau of Air Quality.

