

## STATE OF MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION 17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

#### **DEPARTMENT ORDER**

Mayo Regional Hospital Piscataquis County Dover-Foxcroft, Maine A-186-71-H-M Departmental
Findings of Fact and Order
Air Emission License
Amendment #2

#### 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 (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (Department) finds the following facts:

#### I. REGISTRATION

#### A. Introduction

Hospital Administrative District No. 4 was issued Air Emission License A-186-71-F-R on August 25, 2014, for the operation of emission sources associated with their healthcare facility. The license was subsequently amended on April 4, 2017 (A-186-71-G-A). Hospital Administrative District No. 4 is a governmental agency doing business as Mayo Regional Hospital (MRH). Hospital Administrative District No. 4 has requested that this and future licenses be issued in the name of Mayo Regional Hospital.

MRH has requested a minor revision to their license in order to correct the capacities and update the emissions for Boiler #1 and Boiler #2.

The equipment addressed in this license amendment is located at 897 West Main Street, Dover-Foxcroft, Maine.

#### B. Emission Equipment

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

#### **Boilers**

Equipment	Max. Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type, % sulfur	Date of Manuf.	Date of Install.	Stack #
Boiler #1	8.16*	58.3 gal/hr	Distillate fuel, 0.5%	2017	2017	1
Boiler #2	8.16*	58.3 gal/hr	Distillate fuel, 0.5%	2017	2017	1

<sup>\*</sup>Corrected values

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#### C. Definitions

Distillate Fuel. For the purposes of this license, distillate fuel means the following:

- Fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials (ASTM) 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

All rules, regulations, or statutes referenced in this air emission license refer to the amended version in effect as of the issued date of this license.

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 C.M.R. ch. 100. 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. Boilers #1-#2

MRH operates Boilers #1 and #2 for facility heating and hot water needs. The boilers were originally licensed in A-186-71-G-A as each having a proposed heat input capacity of 7.6 MMBtu/hr; however, upon delivery it was determined that heat input capacity of each boiler is 8.16 MMBtu/hr. Boilers #1 and #2 fire distillate fuel. The boilers were installed in 2017. Both boilers exhaust through a common stack (Stack #1).

#### **BPT Findings**

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

#### Distillate Fuel

PM/PM<sub>10</sub> - 0.08 lb/MMBtu based on 06-096 C.M.R. ch. 115, BPT SO<sub>2</sub> - based on firing distillate fuel with a maximum sulfur

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content of 0.5% by weight

NO<sub>x</sub> - 20 lb/1000 gal based on AP-42 Table 1.3-1 dated 5/10 CO - 5 lb/1000 gal based on AP-42 Table 1.3-1 dated 5/10 VOC - 0.34 lb/1000 gal based on AP-42 Table 1.3-3 dated 5/10

Visible – 06-096 C.M.R. ch. 115, BPT

**Emissions** 

The BPT emission limits for the boilers are the following:

<u>Unit</u>	Pollutant	lb/MMBtu		
Boiler #1	PM	0.08		
Boiler #2	PM	0.08		

<u>Unit</u>	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 (8.16 MMBtu/hr) distillate fuel	0.65	0.65	4.11	1.17	0.29	0.02
Boiler #2 (8.16 MMBtu/hr) distillate fuel	0.65	0.65	4.11	1.17	0.29	0.02

Visible emissions from Stack #1 shall not exceed 20% opacity on a six-minute block average basis.

MRH shall be limited to 200,000 gallons of distillate fuel on a calendar year total basis.

#### C. Annual Emissions

This minor revision does not change the annual emissions from this facility, since the tons per year limits were calculated based on a combined fuel limit of 200,000 gal/year for Boilers #1 and #2 and operating Generator #1 for 100 hr/year.

Mayo Regional Hospital Piscataquis County Dover-Foxcroft, Maine A-186-71-H-M



# Departmental Findings of Fact and Order Air Emission License Amendment #2

#### **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-186-71-H-M subject to the conditions found in Air Emission License A-186-71-F-R, amendment A-186-71-G-A, and the following conditions.

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

Mayo Regional Hospital **Piscataquis County Dover-Foxcroft, Maine** A-186-71-H-M

### **Departmental** Findings of Fact and Order **Air Emission License** Amendment #2

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The following shall replace Condition (16) C of Air Emission License A-186-71-F-R and Amendment A-186-71-G-A:

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

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

Emission <u>Unit</u>	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	0.65	0.65	4.11	1.17	0.29	0.02
Boiler #2	0.65	0.65	4.11	1.17	0.29	0.02

DONE AND DATED IN AUGUSTA, MAINE THIS

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DAY OF November

, 2017.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL MERCER, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-186-71-F-R.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: October 2, 2017 Date of application acceptance: October 11, 2017

Date filed with the Board of Environmental Protection:

This Order prepared by Benjamin Goundie, Bureau of Air Quality.

Filed

State of Maine Board of Environmental Protection