



DEPARTMENT ORDER

**Maine Woods Company LLC
Aroostook County
Portage, Maine
A-736-71-H-M**

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

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

Maine Woods Company LLC (Maine Woods) was issued Air Emission License A-736-71-G-R/M on January 27, 2017, for the operation of emission sources associated with their hardwood sawmill and lumber drying facility.

Maine Woods has requested a minor revision to their license to remove the discontinued Rip Saw Line and its associated cyclone from their air emission license, as well as to request that the tune-up interval for their Boiler #1 be increased from 2 to 5 years.

The equipment addressed in this license amendment is located at 92 Fish Lake Road, Portage, Maine.

B. Emission Equipment

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

Boilers

<u>Equipment</u>	<u>Max. Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate</u>	<u>Fuel Type</u>	<u>Date of Manuf.</u>	<u>Date of Install.</u>	<u>Stack #</u>
Boiler #1	28.8	3.5 tons/hour *	Biomass	1998	1998	1

* based on wood with a moisture content of 50%, Higher Heating Value = 4,500 Btu/lb

The following equipment is being removed from the air emission license:

Process Equipment

Equipment	Production Rate	Pollution Control Equipment
Rip Saw Line	50,000 board feet/day	Cyclone

C. 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 not increase emissions of any pollutant. Therefore, this amendment 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. Boiler #1

Boiler #1 is an existing biomass-fired boiler that utilizes an oxygen trim system. The oxygen trim system was installed as part of a recent controls update for the boiler, but it was not accounted for in the current air emission license A-736-71-G-R/M.

The utilization of an oxygen trim system on Boiler #1 to optimize the air-to-fuel ratio in the boiler permits Maine Woods the ability to extend the tune-up frequency required by the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJJ from two (2) years to five (5) years. [40 C.F.R. § 63.11223(a) and Table 2]

<u>Boiler Category</u>	<u>Tune-Up Frequency</u>
<u>New and Existing Oil, Biomass, and Coal fired Boilers with Less Frequent Tune-up Requirements</u>	
Boiler with oxygen trim system which maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune up	Every 5 years

C. Rip Line Saw

The Rip Line Saw has been removed from service and is no longer operational. Because the Rip Line Saw is not in use, it no longer generates particulate matter. Consequently, its associated cyclone is no longer in service and requires no future visible emissions readings, daily visual inspections or accompanying documentation.

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-736-71-H-M subject to the conditions found in Air Emission License A-736-71-G-R/M, and the following conditions.

Severability - 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.

SPECIFIC CONDITIONS

The following condition shall replace Condition (16)(E)(1) of Air Emission License A-736-71-G-R/M (dated January 27, 2017):

(16) Boiler #1

E. Boiler MACT (40 C.F.R. Part 63, Subpart JJJJJ) Requirements for Boiler #1
[incorporated under 06-096 C.M.R. ch. 115, BPT]

1. The facility shall implement a boiler tune-up program. [40 C.F.R. § 63.11223]

a. 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:

<u>Boiler Category</u>	<u>Tune-Up Frequency</u>
<u>New and Existing Oil, Biomass, and Coal fired Boilers with Less Frequent Tune-up Requirements</u>	
Boiler with oxygen trim system which maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune up	Every 5 years

[40 C.F.R. § 63.11223(a) and Table 2]

b. Each 5-year tune-up must be conducted no more than 61 months after the previous tune-up. The first 5-year tune-up must be no more than 61 months after the initial startup of Boiler #1 with the oxygen trim system. [40 C.F.R. § 63.11223(c)]

c. 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. [40 C.F.R. § 63.11223(b)(1)]

(2) Delay of the burner inspection until the next scheduled shutdown is permitted; however, the burner inspection must be conducted at least once every 72 months. [40 C.F.R. § 63.11223(c)]

(3) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 C.F.R. § 63.11223(b)(2)]

- (4) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly. [40 C.F.R. § 63.11223(b)(3)]
- (5) The inspection of the system that controls the air-to-fuel ratio may be delayed until the next scheduled shutdown is permitted; however, the system controlling the air-to fuel ratio must be inspected at least once every 72 months. [40 C.F.R. § 63.11223(c)]
- (6) Optimize the total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]
- (7) Measure the concentration in the effluent stream of 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 C.F.R. § 63.11223(b)(5)]
- (8) Maintain on-site, and submit, if requested by the Administrator or the Department, a report containing the following information:
 - i. The concentrations of CO in the effluent stream in parts per million, by volume, and oxygen in volume percent, measured at the high fire or typical operating load, **before** and **after** the tune-up of the boiler; and
 - ii. A description of any corrective actions taken as a part of the tune-up of the boiler.[40 C.F.R. § 63.11223(b)(6) and 06-096 C.M.R. ch. 115]
- (9) 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 C.F.R. § 63.11223(b)(7)]

The following condition shall replace Condition (20) of Air Emission License A-736-71-G-R/M (dated January 27, 2017) in its entirety:

(20) **Rip-Line Saw**

The rip-line saw has been removed from service and is no longer operational. The cyclone for the rip-saw line is no longer needed to control particulate matter from the rip-saw line.

Maine Woods shall retain all records and documentation of the daily visual inspections performed prior to the removal of the rip-saw line and cyclone from service, in accordance with Standard Condition (8) of air emission license A-736-71-G-R/M (dated January 27, 2017). [06-096 C.M.R. ch. 115]

DONE AND DATED IN AUGUSTA, MAINE THIS 9 DAY OF April, 2018.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Carne for
PAUL MERCER, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-736-71-G-R/M.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: December 8, 2017

Date of application acceptance: December 11, 2017

Date filed with the Board of Environmental Protection:

This Order prepared by Patric J. Sherman, Bureau of Air Quality.

