



DEPARTMENT ORDER

**Maine Woods Company LLC  
 Aroostook County  
 Portage, Maine  
 A-736-71-G-R/M**

**Departmental  
 Findings of Fact and Order  
 Air Emission License  
 Renewal / Minor Revision**

**FINDINGS OF FACT**

After review of the air emission license renewal 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) has applied to renew their Air Emission License for the operation of emission sources associated with their hardwood sawmill and lumber drying facility.

Maine Woods has requested a minor revision to their air license in order to reduce their license limits below the minimum reporting thresholds required by *Emission Statements*, 06-096 Code of Maine Rules (C.M.R.) Chapter 137.

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

**B. Emission Equipment**

The following equipment is addressed in this air emission license:

**Boilers and Heaters**

<b><u>Equipment</u></b>	<b><u>Max. Capacity (MMBtu/hr)</u></b>	<b><u>Fuel Type</u></b>	<b><u>Maximum Firing Rate</u></b>	<b><u>Control Equipment</u></b>	<b><u>Date of Manuf</u></b>	<b><u>Date of Install</u></b>	<b><u>Stack #</u></b>
Boiler #1	28.8	Biomass	3.5 tons/hour *	Dual Multicyclone	1998	1998	1
Furnace	3.5	Distillate Fuel, 0.0015% sulfur by weight	25 gal/hour	None	1978	1978	2

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

**Emergency Engines**

<b>Equipment</b>	<b>Serial Number</b>	<b>Max. Input Capacity (MMBtu/hr)</b>	<b>Rated Output Capacity (HP)</b>	<b>Firing Rate (gal/hr)</b>	<b>Fuel Type, % sulfur</b>	<b>Date of Manuf.</b>	<b>Date of Install.</b>
Emergency Fire Pump	6A-412573	0.71	284	5.1	Distillate Fuel, 0.0015%	1981	2013

**Process Equipment**

<b>Equipment</b>	<b>Production Rate</b>	<b>Pollution Control Equipment</b>
Drying Kilns	24.3 million board feet/year	None
Rip Line Saw	50,000 board feet/day	Cyclone

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.

The application for Maine Woods does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a renewal of currently licensed emission units and has been processed as such through *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115.

This application has also been processed as a minor revision, as it reduces the licensed emission limits for Maine Woods per their request. This change was determined to be a minor revision because it does not increase emissions of any pollutant.

With the annual fuel limit on the boiler, the runtime hour limit on the emergency fire pump and the lumber throughput restriction on the drying kilns, the facility is licensed below the major source thresholds for criteria air pollutants (CAP) and is considered a synthetic minor.

With the annual fuel limit on the boiler, the runtime hour limit on the emergency fire pump and the lumber throughput restriction on the drying kilns, the facility is licensed below the major source thresholds for hazardous air pollutants (HAP) and is considered an area source of HAP.

## 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. Process Description

Maine Woods manufactures green and dried hardwood lumber. Hardwood logs are delivered to the pile down area by trucks. The logs are accepted in pre-cut and tree length form. The tree length material is slashed off-site and stored. From the pile down area, logs are transferred by truck to the mill in-feed deck. Once debarked, the logs are sawed into lumber.

Slabs and edgings are chipped. After screening to remove fines and dust, the chips are mechanically conveyed to concrete storage bins. From there the chips are conveyed to container trucks. The station is equipped with a railcar cover to minimize fugitive emissions during loading. Bark and sawdust generated by the sawmill is burned in the boiler. Excess wood waste is sold to off-site markets.

Green lumber exits the sawmill as strapped bundles ready for shipment or as stickered bundles to be transferred to the covered in-feed carriages of the dry kilns using mobile lumber lifts. There are a series of several side-by-side steam heated, track style lumber drying kilns that are used to dry the lumber after it has been cut to size. From the drying kilns, the dry lumber is strapped for shipment.

The kilns are heated with steam from Maine Wood's biomass boiler. Emissions from the wood during kiln drying are generated when volatile organic compounds (VOC) are released from the tannins, resins, fats, waxes, oils, gums and other aromatic compounds which naturally occur in the wood. VOC emissions, which can include pinenes, terpenes, aldehydes, ketones and methanol, are emitted through roof vents from the drying kilns along with the moisture (water vapor) that is extracted from the lumber. The kilns process hardwood species which include but are not limited to Sugar Maple, Oregon (Soft) Maple and Yellow Birch.

C. Boiler #1

1. BPT Findings

Boiler #1 fires green hardwood sawdust and hogged bark that has an approximate wet basis moisture content of 50%. Emissions from Boiler #1 are vented to a multi-cyclone to control particulate matter, which then exhausts to a 55 foot tall stack. Boiler #1 has a maximum capacity of 28.8 MMBtu/hr and was manufactured in 1998.

The BPT emission limits for Boiler #1 were based on the following:

Biomass Fuel

PM	– 0.22 lb/MMBtu, from license A-736-71-E-R dated September 14, 2011, BPT
PM <sub>10</sub>	– 0.12 lb/MMBtu, from license A-736-71-E-R dated September 14, 2011, BPT
SO <sub>2</sub>	– 0.025 lb/MMBtu, from AP-42 Table 1.6-2 dated 9/03
NO <sub>x</sub>	– 0.22 lb/MMBtu, from AP-42 Table 1.6-2 dated 9/03
CO	– 0.325 lb/MMBtu, from license A-736-71-E-R dated September 14, 2011, BPT
VOC	– 0.017 lb/MMBtu, from AP-42 Table 1.6-3 dated 9/03
Visible Emissions	– from license A-736-71-E-R dated September 14, 2011, BPT

The BPT emission limits for the boiler are the following:

<u>Unit</u>	<u>Pollutant</u>	<u>lb/MMBtu</u>
Boiler #1	PM	0.22
Boiler #1	PM <sub>10</sub>	0.12

<u>Unit</u>	<u>PM (lb/hr)</u>	<u>PM<sub>10</sub> (lb/hr)</u>	<u>SO<sub>2</sub> (lb/hr)</u>	<u>NO<sub>x</sub> (lb/hr)</u>	<u>CO (lb/hr)</u>	<u>VOC (lb/hr)</u>
Boiler #1 Wood / Biomass	6.3	3.5	0.7	6.3	9.4	0.5

Visible emissions from the boiler shall not exceed 20% opacity except for one six-minute period per hour of not more than 27%.

Maine Woods shall be limited to firing no more than 22,727 tons of wood in their Boiler #1 on a calendar year basis, in order to keep their NO<sub>x</sub> and PM<sub>10</sub> licensed emissions below the reporting thresholds of *Emission Statements*, 06-096 C.M.R. Ch. 137.

## 2. Periodic Monitoring

Periodic monitoring for the boiler shall include recordkeeping to document fuel use both on a monthly and calendar year basis. Documentation shall include the quantity of wood fuel used.

## 3. Federal Requirements

### a. New Source Performance Standards (NSPS): 40 C.F.R. Part 60, Subpart Dc

Boiler #1 was manufactured in 1995, burns fuel consisting of wood and wood mixtures, and has a heat input capacity of 28.8 MMBtu per hour. Due to its size and year of manufacture, Boiler #1 is subject to *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, 40 C.F.R. Part 60, Subpart Dc for units with heat inputs between 10 MMBtu/hr and 100 MMBtu/hr that were manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

However, because it fires wood and wood mixtures for fuel, and because its heat input capacity is less than 30 MMBtu per hour, it is not subject to the Standards for Sulfur Dioxide or for Particulate Matter, or their testing, monitoring and compliance requirements. [40 C.F.R. § 60.42c to 47c]

Boiler #1 is subject to the Reporting and Recordkeeping requirements of Subpart Dc. [40 C.F.R. § 60.48c]

(1) Maine Woods shall have submitted to the Department written notification of the date of construction, reconstruction or actual startup of their facility, including the design heat input capacity of Boiler #1 and identification of the fuels to be combusted within the boiler. [60.48c(a)(1)]

(2) Maine Woods shall keep and maintain records of the amount of wood fuel combusted in Boiler #1. Records may be updated at the end of each operating day [60.48c(g)(1)], or alternatively, at the end of each calendar month. [60.48c(g)(2)]

b. National Emission Standards for Hazardous Air Pollutants (NESHAP):  
40 C.F.R. Part 63, Subpart JJJJJ

Boiler #1 is considered an existing biomass boiler and is subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJ. [40 C.F.R. §§63.11193 and 63.11195]

A summary of the currently applicable federal 40 C.F.R. Part 63, Subpart JJJJJ requirements is listed in this Findings of Fact in section E.

D. Furnace

Maine Woods operates a 3.5 MMBtu/hr furnace in the garage / office building located on site for heating purposes. The furnace fires distillate fuel, exhausts through its own stack and was installed in 1978.

1. BPT Findings

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

Distillate Fuel

PM/PM <sub>10</sub>	–	0.12 lb/MMBtu based on 06-096 C.M.R. ch. 103
SO <sub>2</sub>	–	based on firing distillate fuel with a maximum sulfur content of 0.0015% 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 Emissions	–	06-096 C.M.R. ch. 101

The BPT emission limits for the furnace are the following:

<b>Unit</b>	<b>Pollutant</b>	<b>lb/MMBtu</b>
Furnace	PM	0.12

<b>Unit</b>	<b>PM (lb/hr)</b>	<b>PM<sub>10</sub> (lb/hr)</b>	<b>SO<sub>2</sub> (lb/hr)</b>	<b>NO<sub>x</sub> (lb/hr)</b>	<b>CO (lb/hr)</b>	<b>VOC (lb/hr)</b>
Furnace 3.5 MMBtu/hr Distillate fuel	0.4	0.4	0.01	0.5	0.1	0.01

Visible emissions from the furnace shall not exceed 20% opacity on a six-minute block average basis.

BPT for the furnace includes firing only distillate fuel with a maximum sulfur content of 0.0015% by weight (15 ppm).

2. Periodic Monitoring

Periodic monitoring for the furnace shall include recordkeeping to document the sulfur content of the fuel used, both on a monthly and calendar year basis. Documentation shall be kept on site and current, and made available for review by the Department or the EPA upon request.

3. Federal Requirements

a. New Source Performance Standards (NSPS): 40 C.F.R. Part 60, Subpart Dc

Due to the size and year of manufacture, the furnace is not subject to *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, 40 C.F.R. Part 60, Subpart Dc for units with heat inputs between 10 MMBtu/hr and 100 MMBtu/hr that were manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

b. National Emission Standards for Hazardous Air Pollutants (NESHAP): 40 C.F.R. Part 63, Subpart JJJJJ

The furnace is subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJ. The furnace is considered an existing oil boiler rated less than 10 MMBtu/hr. [40 C.F.R. §§63.11193 and 63.11195]

A summary of the currently applicable requirements of federal 40 C.F.R. Part 63, Subpart JJJJJ for the furnace is included in section E.

- E. National Emission Standards for Hazardous Air Pollutants (NESHAP): 40 C.F.R. Part 63, Subpart JJJJJ

For informational purposes, a summary of the currently applicable federal 40 C.F.R. Part 63, Subpart JJJJJ requirements for **Boiler #1** and for the **furnace** is listed below. At this time, the Department has not taken delegation of this area source MACT (Maximum Achievable Control Technology) rule promulgated by EPA; however, Maine Woods is still subject to the requirements. Notification forms and additional rule information can be found on the following website:

<http://www.epa.gov/ttn/atw/boiler/boilerpg.html>

1. Compliance Dates, Notifications, and Work Practice Requirements

a. Initial Notification of Compliance

An Initial Notification submittal to EPA for both Boiler #1 and the furnace was due no later than January 20, 2014. [40 C.F.R. § 63.11225(a)(2)] Maine Woods submitted their Initial Notification to EPA on September 22, 2011.

b. Boiler #1 and Furnace Tune-Up Program

- (1) A boiler tune-up program shall be implemented for Boiler #1 and for the furnace. [40 C.F.R. § 63.11223]
- (2) Each tune-up for Boiler #1 shall be conducted biennially as specified by the rule. Frequency requirements are based on the size, age, and operations of the boiler. See chart below:
- (3) Each tune-up for the furnace shall be conducted every five years as specified by the rule. Frequency requirements are based on the size, age, and operations of the furnace. See chart below:

<b><u>Boiler Category</u></b>	<b><u>Tune-Up Frequency</u></b>
New or Existing Oil, Biomass and Coal fired boilers that are not designated as "Boilers with Less Frequent Tune-up Requirements"	Every 2 years
Oil fired boilers with a heat input capacity of $\leq 5$ MMBtu/hr	Every 5 years

[40 C.F.R. § 63.11223(a) and Table 2]



- (4) The boiler tune-up programs for Boiler #1 and the furnace, conducted to demonstrate continuous compliance, shall be performed as specified below:
- (i) As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection. [40 C.F.R. § 63.11223(b)(1)]
  - (ii) 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)]
  - (iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection. [40 C.F.R. § 63.11223(b)(3)]
  - (iv) Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]
  - (v) 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)]
  - (vi) 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)]
- (5) Tune-Up Report: Separate tune-up reports for Boiler #1 and the furnace shall be maintained onsite and, if requested, submitted to EPA. The reports shall each contain the following information:
- (i) The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;
  - (ii) A description of any corrective actions taken as part of the tune-up of the boiler; and
  - (iii) The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler or furnace, but only if the unit was physically and

legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 C.F.R. § 63.11223(b)(6)]

- (6) After conducting the initial boiler tune-up, a Notification of Compliance Status was to be submitted to EPA no later than July 19, 2014. [40 C.F.R. § 63.11225(a)(4) and 40 C.F.R. § 63.11214(b)] Maine Woods submitted their Notification of Compliance Status to EPA on April 5, 2012.

## 2. Compliance Report

A compliance report shall be prepared by March 1<sup>st</sup> biennially for Boiler #1 which covers the previous two calendar years. A compliance report shall be prepared by March 1<sup>st</sup> every five years for the furnace, which covers the previous five years. The compliance reports for Boiler #1 and the furnace shall be maintained by the source and submitted to the Department and to the EPA upon request. The reports must include the items contained in §§ 63.11225(b)(1) and (2), including the following: [40 C.F.R. § 63.11225(b)]

- a. Company name and address;
- b. A statement of whether the source has complied with all the relevant requirements of this Subpart;
- c. A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
- d. The following certifications, as applicable:
  - (1) "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
  - (2) "No secondary materials that are solid waste were combusted in any affected unit."
  - (3) "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

### 3. Energy Assessment

Boiler #1 is subject to the energy assessment requirement as follows:

- a. A one-time energy assessment was required to be performed by a qualified energy assessor on the applicable boilers no later than March 21, 2014. [40 C.F.R. § 63.11196(a)(3)] Maine Woods completed the energy assessment, signed their Notification of Compliance Status Report on April 5, 2012 and submitted it to the EPA.
- b. The energy assessment was required to include a visual inspection of the boiler system; an evaluation of operating characteristics of the affected boiler systems, specifications of energy use systems, operating and maintenance procedures, and unusual operating constraints; an inventory of major energy use systems consuming energy from affected boiler(s) and which are under control of the boiler owner or operator; a review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage; a list of major energy conservation measures that are within the facility's control; a list of the energy savings potential of the energy conservation measures identified; and a comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments. [40 C.F.R. Part 63, Subpart JJJJJ, Table 2(16)]
- c. A Notification of Compliance Status was required to be submitted to EPA no later than July 19, 2014. [40 C.F.R. § 63.11225(a)(4) and 40 C.F.R. § 63.11214(c)] Maine Woods signed their Notification of Compliance Status Report for the Energy Assessment on April 5, 2012 and submitted it to the EPA.

### 4. Recordkeeping

Records for Boiler #1 and the furnace shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJ including the following [40 C.F.R. § 63.11225(c)]:

- a. Copies of notifications and reports with supporting compliance documentation;
- b. Identification of the boiler or furnace, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler or furnace was tuned;
- c. Records of the occurrence and duration of each malfunction of the boiler or furnace; and

d. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler or furnace. 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. [40 C.F.R. § 63.11225(a)(4)(vi)]

F. Emergency Fire Pump

Maine Woods operates one emergency fire pump. The emergency fire pump is driven by a 284 horsepower engine with a maximum heat input rating of 0.71 MMBtu/hr and fires distillate fuel. The emergency fire pump was manufactured in 1981 and installed at Maine Woods in 2013.

1. BPT Findings

The BPT emission limits for the emergency fire pump engine are based on the following:

- PM/PM<sub>10</sub> - 0.12 lb/MMBtu from 06-096 C.M.R. ch. 115, BPT
- SO<sub>2</sub> - combustion of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight)
- NO<sub>x</sub> - 4.41lb/MMBtu from AP-42 dated 10/96
- CO - 0.85 lb/MMBtu from AP-42 dated 10/96
- VOC - 0.35 lb/MMBtu from AP-42 dated 10/96
- Visible Emissions - 06-096 C.M.R. ch. 115, BPT

The BPT emission limits for the emergency fire pump engine are the following:

<u>Unit</u>	<u>PM</u> <u>(lb/hr)</u>	<u>PM<sub>10</sub></u> <u>(lb/hr)</u>	<u>SO<sub>2</sub></u> <u>(lb/hr)</u>	<u>NO<sub>x</sub></u> <u>(lb/hr)</u>	<u>CO</u> <u>(lb/hr)</u>	<u>VOC</u> <u>(lb/hr)</u>
Emergency Fire Pump 0.71 MMBtu/hr Distillate fuel	0.1	0.1	0.01	3.1	0.6	0.3

Visible emissions from the distillate fuel-fired emergency fire pump engine shall not exceed 20% opacity on a six-minute block average basis.

The emergency fire pump shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. There is no limit on emergency operation. The emergency fire pump shall be equipped with a non-

resettable hour-meter to record operating time. To demonstrate compliance with the operating hours limit, Maine Woods shall keep records of the total hours of operation and the hours of emergency operation for the unit.

The emergency fire pump is only to be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source.

2. New Source Performance Standards (NSPS)

Due to the date of manufacture of the compression ignition emergency fire pump engine listed above, the engine is not subject to the New Source Performance Standards (NSPS) *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE)*, 40 C.F.R. Part 60, Subpart IIII since the unit was manufactured prior to April 1, 2006. [40 C.F.R. § 60.4200]

3. National Emission Standards for Hazardous Air Pollutants (NESHAP):  
40 C.F.R. Part 63, Subpart ZZZZ

*National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 C.F.R. Part 63, Subpart ZZZZ is applicable to the emergency fire pump engine listed above. The unit is considered existing, emergency stationary reciprocating internal combustion engine at an area HAP source and is not subject to New Source Performance Standards regulations. EPA's August 9, 2010 memo (*Guidance Regarding Definition of Residential, Commercial, and Institutional Emergency Stationary RICE in the NESHAP for Stationary RICE*) specifically does not exempt this unit from the federal requirements. [40 C.F.R. § 63.6585]

a. Emergency Engine Designation and Operating Criteria

Under 40 C.F.R. Part 63, Subpart ZZZZ, a stationary reciprocating internal combustion engine (RICE) is considered an emergency stationary RICE (emergency engine) as long as the engine is operated in accordance with the following criteria. Operation of an engine outside of the criteria specified below may cause the engine to no longer be considered an emergency engine under 40 C.F.R. Part 63, Subpart ZZZZ, resulting in the engine being subject to requirements applicable to non-emergency engines.

(1) Emergency Situation Operation (On-Site)

There is no operating time limit on the use of an emergency engine to provide electrical power or mechanical work during an emergency situation. Examples of use of an emergency engine during emergency situations include the following:

- Use of an engine to produce power for critical networks or equipment (including power supplied to portions of a facility) because of failure or interruption of electric power from the local utility (or the normal power source, if the facility runs on its own power production);
- Use of an engine to mitigate an on-site disaster or equipment failure;
- Use of an engine to pump water in the case of fire, flood, natural disaster, or severe weather conditions; and
- Similar instances.

(2) Non-Emergency Situation Operation

An emergency engine may be operated up to a maximum of 100 hours per calendar year for maintenance checks, readiness testing, and other non-emergency situations as described below.

- (i) An emergency engine may be operated for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government; the manufacturer; the vendor; the regional transmission organization or equivalent balancing authority and transmission operator; or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE more than 100 hours per calendar year.
- (ii) An emergency engine may be operated for up to 50 hours per calendar year for other non-emergency situations. However, these operating hours are counted as part of the 100 hours per calendar year operating limit described in paragraph (2) and (2) (i) above.

The 50 hours per calendar year operating limit for other non-emergency situations cannot be used for peak shaving, non-emergency demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

The emergency fire pump shall be limited to the usage outlined in 40 C.F.R. § 63.6640(f) and therefore may be classified as an existing emergency stationary RICE as defined in 40 C.F.R. Part 63, Subpart ZZZZ. Failure to comply with all of the requirements listed in 40 C.F.R. § 63.6640(f) may cause this engine to not be considered an emergency engine and therefore subject to all applicable requirements for non-emergency engines.

b. 40 C.F.R. Part 63, Subpart ZZZZ Requirements

(1) Operation and Maintenance Requirements

	<b>Operating Limitations</b>
Compression ignition (distillate fuel) units:  <b>Emergency Fire Pump Engine</b>	- Change oil and filter every 500 hours of operation or annually, whichever comes first; - Inspect the air cleaner every 1000 hours of operation or annually, whichever comes first, and replace as necessary; and - Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

The engine shall be operated and maintained according to the manufacturer's emission-related written instructions, or Maine Woods 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 C.F.R. § 63.6625(e)]

(2) Optional Oil Analysis Program

Maine Woods has the option of utilizing an oil analysis program which complies with the requirements of § 63.6625(i) in order to extend the specified oil change requirement. If this option is used, Maine Woods must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine.

[40 C.F.R. § 63.6625(i)]

(3) Non-Resettable Hour Meter Requirement

A non-resettable hour meter shall be installed and operated on the engine.

[40 C.F.R. § 63.6625(f)]

(4) Startup Idle and Startup Time Minimization Requirements

During periods of startup the facility shall minimize the engine's time spent at idle and minimize the engine's startup time at startup to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

[40 C.F.R. § 63.6625(h) and 40 C.F.R. Part 63, Subpart ZZZZ, Table 2d]

(5) Annual Time Limit for Maintenance and Testing

As an emergency engine, the unit shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, non-emergency demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 C.F.R. § 63.6640(f)]

(6) Recordkeeping

Maine Woods shall keep records that include maintenance conducted on the engine and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, including what classified the operation as emergency, and the number of hours the unit operated for non-emergency purposes. [40 C.F.R. § 63.6655(f)]

G. Kilns

Maine Woods operates six side-by-side steam heated, track style lumber dry kilns. The wood dried is all hardwood, primarily maple and birch. The maximum physical capacity of the kilns is 24.3 million board feet per year.

Based on the detailed BACT analysis performed for Air Emission License Amendment A-736-71-C-A (issued December 20, 2004) and carried forward into Air License A-736-71-E-R (issued September 14, 2011), the Department finds that BPT for VOC control from the drying kilns is no add-on pollution control. All other methods analyzed were neither economically nor technically feasible.

No emission data was found for the species of woods that are dried in Maine Woods' kilns. The current air license A-735-71-E-R (issued September 14, 2011) used a conservative emission factor of 2.26 lb of VOC per thousand board feet (MBF) that was developed using data from studies conducted by the National Council for Air and Stream Improvement (NCASI) and the University of Maine. Consistent with the methodology used in the current air license, this emission factor has been carried forward and used to calculate VOC emissions for this air license renewal.

Maine Woods has requested a throughput limit on the kilns of 20.3 MMBF per year, based on a calendar year total, to keep their licensed VOC emission limit below the



reporting requirements of *Emission Statements*, 06-096-C.M.R. Ch. 137. The Department agrees with this limit and has processed the license in accordance with the facility's request.

H. Rip-Line Saw

Maine Woods operates a rip-line saw with conveyors. The facility can rip up to 50,000 board feet per day which produces approximately 9 cubic feet of sawdust. The conventional cut-and-rip line is essentially organized around cut-off saws producing pieces of wood that are fed to straight line ripsaws to be cut as either fixed or random width stock. The rip-line saw is used for edging-up lumber with wane or bark edges; also for taking out heartwood of wide boards, thus raising the grade and market value of lumber otherwise sold for "culls".

The pollutant of concern from the rip-saw line is particulate matter. Maine Woods operates a cyclone to reduce particulate matter from the rip-line saw. The cyclone is considered BPT for this process. Other add-on PM emission controls were considered but were determined to be neither technically nor economically feasible. Maine Woods shall meet the general process equipment opacity limit established in *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101.

I. Parts Washer

The parts washer has a design capacity of 10 gallons and uses mineral spirits as the cleaning solvent. The parts washer is subject to *Solvent Cleaners*, 06-096 C.M.R. ch. 130, and records shall be kept documenting compliance.

J. Fugitive Emissions

Fugitive particulate matter may potentially be emitted in the wood waste transfer and collection systems, including the transfer of wood chips to rail cars. Other potential sources of fugitive PM emissions may also include material stockpiles, unpaved roadways and ash handling systems and equipment.

Maine Woods shall maintain all potential fugitive particulate matter sources to prevent visible emissions from any general process source from exceeding 20 percent opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101]

K. Annual Emissions

1. Total Annual Emissions

Maine Woods shall be restricted to the following annual emissions, based on a calendar year total. The tons per year limits were calculated based on a biomass fuel limit of 22,272 tons per year, a lumber throughput restriction of 20.3 MMBF per year through the drying kilns, and 100 hours per year of operation for the emergency fire pump.

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

<b>Unit</b>	<b>PM</b>	<b>PM<sub>10</sub></b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>VOC</b>
Boiler #1	22.50	12.27	2.56	22.50	33.24	1.74
Furnace	1.84	1.84	0.02	2.19	0.55	0.04
Emergency Fire Pump	0.01	0.01	0.00	0.16	0.03	0.01
Kilns	0	0	0	0	0	23.0
<b>Total TPY</b>	<b>24.3</b>	<b>14.1</b>	<b>2.6</b>	<b>24.9</b>	<b>33.8</b>	<b>24.8</b>

2. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011, through 'Tailoring' revisions made to EPA's *Approval and Promulgation of Implementation Plans*, 40 C.F.R. Part 52, Subpart A, § 52.21, *Prevention of Significant Deterioration of Air Quality* rule. Greenhouse gases, as defined in 06-096 C.M.R. ch. 100, are the aggregate group of the following gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO<sub>2</sub>e).

The quantity of CO<sub>2</sub>e emissions from this facility is less than 100,000 tons per year, based on the following:

- the facility's fuel use limit;
- worst case emission factors from the following sources: U.S. EPA's AP-42, the Intergovernmental Panel on Climate Change (IPCC), and *Mandatory Greenhouse Gas Reporting*, 40 C.F.R. Part 98; and
- global warming potentials contained in 40 C.F.R. Part 98.

No additional licensing actions to address GHG emissions are required at this time.

### III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source is determined by the Department on a case-by case basis. In accordance with 06-096 C.M.R. ch. 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:

<b>Pollutant</b>	<b>Tons/Year</b>
PM <sub>10</sub>	25
SO <sub>2</sub>	50
NO <sub>x</sub>	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 A-736-71-G-R/M subject to the following conditions.

Severability: The invalidity or unenforceability of any provision of this License or part thereof 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. § 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 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 115]
- (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S. § 353-A. [06-096 C.M.R. ch. 115]
- (6) The license does not convey any property rights of any sort, or any exclusive privilege.  
[06-096 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 115]

- (11) In accordance with the Department's air emission compliance test protocol and 40 C.F.R. 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 C.F.R. 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 C.M.R. ch. 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 C.F.R. 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 C.M.R. ch. 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 C.M.R. ch. 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 emissions 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 C.M.R. ch. 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 C.M.R. ch. 115]

#### SPECIFIC CONDITIONS

(16) **Boiler #1**

A. Fuel

1. Total fuel use for Boiler #1 shall not exceed 22,727 tons per year of wood biomass fuel, tracked on a calendar year basis. [06-096 C.M.R. ch. 115, BPT]
2. Compliance shall be demonstrated by records of annual fuel use, kept on a monthly and calendar year basis. [06-096 C.M.R. ch. 115, BPT]

B. Emissions shall not exceed the following:

<u>Emission Unit</u>	<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>Origin and Authority</u>
Boiler #1	PM	0.22	A-736-71-E-R (September 14, 2011), BPT
Boiler #1	PM <sub>10</sub>	0.12	A-736-71-E-R (September 14, 2011), BPT

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

<b>Emission Unit</b>	<b>PM (lb/hr)</b>	<b>PM<sub>10</sub> (lb/hr)</b>	<b>SO<sub>2</sub> (lb/hr)</b>	<b>NO<sub>x</sub> (lb/hr)</b>	<b>CO (lb/hr)</b>	<b>VOC (lb/hr)</b>
Boiler #1	6.3	3.5	0.7	6.3	9.4	0.5

Visible emissions from the boiler shall not exceed 20% opacity on a six-minute block average basis, except for one six minute period per hour of not more than 27%. [Air License A-736-71-E-R (September 14, 2011), BPT]

4. New Source Performance Standards (NSPS) Requirements for Boiler #1

Boiler #1 is subject to the Reporting and Recordkeeping requirements of Subpart Dc. [40 C.F.R. § 60.48c]

Maine Woods shall record and maintain records of the amount of fuel combusted in Boiler #1 during each operating day, [60.48c(g)(1)] or alternatively during each calendar month. [60.48c(g)(2)]

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:

<b>Boiler Category</b>	<b>Tune-Up Frequency</b>
New or Existing Oil, Biomass and Coal fired boilers that are not designated as "Boilers with less frequent tune up requirements" listed below	Every 2 years

[40 C.F.R. § 63.11223(a) and Table 2]

b. 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. Delay of the burner inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection. [40 C.F.R. § 63.11223(b)(1)]

(2) 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)]

- (3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection. [40 C.F.R. § 63.11223(b)(3)]
  - (4) Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]
  - (5) 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)]
  - (6) 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)]
- c. Tune-Up Report: A tune-up report for Boiler #1 shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the following information:
- (1) The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;
  - (2) A description of any corrective actions taken as part of the tune-up of the boiler; and
  - (3) The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit.

[40 C.F.R. § 63.11223(b)(6)]



2. Compliance Report

A compliance report for Boiler #1 shall be prepared by March 1<sup>st</sup> biennially which shall cover the previous two calendar years. The report shall be maintained by the source and submitted to the Department and to the EPA upon request. The report must include the items contained in §§ 63.11225(b)(1) and (2), including the following:

- a. Company name and address;
- b. A statement of whether the source has complied with all the relevant requirements of this Subpart;
- c. A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
- d. The following certifications, as applicable:
  - (1) "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
  - (2) "No secondary materials that are solid waste were combusted in any affected unit."
  - (3) "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

[40 C.F.R. § 63.11225(b)]

3. Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJ including the following:

- a. Copies of notifications and reports with supporting compliance documentation;
- b. Identification of the 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 for Boiler #1; and
- d. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

[40 C.F.R. § 63.11225(c)]

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. [40 C.F.R. § 63.11225(a)(4)(vi)]

(17) **Furnace**

A. Fuel

1. The facility shall fire distillate fuel with a maximum sulfur content not to exceed 0.0015% by weight. [06-096 C.M.R. ch. 115, BPT]
2. Compliance shall be demonstrated by fuel records from the supplier showing the percent sulfur content by weight of the fuel delivered. Purchase records detailing the sulfur content of the fuel burned in the furnace shall be kept and maintained on site. [06-096 C.M.R. ch. 115, BPT]

B. Emissions shall not exceed the following:

<u>Unit</u>	<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>Origin and Authority</u>
Furnace 0.71 MMBtu/hr Distillate Fuel	PM	0.12	06-096 C.M.R. ch. 115, BPT

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

<u>Emission Unit</u>	<u>PM (lb/hr)</u>	<u>PM<sub>10</sub> (lb/hr)</u>	<u>SO<sub>2</sub> (lb/hr)</u>	<u>NO<sub>x</sub> (lb/hr)</u>	<u>CO (lb/hr)</u>	<u>VOC (lb/hr)</u>
Furnace	0.4	0.4	0.01	0.5	0.1	0.01

D. Visible Emissions from the furnace firing distillate fuel shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101]

E. Boiler MACT (40 C.F.R. Part 63, Subpart JJJJJ) Requirements for the Furnace [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>
Oil fired boilers with a heat input capacity of ≤5MMBtu/hr	Every 5 years

[40 C.F.R. § 63.11223(a) and Table 2]

- b. 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. Delay of the burner inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection. [40 C.F.R. § 63.11223(b)(1)]
  - (2) 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)]
  - (3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection. [40 C.F.R. § 63.11223(b)(3)]
  - (4) Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]
  - (5) 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)]
  - (6) 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)]
- c. Tune-Up Report: A tune-up report for the furnace shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the following information:
- (1) The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;
  - (2) A description of any corrective actions taken as part of the tune-up of the furnace; and
  - (3) The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 C.F.R. § 63.11223(b)(6)]

2. Compliance Report

A compliance report for the furnace shall be prepared by March 1<sup>st</sup> every five years, which covers the previous five calendar years. The report shall be maintained by the source and submitted to the Department and to the EPA upon request. The report must include the items contained in §§ 63.11225(b)(1) and (2), including the following:

- a. Company name and address;
- b. A statement of whether the source has complied with all the relevant requirements of this Subpart;
- c. A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
- d. The following certifications, as applicable:
  - (1) "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
  - (2) "No secondary materials that are solid waste were combusted in any affected unit."
  - (3) "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

[40 C.F.R. § 63.11225(b)]

3. Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJ including the following:

- a. Copies of notifications and reports with supporting compliance documentation;
- b. Identification of the furnace, 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 the furnace; and
- d. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.  
[40 C.F.R. § 63.11225(c)]:

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.  
[40 C.F.R. § 63.11225(a)(4)(vi)]

(18) **Emergency Fire Pump**

- A. The emergency fire pump shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations.  
[40 C.F.R. § 60.4211(f)(2)]
- B. Maine Woods shall keep records that include maintenance conducted on the engine and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, including what classified the operation as emergency, and the number of hours the unit operated for non-emergency purposes.  
[06-096 C.M.R. ch. 115, BPT]
- C. The fuel sulfur content for the emergency fire pump engine shall be limited to 0.0015% sulfur by weight. 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 C.M.R. ch. 115, BPT]
- D. Emissions shall not exceed the following:

<b>Unit</b>	<b>Pollutant</b>	<b>lb/MMBtu</b>	<b>Origin and Authority</b>
Emergency Fire Pump	PM	0.12	06-096 C.M.R. ch. 103, § (2)(B)(1)(a)

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

<b>Unit</b>	<b>PM (lb/hr)</b>	<b>PM<sub>10</sub> (lb/hr)</b>	<b>SO<sub>2</sub> (lb/hr)</b>	<b>NO<sub>x</sub> (lb/hr)</b>	<b>CO (lb/hr)</b>	<b>VOC (lb/hr)</b>
Emergency Fire Pump (0.71 MMBtu/hr) Distillate Fuel	0.1	0.1	0.01	3.1	0.6	0.3

F. Visible Emissions

Visible emissions from the distillate fuel-fired emergency fire pump engine shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101]

G. The emergency fire pump is only to be operated for maintenance purposes and for situations arising from sudden and reasonably unforeseeable events beyond the control of the source. [40 C.F.R. § 60.4211(f)]

H. The emergency fire pump engine shall meet the applicable requirements of 40 C.F.R. Part 63, Subpart ZZZZ, including the following:

1. Maine Woods shall meet the following operational limitations for the compression ignition emergency engine:

- a. Change the oil and filter annually,
  - b. Inspect the air cleaner annually and replace as necessary, and
  - c. Inspect the hoses and belts annually and replace as necessary.
- [40 C.F.R. § 63.6603(a) and Table 2d to Subpart ZZZZ]

2. Records shall be maintained documenting compliance with the operational limitations. [40 C.F.R. § 63.6603(a) and Table 2d to Subpart ZZZZ, and 06-096 C.M.R. ch. 115]

3. Oil Analysis Program Option

Maine Woods has the option of utilizing an oil analysis program which complies with the requirements of § 63.6625(i) in order to extend the specified oil change requirement. If this option is used, Maine Woods must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for each engine. The analysis program must be part of the maintenance plan for each engine. [40 C.F.R. § 63.6625(i)]

4. Non-Resettable Hour Meter

A non-resettable hour meter shall be installed and operated on the engine. [40 C.F.R. § 63.6625(f)]

5. Maintenance, Testing, and Non-Emergency Operating Situations

- a. As an emergency engine, the unit shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations. These limits are based on a calendar year. Compliance shall be demonstrated by records

(electronic or written logs) of all engine operating hours.  
[40 C.F.R. § 63.6640(f) and 06-096 C.M.R. ch. 115]

- b. Maine Woods shall keep records that include maintenance conducted on the engine and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, including what classified the operation as emergency, and the number of hours the unit operated for non-emergency purposes. Maine Woods shall keep records of the notification of the emergency situation, and the date, start time, and end time of engine operation for these purposes. [40 C.F.R. §§ 63.6655(e) and (f)]

6. Operation and Maintenance

The engine shall be operated and maintained according to the manufacturer's emission-related written instructions, or Maine Woods shall develop a maintenance plan which provides 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 C.F.R. § 63.6625(e)]

7. Startup Idle and Startup Time Minimization

During periods of startup, the facility must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 C.F.R. § 63.6625(h) & 40 C.F.R. Part 63, Subpart ZZZZ Table 2d]

(19) **Kilns**

- A. Maine Woods shall not exceed a yearly throughput of 20.3 million board feet per year based on a calendar year. [06-096 C.M.R. ch. 115, BPT]
- B. Maine Woods shall keep monthly records of the number of board feet processed through the kilns, and shall differentiate between hardwood and softwood. [06-096 C.M.R. ch. 115, BPT]
- C. Visible emissions from the drying kiln vents shall not exceed 20% opacity on a six- minute block average. [06-096 C.M.R. ch. 101, BPT]

(20) **Rip-Line Saw**

- A. The rip-line saw shall control particulate emissions by the use of a cyclone. [06-096 C.M.R. ch. 115, BPT]
- B. Visible emissions shall not exceed an opacity of 20% on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]
- C. Maine Woods shall perform a daily visual inspection of the cyclone for the rip-line saw and keep records to document that it was done. These records shall also include any observations or findings from the inspection requiring follow-up, as well as a description of all maintenance or repairs that are performed on the cyclone. [06-096 C.M.R. ch. 115, BPT]

(21) **Parts Washer**

The parts washer at Maine Woods is subject to *Solvent Cleaners*, 06-096 C.M.R. ch. 130.

- A. Maine Woods shall keep records of the amount of solvent added to each parts washer. [06-096 C.M.R. ch. 115, BPT]
- B. The following are exempt from the requirements of 06-096 C.M.R. ch. 130 [06-096 C.M.R. ch. 130]:
  - 1. Solvent cleaners using less than two liters (68 oz.) of cleaning solvent with a vapor pressure of 1.00 mmHg, or less, at 20° C (68° F);
  - 2. Wipe cleaning; and,
  - 3. Cold cleaning machines using solvents containing less than or equal to 5% VOC by weight.
- C. The following standards apply to cold cleaning machines that are applicable sources under 06-096 C.M.R. ch. 130.
  - 1. Maine Woods shall attach a permanent conspicuous label to each unit summarizing the following operational standards [06-096 C.M.R. ch. 130]:
    - a. Waste solvent shall be collected and stored in closed containers.
    - b. Cleaned parts shall be drained of solvent directly back to the cold cleaning machine by tipping or rotating the part for at least 15 seconds or until dripping ceases, whichever is longer.



- c. Flushing of parts shall be performed with a solid solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray) at a pressure that does not exceed 10 psig. Flushing shall be performed only within the freeboard area of the cold cleaning machine.
  - d. The cold cleaning machine shall not be exposed to drafts greater than 40 meters per minute when the cover is open.
  - e. Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the parts washer.
  - f. When a pump-agitated solvent bath is used, the agitator shall be operated to produce no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used.
  - g. Spills during solvent transfer shall be cleaned immediately. Sorbent material used to clean spills shall then be immediately stored in covered containers.
  - h. Work area fans shall not blow across the opening of the parts washer unit.
  - i. The solvent level shall not exceed the fill line.
2. The remote reservoir cold cleaning machine shall be equipped with a perforated drain with a diameter of not more than six inches. [06-096 C.M.R. ch. 130]

(22) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles, wood chip piles, ash handling and roadways) shall not exceed 20% opacity. Compliance shall be determined by an aggregate of the individual 15-second opacity observations which exceed 20% in any one (1) hour. [06-096 C.M.R. ch. 101]

(23) **General Process Sources**

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101]

- (24) Maine Woods 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. § 605).

DONE AND DATED IN AUGUSTA, MAINE THIS 27 DAY OF January, 2017.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: *Paul Robert Core*  
PAUL MERCER, COMMISSIONER

**The term of this license shall be ten (10) years from the signature date above.**

[Note: If a renewal application, determined as complete by the Department, is submitted prior to expiration of this license, then pursuant to Title 5 M.R.S. § 10002, all terms and conditions of the license shall remain in effect until the Department takes final action on the license renewal application.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: March 11, 2016

Date of application acceptance: March 16, 2016

Date filed with the Board of Environmental Protection:

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

