



DEPARTMENT ORDER

Hancock Lumber Company, Inc.
Oxford County
Bethel, Maine
A-1-71-V-A (SM)

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

FINDINGS OF FACT

After review of the air emission license amendment applications, 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

Hancock Lumber Company, Inc. (Hancock) was issued Air Emission License A-1-71-S-R on October 20, 2014, for the operation of emission sources associated with their lumber manufacturing facility. The license was subsequently amended on March 15, 2016 (A-1-71-U-A).

Hancock has requested an amendment to their license in order to install an additional cyclone on the Planer Mill, add Boiler #1 back to their license, and remove Boiler #3 from their license. The Department is also making formatting and numbering changes to the conditions in this amendment to clarify conditions in the October 2014 license.

The equipment addressed in this license amendment is located at 639 Walkers Mills Road, Bethel, Maine.

B. Emission Equipment

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

Boiler

<u>Equipment</u>	<u>Max. Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate</u>	<u>Fuel Type, % sulfur</u>	<u>Date of Manuf.</u>	<u>Date of Install.</u>	<u>Stack #</u>
Boiler #1	25.1	178.9 gal/hr	Distillate fuel, 0.5%	1989	1996	4

Boiler #3 will not be installed at the facility and is hereby removed from this air emission license.

Process Equipment

<u>Equipment</u>	<u>Production Rate</u>	<u>Pollution Control Equipment</u>
Planer Mill	42.0 MMBF/year	Cyclones
Parts Washers (2)*	10 gal. capacity (each)	-

*New in this air emission license amendment

Parts Washer #1 (15-gallon capacity) and Parts Washer #2 (5-gallon capacity), previously included in Air Emission License A-1-71-S-R (dated October 20, 2014), have been replaced with two new, 10-gallon capacity Parts Washers included in the table above. Parts Washers #1 and #2 have been removed from the facility and are hereby removed from the facility's air emission license.

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 modification of a minor source is considered a major or minor modification based on whether or not expected emission increases exceed the "Significant Emission" levels as defined in the Department's *Definitions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 100. The emission increases are determined by subtracting the current licensed annual emissions preceding the modification from the maximum future licensed annual emissions, as follows:

<u>Pollutant</u>	<u>Current License (TPY)</u>	<u>Future License (TPY)</u>	<u>Net Change (TPY)</u>	<u>Significant Emission Levels</u>
PM	37.9	41.9	+4.0	100
PM ₁₀	37.9	41.9	+4.0	100
SO ₂	3.5	38.8	+35.3	100
NO _x	41.9	67.8	+25.9	100
CO	85.5	88.0	+2.5	100
VOC	49.6	49.5	-0.1	50

<u>Pollutant</u>	<u>Current License (TPY)</u>	<u>Future License (TPY)</u>	<u>Net Change (TPY)</u>	<u>Significant Emission Levels</u>
CO ₂ e	<100,000	<100,000	-	100,000

This modification is determined to be a minor modification 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 new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

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

In air emission license amendment A-1-71-U-A (dated March 15, 2016) Hancock requested the addition of Boiler #3 to their license and the subsequent removal of Boiler #1 from their license as part of a potential improvement project at the mill. Since the issuance of that license amendment, Hancock has decided not to move forward with the project as planned, and has requested to add Boiler #1 back to their license and remove Boiler #3 from their license. The BACT findings for Boiler #1 are included below.

Hancock operates Boiler #1 as a backup to Boiler #2 to fulfill facility steam needs. Boiler #1 is rated at 25.1 MMBtu/hr and fires distillate fuel with a maximum sulfur content of 0.5% by weight. Boiler #1 was manufactured in 1989, installed in 1996 and exhausts through its own stack.

Hancock is planning to install a back-pressure turbine to generate electricity from the steam coming directly from the boilers. The resulting steam coming from the turbine will be at a lower pressure appropriate for distribution to the facility's lumber drying kilns. The turbine will replace several existing mechanical pressure reduction systems which will improve facility energy efficiency by making use of the energy previously lost by the mechanical pressure reduction systems. This is consistent with the findings of the Energy Assessment. The back-pressure turbine will not increase steam demand from Boilers #1 and #2; therefore, use of the back-pressure turbine will not cause any increase in the facility's licensed emissions.

1. BACT Findings

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

- PM/PM₁₀ – 0.1 lb/MMBtu based on 06-096 C.M.R. ch. 115, BACT
- SO₂ – 0.5 lb/MMBtu based on firing distillate fuel with a maximum sulfur content of 0.5% by weight
- NO_x – 0.37 lb/MMBtu based on 06-096 C.M.R. ch. 115, BACT
- CO – 5 lb/1000 gal based on AP-42, Table 1.3-1, dated 5/10
- VOC – 0.2 lb/1000 gal based on AP-42, Table 1.3-3, dated 5/10
- Visible Emissions – 06-096 C.M.R. ch. 115, BACT

The BACT emission limits for Boiler #1 are the following:

<u>Unit</u>	<u>Pollutant</u>	<u>lb/MMBtu</u>
Boiler #1	PM	0.1

<u>Unit</u>	<u>PM (lb/hr)</u>	<u>PM₁₀ (lb/hr)</u>	<u>SO₂ (lb/hr)</u>	<u>NO_x (lb/hr)</u>	<u>CO (lb/hr)</u>	<u>VOC (lb/hr)</u>
Boiler #1	2.51	2.51	12.61	9.27	0.89	0.04

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

Hancock shall be limited to firing no more than 1,000,000 gallons of distillate fuel in Boiler #1 based on a 12-month rolling total.

Fuel Sulfur Content Requirements

Boiler #1 is licensed to fire distillate fuel which, by definition, has a sulfur content of 0.5% or less by weight. Per 38 M.R.S. § 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 Boiler #1 shall not exceed 0.0015% by weight (15 ppm).

2. Periodic Monitoring

Periodic monitoring for Boiler #1 shall include recordkeeping to document fuel use both on a monthly and 12-month rolling total basis. Documentation shall include the type of fuel used and sulfur content of the fuel.

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

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 greater than 10 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

Hancock shall comply with all requirements of 40 C.F.R. Part 60, Subpart Dc applicable to Boiler #1 including, but not limited to, the following:

- a. Hancock shall record and maintain records of the amounts of each fuel combusted during each month with fuel sulfur content certifications. [40 C.F.R. § 60.48c(g)(2)]
- b. Hancock shall submit semi-annual reports to EPA and to the Department. These reports shall include the calendar dates covered in the reporting period and records of fuel supplier certifications. The semi-annual reports are due within 30 days of the end of each six-month period. [40 C.F.R. § 60.48c(j) and 06-096 C.M.R. ch. 115, BPT]
- c. The following address for EPA shall be used for any reports or notifications required to be copied to them:

U.S. Environmental Protection Agency, Region I
5 Post Office Square, Suite 100 (OES04-2)
Boston, MA 02109-3912
Attn: Air Compliance Clerk

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

Boiler #1 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 unit is considered an existing oil boiler rated greater than 10 MMBtu/hr. [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 below. At this time, the Department has not taken delegation of this federal rule promulgated by EPA; however, Hancock 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>.

a. Compliance Dates, Notifications, and Work Practice Requirements

(1) Initial Notification of Compliance

An Initial Notification submittal to EPA was due no later than January 20, 2014. Hancock submitted their Initial Notification to EPA on September 23, 2011. [40 C.F.R. § 63.11225(a)(2)]

(2) Boiler Tune-Up Program

(i) A boiler tune-up program shall be implemented. [40 C.F.R. § 63.11223]

(ii) 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:

Boiler Category	Tune-Up Frequency
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
New and Existing Oil, Biomass, and Coal fired Boilers with Less Frequent Tune-up Requirements	
Seasonal (see definition § 63.11237)	Every 5 years
Limited use (see definition § 63.11237)	Every 5 years
Oil fired boilers with a heat input capacity of \leq 5MMBtu/hr	Every 5 years
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]

(iii) 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. Delay of the burner inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for oil fired boilers less than or equal to

- 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [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. Delay of the inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [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)]
- (iv) Tune-Up Report: A tune-up report 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)]

- (v) After conducting the initial boiler tune-up, a Notification of Compliance Status shall be submitted to EPA no later than July 19, 2014. Hancock submitted their Notification of Compliance Status to EPA on September 29, 2014. [40 C.F.R. § 63.11225(a)(4) and 40 C.F.R. § 63.11214(b)]

(3) Compliance Report

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

- (i) Company name and address;
- (ii) A statement of whether the source has complied with all the relevant requirements of this Subpart;
- (iii) 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;
- (iv) 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."

(4) Energy Assessment

Boiler #1 is subject to the energy assessment requirement of 40 C.F.R. Part 63, Subpart JJJJJ. Hancock conducted their one-time energy assessment in accordance to this subpart on August 21, 2014 and submitted their Notification of Compliance Status to EPA on September 29, 2014. [40 C.F.R. §§ 63.11196(a)(3), 63.11225(a)(4), and 63.11214(c)]

b. Recordkeeping

Records 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)]:

- (1) Copies of notifications and reports with supporting compliance documentation;
- (2) 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;
- (3) Records of the occurrence and duration of each malfunction of each applicable boiler; and
- (4) 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. [40 C.F.R. § 63.11225(a)(4)(vi)]

C. Planer Mill

Hancock currently operates a Planer Mill to process cut and seasoned boards from the sawmill and turn them into finished lumber. Particulate matter (PM) emissions from the Planer Mill are currently collected and conveyed to a cyclone. In order to better control PM emissions from the Planer Mill, Hancock has recently installed an additional cyclone to operate in parallel with the original cyclone.

BACT for PM emissions from the Planer Mill shall be the use of both cyclones, a visible emissions limit of 20% opacity on a six-minute block average basis, proper maintenance of all dust collection equipment, and the keeping of records of all repair and maintenance done on the dust collection equipment.

D. Parts Washers

Hancock has replaced Parts Washers #1 and #2, previously included in Air Emission License A-1-71-S-R (dated October 20, 2014) with two new parts washers. The two new parts washers each have a 10-gallon capacity. Both new parts washers are subject to *Solvent Cleaners*, 06-096 C.M.R. ch. 130 and records shall be kept documenting compliance. The applicable requirements for the new parts washers are included in Condition (22) of this Air Emission License Amendment.

E. Renumbering of Specific Conditions

The first four Specific Conditions of Air Emission License A-1-71-S-R (dated October 20, 2014) were incorrectly numbered. In order to correct this error, the Order

section of this air emission license amendment will include and renumber all relevant conditions from Air Emission License A-1-71-S-R (dated October 20, 2014) and Air Emission License Amendment A-1-71-U-A (dated March 15, 2016).

F. Annual Emissions

Hancock shall be restricted to the following annual emissions, based on a 12-month rolling total. The tons per year limits were calculated based on the following:

- Firing 1,000,000 gal/year of distillate fuel with a maximum sulfur content of 0.5% by weight in Boiler #1;
- Firing Boiler #2 and the Planer Mill Gasifier each for 8,760 hours/year;
- Operating the Emergency Fire Pump for 100 hours/year; and
- Drying 42.0 MMBF/year of lumber in the kilns.

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

	PM	PM₁₀	SO₂	NO_x	CO	VOC
Boiler #1	7.0	7.0	35.3	25.9	2.5	0.1
Boiler #2	32.3	32.3	3.2	38.8	77.5	1.7
Planer Mill Gasifier	2.6	2.6	0.3	2.9	7.9	0.2
Emergency Fire Pump	-	-	-	0.2	0.1	-
Kilns	-	-	-	-	-	47.5
Total TPY	41.9	41.9	38.8	67.8	88.0	49.5

III. AMBIENT AIR QUALITY ANALYSIS

Hancock previously submitted an ambient air quality impact analysis for air emission license A-1-71-P-A (dated February 8, 2008) demonstrating that emissions from the facility, in conjunction with all other sources, do not violate Ambient Air Quality Standards (AAQS). An additional air quality impact analysis is not required for this amendment.

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-1-71-V-A subject to 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 shall replace all Specific Conditions listed in Air Emission License A-1-71-S-R (dated October 20, 2014) and Air Emission License Amendment A-1-71-U-A (dated March 15, 2016):

(16) **Boiler #1**

A. Fuel

1. Total fuel use for Boiler #1 shall not exceed 1,000,000 gal/yr of distillate fuel, based on a 12-month rolling total. [06-096 C.M.R. ch. 115, BPT]
2. Prior to July 1, 2018, Hancock shall fire distillate fuel with a maximum sulfur content not to exceed 0.5% by weight in Boiler #1. [06-096 C.M.R. ch. 115, BPT]
3. Beginning July 1, 2018, Hancock shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm) for use in Boiler #1. [06-096 C.M.R. ch. 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. Records of annual fuel use shall be kept on a monthly and 12-month rolling total basis. [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>
Boiler #1	PM	0.1	06-096 C.M.R. ch. 115, BACT

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

<u>Unit</u>	<u>PM</u> <u>(lb/hr)</u>	<u>PM₁₀</u> <u>(lb/hr)</u>	<u>SO₂</u> <u>(lb/hr)</u>	<u>NO_x</u> <u>(lb/hr)</u>	<u>CO</u> <u>(lb/hr)</u>	<u>VOC</u> <u>(lb/hr)</u>
Boiler #1	2.51	2.51	12.61	9.27	0.89	0.04

D. Visible emissions from Boiler #1 shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BACT]

E. Hancock shall comply with all requirements of 40 C.F.R. Part 60, Subpart Dc applicable to Boiler #1 including, but not limited to, the following:

1. Hancock shall record and maintain records of the amounts of each fuel combusted during each month with fuel sulfur content certifications. [40 C.F.R. § 60.48c(g)]
2. Hancock shall submit semi-annual reports to EPA and to the Department. These reports shall include the calendar dates covered in the reporting period and records of fuel supplier certifications. The semi-annual reports are due within 30 days of the end of each six-month period. [40 C.F.R. § 60.48c(j) and 06-096 C.M.R. ch. 115, BPT]
3. The following address for EPA shall be used for any reports or notifications required to be copied to them:

U.S. Environmental Protection Agency, Region I
5 Post Office Square, Suite 100 (OES04-2)
Boston, MA 02109-3912
Attn: Air Compliance Clerk

(17) **Boiler #2**

A. Boiler #2 shall fire only wood/wood waste. Records of annual fuel use shall be kept on a 50% moisture basis using the formula below, when necessary, to convert fuel use records to 50% moisture. Records of fuel use shall be kept on a monthly and 12-month rolling total basis.

$$\text{Tons biomass at 50\%} = (\text{Tons of Biomass at M\%}) \times [(100-M)/50]$$

Where M = the actual moisture content of the biomass fired

[06-096 C.M.R. ch. 115, BPT]

B. Emissions shall not exceed the following:

Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #2	PM	0.25	06-096 C.M.R. ch. 115, BPT

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

Unit	PM (lb/hr)	PM₁₀ (lb/hr)	SO₂ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #2	7.38	7.38	0.74	8.85	17.70	0.38

- D. Visible emissions from Boiler #2 shall not exceed 30% opacity on a six-minute block average basis, except for no more than two six-minute block averages in a continuous three-hour period. [06-096 C.M.R. ch. 101]
- E. Hancock shall comply with all requirements of 40 C.F.R. Part 60, Subpart Dc applicable to Boiler #2 including, but not limited to, the following:

Hancock shall record and maintain records of the amounts of wood combusted in Boiler #2 during each calendar month. [40 C.F.R. § 60.48c(g)]

(18) **Planer Mill Gasifier**

- A. The Planer Mill Gasifier shall fire only wood/wood waste. Records of annual fuel use shall be kept on a 50% moisture basis using the formula below, when necessary, to convert fuel use records to 50% moisture. Records of fuel use shall be kept on a monthly and 12-month rolling total basis.

$$\text{Tons biomass at 50\%} = (\text{Tons of Biomass at M\%}) \times [(100-M)/50]$$

Where M = the actual moisture content of the biomass fired

[06-096 C.M.R. ch. 115, BPT]

- B. Emissions shall not exceed the following:

Unit	Pollutant	lb/MMBtu	Origin and Authority
Planer Mill Gasifier	PM	0.20	06-096 C.M.R. ch. 115, BPT

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

Unit	PM (lb/hr)	PM₁₀ (lb/hr)	SO₂ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Planer Mill Gasifier	0.60	0.60	0.08	0.66	1.80	0.05

- D. Visible emissions from the Planer Mill Gasifier shall not exceed 20% opacity on a six-minute block average basis, except for no more than two six-minute block averages in a continuous three-hour period. [06-096 C.M.R. ch. 115, BPT]

(19) **Boiler MACT (40 C.F.R. Part 63, Subpart JJJJJ) Requirements for Boiler #1, Boiler #2, and the Planer Mill Gasifier**
[incorporated under 06-096 C.M.R. ch. 115, BPT]

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

1. 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:

Boiler Category	Tune-Up Frequency
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
<u>New and Existing Oil, Biomass, and Coal fired Boilers with Less Frequent Tune-up Requirements</u>	
Seasonal (see definition § 63.11237)	Every 5 years
Limited use (see definition § 63.11237)	Every 5 years
Oil fired boilers with a heat input capacity of ≤ 5 MMBtu/hr	Every 5 years
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]

2. The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:
 - a. 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. Delay of the burner inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 C.F.R. § 63.11223(b)(1)]
 - b. 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)]
 - c. 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. Delay of the inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 C.F.R. § 63.11223(b)(3)]
 - d. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]

- e. 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)]
 - f. 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)]
3. Tune-Up Report: A tune-up report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the following information:
- a. 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;
 - b. A description of any corrective actions taken as part of the tune-up of the boiler; and
 - c. 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)]

B. Compliance Report

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

1. Company name and address;
2. A statement of whether the source has complied with all the relevant requirements of this Subpart;
3. 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;
4. The following certifications, as applicable:
 - a. "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."
 - b. "No secondary materials that are solid waste were combusted in any affected unit."
 - c. "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."

C. Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJJ including the following [40 C.F.R. § 63.11225(c)]:

1. Copies of notifications and reports with supporting compliance documentation;
2. 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;
3. Records of the occurrence and duration of each malfunction of each applicable boiler; and
4. 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. [40 C.F.R. § 63.11225(a)(4)(vi)]

(20) **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. [06-096 C.M.R. ch. 115, BPT]

B. The fuel sulfur content for the Emergency Fire Pump 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]

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

Unit	PM (lb/hr)	PM₁₀ (lb/hr)	SO₂ (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Emergency Fire Pump	0.16	0.16	0.07	4.26	1.13	0.12

D. Visible emissions from the Emergency Fire Pump shall not exceed 20% opacity on a six-minute block average basis, except for no more than two six-minute block averages in a three-hour period. [06-096 C.M.R. ch. 101]

E. The Emergency Fire Pump shall meet the applicable requirements of 40 C.F.R. Part 63, Subpart ZZZZ, including the following:

1. Hancock shall meet the following operational limitations for the Emergency Fire Pump:

- 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.

A log shall be maintained documenting compliance with the operational limitations.

[40 C.F.R. § 63.6603(a) and Table 2(d); and 06-096 C.M.R. ch. 115]

2. Oil Analysis Program Option

Hancock has the option of utilizing an oil analysis program which complies with the requirements of 40 C.F.R. § 63.6625(i) in order to extend the specified oil change requirement. If this option is used, Hancock 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)]

3. Non-Resettable Hour Meter

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

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

a. The Emergency Fire Pump 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, demand response, or to generate income for a facility by providing power to an electric grid or otherwise to supply power as part of a financial arrangement with another entity). 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, BPT]

b. Hancock shall keep records that include maintenance conducted on the Emergency Fire Pump 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, the number of hours the unit operated for non-emergency purposes, and the reason the engine was in operation during each time. [40 C.F.R. §§ 63.6655(e) and (f)]

5. Operation and Maintenance

The Emergency Fire Pump shall be operated and maintained according to the manufacturer's emission-related written instructions, or Hancock 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)]

6. 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]

(21) **Kilns**

- A. Hancock shall not exceed a yearly throughput of 42.0 million board feet per year based on a 12-month rolling total. [06-096 C.M.R. ch. 115, BACT]
- B. Hancock shall keep monthly and 12-month rolling total records of board feet processed. [06-096 C.M.R. ch. 115, BACT]

(22) **Parts Washers**

Parts washers at Hancock are subject to *Solvent Cleaners*, 06-096 C.M.R. ch. 130.

- A. Hancock 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. Hancock 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]

(23) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity, except for no more than six minutes in any one-hour period, during which time visible emissions shall not exceed 30% opacity. Compliance shall be determined on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

(24) **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. 115, BPT]

(25) **Annual Emission Statement**

In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, the licensee shall annually report to the Department, in a format prescribed by the Department, the information necessary to accurately update the State's emission inventory. The emission statement shall be submitted as specified by the date in 06-096 C.M.R. ch. 137.

- (26) Hancock 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).

Hancock Lumber Company, Inc.
Oxford County
Bethel, Maine
A-1-71-V-A (SM)

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

The following Condition is new in this air emission license amendment:

(27) Planer Mill

Hancock shall operate two cyclones in parallel to control particulate matter emissions from the Planer Mill. Visible emissions from the Planer Mill and its cyclones shall not exceed 20% opacity on a six-minute block average basis. Hancock shall conduct proper maintenance of both cyclones, and keep records of all repair and maintenance done on the cyclones. [06-096 C.M.R. ch. 115, BACT]

DONE AND DATED IN AUGUSTA, MAINE THIS 11 DAY OF July, 2017.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Maia Allen Robert Cane for
PAUL MERCER, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-1-71-S-R.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 9/1/2016

Date of application acceptance: 9/1/2016

Date filed with the Board of Environmental Protection:

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

