



DEPARTMENT ORDER

Hancock Lumber Company, Inc.
Oxford County
Bethel, Maine
A-1-71-W-A

Departmental
Findings of Fact and Order
Air Emission License
Amendment #3

FINDINGS OF FACT

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

I. REGISTRATION

A. Introduction

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), and on July 11, 2017 (A-1-71-V-A).

Hancock has requested an amendment to their license in order to add a new biomass-fired boiler and two new lumber drying kilns, remove an existing oil-fired boiler, and increase licensed annual lumber production.

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

Equipment	Max. Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type, % sulfur	Date of Manuf.	Date of Install.	Stack #
Boiler #3	9.9	1.15 ton/hr	Biomass, negligible	2021	2021	TBD

Boiler #1 (an existing oil-fired boiler) previously included in this license will be permanently shut down and removed from the facility.

Process Equipment

Equipment	Production Rate
Drying Kilns	55 MMBF/yr

C. Definitions

Biomass means any biomass-based solid fuel that is not a solid waste. This includes, but is not limited to, wood residue; wood products (e.g., trees, tree stumps, tree limbs, bark, lumber, sawdust, sander dust, chips, scraps, slabs, millings, and shavings); animal manure, including litter and other bedding materials; vegetative agricultural and silvicultural materials, such as logging residues (slash), nut and grain hulls and chaff (e.g., almond, walnut, peanut, rice, and wheat), bagasse, orchard prunings, corn stalks, coffee bean hulls and grounds. This definition also includes wood chips and processed pellets made from wood or other forest residues. Inclusion in this definition does not constitute a determination that the material is not considered a solid waste. Hancock should consult with the Department before adding any new biomass type to its fuel mix.

D. Application Classification

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

The modification of a minor source is considered a major or minor modification based on whether 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:

Pollutant	Current License (TPY)	Future License (TPY)	Net Change (TPY)	Significant Emission Levels
PM	41.9	42.4	0.5	100
PM ₁₀	41.9	41.4	-0.5	100
SO ₂	38.8	4.1	-34.7	100
NO _x	67.8	46.5	-21.3	100
CO	88.0	98.3	10.3	100
VOC	49.5	64.5	15.0	50

This modification is determined to be a minor modification and has been processed as such.

Following this minor modification, the licensed potential VOC emissions will be greater than 50 TPY, making this facility a major source of VOC. Therefore, Hancock shall

apply for a Part 70 license under *Part 70 Air Emission License Regulation*, 06-096 C.M.R. ch. 140 § 3 within 12 months of commencing the operation of new equipment addressed in this license amendment, as provided in 40 C.F.R. Part 70.5.

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 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 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 #3

Hancock has proposed the installation and operation of Boiler #3 to improve plant efficiency, supplement steam production, and increase operational flexibility. The boiler is rated at 9.9 MMBtu/hr and fires biomass. The boiler will be installed in 2021. Hancock has proposed a combined fuel use limit of 35,000 ton/yr biomass at 50% moisture by weight fired in Boilers #2 and #3 on a 12-month rolling total basis.

1. BACT Findings

Hancock submitted a BACT analysis for control of emissions from Boiler #3, which is summarized below.

a. Particulate Matter (PM, PM₁₀)

Hancock has proposed the use of two multiclones in series to control PM and PM₁₀ emissions. Particulate matter collected by the first multiclone will have a relatively high carbon content and will be re-injected into the boiler to reclaim the fuel value and minimize waste. Hancock has proposed emission limits for PM of

0.30 lb/MMBtu and for PM₁₀ of 0.290 lb/MMBtu, based on vendor emission ratings.

A variety of control equipment systems were evaluated and ultimately it was determined that the most appropriate control was the use of two multicyclones in series to meet the requirements of BACT for a boiler of this size burning white pine.

Potential PM controls for biomass boilers consist of add-on controls, combustion of clean fuel, good combustion practices, or a combination of options. Potential add-on controls for biomass boilers include electrostatic precipitators, wet scrubbers, fabric filters, and multicyclones.

Baghouses and fabric filters are not technically feasible due to a high risk of fires which can destroy the bags due to smoldering particulates that may be carried over from the firebox. Although internal fire suppression systems are incorporated into the design, these are meant to preserve the baghouse shell and do not save the filters and other internal components that are considered expendable in the event of a fire. This results in lost time and expense, and in Hancock's case would risk product quality of the loads in the kiln at the time of a potential baghouse fire.

Electrostatic precipitators (ESPs) are technically feasible, but there are significant initial and ongoing costs associated with them.

Initial costs include construction of the ESP system and electrical components, support foundations, and a larger, more powerful induced draft (ID) fan to overcome the increased pressure drop of the ESP. Because of the high moisture content of white pine, the ESP would need to be relatively large compared to the size required for a boiler of similar size firing other fuel types, due to the electrostatic characteristics of the moist exhaust. Ongoing costs include electrical usage for the transformer/rectifier (T/R) system to power the electrical fields, electrical heaters to prevent condensation and corrosion in the internal components, and increased power requirements for the ID fan. This is estimated to increase electrical usage by at least 7.5 kilowatt hours per hour of operation for the boiler system. Based on an average cost of \$0.1302/kw-hr (from the U.S. Energy Information Administration for 2019), this results in an annual cost of \$8,554.14 for electricity alone. Other ongoing costs include items such as increased flyash disposal costs and replacement of the electrical insulators and moving parts such as the rapper systems on a routine basis. Due to the relatively small size of the boiler, the additional costs associated with an ESP are considered financially infeasible.

A wet scrubber or wet ESP is not feasible based on significant environmental impacts due to water management, along with not being justifiable for economic and energy considerations.

The Department finds that BACT for PM/PM₁₀ emissions from Boiler #3 is the use of two multiclones in series, a combined fuel use limit of 35,000 ton/yr of biomass at 50% moisture by weight fired in Boilers #2 and #3, and the emission limits listed in the tables below.

b. Sulfur Dioxide (SO₂)

Hancock has proposed to fire only biomass in Boiler #3. The use of this fuel results in minimal emissions of SO₂, and additional add-on pollution controls are not economically feasible.

The Department finds that BACT for SO₂ emissions from Boiler #3 is a combined fuel use limit of 35,000 ton/yr of biomass at 50% moisture by weight fired in Boilers #2 and #3 and the emission limits listed in the tables below.

c. Nitrogen Oxides (NO_x), Carbon Monoxide (CO), and Volatile Organic Compounds (VOC)

The Messersmith combustion chamber contains a set of sloping grates, with no moving parts to jam or wear out. Fuel delivered from the stoker augers moves down the sloping grate system as it burns. Underfire combustion air is delivered to the fuel through small holes in the grates. Overfire combustion air is delivered above the fuel through nozzles built into the refractory lined sides of the combustor. The overfire air blowers will each have an Allen Bradley variable frequency drive (VFD). Both underfire and overfire combustion air are modulated by the control panel to always match the amount of fuel delivered to the combustor. This maintains a highly efficient and clean combustion. The ID fan assembly with VFD ensures exhaust gases efficiently exit the system. The VFD changes the speed of the dynamic fan based on a signal from a pressure gauge measuring combustion chamber pressure. This ensures proper negative pressure in the combustor at all times.

The combustion system described above is designed to intrinsically minimize formation of NO_x while simultaneously ensuring complete combustion to minimize emissions of CO and VOC. Because of the inherently low emissions and small size of the boiler, additional control measures are not justified.

Hancock has proposed to minimize emissions of NO_x, CO, and VOC by a combination of boiler design to optimize the efficiency of the boiler system and ensuring good combustion and maintenance practices consistent with boilers of similar size and design. The boiler will use an oxygen trim system to optimize combustion.

The Department finds that BACT for NO_x, CO, and VOC emissions from Boiler #3 is the use of an oxygen trim system, good combustion and maintenance practices, a combined fuel use limit of 35,000 ton/yr of biomass at 50% moisture by weight fired in Boilers #2 and #3, and the emission limits listed in the tables below.

d. Emission Limits

The BACT emission limits for Boiler #3 were based on the following:

Biomass

- PM – 0.30 lb/MMBtu based on vendor data
- PM₁₀ – 0.290 lb/MMBtu based on vendor data
- SO₂ – 0.025 lb/MMBtu based on AP-42 Table 1.6-2 dated 9/2003
- NO_x – 0.22 lb/MMBtu based on AP-42 Table 1.6-2 dated 9/2003
- CO – 0.60 lb/MMBtu based on AP-42 Table 1.6-2 dated 9/2003
- VOC – 0.17 lb/MMBtu based on AP-42 Table 1.6-3 dated 9/2003
- Visible Emissions – 06-096 C.M.R. ch. 101

The BACT emission limits for Boiler #3 are the following:

Unit	Pollutant	lb/MMBtu
Boiler #3	PM	0.3

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #3 Biomass	2.97	2.87	0.25	2.18	5.94	0.17

2. Visible Emissions

Visible emissions from Boiler #3 shall not exceed 30% opacity on a six-minute block average basis, except for periods of startup, shutdown, or malfunction during which time Hancock may comply with the following work practice standards in lieu of the numerical visible emissions standard.

- a. Maintain a log (written or electronic) of the date, time, and duration of all operating time, startups, shutdowns, and malfunctions for the boiler.
- b. Develop and implement a written startup and shutdown plan for the boiler.

- c. Limit the duration of each unit startup, shutdown, and malfunction to no more than one hour per occurrence.
- d. Operate Boiler #3 at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.

3. Periodic Monitoring

Periodic monitoring for Boiler #3 shall include recordkeeping to document fuel use both on a monthly and 12-month rolling total basis. Records of biomass fuel use shall be kept on a basis of 50% moisture.

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

Due to the size, Boiler #3 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 greater than 10 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

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

Boiler #3 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 a new boiler rated less 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. Notification forms and additional rule information can be found on the following website: <https://www.epa.gov/stationary-sources-air-pollution/compliance-industrial-commercial-and-institutional-area-source>.

a. Compliance Dates, Notifications, and Work Practice Requirements

(1) Initial Notification of Compliance

An Initial Notification submittal to EPA is due within 120 days after the source becomes subject to the standard. [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
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 for up to 72 months from the previous inspection for boilers with oxygen trim systems. [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 for up to 72 months from the previous inspection for boilers with oxygen trim systems. [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)]

(3) Compliance Report

A compliance report shall be prepared by March 1st every five years which covers the previous 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."

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.

C. Kilns

Hancock operates nine kilns for drying of lumber and has proposed the installation of two additional kilns. The wood dried is primarily white pine. An emission factor of 2.26 lb of VOC per thousand board feet (MBF) was used based on the NCASI Technical Bulletin 718, *A Small-Scale Kiln Study on Method 25A Measurements of Volatile Organic Compound Emissions from Lumber Drying* dated July 1996. Hancock has proposed increasing the licensed annual kiln throughput limit from 42.0 MMBF per year to 55.0 MMBF per year, based on a 12-month rolling total. Hancock has demonstrated to the Department's satisfaction that this increase is made possible due to increased steam capacity from the addition of Boiler #3 and is not simply a relaxation of an existing throughput limit. The new kiln throughput limit of 55.0 MMBF/yr is incorporated in this license amendment.

D. Annual Emissions

The table below provides an estimate of facility-wide annual emissions for the purposes of calculating the facility's annual air license fee. Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included. Maximum potential emissions were calculated based on the following assumptions:

- A combined total fuel limit of 35,000 tons of biomass per year in Boilers #2 and #3;
- Operating the Planer Mill Gasifier for 8,760 hrs/yr;
- Operating the Emergency Fire Pump for 100 hrs/yr;
- Drying 55 MMBF/yr of lumber in the kilns.

Please note, this information provides the basis for fee calculation only and should not be construed to represent a comprehensive list of license restrictions or permissions. That information is provided in the Order section of this license.

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

	PM	PM ₁₀	SO ₂	NO _x	CO	VOC
Boilers #2 and #3	39.8	38.8	3.8	43.4	90.3	2.1
Planer Mill Gasifier	2.6	2.6	0.3	2.9	7.9	0.2
Emergency Fire Pump	--	--	--	0.2	0.1	--
Kilns	--	--	--	--	--	62.2
Total TPY	42.4	41.4	4.1	46.5	98.3	64.5

Pollutant	Tons/year
Single HAP	9.9
Total HAP	24.9

III. AMBIENT AIR QUALITY ANALYSIS

Hancock previously submitted an ambient air quality impact analysis outlined in 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 license amendment. However, Hancock will be required to submit an ambient air quality impact analysis as part of their upcoming Part 70 license application.

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-W-A subject to the conditions found in Air Emission License A-1-71-S-R, in amendments A-1-71-U-A and A-1-71-V-A, and the following conditions.

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

SPECIFIC CONDITIONS

Specific Condition (16) of Air Emission License Amendment A-1-71-V-A (July 11, 2017) is hereby removed.

The following shall replace Specific Condition (17) of Air Emission License Amendment A-1-71-V-A (July 11, 2017).

(17) Boilers #2 and #3

A. Fuel

1. Total combined fuel use for Boilers #2 and #3 shall not exceed 35,000 ton/yr of biomass at 50% moisture, based on a 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT/BACT]
2. Compliance shall be demonstrated by fuel records showing the quantity of fuel used, corrected to 50% moisture by weight. 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/BACT]

B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #2	PM	0.25	06-096 C.M.R. ch. 115, BPT
Boiler #3	PM	0.30	06-096 C.M.R. ch. 115, BACT

C. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BPT for Boiler #2, BACT for Boiler #3]:

Emission 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
Boiler #3	2.97	2.87	0.25	2.18	5.94	0.17

D. Visible emissions from Boilers #2 and #3 shall each not exceed 30% opacity on a six-minute block average basis, except for periods of startup, shutdown, or malfunction during which time Hancock may comply with the following work practice standards in lieu of the numerical visible emissions standard. [06-096 C.M.R. ch. 101, § 3(A)(5)(a)]

1. Maintain a log (written or electronic) of the date, time, and duration of all operating time, startups, shutdowns, and malfunctions for each boiler.
2. Develop and implement a written startup and shutdown plan for each boiler.

3. Limit the duration of each unit startup, shutdown, and malfunction to no more than one hour per occurrence.
 4. At all times, operate each boiler in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.
- 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 maintain records of the amounts of biomass combusted in Boiler #2 during each calendar month. [40 C.F.R. § 60.48c(g)]

The following shall replace Specific Condition (19) of Air Emission License Amendment A-1-71-V-A (July 11, 2017).

- (19) **40 C.F.R. Part 63, Subpart JJJJJJ Requirements for Boiler #2, Boiler #3, and the Planer Mill Gasifier**
[incorporated under 06-096 C.M.R. ch. 115, BPT]

Hancock shall comply with all requirements of 40 C.F.R. Part 63, Subpart JJJJJJ applicable to Boiler #2, Boiler #3, and the Planer Mill Gasifier including, but not limited to, the following:

- 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	<u>Tune-Up Frequency</u>
Boiler #2 and the Planer Mill Gasifier 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>Boiler #3</u> <u>New and Existing Oil, Biomass, and Coal fired Boilers with Less Frequent Tune-up Requirements</u> Boiler with oxygen trim system which maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune up	Every 5 years

[40 C.F.R. § 63.11223(a) and Table 2]

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 for Boiler #2 and the Planer Mill Gasifier. Delay of the burner inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for Boiler #3. [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 for Boiler #2 and the Planer Mill Gasifier. Delay of the inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for Boiler #3. [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 (Boiler #2 and Planer Mill Gasifier) and every five years (Boiler #3) which covers the previous two or five calendar years, respectively. 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 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)]

The following shall replace Specific Condition (21) of Air Emission License Amendment A-1-71-V-A (July 11, 2017).

(21) Kilns

- A. Hancock is authorized to install and operate two additional kilns, for a total of 11 lumber drying kilns. [06-096 C.M.R. ch. 115, BACT]

- B. Hancock shall not exceed a yearly combined kiln throughput of 55.0 million board feet per year based on a 12-month rolling total. [06-096 C.M.R. ch. 115, BACT]
- C. Hancock shall keep monthly records of board feet processed through the kilns. [06-096 C.M.R. ch. 115, BACT]

The following are new conditions in addition to those in Air Emission License A-1-71-S-R (October 20, 2014).

(28) **Ambient Air Quality Analysis**

- A. Within 90 days of issuance of this license amendment, Hancock shall submit a dispersion modeling protocol to the Department for review and approval.
- B. Within 90 days of receiving written Department approval of the modeling protocol, Hancock shall submit a dispersion modeling analysis demonstrating compliance with all applicable standards.

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

- (29) Hancock shall apply for a Part 70 license within 12 months of commencing operation under the proposed scenario authorized by this air emission license amendment as required in 40 C.F.R. Part 70.5. [06-096 C.M.R. ch. 140, § 3]

DONE AND DATED IN AUGUSTA, MAINE THIS 17th DAY OF MARCH, 2021.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:  for
MELANIE LOYZIM, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: December 15, 2020

Date of application acceptance: January 6, 2021

Date filed with the Board of Environmental Protection:

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

FILED
MAR 17, 2021
State of Maine
Board of Environmental Protection