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

DEPARTMENT ORDER

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| **Hancock Lumber Company, Inc.**<br>**Cumberland County**<br>**Casco, Maine**<br>**A-629-71-N-R/A (SM)** | **Departmental**<br>**Findings of Fact and Order**<br>**Air Emission License**<br>**Renewal and Amendment** |

## FINDINGS OF FACT

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

Hancock has also requested an amendment to their license in order to make the following changes:

1. Add a new biomass-fired boiler (Boiler #4);
2. Address the removal of Boiler #2 that will be decommissioned once Boiler #4 comes online; and
3. Address the repair of a failed pressure vessel section in Boiler #3.

The equipment addressed in this license is located at 1260 Poland Spring Road, Casco, Maine.

### B. Emission Equipment

The following equipment is addressed in this air emission license:

**Boilers**

| Equipment | Max. Capacity (MMBtu/hr) | Maximum Firing Rate | Fuel Type | Date of Manuf. | Date of Install. | Stack # |
|---|---|---|---|---|---|---|
| Boiler #2* | 13.6 | 97 gallons/hour | Distillate fuel, 0.5% | 1982 | Unknown | 1 |
| Boiler #3 | 10.8 | 1.2 tons/hour | Biomass | 1986 | 2006 | 3 |
| Boiler #4 | 9.5 | 1.06 tons/hour | | 2006 | 2017 | 4 |

*Boiler #2 and its associated requirements shall be removed from this air emission license upon Boiler #3 and Boiler #4 both being operational.

**Process Equipment**

| Equipment | Production Rate | Pollution Control Equipment |
|---|---|---|
| Planer Mill | Variable | Planer Mill Cyclone |
| Bagger | Variable | Bagger Cyclone |
| Kilns (7) | 32.0 MMBF/year | --- |

C. Definitions

*Biomass*, for the purpose of this license and in accordance with 40 C.F.R. Part 63, Subpart JJJJJJ, means any biomass-based solid fuel that is not a solid waste. This includes, but is not limited to, wood residue and wood products (e.g., trees, tree stumps, tree limbs, bark, lumber, sawdust, sander dust, chips, scraps, slabs, millings, and shavings); and vegetative agricultural and sylvicultural materials, such as logging residues (slash).

*Modification*, as used in the context of 40 C.F.R. Part 60, means any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollutant (to which a standard applies) into the atmosphere not previously emitted.

*Modification*, as used in the context of 06-096 C.M.R. ch. 115, means any physical change in or change in the method of operation of a source that would result in the emission increase of any regulated pollutant, except that:

- Routine maintenance, repair, and replacement shall not be considered a physical change;
- The following shall not be considered a change in the method of operation:
  - An increase in the production rate at an existing source, unless such change is prohibited under any federally enforceable permit condition which was established after January 6, 1975, pursuant to 40 C.F.R. 52.21 or under regulations approved pursuant to 40 C.F.R. Part 51 Subpart I or 40 C.F.R. 51.166, and if such increase does not exceed the operating design capacity of the source;
  - An increase in the hours of operation, unless such change is prohibited under any federally enforceable permit condition which was established after January 6, 1975 pursuant to 40 C.F.R. 52.21 or under regulations approved pursuant to 40 C.F.R. Part 51 Subpart I or 40 C.F.R. 51.166; or
  - Use of an alternative fuel or raw material if prior to January 6, 1975, the source is designed to accommodate and is licensed to use such alternative fuel; and

- Replacement of pollution control apparatus at steam electrical utility generating units or other source determined by the Department to be equally or more effective than the apparatus being replaced shall not be considered a physical change or change in the method of operation for the purposes of this definition, but shall be governed consistent with the Clean Air Act and federal regulations.

*Reconstruction*, for the purpose of this license and in accordance with 40 C.F.R. Part 60 and 40 C.F.R. Part 63, means the replacement of components of an affected or previously nonaffected source to such an extent that:

- The fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable new source; and
- It is technologically and economically feasible for the reconstructed source to meet the relevant standard(s) established by the Administrator (or a State) pursuant to section 112 of the Clean Air Act. Upon reconstruction, an affected source, or a stationary source that becomes an affected source, is subject to relevant standards for new sources, including compliance dates, irrespective of any change in emissions of hazardous air pollutants from that source.

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 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 | 15.9 | 14.9 | -1.0 | 100 |
| $PM_{10}$ | 15.9 | 14.9 | -1.0 | 100 |
| $SO_2$ | 8.2 | 1.2 | -7.0 | 100 |
| $NO_x$ | 15.3 | 10.9 | -4.4 | 100 |
| CO | 28.9 | 29.7 | +0.8 | 100 |
| VOC | 37.1 | 37.0 | -0.1 | 50 |
| $CO_2e$ | <100,000 | <100,000 | - | 100,000 |

This amendment will not increase emissions of any pollutant above the significant emission levels; therefore, this application is determined to be a renewal with a minor modification and has been processed as such.

The Department has determined the facility is a minor source and the application has been processed through Major and Minor Source Air Emission License Regulations, 06-096 C.M.R. ch. 115. With the annual fuel limit on Boilers #3 and #4 and the annual throughput limit on the Kilns, the facility is licensed below the major source thresholds for criteria pollutants and is considered a synthetic minor. With the annual fuel limit on Boilers #3 and #4 and the annual throughput limit on the 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 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 #3

Hancock operates Boiler #3 for steam and heat for the purposes of drying lumber. The boiler is rated at 10.8 MMBtu/hr, fires biomass at a maximum rate of 1.2 tons of biomass/hour and vents through Stack #3 (71 feet above ground level). Emissions from Boiler #3 are controlled by fly ash re-injection and a single multi-clone. Boiler #3 was manufactured in 1986 and installed in 2006.

Hancock is also 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 the facility's energy efficiency by making use of the energy previously lost by the mechanical pressure reduction systems. The back-pressure turbine will not increase steam

demand from Boilers #3 and #4; therefore, the use of the back-pressure turbine will not cause any increase in the facility's licensed emissions.

1. Boiler #3 Tube Replacement

   Boiler #3 recently developed a steam leak which required the boiler to be taken out of service. Hancock is planning to replace the failed pressure vessel section as soon as possible. The capital cost of this replacement will be $216,800. In order to demonstrate that this does not constitute a reconstruction per 40 C.F.R. Part 60, Subpart Dc and 40 C.F.R. Part 63, Subpart JJJJJJ, Hancock received an estimate for capital cost for the replacement of the boiler. The estimate acquired was found to be $1,179,000. This estimate does not include the cost of a day bin unloader, electrostatic precipitator (ESP), engineering services, general construction, or building renovation. Additionally, a replacement boiler would be considered a new source greater than 10 MMBtu/hr per 40 C.F.R. Part 63, Subpart JJJJJJ, which would likely require the installation of an ESP to meet the applicable emission limit. The fixed capital cost of a properly sized ESP was quoted at $381,200, bringing the total fixed capital cost of replacement to $1,561,000. With all considerations, the fixed capital cost of repairing the unit is only 13.8% of the cost of replacement, well below the 50% threshold; therefore, the repair is not considered a reconstruction per 40 C.F.R. Part 60, Subpart Dc and 40 C.F.R. Part 63, Subpart JJJJJJ.

   Additionally, the repair will not increase boiler capacity and will not either cause an increase in emissions of any pollutant to which a standard applies or result in the emission of a pollutant not previously emitted to which a standard applies; therefore, this repair is not considered a modification under 40 C.F.R. Part 60, Subpart Dc.

   Similarly, the repair will not increase boiler capacity, will not result in an emissions increase of any regulated pollutant, and is considered routine repair and replacement, which is not considered a physical change per 06-096 C.M.R. ch. 100; therefore, this repair is not considered a modification under 06-096 C.M.R. ch. 115.

2. BPT Findings

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

| | | |
|---|---|---|
| $PM/PM_{10}$ | – | 0.3 lb/MMBtu based on 06-096 C.M.R. ch. 103 |
| $SO_2$ | – | 0.025 lb/MMBtu based on AP-42, Table 1.6-2, dated 9/03 |
| $NO_x$ | – | 0.22 lb/MMBtu based on AP-42, Table 1.6-2, dated 9/03 |
| CO | – | 0.6 lb/MMBtu based on AP-42, Table 1.6-2, dated 9/03 |
| VOC | – | 0.017 lb/MMBtu based on AP-42, Table 1.6-3, dated 9/03 |
| Visible Emissions | – | 06-096 C.M.R. ch. 115, BPT |

The BPT 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 | 3.24 | 3.24 | 0.27 | 2.38 | 6.48 | 0.18 |

Visible emission from Boiler #3 shall not exceed 20% opacity on a six-minute block average basis, except for periods of startup, shutdown, or malfunction during which time the unit operator may elect to comply with the following work practice requirements in lieu of this visible emission standard:

- The unit operator shall maintain a log (written or electronic) of the date, time, and duration of all startups, shutdowns, and malfunctions of any unit or its associated air pollution control equipment;
- The unit operator shall develop and implement a written startup and shutdown plan;
- The duration of unit startups and shutdowns shall each not exceed one hour unless otherwise defined and provided for in the facility's air emission license; and
- The unit, including any associated air pollution control equipment, shall be operated 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.

Hancock shall be limited to 11,000 tons/year of biomass on a 12-month rolling total basis for Boilers #3 and #4 combined based on a moisture content of 50%, by weight. Hancock shall use the following formula, when necessary, to convert fuel use records to 50% moisture:

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

Where M = the moisture content of the actual wood fired

Hancock shall continuously operate the fly ash re-injection system and multi-clone on Boiler #3 while the boiler is in operation. Hancock shall keep a log of all maintenance performed on each system.

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. Documentation shall include the type of fuel used.

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

   Due to its year of manufacture, 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 JJJJJJ

   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 JJJJJJ. The unit is considered an existing biomass boiler rated more 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 JJJJJJ 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: 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

         Hancock submitted their initial notification to EPA for Boiler #3 on September 28, 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 |
|---|---|
| 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 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, not to exceed 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)]

(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 July 21, 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 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."

(4) Energy Assessment

Boiler #3 is subject to the energy assessment requirement of this regulation. 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. Hancock conducted their one-time energy assessment on August 19, 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 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)]

C. Boiler #4

This license amendment allows Hancock to install and operate Boiler #4 for steam and heat for drying lumber. The boiler is rated 9.5 MMBtu/hr, fires biomass at a rate of 1.06 tons/hour, and vents through Stack #4 (40 feet AGL). Boiler #4 was manufactured in 2006 and will be installed at the facility in late 2017.

1. BACT Findings

a. Particulate Matter (PM, $PM_{10}$, and $PM_{2.5}$)

Particulate matter (PM) emissions from fuel combustion are formed from incomplete combustion of fuel and non-combustible material in the fuel. 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 (ESPs), wet scrubbers, baghouses (fabric filters), and multi-clones.

Baghouses and fabric filters are technically infeasible due to the risk of fires from smoldering particulates that may be carried over from other control equipment. Due to the relatively small size of the boiler, the additional costs associated with an ESP make that option financially infeasible. Additionally, a wet scrubber is not feasible based on significant environmental impacts due to water management, along with not being justifiable for economic and energy considerations.

The proposed biomass-fired Boiler #4 will have two multi-clones in series to control PM emissions from the unit. Multi-clones are identified most often for PM control for biomass boilers of this age, type, and size. BACT for PM emissions from Boiler #4 shall be the use of two multi-clones in series; operation of the multi-clones whenever Boiler #4 is operating; good combustion practices; a fuel limit of 11,000 tons of biomass per year (50% moisture content with a heat content of 4,500 Btu/lb), or equivalent, for Boilers #3 and #4 combined; and an emission limit of 2.85 lb/hr.

b. Sulfur Dioxide ($SO_2$)

Sulfur dioxide is formed from the combustion of sulfur present in the fuel. Control options identified for $SO_2$ emissions include the use of fuel with a low sulfur content, such as biomass, use of fuels that produce alkali ash which absorbs $SO_2$ (use of biomass may have some absorbing potential), sorbent injection, and $SO_2$ scrubbing technologies, including flue gas desulfurization or packed-bed scrubbers. All the potential add-on controls are technically and financially infeasible for a boiler of this size and fuel type due to the increased energy use from fan and pump electrical requirements as well as additional environmental impacts such as chemical transport to the site and storage on-site, potential chemical release risks, and waste water discharge and solid waste disposal. BACT for sulfur dioxide emissions from Boiler #4 shall be the use of biomass as a fuel and an emission limit of 0.24 lb/hr.

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

Emissions of $NO_x$, CO, and VOC from biomass-fired boilers of this size are typically controlled through proper operation and maintenance per the manufacturer's emission-related instructions. The boiler will also use an oxygen trim system to optimize combustion for these parameters. Additional control measures for these pollutants are not economically feasible for a boiler of this size. BACT for $NO_x$, CO, and VOC emissions for Boiler #4 shall be proper operation and maintenance of the unit and emission limits of 2.09 lb/hr, 5.70 lb/hr, and 0.16 lb/hr, respectively.

2. Emission Limits

The BACT emission limits for Boiler #4 were based on the following:

| | | |
|---|---|---|
| $PM/PM_{10}$ | – | 0.3 lb/MMBtu based on 06-096 C.M.R. ch. 103 |
| $SO_2$ | – | 0.025 lb/MMBtu based on AP-42, Table 1.6-2, dated 9/03 |
| $NO_x$ | – | 0.22 lb/MMBtu based on AP-42, Table 1.6-2, dated 9/03 |
| CO | – | 0.6 lb/MMBtu based on AP-42, Table 1.6-2, dated 9/03 |
| VOC | – | 0.017 lb/MMBtu based on AP-42, Table 1.6-3, dated 9/03 |
| Visible Emissions | – | 06-096 C.M.R. ch. 115, BACT |

The BACT emission limits for Boiler #4 are the following:

| Unit | Pollutant | lb/MMBtu |
|---|---|---|
| Boiler #4 | PM | 0.3 |

| Unit | PM (lb/hr) | $PM_{10}$ (lb/hr) | $PM_{2.5}$ (lb/hr) | $SO_2$ (lb/hr) | $NO_x$ (lb/hr) | CO (lb/hr) | VOC (lb/hr) |
|---|---|---|---|---|---|---|---|
| Boiler #4 Biomass | 2.85 | 2.85 | 2.85 | 0.24 | 2.09 | 5.70 | 0.16 |

Visible emission from Boiler #4 shall not exceed 20% opacity on a six-minute block average basis, except for periods of startup, shutdown, or malfunction during which time the unit operator may elect to comply with the following work practice requirements in lieu of this visible emission standard:

- The unit operator shall maintain a log (written or electronic) of the date, time, and duration of all startups, shutdowns, and malfunctions of any unit or its associated air pollution control equipment;
- The unit operator shall develop and implement a written startup and shutdown plan;
- The duration of unit startups and shutdowns shall each not exceed one hour unless otherwise defined and provided for in the facility's air emission license; and
- The unit, including any associated air pollution control equipment, shall be operated 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.

Hancock shall be limited to 11,000 tons/year of biomass on a 12-month rolling total basis for Boilers #3 and #4 combined based on a moisture content of 50%, by weight. Hancock shall use the following formula, when necessary, to convert fuel use records to 50% moisture:

Tons Wood at 50% = (Tons Wood at M%) x [(100-M)/50]

Where M = the moisture content of the actual wood fired

Hancock shall continuously operate fly ash re-injection and both multi-clones in series on Boiler #4 while the unit is in operation. Hancock shall keep a log of all maintenance performed on the fly ash re-injection system and multi-clones.

3. Periodic Monitoring

Periodic monitoring for Boiler #4 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.

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

Due to its size, Boiler #4 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 JJJJJJ

Boiler #4 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 JJJJJJ. The unit is considered an existing biomass 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 JJJJJJ 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: 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 Boiler #4 has initially been started up. [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, not to exceed 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, not to exceed 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)]

(v) After conducting the initial boiler tune-up, a Notification of Compliance Status shall be submitted to EPA. [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 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 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)]

D. Kilns

Hancock operates seven Kilns for the drying of eastern white pine lumber. Heat for the Kilns is provided by Boilers #3 and #4. Hancock is currently limited to a yearly throughput limit on the Kilns of 32.0 million board-feet (MMBF) per year, based on a 12-month rolling total. No increase in the annual throughput limit has been requested as part of this renewal and amendment.

VOC emissions released from the Kilns during drying have been estimated using data from studies conducted by the National Council of the Paper Industry for Air and Stream Improvement (NCASI) and the University of Maine, included in NCASI Technical Bulletin 718, *A Small Scale Study on Method 25A Measurements of Volatile Organic Compound Emissions from Lumber Drying*, dated July 1996, of 2.26 lb of VOC per thousand board-feet (lb/MBF). Visible emissions from the Kilns shall not exceed 20% opacity on a six-minute block average basis.

E. Planer Mill and Bagger

Hancock currently operates a Planer Mill to process cut and seasoned boards from the sawmill and turn them into finished lumber, and a Bagger to bag up lumber mill by-products. Particulate matter (PM) emissions from the Planer Mill and Bagger are currently collected and conveyed to separate cyclones (Planer Mill cyclone and Bagger cyclone).

BACT for PM emissions from both the Planer Mill and Bagger shall be the use of a cyclone for each, 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.

F. Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity, except for no more than five minutes in any one-hour period during which time visible emissions shall not exceed 30% opacity. Compliance shall be determined by an aggregate of the individual fifteen-second opacity observations which exceed 20% in any one hour.

G. General Process Emissions

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis.

H. Annual Emissions

1. Total 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 a fuel limit of 11,000 tons/year of biomass for Boilers #3 and #4 combined and a throughput limit of 32.0 MMBF/year for the seven Kilns combined:

**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 #3 and #4 | 14.9 | 14.9 | 1.2 | 10.9 | 29.7 | 0.8 |
| Kilns (7) | – | – | – | – | – | 36.2 |
| **Total TPY** | **14.9** | **14.9** | **1.2** | **10.9** | **29.7** | **37.0** |

| Pollutant | Tons/year |
|---|---|
| Single HAP | 9.9 |
| Total HAP | 24.9 |

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 ($CO_2e$).

The quantity of $CO_2e$ emissions from this facility is less than 100,000 tons per year, based on the following:

- the facility's fuel use and throughput limits;
- 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:

| Pollutant | Tons/Year |
|---|---|
| $PM_{10}$ | 25 |
| $SO_2$ | 50 |
| $NO_x$ | 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-629-71-N-R/A 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) **Boilers #3 and #4**

A. Fuel

1. Total fuel use for Boilers #3 and #4 combined shall not exceed 11,000 ton/yr of biomass, based on a 12-month rolling total basis and a moisture content of 50%, by weight. Hancock shall use the following formula, when necessary, to convert fuel use records to 50% moisture:

   Tons Wood at 50% = (Tons Wood at M%) x [(100-M)/50]

   Where M = the moisture content of the actual wood fired

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

2. Compliance shall be demonstrated by fuel records from the supplier showing the quantity and type of fuel used. 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:

| Unit | Pollutant | lb/MMBtu | Origin and Authority |
|---|---|---|---|
| Boiler #3 | PM | 0.3 | 06-096 C.M.R. ch. 103 |
| Boiler #4 | PM | 0.3 | |

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

| Unit | PM (lb/hr) | $PM_{10}$ (lb/hr) | $PM_{2.5}$ (lb/hr) | $SO_2$ (lb/hr) | $NO_x$ (lb/hr) | CO (lb/hr) | VOC (lb/hr) |
|---|---|---|---|---|---|---|---|
| Boiler #3 | 3.24 | 3.24 | --- | 0.27 | 2.38 | 6.48 | 0.18 |
| Boiler #4 | 2.85 | 2.85 | 2.85 | 0.24 | 2.09 | 5.70 | 0.16 |

D. Visible emissions from Boilers #3 and #4 shall each not exceed 20% opacity on a six-minute block average basis, except for periods of startup, shutdown, or malfunction during which time the operator may elect to comply with the following work practice requirements in lieu of this visible emission standard:

1. The unit operator shall maintain a log (written or electronic) of the date, time, and duration of all startups, shutdowns, and malfunctions of any unit or its associated air pollution control equipment;
2. The unit operator shall develop and implement a written startup and shutdown plan;

3. The duration of unit startups and shutdowns shall each not exceed one hour unless otherwise defined and provided for in the facility's air emission license; and
4. The unit, including any associated air pollution control equipment, shall be operated 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.

[06-096 C.M.R. ch. 115, BPT for Boiler #3 & 06-096 C.M.R. ch. 115, BACT for Boiler #4]

E. Hancock shall continuously operate the fly ash re-injection system and multi-clone on Boiler #3 whenever Boiler #3 is in operation, and shall continuously operate the fly ash re-injection system and multi-clones in series on Boiler #4 whenever Boiler #4 is in operation. Hancock shall keep a log of all maintenance performed on the fly ash re-injection systems and multi-clones. [06-096 C.M.R. ch. 115, BPT for Boiler #3 and 06-096 C.M.R. ch. 115, BACT for Boiler #4]

F. Hancock shall comply with all requirements of 40 C.F.R. Part 63, Subpart JJJJJJ applicable to Boilers #3 and #4 including, but not limited to, the following: [incorporated under 06-096 C.M.R. ch. 115, BPT]

1. An Initial Notification submittal to EPA is due within 120 days after startup of Boiler #4. [40 C.F.R. § 63.11225(a)(2)]

2. 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:

| 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]

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 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, not to exceed 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)]

c. 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)]

d. After conducting the initial boiler tune-up on Boiler #4, a Notification of Compliance Status shall be submitted to EPA. [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 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)]

   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."

4. 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)]:
   a. Copies of notifications and reports with supporting compliance documentation;
   b. 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;
   c. Records of the occurrence and duration of each malfunction of each applicable boiler; and
   d. 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)]

(17) **Kilns**

A. Hancock's Kilns shall not exceed a yearly throughput of 32.0 million board feet per year based on a 12-month rolling total. [06-096 C.M.R. ch. 115, BPT]

B. Hancock shall keep monthly records of the quantity of lumber, in board feet, processed in the Kilns. [06-096 C.M.R. ch. 115, BPT]

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

(18) **Planer Mill and Bagger**

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

(19) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity, except for no more than five minutes in any one-hour period during which time visible emissions shall not exceed 30% opacity. Compliance shall be determined by an aggregate of the individual fifteen-second opacity observations which exceed 20% in any one hour. [06-096 C.M.R. ch. 115, BPT]

(20) **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]

(21) **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.

(22) 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).

(23) Boiler #2 shall be decommissioned and rendered inoperable within two weeks of Boiler #3 and Boiler #4 both reaching full operation. Full operation shall be the time at which Boilers #3 and #4 have both achieved maximum steam load. Hancock shall notify the Department within seven days of the second boiler achieving maximum steam load. [06-096 C.M.R. ch. 115, BPT]

**The following Condition shall apply until Condition (23), above, is fulfilled:**

(24) **Boiler #2**

A. The total fuel use for Boiler #2 shall not exceed 200,000 gallons/year of ASTM D396 compliant #2 fuel. Compliance shall be demonstrated by records from the supplier showing the quantity of fuel. Fuel use records shall be kept on a twelve-month rolling total basis. [06-096 CMR 115, BPT]

B. Hancock Lumber shall not fire Boiler #2 with any type of rain cap obstructing the stack exit. [06-096 CMR 115, BPT]

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

| Unit | PM (lb/hr) | $PM_{10}$ (lb/hr) | $SO_2$ (lb/hr) | $NO_x$ (lb/hr) | CO (lb/hr) | VOC (lb/hr) |
|---|---|---|---|---|---|---|
| Boiler #2 | 1.63 | 1.63 | 6.80 | 4.76 | 0.50 | 0.03 |

D. Visible emissions from Stack #1 (serving boiler #2) shall not exceed 20% opacity on a six-minute block average, except for no more than one six-minute block average in a continuous three-hour period. [06-096 CMR 101]

DONE AND DATED IN AUGUSTA, MAINE THIS 25 DAY OF October , 2017.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
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: 8/24/2016
Date of application acceptance: 8/29/2016

Date filed with the Board of Environmental Protection:

Filed
OCT 25 2017
State of Maine
Board of Environmental Protection

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