



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

**Hancock Lumber Company, Inc.
Cumberland County
Casco, Maine
A-629-71-L-A**

**Departmental
Findings of Fact and Order
Air Emission License
Amendment #1**

FINDINGS OF FACT

After review of the air emissions 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 Annotated (M.R.S.A.), §344 and §590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

Hancock Lumber Company, Inc. (Hancock Lumber) was issued Air Emission License A-629-71-K-R on October 21, 2011 permitting the operation of emission sources associated with their lumber manufacturing facility.

Hancock Lumber has requested an amendment to their license in order to add a sixth kiln and increase facility-wide kiln throughput.

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

B. Emission Equipment

The following equipment is addressed in this air emission license:

Process Equipment

Equipment/Process	Production Rate	Control Device(s)	Stack #
Kilns (6)	32 MMBF/yr	None	Fugitive

C. Application Classification

The modification of a minor source is considered a major or minor modification based on whether or not expected emission increases exceed the “Significant Emission Levels” as defined in the Department’s regulations. The emission increases are determined by subtracting the current licensed emissions preceding the modification from the maximum future licensed allowed emissions, as follows:

<u>Pollutant</u>	<u>Current License (TPY)</u>	<u>Future License (TPY)</u>	<u>Net Change (TPY)</u>	<u>Sig. Level</u>
PM	15.9	15.9	0	100
PM ₁₀	15.9	15.9	0	100
SO ₂	8.2	8.2	0	100
NO _x	15.3	15.3	0	100
CO	28.9	28.9	0	100
VOC	27.4	37.1	+9.7	50

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

II. **BEST PRACTICAL TREATMENT (BPT)**

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (as amended). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

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 CMR 100 (as amended). BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. Kilns

Hancock Lumber has added a kiln, for a total of six kilns, for drying eastern white pine lumber. Heat for the kilns is provided by Boilers #2 and/or #3. Hancock Lumber has requested that the yearly throughput limit on the kilns be increased from 23.5 million board feet (BF) per year to 32.0 million BF per year, based on a twelve-month rolling total.

VOC emissions released from the kilns during drying have been estimated using data from studies conducted by the National Counsel of the Paper Industry for Air and Stream Improvement (NCASI) and the University of Maine. VOC emissions from the drying of eastern white pine in the kilns were calculated using a factor of 2.26 lbs/1000BF.

An emission factor of 2.26 lbs/1000BF, an annual throughput limit of 32.0 million BF/year and the opacity limit below are determined to be BACT for the kilns.

Visible emissions from the kilns shall not exceed 20% opacity on a six-minute block average, except for no more than one six-minute block average in a one-hour period.

C. Annual Emissions

1. Total Annual Emissions

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

- A fuel limit of 200,000 gal/year of #2 fuel oil in Boiler #2
- Firing Boiler #3 for 8760 hours per year.
- A throughput of 32.0 MMBF/year in the kilns.

Total Licensed Annual Emissions for the Facility

Tons/year

(used to calculate the annual license fee)

	PM	PM₁₀	SO₂	NO_x	CO	VOC
Boiler #2	1.7	1.7	7.0	4.9	0.5	0.1
Boiler #3	14.2	14.2	1.2	10.4	28.4	0.8
Kilns	–	–	–	–	–	36.2
Total TPY	15.9	15.9	8.2	15.3	28.9	37.1

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 CFR Part 52, Subpart A, §52.21 Prevention of Significant Deterioration of Air Quality rule. Greenhouse gases, as defined in 06-096 CMR 100 (as amended), 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 (CO₂e).

Based on the facility's fuel use limit(s), the worst case emission factors from AP-42, IPCC (Intergovernmental Panel on Climate Change), and *Mandatory Greenhouse Gas Reporting*, 40 CFR Part 98, and the global warming potentials contained in 40 CFR Part 98, Hancock Lumber is below the major source threshold of 100,000 tons of CO₂e per year. Therefore, no additional licensing requirements are needed to address GHG emissions at this time.

III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source shall be determined by the Department on a case-by case basis. In accordance with 06-096 CMR 115, an ambient air quality impact analysis is not required for a minor source if the total emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

<u>Pollutant</u>	<u>Tons/Year</u>
PM ₁₀	25
SO ₂	50
NO _x	50
CO	250

The total facility licensed emissions 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-L-A subject to the conditions found in Air Emission License A-629-71-K-R and in the following conditions.

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Cumberland County
Casco, Maine
A-629-71-L-A

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Severability. The invalidity or unenforceability of any provision, or part thereof, of this License 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.

The following shall replace Condition (18)(A) of Air Emission License A-629-71-K-R:

(18) Kilns

A. Hancock Lumber's kilns shall not exceed a yearly throughput of 32.0 MMBF per year, based on a 12-month rolling total. [06-096 CMR 115, BACT]

DONE AND DATED IN AUGUSTA, MAINE THIS 17 DAY OF April, 2014.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Mass. Allen Robert Carr for
PATRICIA W. AHO, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-629-71-K-R.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 3/26/14

Date of application acceptance: 3/26/14

Date filed with the Board of Environmental Protection:

This Order prepared by Lynn Poland, Bureau of Air Quality.

