



DEPARTMENT ORDER

**MooseWood Millworks LLC
Aroostook County
Ashland, Maine
A-1096-71-B-A**

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

FINDINGS OF FACT

After review of the air emission license amendment, 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

MooseWood Millworks LLC (MWM) was issued Air Emission License A-1096-71-A-N on June 9, 2014, for the operation of emission sources associated with their hardwood flooring manufacturing facility.

MWM has requested an amendment to their license in order to increase the licensed throughput limit for their kilns.

The equipment addressed in this license amendment is located at 42 Realty Road in Ashland, Maine.

B. Emission Equipment

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

Process Equipment

<u>Equipment</u>	<u>Production Rate</u>	<u>Pollution Control Equipment</u>
Kilns (6)	19 MMBF / year	None

C. Application Classification

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

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

Pollutant	Current License (TPY)	Future License (TPY)	Net Change (TPY)	Significant Emission Levels
PM	4.8	4.8	0.0	100
PM ₁₀	4.8	4.8	0.0	100
SO ₂	0.3	0.3	0.0	100
NO _x	7.5	7.5	0.0	100
CO	8.9	8.9	0.0	100
VOC	3.9	22.1	18.2	50

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

D. Facility Classification

The facility is licensed as follows:

- As a natural minor source of air emissions, because facility emissions cannot exceed major source thresholds for criteria pollutants; and
- As an area source of hazardous air pollutants (HAP), because the licensed emissions are below the major source thresholds for HAP.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Process Description

MWM is currently licensed to process 4.7 million board feet (MMBF) of hardwood per year. Due to changing business conditions, MWM has converted from drying hardwood lumber in their kilns to now drying softwood lumber. Softwood lumber requires a much shorter residence time in the kilns than does hardwood lumber to achieve the targeted moisture content in the wood. The result of this change is an ability for MWM to dry higher volumes of softwood than they could previously dry when they were processing hardwood. Additionally, softwood lumber has a higher emission factor for VOC than does hardwood for the same volume of lumber dried. The higher capacity of the kilns to process softwood, combined with the higher emission factors for softwood lumber, require that MWM amend their air emission license to reflect the change in their operation.

C. Kilns

MWM operates five (5) kilns for drying of lumber and plans to install one (1) additional kiln, to be used for the drying of lumber in their manufacturing process. The wood being dried is all softwood, primarily spruce and fir. No emission data was available for the softwood species being dried at MWM, so a conservative emission factor of 2.26 lb of VOC per thousand board feet dried was used to calculate the VOC emissions from the kilns. This emission factor was developed using data from studies conducted by the National Council for Air and Stream Improvement (NCASI) and the University of Maine. MWM has agreed to limit the throughput of the kilns to no more than 19.0 million board feet (MMBF) per calendar year, to minimize licensing costs and to stay under the reporting requirements of 06-096 C.M.R. ch. 137, *Emission Statements*.

D. Annual Emissions

1. Total Annual Emissions

MWM shall be restricted to the following annual emissions, based on a calendar year. The tons per year limits were calculated based on operating Boilers #1 and #2 for 8,760 hours per year and drying 19.0 MMBF of softwood lumber per year in the kilns.

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

	<u>PM</u>	<u>PM₁₀</u>	<u>SO₂</u>	<u>NO_x</u>	<u>CO</u>	<u>VOC</u>
Boiler #1	1.8	1.8	--	5.3	3.0	0.4
Boiler #2	3.0	3.0	0.3	2.2	5.9	0.2
Kilns	--	--	--	--	--	21.5
Total TPY	4.8	4.8	0.3	7.5	8.9	22.1

2. MWM's HAP calculations shall be made using emission factors provided by the Department.

Pollutant	Tons/year
Single HAP	9.9
Total HAP	24.9

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 Amendment A-1096-71-B-A subject to the conditions found in Air Emission License A-1096-71-A-N, 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.

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SPECIFIC CONDITIONS

The following Specific Condition replaces (18)(A) in Air Emission License A-1096-71-A-N dated June 9, 2014:

(18) Kilns

A. MWM shall not exceed a yearly throughput of 19.0 million board feet per year through their kilns, based on a calendar year total. [06-096 C.M.R. ch. 115, BACT]

DONE AND DATED IN AUGUSTA, MAINE THIS 20 DAY OF December, 2018.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Melanie Loyzim
MELANIE LOYZIM, ACTING COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-1096-71-A-N.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: October 30, 2018

Date of application acceptance: November 1, 2018

Date filed with the Board of Environmental Protection:

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

