



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

**Robbins Lumber, Inc.
Waldo County
Searsmont, Maine
A-834-71-F-R (SM)**

**Departmental
Findings of Fact and Order
Air Emission License
Renewal**

FINDINGS OF FACT

After review of the air emissions license 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

Robbins Lumber, Inc. (Robbins Lumber) has applied to renew their Air Emission License permitting the operation of emission sources associated with their coating facility.

The equipment addressed in this license is located at 221 Belfast-Augusta East Road, Searsmont, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Process Equipment

<u>Equipment</u>	<u>Unit Type</u>
Coating Machine #1	Roller Type Paint Applicator
Coating Machine #2	Spray Type Paint Applicator
Spray Booths	Coating Booths with Blowers & Filters

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826
RAY BLDG., HOSPITAL ST.

BANGOR
106 HOGAN ROAD, SUITE 6
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04769
(207) 764-0477 FAX: (207) 760-3143

C. Application Classification

The application for Robbins Lumber does not include the licensing of increased emissions or the installation of new or modified equipment. Therefore, the license is considered to be a renewal of currently licensed emission units only and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (CMR) 115 (as amended). With the facility-wide annual limits on volatile organic compounds (VOC) and hazardous air pollutants (HAPs) the facility is licensed below the major source thresholds and is considered a synthetic minor.

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 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

Robbins Lumber operates a lumber coating process. When the lumber is delivered to the site, it is first inspected for knots. When required, the knots are coated by hand with BIN shellac, or a similar primer-sealer, to seal the knots so that they will not show up after the final coating is applied.

After the primer-sealer has dried, the lumber is fed through one of the coating machines. The boards are received at the discharge end of the coating machine and placed in racks for drying. The racks are positioned to allow for air flow through and around the lumber to minimize drying time. After the wood is dried, it is shipped off-site.

This facility is subject to a total annual VOC emissions limit of 49.9 ton per year (tpy) and a total annual HAP emissions limit of 9.9 tpy of any single HAP and 24.9 tpy for all HAPs combined. All emission limits are on a 12-month rolling total basis.

To demonstrate compliance with VOC and HAP emission limits, Robbins Lumber shall maintain records of coating material use. The records shall include dates of coating operations, type of coating used, volume of coating used and VOC and HAP content of the coatings based on safety data sheets (SDS). Records shall be maintained monthly as well as a 12-month rolling total. For the purposes of this license, the volume of coating used shall be equal to the amount of coatings verified to have been purchased by purchase receipts minus the amount of coatings that remain in inventory.

Surface Coating Facilities, 06-096 CMR 129 establishes consistent requirements for testing, evaluating, and limiting the emissions of volatile organic compounds (VOC) and Hazardous Air Pollutants (HAP) from selected surface coating operations. The coating operations at Robbins Lumber are not included in these selected coating operation categories. Therefore, 06-096 CMR 129 is not applicable to this facility.

C. Primer-Sealer

Robbins Lumber uses an alcohol-based, pigmented shellac to prime surfaces before painting. Emissions from this processes are exhausted from the building through the air scavenging system described in the Coating Machine #1 section below.

BPT for this operation is determined to be maintaining records demonstrating compliance with the facility-wide VOC and HAP emission limits.

D. Coating Machine #1

Coating Machine #1 is a simple tractor-roller and flushing and brushing process. Lumber is fed into a system of rollers that pull the lumber through a curtain of coating material. The flow of the coating material is controlled so that the application is a thick curtain of coating. The flow of the lumber through the curtain of coating material is designed so that all portions of the lumber receive an even coating of material. The rollers then push the lumber through a set of brushes that brush off the excess coating material. The excess coating material is collected in a collection tank and re-circulated through the system. The maximum production rate of the coating machine is approximately 22,800 board feet per day. Emissions from Coating Machine #1 are vented through the air scavenger system.

Robbins Lumber uses an air scavenging system in the coating building that consists of two perforated duct work piping systems that vent to the outdoors via a 45-foot high exhaust stack. The system uses a 36,000 cfm fan to draw ambient air out of the first floor work space. The system also uses a second 20,000 cfm fan to

draw ambient air out of the second floor work space. The fans blow the VOC and HAP containing air to the exhaust stack.

BPT for Coating Machine #1 is determined to be maintaining records demonstrating compliance with the facility-wide VOC and HAP emission limits.

Visible emissions from the air scavenging exhaust shall not exceed 5% opacity based on a six (6) minute block average.

E. Coating Machine #2

Coating Machine #2 was installed in 2011 and handles approximately 95% of the lumber throughput between the two machines. The spray coating method used on Coating Machine #2 is more efficient than the curtain and brush method used on Coating Machine #1.

Lumber up to 12 inches wide is fed into the machine at a rate of approximately 250 linear feet per minute. The lumber is spray coated with up to six spray nozzles or guns. Coating Machine #2 is equipped with its own blower, stack, and filters for overspray control.

BPT for Coating Machine #2 is determined to be operation and maintenance of the machine's blower and fabric filters as well as maintaining records demonstrating compliance with the facility-wide VOC and HAP emission limits.

Visible emissions from the Coating Machine #2 exhaust stack shall not exceed 5% opacity based on a six (6) minute block average.

F. Spray Booths

Robbins Lumber uses two spray booths to apply a primer coat to finished wood products. A small amount of thinner and wood finish is also used in the booths. Primer is applied via spray gun and thinner and wood finish is applied by brush. Each spray booth is equipped with a blower and filters.

BPT for the spray booths is determined to be operation and maintenance of the associated blowers and fabric filters as well as maintaining records demonstrating compliance with the facility-wide VOC and HAP emission limits.

Visible emissions from each of the spray booths shall be limited to 15% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block average in a 1-hour period.

G. Annual Emissions

1. Total Annual Emissions

Robbins Lumber shall be restricted to the following annual emissions, based on a 12 month rolling total.

Total Licensed Annual Emissions for the Facility

Tons/year

(used to calculate the annual license fee)

Pollutant	Tons/Year
VOC	49.9
Individual HAP*	9.9
Total HAP*	24.9

* HAP (Hazardous Air Pollutants) are identified by the EPA pursuant to Section 112 (b) of the Clean Air Act.

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, Robbins 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-834-71-F-R subject to the following conditions.

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.

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.A. §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 CMR 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 CMR 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 CMR 115]
 - (5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353-A. [06-096 CMR 115]
 - (6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 CMR 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 CMR 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 CMR 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 CMR 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 CMR 115]

- (11) In accordance with the Department's air emission compliance test protocol and 40 CFR 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 CFR 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 CMR 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 CFR 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 CMR 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 CMR 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 CMR 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 CMR 115]

SPECIFIC CONDITIONS

(16) **Facility-Wide Emission Limits**

- A. Robbins Lumber shall not exceed a facility-wide total annual emissions of 49.9 tons per year of VOCs, 9.9 tons per year of any single HAP or 24.9 tons per year of any combination of HAPs from coating processes based on a 12-month rolling total. [06-096 CMR 115, BPT]
- B. To demonstrate compliance with VOC and HAP emissions limits, Robbins Lumber shall maintain records of all VOC/HAP containing materials used in the coating machines, spray booths, and priming-sealing operations. The records shall include dates of coating operations, type of material used, volume of materials used, and VOC and HAP content based on SDS. For the purposes of this license, the volume of material used shall be equal to the amount of material verified to have been purchased through purchase receipts **minus** the amount of material that remain in inventory. The coating material use records shall be maintained monthly as well as on a 12-month rolling total basis. [06-096 CMR 115, BPT]

(17) **Coating Machine #1**

Visible emissions from the air scavenging exhaust shall not exceed 5% opacity based on a six (6) minute block average. [06-096 CMR 115, BPT]

(18) **Coating Machine #2**

- A. Robbins Lumber shall operate the blower and utilize fabric filters during all periods of operation of Coating Machine #2. [06-096 CMR 115, BPT]
- B. Robbins Lumber shall inspect the blower equipment and the coating machine filters at least once a month, and document the inspections in a maintenance log. The maintenance log shall contain information on maintenance, failures, and corrective action. [06-096 CMR 115, BPT]
- C. Visible emissions from the Coating Machine #2 exhaust stack shall not exceed 5% opacity on a six (6) minute block average. [06-096 CMR 115, BPT]

(19) **Spray Booths**

- A. Robbins Lumber shall operate the spray booth exhaust fans during all periods of sprayer operation. [06-096 CMR 115, BPT]
- B. Robbins Lumber shall maintain the spray booths in good working order and any coating material spilled or excess coating material shall be cleaned up immediately. [06-096 CMR 115, BPT]
- C. Visible emissions from each of the spray booths shall be limited to 15% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 1 hour period. [06-096 CMR 115, BPT]
- D. Robbins Lumber shall inspect the blower equipment and the spray booth filters at least once a month, and document the inspections in a maintenance log. The maintenance log shall contain information on maintenance, failures, and corrective action. [06-096 CMR 115, BPT]

(20) **Annual Emission Statement**

In accordance with *Emission Statements*, 06-096 CMR 137 (as amended), the licensee shall annually report to the Department the information necessary to accurately update the State's emission inventory by means of either:

- 1) A computer program and accompanying instructions supplied by the Department; or
- 2) A written emission statement containing the information required in 06-096 CMR 137.

The emission statement must be submitted as specified by the date in 06-096 CMR 137.

Robbins Lumber, Inc.
Waldo County
Searsmont, Maine
A-834-71-F-R (SM)

11

Departmental
Findings of Fact and Order
Air Emission License
Renewal

- (21) Robbins Lumber 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.A. §605).

DONE AND DATED IN AUGUSTA, MAINE THIS 31 DAY OF January, 2014.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Come for
PATRICIA W. AHO, COMMISSIONER

The term of this license shall be ten (10) years from the signature date above.

[Note: If a complete renewal application, as determined by the Department, is submitted prior to expiration of this license, then pursuant to Title 5 MRSA §10002, all terms and conditions of the license shall remain in effect until the Department takes final action on the renewal of the license.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 1/30/13

Date of application acceptance: 2/1/13

Date filed with the Board of Environmental Protection:

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

