

Churchill Coatings of Maine, LLC)
 Waldo County)
 Searsmont, Maine)
 A-834-71-C-R)

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

After review of the air emissions license renewal application, staff investigation reports and other documents in the applicant’s file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Churchill Coatings of Maine, LLC (Churchill Coatings) has applied to renew their Air Emission License permitting the operation of emission sources associated with their coatings facility located at the old Crowe Rope building at 221 Belfast-Augusta East Road, in Searsmont, Maine.

B. Emission Equipment

Churchill Coatings is applying to operate the following equipment:

Process Equipment

<u>Equipment</u>	<u>Unit Type</u>	<u>Production Rate</u>
Coating Machine	Roller Type Paint Applicator	Approximately 22,800 BF/day

C. Application Classification

The application for Churchill Coatings 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 current licensed emission units only.

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 (last amended December 1, 2005). 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 emission from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Process Description

Churchill Coatings, in conjunction with Robbins Lumber (Robbins) also of Searsmont, makes use of the old Crowe Rope building at 221 Belfast-Augusta East Road, in Searsmont, Maine, to operate a coating process. Lumber from Robbins or other lumber retailers and wholesalers is delivered to the site where it first is inspected for knots. When required, the knots are coated by hand with BIN shellac, or similar shellac sealant, to seal the knots so that they will not show up after the final coating is applied. After the BIN has dried, the lumber is fed through the coating machine. The coating machine coats all sides and the board ends. The boards are received at the discharge end of the coating machine and manually placed in racks for drying. The racks are positioned to allow for airflow through and around the lumber to minimize drying time. After the wood has dried it is then shipped offsite.

Surface Coating Facilities, 06-096 CMR 129 (last amended March 3, 1998) 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 Churchill Coatings are not included in the selected coating operation categories in 06-096 CMR 129, therefore, 06-096 CMR 129 is not applicable.

C. BIN Primer-Sealer

BIN Primer-Sealer is an alcohol based, pigmented shellac used to prime surfaces before painting. BIN has a VOC content of approximately 4.6 lb/gal and a HAP content of 0.04 lb/gal and weighs approximately 9.8 lb/gal. Churchill Coatings is approximating their total annual VOC emissions from the use of BIN to be 2.75 tons/yr. This gives the facility an approximate annual usage rate of BIN of 1186 gallons per year.

D. Coating Machine

The Churchill Coatings' coating machine 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 material. 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. Coating material is added to the machine manually in 25-gallon increments.

The coated lumber is received at the discharge end of the coating machine and manually placed into racks to dry. The lumber is held by the racks in a manner to allow air circulation through the lumber to decrease drying time. The coating machine and the drying racks are located on the first floor of the old Crowe Rope building.

Churchill Coatings makes use of Cabot 5259 Alkyd Oil-Base Primer or other similar primer. Cabot 5259 Alkyd Oil-Base Primer has a percent VOC concentration of 2.92 pounds of VOC per gallon of primer although Churchill Coatings may utilize other coatings that have VOC contents as high as 4.6 pounds of VOC per gallon. The primer has coverage of 200 board feet per gallon and Churchill Coatings is approximating that they will use 300 gallons of primer per day from operation of the coating machine.

E. BPT

Churchill Coatings utilizes 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, designated Exhaust Stack #1. The system utilizes a 36,000 cubic foot per minute (CFM) fan to draw ambient air out of the first floor workspace. The system also utilizes a second 20,000 CFM fan to draw ambient air out of the second floor workspace. The fans blow the VOC and HAP laden air to the exhaust stack.

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

The regulated pollutants associated with the coating process are VOCs and HAPs. Churchill Coatings of Maine, LLC agrees to accept total annual VOC emissions limit of 49.9 tons/yr based on a twelve month rolling total and total annual HAP emissions limits of 9.9 tons per year of any single HAP and 24.9 tons per year of any combination of HAPs based on a twelve month rolling total.

To demonstrate compliance with VOC and HAP emissions limits, Churchill Coatings shall maintain a record of coating material use. The record shall include dates of coating operations, type of coatings used, volume of coatings used and VOC and HAP content of the coatings based on MSDS. The record shall be maintained monthly as well as a twelve-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.

F. Fuel Burning Equipment

The building utilizes a 0.8 MMBtu/hr propane fired heating system as a heat source for the building. The heating system is below the 1.0 MMBtu/hr threshold for being considered a significant activity, therefore, the emissions resulting from the operations of the heating system will not be considered in determining total facility PTE (potential to emit) and the space heaters are mentioned in this license for inventory purposes only.

G. Annual Facility Emissions

Churchill Coatings shall be restricted to the following annual emissions, based on a 12-month rolling total:

Total Allowable Annual Emission for the Facility
(used to calculate the annual license fee)

<u>Pollutant</u>	<u>Tons/Year</u>
VOC	49.9
Individual HAP*	9.9
Total HAPs*	24.9

* HAPs are identified by the EPA in regulations pursuant to Section 112(b) of the Clean Air Act (CAA).

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III. AMBIENT AIR QUALITY ANALYSIS

According to *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (last amended December 1, 2005), the level of air quality analyses required for a minor source shall be determined on a case-by case basis. Based on the information available in the file, and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source. Based on the total facility emissions, the Churchill Coatings is below the emissions level required for modeling and monitoring.

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,
- 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-C-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 (Title 38 MRSA §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 06-096 CMR 115. [06-096 CMR 115]

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- (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.
- (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]

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(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:

(i) perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility’s normal process and operating conditions:

- a. 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
- b. pursuant to any other requirement of this license to perform stack testing.

(ii) 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

(iii) 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:

(i) 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

(ii) 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

- (iii)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 emission 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) VOC Emissions
- A. Churchill Coatings shall not exceed 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 at the Searsmont, Maine facility. [06-096 CMR 115, BPT]
- B. To demonstrate compliance with VOC and HAP emissions limits, Churchill Coatings shall maintain a record of coating material use. The record shall include dates of coating operations, type of coatings used, volume of coatings used and VOC and HAP content of the coatings based on MSDS. For the purposes of this license, the volume of coating used shall be equal to the amount of coatings verified to have been purchased through purchase receipts **minus** the amount of coatings that remain in inventory. [06-096 CMR 115, BPT]

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C. The coating material use record shall be maintained monthly as well as a twelve-month rolling total. [06-096 CMR 115, BPT]

D. Visible emissions from Exhaust Stack #1 shall not exceed 5% opacity based on a 6-minute block average. [06-096 CMR 101]

(17) Annual Emission Statement

In accordance with *Emission statements*, 06-096 CMR 137 (last amended July 6, 2004), the licensee shall annually report to the Department by September 1, the information necessary to accurately update the State's emission inventory by means of:

- 1) A computer program and accompanying instructions supplied by the Department;
Or
- 2) A written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions should be directed to:

Attn: Criteria Emission Inventory Coordinator
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

Phone: (207) 287-2437

[06-096 CMR 137]

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- (18) Churchill Coatings 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 MRSA §605-C).

DONE AND DATED IN AUGUSTA, MAINE THIS _____ DAY OF _____ 2008.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
DAVID P. LITTELL, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

The term of this Order shall be for five (5) years from the signature above.

Date of initial receipt of application: August 14, 2007

Date of application acceptance: August 27, 2007

Date filed with the Board of Environmental Protection: _____

This Order prepared by, Peter G. Carleton, Bureau of Air Quality