

**Pride Manufacturing Company, LLC**  
**Waldo County**  
**Burnham, Maine**  
**A-306-71-J-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

Pride Manufacturing Company, LLC (Pride), located in Burnham, Maine has applied to renew their air emission license permitting the operation of emission sources associated with their wood products facility.

B. Emission Equipment

Pride is authorized to operate the following air emission units:

**Fuel Burning Equipment**

<u>Equipment</u>	<u>Date of Const.</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Fuel Type</u>	<u>Maximum Firing Rate</u>	<u>Post Combustion Ctrl Eqpmnt</u>	<u>Stack #</u>
Boiler 1	1972	20.9	#2 fuel oil	140 gal/hr	none	1
Boiler 2	1972	20.9	wood	*2,639 lb/hr	cyclone	2

\* based on 7,920 Btu per pound wood

C. Application Classification

The application for Pride 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 and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (last amended December 24, 2005).

**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

24, 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 emissions from the source being considered; and
- the economic feasibility for the type of establishment involved.

B. Boiler 1

Boiler 1 was manufactured in 1972 and has a maximum design heat input capacity of 20.9 MMBtu/hr firing #2 fuel oil. Boiler 1 is therefore not subject to EPA New Source Performance Standards (NSPS) Subpart Dc, for boilers with a heat input of 10 MMBtu/hr or greater and manufactured after June 9, 1989.

BPT for Boiler 1 is the following:

1. *Fuel Burning Equipment Particulate Emission Standard*, 06-096 CMR 103 (last amended November 3, 1990) regulates PM emission limits. The PM<sub>10</sub> limits are derived from the PM limits.
2. SO<sub>2</sub> emission limits are based on the firing of fuel which meets the criteria in ASTM D396 for #2 fuel oil.
3. NO<sub>x</sub> emission limits are based on data from similar #2 fired boilers of this size and age.
4. CO and VOC emission limits are based upon AP-42 data dated 9/98 #2 fuel oil fired boilers smaller than 100 MMBtu/hr.
5. Visible emissions from the stack serving Boiler 1 shall not exceed 20% opacity on a six (6) minute block average, except for no more than one (1) six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3-hour period.

C. Boiler 2

Boiler 2 was manufactured in 1972 and has a maximum design heat input capacity of 20.9 MMBtu/hr firing wood. Boiler 2 is therefore not subject to EPA New Source Performance Standards (NSPS) Subpart Dc, for boilers with a heat input of 10 MMBtu/hr or greater and manufactured after June 9, 1989.

BPT for Boiler 2 is the following:

1. Use of a cyclone to reduce particulate matter emissions.
2. 06-096 CMR 103 regulates PM emission limits. The PM<sub>10</sub> limits are derived from the PM limits.
3. SO<sub>2</sub>, NO<sub>x</sub>, CO and VOC emission rates are based on AP-42 data dated 10/96 for wood fired boilers smaller than 100 MMBtu/hr.

4. Visible emissions from the stack serving Boiler 2 shall not exceed 30% opacity on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3-hour period.

D. Wood handling

The debarker and sawmill are serviced by two cyclones. One vents through the roof and the other through the wall. Wood waste from the sawmill is either collected in trailers and sold or used for fuel in the boiler.

The utilization of the cyclones for the debarker and sawmill areas represents BPT for control of particulate matter for both locations of this facility. The use of baghouses for particulate collection from other wood processing activities represents BPT.

Visible emissions from baghouses shall not exceed an opacity of 10 percent 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. The facility shall take corrective action if visible emissions from the baghouses exceed five (5) percent opacity.

Visible emissions from any general process source, including cyclones, are regulated under *Visible Emissions Regulation* 06-096 CMR 101 (last amended May 18, 2003), Section 3(d) and shall not exceed an opacity of 20% on a 6 minute block average basis, except for no more than 1 six minute block average in a 1 hour period.

E. Wood drying kilns

Pride operates six kilns for drying hardwood lumber. Heat for the kilns is provided by Boiler 1 or Boiler 2. A summary of BPT for the drying kilns is the following:

1. Pride shall not exceed a combined yearly throughput in the kilns of 8.5 million board feet based on a 12-month rolling total.
2. Pride shall keep monthly records of board feet processed.

F. Wood finishing

BPT for all wood painting and finishing processes shall be the use of water-based coatings when feasible as well as the use of paint pre-heaters to allow the paint to be used with less mineral spirits for thinning. All solvent-based coating storage containers shall remain closed at all times with air-tight lids when not in use to reduce fugitive VOC and HAP emissions.

BPT for the nine large paint tumblers used at the facility also includes the use of fiberglass filters installed in the exhaust ductwork of each of the nine tumblers to reduce the emissions of particulate matter from this process.

Particulate matter emissions from the wood finishing process are unquantifiable.

VOC emissions from all finishing processes is limited 39.9 ton/yr (12 month rolling total). Use of VOC emitting chemicals shall be documented in a monthly log to be kept on site at all times. Records shall include the number of gallons used and the VOC content of each finish (lb. VOC/gallon).

HAP emissions from all finishing processes is limited 8.0 ton/yr (12 month rolling total). Use of HAP emitting chemicals shall be documented in a monthly log to be kept on site at all times. Records shall include the number of gallons used and the HAP content of each finish (lb. HAP/gallon).

The wood finishing operations at Pride fall under the definition of General Process Sources and visible emissions are regulated under 06-096 CMR 101, Section 3(d) and shall not exceed an opacity of 20% on a 6 minute block average basis, except for no more than 1 six minute block average in a 1 hour period.

G. Metal working

There are 11 grinding stations where metal shaping and cutting equipment is serviced by Pride.

The use of cyclones represents BPT for all grinding, shaping, cutting and filing operations within the Grinding and Filing rooms.

The metal working operations at Pride fall under the definition of General Process Sources and visible emissions are regulated under 06-096 CMR 101, Section 3(d) and shall not exceed an opacity of 20% on a 6 minute block average basis, except for no more than 1 six minute block average in a 1 hour period.

H. Parts Washers

Pride has two parts washers located in the garage facility. BPT for these parts washers is meeting the requirements of *Solvent Cleaners* 06-096 CMR 130 (last amended June 28, 2004) as well as keeping records of the solvent added and removed.

I. General Process Emissions

Visible emissions from any general process source shall not exceed an opacity of 20% 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.

J. Facility Emissions

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

**Total Annual Emissions for the Facility**  
(used to calculate the annual license fee)

<b><u>Pollutant</u></b>	<b><u>Boiler 1</u></b>	<b><u>Boiler 2</u></b>	<b><u>Kiln</u></b>	<b><u>Finishing</u></b>	<b><u>Total TPY</u></b>
PM	2.9	20.8	-	-	23.7
PM <sub>10</sub>	2.9	20.8	-	-	23.7
SO <sub>2</sub>	7.2	1.5	-	-	8.7
NO <sub>x</sub>	5.7	29.1	-	-	34.8
CO	0.5	35.6	-	-	36.1
VOC	0.0	2.2	5.5	39.9	47.6
Total HAP	-	-	-	8.0	8.0

**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 Renewal A-306-71-J-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. [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 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) **Boiler 1**

- A. Fuel use in Boiler 1 shall not exceed 204,000 gallons per year (12 month rolling total) of fuel which meets the criteria in ASTM D396 for #2 fuel oil. Compliance shall be demonstrated by fuel records from the supplier showing the quantity and type of fuel delivered. Records of annual fuel use shall be kept on a 12- month rolling total basis. [06-096 CMR 115, BPT]
- B. Emissions from Boiler 1 shall not exceed the following: [06-096 CMR 115, BPT]

**Boiler 1**

<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>lb/hr</u>
PM	0.20	4.18
PM <sub>10</sub>	n/a	4.18
SO <sub>2</sub>	n/a	10.52
NO <sub>x</sub>	n/a	8.36
CO	n/a	0.75
VOC	n/a	0.03

- C. Visible emissions from the stack serving Boiler 1 (Stack #1) shall not exceed an opacity of 20 percent on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3-hour period. [06-096 CMR 101]

(17) **Boiler 2**

- A. Fuel use shall not exceed 7,500 ton/yr of wood waste at 15% moisture, or equivalent, (12 month rolling total). Fuel records, including amount of fuel fired shall be maintained on a monthly basis, in addition to the 12 month rolling total. [06-096 CMR 115, BPT]
- B. Pride shall continuously use the cyclone to control particulate matter when operating Boiler 2. [06-096 CMR 115, BPT]

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

**Boiler 2**

<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>lb/hr</u>
PM	0.35	7.32
PM <sub>10</sub>	n/a	7.32
SO <sub>2</sub>	n/a	0.52
NO <sub>x</sub>	n/a	10.24
CO	n/a	12.54
VOC	n/a	0.79

- D. Visible emissions from the stack serving Boiler 2 (Stack #2) shall not exceed an opacity of 30 percent on a six (6) minute block average basis, except for no more than two (2) six (6) minute block averages in a 3-hour period. [06-096 CMR 101, BPT]

(18) **Kilns**

- A. Pride shall not exceed a combined yearly throughput in the kilns of 8.5 million board feet based on a 12-month rolling total. [06-096 CMR 115, BPT]
- B. Pride shall keep monthly records of board feet processed. [06-096 CMR 115, BPT]

(19) **Baghouses**

Visible emissions from baghouses shall not exceed an opacity of 10 percent 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. The facility shall take corrective action if visible emissions from the baghouses exceed five (5) percent opacity. [06-096 CMR 101]

(20) **Finishing Processes** [06-096 CMR 115, BPT]

- A. Pride shall use water-based coatings when feasible.
- B. Pride shall use paint pre-heaters to allow the coatings to flow more easily.
- C. Pride shall use fiberglass filters installed in the exhaust ductwork of each of the nine large tumblers.
- D. All solvent-based coating storage containers shall remain closed at all times with air-tight lids when not in use to reduce fugitive VOC and HAP emissions.
- E. VOC emissions from all finishing processes shall not exceed 39.9 ton/yr (12 month rolling total). Use of VOC emitting chemicals shall be documented in

a monthly log to be kept on site at all times. Records shall include the number of gallons used and the VOC content of each finish (pound VOC/gallon).

- F. HAP emissions from all finishing processes shall not exceed 8.0 ton/yr (12 month rolling total). Use of HAP emitting chemicals shall be documented in a monthly log to be kept on site at all times. Records shall include the number of gallons used and the HAP content of each finish (pound HAP/gallon).

(21) **General Process Sources**

Visible emissions from any general process source, including cyclones, metal working, and finishing operations, shall not exceed an opacity of 20% on a 6 minute block average basis, except for no more than 1 six minute block average in a 1 hour period. [06-096 CMR 101]

(22) **Parts Washer**

Parts washers at Pride are subject to 06-096 CMR 130.

- A. Pride shall keep records of the amount of solvent added to each parts washer. [06-096 CMR 115, BPT]
- B. The following are exempt from the requirements of 06-096 CMR 130. [06-096 CMR 130]:
1. Solvent cleaners using less than two liters (68 oz) of cleaning solvent with a vapor pressure of 1.00 mmHg, or less, at 20° C (68° F);
  2. Wipe cleaning; and,
  3. Cold cleaning machines using solvents containing less than or equal to 5% VOC by weight.
- C. The following standards apply to remote reservoir cold cleaning machines that are applicable sources under 06-096 CMR 130.
1. Pride shall attach a permanent conspicuous label to each unit summarizing the following operational standards [06-096 CMR 130]:
    - (i) Waste solvent shall be collected and stored in closed containers.
    - (ii) Cleaned parts shall be drained of solvent directly back to the cold cleaning machine by tipping or rotating the part for at least 15 seconds or until dripping ceases, whichever is longer.
    - (iii) Flushing of parts shall be performed with a solid solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray) at a pressure that does not exceed 10 psig. Flushing shall be performed only within the freeboard area of the cold cleaning machine.
    - (iv) The cold cleaning machine shall not be exposed to drafts greater than 40 meters per minute when the cover is open.
    - (v) Sponges, fabric, wood, leather, paper products and other absorbent

- materials shall not be cleaned in the degreaser.
- (vi) When a pump-agitated solvent bath is used, the agitator shall be operated to produce no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used.
  - (vii) Spills during solvent transfer shall be cleaned immediately. Sorbent material shall be immediately stored in covered containers.
  - (viii) Work area fans shall not blow across the opening of the degreaser unit.
  - (ix) The solvent level shall not exceed the fill line.
2. The remote reservoir cold cleaning machine shall be equipped with a perforated drain with a diameter of not more than six inches. [06-096 CMR 130, BPT]
- (23) Pride 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 (Title 38 MRSA §605-C).
- (24) **Annual Emission Statement** [06-096 CMR 137]

In accordance with *Emission Statements*, 06-096 CMR 137 (last amended July 6, 2004), the licensee shall annually report to the Department 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 06-096 CMR 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

The emission statement must be submitted by July 1 or as otherwise specified in 06-096 CMR 137.

(25) **Air Toxics Emission Statement** [06-096 CMR 137]

If Pride exceeds the thresholds for HAPs listed in Appendix A of MEDEP 06-096 CMR 137 in an inventory year, in accordance with 06-096 CMR 137 the licensee shall report, no later than July 1 every three years (2008, 2011, 2014, etc.) or as otherwise stated in 06-096 CMR 137, the information necessary to accurately update the State's toxic air pollutants emission inventory in a format prescribed by the Department containing the information required in 06-096 CMR 137.

Reports and questions should be directed to:

Attn: HAP Inventory Coordinator  
Maine DEP  
Bureau of Air Quality  
17 State House Station  
Augusta, ME 04333-0017  
Phone: (207) 287-2437

DONE AND DATED IN AUGUSTA, MAINE THIS \_\_\_\_\_ DAY OF \_\_\_\_\_ 2007.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_  
DAVID P. LITTELL, COMMISSIONER

**The term of this license shall be five (5) years from the signature date above.**

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: August 16, 2007

Date of application acceptance: September 5, 2007

Date filed with Board of Environmental Protection: \_\_\_\_\_

This order prepared by Mark Roberts , Bureau of Air Quality