STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION
17 STATE HOUSE STATION AUGUSTA, MAINE 04333-0017

DEPARTMENT ORDER

Maine Plywood USA LLC **Somerset County** **Bingham, Maine** **A-1183-71-A-N**	**Departmental** **Findings of Fact and Order** **Air Emission License**

FINDINGS OF FACT

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

I. REGISTRATION

A. Introduction

Maine Plywood USA LLC (Maine Plywood) has applied for an Air Emission License for the operation of emission sources associated with their plywood manufacturing facility.

The equipment addressed in this license is located at 17 Lander Ave, Bingham, Maine.

B. Title, Right, or Interest

In their application, Maine Plywood submitted copies of a property deed demonstrating ownership of the facility. Maine Plywood has provided sufficient evidence of title, right, or interest in the facility for purposes of this air emission license.

C. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

Equipment	Max. Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type	Date of Manuf.	Date of Install.	Stack #
Boiler #1	31.4	224.3 gal/hr	Distillate Fuel	1997	2025	#1
Boiler #2	16.0	1.8 tons/hr *	Biomass	2007	2025	#2
Boiler #3	8.9	63.0 gal/hr	Distillate Fuel	1958	2025	#3

* This feed rate is assumed to be at a 50% moisture content.

Maine Plywood also has several small boilers, water heaters, and unit heaters not listed in the table above. These are considered insignificant emissions units because they are each rated below 1.0 MMBtu/hr, the heat input capacity level at or above which would require

their inclusion in the license; therefore, these small boilers, water heaters, and unit heaters are not addressed further in this license.

Maine Plywood may operate small stationary engines smaller than 0.5 MMBtu/hr. These engines are considered insignificant activities and are not required to be included in this license. However, they are still subject to applicable State and Federal regulations. More information regarding requirements for small stationary engines is available on the Department's website at the link below.
http://www.maine.gov/dep/air/publications/docs/SmallRICEGuidance.pdf

Additionally, Maine Plywood may operate portable engines used for maintenance or emergency-only purposes. These engines are considered insignificant activities and are not required to be included in this license. However, they may still be subject to applicable State and Federal regulations.

Process Equipment

Equipment	Production Rate	Pollution Control Equipment
Veneer Dryer	8.8 Mft^2/hour *	Wet Scrubber
Plywood Press	8.8 Mft^2/hour *	Wet Scrubber

* Thousand square feet per hour on a ¼ inch thickness basis.

D. Definitions

Biomass means any biomass-based solid fuel that is not a solid waste. This includes, but is not limited to, wood residue and wood products (*e.g.,* trees, tree stumps, tree limbs, bark, lumber, sawdust, sander dust, chips, scraps, slabs, millings, and shavings). This definition also includes wood chips and processed pellets made from wood or other forest residues. Inclusion in this definition does not constitute a determination that the material is not considered a solid waste. Maine Plywood should consult with the Department before adding any new biomass type to its fuel mix.

Distillate Fuel means the following:

- Fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials (ASTM) in ASTM D396;
- Diesel fuel oil numbers 1 or 2, as defined in ASTM D975;
- Kerosene, as defined in ASTM D3699;
- Biodiesel, as defined in ASTM D6751; or
- Biodiesel blends, as defined in ASTM D7467.

Records or *Logs* mean either hardcopy or electronic records.

Shutdown means the period in which cessation of operation of a boiler is initiated for any purpose. Shutdown begins when the boiler no longer supplies useful thermal energy (such as steam or hot water) for heating, or when no fuel is being fed to the boiler, whichever is earlier. Shutdown ends when the boiler no longer supplies useful thermal energy (such as steam or hot water) for heating, and no fuel is being combusted in the boiler.

Startup means:

(1) Either the first-ever firing of fuel in a boiler for the purpose of supplying useful thermal energy (such as steam or hot water) for heating and/or producing electricity, or for any other purpose, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the useful thermal energy (such as steam or hot water) from the boiler is supplied for heating and/or producing electricity, or for any other purpose, or

(2) The period in which operation of a boiler is initiated for any purpose. Startup begins with either the first-ever firing of fuel in a boiler for the purpose of supplying useful thermal energy (such as steam or hot water) for heating, or the firing of fuel in a boiler for any purpose after a shutdown event. Startup ends 4 hours after when the boiler supplies useful thermal energy (such as steam or hot water) for heating, cooling, or process purposes or generates electricity, whichever is earlier.

E. Application Classification

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

A new source is considered a major source based on whether or not total licensed annual emissions exceed the "Significant Emissions" levels as defined in the Department's *Definitions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 100.

Pollutant	Total Licensed Annual Emissions (tpy)	Significant Emissions Levels
PM	11.9	100
PM_{10}	14.1	100
$PM_{2.5}$	13.6	100
SO_2	1.8	100
NO_x	34.5	100
CO	42.8	100
VOC	6.0	100

The Department has determined the facility is a minor source, and the application has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115.

F. Facility Classification

The facility is licensed as follows:

- As a natural minor source of criteria pollutants, because no license restrictions are necessary to keep facility emissions below 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.

Emissions of HAP are licensed above 80% of the major source threshold. Therefore, this facility is classified as an "80% Synthetic Minor" for the purpose of determining the minimum required compliance inspection frequency in accordance with Maine's Compliance Monitoring Strategy.

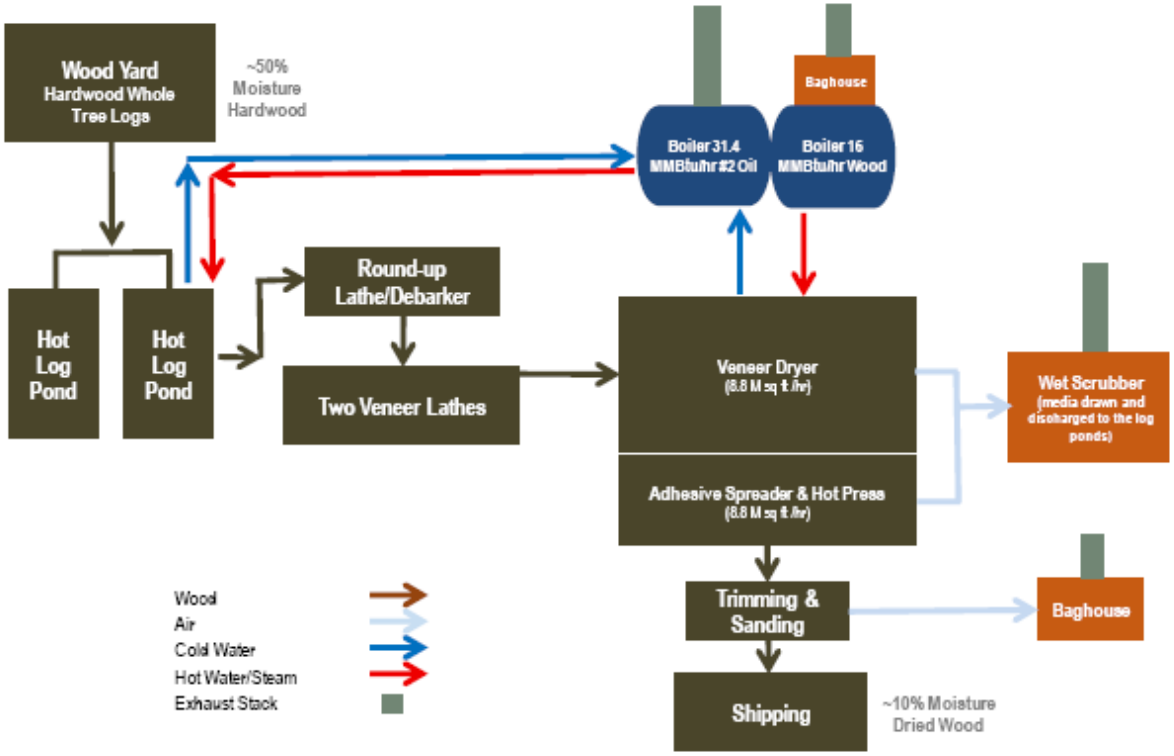
II. BEST PRACTICAL TREATMENT (BPT)

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 new sources and modifications requires a demonstration that emissions are receiving Best Available Control Technology (BACT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental, and energy impacts.

B. Process Description



The plywood manufacturing process begins with the delivery of hardwood logs, primarily poplar and other similar hardwoods, by truck. Logs are unloaded, inspected, and sorted by diameter, length, and grade. Proper sorting ensures that the logs match the desired plywood quality, surface finish requirements, and panel dimensions.

Once sorted, the hardwood logs are conveyed to a hot log pond, which is comprised of two large, heated water reservoirs (each about 10' x 100'). Submerging the logs in warm water softens the dense hardwood fibers, making them easier to peel into uniform veneer sheets. The hot pond also washes off dirt and debris and prevents logs from drying out and developing surface splits.

The logs are then moved to a round-up lathe, where bark is removed and each log is trimmed into a smooth, uniform cylinder. This step is especially important for hardwood species to ensure concentric peeling, maximize veneer yield, and maintain consistent veneer thickness.

The rounded logs are then fed into veneer lathes, where the logs spin rapidly against a fixed knife that peels off a continuous thin ribbon of veneer. Veneer thickness is precisely controlled, ranging from $^{1}/_{10}$ to $^{1}/_{6}$ inch, depending on panel specifications. The peeled veneer is clipped to standard sizes, and obvious defects such as knots or splits are trimmed or repaired in later grading steps.

The freshly peeled poplar, birch, or other hardwood veneers have high moisture content and must be dried before adhesive application. Veneer sheets are conveyed through an indirect contact veneer dryer heated by a distillate fuel oil boiler. The boiler generates steam that circulates through multiple heated dryer sections, carefully removing moisture without scorching or over drying the thin hardwood sheets. The target final moisture content is usually 6–12%.

After drying, the veneers are visually inspected, graded, and sorted. To form plywood panels, veneer sheets are laid up in cross-laminated stacks with alternating grain directions for strength and dimensional stability. A low emissions phenol-formaldehyde (PF) resin adhesive is uniformly applied to the veneer surfaces using glue spreaders. PF adhesives are commonly chosen for hardwood plywood due to their excellent water resistance, strong bonding properties, and durability, making them ideal for exterior and structural applications.

The adhesive-coated veneer stacks are loaded into a hot press, where high heat and pressure cure the PF resin and bond the layers into a rigid plywood panel. The press is heated by steam produced by a 16 MMBtu/hr wood boiler, which burns residual mill waste such as bark, sawdust, and trim scraps from hardwood processing. Typical pressing conditions for PF-bonded hardwood plywood panels range from 275 °F to 350 °F (135–175 °C) at pressures of 150–200 psi for several minutes per panel, depending on panel thickness.

Air emissions from the veneer dryer and the hot press — including particulates and volatile organic compounds (VOC) released from the hardwood fibers and PF resin — are captured and treated by a wet scrubber. The scrubber uses water as the scrubbing medium to remove pollutants from the exhaust streams. The scrubbing water is drawn from the hot log pond system and, after removing particulates and contaminants from the dryer and press exhaust stream, is discharged back to the log ponds. This closed-loop system helps conserve water and provides heat for the log pond. This control method is not considered to reduce VOC emissions from the facility because VOC captured by this control device is considered to be re-emitted when the effluent is returned to the hot pond.

The bonded panels are removed from the hot press and trimmed to exact dimensions using saws. Panel edges are squared, and any edge defects are removed. Panels are then sanded using wide-belt sanders to achieve a smooth, consistent surface suitable for furniture, cabinetry, architectural millwork, or industrial applications. These finished durable, high-strength, dimensionally stable hardwood plywood panels are stacked, graded, packaged, and prepared for shipment to wholesalers, manufacturers, or direct customers.

C. Boilers

Maine Plywood will operate Boilers #1 and #2 for process steam to operate the veneer dryer and the log hot pond. Boiler #3 is used to heat the plywood press and cure the resin which bonds the veneer layers. Boilers #1 and #3 are rated at 31.4 and 8.9 MMBtu/hr,

respectively, firing distillate fuel. Boiler #2 is rated at 16.0 MMBtu/hr firing biomass. The Boiler #1 stack will extend 20 feet above the roof of its building, and the Boiler #3 stack will extend to a height of 8 feet above the roof level. The Boiler #2 stack will stand at a height of 66 feet above ground level.

Boilers #1 and #3 are licensed to fire distillate fuel. With limited exceptions, no person shall import, distribute, or offer for sale any distillate fuel with a sulfur content greater than 0.0015% by weight (15 ppm) pursuant to 38 M.R.S. § 603-A(2)(A)(3). Therefore, the distillate fuel purchased or otherwise obtained for use in Boilers #1 and #3 shall not exceed 0.0015% by weight (15 ppm).

1. BACT Findings

   Maine Plywood performed a BACT analysis for control of emissions from Boilers #1, #2, and #3.

   a. Particulate Matter (PM, PM_{10}, $PM_{2.5}$)
   Maine Plywood has proposed to burn only low-ash content fuel (distillate fuel) in Boilers #1 and #3 and to optimize combustion conditions using good combustion practices. Additional add-on pollution controls are not economically feasible.

   BACT for $PM/PM_{10}/PM_{2.5}$ emissions from Boilers #1 and #3 is the use of good combustion practices and the emission limits listed in the tables below.

   Maine Plywood has proposed to utilize a baghouse for control of filterable particulate matter from Boiler #2. Although multi-clones, electrostatic precipitators, and wet scrubbers were considered, they were determined to be not economically feasible to operate in conjunction with the baghouse.

   BACT for $PM/PM_{10}/PM_{2.5}$ emissions from Boiler #2 is the use of a baghouse and the emission limits listed in the tables below. Maine Plywood shall operate and maintain the baghouse according to the manufacturers' written instructions.

   b. Sulfur Dioxide (SO_2)
   Maine Plywood has proposed to fire only distillate fuel with a sulfur content not to exceed 0.0015% by weight in Boilers #1 and #3 and biomass in Boiler #2. The use of these fuels results in minimal emissions of SO_2, and additional add-on pollution controls are not economically feasible.

   BACT for SO_2 emissions from Boilers #1 and #3 is the use of ultra-low-sulfur distillate fuel and the emission limits listed in the tables below. BACT for SO_2 emissions from Boiler #2 is the use of biomass fuel and the emission limits listed in the tables below.

c. Nitrogen Oxides (NO_x)

Maine Plywood considered several control strategies for the control of NO_x including Selective Catalytic Reduction (SCR), Selective Non-Catalytic Reduction (SNCR), water/steam injection, and flue gas recirculation (FGR) for Boilers #1, #2, and #3.

Both SCR and SNCR are technically feasible control technologies for minimizing NO_x. Both methods include injection of a NO_x reducing agent, typically ammonia or urea, into the boiler combustion gases, where the reagent reacts with NO_x to form nitrogen and water. Each technology is effective within a specific temperature range, 500 – 1,200 °F for SCR and 1,400 – 1,600 °F for SNCR. However, both SCR and SNCR have the negative environmental impact of emissions of unreacted ammonia. In addition, due to the initial capital cost and the annual operating costs, these systems are typically only considered cost effective for units larger than Boilers #1, #2, and #3.

Water/steam injection and FGR can attain similar NO_x reduction efficiencies through lowering burner flame temperature and thereby reducing thermal NO_x formation. However, both control strategies reduce the boiler's fuel efficiency by approximately 5% from water/steam injection but a lesser percentage from FGR.

The use of FGR on Boiler #1 has been determined to be feasible and has been selected as part of the BACT strategy. Additional controls have been determined to be not economically feasible for Boilers #2 and #3. Because Boiler #2 combusts biomass, add-on emission controls beyond proper combustion practices have been determined to not be economically feasible. Based on the size of Boiler #3 add-on controls have been determined to not be economically feasible.

BACT for NO_x emissions from Boiler #1 is the use of FGR and the emission limits listed in the tables below. BACT for NO_x emissions from Boilers #2 and #3 is the use good combustion practices and the emission limits listed in the tables below.

d. Carbon Monoxide (CO) and Volatile Organic Compounds (VOC)

Maine Plywood considered several control strategies for the control of CO and VOC including oxidation catalysts, thermal oxidizers, and use of an oxygen trim system.

Oxidation catalysts and thermal oxidizers both have high capital, maintenance, and operational costs considering the sizes of the boilers in question. These controls were determined to be economically infeasible.

The use of an oxygen trim system has been determined to be feasible for Boiler #2 and has been selected as part of its BACT strategy. Because both Boilers #1 and #3 combust distillate fuel which has little variability in its combustion and would result in a minimum reduction in emissions outside of regular maintenance, an oxygen

trim system has been determined to not be economically feasible for control of CO and VOC.

BACT for CO and VOC emissions from Boiler #2 is the use of an oxygen trim system and the emission limits listed in the tables below. BACT for CO and VOC emissions from Boilers #1 and #3 is the use of good combustion practices, periodic maintenance, and the emission limits listed in the tables below.

e. Emission Limits

The BACT emission limits for Boilers #1, #2, and #3 were based on the following:

Boilers #1 and #3 - Distillate Fuel

PM	–	2.0 lb/1,000 gal based on AP-42 Table 1.3-1 dated 5/10
$PM_{10}/PM_{2.5}$	–	3.3 lb/1,000 gal based on AP-42 Table 1.3-1 dated 5/10
SO_2	–	based on firing distillate fuel with a maximum sulfur content of 0.0015% by weight
NO_x	–	20.0 lb/1,000 gal based on AP-42 Table 1.3-1 dated 5/10
CO	–	5.0 lb/1,000 gal based on AP-42 Table 1.3-1 dated 5/10
VOC	–	0.34 lb/1,000 gal based on AP-42 Table 1.3-1 dated 5/10
Visible Emissions	–	06-096 C.M.R. ch. 115, BACT

Boiler #2 - Biomass

PM	–	0.07 lb/MMBtu based on 40 C.F.R. Part 63, Subpart JJJJJJ
PM_{10}	–	0.091 lb/MMBtu based on AP-42 Table 1.6-1 dated 4/22
$PM_{2.5}$	–	0.082 lb/MMBtu based on AP-42 Table 1.6-1 dated 4/22
SO_2	–	0.025 lb/MMBtu based on AP-42 Table 1.6-1 dated 4/22
NO_x	–	0.22 lb/MMBtu based on AP-42 Table 1.6-2 dated 4/22
CO	–	0.60 lb/MMBtu based on AP-42 Table 1.6-2 dated 4/22
VOC	–	0.039 lb/MMBtu based on AP-42 Table 1.6-3 dated 4/22
Visible Emissions	–	06-096 C.M.R. ch. 115, BACT

The BACT emission limits for Boilers #1, #2, and #3 are the following:

Unit	Pollutant	lb/MMBtu
Boiler #1	PM	0.01
Boiler #2	PM	0.07
Boiler #3	PM	0.01

Unit	PM (lb/hr)	PM_{10} (lb/hr)	$PM_{2.5}$ (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	0.45	0.74	0.74	0.05	4.48	1.12	0.08
Boiler #2	1.12	1.46	1.32	0.40	3.52	9.60	0.63
Boiler #3	0.13	0.21	0.21	0.02	1.26	0.32	0.03

2. Visible Emissions

Boilers #1 and #3
Visible emissions from Boilers #1 and #3 shall each not exceed 20% opacity on a six-minute block average basis.

Boiler #2
Visible emissions from Boiler #2 shall not exceed 30% opacity on a six-minute block average basis, except for periods of startup, shutdown, or malfunction during which time Maine Plywood shall either meet the normal operating visible emissions standard or the following alternative visible emissions standard.

During periods of startup, shutdown, or malfunction, visible emissions shall not exceed 40% opacity on a six-minute block average basis. This alternative visible emissions standard shall not be utilized for more than two hours (20 consecutive six-minute block averages) per event. If this alternative visible emissions standard is utilized, Maine Plywood shall keep records of the date, time, and duration of all startup, shutdown, and malfunction events and provide them to the Department upon request.

3. Operating Limitations

Maine Plywood has elected to limit the total operating hours of Boiler #2 to 7,446 hours per calendar year, and to limit the fuel fired in Boilers #1 and #3 combined to 2,137,000 gallons of distillate fuel per calendar year in order to limit the potential emissions of the facility to a level below where the facility would be required to perform an ambient air quality impact analysis.

4. New Source Performance Standards (NSPS): 40 C.F.R. Part 60, Subpart Dc

Boilers #1 and #2 are subject to *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* 40 C.F.R. Part 60, Subpart Dc for units greater than 10 MMBtu/hr manufactured after June 9, 1989, but Boiler #3 is not due to its size and year of manufacture. [40 C.F.R. § 60.40c]

Maine Plywood shall comply with all requirements of 40 C.F.R. Part 60, Subpart Dc applicable to Boilers #1 and #2 including, but not limited to, the following:

a. Notifications

Maine Plywood shall submit notification to EPA and the Department of the date of construction, anticipated start-up, and actual start-up of Boilers #1 and #2. This notification shall include the design heat input capacity of the boilers and the type of fuel to be combusted. [40 C.F.R. § 60.48c(a)]

Per 40 C.F.R. 60.7, Maine Plywood shall postmark the above notifications within 30 days of commencing construction, and 15 days of the date of initial startup.

b. Standards

(1) Sulfur Dioxide (SO_2)
The fuel fired in Boiler #1 shall not exceed 0.5% sulfur by weight.
[40 C.F.R. § 60.42c(d)] This fuel sulfur content limit shall be streamlined to the lower limit required by State statute.

(2) Opacity
Boiler #1 is subject to an applicable visible emissions standard pursuant to 40 C.F.R. §§ 60.43c(c) and (d). However, the Department has determined that the BACT visible emissions limit is more stringent than the applicable limit in 40 C.F.R. Part 60, Subpart Dc. Therefore, the visible emissions limit for Boiler #1 has been streamlined to the more stringent BACT limit, and only this more stringent limit shall be included in the Order of this air emission license.

Due to its size, Boiler #2 does not have opacity standards under 40 C.F.R. Part 60, Subpart Dc.

c. Initial Compliance Requirements

Maine Plywood shall perform the following within 30 days after achieving the maximum production rate at which Boiler #1 will be operated but not later than 180 days after the initial start-up of Boiler #1:

(1) Submit to EPA and the Department copies of the fuel supplier certification of the sulfur content of the distillate fuel fired in Boiler #1. The fuel supplier certification must contain the name of the oil supplier, a statement from the oil supplier that the oil complies with ASTM specifications for distillate oil, and the maximum sulfur content of the oil. [40 C.F.R. § 60.44c(h)]

(2) Conduct an initial performance test for opacity of Boiler #1 using 40 C.F.R. Part 60, Appendix A, Method 9 in accordance with 40 C.F.R. § 60.45c.

d. Monitoring Requirements

(1) Except as provided in paragraph (3) below, Maine Plywood shall conduct performance tests on Boiler #1 for opacity using 40 C.F.R. Part 60, Appendix A, Method 9 according to the following schedule:
[40 C.F.R. § 60.47c(a)]

(i) If no visible emissions were observed in the most recent Method 9 performance test, the next performance test shall be completed within 12 calendar months or within 45 days of firing oil in the boiler, whichever is later.
(ii) If visible emissions were observed in the most recent Method 9 performance test, and the maximum 6-minute block average was less than or equal to 5% opacity, the next performance test shall be completed within 6 calendar months or within 45 days of firing oil in the boiler, whichever is later.
(iii) If visible emissions were observed in the most recent Method 9 performance test, and the maximum 6-minute block average was greater than 5% but less than or equal to 10% opacity, the next performance test shall be completed within 3 calendar months or within 45 days of firing oil in the boiler, whichever is later.
(iv) If visible emissions were observed in the most recent Method 9 performance test, and the maximum 6-minute block average was greater than 10% opacity, the next performance test shall be completed within 45 days.

Because Boiler #2 does not have an opacity standard under 40 C.F.R. Part 60, Subpart Dc, and is therefore not subject to the above testing requirement.

(2) The observation period for the Method 9 performance test may be reduced from 3 hours to 60 minutes if all 6-minute block averages are less than 10% opacity and all individual 15-second observations are less than or equal to 20% opacity during the initial 60 minutes of observation.

(3) If the visible emissions observed in the most recent Method 9 performance test were less than 10% opacity, Maine Plywood may elect to perform subsequent performance tests using 40 C.F.R. Part 60, Appendix A, Method 22 as follows:

(i) Maine Plywood shall conduct 10-minute observations each operating day Boiler #1 fires oil using Method 22.
(ii) If no visible emissions are observed for 10 operating days, Maine Plywood may reduce observations to once every 7 operating days. If any visible emissions are observed, daily observations shall be resumed.
(iii) If the sum of the occurrence of any visible emissions is greater than 30 seconds per 10-minute observation, Maine Plywood shall immediately conduct a 30-minute observation.

(iv) If the sum of the occurrence of any visible emissions is greater than 90 seconds per 30-minute observation, Maine Plywood shall either document the adjustments made to Boiler # and demonstrate within 24 hours that the sum of the occurrence of any visible emissions is not greater than 90 seconds per 30-minute observation or conduct a Method 9 performance test within 45 days.

e. Reporting and Recordkeeping

(1) Maine Plywood shall maintain records of the amounts of distillate fuel combusted during each calendar month. [40 C.F.R. § 60.48c(g)]

(2) For each opacity performance test performed, Maine Plywood shall maintain records of the following:

(i) Dates and time intervals of all opacity or visible emissions observation periods;
(ii) Name and affiliation for each visible emissions observer participating in the performance test. For Method 9 performance tests, include a copy of the current visible emissions reading certification for each visible emissions observer.
(iii) Copies of all visible emissions observer opacity field data sheets; and
(iv) Documentation of any adjustments made and the time the adjustments were completed to demonstrate compliance with the applicable monitoring requirements (Method 22 observations only).

(3) Maine Plywood shall submit semi-annual reports to EPA and to the Department. [40 C.F.R. § 60.48c(d)] These reports shall include the following:

(i) Calendar dates covered in the reporting period; [40 C.F.R. § 60.48c(e)(1)]
(ii) Records of fuel supplier certifications; [40 C.F.R. § 60.48c(e)(11)] and
(iii) Any instances of excess emissions (including opacity) from Boiler #1**.** [40 C.F.R. § 60.48c(c)]

(4) The semi-annual reports are due within 30 days of the end of each six-month period. [40 C.F.R. § 60.48c(j)]

(5) The following address for EPA shall be used for any reports or notifications required to be copied to them:

U.S. Environmental Protection Agency, Region I
5 Post Office Square, Suite 100 (OES04-2)
Boston, MA 02109-3912
Attn: Air Compliance Clerk

(6) Maine Plywood shall maintain records required by Subpart Dc for a period of two years following the date of the record. [40 C.F.R. § 60.48c(i)]
Note: Standard Condition (8) of this license requires all records be retained for six years; therefore, the two-year record retention requirement of Subpart Dc shall be streamlined to the more stringent six-year requirement.

5. National Emission Standards for Hazardous Air Pollutants (NESHAP): 40 C.F.R. Part 63, Subpart JJJJJJ

Boilers #1, #2, and #3 are subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 C.F.R. Part 63, Subpart JJJJJJ. Boiler #1 is considered a new oil boiler, Boiler #2 is considered a new biomass boiler, and Boiler #3 is considered a new boiler rated less than 10 MMBtu/hr. [40 C.F.R. §§ 63.11193 and 63.11195]

Based on the definitions of *Construction* and *Reconstruction* in 40 C.F.R. Part 63, Subpart A, and the manufacture dates, coupled with the equipment's undocumented histories, the Department considers that Boilers #1, #2, and #3 meet the criteria for reconstruction and are therefore classified as new boilers pursuant to 40 C.F.R. 63.11194.

a. Compliance Dates, Notifications, and Work Practice Requirements

(1) Initial Notification of Compliance
An Initial Notification submittal to EPA is due within 120 days after the source becomes subject to the standard. [40 C.F.R. § 63.11225(a)(2)]

(2) Work Practice Requirements

(a) For Boiler #1, Maine Plywood shall minimize the boiler's startup and shutdown periods and conduct startups and shutdowns according to the manufacturer's recommended procedures. If the manufacturer's recommended procedures are not available, Maine Plywood must follow recommended procedures for a unit of similar design for which the manufacturer's recommended procedures are available. [40 C.F.R. Part 63, Subpart JJJJJJ, Table 2]

(b) For Boiler #2, Maine Plywood shall install and operate a bag leak detection system according to 40 C.F.R. § 63.11224 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during each 6-month period. [40 C.F.R. Part 63, Subpart JJJJJJ, Table 3]

(3) Boiler Tune-Up Program

(i) A boiler tune-up program shall be implemented. [40 C.F.R. § 63.11223]

(ii) Tune-ups shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. See chart below:

Boiler Category	**Tune-Up Frequency**
New or Existing Oil, Biomass and Coal fired boilers that are not designated as "Boilers with Less Frequent Tune-up Requirements" **Boilers #1 and #3**	Every 2 years
Boiler with oxygen trim system which maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune up **Boiler #2**	Every 5 years

[40 C.F.R. § 63.11223(a) and Table 2]

(iii) The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:

1. As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection (Boilers #1 and #3). Delay of the burner inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers (Boiler #2). [40 C.F.R. § 63.11223(b)(1)]
2. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 C.F.R. § 63.11223(b)(2)]
3. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection (Boilers #1 and #3). Delay of the inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers (Boiler #2). [40 C.F.R. § 63.11223(b)(3)]
4. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]
5. Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are

made). Measurements may be taken using a portable CO analyzer. [40 C.F.R. § 63.11223(b)(5)]

6. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up. [40 C.F.R. § 63.11223(b)(7)]

(iv) Tune-Up Report: A tune-up report shall be maintained onsite and submitted to the Department and/or EPA upon request. The report shall contain the following information:

1. The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;

2. A description of any corrective actions taken as part of the tune-up of the boiler; and

3. The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 C.F.R. § 63.11223(b)(6)]

(4) Compliance Report

For Boiler #3, for every two-year compliance period, Maine Plywood shall prepare a compliance report by March 1st of the following year to document the information below for the two-year period. The report shall be maintained by the source and submitted to the Department and/or to the EPA upon request. The report must include the items contained in §§ 63.11225(b)(1) and (2), including the following: [40 C.F.R. § 63.11225(b)]

(i) Company name and address;

(ii) A statement of whether the source has complied with all the relevant requirements of this Subpart;

(iii) A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;

(iv) The following certifications, as applicable:

1. "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
2. "No secondary materials that are solid waste were combusted in any affected unit."
3. "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the

manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

Each year for Boilers #1 and #2, Maine Plywood shall prepare a compliance report by March 1st of the following year. The report shall be maintained by the source and submitted to the Department and/or to the EPA upon request, unless the source experiences any deviations from the applicable requirements of this Subpart during the previous calendar year, then the report must be submitted to the Department and to the EPA by March 15th. The report must include the items contained in § 63.11225(b)(1) through (4), including the following: [40 C.F.R. § 63.11225(b)]

(i) Company name and address;

(ii) A statement of whether the source has complied with all the relevant requirements of this Subpart;

(iii) A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;

(iv) The following certifications, as applicable:

1. "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
2. "No secondary materials that are solid waste were combusted in any affected unit."
3. "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

(v) If the source experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken; and

(vi) The total fuel use by each affected boiler subject to an emission limit for each calendar month within the reporting period.

b. Recordkeeping

(1) Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJJ including the following [40 C.F.R. § 63.11225(c)]:

(i) Copies of notifications and reports with supporting compliance documentation;

(ii) Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;

(iii) Records of the occurrence and duration of each malfunction of each applicable boiler; and

(iv) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

(2) Records shall be in a form suitable and readily available for expeditious review. Each record must be kept for 5 years following the date of each recorded action. Each record must be kept on-site or be accessible from a central location by computer or other means that instantly provides access at the site for at least 2 years after the date of each recorded action. The records may be maintained off-site for the remaining 3 years. [40 C.F.R. § 63.11225(d)] Note: Standard Condition (8) of this license requires all records be retained for six years; therefore, the five-year record retention requirement of Subpart JJJJJJ shall be streamlined to the more stringent six-year requirement.

D. Veneer Dryer and Plywood Press

1. BACT Discussion

In the BACT analysis performed by Maine Plywood, emissions control options were considered for PM, PM_{10}, $PM_{2.5}$, CO, and VOC.

For emissions of PM, PM_{10}, and $PM_{2.5}$ from the Veneer Dryer and Plywood Press, Maine Plywood considered the use of a wet scrubber, a wet electrostatic precipitator (WESP), and a baghouse. A WESP was determined to not be economically feasible due to its high initial cost as well as continued operating costs. A baghouse was determined to not be technically feasible due to the high moisture content of the exhaust. A wet scrubber was determined to be both technically and economically feasible and has been selected as BACT for emissions from the Veneer Dryer and Plywood Press.

BACT for PM, PM_{10}, and $PM_{2.5}$ have been determined to be the use of a wet scrubber and the emission limits noted below.

For control of emissions of CO and VOC, Maine Plywood considered the use of a regenerative thermal oxidizer, a catalytic oxidizer, and the processing of primarily hardwood in its plywood manufacturing operation. The use of thermal oxidation for control of CO and VOC from this process was found to be both technically and economically infeasible due to the low concentration of CO and VOC in the exhaust from the Wet Scrubber. Normally, a wet scrubber would be effective in capturing some of the VOC from the exhaust of the Veneer Dryer and Plywood Press; however, in this case where the effluent stream from the Wet Scrubber is returned to the hot pond to

recapture waste heat, the VOC would be likely emitted again from the water. Therefore, the Wet Scrubber will not be considered to be a control device for emissions of VOC. The processing of naturally low CO and VOC bearing materials such as poplar and other similar hardwoods has been selected as BACT for emissions of CO and VOC from the Veneer Dryer and Plywood Press. Additionally, Maine Plywood has elected to limit the annual throughput of the facility to 65.5 million square feet of ¼-inch thickness finished product.

BACT for CO and VOC has been determined to be processing poplar and other similar hardwoods, a production limit of 65.5 million square feet of ¼-inch thickness finished product, and the emissions limits in the table below.

2. BACT Emissions

BACT for emissions from the Veneer Dryer are based on the following:

Pollutant	Emission Factors	Source of Emission Factors
Veneer Dryer Emissions		
PM	0.547 lb/ Mft^2 of ¼"-thickness finished material	based on an average of softwood veneer and hardwood oriented strand board emission factors from AP-42 Tables 10.5-1 and 10.6-1 (DATE)
PM_{10}, and $PM_{2.5}$	0.153 lb/ Mft^2 of ¼"-thickness finished material	
CO	0.187 lb/ Mft^2 of ¼"-thickness finished material	AP-42 Table 10.5-2 (dated 1/22)
VOC	0.006 lb/ Mft^2 -ft of ¼"-thickness finished material	AP-42 Table 10.5-3 (dated 1/22)

BACT for emissions from the Plywood Press are based on the following:

Pollutant	Emission Factors	Source of Emission Factors
Plywood Press Emissions		
PM, PM_{10}, and $PM_{2.5}$	0.135 lb/ Mft^2 of ¼"-thickness finished material	based on emission factors from AP-42 Table 10.5-4 (dated 1/22)
VOC	material balance of the VOC content of the binding resin per the manufacturer's specifications	

The BACT emission limits for the combined Veneer Dryer and Plywood Press emissions through the Wet Scrubber are the following:

Unit	PM (lb/hr)	PM_{10} (lb/hr)	$PM_{2.5}$ (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Veneer Dryer and Plywood Press (combined, after the Wet Scrubber)	1.51	1.41	1.41	1.65	3.37

3. Visible Emissions

   All emissions from the Veneer Dryer and Plywood Press shall only be released through the Wet Scrubber exhaust, and visible emissions shall not exceed the applicable general process visible emissions limit defined below.

4. Testing

   Within 180 days of the initial startup of the facility, Maine Plywood shall demonstrate compliance with the PM, PM_{10}, and $PM_{2.5}$ emission limits for the combined Veneer Dryer and Plywood Press emissions.

   During this initial performance test, Maine Plywood shall determine the minimum flow rate of water through the wet scrubber to maintain compliance with the above emission limits of PM, PM_{10}, and $PM_{2.5}$. Maine Plywood shall maintain records of daily checks of the flow rate for any day that the Veneer Dryer or Plywood Press are in operation.

5. National Emission Standards for Hazardous Air Pollutants

   Maine Plywood is not subject to the *National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Products*, 40 C.F.R. Part 63, Subpart DDDD because the facility is classified as an area source of HAP emissions. [40 C.F.R. § 63.2231]

E. Finishing and Sanding Operations

The Department finds that BACT for PM, PM_{10}, and $PM_{2.5}$ emissions from Finishing and Sanding Operations is use of a baghouse maintained according to the manufacturer's written instructions. A copy of those instructions or procedures shall be provided to the Department upon request. Maine Plywood shall maintain records of all maintenance performed on the baghouse.

The Department considers the controlled emissions from this process to be unquantifiable.

Visible emissions from the Finishing and Sanding Operations shall only be released from control equipment exhaust points and shall not exceed the applicable general process visible emissions limit defined below.

F. Ink Jet Printing and Labeling

The Ink Jet Printing and Labeling activities at Maine Plywood are proposed to be performed unitizing water-based inks which contain no VOC or HAPs and are therefore considered insignificant activities.

G. HAP Emissions

Total emissions of HAP from the facility shall be limited to 9.9 tons of any single HAP and 24.9 tons of all HAP combined on a 12-month rolling total basis.

Maine Plywood shall calculate emissions of HAP from all sources at the facility addressed in this license and maintain documentation of such calculations and any supporting documentation.

H. General Process Emissions

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis.

Visible emissions from any baghouse shall not exceed 10% on a six-minute block average basis.

I. Fugitive Emissions

Maine Plywood shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.

Maine Plywood shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22.

J. Performance Test Protocol

For any performance testing required by this license, Maine Plywood shall submit to the Department for approval a performance test protocol, as outlined in the Department's Performance Testing Guidance, at least 30 days prior to the scheduled date of the performance test. [06-096 C.M.R. ch. 115, BPT]

The Department's Performance Testing Guidance is available online at:
https://www.maine.gov/dep/air/emissions/testing.html

K. Emission Statements

Maine Plywood is subject to emissions inventory requirements contained in *Emission Statements*, 06-096 C.M.R. ch. 137. Maine Plywood shall maintain the following records in order to comply with this rule:

1. The amount of distillate fuel fired in Boilers #1 and #3 (each) on a monthly basis;
2. The hours of operation of each emission unit addressed in this license, on a monthly basis; and
3. Plywood production records on a monthly basis.

Every third year, or as requested by the Department, Maine Plywood shall report to the Department emissions of hazardous air pollutants as required pursuant to 06-096 C.M.R. ch. 137, § (3)(C). The next report is due no later than May 15, 2027, for emissions occurring in calendar year 2026. The Department will use these reports to calculate and invoice for the applicable annual air quality surcharge for the subsequent three billing periods. Maine Plywood shall pay the annual air quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3).
[38 M.R.S. § 353-A(1-A)]

L. Annual Emissions

The table below provides an estimate of facility-wide annual emissions for the purposes of calculating the facility's annual air license fee and establishing the facility's potential to emit (PTE). Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included except when required by state or federal regulations. Maximum potential emissions were calculated based on the following assumptions:

- An annual production limit of 65.5 million square feet of ¼"-thickness finished product;
- A facility-wide HAP limit of 9.9 tpy of any single HAP and 24.9 tpy of all HAP combined;
- Operating Boiler #2 a maximum of 7,446 hours per calendar year; and
- A combined fuel limit of 2,137,000 gallons of distillate fuel per calendar year for Boilers #1 and #3.

This information does not represent a comprehensive list of license restrictions or permissions. That information is provided in the Order section of this license.

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

	PM	PM_{10}	$PM_{2.5}$	SO_2	NO_x	CO	VOC
Boilers #1, #2, and #3	6.4	9.0	8.5	1.8	34.5	41.2	2.8
Veneer Dryer and Plywood Press	5.5	5.1	5.1	-	-	1.6	3.2
Total TPY	**11.9**	**14.1**	**13.6**	**1.8**	**34.5**	**42.8**	**6.0**

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
$PM_{2.5}$	15
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.

This determination is based on information provided by the applicant regarding the expected construction and operation of the proposed emission units. If the Department determines that any parameter (e.g., stack size, configuration, flow rate, emission rates, nearby structures, etc.) deviates from what was included in the application, the Department may require Maine Plywood to submit additional information and may require an ambient air quality impact analysis at that time.

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-1183-71-A-N subject to the following conditions.

Severability. The invalidity or unenforceability of any provision of this License or part thereof 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. § 347-C).

(2) The licensee shall acquire a new or amended air emission license prior to beginning actual construction of a modification, unless specifically provided for in Chapter 115. [06-096 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 115]

(5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S. § 353-A. [06-096 C.M.R. ch. 115] Payment of the annual air emission license fee for Maine Plywood is due by the end of November of each year. [38 M.R.S. § 353-A(3)]

(6) The license does not convey any property rights of any sort, or any exclusive privilege. [06-096 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 115]

(11) In accordance with the Department's air emission compliance test protocol and 40 C.F.R. 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 C.F.R. 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 C.M.R. ch. 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 the written test report by the Department, or another alternative timeframe approved by the Department, 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 C.F.R. 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 C.M.R. ch. 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 license requirement. [06-096 C.M.R. ch. 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 C.M.R. ch. 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 C.M.R. ch. 115]

(16) The licensee 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. § 605). [06-096 C.M.R. ch. 115]

SPECIFIC CONDITIONS

(17) **Emissions and Operating Limits**

A. Boiler #2 shall each be limited to 7,446 hours of operation per calendar year. [06-096 C.M.R. ch. 115, BACT]

B. The fuel fired in Boilers #1 and #3 combined shall be limited to 2,137,000 gallons of distillate fuel per calendar year. [06-096 C.M.R. ch. 115, BACT]

C. Maine Plywood shall be limited to production of 65.5 million square feet of ¼" thickness finished product per calendar year. [06-096 C.M.R. ch. 115, BACT]

D. Maine Plywood shall be limited to a facility wide limit of HAP emissions of 9.9 tpy of any single HAP and 24.9 tpy of all HAP combined on a 12-month rolling total basis. [06-096 C.M.R. ch. 115, BACT]

E. Maine Plywood shall maintain records suitable to demonstrate compliance with the above emissions and operating limits and have such records available for review at the request of the Department. [06-096 C.M.R. ch. 115, BACT]

(18) **Boilers**

A. Fuel

1. Boilers #1 and #3 are licensed to fire distillate fuel. [06-096 C.M.R. ch. 115, BACT]

2. Boiler #2 is licensed to fire biomass fuel. [06-096 C.M.R. ch. 115, BACT]

3. Boiler #1 shall be equipped with flue gas recirculation. [06-096 C.M.R. ch. 115, BACT]

4. Boiler #2 shall be equipped with an oxygen trim system. [06-096 C.M.R. ch. 115, BACT]

5. Boiler #2 shall be equipped with a baghouse and operated and maintained according to the manufacturer's written instructions. [06-096 C.M.R. ch. 115, BACT]

6. The facility shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm). [06-096 C.M.R. ch. 115, BACT]

7. Compliance shall be demonstrated by fuel records showing the quantity, type, and the percent sulfur of the fuel delivered (if applicable). Records of annual fuel use shall be kept on a monthly and calendar year basis. Fuel sulfur content compliance shall be demonstrated by fuel supplier certification.
   [06-096 C.M.R. ch. 115, BACT]

B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #1	PM	0.01	06-096 C.M.R. ch. 115, BACT
Boiler #2	PM	0.07	40 C.F.R. Part 63, Subpart JJJJJJ, Table 2
Boiler #3	PM	0.01	06-096 C.M.R. ch. 115, BACT

C. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BACT]:

Emission Unit	PM (lb/hr)	PM_{10} (lb/hr)	$PM_{2.5}$ (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #1	0.45	0.74	0.74	0.05	4.48	1.12	0.08
Boiler #2	1.12	1.46	1.32	0.40	3.52	9.60	0.63
Boiler #3	0.13	0.21	0.21	0.02	1.26	0.32	0.03

D. Visible emissions from Boilers #1 and #3 shall each not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BACT]

E. Visible emissions from Boiler #2 shall not exceed 30% opacity on a six-minute block average basis, except for periods of startup, shutdown, or malfunction during which time Maine Plywood shall either meet the normal operating visible emissions standard or the following alternative visible emissions standard.

   During periods of startup, shutdown, or malfunction, visible emissions shall not exceed 40% opacity on a six-minute block average basis. This alternative visible emissions standard shall not be utilized for more than two hours (20 consecutive six-minute block averages) per event. If this alternative visible emissions standard is utilized, Maine Plywood shall keep records of the date, time, and duration of all startup, shutdown, and malfunction events and provide them to the Department upon request.
   [06-096 C.M.R. ch. 115, BACT]

F. Maine Plywood shall comply with all requirements of 40 C.F.R. Part 60, Subpart Dc applicable to Boilers ##1 and #2 including, but not limited to, the following:

   1. Notification

      (a) Maine Plywood shall submit notification to EPA and the Department of the date of construction, anticipated start-up, and actual start-up of Boilers #1 and #2.

This notification shall include the design heat input capacity of the boiler and the type of fuel to be combusted. [40 C.F.R. § 60.48c(a)]

(b) Maine Plywood shall postmark within 30 days of the actual event the notification of the commencement of construction of each boiler. [40 C.F.R. 60.7(a)(1)]

(c) Maine Plywood shall postmark within 15 days of the actual event the notification of the initial startup of each boiler. [40 C.F.R. 60.7(a)(1)]

2. Initial Compliance Requirements

Maine Plywood shall perform the following within 30 days after achieving the maximum production rate at which the boiler will be operated but not later than 180 days after the initial start-up of the boiler:

a. Submit to EPA and the Department copies of the fuel supplier certification of the sulfur content of the distillate fuel fired in Boiler #1. The fuel supplier certification must contain the name of the oil supplier, a statement from the oil supplier that the oil complies with ASTM specifications for distillate oil, and the maximum sulfur content of the oil. [40 C.F.R. § 60.44c(h)]

b. Maine Plywood shall conduct an initial performance test for opacity using 40 C.F.R. Part 60, Appendix A, Method 9 in accordance with 40 C.F.R. § 60.45c.

3. Monitoring Requirements

a. Except as provided in paragraph (3) below, Maine Plywood shall conduct performance tests on Boiler #1 for opacity using 40 C.F.R. Part 60, Appendix A, Method 9 according to the following schedule: [40 C.F.R. § 60.47c(a)]

(1) If no visible emissions were observed in the most recent Method 9 performance test, the next performance test shall be completed within 12 calendar months or within 45 days of firing oil in the boiler, whichever is later.
(2) If visible emissions were observed in the most recent Method 9 performance test, and the maximum 6-minute block average was less than or equal to 5% opacity, the next performance test shall be completed within 6 calendar months or within 45 days of firing oil in the boiler, whichever is later.
(3) If visible emissions were observed in the most recent Method 9 performance test, and the maximum 6-minute block average was greater than 5% but less than or equal to 10% opacity, the next performance test shall be completed

within 3 calendar months or within 45 days of firing oil in the boiler, whichever is later.

(4) If visible emissions were observed in the most recent Method 9 performance test, and the maximum 6-minute block average was greater than 10% opacity, the next performance test shall be completed within 45 days.

b. The observation period for the Method 9 performance test may be reduced from 3 hours to 60 minutes if all 6-minute block averages are less than 10% opacity and all individual 15-second observations are less than or equal to 20% opacity during the initial 60 minutes of observation.

c. If the visible emissions observed in the most recent Method 9 performance test were less than 10% opacity, Maine Plywood may elect to perform subsequent performance tests using 40 C.F.R. Part 60, Appendix A, Method 22 as follows:

(1) Maine Plywood shall conduct 10-minute observations each operating day Boiler #1 fires oil using Method 22.
(2) If no visible emissions are observed for 10 operating days, Maine Plywood may reduce observations to once every 7 operating days. If any visible emissions are observed, daily observations shall be resumed.
(3) If the sum of the occurrence of any visible emissions is greater than 30 seconds per 10-minute observation, Maine Plywood shall immediately conduct a 30-minute observation.
(4) If the sum of the occurrence of any visible emissions is greater than 90 seconds per 30-minute observation, Maine Plywood shall either document the adjustments made to Boiler # and demonstrate within 24 hours that the sum of the occurrence of any visible emissions is not greater than 90 seconds per 30-minute observation or conduct a Method 9 performance test within 45 days.

4. Reporting and Recordkeeping

a. Maine Plywood shall maintain records of the amounts of each fuel combusted during each calendar month with fuel certifications. [40 C.F.R. § 60.48c(g)]

b. For each opacity performance test performed, Maine Plywood shall maintain records of the following:

(1) Dates and time intervals of all opacity or visible emissions observation periods;
(2) Name and affiliation for each visible emissions observer participating in the performance test. For Method 9 performance tests, include a copy of the current visible emissions reading certification for each visible emissions observer.
(3) Copies of all visible emissions observer opacity field data sheets; and

(4) Documentation of any adjustments made and the time the adjustments were completed to demonstrate compliance with the applicable monitoring requirements (Method 22 observations only).

c. Maine Plywood shall submit semi-annual reports to EPA and to the Department. [40 C.F.R. § 60.48c(d)] These reports shall include the following:

(1) Calendar dates covered in the reporting period; [40 C.F.R. § 60.48c(e)(1)]
(2) Records of fuel supplier certifications; [40 C.F.R. § 60.48c(e)(11)] and
(3) Any instances of excess emissions (including opacity) from Boiler #1**.** [40 C.F.R. § 60.48c(c)]

d. The semi-annual reports are due within 30 days of the end of each six-month period. [40 C.F.R. § 60.48c(j)]

G. Maine Plywood shall comply with all requirements of 40 C.F.R. Part 63, Subpart JJJJJJ applicable to Boilers #1, #2, and #3 including, but not limited to, the following: [incorporated under 06-096 C.M.R. ch. 115, BACT]

1. An Initial Notification submittal to EPA is due within 120 days after the source becomes subject to the standard. [40 C.F.R. § 63.11225(a)(2)]

2. The facility shall implement a boiler tune-up program. [40 C.F.R. § 63.11223]

a. Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler. See chart below:

Boiler Category	**Tune-Up Frequency**
New or Existing Oil, Biomass and Coal fired boilers that are not designated as "Boilers with Less Frequent Tune-up Requirements" **Boilers #1 and #3**	Every 2 years
Boiler with oxygen trim system which maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune up **Boiler #2**	Every 5 years

[40 C.F.R. § 63.11223(a) and Table 2]

b. The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:
(1) <u>As applicable</u>, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection (Boilers #1 and #3). Delay of the burner inspection until the next scheduled shutdown is permitted for up to 72 months from the

previous inspection for oil fired boilers less than or equal to 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers (Boiler #2). [40 C.F.R. § 63.11223(b)(1)]

(2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 C.F..R § 63.11223(b)(2)]

(3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection (Boilers #1 and #3). Delay of the inspection until the next scheduled shutdown is permitted for up to 72 months from the previous inspection for oil fired boilers less than or equal to 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers (Boiler #2). [40 C.F.R. § 63.11223(b)(3)]

(4) Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]

(5) Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 C.F.R. § 63.11223(b)(5)]

(6) If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up. [40 C.F.R. § 63.11223(b)(7)]

c. Tune-Up Report: A tune-up report shall be maintained onsite and submitted to the Department and EPA upon request. The report shall contain the following information:

(1) The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;

(2) A description of any corrective actions taken as part of the tune-up of the boiler; and

(3) The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 C.F.R. § 63.11223(b)(6)]

3. Compliance Report

For every two-year compliance period, Maine Plywood shall prepare a compliance report by March 1st of the following year to document the information below for the two-year period for Boiler #3. The report shall be maintained by the source and submitted to the Department and/or to the EPA upon request. The report must

include the items contained in §§ 63.11225(b)(1) and (2), including the following: [40 C.F.R. § 63.11225(b)]

a. Company name and address;
b. A statement of whether the source has complied with all the relevant requirements of this Subpart;
c. A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
d. The following certifications, as applicable:
   (1) "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
   (2) "No secondary materials that are solid waste were combusted in any affected unit."
   (3) "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

Each year, Maine Plywood shall prepare a compliance report by March 1st of the following year for Boilers #1 and #2. The report shall be maintained by the source and submitted to the Department and/or to the EPA upon request, unless the source experiences any deviations from the applicable requirements of this Subpart during the previous calendar year, then the report must be submitted to the Department and to the EPA by March 15th. The report must include the items contained in § 63.11225(b)(1) – (4), including the following: [40 C.F.R. § 63.11225(b)]

a. Company name and address;
b. A statement of whether the source has complied with all the relevant requirements of this Subpart;
c. A statement certifying truth, accuracy, and completeness of the notification and signed by a responsible official and containing the official's name, title, phone number, email address, and signature;
d. The following certifications, as applicable:
   (1) "This facility complies with the requirements in 40 C.F.R. § 63.11223 to conduct tune-ups of each boiler in accordance with the frequency specified in this Subpart."
   (2) "No secondary materials that are solid waste were combusted in any affected unit."
   (3) "This facility complies with the requirement in §§ 63.11214(d) and 63.11223(g) to minimize the boiler's time spent during startup and shutdown and to conduct startups and shutdowns according to the

manufacturer's recommended procedures or procedures specified for a boiler of similar design if manufacturer's recommended procedures are not available."

e. If the sources experiences any deviations from the applicable requirements during the reporting period, include a description of deviations, the time periods during which the deviations occurred, and the corrective actions taken; and
f. The total fuel use by each affected boiler subject to an emission limit for each calendar month within the reporting period.

4. Work Practice Requirements

a. Maine Plywood shall minimize Boiler #1's startup and shutdown periods and conduct startups and shutdowns according to the manufacturer's recommended procedures. If the manufacturer's recommended procedures are not available, Maine Plywood must follow recommended procedures for a unit of similar design for which manufacturer's recommended procedures are available. [40 C.F.R. Part 63, Subpart JJJJJJ, Table 2]

b. For Boiler #2, Maine Plywood shall install and operate a bag leak detection system according to 40 C.F.R. § 63.11224 and operate the fabric filter such that the bag leak detection system alarm does not sound more than 5 percent of the operating time during each 6-month period.
[40 C.F.R. Part 63, Subpart JJJJJJ, Table 3]

5. Recordkeeping

a. Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJJ including the following [40 C.F.R. § 63.11225(c)]:

(1) Copies of notifications and reports with supporting compliance documentation;
(2) Identification of each boiler, the date of tune-up, procedures followed for tune-up, and the manufacturer's specifications to which the boiler was tuned;
(3) Records of the occurrence and duration of each malfunction of each applicable boiler; and
(4) Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

b. Records shall be in a form suitable and readily available for expeditious review. Each record must be kept for 5 years following the date of each recorded action. Each record must be kept on-site or be accessible from a central location by computer or other means that instantly provides access at the site for at least 2 years after the date of each recorded action. The records may be maintained off-site for the remaining 3 years. [40 C.F.R. § 63.11225(d)] Note: Standard

Condition (8) of this license requires all records be retained for six years; therefore, the five-year record retention requirement of Subpart JJJJJJ shall be streamlined to the more stringent six-year requirement.

(19) **Veneer Dryer and Plywood Press**

A. The combined PM, PM_{10}, and $PM_{2.5}$ emissions from the Veneer Dryer and Plywood Press shall be controlled by a wet scrubber. [06-096 C.M.R. ch. 115, BACT]

B. Emissions shall not exceed the following [06-096 C.M.R. ch. 115, BACT]:

Unit	PM (lb/hr)	PM_{10} (lb/hr)	$PM_{2.5}$ (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Veneer Dryer and Plywood Press (combined)	1.51	1.41	1.41	1.65	3.37

C. Within 180 days of the initial startup of the facility, Maine Plywood shall demonstrate compliance with the PM, PM_{10}, and $PM_{2.5}$ emission limits for the combined Veneer Dryer and Plywood Press emissions through performance testing utilizing EPA Methods 5 and 202 or other methods approved by the Department. [06-096 C.M.R. ch. 115, BACT]

D. During the initial performance test, Maine Plywood shall determine the minimum flow rate of water through the wet scrubber to demonstrate compliance with the above emission limits of PM, PM_{10}, and $PM_{2.5}$. [06-096 C.M.R. ch. 115, BACT]

E. Maine Plywood shall maintain records of daily checks of the flow rate for any day that the Veneer Dryer or Plywood Press are in operation. [06-096 C.M.R. ch.115, BACT]

(20) **Finishing and Sanding Operations**

A. The PM, PM_{10}, and $PM_{2.5}$ emissions from the Finishing and Sanding Operations shall be controlled by a baghouse. [06-096 C.M.R. ch. 115, BACT]

B. The baghouse shall be maintained according to the manufacturer's written instructions. A copy of those instructions or procedures shall be provided to the Department upon request. Maine Plywood shall maintain records of all maintenance performed on the baghouse. [06-096 C.M.R. ch. 115, BACT]

(21) **General Process Sources**

1. Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(4)]

2. Visible emissions from any baghouse shall not exceed 10% on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(B)(3)]

(22) **Fugitive Emissions**

A. Maine Plywood shall not cause emissions of any fugitive dust during any period of construction, reconstruction, or operation without taking reasonable precautions. Such reasonable precautions shall be included in the facility's continuing program of best management practices for suppression of fugitive particulate matter. See 06-096 C.M.R. ch. 101, § 4(C) for a list of potential reasonable precautions.

B. Maine Plywood shall not cause or allow visible emissions within 20 feet of ground level, measured as any level of opacity and not including water vapor, beyond the legal boundary of the property on which such emissions occur. Compliance with this standard shall be determined pursuant to 40 C.F.R. Part 60, Appendix A, Method 22.

[06-096 C.M.R. ch. 101, § 4(C)]

(23) **Performance Test Protocol**

For any performance testing required by this license, Maine Plywood shall submit to the Department for approval a performance test protocol, as outlined in the Department's Performance Testing Guidance, at least 30 days prior to the scheduled date of the performance test. [06-096 C.M.R. ch. 115, BPT]

(24) **Annual Emission Statements**

A. In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, Maine Plywood shall annually report to the Department, in a format prescribed by the Department, the information necessary to accurately update the State's emission inventory. The emission statement shall be submitted as specified by the date in 06-096 C.M.R. ch. 137.

B. Maine Plywood shall keep the following records in order to comply with 06-096 C.M.R. ch. 137:

1. The amount of distillate fuel fired in Boilers #1 and #3 (each) on a monthly basis;
2. The hours of operation of each emission unit addressed in this license, on a monthly basis; and
3. Plywood production records on a monthly basis.

[06-096 C.M.R. ch. 137]

C. Every third year, or as requested by the Department, Maine Plywood shall report to the Department emissions of hazardous air pollutants as required pursuant to 06-096 C.M.R. ch. 137, § (3)(C). The next report is due no later than May 15, 2027, for emissions occurring in calendar year 2026. Maine Plywood shall pay the annual air

quality surcharge, calculated by the Department based on these reported emissions of hazardous air pollutants, by the date required in Title 38 M.R.S. § 353-A(3). [38 M.R.S. § 353-A(1-A)]

(25) If the Department determines that any parameter value pertaining to construction and operation of the emissions units, including but not limited to stack size, configuration, flow rate, emission rates, nearby structures, etc., deviates from what was submitted in the application or ambient air quality impact analysis for this air emission license, Maine Plywood may be required to submit additional information. Upon written request from the Department, Maine Plywood shall provide information necessary to demonstrate AAQS will not be exceeded, potentially including submission of an ambient air quality impact analysis or an application to amend this air emission license to resolve any deficiencies and ensure compliance with AAQS. Submission of this information is due within 60 days of the Department's written request unless otherwise stated in the Department's letter. [06-096 C.M.R. ch. 115, § 2(O)]

DONE AND DATED IN AUGUSTA, MAINE THIS 28th DAY OF OCTOBER, 2025.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____ for ____
MELANIE LOYZIM, COMMISSIONER

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

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

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 8/27/24
Date of application acceptance: 8/28/24

This Order prepared by Chris Ham, Bureau of Air Quality.