

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

DEPARTMENT ORDER

Maine Wood Turning, Inc. Franklin County New Vineyard, Maine A-1095-71-C-R Departmental Findings of Fact and Order Air Emission License Renewal

FINDINGS OF FACT

After review of the air emission license renewal 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 Wood Turning, Inc. (MWT) has applied to renew its Air Emission License for the operation of emission sources associated with its wood products manufacturing facility.

The equipment addressed in this license is located at 1687 New Vineyard Road, New Vineyard, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

Equipment	Max. Capacity (MMBtu/hr)	Fuel Type	Date of Install.	Stack #
Boiler #1	9.1	biomass assumed 20% moisture (75% dry / 25% wet)	1986	1

MWT also operates a 3.1 MMBtu/hr biomass-fired boiler for facility heating at their nearby sawmill. Although under common control, the sawmill is not located on contiguous or adjacent property and is therefore not included in this air emission license.

MWT 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, MWT may operate <u>portable</u> engines used for maintenance or emergencyonly 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.

		Pollution Control	Install.
Equipment	Production Rate	Equipment	Date
Kilns (6)	2.0 million BF/year	none	1974
Paint Booths	varies	particulate filters	2010
Paint Tumblers	varies	particulate filters	2010
Sawdust Collection	N/A	cyclones	N/A

Process Equipment

MWT also operates a pad printing station as well as tumblers that use aqueous-based finishes. These units are considered insignificant activities and mentioned for completeness purposes only.

MWT operates an aqueous-based parts washer. The cleaning solution contains less than 5% VOC, it does not meet the definition of solvent cleaning machine, and there are no applicable requirements in *Solvent Cleaners*, 06-096 C.M.R. ch. 130. Therefore, it is considered an insignificant activity and mentioned for completeness purposes only.

C. Definitions

<u>Biomass</u> 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. MWT should consult with the Department before adding any new biomass type to its fuel mix.

<u>Portable or Non-Road Engine</u> means an internal combustion engine which is portable or transportable, meaning designed to be and capable of being carried or moved from one location to another. Indicia of transportability include, but are not limited to, wheels, skids, carrying handles, dolly, trailer, or platform. This definition does NOT include engines which remain or will remain at a location (excluding storage locations) for more than

12 consecutive months or a shorter period of time for an engine located at a seasonal source. <u>A location is any single site</u> at a building, structure, facility, or installation. Any engine that replaces an engine at a location and that is intended to perform the same or similar function as the engine replaced will be included in calculating the consecutive time period.

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An engine is <u>not</u> a non-road (portable) engine if it remains or will remain at a location for more than 12 consecutive months or for a shorter period of time if sited at a seasonal source. A seasonal source is a source that remains in a single location for two years or more and which operates for fewer than 12 months in a calendar year. If an engine operates at a seasonal source for one entire season, the engine does not meet the criteria of a non-road (portable) engine and is subject to applicable stationary engine requirements.

<u>*Records*</u> or <u>*Logs*</u> mean either hardcopy or electronic records.

D. 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.

The application for MWT does not include the installation of new or modified equipment. Therefore, the license is considered to be a renewal of currently licensed emission units only and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 115.

E. Facility Classification

With the VOC and HAP limits associated with the painting and finishing operations the facility is licensed as follows:

- As a synthetic minor source of air emissions for criteria pollutants, because MWT is subject to license restrictions that keep facility emissions below major source thresholds for VOC; 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.

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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. <u>Boiler #1</u>

MWT operates Boiler #1 to produce steam for the kilns. The boiler is rated at 9.1 MMBtu/hr and fires biomass. The biomass fired is a mixture of 75% kiln-dried wood and 25% wet wood. Based on this, an assumed moisture of 20% was used in emission calculations. Boiler #1 was installed in 1986 and exhausts through its own stack.

1. BPT Findings

The BPT emission limits for Boiler #1 are based on the following:

PM/PM10/PM2.5	_	0.30 lb/MMBtu from 06-096 C.M.R. ch. 103
SO_2	_	0.025 lb/MMBtu based on AP-42 Table 1.6-1 dated 4/22
NO _x	_	0.49 lb/MMBtu based on AP-42 Table 1.6-2 dated 4/22
CO	_	0.6 lb/MMBtu based on AP-42 Table 1.6-2 dated 4/22
VOC	_	0.017 lb/MMBtu based on AP-42 Table 1.6-3 dated 4/22
Visible	_	06-096 C.M.R. ch. 101
Emissions		

The BPT emission limits for Boiler #1 are the following:

Unit	Pollutant	lb/MMBtu
Boiler #1	PM	0.30

Unit	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	VOC
	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Boiler #1	2.73	2.73	2.73	0.23	4.46	5.46	0.15

2. Visible Emissions

Visible emissions from Boiler #1 shall not exceed 30% opacity on a six-minute block average basis, except for periods of startup, shutdown, or malfunction during which time MWT shall either meet the normal operating visible emissions standard or the following alternative visible emissions standard.

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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, MWT 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. Periodic Monitoring

Periodic monitoring for Boiler #1 shall include recordkeeping to document fuel use (i.e., tons of biomass) both on a monthly and 12-month rolling total basis.

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

Due to its size, Boiler #1 is not 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. [40 C.F.R. § 60.40c]

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

Boiler #1 is 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. The unit is considered an existing biomass boiler less than 10 MMBtu/hr. [40 C.F.R. §§ 63.11193 and 63.11195]

Applicable federal 40 C.F.R. Part 63, Subpart JJJJJJ requirements include the following. Additional rule information can be found on the following website: <u>https://www.epa.gov/stationary-sources-air-pollution/compliance-industrial-commercial-and-institutional-area-source</u>.

- a. Work Practice Requirements
 - (1) 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:

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Boiler Category	Tune-Up Frequency
Existing biomass-fired boilers that are not designated as	Every 2 years
"Boilers with Less Frequent Tune-up Requirements"	Every 2 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. <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. [40 C.F.R. § 63.11223(b)(1)]
 - 2. Inspect the flame pattern, <u>as applicable</u>, 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, <u>as applicable</u>, 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. [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)]
 - 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)<u>Tune-Up Report</u>: 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; and

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

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[40 C.F.R. § 63.11223(b)(6)]

(2) Compliance Report

For every two-year compliance period, MWT 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."
- 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.

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(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.

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C. Kilns

MWT operates six kilns for drying of lumber used in their manufacturing process. The wood dried is all hardwood, primarily maple and birch.

1. Criteria Pollutants

An emission factor of 1.43 lb of VOC per thousand board feet (MBF) of lumber was used based on the Forest Products Journal article *Estimated VOC Losses During the Drying of Six Eastern Hardwood Species* dated October 2006. MWT shall be limited to the drying of no more than 2.0 MMBF of lumber per year, based on a 12-month rolling total.

2. Hazardous Air Pollutants

Potential emissions of total HAP from the kilns are estimated to be 0.23 ton per year (tpy) based on averaging the emission factors for white and black spruce contained in the *Handbook of Substance-Specific Information for National Pollutant Release Inventory Reporting*, also known as the NPRI Handbook published by the National Council for Air and Stream Improvement (NCASI). This total is predominantly comprised of acetaldehyde (0.1 tpy) and methanol (0.1 tpy). When reporting actual HAP emissions pursuant to 06-096 C.M.R. ch. 137, MWT shall use the following emission factors (or other methods approved by the Department).

Pollutant	lb/MBF
Acetaldehyde	8.65 x 10 ⁻²
Acrolein	1.15 x 10 ⁻³
Benzene	1.55 x 10 ⁻⁵
Formaldehyde	8.00 x 10 ⁻³
Methanol	0.129
Methyl Isobutyl Ketone	2.55 x 10 ⁻³
Toluene	2.50 x 10 ⁻⁴

3. National Emission Standards for Hazardous Air Pollutants

The facility's kilns are not subject to *National Emission Standards for Hazardous Air Pollutants: Plywood and Composite Wood Product*, 40 C.F.R. Part 63, Subpart DDDD. This subpart applies to lumber kilns at plywood and composite wood products (PCWP) manufacturing facilities and any other kind of facility. [40 C.F.R. §§ 63.2231(a) and 63.2232(b)] However, the subpart only applies if the facility is a major source of HAP. [40 C.F.R. § 63.2231(b)] With the annual throughput limit on the kilns, MWT is licensed as an area source of HAP.

D. Painting and Finishing Operations

MWT operates three paint booths and several tumblers used to apply paints and other finishes to wooden parts. The paint booths and tumblers are referred to collectively in this license as the Painting and Finishing Operations.

1. 06-096 C.M.R. ch. 129, Surface Coating Facilities

MWT is not subject to *Surface Coating Facilities*, 06-096 C.M.R. ch. 129. This rule establishes requirements for testing, evaluating, and limiting the emissions of VOC and HAP from selected surface coating operations. The coating operations at MWT are not included in these selected coating operation categories.

2. BPT

Emissions from the paint booths and enclosed tumblers are drawn through a dedicated ventilation system equipped with particulate filters, which draws ambient air from the work space. Fans blow the VOC- and HAP-containing air to the exhaust stack.

BPT for the Painting and Finishing Operations is determined to be use and maintenance of the particulate filters and compliance with the facility-wide limits for VOC and HAP.

MWT shall maintain records of all paints and finishes used including product identification, amount used, and VOC and HAP content on a monthly and 12-month rolling total basis. These records shall be used to calculate actual emissions on a monthly and 12-month rolling total basis when documenting compliance with the facility-wide VOC and HAP emission limits.

MWT shall keep containers of VOC/HAP containing liquids covered when not in immediate use and manage materials in such a manner as to reduce the likelihood of spills. Any excess or spilled coating material shall be cleaned up immediately.

Visible emissions from the Painting and Finishing Operations exhausts shall not exceed 5% opacity on a six-minute block average basis.

E. Facility-Wide Emission Limits

MWT shall be limited to facility-wide emissions of 39.9 tpy of VOC on a 12-month rolling total basis.

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MWT shall be limited to facility-wide emissions of 9.9 tpy of any single HAP and 24.9 tpy for all HAP combined on a 12-month rolling total basis.

These are facility-wide limits. As such, emissions from all equipment and processes at the facility and addressed in the air emission license shall be included in calculations used to determine compliance with these limits including emissions from fuel burning equipment.

Compliance with the VOC and HAP emission limits shall be demonstrated by monitoring, recordkeeping, and calculations as necessary and described in this license for each emissions unit to quantify VOC and HAP from individual units and the facility as a whole.

Emissions of VOC and HAP from fuel combustion shall be based on records of fuel use and AP-42 emission factors. Fuel use shall be determined monthly and on a 12-month rolling total basis.

Calculations of annual VOC and HAP emissions shall be performed at least once per calendar year in accordance with *Emission Statements*, 06-096 C.M.R. ch. 137. Additional calculation of emissions to demonstrate compliance with these limits for any 12-month period shall be performed upon request by the Department.

F. Sawdust Collection

MWT uses a pneumatic conveying system to collect sawdust from the facility's sawing and wood-turning operations. Three cyclones are used as part of this system.

Visible emissions from the material handling cyclones shall not exceed 20% opacity on a six-minute block average basis. $[06-096 \text{ C.M.R. ch. } 101, \S 4(B)(4)]$

G. General Process Emissions

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

H. Fugitive Emissions

MWT 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.

MWT 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.

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I. <u>Emission Statements</u>

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

- 1. The amount of wood fired (at 20% moisture) in Boiler #1 on a monthly basis;
- 2. Kiln throughput on a monthly basis;
- 3. Calculations of the VOC and HAP emissions from the Painting and Finishing Operations on a monthly basis; and
- 4. Hours each emission unit was active or operating on a monthly basis.

Every third year, or as requested by the Department, MWT shall report to the Department emissions of hazardous air pollutants as required pursuant to 06-096 C.M.R. ch. 137, $\S(3)(C)$. 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. MWT 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)]

J. 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:

- Operating Boiler #1 for 8,760 hours/year firing 20% moisture biomass;
- Drying 2.0 MMBF of lumber per year in the kilns; and
- Facility-wide limits of 39.9 tpy for VOC, 9.9 tpy for any single HAP, and 24.9 tpy for all HAP combined.

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)

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	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	VOC
Boiler #1	12.0	12.0	12.0	1.0	19.5	23.9	_
Facility-wide	_	_	—	_	_	_	39.9
Total TPY	12.0	12.0	12.0	1.0	19.5	23.9	39.9

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
СО	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 licensed 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 MWT to submit additional information and may require an ambient air quality impact analysis at that time.

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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-1095-71-C-R subject to the following conditions.

<u>Severability</u>. 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 MWT is due by the end of February 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]

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- (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:

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- 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]

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(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) **Boiler #1**

A. Fuel

- 1. Boiler #1 shall fire only clean, unpainted, untreated biomass. [06-096 C.M.R. ch. 115, BPT]
- MWT shall maintain records to document fuel use (i.e., tons of biomass at 20% moisture) in Boiler #1 on a monthly and 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT]
- B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #1	PM	0.30	06-096 C.M.R. ch. 103

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

Emission	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	CO	VOC
Unit	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)	(lb/hr)
Boiler #1	2.73	2.73	2.73	0.23	4.46	5.46	0.15

D. Visible emissions from Boiler #1 shall not exceed 30% opacity on a six-minute block average basis, except for periods of startup, shutdown, or malfunction during which time MWT 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, MWT 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. 101, § 4(A)(5)(a)]

- E. MWT shall comply with all requirements of 40 C.F.R. Part 63, Subpart JJJJJJ applicable to Boiler #1 including, but not limited to, the following: [incorporated under 06-096 C.M.R. ch. 115, BPT]
 - 1. 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
Existing biomass-fired boilers that are not designated as	Every 2 years
"Boilers with less frequent tune up requirements"	

[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. [40 C.F.R. § 63.11223(b)(1)]
 - (2) Inspect the flame pattern, <u>as applicable</u>, 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, <u>as applicable</u>, 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. [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. <u>Tune-Up Report</u>: A tune-up report shall be maintained onsite and submitted to the Department and EPA upon request. The report shall contain the following information:

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- (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; and
- (2) A description of any corrective actions taken as part of the tune-up of the boiler.
- [40 C.F.R. § 63.11223(b)(6)]
- 2. Compliance Report

For every two-year compliance period, MWT shall prepare a compliance report shall be prepared by March 1^{st} 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)]

- 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."
- 3. 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;

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- (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.

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

- A. MWT shall not exceed an emission limit of 39.9 tons per year of VOC on a 12-month rolling total basis. This is a facility-wide limit. As such, emissions from all equipment and processes at the facility and addressed in the air emission license shall be included in calculations used to determine compliance with this limit. [06-096 C.M.R. ch. 115, BPT]
- B. MWT shall not exceed emission limits of 9.9 tons per year for any single HAP and 24.9 tons per year for all HAPs combined on a 12-month rolling total basis. These are facility-wide limits. As such, emissions from all equipment and processes at the facility and addressed in the air emission license shall be included in calculations used to determine compliance with these limits, including HAP emissions from fuel burning equipment and all other HAP emission sources. HAPs are as identified in 06-096 C.M.R. ch. 115, Appendix B and in Section 112(b) of the CAA. [06-096 C.M.R. ch. 115, BPT]
- C. Compliance with the VOC and HAP emission limits shall be demonstrated by monitoring, recordkeeping, and calculations as necessary and described in this license for each emissions unit to quantify VOC and HAP from individual units and the facility as a whole. Emissions of VOC and HAP from fuel combustion, shall be based on records of fuel use and AP-42 emission factors. Calculations of annual VOC and HAP emissions shall be performed at least once per calendar year in accordance with *Emission Statements*, 06-096 C.M.R. ch. 137. Additional calculation of emissions to demonstrate compliance with these limits for any 12-month period shall be performed upon request by the Department. [06-096 C.M.R. ch. 115, BPT]

(19) Kilns

- A. MWT shall not exceed a yearly throughput of 2.0 million board feet of lumber per year based on a 12-month rolling total. [06-096 C.M.R. ch. 115, BPT]
- B. MWT shall keep monthly records of board feet of lumber processed. [06-096 C.M.R. ch. 115, BPT]

(20) **Painting and Finishing Operations**

- A. MWT shall equip the ventilation system for the Painting and Finishing Operations with filters and maintain them in good working order. [06-096 C.M.R. ch. 115, BPT]
- B. MWT shall inspect the ventilation system filters at least once per month and document the inspection results. [06-096 C.M.R. ch. 115, BPT]
- C. MWT shall maintain records of all paint and finishes used including product identification, amount used, and VOC and HAP content on a monthly and 12-month rolling total basis. These records shall be used to calculate actual emissions on a monthly and 12-month rolling total basis when documenting compliance with the facility-wide VOC and HAP emission limits. [06-096 C.M.R. ch. 115, BPT]
- D. MWT shall keep containers of VOC/HAP containing liquids covered when not in immediate use and manage materials in such a manner as to reduce the likelihood of spills. Any excess or spilled coating material shall be cleaned up immediately. [06-096 C.M.R. ch. 115, BPT]
- E. Visible emissions from the Painting and Finishing Operations exhausts shall not exceed 5% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 115, BPT]

(21) Cyclones and General Process Sources

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

(22) **Fugitive Emissions**

A. MWT 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.

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B. MWT 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) Annual Emission Statements

- A. In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, MWT 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. MWT shall keep the following records in order to comply with 06-096 C.M.R. ch. 137:
 - 1. The amount of wood fired (at 20% moisture) in Boiler #1 on a monthly basis;
 - 2. Kiln throughput on a monthly basis;
 - 3. Calculations of the VOC and HAP emissions from the Painting and Finishing Operations on a monthly basis; and
 - 4. Hours each emission unit was active or operating on a monthly basis. [06-096 C.M.R. ch. 137]
- C. Every third year, or as requested by the Department, MWT 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. MWT 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)]
- (24) 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, MWT may be required to submit additional information. Upon written request from the Department, MWT shall provide information necessary to demonstrate AAQS will not be exceeded,

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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 4^{th} day of APRIL, 2025.
DEPARTMENT OF ENVIRONMENTAL PROTECTION
BY: for
MELANIE LOYZIM, COMMISSIONER
The term of this license shall be ten (10) years from the signature dat

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:3/1/2024Date of application acceptance:3/4/2024

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