



**DEPARTMENT ORDER**

**Moose River Lumber Company, Inc.**  
**Somerset County**  
**Moose River, Maine**  
**A-779-70-G-R**

**Departmental**  
**Findings of Fact and Order**  
**Part 70 Air Emission License**  
**Renewal**

**FINDINGS OF FACT**

After review of the Part 70 License amendment 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**

FACILITY	Moose River Lumber Company, Inc.
LICENSE TYPE	Part 70 License Renewal
NAICS CODES	321113
NATURE OF BUSINESS	Lumber and Wood Products Manufacturer
FACILITY LOCATION	25 Talpey Road, Moose River, Maine

Moose River Lumber Company, Inc. (MRL) is a spruce and fir board lumber mill.

MRL has the potential to emit more than 100 tons per year (TPY) of carbon monoxide (CO) and more than 50 TPY of volatile organic compounds (VOC). Therefore, the source is a major source for criteria pollutants. MRL does not have the potential to emit 10 TPY or more of a single hazardous air pollutant (HAP) or 25 TPY or more of combined HAP. Therefore, the source is considered an area source for HAP.

**B. Emission Equipment**

The following emission units are addressed by this Part 70 License:

**Boilers**

<b>Equipment</b>	<b>Maximum Heat Input Capacity (MMBtu/hr)</b>	<b>Max. Firing Rate (tons/hr)</b>	<b>Fuel Type, % moisture</b>	<b>Manufacture Date</b>	<b>Install. Date</b>	<b>Stack #</b>
Boiler #1	15.3	1.0	wood, 15%	1988	1988	1
Boiler #4	29.4	2.2	wood, 25%	2008	2008	4

**Generator**

Equipment	Maximum Heat Input Capacity (MMBtu/hr)	Output (Hp)	Fuel Type, % sulfur	Manufacture Date	Install Date
Generator #1	1.9	275	Distillate Fuel, 0.0015%	4/3/06	2010

**Process Equipment**

Equipment	Production Rate	Installation Date	Pollution Control Equipment
Kilns #1, #2, and #3	98 MMBF/year (combined)	1988	none
Kiln #4	32 MMBF/year	2017	none
Kiln #5	100 MMBF/year	2019	none
Pneumatic Conveying Systems	N/A	N/A	Cyclones

MRL operates an aqueous-based parts washer. Since 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.

MRL has additional insignificant activities which do not need to be listed in the emission equipment tables above. The list of insignificant activities can be found in the Part 70 license application and in Appendix B of *Part 70 Air Emission License Regulations*, 06-096 C.M.R. ch. 140.

**C. Acronyms and Units of Measure**

ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
BPT	Best Practical Treatment
C.F.R.	Code of Federal Regulations
C.M.R.	Code of Maine Rules
CAM	Compliance Assurance Monitoring
CEMS	Continuous Emissions Monitoring System
CO	Carbon Monoxide
CO <sub>2e</sub>	Carbon Dioxide equivalent
COMS	Continuous Opacity Monitoring System

EPA or US EPA	United States Environmental Protection Agency
gal/hr	gallon per hour
GHG	Greenhouse Gases
HAP	Hazardous Air Pollutants
lb	pound
lb/hr	pounds per hour
lb/MMBtu	pounds per million British Thermal Units
M.R.S.	Maine Revised Statutes
MMBF	Million Board Feet
MMBtu	Million British Thermal Units
MMBtu/hr	million British Thermal Units per hour
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NO <sub>x</sub>	Nitrogen Oxides
NSPS	New Source Performance Standards
NSR	New Source Review
PM	Particulate Matter less than 100 microns in diameter
PM <sub>10</sub>	Particulate Matter less than 10 microns in diameter
PM <sub>2.5</sub>	Particulate Matter less than 2.5 microns in diameter
PSD	Prevention of Significant Deterioration
RACT	Reasonably Available Control Technology
RICE	Reciprocating Internal Combustion Engine
SO <sub>2</sub>	Sulfur Dioxide
tpy	ton per year
VOC	Volatile Organic Compounds

**D. Definitions**

*Biomass* means any biomass-based solid fuel that is not a solid waste. This includes, but is not limited to, wood residue; wood products (*e.g.*, trees, tree stumps, tree limbs, bark, lumber, sawdust, sander dust, chips, scraps, slabs, millings, and shavings); animal manure, including litter and other bedding materials; vegetative agricultural and silvicultural materials, such as logging residues (slash), nut and grain hulls and chaff (*e.g.*, almond, walnut, peanut, rice, and wheat), bagasse, orchard prunings, corn stalks, coffee bean hulls and grounds. 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. *Facility* 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.

Portable or Non-Road Engine 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. A location is any single site 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.

An engine is not 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.

#### **E. Application Classification**

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

The application for MRL does not include the licensing of increased emissions or the installation of new or modified equipment; therefore, the license is considered to be a Part 70 License renewal issued under *Part 70 Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 140.

## **F. Facility Description**

MRL produces kiln-dried spruce and fir dimensional lumber at the Moose River facility. Logs are delivered by truck to the mill yard, some in either sawlog form, from 8 feet to 16-feet long, or in tree-length form, up to 50 feet long. Tree-length logs are moved to the slasher by cranes and then cut into sawlogs. Sawlogs pass through a scanner and are sorted into two transfer decks for the two separate sawing lines and then are transferred by conveyors to two ring-debarkers. Bark, removed during the debarking process, is conveyed to a concrete storage area where a bucket loader is used to transfer the bark to trucks to be hauled offsite to customers.

The sawmill consists of two single-pass log breakdown lines, one for small logs and one for large logs. The line for smaller logs consists of a hew-saw, which has four chipping heads, and one group of horizontal saws. The line for larger logs consists of two chipping heads and two vertical band saws, which make the first cut. Blocks are then transferred to a gang saw with side chipping heads to be cut into planks. Sideboards go to an edger, which cuts the boards to acceptable specifications. All lumber is then fed to a trim-saw line, which trims the ends square in two-foot increments from 6-foot to 16-foot lengths. From the trim saw line the wood transfers to an automatic sorter, which separates the wood by width and length. Bundles of lumber are then stacked and moved into a storage yard area by forklifts before being transferred to the drying kilns.

Wood waste from the sawmill goes to a chipper, and the chips are conveyed to a storage bin where they are loaded onto trucks for delivery to outside customers. Sawdust is transferred by a blowing system to a storage building for combustion in Boiler #4 or to a storage bin where it is loaded into trucks for transfer to outside customers.

The majority of boards produced at the mill are kiln-dried in one of five kilns located at the mill. Two wood-fired boilers (Boilers #1 and #4) are used to provide heat for the kilns. Exhaust from the kilns is released to the atmosphere through multiple roof vents. Once dried, the lumber is transferred by forklift to the planer mill. Rough, dry lumber is fed through a planer machine. The finished lumber passes a grading station where it is graded by an automated system.

After grading, trim saws trim for length and grade, and the lumber is then sorted and stacked in bundles approximately 4-foot wide by 3-foot high and from 6-foot to 18-foot lengths. Lumber packs are then placed in inventory awaiting shipment by truck to customers along the northeast coast and also to a railroad reload facility to customers further south. Planer mill shavings are transferred by a blowing system to a storage silo for combustion in Boiler #1 or Boiler #4.

**G. General Facility Requirements**

MRL is subject to the following state and federal regulations listed below in addition to the regulations listed for specific units as described further in this license.

<b>Citation</b>	<b>Requirement Title</b>
06-096 C.M.R. ch. 101	Visible Emissions Regulation
06-096 C.M.R. ch. 102	Open Burning
06-096 C.M.R. ch. 103	Fuel Burning Equipment Particulate Emission Standard
06-096 C.M.R. ch. 105	General Process Source Particulate Emission Standard
06-096 C.M.R. ch. 106	Low Sulfur Fuel Regulation
06-096 C.M.R. ch. 109	Emergency Episode Regulations
06-096 C.M.R. ch. 110	Ambient Air Quality Standards
06-096 C.M.R. ch. 116	Prohibited Dispersion Techniques
06-096 C.M.R. ch. 137	Emission Statements
06-096 C.M.R. ch. 140	Part 70 Air Emission License Regulations
06-096 C.M.R. ch. 143	New Source Performance Standards
06-096 C.M.R. ch. 144	National Emission Standards for Hazardous Air Pollutants
40 C.F.R. Part 60, Subpart Dc	Standards of Performance for Small Industrial- Commercial-Institutional Steam Generating Units
40 C.F.R. Part 60, Subpart III	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines
40 C.F.R. Part 63, Subpart JJJJJ	National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources
40 C.F.R. Part 70	State Operating Permit Programs

Note: C.M.R. = Code of Maine Regulations  
 C.F.R. = Code of Federal Regulations

**II. BEST PRACTICAL TREATMENT (BPT) AND EMISSION STANDARDS**

**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 as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emission from the source being considered; and
- the economic feasibility for the type of establishment involved.

**B. NO<sub>x</sub> RACT (Reasonably Available Control Technology)**

*Reasonably Available Control Technology for Facilities that Emit Nitrogen Oxides*, 06-096 C.M.R. ch. 138 (NO<sub>x</sub> RACT) is applicable to sources that have the potential to emit quantities of NO<sub>x</sub> equal to or greater than 100 tons/year. MRL's potential to emit NO<sub>x</sub> is less than 100 ton/year. Therefore, 06-096 C.M.R. ch. 138 is not applicable to this facility.

**C. VOC RACT (Reasonably Available Control Technology)**

*Reasonably Available Control Technology for Facilities that Emit Volatile Organic Compounds*, 06-096 C.M.R. ch. 134 (VOC RACT) is applicable to sources that have the potential to emit quantities of VOC equal to or greater than 40 tons/year from non-exempt equipment. MRL has VOC emission limits greater than 40 ton/year. However, indirect contact wood kilns are exempt when determining the facility's total VOC emissions for the purposes of 06-096 C.M.R. ch. 134. After excluding the kiln emissions, MRL is below the 40 ton/year threshold. Therefore, 06-096 C.M.R. ch. 134 is not applicable to this facility.

**D. Mandatory Greenhouse Gas (GHG) Reporting**

Federal regulation *Mandatory Greenhouse Gas Reporting*, 40 C.F.R. Part 98, which contains GHG reporting and related monitoring and recordkeeping requirements, is applicable to the owners/operators of any facility which falls into any one of the following three categories, per *General Provisions, Who must report?*, 40 C.F.R. § 98.2.

- (a)(1) A facility that contains any source category that is listed in Table A-3 of this subpart in any calendar year starting in 2010
- (a)(2) A facility that contains any source category that is listed in Table A-4 of this subpart and that emits 25,000 metric tons CO<sub>2</sub>e or more per year in combined emissions from stationary fuel combustion units, miscellaneous uses of carbonate, and all applicable source categories that are listed in Table A-3 and Table A-4 of this subpart
- (a)(3) A facility that in any calendar year starting in 2010 meets all three of the conditions listed in this paragraph (a)(3). For these facilities, the annual GHG report must cover emissions from stationary fuel combustion sources only.
  - (i) The facility does not meet the requirements of either paragraph (a)(1) or (a)(2) of this section.
  - (ii) The aggregate maximum rated heat input capacity of the stationary fuel combustion units at the facility is 30 MMBtu/hour or greater.

(iii) The facility emits 25,000 metric tons CO<sub>2</sub>e or more per year in combined emissions from all stationary fuel combustion sources.

MRL does not contain any source categories listed in Tables A-3 or A-4 of 40 CFR Part 98, Subpart A.

Emissions of CO<sub>2</sub> from the combustion of biomass are excluded from paragraph (a)(3)(iii) above. Therefore, MRL does not meet all three conditions listed in paragraph (a)(3) above. Therefore, MRL is not required to fulfill the recordkeeping and reporting requirements of 40 CFR Part 98.

#### **E. Compliance Assurance Monitoring (CAM)**

*Compliance Assurance Monitoring*, 40 C.F.R. Part 64 is applicable to units at major sources if the unit has emission limits, a control device to meet the limits, and pre-control emissions greater than 100% of the major source threshold (50 tons/year for VOC and 100 tpy for any other pollutant).

Boilers #1 and #4 use control equipment to meet emission limits for PM, and MRL's previous air emission license stated that these boilers were subject to CAM for PM. However, highly rated emission factors from EPA's AP-42, *Compilation of Air Pollutant Emission Factors* demonstrate pre-control emissions of PM are significantly less than 100 tons/year. Therefore, it has been determined that CAM does not apply to any emission units at the facility.

#### **F. Boiler # 1**

Boiler #1 is also referred to as the "Industrial Boiler." It is used as a backup to Boiler #4 and to provide supplemental heat during the winter. Boiler #1 has a maximum heat input capacity of 15.3 MMBtu/hr and fires only kiln-dried planer mill shavings which have an average moisture content of 15%. It was manufactured and installed in 1988.

Emissions exit through Stack #1 which has an inside diameter of 24 inches and above ground level (AGL) height of 70 feet.

##### **1. Control Equipment**

Emissions of particulate matter from Boiler #1 are controlled by a cyclone with fly ash re-injection.



2. New Source Performance Standards (NSPS)

Boiler # 1 is not subject to the New Source Performance Standards (NSPS) titled *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, 40 C.F.R. Part 60, Subpart Dc. These standards apply to steam generating units with a heat input capacity of 10 MMBtu/hr or more that are constructed after June 9, 1989. Boiler #1 was constructed prior to the applicability date of this rule.

3. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

Boiler #1 is subject to *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63, Subpart JJJJJ). It is considered an existing biomass-fired boiler. The requirements of this subpart are covered in a separate section below.

4. Emission Limits and Streamlining

a. Criteria Pollutants

For Boiler # 1, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

<b>Pollutant</b>	<b>Applicable Emission Standards</b>	<b>Origin and Authority</b>	<b>Licensed Emission Limits</b>
PM	0.30 lb/MMBtu	06-096 C.M.R. ch. 103, §2(B)(4)(a)	0.30 lb/MMBtu
	4.59 lb/hr	06-096 C.M.R. ch. 115, BACT (A-779-77-1-A, issued 10/30/08)	4.59 lb/hr
PM <sub>10</sub>	4.44 lb/hr	06-096 C.M.R. ch. 115, BACT (A-779-77-3-A, issued 7/9/19)	4.44 lb/hr
PM <sub>2.5</sub>	2.74 lb/hr	06-096 C.M.R. ch. 115, BACT (A-779-77-3-A, issued 7/9/19)	2.74 lb/hr
SO <sub>2</sub>	0.38 lb/hr	06-096 C.M.R. ch. 115, BACT (A-779-77-3-A, issued 7/9/19)	0.38 lb/hr
NO <sub>x</sub>	7.50 lb/hr	06-096 C.M.R. ch. 115, BACT (A-779-77-3-A, issued 7/9/19)	7.50 lb/hr
CO	9.18 lb/hr	06-096 C.M.R. ch. 115, BACT (A-779-77-3-A, issued 7/9/19)	9.18 lb/hr

Pollutant	Applicable Emission Standards	Origin and Authority	Licensed Emission Limits
VOC	0.58 lb/hr <sup>1</sup>	06-096 C.M.R. ch. 40, BPT	0.58 lb/hr

<sup>1</sup> The previous value of 2.61 lb/hr in NSR A-779-77-3-A was a typographical error in which the tons/year value was used as the lb/hr air emission limit. This correction does not remove the licensed emission limit established in NSR A-779-77-3-A, but it will be streamlined to the lower value in this license.

b. Visible Emissions

Visible emissions from Boiler # 1 shall not exceed 30% opacity on a 6-minute block average basis, except for periods of startup, shutdown, or malfunction during which times MRL may elect to comply with the following work practice standards in lieu of the numerical visible emissions standard. [06-096 C.M.R. ch. 101, § 3(A)(4)(a)]

- (1) Maintain a log (written or electronic) of the date, time, and duration of all operating time, startups, shutdowns, malfunctions, and approved maintenance for the Boiler #1.
- (2) Develop and implement a written startup and shutdown plan for Boiler #1.
- (3) The duration of unit startups, shutdowns, or malfunctions shall each not exceed one hour per occurrence.
- (4) Operate Boiler #1 at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.

5. Emission Limit Compliance Methods

Compliance with the emission limits associated with Boiler # 1 shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
PM	lb/MMBtu	40 C.F.R. Part 60, App. A, Method 5	As requested
	lb/hr		

<b>Pollutant</b>	<b>Applicable Emission Limit</b>	<b>Compliance Method</b>	<b>Frequency</b>
PM <sub>10</sub>	lb/hr	40 C.F.R. Part 60, App. A, Method 5 or Method 201 or 201A	As requested
PM <sub>2.5</sub>	lb/hr	40 C.F.R. Part 60, App. A, Method 202	As requested
SO <sub>2</sub>	lb/hr	40 C.F.R. Part 60, App. A, Method 6	As requested
NO <sub>x</sub>	lb/hr	40 C.F.R. Part 60, App. A, Method 7	As requested
CO	lb/hr	40 C.F.R. Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
Visible Emissions	% opacity on a 6-minute block average basis	40 C.F.R. Part 60, App. A, Method 9	As requested

6. Fuel Metering

Previous testing has shown that the fuel auger delivers 7.6 lbs of wood per revolution when the auger is 100% full. However, the auger is typically operated at a fill level of 50% equating to 3.8 lbs of wood per revolution.

To demonstrate compliance with the annual fuel limit, MRL operates and maintains an auger revolution counter on the fuel supply for Boiler #1. MRL keeps a log of daily auger revolution counter readings and converts the records to daily fuel use for Boiler #1.

MRL shall conduct testing to identify the fuel delivery rate of each auger revolution at minimum once every other calendar year, beginning with the year of issuance of this license. MRL shall maintain documentation of this testing in a form suitable and readily available for Department review. The most recent test results shall be used to calculate fuel use in the boilers.

7. Compliance Assurance Monitoring (CAM)

As denoted in MRL's previous air emission license (A-779-70-D-R/A), AP-42 Table 1.6-1 (dated 9/03) lists a PM emission factor from combustion of dry wood with no control as 0.40 lb/MMBtu. This results in estimated maximum uncontrolled emissions of PM from Boiler #1 of 26.8 tpy, well below the applicability threshold of 100 tpy. Therefore, it has been determined that CAM does not apply to this equipment.

8. Periodic Monitoring

MRL shall record data and maintain records of the following for Boiler #1:

- a. Tons of wood fired in Boiler #1 on a monthly and 12-month rolling total basis based on auger revolutions.
- b. Records of all cyclone monthly inspections and any maintenance activities performed.

9. Parameter Monitors

There are no Parameter Monitors required for Boiler #1.

10. CEMS and COMS

There are no continuous emission monitoring systems (CEMS) or continuous opacity monitoring systems (COMS) required for Boiler #1.

**G. Boiler # 4**

Boiler #4 is also referred to as the “Hurst Boiler.” It provides primary heat for the facility and to the drying kilns. Boiler #4 has a maximum heat input capacity of 29.4 MMBtu/hr and was manufactured and installed in 2008.

Boiler #4 fires a mix of kiln-dried planer mill shavings and green wood. The current mix is approximately 70% dry material (15% moisture) and 30% green material (50% moisture) for an effective moisture content of 25.5% and a heating value of 6,705 Btu per pound of wood.

Emissions exit through Stack #4 which has an inside diameter of 30 inches and above ground level (AGL) height of 72 feet.

1. Control Equipment

Emissions of particulate matter from Boiler #4 are controlled by two multiclones, in series, with fly ash re-injection.

2. New Source Performance Standards (NSPS)

Boiler #4 is subject to the New Source Performance Standards (NSPS) titled *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, 40 CFR Part 60, Subpart Dc. These standards apply to steam generating units

with a heat input capacity of 10 MMBtu/hr or more that are constructed after June 9, 1989.

Since Boiler #4 fires only wood and has a maximum heat input less than 30 MMBtu/hr, it is not subject to the emission limits contained in the rule for SO<sub>2</sub> and PM. MRL is subject to the recordkeeping and reporting requirements of Subpart Dc including the requirement to keep monthly records of fuel use.

3. National Emissions Standards for Hazardous Air Pollutants (NESHAP)

Boiler #4 is subject to *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*, 40 CFR Part 63, Subpart JJJJJ. It is considered an existing biomass-fired boiler. The requirements of this subpart are covered in a separate section below.

4. Emission Limits and Streamlining

a. Criteria Pollutants

For Boiler # 4, a listing of potentially applicable emission standards, the origin and authority of the standards, notation if streamlining of the standards has been requested, and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

<b>Pollutant</b>	<b>Applicable Emission Standards</b>	<b>Origin and Authority</b>	<b>Licensed Emission Limits</b>
PM	0.30 lb/MMBtu	06-096 C.M.R. ch. 103, §2(B)(4)(a)	0.30 lb/MMBtu
	8.82 lb/hr	06-096 C.M.R. ch. 115, BACT (A-779-77-3-A, issued 7/9/19)	8.82 lb/hr
PM <sub>10</sub>	8.53 lb/hr	06-096 C.M.R. ch. 115, BACT (A-779-77-3-A, issued 7/9/19)	8.53 lb/hr
PM <sub>2.5</sub>	5.26 lb/hr	06-096 C.M.R. ch. 115, BACT (A-779-77-3-A, issued 7/9/19)	5.26 lb/hr
SO <sub>2</sub>	0.73 lb/hr	06-096 C.M.R. ch. 115, BACT (A-779-77-3-A, issued 7/9/19)	0.73 lb/hr
NO <sub>x</sub>	9.99 lb/hr	06-096 C.M.R. ch. 115, BACT (A-779-77-3-A, issued 7/9/19)	9.99 lb/hr
CO	17.63 lb/hr	06-096 C.M.R. ch. 115, BACT (A-779-77-3-A, issued 7/9/19)	17.63 lb/hr
VOC	0.50 lb/hr	06-096 C.M.R. ch. 115, BACT (A-779-77-3-A, issued 7/9/19)	0.50 lb/hr

b. Visible Emissions

Visible emissions from Boiler # 4 shall not exceed 30% opacity on a 6-minute block average basis, except for periods of startup, shutdown, or malfunction, during which times MRL may elect to comply with the following work practice standards in lieu of the numerical visible emissions standard.

[06-096 C.M.R. ch. 101, § 3(A)(4)(a)]

- (1) Maintain a log (written or electronic) of the date, time, and duration of all operating time, startups, shutdowns, malfunctions, and approved maintenance for the Boiler #4.
- (2) Develop and implement a written startup and shutdown plan for Boiler #4.
- (3) The duration of unit startups, shutdowns, or malfunctions shall each not exceed one hour per occurrence.
- (4) Operate Boiler #4 at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.

5. Emission Limit Compliance Methods

Compliance with the emission limits associated with Boiler # 4 shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

<b>Pollutant</b>	<b>Applicable Emission Limit</b>	<b>Compliance Method</b>	<b>Frequency</b>
PM	lb/MMBtu	40 C.F.R. Part 60, App. A, Method 5	As requested
	lb/hr		
PM <sub>10</sub>	lb/hr	40 C.F.R. Part 60, App. A, Method 5 or EPA Test Method 201 or 201A	As requested
PM <sub>2.5</sub>	lb/hr	40 C.F.R. Part 60, App. A, Method 202	As requested
SO <sub>2</sub>	lb/hr	40 C.F.R. Part 60, App. A, Method 6	As requested
NO <sub>x</sub>	lb/hr	40 C.F.R. Part 60, App. A, Method 7	As requested

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
CO	lb/hr	40 C.F.R. Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
Visible Emissions	% opacity on a 6-minute block average basis	40 C.F.R. Part 60, App. A, Method 9	As requested

6. Fuel Metering

MRL tracks fuel usage from Boiler #4 for use in estimating emissions as required by *Emission Statements*, 06-096 C.M.R. ch. 137. Since Boiler #4 fires wood of varying moisture contents, the weight of fuel delivered per auger revolution can change. A typical mix of 70% dry/30% green results in a delivery rate of 5.98 lbs of wood per revolution. To determine Boiler #4's fuel usage, MRL shall keep records of auger revolutions, moisture ratios of the wood fired, and the delivery rate per revolution for each moisture ratio.

MRL shall conduct testing to identify the fuel delivery rate of each auger revolution at minimum once every other calendar year, beginning with the year of issuance of this license. MRL shall maintain documentation of this testing in a form suitable and readily available for Department review. The most recent test results shall be used to calculate fuel use in the boilers.

7. Compliance Assurance Monitoring

As shown in MRL's previous air emission license (A-779-70-D-R/A), AP-42 Table 1.6-1 (dated 9/03) lists a PM emission factor from combustion of dry wood with no control as 0.40 lb/MMBtu. This results in estimated maximum uncontrolled emissions of PM from Boiler #4 of 51.5 tpy, well below the applicability threshold of 100 tpy. Therefore, it has been determined that CAM does not apply to this equipment.

8. Periodic Monitoring

MRL shall record data and maintain records of the following for Boiler #4 and its associated air pollution control equipment.

- a. Tons of wood fired in Boiler #4 on a monthly and 12-month rolling total basis based on auger revolutions.
- b. Ratio of dry to wet wood fired in Boiler #4 on a daily basis.

- c. Delivery rate (lbs of wood per auger revolution) for each moisture ratio.
- d. Records of all multiclone monthly inspections and any maintenance activities performed.

9. Parameter Monitors

There are no Parameter Monitors required for Boiler #4.

10. CEMS and COMS

There are no continuous emission monitoring systems (CEMS) or continuous opacity monitoring systems (COMS) required for Boiler #4.

**H. Annual Fuel Limit**

In order to limit emissions increases from the addition of Kilns #4 and #5 to below significant emissions increase levels, MRL proposed an annual fuel limit for Boilers #1 and #4 of 25,000 ton/year (both boilers combined).

The fuel mixes fired in each boiler have different moisture contents resulting in a different heat content per ton of fuel. The highest annual emissions would occur from firing Boiler #1 at 100% capacity for 8,760 hours/year and firing the remaining fuel in Boiler #4. Although this scenario is unlikely to occur, it has been conservatively used to calculate the facility's future potential to emit.

Therefore, BPT for Boilers #1 and #4 shall include a combined annual fuel limit of 25,000 ton/year based on a 12-month rolling total basis. Compliance shall be demonstrated through monthly and 12-month rolling total records of fuel use. Because emissions have been calculated based on the worst-case scenario, no moisture content monitoring is required for the purposes of meeting this fuel use limit.

**I. NESHAP 40 C.F.R. Part 63, Subpart JJJJJ**

Boilers #1 and #4 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 JJJJJ. These units are considered existing biomass boilers. [40 C.F.R. §§63.11193 and 63.11195]

A summary of the currently applicable federal 40 C.F.R. Part 63, Subpart JJJJJ requirements is listed below. Notification forms and additional rule information can be found on the following website: <https://www.epa.gov/stationary-sources-air-pollution/compliance-industrial-commercial-and-institutional-area-source>.



1. Compliance Dates, Notifications, and Work Practice Requirements

a. Initial Notification of Compliance

An Initial Notification of Compliance was submitted to the EPA on August 4, 2015.  
[40 C.F.R. § 63.11225(a)(2)]

b. Boiler Tune-Up Program

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

(2) 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 "Boilers with less frequent tune up requirements" <i>Boilers #1 and #4</i>	Every 2 years

[40 C.F.R. § 63.11223(a) and Table 2]

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

(i) 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. [40 C.F.R. § 63.11223(b)(1)]

(ii) 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)]

(iii) 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. [40 C.F.R. § 63.11223(b)(3)]

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

(v) 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)]

(vi) 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)]

- (4) Tune-Up Report: A tune-up report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the following information:
- (i) 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;
  - (ii) A description of any corrective actions taken as part of the tune-up of the boiler; and
  - (iii) 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)]

A Notification of Compliance Status was submitted to EPA on August 4, 2015. [40 C.F.R. § 63.11225(a)(4) and 40 C.F.R. § 63.11214(b)]

(5) Compliance Report:

A compliance report shall be prepared by March 1<sup>st</sup> biennially which covers the previous two calendar years. 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.”

(6) Energy Assessment

Boilers #1 and #4 are subject to the energy assessment requirement as follows:

A one-time energy assessment was required to be performed by a qualified energy assessor on the applicable boilers no later than March 21, 2014. [40 C.F.R. § 63.11196(a)(3)]

A Notification of Compliance Status was submitted to EPA on August 4<sup>th</sup>, 2015. [40 C.F.R. § 63.11225(a)(4) and 40 C.F.R. § 63.11214(c)]

2. Recordkeeping

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

- a. Copies of notifications and reports with supporting compliance documentation;
- b. 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;
- c. Records of the occurrence and duration of each malfunction of each applicable boiler; and
- d. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

Records shall be in a form suitable and readily available for expeditious review. EPA requires submission of Notification of Compliance Status reports for tune-ups and

energy assessments through their electronic reporting system.  
[40 C.F.R. § 63.11225(a)(4)(vi)]

#### J. Generator #1

MRL operates one emergency generator. The emergency generator (Generator #1) is a generator set, consisting of an engine and an electrical generator. Generator #1 has a John Deere 6081H Power Tech engine rated at 1.9 MMBtu/hr which fires distillate fuel. Generator #1 was manufactured on 4/3/06 and installed in 2010.

##### 1. Control Equipment

There is no control equipment associated with Generator #1.

##### 2. New Source Performance Standards (NSPS)

*Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*, 40 C.F.R. Part 60, Subpart IIII is applicable to Generator #1 since the unit was ordered after July 11, 2005, and manufactured after April 1, 2006. By meeting the requirements of 40 C.F.R. Part 60, Subpart IIII, the internal combustion engines (ICE) also meets the requirements found in *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*, 40 C.F.R. Part 63, Subpart ZZZZ.

##### a. Emergency Engine Designation and Operating Criteria

Under Subpart IIII, a stationary reciprocating internal combustion engine (ICE) is considered an **emergency** stationary ICE (emergency engine) as long as the engine is operated in accordance with the following criteria. Operation of an engine outside of the criteria specified below may cause the engine to no longer be considered an emergency engine under Subpart IIII, resulting in the engine being subject to requirements applicable to **non-emergency** engines.

##### (1) Emergency Situation Operation (On-Site)

**There is no operating time limit on the use of an emergency engine to provide electrical power or mechanical work during an emergency situation.** Examples of use of an emergency engine during emergency situations include the following:

- Use of an engine to produce power for critical networks or equipment (including power supplied to portions of a facility) because of failure or interruption of electric power from the local utility (or the normal power source, if the facility runs on its own power production);
- Use of an engine to mitigate an on-site disaster or equipment failure;

- Use of an engine to pump water in the case of fire, flood, natural disaster, or severe weather conditions; and
- Similar instances.

(2) Non-Emergency Situation Operation

An emergency engine may be operated up to a maximum of 100 hours per calendar year for maintenance checks, readiness testing, and other non-emergency situations as described below.

- (i) An emergency engine may be operated for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government; the manufacturer; the vendor; the regional transmission organization or equivalent balancing authority and transmission operator; or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE more than 100 hours per calendar year.
- (ii) An emergency engine may be operated for up to 50 hours per calendar year for other non-emergency situations. **However, these operating hours are counted as part of the 100 hours per calendar year operating limit described in paragraph (2) and (2) (i) above.**

The 50 hours per calendar year operating limit for other non-emergency situations cannot be used for peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 C.F.R. § 60.4211(f) and §60.4219]

b. 40 C.F.R. Part 60, Subpart III Requirements

(1) Manufacturer Certification Requirement

The engine shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in 40 C.F.R. § 60.4202. [40 C.F.R. § 60.4205(b)]

(2) Ultra-Low Sulfur Fuel Requirement

The distillate fuel fired in the engine shall not exceed 15 ppm sulfur (0.0015% sulfur). [40 C.F.R. § 60.4207(b)]

- (3) **Non-Resettable Hour Meter Requirement**  
A non-resettable hour meter shall be installed and operated on the engine.  
[40 C.F.R. § 60.4209(a)]
  
- (4) **Operation and Maintenance Requirement**  
The engine shall be operated and maintained according to the manufacturer's emission-related written instructions. MRL may only change those emission-related settings that are permitted by the manufacturer.  
[40 C.F.R. § 60.4211(a)]
  
- (5) **Annual Time Limit for Maintenance and Testing**  
The engine shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). [40 C.F.R. § 60.4211(f)]
  
- (6) **Initial Notification Requirement**  
No initial notification is required for emergency engines.  
[40 C.F.R. § 60.4214(b)]
  
- (7) **Recordkeeping**  
MRL shall keep records that include maintenance conducted on the engine and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, the number of hours the unit operated for non-emergency purposes, and the reason the engine was in operation during each time. [40 C.F.R. § 60.4214(b)]

3. **Emission Limits and Streamlining**

a. **Criteria Pollutants**

For Generator #1, a listing of potentially applicable emission standards, the origin and authority of the standards, and the applicable emission limits can be found below. Limits are on a 1-hour block average basis unless otherwise stated.

<b>Pollutant</b>	<b>Applicable Emission Standards</b>	<b>Origin and Authority</b>	<b>Licensed Emission Limits</b>
PM	0.23 lb/hr	06-096 C.M.R. ch. 140, BPT (A-779-70-D-R/A, 11/12/15)	0.23 lb/hr
PM <sub>10</sub>	0.23 lb/hr	06-096 C.M.R. ch. 140, BPT (A-779-70-D-R/A, 11/12/15)	0.23 lb/hr

<b>Pollutant</b>	<b>Applicable Emission Standards</b>	<b>Origin and Authority</b>	<b>Licensed Emission Limits</b>
SO <sub>2</sub>	Negligible (based on 0.0015% sulfur limit, by weight)	06-096 C.M.R. ch. 140, BPT (A-779-70-D-R/A, 11/12/15)	Negligible (based on 0.0015% sulfur limit, by weight)
NO <sub>x</sub>	8.51 lb/hr	06-096 C.M.R. ch. 140, BPT (A-779-70-D-R/A, 11/12/15)	8.51 lb/hr
CO	1.83 lb/hr	06-096 C.M.R. ch. 140, BPT (A-779-70-D-R/A, 11/12/15)	1.83 lb/hr
VOC	0.68 lb/hr	06-096 C.M.R. ch. 140, BPT (A-779-70-D-R/A, 11/12/15)	0.68 lb/hr

b. Visible Emissions

Visible emissions from Generator #1 shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time MRL may elect to comply with the following work practice standards in lieu of the numerical visible emissions standard. [06-096 C.M.R. ch. 101, § 3(A)(4)(a)]

- (1) Maintain a log (written or electronic) of the date, time, and duration of all generator startups.
- (2) Operate Generator #1 in accordance with the manufacturer's emission-related operating instructions.
- (3) Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations shall apply.
- (4) Operate Generator #1, including any associated air pollution control equipment, at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.

4. Emission Limit Compliance Methods

Compliance with the emission limits associated with Generator #1 shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

5. Compliance Assurance Monitoring

CAM is not applicable to Generator #1.

6. Periodic Monitoring

MRL shall record data, and maintain records from the following for Generator #1:

- a. Hours of operating time on a calendar year basis. [06-096 C.M.R. ch. 137]
- b. Log of the duration and reasons for all operating times as they occur.
- c. Records of all maintenance conducted.
- d. Sulfur content of the distillate fuel fired based on fuel receipts from the supplier. [40 C.F.R. Part 60, Subpart III]

7. Parameter Monitors

There are no Parameter Monitors required for Generator #1.

8. CEMS and COMS

There are no CEMS or COMS required for Generator #1.

**K. Drying Kilns**

MRL utilizes Kilns #1, #2, #3, #4 and #5 to dry lumber before sale. MRL predominantly dries spruce and fir. NSR A-779-77-3-A, issued 7/9/2019, established a kiln throughput restriction of 150 MMBF/yr. Using a factor developed by the University of Maine of 1.283 pounds of VOC released in the kiln drying process for every 1,000 BF of lumber dried, MRL is restricted to an annual VOC emission limit from kiln operations of no greater than 96.2 tons of VOC per year based on a 12-month rolling total. Prior to drying any species of wood other than spruce and fir in the kilns, MRL shall contact the Department for approval of an alternative emission factor appropriate for the species the facility intends to dry.

MRL shall record the board feet of lumber dried in Kilns #1 – #5 on a monthly and 12-month rolling total basis.



## **L. HAP Emissions**

### 1. Kilns

Emission factors for HAPs from the drying of lumber are included in the *Handbook of Substance-Specific Information of National Pollutant Release Inventory Reporting*, also known as the “NPRI Handbook,” issued by the National Council for Air and Stream Improvement (NCASI). The NPRI Handbook is designed to assist NCASI’s Canadian members with reporting requirements under Environment Canada’s NPRI program which is similar to EPA’s Toxics Release Inventory (TRI) reporting program. Additionally, Environment Canada publishes these same emission factors on their website for use in emissions reporting.

The NPRI Handbook provided emissions data for white spruce and black spruce. To establish appropriate emission factors for the predominant wood species processed at MRL (red spruce and fir), the average of the data for white and black spruce was used. This is consistent with the methodology used for other similar facilities within the state.

### 2. Boilers

HAP emissions from the boilers were based on emission factors found in NCASI’s *Technical Bulletin No. 1013: A Comprehensive Compilation and Review of Wood-Fired Boiler Emissions*, published March 2013.

### 3. Total HAP Emissions

Based on the emission factors outlined above, a fuel limit of 25,000 ton/year for the boilers, and a kiln throughput limit of 150.0 MMBF/year, MRL will be limited to maximum single HAP emissions of less than 9.9 tpy and total HAP emissions of less than 24.9 tpy.

## **M. Wood Chip and Sawdust Handling**

MRL utilizes a conveyor belt system to transfer wood chips from the sawmill to the chip loading storage building where the chips are loaded by bucket loader onto trucks to be transferred to customers. Bark removed from the logs prior to processing is transferred by a drag chain conveyor system from the sawmill to a concrete bark storage pad where it is transferred by bucket loader to trucks for transfer to various markets.

MRL utilizes blower systems to transfer sawdust from the sawmill to the sawdust storage shed and to transfer planer shavings and planer sawdust to the boiler fuel silo. A process cyclone is located at the top of the boiler fuel storage silo.

1. Visible Emissions

Visible emissions from the wood chip and sawdust handling systems shall not exceed 20% opacity on a six-minute block average basis.  
[06-096 C.M.R. ch. 101, § 3(B)(4)]

2. Periodic Monitoring

MRL shall establish and maintain a system of maintenance, inspection, and repair for the wood chip and wood dust handling system, which shall include a monthly inspection of the system.

MRL shall conduct and record the following for the wood chip and sawdust handling systems:

- a. Records of monthly inspections of the wood chip and sawdust handling systems.
- b. Records of all wood chip and sawdust handling systems maintenance activities.

**N. Portable Engines**

MRL may operate portable engines on-site for maintenance and emergency-only purposes. Depending on their size and age, these engines may be subject to *Visible Emissions Regulation*, 06-096 C.M.R. ch. 101 and *Fuel Burning Equipment Particulate Emission Standard*, 06-096 C.M.R. ch. 103.

Any engine which cannot meet the definition of “portable engine” as defined by this license may be subject to additional State and Federal regulations. A license amendment may be necessary for a portable engine to be reclassified as stationary.

**O. Emission Statements**

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

1. The amount of wood fired in Boilers #1 and #4 (each) on a monthly basis;
2. The amount of distillate fuel fired in Generator #1 on a monthly basis;
3. The sulfur content of the distillate fuel fired in Generator #1;
4. Kiln throughput on a monthly basis; and

5. Hours of operation for each emission unit on a monthly basis.

In reporting year 2020 and every third year thereafter, MRL shall report to the Department emissions of hazardous air pollutants as required by 06-096 C.M.R. ch. 137, § (3)(C). The Department will use these reports to calculate and invoice for the applicable annual air quality surcharge for the subsequent three billing periods. MRL 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)]

**P. Facility 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. Only licensed equipment is included, i.e., emissions from insignificant activities are excluded. Similarly, unquantifiable fugitive particulate matter emissions are not included. Maximum potential emissions were calculated based on the following assumptions:

- A fuel limit of 25,000 ton/year for both boilers combined, emissions based on firing Boiler #1 at 100% for 8,760 hours/year and firing the remaining fuel in Boiler #4;
- Operating Generator #1 for 100 hours/year; and
- A facility-wide kiln throughput limit of 150.0 MMBF/year.

Please note, this information provides the basis for fee calculation only and should not be construed to 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 <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	CO	VOC
Boilers #1 & #4	52.8	51.0	31.5	4.4	69.9	105.5	4.5
Generator #1	–	–	–	–	0.4	0.1	–
Kilns #1 - #5	–	–	–	–	–	–	96.2
<b>Total TPY</b>	<b>52.8</b>	<b>51.0</b>	<b>31.5</b>	<b>4.4</b>	<b>70.3</b>	<b>105.6</b>	<b>100.7</b>

Pollutant	Tons/year
Single HAP	9.9
Total HAP	24.9

### III. AMBIENT AIR QUALITY ANALYSIS

MRL previously submitted an ambient air quality analysis demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards (see NSR A-779-77-3-A, issued on 7/9/2019). An additional ambient air quality analysis is not required for this Part 70 License.

### ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that emissions from this source:

- will receive Best Practical Treatment;
- will not violate applicable emissions standards; and
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants the Part 70 License A-779-70-G-R pursuant to 06-096 C.M.R. ch. 140 and the preconstruction permitting requirements of 06-096 C.M.R. ch. 115 and subject to the standard and specific conditions below.

All federally enforceable and State-only enforceable conditions in existing air licenses previously issued to MRL pursuant to the Department's preconstruction permitting requirements have been incorporated into this Part 70 license, except for such conditions that the Department has determined are obsolete, extraneous, or otherwise environmentally insignificant, as explained in the Findings of Fact accompanying this Order. As such, the conditions in this license supersede all previously issued air license conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115 for making such changes and pursuant to the applicable requirements in 06-096 C.M.R. ch. 140.

For each standard and specific condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only**.

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 STATEMENTS**

- (1) 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. 140]
- (2) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege. [06-096 C.M.R. ch. 140]
- (3) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable. [06-096 C.M.R. ch. 140]
- (4) 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. 140]
- (5) Notwithstanding any other provision in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 C.M.R. ch. 140]
- (6) Compliance with the conditions of this Part 70 license shall be deemed compliance with any Applicable requirement as of the date of license issuance and is deemed a permit shield, provided that:

- A. Such Applicable and state requirements are included and are specifically identified in the Part 70 license, except where the Part 70 license term or condition is specifically identified as not having a permit shield; or
- B. The Department, in acting on the Part 70 license application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 license includes the determination or a concise summary, thereof.

Nothing in this section or any Part 70 license shall alter or affect the provisions of Section 303 of the CAA (emergency orders), including the authority of EPA under Section 303; the liability of an owner or operator of a source for any violation of Applicable requirements prior to or at the time of permit issuance; or the ability of EPA to obtain information from a source pursuant to Section 114 of the CAA.

The following requirements have been specifically identified as not applicable based upon information submitted by the licensee in an application dated March 16<sup>th</sup>, 2020.

**Permit Shield Table**

<b>Source</b>	<b>Citation</b>	<b>Description</b>	<b>Basis for Determination</b>
Kilns	06-096 C.M.R. ch. 134	VOC RACT	Exempt per 06-096 C.M.R. ch. 134, Section (1)(C)(6)
Boilers #1 & #4	06-096 C.M.R. ch. 134	VOC RACT	Exempt per 06-096 C.M.R. ch. 134, Section (1)(C)(4)
Boilers #1 & #4	06-096 C.M.R. ch. 138	NO <sub>x</sub> RACT	Facility is limited to less than 100 tpy for NO <sub>x</sub>
Boilers #1 & #4	06-096 C.M.R. ch. 145	NO <sub>x</sub> Control Program	Maximum heat input for each boiler less than 250 MMBtu/hr
Boilers #1 & #4	40 C.F.R. 60, Subpart D	NSPS for Fossil-Fuel-Fired Steam Generators	Maximum heat input for each boiler less than 250 MMBtu/hr
Boilers #1 & #4	40 C.F.R. 60, Subpart Db	NSPS for Industrial-Commercial-Institutional Steam Generating Units	Maximum heat input for each boiler less than 100 MMBtu/hr
Boiler #1	40 C.F.R. 60, Subpart Dc	NSPS for Small Industrial-Commercial-Institutional Steam Generating Units	Boiler #1 commenced construction prior to June 9, 1989.
Boilers #1 & #4	40 C.F.R. Part 63, Subpart DDDDD	NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters	Facility is not a major source of HAP.
Facility	40 C.F.R. Part 64	Compliance Assurance Monitoring	Facility does not have equipment that meets all applicability requirements

Source	Citation	Description	Basis for Determination
Facility	40 C.F.R. Part 98	Mandatory Greenhouse Gas Reporting	Facility does not contain any source category listed in Tables A-3 or A-4 of the rule and facility does not have the potential to emit more than 25,000 metric tons of CO <sub>2e</sub> .

[06-096 C.M.R. ch. 140]

- (7) The Part 70 license shall be reopened for cause by the Department or EPA, prior to the expiration of the Part 70 license, if:
- A. Additional Applicable requirements under the CAA become applicable to a Part 70 major source with a remaining Part 70 license term of three or more years. However, no opening is required if the effective date of the requirement is later than the date on which the Part 70 license is due to expire, unless the original Part 70 license or any of its terms and conditions has been extended pursuant to 06-096 C.M.R. ch. 140;
  - B. Additional requirements (including excess emissions requirements) become applicable to a Title IV source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the Part 70 license;
  - C. The Department or EPA determines that the Part 70 license contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Part 70 license; or
  - D. The Department or EPA determines that the Part 70 license must be revised or revoked to assure compliance with the Applicable requirements.

The licensee shall furnish to the Department within a reasonable time any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the Part 70 license or to determine compliance with the Part 70 license.

[06-096 C.M.R. ch. 140]

- (8) No license revision or amendment shall be required, under any approved economic incentives, marketable licenses, emissions trading, and other similar programs or processes for changes that are provided for in the Part 70 license. [06-096 C.M.R. ch. 140]

**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 and this license (38 M.R.S. § 347-C).

- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in 06-096 C.M.R. ch. 140. [06-096 C.M.R. ch. 140]
- (3) 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. 140]  
**Enforceable by State-only**
- (4) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to 38 M.R.S. § 353-A.
- (5) The licensee shall maintain and operate all emission units and air pollution control 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. 140]  
**Enforceable by State-only**
- (6) 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. In addition, the licensee shall retain records of all required monitoring data and support information for a period of at least six (6) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Part 70 license. The records shall be submitted to the Department upon written request or in accordance with other provisions of this license. [06-096 C.M.R. ch. 140]
- (7) The licensee shall comply with all terms and conditions of the air emission license. The submission of notice of intent to reopen for cause by the Department, 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 the renewal of a Part 70 license or amendment shall not stay any condition of the Part 70 license. [06-096 C.M.R. ch. 140]
- (8) 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 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;
  2. To demonstrate compliance with the applicable emission standards; or
  3. 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. 140] **Enforceable by State-only**

- (9) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicates emissions in excess of the applicable standards, then:
- A. Within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 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. 140] **Enforceable by State-only**

- (10) The licensee shall maintain records of all deviations from license requirements. Such deviations shall include, but are not limited to malfunctions, failures, downtime, and any

other similar change in operation of air pollution control systems or the emission unit itself that is not consistent with the terms and conditions of the air emission license.

- A. The licensee shall notify the Commissioner within 48 hours of a violation of any emission standard and/or a malfunction or breakdown in any component part that causes a violation of any emission standard, and shall report the probable cause, corrective action, and any excess emissions in the units of the applicable emission limitation;
- B. The licensee shall submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component part causes a violation of any emission standard, together with any exemption requests.

Pursuant to 38 M.R.S. § 349(9), the Commissioner may exempt from civil penalty an air emission in excess of license limitations if the emission occurs during start-up or shutdown or results exclusively from an unavoidable malfunction entirely beyond the control of the licensee and the licensee has taken all reasonable steps to minimize or prevent any emission and takes corrective action as soon as possible. There may be no exemption if the malfunction is caused, entirely or in part, by poor maintenance, careless operation, poor design, or any other reasonably preventable condition or preventable equipment breakdown. The burden of proof is on the licensee seeking the exemption under this subsection.

- C. All other deviations shall be reported to the Department in the facility's semiannual report.

[06-096 C.M.R. ch. 140]

- (11) Upon the written request of 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 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. 140]
- (12) The licensee shall submit semiannual reports of any required periodic monitoring by January 31 and July 31 of each year, or on an equivalent schedule specified in the license. All instances of deviations from Part 70 license requirements must be clearly identified in such reports. All required reports must be certified by a responsible official.  
[06-096 C.M.R. ch. 140]
- (13) The licensee shall submit a compliance certification to the Department and EPA annually by January 31 of each year, or more frequently if specified in the applicable requirement or by the Department. The compliance certification shall include the following:

- A. The identification of each term or condition of the Part 70 license that is the basis of the certification;
- B. The compliance status;
- C. Whether compliance was continuous or intermittent;
- D. The method(s) used for determining the compliance status of the source, currently and over the reporting period; and
- E. Such other facts as the Department may require to determine the compliance status of the source.

[06-096 C.M.R. ch. 140]

### SPECIFIC CONDITIONS

#### (14) Boilers #1 and #4

- A. Boilers #1 and #4 are licensed to fire biomass.  
[06-096 C.M.R. ch. 115, BPT A-779-77-3-A (7/9/19)]
- B. Boilers #1 and #4 shall not exceed a combined annual fuel usage of 25,000 ton/year (12-month rolling total basis) of biomass. MRL shall keep records of fuel usage in each boiler on a monthly and 12-month rolling total basis.  
[06-096 C.M.R. ch. 115, BPT A-779-77-3-A (7/9/19)]
- C. MRL shall conduct testing to identify the fuel delivery rate of each auger revolution at minimum once every other calendar year, beginning with the year of issuance of this license. MRL shall maintain documentation of this testing in a form suitable and readily available for Department review. The most recent test results shall be used to calculate fuel use in the boilers.  
[06-096 C.M.R. ch. 140, BPT] **Enforceable by State-only**
- D. Emission Limits

- 1. Emissions from Boiler #1 shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.30	06-096 C.M.R. ch. 103, § 2(B)(4)(a)	Federally Enforceable

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	4.59	06-096 C.M.R. ch. 115, BACT (A-779-77-3-A, 7/9/19)	Federally Enforceable
PM <sub>10</sub>	4.44	06-096 C.M.R. ch. 115, BACT (A-779-77-3-A, 7/9/19)	Federally Enforceable

Pollutant	lb/hr	Origin and Authority	Enforceability
PM <sub>2.5</sub>	2.74	06-096 C.M.R. ch. 115, BACT (A-779-77-3-A, 7/9/19)	Federally Enforceable
SO <sub>2</sub>	0.38	06-096 C.M.R. ch. 115, BACT (A-779-77-3-A, 7/9/19)	Federally Enforceable
NO <sub>x</sub>	7.50	06-096 C.M.R. ch. 115, BACT (A-779-77-3-A, 7/9/19)	Federally Enforceable
CO	9.18	06-096 C.M.R. ch. 115, BACT (A-779-77-3-A, 7/9/19)	Federally Enforceable
VOC	0.58	06-096 C.M.R. ch. 40, BPT	Enforceable by State-only

2. Emissions from Boiler #4 shall not exceed the following limits:

Pollutant	lb/MMBtu	Origin and Authority	Enforceability
PM	0.30	06-096 C.M.R. ch. 103, § 2(B)(4)(a)	Federally Enforceable

Pollutant	lb/hr	Origin and Authority	Enforceability
PM	8.82	06-096 C.M.R. ch. 115, BACT (A-779-77-3-A, 7/9/19)	Federally Enforceable
PM <sub>10</sub>	8.53	06-096 C.M.R. ch. 115, BACT (A-779-77-3-A, 7/9/19)	Federally Enforceable
PM <sub>2.5</sub>	5.26	06-096 C.M.R. ch. 115, BACT (A-779-77-3-A, 7/9/19)	Federally Enforceable
SO <sub>2</sub>	0.73	06-096 C.M.R. ch. 115, BACT (A-779-77-3-A, 7/9/19)	Federally Enforceable
NO <sub>x</sub>	9.99	06-096 C.M.R. ch. 115, BACT (A-779-77-3-A, 7/9/19)	Federally Enforceable
CO	17.63	06-096 C.M.R. ch. 115, BACT (A-779-77-3-A, 7/9/19)	Federally Enforceable
VOC	0.50	06-096 C.M.R. ch. 115, BACT (A-779-77-3-A, 7/9/19)	Federally Enforceable

3. Visible emissions from Boilers #1 and #4 shall each not exceed 30% opacity on a six (6) minute block average basis, except for periods of startup, shutdown, and malfunction during which time MRL may elect to comply with the following work practice standards in lieu of the numerical opacity standard.

- a. Maintain a log (written or electronic) of the date, time, and duration of all operating time, startups, shutdowns, and malfunctions for each boiler (Boilers #1 and #4).

- b. Develop and implement a written startup and shutdown plan for Boilers #1 and #4.
- c. Limit the duration of startups, shutdowns, or malfunctions to not exceed one hour per occurrence.
- d. Operate Boilers #1 and #4 at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.  
 [06-096 C.M.R. ch. 101, § 3(A)(4)(a) and 06-096 C.M.R. ch. 115, BPT A-779-77-3-A (7/9/19)]

**E. Compliance Methods**

Compliance with the emission limits listed above shall be demonstrated in accordance with the following methods and frequencies, or other methods and frequencies as approved by the Department:

<b>Pollutant</b>	<b>Unit of Emission Standard</b>	<b>Compliance Method</b>	<b>Frequency</b>
PM	lb/MMBtu and lb/hr	40 C.F.R. Part 60, App. A, Method 5	As requested
PM <sub>10</sub>	lb/hr	40 C.F.R. Part 60, App. A, Method 5 or EPA Test Method 201 or 201A	As requested
PM <sub>2.5</sub>	lb/hr	40 C.F.R. Part 60, App. A, Method 202	As requested
SO <sub>2</sub>	lb/hr	40 C.F.R. Part 60, App. A, Method 6	As requested
NO <sub>x</sub>	lb/hr	40 C.F.R. Part 60, App. A, Method 7	As requested
CO	lb/hr	40 C.F.R. Part 60, App. A, Method 10	As requested
VOC	lb/hr	40 C.F.R. Part 60, App. A, Method 25 or 25A	As requested
Visible Emissions	% opacity on a 6-minute block average basis	40 C.F.R. Part 60, App. A, Method 9	As requested

[06-096 C.M.R. ch. 115 BPT, A-779-77-3-A (7/9/19)]

F. Periodic Monitoring

MRL shall record data and maintain records of the following for Boilers #1 and #4 and their associated air pollution control equipment:

1. Tons of wood fired in Boilers #1 and #4 (each) on a monthly and 12-month rolling total basis based on auger rotations.  
[40 C.F.R. § 60.48c(g)(2) and 06-096 C.M.R. ch. 115, BPT A-779-77-3-A (7/9/19)]
2. Records of all cyclone monthly inspections and any maintenance activities performed on Boiler #1. [06-096 C.M.R. ch. 115, BPT A-779-77-3-A (7/9/19)]
3. Records of all multiclone monthly inspections and any maintenance activities performed on Boiler #4. [06-096 C.M.R. ch. 115, BPT A-779-77-3-A (7/9/19)]
4. Ratio of dry to wet wood fired in Boiler #4 on a daily basis.  
[06-096 C.M.R. ch. 140, BPT]
5. Delivery rate (lbs of wood per auger revolution) for each moisture ratio.  
[06-096 C.M.R. ch. 140, BPT]

G. MRL shall comply with all requirements of 40 C.F.R. Part 63, Subpart JJJJJ applicable to Boilers #1 and #4 including, but not limited to, the following:

1. MRL 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:

<b>Boiler Category</b>	<b>Tune-Up Frequency</b>
Existing Biomass-fired boilers that are not designated as "Boilers with less frequent tune up requirements"	Every 2 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) 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. [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. [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, if requested, submitted to EPA. 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)]
2. Compliance Report

A compliance report shall be prepared by March 1<sup>st</sup> biennially which covers the previous two calendar years. 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. Records shall be maintained consistent with the requirements of 40 C.F.R. Part 63, Subpart JJJJJ including the following [40 C.F.R. § 63.11225(c)]:
- a. Copies of notifications and reports with supporting compliance documentation;
  - b. 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;
  - c. Records of the occurrence and duration of each malfunction of each applicable boiler; and
  - d. Records of actions taken during periods of malfunction to minimize emissions, including corrective actions to restore the malfunctioning boiler.

Records shall be in a form suitable and readily available for expeditious review.  
[40 C.F.R. § 63.11225(a)(4)(vi)]



(15) **Generator #1**

A. Allowable Operation and Fuels

Generator #1 is licensed to fire distillate fuel with a sulfur content not to exceed 0.0015% sulfur by weight.

[06-096 C.M.R. ch. 140, BPT A-779-70-D-R/A (11/12/15)] **Enforceable by State-only**

B. Emissions Limits and Compliance Methods:

Unit	PM (lb/hr)	PM <sub>10</sub> (lb/hr)	SO <sub>2</sub> (lb/hr)	NO <sub>x</sub> (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator #1	0.23	0.23	Neg.	8.51	1.83	0.68

[06-096 C.M.R. ch. 140, BPT A-779-70-D-R/A (11/12/15)] **Enforceable by State-only**

Compliance with the emission limits associated with Generator #1 shall be demonstrated in accordance with the appropriate test methods upon request of the Department.

C. Visible Emissions

Visible emissions from Generator #1 shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time MRL may elect to comply with the following work practice standards in lieu of the numerical visible emissions standard. [06-096 C.M.R. ch. 101, § 3(A)(4)]

1. Maintain a log (written or electronic) of the date, time, and duration of all generator startups.
2. Operate Generator #1 in accordance with the manufacturer's emission-related operating instructions.
3. Minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the non-startup emission limitations shall apply.
4. Operate Generator #1, including any associated air pollution control equipment, at all times in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Department that may include, but is not limited to, monitoring results, review

of operation and maintenance procedures, review of operation and maintenance records, and inspection of the unit.

D. Periodic Monitoring

MRL shall record data and maintain records of the following for Generator #1:

1. Hours of operating time on a calendar year basis. [06-096 C.M.R. ch. 137]
2. Log of the duration and reasons for all operating times as they occur.
3. Records of all maintenance conducted.
4. Sulfur content of the distillate fuel fired based on fuel receipts from the supplier. [40 C.F.R. Part 60, Subpart III]

E. Generator #1 shall meet the applicable requirements of 40 C.F.R. Part 60, Subpart III, including the following:

1. Manufacturer Certification  
The engine shall be certified by the manufacturer as meeting the emission standards for new nonroad compression ignition engines found in § 60.4202. [40 C.F.R. § 60.4205(b)]
2. Ultra-Low Sulfur Distillate Fuel  
The distillate fuel fired in the engine shall not exceed 15 ppm sulfur (0.0015% sulfur by weight). Compliance with the fuel sulfur content limit shall be based on fuel records from the supplier documenting the type of fuel delivered and the sulfur content of the fuel. [40 C.F.R. § 60.4207(b) and 06-096 C.M.R. ch. 140, BPT]
3. Non-Resettable Hour Meter  
A non-resettable hour meter shall be installed and operated on the engine. [40 C.F.R. § 60.4209(a)]
4. Annual Time Limit for Maintenance and Testing
  - a. The engine shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). These limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written log) of all engine operating hours. [40 C.F.R. § 60.4211(f) and 06-096 C.M.R. ch. 140, BPT]

- b. MRL shall keep records that include maintenance conducted on the engine and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, the number of hours the unit operated for non-emergency purposes, and the reason the engine was in operation during each time.  
[40 C.F.R. § 60.4214(b)]

5. Operation and Maintenance

The engine shall be operated and maintained according to the manufacturer's emission-related written instructions. MRL may only change those emission-related settings that are permitted by the manufacturer. [40 C.F.R. § 60.4211(a)]

**(16) Drying Kilns**

- A. MRL shall be limited to drying a total of 150,000,000 BF (150.0 MMBF) of lumber per year in the facility's drying kilns based on a monthly and 12-month rolling total.  
[06-096 C.M.R. ch. 115, BACT A-779-77-3-A (7/9/19)]
- B. MRL shall maintain records indicating the quantity of wood dried (in BF) and VOC emissions. VOC emissions shall be calculated using an emission factor of 1.283 pounds of VOC per 1,000 BF. The kiln records shall be maintained on a monthly and a 12-month rolling total basis. [06-096 C.M.R. ch. 115, BPT A-779-77-3-A (7/9/19)]
- C. Prior to drying any species of wood other than spruce and fir in the kilns, MRL shall contact the Department for approval of an alternative emission factor appropriate for the species the facility intends to dry.  
[06-096 C.M.R. ch. 115, BPT A-779-77-3-A (7/9/19)]

**(17) Wood Chip and Sawdust Handling System**

- A. Visible emissions from the wood chip and wood dust handling systems, including the wood chip and sawdust transfer systems (blower systems and conveyor systems), the dust cyclone, and chip and dust collection buildings and silo, shall not exceed an opacity of 20% on a 6-minute block average basis.  
[06-096 C.M.R. ch. 101, § 3(B)(4)]
- B. MRL shall establish and maintain a system of maintenance, inspection and repair for the wood chip and wood dust handling system, which shall include a monthly inspection of the system. [06-096 C.M.R. ch. 115, BPT A-779-77-3-A (7/9/19)]

C. Periodic Monitoring

MRL shall monitor and record the following for the wood chip and wood dust handling system:

1. Records of monthly inspections of the wood chip and wood dust handling system. [06-096 C.M.R. ch. 115, BPT A-779-77-3-A (7/9/19)]
2. Records of all wood chip and wood dust handling system maintenance activities. [06-096 C.M.R. ch. 115, BPT A-779-77-3-A (7/9/19)]

(18) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed 20% opacity on a 5-minute block average basis. [06-096 C.M.R. ch. 101, § 3(C)]

(19) **General Process Sources**

Visible emissions from any general process source shall not exceed 20% on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 3(B)(4)]

(20) **Semiannual Reporting** [06-096 C.M.R. ch. 140]

- A. The licensee shall submit to the Bureau of Air Quality semiannual reports which are due on **January 31<sup>st</sup>** and **July 31<sup>st</sup>** of each year. The facility's designated responsible official must sign this report.
- B. The semiannual report shall be considered on-time if the postmark of the submittal is before the due date or if the report is received by the Department within seven calendar days of the due date.
- C. Each semiannual report shall include a summary of the periodic monitoring required by this license.
- D. All instances of deviations from license requirements and the corrective action taken must be clearly identified and provided to the Department in summary form for each six-month interval.

**(21) Annual Compliance Certification**

MRL shall submit an annual compliance certification to the Department and EPA in accordance with Standard Condition (13) of this license. The annual compliance certification is due **January 31<sup>st</sup>** of each year. The facility's designated responsible official must sign this report.

The annual compliance certification shall be considered on-time if the postmark of the submittal is on or before the due date or if the report is received by the Department within seven calendar days of the due date. Certification of compliance is to be based on the stack testing or monitoring data required by this license. Where the license does not require such data, or the license requires such data upon request of the Department and the Department has not requested the testing or monitoring, compliance may be certified based upon other reasonably available information such as the design of the equipment or applicable emission factors. [06-096 C.M.R. ch. 140]

**(22) Annual Emission Statement**

A. In accordance with *Emission Statements*, 06-096 C.M.R. ch. 137, MRL 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. MRL shall keep the following records in order to comply with 06-096 C.M.R. ch. 137:

1. The amount of wood fired in Boilers #1 and #4 (each) on a monthly basis;
2. The amount of distillate fuel fired in Generator #1 on a monthly basis;
3. The sulfur content of the distillate fuel fired in Generator #1;
4. Kiln throughput on a monthly basis; and
5. Hours of operation for each emission unit on a monthly basis.  
[06-096 C.M.R. ch. 137]

C. In reporting year 2020 and every third year thereafter, MRL shall report to the Department emissions of hazardous air pollutants as required by 06-096 C.M.R. ch. 137, § (3)(C). MRL 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)]

(23) **General Applicable State Regulations**

The licensee is subject to the State regulations listed below.

Origin and Authority	Requirement Summary	Enforceability
06-096 C.M.R. ch. 102	Open Burning	-
06-096 C.M.R. ch. 109	Emergency Episode Regulations	-
06-096 C.M.R. ch. 110	Ambient Air Quality Standards	-
06-096 C.M.R. ch. 116	Prohibited Dispersion Techniques	-
38 M.R.S. § 585-B, §§5	Mercury Emission Limit	Enforceable by State-only

(24) **Units Containing Ozone Depleting Substances**

When repairing or disposing of units containing ozone depleting substances, the licensee shall comply with the standards for recycling and emission reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for motor vehicle air conditioning units in Subpart B. Examples of such units include refrigerators and any size air conditioners that contain CFCs. [40 C.F.R. Part 82, Subpart F]

(25) **Asbestos Abatement**

When undertaking Asbestos abatement activities, MRL shall comply with the *Standard for Asbestos Demolition and Renovation*, 40 C.F.R. Part 61, Subpart M.

(26) **Expiration of a Part 70 License**

- A. MRL shall submit a complete Part 70 renewal application at least six but no more than 18 months prior to the expiration of this air license.
- B. Pursuant to Title 5 M.R.S. §10002, and 06-096 C.M.R. ch. 140, the Part 70 license shall not expire and all terms and conditions shall remain in effect until the Department takes final action on the renewal application of the Part 70 license. An existing source submitting a complete renewal application under 06-096 C.M.R. ch. 140 prior to the expiration of the Part 70 license will not be in violation of operating without a Part 70 license. **Enforceable by State-only**

**Moose River Lumber Company, Inc.  
Somerset County  
Moose River, Maine  
A-779-70-G-R**

47

**Departmental  
Findings of Fact and Order  
Part 70 Air Emission License  
Renewal**

**(27) New Source Review**

MRL is subject to all previous New Source Review (NSR) requirements summarized in this Part 70 air emission license, and the NSR requirements remain in effect even if this 06-096 C.M.R. ch. 140 Air Emission License, A-779-70-G-R, expires.

DONE AND DATED IN AUGUSTA, MAINE THIS 21<sup>st</sup> DAY OF AUGUST, 2020.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: \_\_\_\_\_ for  
GERALD D. REID, COMMISSIONER

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

[Note: If a complete renewal application, as determined by the Department, is submitted at least six but no more than 18 months prior to expiration of the facility's Part 70 license, then pursuant to Title 5 M.R.S. §10002, all terms and conditions of the Part 70 license shall remain in effect until the Department takes final action on the Part 70 license renewal application.]

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 3/19/20

Date of application acceptance: 3/25/20

Date filed with the Board of Environmental Protection:

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

