



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

JOHN ELIAS BALDACCI
GOVERNOR

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COMMISSIONER

Moose River Lumber Company, Inc.) Department
Somerset County) Findings of Fact and Order
Moose River, Maine) Part 70 Air Emission License
A-779-70-C-R)

After review of the Part 70 Air Emission License renewal application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A, Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

FACILITY	Moose River Lumber Company, Inc. (Moose River)
LICENSE NUMBER	A-779-70-B-R
LICENSE TYPE	Part 70 Air Emission License Renewal
NAICS CODES	2421
NATURE OF BUSINESS	Lumber and Wood Products Manufacturer
FACILITY LOCATION	25 Tapley Road, Moose River, Me. 04945
LICENSE ISSUANCE DATE	May 14, 2010
LICENSE EXPIRATION DATE	

B. Emission Equipment

- The following fuel burning equipment is addressed by this Part 70 License:

Emissions Unit ID	Unit Capacity	Unit Type	Stack #
Boiler #1	15.3 MMBtu/hr	Fuel Burning, Wood	#1
Boiler #2	4.5 MMBtu/hr	Fuel Burning, Wood	#2
Boiler #3	25.1 MMBtu/hr	Fuel Burning, #2 Oil	#3
Boiler #4	29.4 MMBtu/hr	Fuel Burning, Wood	#4

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

Emissions Unit ID	Process Rate	Unit type
Kiln #1	34 Million Boardfeet per Year	Wood Drying
Kiln #2	32 Million Boardfeet per Year	Wood Drying
Kiln #3	32 Million Boardfeet per Year	Wood Drying
Parts Washer	30 gallon	Degreaser

AUGUSTA
17 STATE HOUSE STATION
AUGUSTA, MAINE 04333-0017
(207) 287-7688 FAX: (207) 287-7826
RAY BLDG., HOSPITAL ST.

BANGOR
106 HOGAN ROAD, SUITE 6
BANGOR, MAINE 04401
(207) 941-4570 FAX: (207) 941-4584

PORTLAND
312 CANCO ROAD
PORTLAND, MAINE 04103
(207) 822-6300 FAX: (207) 822-6303

PRESQUE ISLE
1235 CENTRAL DRIVE, SKYWAY PARK
PRESQUE ISLE, MAINE 04679-2094
(207) 764-0477 FAX: (207) 760-3143

Moose River Lumber Company, Inc.)	Department
Somerset County)	Findings of Fact and Order
Moose River, Maine)	Part 70 Air Emission License
A-779-70-C-R	2	

- Process rates listed within the Findings of Fact section of this license are referenced for the purposes of description only. Process rates that are determined to be licensed limitations are stated in the Order section of this license.
- Moose River has additional insignificant activities, which do not need to be listed in the emission equipment table above. The list of insignificant activities can be found in the Part 70 license application and in Appendix B of 06-096 CMR 140 of the Department's Regulations.

C. Application Classification

This air emission license renewal includes an amendment of the facility's Initial Part 70 Air Emission License (A-779-70-A-I), to include the installation and operation of a new 29.4 MMBtu/hr wood fired boiler. Moose River operates the new boiler under the terms and conditions established by New Source Review (NSR) Air Emission License A-779-77-1-A issued under Maine's rule *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (last amended December 1, 2005). This renewal is considered to be a Part 70 Air Emission License renewal/amendment issued under 06-096 CMR 140 and 06-096 CMR 115.

II. EMISSION UNIT DESCRIPTION

A. Process Description

Moose River 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 hot-ponds 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. Some of this bark is burned in the small boiler (Boiler #2) to heat the sawmill.

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 horizontal 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 in a storage bin where they are loaded onto trucks for delivery to local paper mills. Sawdust is transferred by a blowing system to a storage building for combustion in either Boiler #1 or boiler #4 or to a storage bin where it is loaded into trucks for transfer to various outside customers.

The majority of boards produced at the mill are kiln-dried in one of three kilns located at the mill. Two wood-fired boilers (Boilers #1 and #4) and one oil-fired boiler (Boiler #3) 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 visually graded.

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 various 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 (the kiln boiler) and Boiler #4.

B. Fuel Burning Equipment

Moose River's Part 70 Air Emission License (A-779-70-A-I) permits the facility to operate two wood fired boilers, designated Boiler #1 (15.3 MMBtu/hr) and Boiler #2 (4.5 MMBtu/hr), and a #2 fuel oil burning boiler, designated Boiler #3 (25.1 MMBtu/hr). This Air Emission License renewal includes an amendment to include the installation and operation of a new 29.4 MMBtu/hr wood fired boiler, designated Boiler #4. Moose River currently operates the new boiler under the terms and conditions established by NSR Air Emission License A-779-77-1-A issued under Maine's rule *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (last amended December 1, 2005).

1. Boiler #1

Boiler #1 is referred to as the kiln boiler and has a heat input capacity of 15.3 MMBtu/hr. Boiler #1 fires only kiln-dried planer mill shavings. Boiler #1 exhausts through its own 70 feet AGL (Above Ground Level) stack, which is 73% Good Engineering Practice (GEP) height, designated Stack #1.

Boiler #1 was manufactured in 1988 and licensed through NSR (Air Emission License A-779-71-A-N and the subsequent Air Emission License Amendments A-779-71-C-A and A-779-77-1-M), prior to the NSPS applicability date of June 9, 1989 and is therefore not subject to EPA New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc (Standards of Performance for Small Industrial, Commercial and Institutional Steam Generators). The BACT analysis established by the facility's NSR permits is incorporated in the facility's Part 70 Air Emission License A-779-70-A-I.

Previous BACT analysis, which now represents BPT, for Boiler #1, includes the following:

- a. *Fuel Burning Equipment Particulate Emission Standard*, 06-096 CMR 103, (last amended November 3, 1990) regulates PM emission limits. However the BPT emission limit established in A-779-71-C-A and A-779-77-1-M and incorporated in A-779-70-A-I is more stringent and Boiler #1 shall continue to be subject to this more stringent limit of 0.3 lb/MMBtu. The PM₁₀ emission limit is based on the PM limit.
- b. SO₂, CO and VOC emission rates calculated from AP-42 emission data dated 7/01.
- c. NO_x emission rates calculated from AP-42 emission data dated 7/01 for the combustion of dry wood for Boiler #1.
- d. Visible emissions from Stack #1 are subject to *Visible Emissions Regulation*, 06-096 CMR 101 (last amended May 18, 2003). Visible emissions from Stack #1 shall not exceed 30% opacity on a six-minute block average basis, except for no more than 2 six-minute averages in any three-hour period.

The calculations for the boiler's firing rate and emission limits were based on a heat content of 7000 Btu/lb for the kiln-dried shavings.

As discussed in the Boiler #4 section of this "Finding-of-Fact", when Boilers #1 and #4 are operated in conjunction, Moose River must reduce the heat input firing capacity (tons/hr) of Boiler #1 to 20% capacity or less, on a 24-hour basis, except during periods of start-up and shutdown when operational overlap is necessary. To demonstrate compliance with the heat input capacity (tons/hr) restriction, Moose River will operate and maintain an auger revolution counter on the fuel supply line for Boiler #1. Moose River shall determine the relationship between auger revolutions and fuel usage for this boiler and provide this information to the Department. Moose River shall have 30 days from the first start-up of Boiler #1 following the signature of this Part 70 Air Emission License Renewal to establish auger revolution/fuel delivery characteristics for Boiler #1 and report this to the Department.

During periods when Boiler #1 is operated in conjunction with Boiler #4, except during startup and shutdown, Moose River will maintain a log of fuel used, which will allow for daily entries of auger revolution counter readings for Boiler #1, daily run time for Boiler #1, and the total daily fuel used by Boiler #1. Moose River Lumber will calculate the quantity of fuel consumed in lb/hr (or tons/hr) on a daily 24-hour average basis.

As part of the semi-annual reporting to the DEP, Moose River will report the daily tons per hour for each day for Boiler #1 for any periods of time during which Boiler #1 was operated in conjunction with Boiler #4, except during periods of startup and shutdown. Any exceedance of the Boiler #1 restriction will be reported to the DEP.

Streamlining

i. Opacity

Moose River accepts streamlining for opacity requirements. 06-096 CMR 101, Section 2(B)(1)(e) and Best Practical Treatment (BPT) requirements are applicable. The Best Practical Treatment (BPT) opacity limit is more stringent. Therefore, only the more stringent BPT opacity limit is included in this license.

ii. Particulate Matter

Moose River accepts streamlining for particulate matter requirements. 06-096 CMR 103 and BPT requirements are applicable. The Best Practical Treatment (BPT) particulate matter limit is more stringent. Therefore, only the more stringent BPT particulate matter limit is included in this license.

2. Boiler #2

Boiler #2 is a Moose River made boiler with a heat input capacity estimated at 4.5 MMBtu/hr. Boiler #2 consists of an on-site constructed dutch oven style section in which hog fuel (wood waste and bark) from facility operations is fired. Boiler #2 exhausts through its own 90-foot stack, which is greater than the GEP height of 75.8 feet, designated Stack #2. Boiler #2 is used for facility heating needs. The heat input capacity of Boiler #2 is below 10.0 MMBtu/hr, therefore Boiler #2 is not subject to EPA New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc (Standards of Performance for Small Industrial, Commercial and Institutional Steam Generators):

Moose River Lumber Company, Inc.)
Somerset County)
Moose River, Maine)
A-779-70-C-R 6

Department
Findings of Fact and Order
Part 70 Air Emission License

Boiler #2 was licensed through NSR (Air Emission License A-779-71-A-N and the subsequent Air Emission License Amendment A-779-71-B-M and A-779-77-1-M), and the BACT analysis established by the facility's NSR permits is incorporated in the facility's Part 70 Air Emission License A-779-70-A-I.

Previous BACT analysis, which now represents BPT, for Boiler #2, includes the following:

- a. 06-096 CMR 103 regulates PM emission limits, however the BPT emission limit established in A-779-71-B-M and A-779-77-1-M and incorporated in A-779-70-A-I is more stringent and Boiler #2 shall continue to be subject to this more stringent limit of 0.3 lb/MMBtu. The PM₁₀ emission limit is based on the PM limit.
- b. SO₂, CO and VOC emission rates calculated from AP-42 emission data dated 7/01.
- c. NO_x emission rates calculated from AP-42 emission data dated 7/01 for the combustion of bark and wet wood for Boiler #2.
- d. Visible emissions from Stack #2 are subject to 06-096 CMR 101. Visible emissions from Stack #2 shall not exceed 30% opacity on a six-minute block average basis, except for no more than 2 six-minute averages in any three-hour period.

The calculations for the boiler's firing rate and emission limits were based on a heat content of 4500 Btu/lb for the bark/wood fuel (approximately 50% moisture).

As discussed in the Boiler #4 section of this "Finding-of-Fact", Boiler #2 can be operated at any capacity up to 100% when operating in conjunction with Boiler #4 alone or operated in conjunction with Boilers #1 and #4.

Streamlining

- i. Opacity

Moose River accepts streamlining for opacity requirements. 06-096 CMR 101, Section 2(B)(1)(e) of the Department's regulations and Best Practical Treatment (BPT) requirements are applicable. The Best Practical Treatment (BPT) opacity limit is more stringent. Therefore, only the more stringent BPT opacity limit is included in this license.

ii. Particulate Matter

Moose River accepts streamlining for particulate matter requirements. Chapter 103 of the Department's regulations and BPT requirements are applicable. The Best Practical Treatment (BPT) particulate matter limit is more stringent. Therefore, only the more stringent BPT particulate matter limit is included in this license.

3. Boiler #3

Boiler #3 is rated at 25.1 MMBtu/hr, was manufactured in 1986 and fires #2 fuel oil. Because the boiler was manufactured before June 9, 1989, Boiler #3 is not subject to EPA New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc. Boiler #3 exhausts to a 45 foot (68% GEP) stack, designated Stack #3.

Boiler #3 was licensed through NSR (Air Emission License A-779-71-A-N and the subsequent Air Emission License Amendment A-779-71-B-M and A-779-77-1-M), and the BACT analysis established by the facility's NSR permits is incorporated in the facility's Part 70 Air Emission License A-779-70-A-I.

Moose River is restricted to firing #2 fuel oil sulfur content restriction of no greater than 0.35% sulfur by weight as established in A-779-71-B-M and incorporated into A-779-70-A-I. However, since the issuance of A-779-70-A-I, the MEDEP Bureau of Air Quality has determined that BPT/BACT for sulfur content of #2 fuel oil is satisfied by the use of #2 fuel oil that meets the sulfur content criteria found in ASTM D396 for #2 fuel oil (0.5% sulfur by weight).

Previous BACT analysis, which now represents BPT, for Boiler #3, includes the following:

- a. 06-096 CMR 103 regulates PM emission limits and shall be based on a factor of 0.08 lb/MMBtu for Boiler #3. The PM₁₀ emission limit is based on the PM limit.
- b. *Low Sulfur Fuel*, 06-096 CMR 106 (last amended July 4, 1999) regulates fuel sulfur content for liquid fossil fuels. However, BPT for SO₂ shall be met by the use of #2 fuel oil which meets the sulfur content criteria found in ASTM D396 for #2 fuel oil (0.5% sulfur by weight).
- c. SO₂, NO_x, CO, VOC emission rates calculated from AP-42 emission data dated 9/98.

Moose River Lumber Company, Inc.)
Somerset County)
Moose River, Maine)
A-779-70-C-R 8

Department
Findings of Fact and Order
Part 70 Air Emission License

- d. Visible emissions from Stack #2 are subject to 06-096 CMR 101. Visible emissions from Stack #3 shall not exceed 20% opacity on a six-minute block average basis, except for no more than 1 six-minute average in any three-hour period.

As discussed in the Boiler #4 section of this "Finding-of-Fact", Boilers #3 and #4 shall not be operated in conjunction at any time, except during periods of start-up and shutdown when operational overlap is necessary.

Streamlining

i. Opacity

Moose River accepts streamlining for opacity requirements. 06-096 CMR 101, Section 2(B)(1)(b) of the Department's regulations and Best Practical Treatment (BPT) requirements are applicable. The Best Practical Treatment (BPT) opacity limit is more stringent. Therefore, only the more stringent BPT opacity limit is included in this license.

ii. Particulate Matter

06-096 CMR 103 and BPT requirements are applicable. The Best Practical Treatment (BPT) particulate matter limit is more stringent. Therefore, only the more stringent BPT particulate matter limit is included in this license.

iii. Sulfur Dioxide

06-096 CMR 106 and BPT requirements are applicable. The Best Practical Treatment (BPT) sulfur dioxide limit is more stringent. Therefore, only the more stringent BPT sulfur dioxide limit is included in this license.

Periodic Monitoring

To demonstrate compliance with fuel oil sulfur content restrictions, Moose River shall maintain fuel purchase records which shall include purchase receipts or fuel supplier certification that specifies the amount of fuel purchased, type of fuel and the fuel delivery date. Fuel records shall be maintained on a monthly as well as a 12-month rolling basis.

4. Boiler #4

The Boiler #4 has a maximum heat input capacity of 29.4 MMBtu/hr firing wood. Moose River plans to fire a mixture of green wood and dried wood in Boiler #4 at a blend of approximately 80% green wood and 20% dry wood. Boiler #4 makes use of two in-series multi-clone ash collectors and a fly ash re-injection system. Further emissions control will be achieved through staged combustion, a live combustion chamber grate, combustion controls and O₂ trim. Use of these emissions control devices and methods as well as good combustion and operating practices shall be considered BACT for Boiler #4. Moose River plans to use Boiler #4 as the primary source of steam for facility heating and process steam. Moose River plans to maintain Boilers #1 and #3 for periods of time when temperatures are very cold (deep winter conditions) and when Boiler #4 is down for maintenance or other similar purpose.

Boiler #4 has a maximum heat input capacity of greater than the 10.0 MMBtu/hr de minimus threshold and is therefore subject to EPA New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc, for boilers with a maximum design heat input capacity of 10 MMBtu/hr or greater and manufactured after June 9, 1989. NSPS 40 CFR Part 60, Subpart Dc contains performance standards, which include emissions standards, monitoring requirements and test methods, for applicable small industrial-commercial-institutional boilers. Because Boiler #4 is a wood fired boiler, it is not subject to the SO₂ emissions standard established in Subpart Dc. Also, because Boiler #4 has a maximum heat input capacity of less than 30 MMBtu/hr, it is not subject to the PM emission standard established in Subpart Dc. Subpart Dc does specify that Moose River is subject to the reporting and record keeping requirements as outlined in 40 CFR Part 60.48c and Part 60.7.

Moose River included a BACT analysis with the amendment application for the NSR Air Emission License A-779-77-1-A which includes discussions of several control devices and methods that were determined to be neither economically or technically feasible.

A summary of the BACT analysis for Boiler #4 (29.4 MMBtu/hr) is as follows:

- a. PM emissions from Boiler #4 are subject to 06-096 CMR 103. However, NSR Air Emission License A-779-77-1-A established a PM emission limit of 0.3 lb/MMBtu when firing wood. The NSR PM emission factor is based on manufacture's guarantee. The NSR limit is more stringent and Boiler #4 shall continue to be subject to this more stringent limit of 0.3 lb/MMBtu. The PM₁₀ emission limit is based on the PM limit.

- b. The NO_x emission calculations are based on similarly sized units and manufacturer's information. A limit of 0.34 lb/MMBtu of NO_x emissions shall be considered BACT.
- c. SO₂, CO and VOC emission limits are based upon AP-42 data dated 9/03.
- d. Visible emissions from the stack are subject to 06-096 CMR 101. Visible emissions from Stack #4 shall not exceed 30% opacity on a six-minute block average except, for no more than 2 six-minute block averages in a 3-hour period.

Moose River included an Ambient Air Quality Analysis with the amendment application for the NSR Air Emission License A-779-77-1-A. As determined from Moose River's Ambient Air Quality Analysis, in order to comply with Maine Ambient Air Quality Standards (MAAQS) and Prevention of Significant Deterioration (PSD) increments, Moose River must reduce the firing capacity of Boiler #1 to 20% capacity or less, on a 24-hour basis, when Boiler #1 and the new Boiler #4 are fired in conjunction, except during periods of start-up and shutdown when operational overlap is necessary. Also, Boilers #3 and #4 shall not be operated in conjunction at any time, except during periods of start-up and shutdown when operational overlap is necessary.

5. Insignificant Fuel Burning Equipment

Moose River makes use of several small pieces of fuel burning equipment considered insignificant as outlined in Appendix B of 06-096 CMR 140. These pieces of equipment include the following:

- a. A 290,000 Btu/hr furnace which fires #2 fuel oil is utilized for space heat in the main office building.
- b. A Clean Burn waste oil furnace, located in the maintenance garage, is utilized for space heating and waste oil disposal. The Clean Burn has a capacity of 280,000 Btu/hr and fires waste oil and kerosene.
- c. Two kerosene-fired space heaters, each rated at 35,000 Btu/hr, are also used at the facility for space heating needs in the winter months.

C. Wood Drying Kilns

Moose River uses three kilns, designated Kilns #1, #2 and #3 to dry the spruce and fir lumber produced at the facility. Emissions from the wood drying kilns include VOCs. Based on data from the University of Maine, spruce and fir emit approximately 1.283-lb VOC/1000 board feet.

Moose River has proposed to establish an annual VOC emission limit based on a 98 million boardfeet per year kiln throughput and an emission factor for the drying of spruce and fir of 1.283 pounds of VOC per 1,000 boardfeet of wood dried. This establishes an annual limit for the facility of 62.9 tons of VOC per year from kiln drying operations based on a twelve-month rolling total.

To demonstrate compliance with the VOC emission limits, Moose River shall maintain a record of kiln production and VOC emissions. The record shall include VOC emissions, the quantity of wood dried and the species of wood dried. The record shall be maintained on a monthly as well as a twelve-month rolling total basis.

When calculating VOC emissions, the following emissions factor shall be used.

Species	Emission Factor (lb/1000BF)
Spruce /fir	1.283

Prior to drying any species of wood other than spruce and fir in the kilns, Moose River shall contact the Department for approval of an alternative emission factor appropriate for the species that the facility intends to dry.

Periodic Monitoring

Periodic monitoring shall consist of kiln production and VOC emissions record keeping, which shall include monthly records of VOC emissions, the quantity of wood dried and the species of wood dried. The record shall be maintained on a monthly and a twelve-month rolling total basis.

D. Wood Chip and Wood Sawdust Handling

Moose River 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 paper mills. 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.

Moose River 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 #1 fuel silo. A process cyclone, designated Cyclone #1, for handling particulate matter (PM) and particulate matter with a diameter of ten (10) microns or less (PM₁₀) that is generated by the wood processing equipment, is located at the top of the Boiler #1 fuel storage silo.

In accordance with 06-096 CMR 101, Section 2(B)(3)(d) of the Department's regulations, general process emissions from the wood chip and wood dust handling systems, which include 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, except for no more than one 6-minute block average in a 1-hour period.

Moose River shall establish a system of maintenance, inspection and repair for the wood chip and wood dust handling systems, which shall allow for a monthly inspection of the system. Moose River shall document compliance by means of a maintenance, inspection and repair log.

Periodic Monitoring

Moose River shall maintain a maintenance, inspection and repair log of the wood chip and wood dust handling system. Moose River shall inspect operations of the wood chip and wood dust handling system, once per month and record findings in the maintenance, inspection and repair log.

E. Degreaser Unit

Moose River makes use of a Safety-Kleen 30-gallon parts degreaser unit. The degreaser unit was installed in 2002 and uses Safety-Kleen 105 solvent as the cleaning medium. Safety-Kleen 105 solvent is 100% VOCs and Moose River uses approximately 50 gallons of solvent per year, therefore, with a density of 6.7 pounds per gallon, VOC emissions as a result of the parts degreaser are approximately 0.2 tons per year.

Moose River shall maintain a record of Safety-Kleen 105 solvent use that shall include the amount of solvent added to the degreaser unit and the dates that the solvent was added. The record shall be maintained on a monthly and a twelve-month rolling total basis. For purposes of record keeping, the amount of solvent used shall be considered as the difference between the amount of solvent added and the amount of solvent removed.

In accordance with 06-096 CMR 130, Section 1(B), the following are exempt from the requirements of 06-096 CMR 130:

- (1) A solvent cleaner using less than two liters (68 oz) of cleaning solvent with a vapor pressure of 1.00 mm Hg, or less, at 20° C (68° F);
- (2) Wipe cleaning; and

- (3) Cold cleaning machines using solvents containing less than or equal to 5% VOCs by weight.

In accordance with 06-096 CMR 130, Section 3(A) and (B), Moose River shall be subject to the following compliance standards:

- a. Immersion cold cleaning machines shall have a freeboard ratio of 0.75 or greater unless the machines are equipped with covers that are kept closed except when parts are being placed into or being removed from the machine.
- b. Immersion cold cleaning machines and remote reservoir cold cleaning machines shall:
 1. Have a permanent, conspicuous label summarizing the operating requirements in Subsection 3 below.
 2. Be equipped with a cover that shall be closed at all times except during cleaning of parts or the addition or removal of solvent. For remote reservoir cold cleaning machines which drain directly into the solvent storage reservoir, a perforated drain with a diameter of not more than six inches shall constitute an acceptable cover.
 3. Cold cleaning machines shall be operated in accordance with the following procedures:
 - a. Waste solvent shall be collected and stored in closed containers. The closed containers may contain a device that allows pressure relief, but does not allow liquid solvent to drain from the container;
 - b. Cleaned parts shall be drained at least 15 seconds or until dripping ceases, whichever is longer. Parts having cavities or blind holes shall be tipped or rotated while the part is draining. During the draining, tipping or rotating, the parts shall be positioned so that solvent drains directly back to the cold cleaning machine;
 - c. Flushing of parts using a flexible hose or other flushing device shall be performed only within the freeboard area of the cold cleaning machine. The solvent spray shall be a solid fluid stream, not an atomized or shower spray at a pressure that does not exceed 10 pounds per square inch gauge (psig);

- d. The owner or operator shall ensure that, when the cover is open, the cold cleaning machine is not exposed to drafts greater than 40 meters per minute (132 feet per minute), as measured between 1 and 2 meters (3.3 and 6.6 feet) upwind and at the same elevation as the tank lip;
- e. Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the cold cleaning machine;
- f. When a pump-agitated solvent bath is used, the agitator shall be operated to produce a rolling motion of the solvent with no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used;
- g. Spills during solvent transfer and use of the cold cleaning machine shall be cleaned up immediately, and the wipe rags or other sorbent material shall be immediately stored in covered containers for disposal or recycling;
- h. Work area fans shall be located and positioned so that they do not blow across the opening of the degreaser unit; and
- i. The owner or operator shall ensure that the solvent level does not exceed the fill line.

Periodic Monitoring

A record shall be maintained in regards to solvent added and used, which would include the dates when solvent is added and removed, the volume of solvent added and removed and the VOC content of the solvent. The record shall be maintained on a monthly and a twelve-month rolling total basis. For purposes of record keeping, the amount of solvent used shall be considered as the difference between the amount of solvent added and the amount of solvent removed.

If, in the future, Moose River switches to a solvent that contains less than 5% VOC for use in the parts washers, to satisfy record keeping requirements Moose River need only keep a copy of the MSDS sheet that demonstrates the VOC content of the solvent on file at their facility.

Moose River Lumber Company, Inc.)
Somerset County)
Moose River, Maine)
A-779-70-C-R 15

Department
Findings of Fact and Order
Part 70 Air Emission License

F. Liquid Organic Storage Tank

Moose River makes use of a 12,000-gallon steel tank to store #2 fuel oil for Boiler #3. The tank was manufactured and installed in 1999 and has an approximate annual throughput of 560,000-gallons of #2 fuel oil per year. The tank has a capacity of approximately 21 cubic meters (m³) and is therefore not subject to EPA's New Source Performance Standards (NSPS), Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels).

G. Ink Labeling Process

Moose River utilizes a labeling process in which ink rolls are used to coat labeling spools for imprinting the board ends for inventory purposes. The ink labeling process uses no greater than 50-gallons of coating, therefore, it is considered an insignificant activity and emissions from the process are not considered in determining facility emissions limits.

H. VOC Reasonable Available Control Technology (RACT)

Maine's rule *Reasonable Available Control Technology for Facilities that Emit Volatile Organic Compounds (VOC-RACT)*, 06-096 CMR 134 (last amended February 15, 1995), requires that any facility that emits or has the potential to emit forty (40) tons or more of VOC per calendar year must meet RACT. VOC emissions from kiln drying operations at the Moose River facility exceed the 40 ton/yr VOC emissions applicability threshold for 06-096 CMR 134. However, in accordance with 06-096 CMR 134, Section 3(C)(6) establishes that indirect contact wood kilns and wood yards are exempt from applicability to 06-096 CMR 134.

I. Compliance Assurance Monitoring

40 CFR Part 64 Compliance Assurance Monitoring (CAM) applies to specific emissions units located at a major source that is required to obtain a Part 70 Air Emission License, is subject to an emission limit or standard for an applicable regulated air pollutant, uses a control device to meet the emission limit or standard for that pollutant, has a pre-control potential to emit at least 100 tons per year of the major source amount of the pollutant and is not otherwise exempt from the requirements of 40 CFR Part 64. Moose River has two units, Boilers #1 and #4 that are subject to the requirements of 40 CFR Part 64 CAM.

Moose River included a CAM plan with the application for renewal of the facility's Part 70 Air Emission License. It was determined that Boilers #1 and #4 had the pre-control potential to emit at least 100 tons per year of particulate matter (PM) each and were therefore subject to 40 CFR Part 64 CAM. The following summarizes the CAM plan submitted by Moose River for each unit:

1. Boiler #1

Boiler #1 (sometimes referred to as the Kiln Boiler) has a maximum heat input capacity of 15.3 million British thermal units per hour (MMBtu/hr) at a firing rate of approximately 1.09 tons per hour (ton/hr) of kiln-dried planer shavings. Part 70 Air Emission License A-779-70-A-I established a PM emission limit of no greater than 0.3 lb/MMBtu and a PM/Particulate matter of 10 microns or smaller (PM₁₀) hourly emission limit if no greater than 4.59 pounds per hour (lb/hr). Compliance with these limits is achieved through the use of a multi-cyclone separator (multiclone). The pre-control PM emission potential for Boiler #1 is 134 tons/yr of PM.

The following table represents the CAM plan monitoring approach for Boiler #1:

Indicator	Inspection/Maintenance
General Criteria	
Measurement Method	Visual inspections of ash collection system, including ash hopper and associated ash handling equipment; Maintenance as required.
Indicator range	An observation that the ash collection system is not working properly (i.e. if the ash collection system hopper is over-heating, if the systems ash handling equipment is plugged or not operating).
Performance Criteria	
Data Representatives	Log entries indicating the results of visual inspections performed on the ash collection system, including hopper and associated ash handling equipment. Record keeping detailing any preventative or required maintenance.
QA/QC Practices Criteria	Qualified personnel (trained in boiler and ash handling system operations) shall perform inspections and maintenance. All maintenance shall be performed in accordance with manufacturer specifications
Monitoring Frequency	Inspections shall be conducted on a twice per 12-hour shift basis when the boiler is operational; Maintenance as required.
Data Collection Methods	Log entries shall be conducted indicating the results of each inspection; records shall be maintained to indicate any preventative and required maintenance.

2. Boiler #4

Boiler #4 has a maximum heat input capacity of 29.4 MMBtu/hr at a firing rate of approximately 3.27 tons per hour (ton/hr) of a mixture of green wood and dried wood at a blend of approximately 80% green wood and 20% dry wood. Part 70 Air Emission License A-779-70-A-I established a PM emission limit of no greater than 0.3 lb/MMBtu and a PM/PM₁₀ hourly emission limit of no greater than 8.82 lb/hr. Compliance with these limits is achieved through the use of a multiclone. The pre-control PM emission potential for Boiler #1 is 257 tons/yr of PM.

The following table represents the CAM plan monitoring approach for Boiler #4:

	Indicator #1	Indicator #2
Indicator	Inspection/Maintenance	Visual Emissions Observations
General Criteria		
Measurement Method	Visual inspections of multiclone, including seal valves, multiclone ash hopper and associated ash handling equipment; Maintenance as required.	Pressure drop across the multiclones is measured with differential pressure gauges.
Indicator range	An observation that the multiclone is not working properly (i.e. if rotary seal valves or not functioning, if the multiclone hopper is overheating, if the systems ash handling equipment is plugged or not operating).	The indicator range is a pressure drop between 0 and 6 inches of water. If there is no pressure drop, corrective action is taken. If necessary, the boiler is shut down and the hoppers cleaned out.
Performance Criteria		
Data Representatives	Log entries indicating the results of visual inspections performed on multiclone, including multiclone hopper and associated ash handling equipment. Record keeping detailing any preventative or required maintenance.	The pressure drop across the multiclone is measured at the inlet and outlet. Log entries indicate pressure drop readings.
QA/QC Practices Criteria	Qualified personnel (trained in multiclone and ash handling system operations) shall perform inspections and maintenance. All maintenance shall be performed in accordance with manufacturer specifications	Qualified personnel take readings. Equipment is maintained according to manufacturer specifications.

CAM plan monitoring approach for Boiler #4 continued:

Monitoring Frequency	Inspections shall be conducted on a twice per 12-hour shift basis when the boiler is operational; Maintenance as required.	The pressure drop is checked twice per 12-hour shift.
Data Collection Methods	Log entries shall be conducted indicating the results of each inspection; records shall be maintained to indicate any preventative and required maintenance.	Pressure drop is manually recorded twice per 12-hour shift.

J. Facility Emissions

Moose River Lumber Company shall be restricted to the following annual emissions, based on a 12-month rolling total:

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

Pollutant	Emissions in tons/year					Total
	Boiler #1	Boiler #2	Boiler #3	Boiler #4	Kilns	
-	20.10	5.91	8.80	38.62	-	73.43
PM	20.10	5.91	8.80	38.62	-	73.43
PM ₁₀	20.10	5.91	8.80	38.62	-	73.43
SO ₂	1.68	0.49	55.76	3.22	-	61.15
NO _x	32.84	4.34	15.71	43.77	-	96.65
CO	40.21	11.83	3.93	77.24	-	133.21
VOC	2.55	0.75	0.27	2.19	62.87	68.63

* Facility wide VOC emissions total does not include VOC emissions from the parts degreaser.

III. AIR QUALITY ANALYSIS

Moose River 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. The findings from the modeling analysis are included in the Moose River NSR Air Emission License A-779-77-1-A. An additional ambient air quality analysis is not required for this Part 70 Air Emission License renewal.

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
- 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-C-R pursuant to 06-096 CMR 140 and the preconstruction permitting requirements of 06-096 CMR 115 and subject to the standard and special conditions below.

All federally enforceable and State-only enforceable conditions in existing air licenses previously issued to Moose River pursuant to the Department's preconstruction permitting requirements in *Emission license regulations*, 06-096 CMR 108 or *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (last amended December 24, 2005) have been incorporated into this Part 70 Air Emission License renewal, except for such conditions that MEDEP has determined are obsolete, extraneous or otherwise environmentally insignificant, as explained in the findings of fact accompanying this permit. As such the conditions in this license supersede all previously issued air license conditions.

Federally enforceable conditions in this Part 70 Air Emission License renewal must be changed pursuant to the applicable requirements in 06-096 CMR 115 for making such changes and pursuant to the applicable requirements in 06-096 CMR 140.

For each standard and special 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, or part thereof, of this License shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD 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 CMR 140]

- (2) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege; [06-096 CMR 140]
- (3) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable. [06-096 CMR 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 CMR 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 CMR 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 effect 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 November 16, 2001.

	SOURCE	CITATION	DESCRIPTION	BASIS FOR DETERMINATION
a.	Boilers #1, #2, #3 and #4	40 CFR Part 60, Subpart D	Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971	All Boilers < 250 MMBtu/hr each
b.	Boilers #1, #2, #3 and #4	40 CFR Part 60, Subpart Da	Standards of Performance for Electrical Utility Steam Generators for Which Construction is Commenced After September 18, 1978	All Boilers < 250 MMBtu/hr each
c.	Boilers #1, #2, #3 and #4	40 CFR Part 60, Subpart Db	Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units	All Boilers < 100 MMBtu/hr each
d.	Boilers #1, #2 and #3	40 CFR Part 60, Subpart Dc	Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	Construction of each boiler commenced prior to June 9, 1989
e.	Boilers #1, #2, #3 and #4	06-096 CMR 138	NO _x Reasonable Available Control Technology (VOC RACT)	The facility is limited to no greater than 96.65 tons of NO _x per year
f.	Drying Kilns	06-096 CMR 134	VOC Reasonable Available Control Technology (NO _x RACT)	Kiln drying activities are exempt from VOC RACT

- (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 3 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 CMR 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 CMR 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 CMR 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 (Title 38 MRSA 38 §347-C);
- (2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in 06-096 CMR 140; [06-096 CMR 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 CMR 140] **Enforceable by State-only**
- (4) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 MRSA §353.
- (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 CMR 140]
Enforceable by State-only

Moose River Lumber Company, Inc.)
Somerset County)
Moose River, Maine)
A-779-70-C-R 23

Department
Findings of Fact and Order
Part 70 Air Emission License

- (6) 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 CMR 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 CMR 140]
- (8) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:
- A. perform stack testing 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 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and
 - C. submit a written report to the Department within thirty (30) days from date of test completion.

[06-096 CMR 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 CFR Part 60 or other method approved or required by the Department; and
 - B. the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and
 - C. the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 CMR 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 MRSA § 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 CMR 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 CMR 140]
- (12) The licensee shall submit semiannual reports of any required periodic monitoring. 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 CMR 140]
- (13) The licensee shall submit a compliance certification to the Department and EPA at least annually, 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 CMR 140]

Moose River Lumber Company, Inc.)
 Somerset County)
 Moose River, Maine)
 A-779-70-C-R 26

Department
 Findings of Fact and Order
 Part 70 Air Emission License

SPECIFIC CONDITIONS

(14) Boiler #1

A. Moose River is licensed to operate Boiler #1 (15.3 MMBtu/hr) which is licensed to fire kiln-dried planer mill shavings.
 [06-096 CMR 115, BPT, 06-096 CMR 140]

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

Boiler #1 lb/MMBtu limit

<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>Origin and Authority</u>	<u>Enforceability</u>
Boiler #1	0.3	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable

Boiler #1 lb/hr limits

<u>Pollutant</u>	<u>lb/hr</u>	<u>Origin and Authority</u>	<u>Enforceability</u>
PM	4.59	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable
PM ₁₀	4.59	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable
SO ₂	0.38	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable
NO _x	7.5	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable
CO	9.18	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable
VOC	0.58	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable

C. When operating Boilers #4 and #1 in conjunction, Moose River must reduce the heat input firing capacity of Boiler #1 to 20% capacity or less, on a 24-hour basis, except during periods of start-up and shutdown when operational overlap is necessary. [A-779-77-1-A, 06-096 CMR 115, BPT]

D. In order to demonstrate compliance with the heat input capacity restriction, Moose River will operate and maintain an auger revolution counter on the fuel supply line for Boiler #1. Moose River shall determine the relationship between auger revolutions and fuel usage for this boiler and provide this information to the Department. Moose River shall have 30 days from the first start-up of Boiler #1 following the signature of this Part 70 Air Emission License Renewal to establish auger revolution/fuel delivery characteristics for Boiler #1 and report this to the Department. [06-096 CMR 140]

- E. During periods when Boiler #1 is operated in conjunction with Boiler #4, except during startup and shutdown, Moose River shall maintain a log of fuel used, which will allow for daily entries of auger revolution counter readings for Boiler #1, daily run time for Boiler #1, and the total daily fuel used by Boiler #1. Moose River will calculate the quantity of fuel consumed in lb/hr (or tons/hr) on a daily 24-hour average basis. [06-096 CMR 140]
- F. As part of the semi-annual reporting to the DEP, Moose River will report the daily tons per hour for each day for Boiler #1 for any periods of time during which Boiler #1 was operated in conjunction with Boiler #4, including periods of startup and shutdown. Any exceedance of the Boiler #1 restriction will be reported to the DEP. [06-096 CMR 140]
- G. Moose River shall operate Boiler #1 such that the visible emissions from the stack do not exceed 30% opacity on a six-minute block average basis, except for no more than 2 six-minute block averages in a 3-hour period. [06-096 CMR 101]

(15) Boiler #2

- A. Moose River is licensed to operate Boiler #2 (4.5 MMBtu/hr) which is licensed to fire hog fuel (wood waste and bark). [06-096 CMR 115, BPT, 06-096 CMR 140]
- B. Emissions from the Boiler #2 shall not exceed the following limits:

Boiler #2 lb/MMBtu limit

<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>Origin and Authority</u>	<u>Enforceability</u>
Boiler #1	0.3	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable

Boiler #2 lb/hr limits

<u>Pollutant</u>	<u>lb/hr</u>	<u>Origin and Authority</u>	<u>Enforceability</u>
PM	1.35	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable
PM ₁₀	1.35	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable
SO ₂	0.11	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable
NO _x	0.99	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable
CO	2.70	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable
VOC	0.17	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable

Moose River Lumber Company, Inc.)
 Somerset County)
 Moose River, Maine)
 A-779-70-C-R 28

Department
 Findings of Fact and Order
 Part 70 Air Emission License

C. Moose River shall operate Boiler #2 such that the visible emissions from the stack do not exceed 30% opacity on a six-minute block average basis, except for no more than 2 six-minute block averages in a 3-hour period. [06-096 CMR 101]

(16) Boiler #3

A. Moose River is licensed to operate Boiler #3 (25.1 MMBtu/hr) which is licensed to fire #2 fuel oil which meets the sulfur content criteria found in ASTM D396 for #2 fuel oil (0.5% sulfur by weight). [06-096 CMR 115, BPT, 06-096 CMR 140]

B. Emissions from the boiler shall not exceed the following limits:

Boiler #3 lb/MMBtu limit

<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>Origin and Authority</u>	<u>Enforceability</u>
Boiler #1	0.08	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable

Boiler #3 lb/hr limits

<u>Pollutant</u>	<u>lb/hr</u>	<u>Origin and Authority</u>	<u>Enforceability</u>
PM	2.01	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable
PM ₁₀	2.01	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable
SO ₂	12.73	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable
NO _x	3.59	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable
CO	0.90	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable
VOC	0.06	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable

C. Moose River shall maintain fuel purchase records which shall include purchase receipts or fuel supplier certification that specify the amount of fuel purchased, type of fuel and the fuel delivery date. Fuel records shall be maintained on a monthly as well as a 12-month rolling basis. [A-779-71-A-N, 06-096 CMR 115, BPT]

D. Moose River shall not operate Boilers #3 and #4 in conjunction at any time except during periods of start-up and shutdown when operational overlap is necessary. [A-779-71-A-N, 06-096 CMR 115, BPT]

E. Moose River shall operate the boiler such that the visible emissions from the stack do not exceed 20% opacity on a six-minute block average basis, except for no more than 1 six-minute block average in a 3-hour period. [06-096 CMR 101]

Moose River Lumber Company, Inc.)
 Somerset County)
 Moose River, Maine)
 A-779-70-C-R 29

Department
 Findings of Fact and Order
 Part 70 Air Emission License

(17) Boiler #4

- A. Boiler #4 shall not exceed a heat input capacity of 29.39 MMBtu/hr.
 [06-096 CMR 115, BPT, 06-096 CMR 140]
- B. Boiler #4 shall not exceed the following emissions:

Boiler #4 lb/MMBtu limit

<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>Origin and Authority</u>	<u>Enforceability</u>
Boiler #1	0.3	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable

Boiler #4 lb/hr limits

<u>Pollutant</u>	<u>lb/hr</u>	<u>Origin and Authority</u>	<u>Enforceability</u>
PM	8.82	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable
PM ₁₀	8.82	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable
SO ₂	0.73	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable
NO _x	9.99	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable
CO	17.63	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable
VOC	0.50	A-779-77-1-A, 06-096 CMR 115, BPT	Federally Enforceable

- C. Visible emissions from the Boiler #4 stack shall not exceed 30% opacity on a 6-minute block average, except for no more than 2 six-minute block averages in any three-hour period. [06-096 CMR 101]
- D. When operating Boilers #4 and #1 in conjunction, Moose River must reduce the heat input firing capacity of Boiler #1 to 20% capacity or less, on a 24-hour basis, except during periods of start-up and shutdown when operational overlap is necessary. [A-779-77-1-A, 06-096 CMR 115, BPT]
- E. Moose River shall not operate Boilers #3 and #4 in conjunction at any time, except during periods of start-up and shutdown when operational overlap is necessary. [A-779-77-1-A, 06-096 CMR 115, BPT]
- F. As required by EPA NSPS 40 CFR Part 60, Subpart Dc does specify that Moose River is subject to the reporting and record keeping requirements as outlined in 40 CFR Part 60.48c and Part 60.7.

(18) Drying Kilns

- A. Moose River shall be limited to an annual VOC emissions limit of 62.9 tons of VOC per year (tons/yr) from the drying of wood in the facility's wood drying kilns based on a twelve-month rolling total.
[A-779-77-1-A, 06-096 CMR 115, BPT]
- B. Moose River shall maintain records indicating the quantity of wood dried in BF and VOC emissions. VOC emissions shall be calculated using an emission factor for spruce and fir of 1.283 pounds of VOC per 1,000 BF. The kiln record shall be maintained on a monthly and a 12-month rolling total basis. [A-779-77-1-A, 06-096 CMR 115, BPT]
- C. Prior to drying any species of wood other than spruce and fir in the kilns, Moose River shall contact the Department for approval of an alternative emission factor appropriate for the species that the facility intends to dry.
[A-779-77-1-A, 06-096 CMR 115, BPT]

(19) Wood Chip and Wood Dust 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, except for no more than one 6-minute block average in a 1-hour period.
[06-096 CMR 101]
- B. Moose River shall establish a system of maintenance, inspection and repair for the wood chip and wood dust handling system, which shall allow for a monthly inspection of the system. [A-779-77-1-A, 06-096 CMR 115, BPT]
- C. Moose River shall maintain a maintenance, inspection and repair log of the wood chip and wood dust handling system. Moose River shall inspect operations of the wood chip and wood dust handling system, once per month and record findings in the maintenance, inspection and repair log.
[A-779-77-1-A, 06-096 CMR 115, BPT]

(20) Parts Degreaser

- A. The parts degreaser at Moose River is subject to *Solvent Cleaners*, 06-096 CMR 130 (last amended June 28, 2004).

- B. Moose River shall maintain a record of solvent use for the parts degreasers. The record shall include solvent added and removed, the dates when solvent is added and removed, the quantity of solvent added and removed and the VOC content of the solvent. [A-779-77-1-A, 06-096 CMR 115, BPT]
- C. The following are exempt from the requirements of 06-096 CMR 130 [06-096 CMR 130]:
1. Solvent cleaners using less than two liters (68 oz) of cleaning solvent with a vapor pressure of 1.00 mmHg, or less, at 20° C (68° F);
 2. Wipe cleaning; and,
 3. Cold cleaning machines using solvents containing less than or equal to 5% VOC by weight.
- D. In accordance with 06-096 CMR 130, immersion cold cleaning machines shall have a freeboard ratio of 0.75 or greater unless the machines are equipped with covers that are kept closed except when parts are being placed into or being removed from the machine.
- E. Immersion cold cleaning machines and remote reservoir cold cleaning machines shall:
1. Have a permanent conspicuous label summarizing the operating requirements in Subsection 3 below.
 2. Be equipped with a cover that shall be closed at all times except during cleaning of parts or the addition or removal of solvent. For remote reservoir cold cleaning machines which drain directly into the solvent storage reservoir, a perforated drain with a diameter of not more than six inches shall constitute an acceptable cover.
 3. Cold cleaning machines shall be operated in accordance with the following procedures:
 - (ii) Waste solvent shall be collected and stored in closed containers.
 - (iii) Cleaned parts shall be drained of solvent directly back to the cold cleaning machine by tipping or rotating the part for at least 15 seconds or until dripping ceases, whichever is longer.
 - (iv) Flushing of parts shall be performed with a solid solvent spray that is a solid fluid stream (not a fine, atomized or shower type spray) at a pressure that does not exceed 10 psig. Flushing shall be performed only within the freeboard area of the cold cleaning machine.

Moose River Lumber Company, Inc.)
Somerset County)
Moose River, Maine)
A-779-70-C-R 32

Department
Findings of Fact and Order
Part 70 Air Emission License

- (v) The cold cleaning machine shall not be exposed to drafts greater than 40 meters per minute when the cover is open.
- (vi) Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the degreaser.
- (vii) When a pump-agitated solvent bath is used, the agitator shall be operated to produce no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used.
- (viii) Spills during solvent transfer shall be cleaned immediately. Sorbent material shall be immediately stored in covered containers.
- (ix) Work area fans shall not blow across the opening of the degreaser unit.
- (x) The solvent level shall not exceed the fill line.

F. The remote reservoir cold cleaning machine shall be equipped with a perforated drain with a diameter of not more than six inches.
[06-096 CMR 130]

G. If, in the future, Moose River switches to a solvent that contains less than 5% VOC for use in the parts washers, to satisfy record keeping requirements Moose River need only keep a copy of the MSDS sheet that demonstrates the VOC content of the solvent on file at their facility.
[06-096 CMR 115, BPT, 06-096 CMR 130]

(21) Compliance Assurance Monitoring for Boiler #1

A. As part of the facility's Compliance Assurance Plan, Moose River shall establish and implement the inspection/maintenance program for the Boiler #1 ash collection system as specified in Section II, paragraph I of the "Finding-of-Fact of this Air Emission License. The program will allow for inspections of the ash collection system, including the exterior of dust hoppers and associated ash handling equipment. Inspections shall be conducted on a twice per 12-hour shift basis when the boiler is operational.
[40 CFR Part 64, 06-096 CMR 140]

B. Moose River shall make log entries in the associated boiler's log book recording visual inspection results. Moose River shall report any deviations or excursions in the facility's semiannual report. An excursion or deviation shall be defined as any time that the ash collection system is not working properly. If excursions or deviations occur, Moose River must also certify compliance with the emissions standards for the control device monitored in the facility's annual compliance certification.

[40 CFR Part 64, 06-096 CMR 140]

C. Moose River shall maintain a record detailing any maintenance that resulted from inspection findings as well as any preventative maintenance undertaken on the associated equipment. [40 CFR Part 64, 06-096 CMR 140]

D. Moose River shall have only trained personnel undertake inspections and maintenance of associated equipment. [40 CFR Part 64, 06-096 CMR 140]

E. Prior to making any changes to the approved CAM plan, Moose River shall notify the Department and, if necessary, submit a proposed modification to this Air Emission License to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[40 CFR Part 64, 06-096 CMR 140]

(22) Compliance Assurance Monitoring for Boiler #4

H. As part of the facility's Compliance Assurance Plan, Moose River shall establish and implement the inspection/maintenance program for the Boiler #4 multiclones as specified in Section II, paragraph I of the "Finding-of-Fact of this Air Emission License. The program will allow for inspections of the multiclones, including the exterior of dust hoppers, seal valves and associated ash handling equipment. Inspections shall be conducted on a twice per 12-hour shift basis when the boiler is operational.

[40 CFR Part 64, 06-096 CMR 140]

I. As part of the facility's Compliance Assurance Plan, Moose River shall establish and implement the inspection/maintenance program for the Boiler #4 ash collection system as specified in Section II, paragraph I of the "Finding-of-Fact of this Air Emission License. The program will allow for inspections of the ash collection system, including the exterior of dust hoppers and associated ash handling equipment. Inspections shall be conducted on a twice per 12-hour shift basis when the boiler is operational.

[40 CFR Part 64, 06-096 CMR 140]

- J. Moose River shall make log entries in the associated boiler's log book recording visual inspection results. Moose River shall report any deviations or excursions in the facility's semiannual report. An excursion or deviation shall be defined as any time that the ash collection system is not working properly or anytime the indicator pressure drop deviates from its normal range. If excursions or deviations occur, Moose River must also certify compliance with the emissions standards for the control device monitored in the facility's annual compliance certification.
[40 CFR Part 64, 06-096 CMR 140]
- K. Moose River shall maintain a record detailing any maintenance that resulted from inspection findings as well as any preventative maintenance undertaken on the multiclones and associated equipment.
[40 CFR Part 64, 06-096 CMR 140]
- L. Moose River shall have only trained personnel undertake inspections and maintenance of associated equipment. [40 CFR Part 64, 06-096 CMR 140]
- M. As part of the facility's Compliance Assurance Plan, Moose River shall establish and implement a pressure drop observation program for Boiler #4. The program will allow for monitoring of pressure drop across the multiclones utilizing differential pressure gauges. [40 CFR Part 64, 06-096 CMR 140]
- N. Moose River shall maintain a record of Pressure drop across the multiclones as measured with differential pressure gauges. The indicator range is a pressure drop between 0 and 6 inches of water.
[40 CFR Part 64, 06-096 CMR 140]
- O. In the event of an excursion or deviation, for example, if there is no pressure drop, corrective action shall taken. If necessary, the boiler shall be shut down and the hoppers cleaned out. Moose River shall restore normal operation of the control equipment as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
[40 CFR Part 64, 06-096 CMR 140]
- P. Observations of pressure drop shall be conducted on a twice per 12-hour shift basis when the boiler is operational. Moose River shall have only trained personnel undertake inspections and maintenance of associated equipment.
[40 CFR Part 64, 06-096 CMR 140]

- Q. Prior to making any changes to the approved CAM plan, Moose River shall notify the Department and, if necessary, submit a proposed modification to this Air Emission License to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
[40 CFR Part 64, 06-096 CMR 140]

(23) Record Keeping Requirements

A. Periodic Monitoring

The following is a list of the periodic monitoring required by this license:

1. Moose River will maintain a log of fuel used for Boiler #1 for those periods of time that both Boiler #1 and Boiler #4 are operated in conjunction. [License Condition (14)E]
2. Moose River shall maintain a record of #2 fuel oil purchased for Boiler #3. [License Condition (16)B]
3. Moose River shall maintain a record of kiln production and a record of VOC emissions resulting from kiln drying operations. [License Condition (18)B]
4. Moose River shall maintain a record of maintenance, inspection and repair of the facility's wood chip and wood dust handling system. [License Condition (19)C]
5. Moose River shall maintain a record of solvent use in the facility's Parts Washer. [License Condition (20)B]
6. Moose River shall make log entries in the associated boiler's log book recording visual inspection results. Moose River shall maintain a record detailing any maintenance that resulted from inspection findings as well as any preventative maintenance undertaken on the associated equipment. [License Conditions (22)B and C]
7. Moose River shall make log entries in the associated boiler's log book recording visual inspection results. Moose River shall maintain a record detailing any maintenance that resulted from inspection findings as well as any preventative maintenance undertaken on the multiclones and associated equipment. [License Conditions (23)B and C]

Moose River Lumber Company, Inc.)
Somerset County)
Moose River, Maine)
A-779-70-C-R) 36

Department
Findings of Fact and Order
Part 70 Air Emission License

(24) Semiannual Reporting

- A. The licensee shall submit semiannual reports every six months to the Maine Department of Environmental Protection's Bureau of Air Quality. The facility's designated responsible official must sign the report.
[06-096 CMR 140]
- B. The semiannual reports are due on January 31st and July 31st of each year. The semiannual report 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. [06-096 CMR 140]
- C. Each semiannual report shall include a summary of periodic and CAM monitoring. All instances of excursions and/or deviations from the license requirements and the corrective action taken must be clearly identified and provided to the Department in summary from each six-month interval.
[06-096 CMR 140]

(25) Annual Emission Statement

In accordance with *Emissions Standards*, 06-096 CMR 137 (last amended November 8, 2008), the licensee shall annually report to the Department the information necessary to accurately update the State's criteria pollutant emission inventory by means of:

- 1) A computer program and accompanying instructions supplied by the Department;

Or

- 2) A written emission statement containing the information required in 06-096 CMR 137.

Annual emissions statements and questions pertaining to annual emissions statements should be directed to:

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

Phone: (207) 287-2437

Moose River's 2008 emission inventory statement must be submitted by July 1, 2009 or as specified in 06-096 CMR 137. Beginning with the 2009 annual emissions inventory, the submission deadline will move from July 1 to May 15. The 2009 emissions inventory must be reported no later than May 15, 2010.

(26) Annual Compliance Certification

Moose River shall submit an annual compliance certification to the Department and EPA in accordance with Standard Condition (13) of this license. The initial annual compliance certification is due January 31 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 before the due date or if the report is received by the DEP 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 CMR 140]

(27) 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 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioning units in Subpart B. An example of such units include refrigerators and any size air conditioner that contain CFCs. [40 CFR, Part 82, Subpart F]

(28) Certification by a Responsible Official

All reports (including quarterly reports, semiannual reports, and annual compliance certifications) required by this license to be submitted to the Bureau of Air Quality must be signed by a responsible official. [06-096 CMR 140]

(29) Asbestos Abatement

Any Asbestos abatement activities undertaken at Moose River shall be done in accordance with the Standard for Asbestos Demolition and Renovation 40 CFR Part 61, Subpart M.

Moose River Lumber Company, Inc.)
Somerset County)
Moose River, Maine)
A-779-70-C-R 38

Department
Findings of Fact and Order
Part 70 Air Emission License

(30) Expiration of a Part 70 license

- A. Moose River shall submit a complete Part 70 Air Emission License renewal application at least 6 months prior, but no more than 18-months prior, to the expiration of this air license.
- B. Pursuant to Title 5 M.R.S.A. §10002, and 06-096 CMR 140, this Part 70 Air Emission 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 Air Emission License. An existing source submitting a complete renewal application under 06-096 CMR 140 prior to the expiration of the Part 70 Air Emission License will not be in violation of operating without a Part 70 Air Emission License. **Enforceable by State only**

(31) New Source Review

Moose River 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 Part 70 Air Emission License expires.
[06-096 CMR 140]

DONE AND DATED IN AUGUSTA, MAINE THIS 14th DAY OF May 2010.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: James P. Wood
DAVID P. LITTELL, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

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

Date of initial receipt of application: August 15, 2008

Date of application acceptance: August 18, 2008

Date filed with the Board of Environmental Protection: _____

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

