Pleasant River Lumber Company
Piscataquis County
Dover-Foxcroft, Maine
A-704-71-H-R/A (SM)

Departmental
Findings of Fact and Order
Air Emission License
Renewal/Amendment

FINDINGS OF FACT

After review of the air emission license amendment and renewal application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes Annotated (M.R.S.A.), §344 and §590, the Maine Department of Environmental Protection (the Department) finds the following facts:

I. REGISTRATION

A. Introduction

Pleasant River Lumber Company (Pleasant River) has applied to renew their Air Emission License permitting the operation of emission sources associated with their Dover-Foxcroft, Maine lumber mill. Pleasant River has also requested an increase of the fuel usage limit for the wood-fired Boiler #3A. Pleasant River is anticipating an increase in kiln-dried lumber demand and will require an increase in steam production to meet this demand.

The equipment addressed in this license is located at 42 Milo Road in Dover-Foxcroft, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type, % sulfur	Date of...		Stack #
				Manuf.	Install.	
Boiler #3A	25.22	2.15 ton/hr	Wood	1992	2006	#3A
Boiler #3	20.92	149.4 gal/hr	#2 fuel oil, 0.5%	1964	n/a	#3

Process Equipment

Equipment	Production Rate	Pollution Control Equipment	Stack #
Kiln 1	141,312 BF/day	n/a	Fugitive
Kiln 2	105,984 BF/day		
Kiln 3	141,312 BF/day		
Bagger Silo	10,000 tons/yr	Centrifugal Separator	

C. Application Classification

The application for renewal of Pleasant River's air emission license includes an amendment request to increase the fuel use cap for Boiler #3A. This change will increase emissions by less than 4 ton/year for each single pollutant and less than 8 ton/year for all pollutants combined. Therefore, this modification is determined to be a minor revision and has been processed as such through 06-096 Code of Maine Rules (CMR) 115, *Major and Minor Source Air Emission License Regulations* (as amended). With the annual throughput restriction on the Kilns, the facility is licensed below the major source thresholds and is considered a synthetic minor. With the fuel limit on Boilers #3A and #3, the facility is licensed below the major source thresholds for hazardous air pollutants (HAP) and is considered an area source of HAP.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 CMR 100 (as amended). Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

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

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

B. Boiler #3A

Pleasant River operates wood-fired Boiler #3A to provide steam for the drying kilns and sawmill. The boiler is rated at 25.22 MMBtu/hour, was manufactured in 1992, and was installed in 2006. Exhaust from Boiler #3A is controlled by a centrifugal separator to reduce particulate matter (PM) emissions. Boiler #3A

then exhausts through its own stack, a 50-ft above ground level (AGL) stack designated Stack #3A.

The majority of wood fuel burned in Boiler #3A is byproducts of the manufacturing process, such as sawdust, bark, trim, sort-yard debris, chip fines, shavings, etc. Although some post-kiln wood waste is burned, the vast majority is pre-kiln production rejects from the sawmill operation. A moisture content analysis conducted previous to the last license renewal identified a moisture content of approximately 30% in the wood fuel fired in Boiler #3A.

Pleasant River's previous license established an annual wood fuel use limit of no greater than 13,500 tons per year (ton/yr) of wood at 30.0% moisture content or the equivalent. Since then, actual wood fuel used at the facility has been identified as most typically 90-95% green sawdust (approximately 50% moisture) and 5-10% kiln-dried wood chips (approximately 12% moisture). The facility has requested their annual wood fuel use limit be changed to 14,500 tons/year containing no more than 10% kiln-dried wood chips. This increase is expected to meet the anticipated increase in steam demand at the facility.

Compliance with the fuel limit shall be demonstrated via fuel use records, to include the amount of fuel burned each month and its moisture content. Fuel records shall be maintained on both a monthly and a 12-month rolling total basis.

1. New Source Performance Standards (NSPS)

   Because Boiler #3A has a rated capacity greater than 10 but less than 100 MMBtu/hour and was manufactured after June 9, 1989, the boiler is subject to the applicable requirements of New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.*

   As an alternative to daily fuel use records as required per 40 CFR §60.48c (g)(1), this regulation also provides for the following: Because this boiler combusts only wood, Pleasant River may elect to record and maintain records of the amount of fuel combusted during each calendar month. [40 CFR §60.48c (g)(2)]

2. BACT/BPT Findings

   The BACT/BPT emission limits for the boiler are based on a fuel heat content of 4,850 Btu/lb of wood and the following emission factors which are weighted to reflect the 90% wet /10% dry fuel combination:

Pollutant	Emission Factor	Source of Emission Factor
PM	0.23 lb/MMBtu	AP-42, Table 1.6-1 (9/03)
PM_{10}	0.21 lb/MMBtu	
SO_2	0.025 lb/MMBtu	AP-42, Table 1.6-2 (9/03)
NO_x	0.247 lb/MMBtu	

Pollutant	Emission Factor	Source of Emission Factor
CO	0.60 lb/MMBtu	
VOC	0.017 lb/MMBtu	AP-42, Table 1.6-3 (9/03)

The BPT emission limits for Boiler #3A are the following:

PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
4.80	4.38	0.52	5.15	12.51	0.35

Visible emissions from the boiler shall not exceed 20% opacity on a six-minute block average basis, except for no more than one six-minute block average in a three-hour period. [06-096 CMR 101]

Pleasant River shall be limited to 14,500 tons/year of wood fuel combusted in Boiler #3A, containing no more than 10% kiln-dried wood chips.

3. Periodic Monitoring

Periodic monitoring for Boiler #3A shall include recordkeeping to document fuel use both on a monthly and 12-month rolling total basis. Documentation shall include the type of fuel used and the moisture content of the fuel.

4. Fuel Handling for Boiler #3A

Pleasant River's wood fuel handling system consists of a fuel storage building, a conveyor system, and a metering bin (surge bin). Wood fuel is conveyed to the fuel storage building by bucket loader. The fuel storage building has a moving floor (live floor) which moves wood fuel from the storage building onto a conveyor belt, which transports the wood fuel to the surge bin. The surge bin feeds fuel into the boiler.

In accordance with 06-096 CMR 101, Section 2(B)(3)(d), visible emissions from the fuel handling system shall not exceed an opacity of 20% on a six-minute block average basis, except for no more than one six-minute block average in a one-hour period.

C. Boiler #3

Boiler #3 is a Cleaver Brooks boiler manufactured in 1964 with a maximum design heat input of 20.92 MMBtu/hour firing #2 fuel oil. Boiler #3 is maintained as a back-up in the event of catastrophic failure of Boiler #3A. Boiler #3 exhausts to its own stack, a 32.4 foot AGL stack designated Stack #3.

1. New Source Performance Standards (NSPS)

Boiler #3 was manufactured prior to 1989 and is therefore not subject to New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc, for

boilers with a maximum design heat input capacity of 10 MMBtu/hour or greater and manufactured after June 9, 1989.

2. BACT/BPT Findings

The BACT/BPT emission limits for Boiler #3 are based on the following:

Pollutant	Emission Factor	Source of Emission Factor
PM	0.08 lb/MMBtu	A-704-71-G-N/A (Oct. 31, 2008); BACT
PM_{10}	0.08 lb/MMBtu	
SO_2	0.5 lb/MMBtu	Based on firing ASTM D396 compliant #2 fuel oil (0.5% sulfur by weight)
NO_x	0.25 lb/MMBtu	A-704-71-G-N/A (Oct. 31, 2008); BACT
CO	5 lb/1000 gal	AP-42, Table 1.3-1 (5/10)
VOC	0.34 lb/1000 gal	

The BPT emission limits for Boiler #3 are the following:

PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
1.67	1.67	10.46	5.23	0.75	0.05

Visible emissions from Boiler #3 shall not exceed 20% opacity on a six-minute block average, except for no more than two six-minute block averages in a three-hour period. [06-096 CMR 101]

Pleasant River shall be limited to 150,000 gallons of #2 fuel oil per year based on a twelve-month rolling total.

Prior to July 1, 2016, or by the date otherwise stated in 38 MRSA §603-A(2)(A)(3), the #2 fuel oil fired in Boiler #3 shall be ASTM D396 compliant #2 fuel oil (maximum sulfur content of 0.5% by weight). Per 38 MRSA §603-A(2)(A)(3), beginning July 1, 2016, or on the date specified in the statute, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.005% by weight (50 ppm); and beginning January 1, 2018, or on the date specified in the statute, the facility shall fire #2 fuel oil with a maximum sulfur content limit of 0.0015% by weight (15 ppm). The specific dates contained in this paragraph reflect the current dates in the statute as of the effective date of this license; however, if the statute is revised, the facility shall comply with the revised dates upon promulgation of the statute revision.

3. Periodic Monitoring

Periodic monitoring for Boiler #3 shall include recordkeeping to document fuel use both on a monthly and 12-month rolling total basis. Documentation shall include the type of fuel used and sulfur content of the fuel.

D. National Emission Standards for Hazardous Air Pollutants (NESHAP): 40 CFR Part 63, Subpart JJJJJJ and Boilers #3A and #3

Boilers #3A and #3 are subject to 40 CFR Part 63, Subpart JJJJJJ, *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources*. Boiler #3A is considered an existing biomass-fired boiler, and Boiler #3 is considered an existing oil-fired boiler.

A summary of the currently applicable federal 40 CFR Part 63, Subpart JJJJJJ requirements is listed below. At this time, the Department has not taken delegation of this rule promulgated by EPA; however Pleasant River is still subject to the requirements. Notification forms and additional rule information can be found on the following website:
http://www.epa.gov/ttn/atw/boiler/boilerpg.html.

1. Compliance Dates, Notifications, and Work Practice Requirements

   a. Initial Notification of Compliance

      An Initial Notification submittal to EPA was due no later than January 20, 2014. [40 CFR §63.11225(a)(2)]

   b. Boiler Tune-Up Program

      (1) A boiler tune-up program shall be implemented to include the initial tune-up of applicable boilers no later than March 21, 2014. [40 CFR §63.11196(a)(1)]

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

         (a) 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 for boilers greater than 5 MMBtu/hour or 72 months from the previous inspection for oil fired boilers less than 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 CFR §63.11223(b)(1)]

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

         (c) 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

for boilers greater than 5 MMBtu/hour or 72 months from the previous inspection for oil fired boilers less than 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 CFR §63.11223(b)(3)]

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

(e) 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 CFR §63.11223(b)(5)]

(f) 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 CFR §63.11223(b)(7)]

(3) After conducting the initial boiler tune-up, a Notification of Compliance Status shall be submitted to EPA no later than July 19, 2014. [40 CFR §63.11225(a)(4) and 40 CFR §63.11214(b)]

(4) The facility shall implement a boiler tune-up program after the initial tune-up and initial compliance report (called a Notification of Compliance Status) has been submitted.

(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, as summarized in the following table:

Boiler Category	**Tune-Up Frequency**
New or Existing Oil, Biomass, and Coal fired boilers that are not designated as "Boilers with Less Frequent Tune-up Requirements" listed below	Every 2 years
New and Existing Oil, Biomass, and Coal fired Boilers with Less Frequent Tune-up Requirements	
Seasonal (see definition §63.11237)	Every 5 years
Limited use (see definition §63.11237)	Every 5 years
With a heat input capacity of <5MMBtu/hr	Every 5 years
Boiler with oxygen trim system which maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune up	Every 5 years

[40 CFR §63.11223(a) and Table 2]

(b) The tune-up compliance report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the concentration of CO (ppmv) and oxygen (volume %) in the effluent stream, measured at high fire or typical operating load, before and after the boiler tune-up; a description of any corrective actions taken as part of the tune-up of the boiler; and the types and amounts of fuels used over the 12 months prior to the tune-up of the boiler. [40 CFR §63.11223(b)(6)] The compliance report shall also include the company name and address; a compliance statement signed by a responsible official certifying truth, accuracy, and completeness; and a description of any deviations and corrective actions. [40 CFR §63.11225(b)]

c. Energy Assessment

Boilers #3A and #3 are subject to the energy assessment requirement as follows:

(1) A one-time energy assessment shall be performed by a qualified energy assessor on the applicable boilers no later than March 21, 2014. [40 CFR §63.11196(a)(3)]

(2) The energy assessment shall include a visual inspection of the boiler system; an evaluation of operating characteristics of the affected boiler systems, specifications of energy use systems, operating and maintenance procedures, and unusual operating constraints; an inventory of major energy use systems consuming energy from affected boiler(s) and which are under control of the boiler owner or operator; a review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage; a list of major energy conservation measures that are within the facility's control; a list of the energy savings potential of the energy conservation measures identified; and a comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments. [40 CFR §63, Table 2(4)]

(3) A Notification of Compliance Status shall be submitted to EPA no later than July 19, 2014. [40 CFR §63.11225(a)(4) and 40 CFR §63.11214(c)]

2. Recordkeeping

Records shall be maintained consistent with the requirements of 40 CFR Part 63, Subpart JJJJJJ including the following [40 CFR §63.11225(c)]: copies of notifications and reports with supporting compliance documentation; 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; documentation of fuel type(s) used monthly by each boiler; the occurrence and duration of each malfunction of the boiler; and actions taken during periods of malfunction to minimize emissions and actions taken to restore the malfunctioning boiler to its usual manner of operation. Records shall be in a form suitable and readily available for expeditious review.

Note: EPA requires submission of Notification of Compliance Status (NOCS) reports for tune-ups and energy assessments through their electronic reporting system. [§63.1125(a)(4)(vi)]

E. Drying Kilns

Pleasant River operates three kilns to dry lumber produced at the facility. Kilns #1 and #3 each process at a rate of 141,312 board-feet per day (BF/day); and Kiln #2 processes at a rate of 105,984 BF/day. Pleasant River dries approximately 90% spruce and 10% fir in the kilns at this facility.

As previously licensed, Pleasant River shall not dry more than 130.0 MMBF/year of spruce and/or fir lumber in the Drying Kilns.

A site-specific Drying Kiln VOC emission study concluded with a VOC emission factor of 0.73 pounds per thousand board-feet (lb/MBF) from kiln-drying spruce and/or fir wood at the Pleasant River facility. Based on this emission factor and the licensed maximum annual drying production from the Drying Kilns of 130.0 MMBF/year, the total potential VOC emissions from the Drying Kilns is 47.5 tons/year.

To demonstrate compliance with the production cap and the tons/year emission limit, Pleasant River shall maintain a record for the Drying Kilns including the quantity of wood dried, species dried, drying dates, and calculated VOC emissions, determined monthly using the equation given below for drying spruce and/or fir species.

To Determine *Monthly* VOC Emissions from Kiln-Drying

VOC (lb/month) =	0.73	(lb per thousand-board-feet)
	x #	(throughput, in thousand-board-feet per month)

Prior to drying any species of wood other than spruce and/or fir in the kilns, Pleasant River shall contact the Department to assess what emission factor(s) may need to be used to account for VOC emissions.

The record of calculated VOC emissions from the Drying Kilns shall be maintained on both a monthly and a 12-month rolling total basis. The record shall also include the quantity of any wood air-dried, including identification of the species and drying dates.

F. Bagger Silo Cyclone

Shavings from the Pleasant River sawmill and planer mill processes are blown to the Bagger Silo, which is equipped with a cyclone to control particulate matter emissions from the process. Pleasant River shall maintain and operate the Bagger Silo Cyclone and Bagger Silo in a manner that minimizes visible emissions.

Visible emissions from the cyclone shall not exceed 10% opacity on a six-minute block average basis. Pleasant River shall inspect operations of the cyclones and the silo once per week and maintain a log of the condition of the cyclone and silo as well as any repairs made to either.

G. Ink Marking Process

Pleasant River makes use of an Ink Marking Process to label finished material, using approximately five gallons per year of ink in an ink jet printer. Pleasant River also uses less than five gallons per year of a water-based red ink to mark the grade of lumber before it is kiln dried. This ink evaporates in the drying process. The Ink Marking Process utilizes less than 50 gallons per year of coatings that have negligible volatility; therefore, the Ink Marking Process is considered an insignificant activity and is listed in this license for completeness purposes only.

H. Fugitive Emissions

Visible emissions from any fugitive emission source, including stockpiles and roadways, shall not exceed 20% opacity, except for up to five minutes in any one-hour period. Compliance shall be determined by an aggregate of the individual 15-second opacity observations which exceed 20% in any one hour.

I. General Process Emissions

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis, except for no more than one six-minute block average in a one-hour period.

J. Annual Emissions

1. Total Annual Emissions

Pleasant River shall be restricted to the following annual emissions, based on a 12-month rolling total. The tons per year limits were calculated based on the following:

- For Boiler #3A, a fuel use limit of no greater than 14,500 tons/year containing no more than 10% kiln-dried wood chips;
- For Boiler #3, a fuel use limit of 150,000 gal/year of #2 fuel oil @ 0.5% sulfur by weight; and

- Drying Kilns VOC emissions based on an annual throughput of no greater than 130.0 MMBF/year and an emission factor of 0.73 lb/MBF.

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

	PM	PM_{10}	SO_2	NO_x	CO	VOC
Boiler #3A	16.0	14.6	1.8	17.4	42.2	1.2
Boiler #3	0.9	0.9	0.9	2.6	0.4	0.1
Drying Kilns	--	--	--	--	--	47.5
Total TPY	**16.9**	**15.5**	**2.7**	**20.0**	**42.6**	**48.8**

2. Greenhouse Gases

Greenhouse gases are considered regulated pollutants as of January 2, 2011, through 'Tailoring' revisions made to EPA's *Approval and Promulgation of Implementation Plans,* 40 CFR Part 52, Subpart A, §52.21, *Prevention of Significant Deterioration of Air Quality* rule. Greenhouse gases, as defined in 06-096 CMR 100 (as amended), are the aggregate group of the following gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. For licensing purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO_2e).

Based on the facility's fuel use limits; the worst case emission factors from AP-42, IPCC (Intergovernmental Panel on Climate Change), and *Mandatory Greenhouse Gas Reporting*, 40 CFR Part 98; and the global warming potentials contained in 40 CFR Part 98; Pleasant River is below the major source threshold of 100,000 tons of CO_2e per year. Therefore, no additional licensing requirements are needed to address GHG emissions at this time.

III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source shall be determined by the Department on a case-by case basis. In accordance with 06-096 CMR 115, an ambient air quality impact analysis is not required for a minor source if the total emissions of any pollutant released do not exceed the following levels and there are no extenuating circumstances:

Pollutant	Tons/Year
PM_{10}	25
SO_2	50
NO_x	50
CO	250

The total facility licensed emissions are below the emission levels contained in the table above and there are no extenuating circumstances; therefore, an ambient air quality impact analysis is not required as part of this license.

ORDER

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

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

The Department hereby grants Air Emission License A-704-71-H-R/A subject to the following conditions.

Severability. The invalidity or unenforceability of any provision of this License or part thereof shall not affect the remainder of the provision or any other provisions. This License shall be construed and enforced in all respects as if such invalid or unenforceable provision or part thereof had been omitted.

STANDARD CONDITIONS

(1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions (38 M.R.S.A. §347-C).

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

(3) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both. [06-096 CMR 115]

(4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any

period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 CMR 115]

(5) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 M.R.S.A. §353-A. [06-096 CMR 115]

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

(7) The licensee shall maintain and operate all emission units and air pollution systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions. [06-096 CMR 115]

(8) The licensee shall maintain sufficient records to accurately document compliance with emission standards and license conditions and shall maintain such records for a minimum of six (6) years. The records shall be submitted to the Department upon written request. [06-096 CMR 115]

(9) The licensee shall comply with all terms and conditions of the air emission license. The filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for a renewal of a license or amendment shall not stay any condition of the license. [06-096 CMR 115]

(10) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license. [06-096 CMR 115]

(11) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:

A. Perform stack testing to demonstrate compliance with the applicable emission standards under circumstances representative of the facility's normal process and operating conditions:

1. Within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring, or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions; or

2. Pursuant to any other requirement of this license to perform stack testing.

B. Install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

C. Submit a written report to the Department within thirty (30) days from date of test completion.

[06-096 CMR 115]

(12) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicate emissions in excess of the applicable standards, then:

A. Within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and

B. The days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

C. The licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

[06-096 CMR 115]

(13) Notwithstanding any other provisions in the State Implementation Plan approved by the EPA or Section 114(a) of the Clean Air Act (CAA), any credible evidence may be used for the purpose of establishing whether a person has violated or is in violation of any statute, regulation, or Part 70 license requirement. [06-096 CMR 115]

(14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emissions and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next state government working day, whichever is later, of such occasions where such changes result in an increase of emissions. The

licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 CMR 115]

(15) Upon written request from the Department, the licensee shall establish and maintain such records; make such reports; install, use, and maintain such monitoring equipment; sample such emissions in accordance with such methods, at such locations, at such intervals, and in such a manner as the Department shall prescribe; and provide other information as the Department may reasonably require to determine the licensee's compliance status. [06-096 CMR 115]

SPECIFIC CONDITIONS

(16) **Boiler #3A**

A. Fuel

1. Total fuel use for Boiler #3A shall not exceed 14,500 tons/year of wood fuel combusted in Boiler #3A, containing no more than 10% kiln-dried wood chips. [06-096 CMR 115, BPT]

2. Compliance shall be demonstrated by recordkeeping documenting fuel use both on a monthly and 12-month rolling total basis. Documentation shall include the type of fuel used and the moisture content of the fuel. [06-096 CMR 115, BPT]

B. Emissions shall not exceed the following:

PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
4.80	4.38	0.52	5.15	12.51	0.35

C. Visible emissions from Boiler #3A shall not exceed 20% opacity on a six-minute block average basis, except for no more than one six-minute block average in a three-hour period. [06-096 CMR 101]

D. Pleasant River shall comply with all applicable requirements of 40 CFR Part 60, Subpart Dc applicable to Boiler #3A including, but not limited to, the following: Pleasant River shall record and maintain records of the amount of fuel combusted during each calendar month. [40 CFR §60.48c (g)(2)]

E. Visible emissions from the fuel handling system associated with Boiler #3A shall not exceed an opacity of 20% on a six-minute block average basis, except for no more than one six-minute block average in a one-hour period. [06-096 CMR 101, Section 2(B)(3)(d)]

(17) **Boiler #3**

A. Fuel

1. Total fuel use for Boiler #3 shall not exceed 150,000 gallons of #2 fuel oil per year based on a twelve-month rolling total.

2. Prior to July 1, 2016, or on the date specified in 38 MRSA §603-A(2)(A)(3), the #2 fuel oil fired in the boilers shall be ASTM D396 compliant (max. sulfur content of 0.5% by weight). [06-096 CMR 115, BPT]

3. Beginning July 1, 2016, or on the date specified in 38 MRSA §603-A(2)(A)(3), the facility shall fire #2 fuel oil with a maximum sulfur content of 0.005% by weight (50 ppm). [38 MRSA §603-A(2)(A)(3)]

4. Beginning January 1, 2018 or on the date specified in 38 MRSA §603-A(2)(A)(3), the facility shall fire #2 fuel oil with a maximum sulfur content of 0.0015% by weight (15 ppm). [38 MRSA §603-A(2)(A)(3)]

5. Compliance shall be demonstrated by fuel records from the supplier showing the quantity, type, and the percent sulfur of the fuel delivered. Records of annual fuel use shall be kept on a monthly and 12-month rolling total basis. [06-096 CMR 115, BPT]

B. Emissions shall not exceed the following:

PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
1.67	1.67	10.46	5.23	0.75	0.05

C. Visible emissions from Boiler #3 shall not exceed 20% opacity on a six-minute block average, except for no more than two six-minute block averages in a three-hour period. [06-096 CMR 101]

(18) **Boilers #3A and #3: NESHAP (40 CFR Part 63, Subpart JJJJJJ)**

A. Compliance Dates, Notifications, and Work Practice Requirements

1. Initial Notification of Compliance

An Initial Notification submittal to EPA was due no later than January 20, 2014. [40 CFR §63.11225(a)(2)]

2. Boiler Tune-Up Program

   a. A boiler tune-up program shall be implemented to include the initial tune-up of applicable boilers no later than March 21, 2014. [40 CFR §63.11196(a)(1)]

   b. The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below: [06-096 CMR 115, BPT]

      (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 for boilers greater than 5 MMBtu/hour or 72 months from the previous inspection for oil fired boilers less than 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 CFR §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 CFR §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 for boilers greater than 5 MMBtu/hour or 72 months from the previous inspection for oil fired boilers less than 5 MMBtu/hour, boilers with oxygen trim systems, seasonal boilers, and limited use boilers. [40 CFR §63.11223(b)(3)]

      (4) Optimize total emissions of CO, consistent with manufacturer's specifications. [40 CFR §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 CFR §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 CFR §63.11223(b)(7)]

c. After conducting the initial boiler tune-up, a Notification of Compliance Status shall be submitted to EPA no later than July 19, 2014. [40 CFR §63.11225(a)(4) and 40 CFR §63.11214(b)]

d. Pleasant River shall implement a boiler tune-up program after the initial tune-up and initial compliance report (called a Notification of Compliance Status) has been submitted. [06-096 CMR 115, BPT]

(1) Each tune-up shall be conducted at a frequency specified by the rule and based on the size, age, and operations of the boiler, as summarized in the following table:

Boiler Category	**Tune-Up Frequency**
New or Existing Oil, Biomass, and Coal fired boilers that are not designated as "Boilers with Less Frequent Tune-up Requirements" listed below	Every 2 years
New and Existing Oil, Biomass, and Coal fired Boilers with Less Frequent Tune-up Requirements	
Seasonal (see definition §63.11237)	Every 5 years
Limited use (see definition §63.11237)	Every 5 years
With a heat input capacity of <5MMBtu/hr	Every 5 years
Boiler with oxygen trim system which maintains an optimum air-to-fuel ratio that would otherwise be subject to a biennial tune up	Every 5 years

[40 CFR §63.11223(a) and Table 2]

(2) The tune-up compliance report shall be maintained onsite and, if requested, submitted to EPA. The report shall contain the concentration of CO (ppmv) and oxygen (volume %) in the effluent stream, measured at high fire or typical operating load, before and after the boiler tune-up; a description of any corrective actions taken as part of the tune-up of the boiler; and the types and amounts of fuels used over the 12 months prior to the tune-up of the boiler. [40 CFR §63.11223(b)(6)] The compliance report shall also include the company name and address; a compliance statement signed by a responsible official certifying truth, accuracy, and completeness; and a description of any deviations and corrective actions. [40 CFR §63.11225(b)]

3. Energy Assessment

a. A one-time energy assessment shall be performed by a qualified energy assessor on Boilers #3A and #3 no later than March 21, 2014. [40 CFR §63.11196(a)(3)]

b. The energy assessment shall include a visual inspection of each boiler system; an evaluation of operating characteristics of affected boiler systems, specifications of energy use systems, operating and maintenance procedures, and unusual operating constraints; an inventory of major energy use systems consuming energy from affected boilers and which are under control of the boiler owner or operator; a review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage; a list of major energy conservation measures that are within the facility's control; a list of the energy savings potential of the energy conservation measures identified; and a comprehensive report detailing the ways to improve efficiency, the cost of specific improvements, benefits, and the time frame for recouping those investments. [40 CFR §63, Table 2(4)]

c. A Notification of Compliance Status shall be submitted to EPA no later than July 19, 2014. [40 CFR §63.11225(a)(4) and §63.11214(c)]

B. Recordkeeping

Records shall be maintained consistent with the requirements of 40 CFR Part 63, Subpart JJJJJJ including the following [40 CFR §63.11225(c)]: copies of notifications and reports with supporting compliance documentation; 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; documentation of fuel type(s) used monthly by each boiler; the occurrence and duration of each malfunction of the boiler; and actions taken during periods of malfunction to minimize emissions and actions taken to restore the malfunctioning boiler to its usual manner of operation. Records shall be in a form suitable and readily available for expeditious review. [06-096 CMR 115, BPT]

Note: EPA requires submission of Notification of Compliance Status (NOCS) reports for tune-ups and energy assessments through their electronic reporting system. [40 CFR §63.1125(a)(4)(vi)]

(19) **Drying Kilns**

A. Pleasant River shall not dry more than 130.0 MMBF/year of spruce and/or fir lumber in the Drying Kilns.

B. Total VOC emissions from the Drying Kilns shall not exceed 47.5 tons/year.

C. To demonstrate compliance with the production cap and the tons/year emission limit, Pleasant River shall maintain a record for the Drying Kilns including the quantity of wood dried, species dried, drying dates, and

calculated VOC emissions, determined monthly using the equation given below for the drying of spruce and/or fir species.

To Determine *Monthly* VOC Emissions from Kiln-Drying

VOC (lb/month) = 0.73 (lb per thousand-board-feet)
x # (throughput, in thousand-board-feet per month)

Prior to drying any species of wood other than spruce and/or fir in the kilns, Pleasant River shall contact the Department to assess what emission factor(s) may need to be used to account for VOC emissions.

The record of calculated VOC emissions from the Drying Kilns shall be maintained on both a monthly and a 12-month rolling total basis. The record shall also include the quantity of any wood air-dried, including identification of the species and drying dates.

[06-096 CMR 115, BPT]

(20) **Bagger Silo Cyclone**

A. Visible emissions from the Bagger Silo Cyclone shall not exceed 10% opacity on a six-minute block average basis.

B. Pleasant River shall inspect operations of the cyclones and the silo once per week and maintain a log of the condition of the cyclone and silo as well as any repairs and maintenance performed to either.

(21) **Fugitive Emissions**

Visible emissions from any fugitive emission source, including stockpiles and roadways, shall not exceed 20% opacity, except for up to five minutes in any one-hour period. Compliance shall be determined by an aggregate of the individual 15-second opacity observations which exceed 20% in any one hour. [06-096 CMR 101]

(22) **General Process Sources**

Visible emissions from any general process source shall not exceed 20% opacity on a six-minute block average basis, except for no more than one six-minute block average in a one-hour period. [06-096 CMR 101]

(23) **Annual Emission Statement**

In accordance with *Emission Statements*, 06-096 CMR 137 (as amended), the licensee shall annually report to the Department the information necessary to

accurately update the State's emission inventory by means of either of the following:

A. A computer program and accompanying instructions supplied by the Department; or

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

The emission statement must be submitted as specified by the date in 06-096 CMR 137.

(24) Pleasant River shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S.A. §605).

DONE AND DATED IN AUGUSTA, MAINE THIS 28 DAY OF March , 2014.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Cone for
PATRICIA W. AHO, COMMISSIONER

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

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

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: October 29, 2013
Date of application acceptance: October 31, 2013

Date filed with the Board of Environmental Protection:

This Order prepared by Jane E. Gilbert, Bureau of Air Quality.

Filed
MAR 31 2014
State of Maine
Board of Environmental Protection