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

DEPARTMENT ORDER

Pleasant River Lumber Company **Piscataquis County** **Dover Foxcroft, Maine** **A-704-71-L-R/A**	**Departmental** **Findings of Fact and Order** **Air Emission License** **Renewal and** **After-the-Fact Amendment**

FINDINGS OF FACT

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

I. REGISTRATION

A. Introduction

Pleasant River Lumber Company (Pleasant River) has applied to renew their Air Emission License for the operation of emission sources associated with their lumber mill. Additionally, Pleasant River has requested an amendment to their license in order to add an emergency generator, a fire pump, and a fuel storage tank, after-the-fact.

The equipment addressed in this license is located at 432 Milo Road, Dover-Foxcroft, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

Equipment	Max. Capacity (MMBtu/hr)	Maximum Firing Rate	Fuel Type	Date of Manuf.	Date of Install.	Stack #
Boiler #3	6.30	45 gal/hr	Distillate Fuel	2022	2023	#3
Boiler #3A	24.62	2.15 ton/hr	Wood *	1992	2006	Centrifugal Separator

*Assumed moisture content of 36.7% by weight or equivalent

Stationary Engines

Equipment	Max. Input Capacity	Rated Output Capacity	Fuel Type	Firing Rate (gal/hr)	Date of Manuf.	Date of Install.
Fire Pump*	1.3 MMBtu/hr	149 HP	Distillate Fuel	9.5	2006	2006
Generator*	1.0 MMBtu/hr	100 kW	Distillate Fuel	7.4	1995	2006

* New to license

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

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

Process Equipment

Equipment	Production Rate	Pollution Control Equipment	Stack #
Kiln #1	141,312 BF/day	N/A	Fugitive
*Kiln #2**	*105,984 BF/day*		
Kiln #3	141,312 BF/day		
Kiln #4	273,973 BF/day		
Bagger Silo	10,000 tons/yr	Centrifugal Separator	

* Removed from license

Bulk Petroleum Storage Tanks

Equipment	Capacity (gallons)	Product Stored	Tank Type	Construction Date
Tank #1*	15,000	Distillate Fuel	Double walled, above ground, fixed	1997

* New to license

C. Definitions

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

Distillate Fuel means the following:

· Fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials (ASTM) in ASTM D396;

- Diesel fuel oil numbers 1 or 2, as defined in ASTM D975;
- Kerosene, as defined in ASTM D3699;
- Biodiesel, as defined in ASTM D6751; or
- Biodiesel blends, as defined in ASTM D7467.

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

D. Application Classification

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

Pleasant River has applied to renew currently licensed emission units as well as modify their license as addressed in Section I(A) above.

The modification of a minor source is considered a major or minor modification based on whether or not expected emission increases exceed the "Significant Emissions" levels as defined in the Department's *Definitions Regulation*, 06-096 Code of Maine Rules (C.M.R.) ch. 100. The emission increases are determined by subtracting the current licensed annual emissions preceding the modification from the maximum future licensed annual emissions, as follows:

Pollutant	Current License (tpy)	Future License (tpy)	Net Change (tpy)	Significant Emissions Levels
PM	27.2	26.9	-0.3	100
PM_{10}	24.7	25.7	+1.0	100
$PM_{2.5}$	-	16.1	-	100
SO_2	2.7	2.6	-0.1	100
NO_x	34.8	35.2	+0.4	100
CO	63.9	63.8	-0.1	100
VOC	49.4	49.3	-0.1	100

Therefore, this license is considered to be both a renewal and a minor modification and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules C.M.R. ch. 115.

E. Facility Classification

With the annual fuel limit of 18,500 tons/year of biomass based on an average moisture content of 36.7% by weight to be fired in Boiler #3A, 150,000 gallons per year to be fired in Boiler #3, and an annual limit of 47.5 tons/year of VOC from the kilns, the facility is licensed as follows:

- As a synthetic minor source of air emissions for criteria pollutants, because Pleasant River is subject to license restrictions that keep facility emissions below major source thresholds for VOC; and
- As an area source of hazardous air pollutants (HAP), because the licensed emissions are below the major source thresholds for HAP.

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

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license, the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in *Definitions Regulation*, 06-096 C.M.R. ch. 100. Separate control requirement categories exist for new and existing equipment.

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

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. Boilers #3 and #3A

Pleasant River operates Boiler #3 for steam to supplement Boiler #3A during periods of high demand. Boiler #3 is rated at 6.30 MMBtu/hr and fires distillate fuel. The boiler was installed in 2023 and exhausts through its own stack, Stack #3.

Pleasant River operates Boiler #3A to provide steam for the drying kilns and sawmill. The boiler is rated at 24.62 MMBtu/hr and fires wood. The boiler was installed in 2006. Exhaust from Boiler #3A is controlled by a centrifugal separator to reduce particulate matter (PM) emissions. Boiler #3A exhausts through its own stack, a 50-foot above-ground-level stack designated Stack #3A. Boiler #3A is licensed to burn 18,500 tons/yr of biomass containing

35% kiln-dried wood chips (approximately 12% moisture) with 65% green saw dust (approximately 50% moisture) for a total average moisture content of approximately 36.7% by weight.

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

1. BPT Findings

The BPT emission limits for Boiler #3 were based on the following:

PM	–	0.08 lb/MMBtu, 06-096 C.M.R. ch. 115, BPT
PM_{10}	–	2.38 lb/1,000 gal based on AP-42 Table 1.3-2 & Table 1.3-7 dated 5/10
$PM_{2.5}$	–	2.13 lb/1,000 gal based on AP-42 Table 1.3-2 & Table 1.3-7 dated 5/10
SO_2	–	based on firing distillate fuel with a maximum sulfur content of 0.0015% by weight
NO_x	–	20 lb/1,000 gal based on AP-42 Table 1.3-1 dated 5/10
CO	–	5 lb/1,000 gal based on AP-42 Table 1.3-1 dated 5/10
VOC	–	0.34 lb/1,000 gal based on AP-42 Table 1.3-3 dated 5/10
Visible Emissions	–	06-096 C.M.R. ch. 101

The BPT emission limits for Boiler #3A were based on the following with any AP-42 values modified by the ratio of wet to dry wood as calculated in A-704-71-I-A (10/27/17):

PM	–	0.248 lb/MMBtu based on a weighted ratio of values from AP-42 Table 1.6-1 dated 4/22
PM_{10}	–	0.242 lb/MMBtu based on a weighted ratio of values from AP-42 Table 1.6-1 dated 4/22
$PM_{2.5}$	–	0.151 lb/MMBtu based on a weighted ratio of values from AP-42 Table 1.6-1 dated 4/22
SO_2	–	0.025 lb/MMBtu based on AP-42 Table 1.6-2 dated 4/22
NO_x	–	0.315 lb/MMBtu based on a weighted ratio of values from AP-42 Table 1.6-2 dated 4/22
CO	–	0.60 lb/MMBtu based on AP-42 Table 1.6-2 dated 4/22
VOC	–	0.017 lb/MMBtu based on AP-42 Table 1.6-3 dated 4/22
Visible Emissions	–	06-096 C.M.R. ch. 101

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

Unit	Pollutant	lb/MMBtu
Boiler #3	PM	0.08
Boiler #3A	PM	0.25

Unit	PM (lb/hr)	PM_{10} (lb/hr)	$PM_{2.5}$ (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #3	0.50	0.11	0.10	0.01	0.90	0.23	0.02
Boiler #3A	6.11	5.96	3.72	0.62	7.76	14.77	0.42

Pleasant River shall be limited to firing no more than 18,500 tons of wood (at approximately 36-38% moisture by weight or equivalent) in Boiler #3A on a 12-month rolling total basis.

Pleasant River shall be limited to firing now more than 150,000 gallons of distillate fuel per year in Boiler #3 on a 12-month rolling total basis.

2. Visible Emissions

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

Visible emissions from Boiler #3A shall not exceed 30% opacity on a six-minute block average basis, except for periods of startup, shutdown, or malfunction during which time Pleasant River shall either meet the normal operating visible emissions standard or the following alternative visible emissions standard.

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

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

Due to the size of Boiler #3, it is not subject to *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* 40 C.F.R. Part 60, Subpart Dc (Subpart Dc) for units greater than 10 MMBtu/hr manufactured after June 9, 1989. [40 C.F.R. § 60.40c]

Due to its size and date of manufacture, Boiler #3A is subject to Subpart Dc. Pleasant River shall comply with all requirements of Subpart Dc applicable to Boiler #3A including, but not limited to, the following:

Reporting and Recordkeeping

a. Since Boiler #3A only combusts wood, Pleasant River shall maintain records of the amount of fuel combusted during each calendar month. [40 C.F.R. § 60.48c(g)(2)]

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

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

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

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

a. Work Practice Requirements

(1) Boiler Tune-Up Program

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

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

Boiler Category	**Tune-Up Frequency**
New or Existing Oil and Biomass fired boilers that are not designated as "Boilers with Less Frequent Tune-up Requirements" (Boilers #3 and #3A)	Every 2 years

[40 C.F.R. § 63.11223(a) and Table 2]

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

1. As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection. [40 C.F.R. § 63.11223(b)(1)]
2. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 C.F.R. § 63.11223(b)(2)]
3. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection. [40 C.F.R. § 63.11223(b)(3)]
4. Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]
5. Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer. [40 C.F.R. § 63.11223(b)(5)]
6. If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up. [40 C.F.R. § 63.11223(b)(7)]

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

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

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

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

(2) Compliance Report

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

(i) Company name and address;

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

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

(iv) The following certifications, as applicable:

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

b. Recordkeeping

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

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

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

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

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

(2) Records shall be in a form suitable and readily available for expeditious review. Each record must be kept for 5 years following the date of each recorded action. Each record must be kept on-site or be accessible from a central location by

computer or other means that instantly provides access at the site for at least 2 years after the date of each recorded action. The records may be maintained off-site for the remaining 3 years. [40 C.F.R. § 63.11225(d)] Note: Standard Condition (8) of this license requires all records be retained for six years; therefore, the five-year record retention requirement of Subpart JJJJJJ is satisfied by compliance with the more stringent six-year requirement.

C. Generator and Fire Pump

Pleasant River operates an emergency generator. The emergency generator is a generator set consisting of an engine and an electrical generator. The emergency generator has an engine rated at 1.0 MMBtu/hr, which fires distillate fuel, and was manufactured in 1995.

Pleasant River operates a fire pump. The fire pump has an engine rated at 1.3 MMBtu/hr, which fires distillate fuel, and was manufactured in 2006.

1. BACT Findings

The following is a BACT analysis for control of emissions from the Generator and the Fire Pump.

a. Particulate Matter (PM, PM_{10}, $PM_{2.5}$)
Pleasant River fires only low-ash content fuel, distillate fuel, in the boilers and optimizes combustion conditions by following maintenance practices recommended by the manufacturer. Additional add-on pollution controls are not economically feasible.

BACT for PM/PM_{10}/$PM_{2.5}$ emissions from the Generator and the Fire Pump are the use of low-ash content fuel and the emission limits listed in the tables below.

b. Sulfur Dioxide (SO_2)
Pleasant River fires only distillate fuel with a sulfur content not to exceed 0.0015% by weight. The use of this fuel results in minimal emissions of SO_2, and additional add-on pollution controls are not economically feasible.

BACT for SO_2 emissions from the Generator and the Fire Pump is the use of ultra-low-sulfur distillate fuel and the emission limits listed in the tables below.

c. Nitrogen Oxides (NO_x)
There are several control strategies for the control of NO_x from distillate fuel-fired engines including Selective Catalytic Reduction (SCR), Selective Non-Catalytic Reduction (SNCR), and proper operation and maintenance of the engine.

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

BACT for NO_x emissions from the Generator and the Fire Pump is proper maintenance and operation of the unit and the emission limits listed in the tables below.

d. Carbon Monoxide (CO) and Volatile Organic Compounds (VOC)
There are several control strategies for the control of CO and VOC including oxidation catalysts, thermal oxidizers, and use of an oxygen trim system.

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

BACT for CO and VOC emissions from the Generator and the Fire Pump are the emission limits listed in the tables below.

e. Emission Limits

The BACT emission limits for the engines are based on the following:

$PM/PM_{10}/PM_{2.5}$	–	0.12 lb/MMBtu from 06-096 C.M.R. ch. 103
SO_2	–	Combustion of distillate fuel with a maximum sulfur content not to exceed 15 ppm (0.0015% sulfur by weight)
NO_x	–	4.41 lb/MMBtu from AP-42 Table 3.3-1 dated 4/25
CO	–	0.95 lb/MMBtu from AP-42 Table 3.3-1 dated 4/25
VOC	–	0.36 lb/MMBtu from AP-42 Table 3.3-1 dated 4/25
Visible Emissions	–	06-096 C.M.R. ch. 101

The BACT emission limits for the generators are the following:

Unit	PM (lb/hr)	PM_{10} (lb/hr)	$PM_{2.5}$ (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator	0.12	0.12	0.12	-	4.41	0.95	0.36
Fire Pump	0.16	0.16	0.16	-	5.76	1.24	0.47

Visible emissions from each of the emergency engines shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time Facility shall either meet the normal operating visible emissions standard or the following work practice standards and alternative visible emissions standard.

(1) The duration of the startup shall not exceed 30 minutes per event;
(2) Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and
(3) Pleasant River shall keep records of the date, time, and duration of each startup.

Use of the work practice standards and alternative visible emissions standard in lieu of the normal operating standard is limited to no more than once per day.

Note: This does not limit the engine to one startup per day. It only limits the use of the alternative emission standard to once per day.

2. Chapter 169

The Generator and the Fire Pump were installed prior to the effective date of *Stationary Generators*, 06-096 C.M.R. ch. 169 and are therefore exempt from this rule pursuant to section 1.

3. New Source Performance Standards (NSPS)

Due to the dates of manufacture of the compression ignition emergency engines listed above, the engines are not subject to the New Source Performance Standards (NSPS) *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (CI ICE),* 40 C.F.R. Part 60, Subpart IIII since the units were manufactured prior to April 1, 2006. [40 C.F.R. § 60.4200]

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

National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines, 40 C.F.R. Part 63, Subpart ZZZZ is applicable to the emergency engines listed above. The units are considered existing, emergency stationary reciprocating internal combustion engines at an area HAP source and are not subject to New Source Performance Standards regulations. EPA's August 9, 2010 memo (*Guidance Regarding Definition of Residential, Commercial, and Institutional Emergency Stationary RICE in the NESHAP for Stationary RICE*) specifically does not exempt these units from the federal requirements. [40 C.F.R. § 63.6585]

A summary of the currently applicable federal 40 C.F.R. Part 63, Subpart ZZZZ requirements is listed below.

a. Emergency Engine Designation and Operating Criteria

Under 40 C.F.R. Part 63, Subpart ZZZZ, a stationary reciprocating internal combustion engine (RICE) is considered an **emergency** stationary RICE (emergency engine) as long as the engine is operated in accordance with the following criteria. Operation of an engine outside of the criteria specified below may cause the engine to no longer be considered an emergency engine under 40 C.F.R. Part 63, Subpart ZZZZ, resulting in the engine being subject to requirements applicable to **non-emergency** engines.

(1) Emergency Situation Operation (On-Site)

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

- Use of an engine to produce power for critical networks or equipment (including power supplied to portions of a facility) because of failure or interruption of electric power from the local utility (or the normal power source, if the facility runs on its own power production);
- Use of an engine to mitigate an on-site disaster;
- Use of an engine to pump water in the case of fire, flood, natural disaster, or severe weather conditions; and
- Similar instances.

(2) Non-Emergency Situation Operation

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

(i) An emergency engine may be operated for a maximum of 100 hours per calendar year for maintenance checks and readiness testing, provided that the tests are recommended by federal, state, or local government; the manufacturer; the vendor; the regional transmission organization or equivalent balancing authority and transmission operator; or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE more than 100 hours per calendar year.

(ii) An emergency engine may be operated for up to 50 hours per calendar year for other non-emergency situations. **However, these operating hours are counted as part of the 100 hours per calendar year operating limit described in paragraph (2) and (2) (i) above.**

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

The Generator and the Fire Pump shall be limited to the usage outlined in 40 C.F.R. § 63.6640(f) and therefore may be classified as existing emergency stationary RICE as defined in 40 C.F.R. Part 63, Subpart ZZZZ. Failure to comply with all of the requirements listed in 40 C.F.R. § 63.6640(f) may cause these engines to not be considered emergency engines and therefore subject to all applicable requirements for non-emergency engines.

b. 40 C.F.R. Part 63, Subpart ZZZZ Requirements

(1) Operation and Maintenance Requirements
(40 C.F.R. § 63.6603(a) and Table 2(d))

	Operating Limitations
Compression ignition (distillate fuel) units: ***Generator*** ***Fire Pump***	- Change oil and filter every 500 hours of operation or within 1 year + 30 days of the previous change, whichever comes first; - Inspect the air cleaner every 1,000 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary; and - Inspect all hoses and belts every 500 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary.

The engines shall be operated and maintained according to the manufacturer's emission-related written instructions, or Pleasant River shall develop a maintenance plan which must provide to the extent practicable for the maintenance and operation of the engines in a manner consistent with good air pollution control practice for minimizing emissions.
[40 C.F.R. § 63.6625(e)]

(2) Optional Oil Analysis Program
Pleasant River has the option of utilizing an oil analysis program which complies with the requirements of § 63.6625(i) in order to extend the specified oil change requirement. If this option is used, Pleasant River must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for each engine. The analysis program must be part of the maintenance plan for each engine. [40 C.F.R. § 63.6625(i)]

(3) Non-Resettable Hour Meter Requirement
A non-resettable hour meter shall be installed and operated on each engine. [40 C.F.R. § 63.6625(f)]

(4) Startup Idle and Startup Time Minimization Requirements
During periods of startup, the facility must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 C.F.R. § 63.6625(h) and 40 C.F.R. Part 63, Subpart ZZZZ Table 2d]

(5) Annual Time Limit for Maintenance and Testing
As emergency engines, the units shall each be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise supply power as part of a financial arrangement with another entity). [40 C.F.R. § 63.6640(f)]

(6) Recordkeeping
Pleasant River shall keep records that include maintenance conducted on the engines and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason each engine was in operation during each time. [40 C.F.R. § 63.6655(f)]

D. Kilns

Pleasant River operates three kilns for drying of lumber used in their manufacturing process. Kilns #1 and #3 each process at a rate of 141,312 board-feet per day (BF/day); and Kiln #4 processes at a rate of 273,973 BF/day. The wood dried is primarily 90% spruce and 10% fir.

1. Criteria Pollutants

An emission factor of 0.73 lb of VOC per thousand board feet (MBF) was used based on a site-specific Drying Kiln VOC emissions study**.** Pleasant River shall be limited to the drying of no more than 130.0 MMBF per year, of spruce and/or fir lumber, based on a 12-month rolling total. Based on the emission factor and the licensed maximum annual drying production from the Drying Kilns, the total potential VOC emissions from the Drying Kilns is 47.5 tons/year.

2. Compliance with Production Cap

To demonstrate compliance with the production cap and the tons/year emissions limit, Pleasant River shall maintain a record for the Drying Kilns including quantity of wood dried, species dried, drying dates, and calculated VOC emissions determined by 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, including identification of the species and drying dates. Previously, Pleasant River had been required to maintain records of VOC emissions from air-dried wood. Emissions from air-dried wood is categorically exempt pursuant 06-096 C.M.R. ch. 115, Appendix B, Section A, 107 and shall not be further addressed in this license.

3. Hazardous Air Pollutants

Potential emissions of total HAP are estimated to be 14.75 tpy based on averaging the emission factors for white and black spruce contained in the *Handbook of Substance-Specific Information for National Pollutant Release Inventory Reporting,* also known as the NPRI Handbook published by the National Council for Air and Stream Improvement (NCASI). This total is predominantly comprised of acetaldehyde (5.62 tpy) and methanol (8.35 tpy). When reporting actual HAP emissions pursuant to 06-096 C.M.R. ch. 137, Pleasant River shall use the following emission factors (or other methods approved by the Department).

Pollutant	lb/MBF
Acetaldehyde	8.65×10^{-2}
Acrolein	1.15×10^{-3}
Benzene	1.55×10^{-5}
Formaldehyde	8.00×10^{-3}
Methanol	0.129
Methyl Isobutyl Ketone	2.55×10^{-3}
Toluene	2.50×10^{-4}

4. National Emission Standards for Hazardous Air Pollutants

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

E. Bagger Silo Cyclone

Shavings from the Pleasant River planer mill 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.

F. Ink Marking Process

Pleasant River makes use of an Ink Marking Process to label finished material, using approximately five gallons per year of ink using 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.

G. Tank #1

Tank #1 is a 15,000-gallon, above ground, horizontal, fixed roof, petroleum storage tank that stores distillate fuel to supply Boiler #3.

Based on the EPA's TANKS Emissions Estimation Software, Version 5 calculator, estimated uncontrolled potential emissions of VOC from Tank #1 are less than 0.1 ton/yr. This model calculates emissions based on emission factors and formulas contained in *Compilation of Air Emissions Factors from Stationary Sources*, AP-42, Volume I, Chapter 7. No other criteria pollutants are expected to be emitted from this tank.

1. BACT Findings

   VOC emissions may be controlled by using oxidation (thermal or catalytic), adsorption, or condensation. Due to the storage of distillate fuel and based on the calculated emissions estimate, expected emissions are extremely low; thus, the addition of control equipment would be economically infeasible.

   The Department has determined that BACT for Tank #1 is storage of only distillate fuel.

2. 06-096 C.M.R. ch. 111

   Tank #1 is not subject to the requirements of *Petroleum Liquid Storage Vapor Control*, 06-096 C.M.R. ch. 111, because it has a capacity less than 39,000 gallons and stores a product with a vapor pressure less than 10.5 kilopascals.

3. 06-096 C.M.R. ch. 118

   Tank #1 is not subject to the requirements of *Gasoline Dispensing Facilities Vapor Control*, 06-096 C.M.R. ch. 118, because it does not store gasoline.

4. 06-096 C.M.R. ch. 133

   Tank #1 is not subject to the requirements of *Petroleum Liquids Transfer Vapor Recovery at Bulk Gasoline Plants*, 06-096 C.M.R. ch. 133, because Pleasant River is not a bulk gasoline plant and Tank #1 does not store gasoline.

5. 06-096 C.M.R. ch. 170

   Tank #1 is not subject to the requirements of *Degassing of Petroleum Storage Tanks, Marine Vessels, and Transport Vessels*, 06-096 C.M.R. ch. 170, because it has a capacity of less than 39,000 gallons and is not a transport vessel or marine vessel.

6. 06-096 C.M.R. ch. 171

   Tank #1 is not subject to the requirements of *Control of Petroleum Storage Facilities*, 06-096 C.M.R. ch. 171, because Pleasant River is not a petroleum storage facility as defined by the rule.

7. 40 C.F.R. Part 60, Subpart Kb

   Tank #1 is not subject to the requirements of *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced After July 23, 1984, and On or Before October 4, 2023*, 40 C.F.R. Part 60, Subpart Kb, because the true vapor pressure of the product stored is less than 15.0 kilopascals.
   [40 C.F.R. § 60.110b(b)]

8. 40 C.F.R. Part 60, Subpart Kc

   Tank #1 is not subject to the requirements of *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for which Construction, Reconstruction, or Modification Commenced After October 4, 2023*, 40 C.F.R. Part 60, Subpart Kc (Subpart Kc).

   Tank #1 was installed prior to October 15, 2024. Existing storage vessels can become subject to Subpart Kc if modified. Pursuant to 40 C.F.R. § 60.110c(e), a modification occurs if the storage vessel is used to store a volatile organic liquid (VOL) that has a greater maximum true vapor pressure than all VOL historically stored or permitted to be stored. Tank #1 has historically stored distillate fuel and is limited to only storing distillate fuel. Therefore, Tank #1 is not subject to Subpart Kc provided it continues to store the products for which it is currently licensed. Pleasant River shall maintain records of the type and maximum true vapor pressure for each product stored in Tank #1.

H. General Process Emissions

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

I. Fugitive Emissions

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

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

J. Emission Statements

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

1. The amount of wood fired (at approximately 36.7% moisture by weight) in Boiler #3A on a monthly basis;
2. The amount of distillate fuel fired in Boiler #3 on a monthly basis;
3. The sulfur content of the distillate fuel fired in Boiler #3;
4. Annual emissions from Tank #1;
5. Total Kilns throughput on a monthly basis;
6. Calculations of the VOC and/or HAP emissions from the Kilns on a 12-month rolling total basis; and
7. Hours each emission unit was operating on a monthly basis.

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

K. Annual Emissions

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

- Firing 18,500 tons/yr wood (based on a moisture content of approximately 36.7% by weight) in the Boiler #3A;

- Firing 150,000 gal/yr distillate fuel in Boiler #3;
- Operating the Generator and the Fire Pump each for 100 hr/yr of non-emergency operation; and
- A VOC limit of 47.5 tpy from the kilns.

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

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

	PM	PM_{10}	$PM_{2.5}$	SO_2	NO_x	CO	VOC
Boiler #3	0.8	0.2	0.2	-	1.5	0.4	-
Boiler #3A	26.1	25.5	15.9	2.6	33.2	63.2	1.8
Generator	-	-	-	-	0.2	0.1	-
Fire Pump	-	-	-	-	0.3	0.1	-
Drying Kilns	-	-	-	-	-	-	47.5
Total TPY	**26.9**	**25.7**	**16.1**	**2.6**	**35.2**	**63.8**	**49.3**

Pollutant	Tons/year
Single HAP	9.9
Total HAP	24.9

III. AMBIENT AIR QUALITY ANALYSIS

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

Pollutant	Tons/Year
PM_{10}	25
$PM_{2.5}$	15
SO_2	50
NO_x	50
CO	250

The total licensed annual emissions for the facility exceed the emission levels contained in the table above; however, since this is mainly driven by a correction to the PM_{10} and $PM_{2.5}$ emission factors and there are no other extenuating circumstances, an ambient air quality impact analysis is not required as part of this license.

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

ORDER

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

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

The Department hereby grants Air Emission License A-704-71-L-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. § 347-C).

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

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

(4) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request. [06-096 C.M.R. ch. 115]

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

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

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

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

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

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

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

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

1. Within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment

may be operating out of compliance with emission standards or license conditions; or

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

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

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

[06-096 C.M.R. ch. 115]

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

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

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

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

[06-096 C.M.R. ch. 115]

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

(14) The licensee shall maintain records of malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emissions unit itself that would affect emissions and that is not consistent with the terms and conditions of the air emission license. The licensee shall notify the Department within two (2) days or the next

state working day, whichever is later, of such occasions where such changes result in an increase of emissions. The licensee shall report all excess emissions in the units of the applicable emission limitation. [06-096 C.M.R. ch. 115]

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

(16) The licensee shall notify the Department within 48 hours and submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component causes a violation of any emission standard (38 M.R.S. § 605). [06-096 C.M.R. ch. 115]

SPECIFIC CONDITIONS

(17) **Boilers #3 and #3A**

A. Fuel [06-096 C.M.R. ch. 115, BPT]

1. Total fuel use for Boiler #3A shall not exceed 18,500 ton/yr of wood fuel containing no more than 35% kiln-dried wood, for a total average moisture content of no less than 36.7% by weight.
2. Total fuel use for Boiler #3 shall not exceed 150,000 gallons of distillate fuel per year on a 12-month rolling calendar basis.
3. The facility shall not purchase or otherwise obtain distillate fuel with a maximum sulfur content that exceeds 0.0015% by weight (15 ppm).
4. Compliance shall be demonstrated by fuel records showing the quantity, type, and the percent sulfur of the fuel delivered or fuel used. Records of annual fuel use shall be kept on a monthly and 12-month rolling total basis. Fuel sulfur content compliance shall be demonstrated by fuel delivery receipts from the supplier, a statement from the supplier that the fuel delivered meets Maine's fuel sulfur content standards, certificate of analysis, or testing of fuel in the tank on-site.

B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler #3	PM	0.08	06-096 C.M.R. ch. 115, BPT
Boiler #3A	PM	0.25	

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

Emission Unit	PM (lb/hr)	PM_{10} (lb/hr)	$PM_{2.5}$ (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler #3	0.50	0.11	0.10	0.01	0.90	0.23	0.02
Boiler #3A	6.11	5.96	3.72	0.62	7.72	14.77	0.42

D. Visible emissions from Boiler #3 shall not exceed 20% opacity on a six-minute block average basis. [06-096 C.M.R. ch. 101, § 4(A)(2)]

E. Visible emissions from Boiler #3A shall not exceed 30% opacity on a six-minute block average basis, except for periods of startup, shutdown, or malfunction during which time Pleasant River shall either meet the normal operating visible emissions standard or the following alternative visible emissions standard.

During periods of startup, shutdown, or malfunction, visible emissions shall not exceed 40% opacity on a six-minute block average basis. This alternative visible emissions standard shall not be utilized for more than two hours (20 consecutive six-minute block averages) per event. If this alternative visible emissions standard is utilized, Pleasant River shall keep records of the date, time, and duration of all startup, shutdown, and malfunction events and provide them to the Department upon request. [06-096 C.M.R. ch. 101, § 4(A)(5)(a)]

F. Pleasant River shall comply with all requirements of 40 C.F.R. Part 60, Subpart Dc applicable to Boiler #3A including, but not limited to, the following record keeping requirement:

Since Boiler #3A only combusts wood, Pleasant River shall maintain records of the amount of fuel combusted during each calendar month. [40 C.F.R. § 60.48c(g)(2)]

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

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

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

Boiler Category	Tune-Up Frequency
New and Existing Oil and Biomass fired boilers that are not designated as "Boilers with less frequent tune up requirements" (Boilers #3 and #3A)	Every 2 years

[40 C.F.R. § 63.11223(a) and Table 2]

b. The boiler tune-up program, conducted to demonstrate continuous compliance, shall be performed as specified below:
   (1) As applicable, inspect the burner, and clean or replace any component of the burner as necessary. Delay of the burner inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection. [40 C.F.R. § 63.11223(b)(1)]
   (2) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern, consistent with the manufacturer's specifications. [40 C.F.R. § 63.11223(b)(2)]
   (3) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure it is correctly calibrated and functioning properly. Delay of the inspection until the next scheduled shutdown is permitted, not to exceed 36 months from the previous inspection. [40 C.F.R. § 63.11223(b)(3)]
   (4) Optimize total emissions of CO, consistent with manufacturer's specifications. [40 C.F.R. § 63.11223(b)(4)]
   (5) Measure the concentration in the effluent stream of CO in parts per million by volume (ppmv), and oxygen in volume percent, before and after adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer.
   [40 C.F.R. § 63.11223(b)(5)]
   (6) If a unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 days of start-up.
   [40 C.F.R. § 63.11223(b)(7)]

c. Tune-Up Report: A tune-up report shall be maintained onsite and submitted to the Department and EPA upon request. The report shall contain the following information:
   (1) The concentration of CO in the effluent stream (ppmv) and oxygen (volume percent) measured at high fire or typical operating load both **before** and **after** the boiler tune-up;
   (2) A description of any corrective actions taken as part of the tune-up of the boiler; and
   (3) The types and amounts of fuels used over the 12 months prior to the tune-up of the boiler, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel use by each unit. [40 C.F.R. § 63.11223(b)(6)]

2. Compliance Report

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

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

3. Recordkeeping

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

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

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

(18) **Generator and Fire Pump**

A. The fuel sulfur content for the Generator and the Fire Pump shall be limited to 0.0015% sulfur by weight. Compliance shall be demonstrated by fuel delivery receipts from the supplier, fuel supplier certification, certificate of analysis, or testing of the fuel in the tank on-site. [06-096 C.M.R. ch. 115, BACT]

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

Unit	PM (lb/hr)	PM_{10} (lb/hr)	$PM_{2.5}$ (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Generator	0.12	0.12	0.12	-	4.41	0.95	0.36
Fire Pump	0.16	0.16	0.16	-	5.76	1.24	0.47

C. Visible Emissions

Visible emissions from both the Generator and the Fire Pump shall not exceed 20% opacity on a six-minute block average basis except for periods of startup during which time Pleasant River shall either meet the normal operating visible emissions standard or the following work practice standards and alternative visible emissions standard.

1. The duration of the startup shall not exceed 30 minutes per event;
2. Visible emissions shall not exceed 50% opacity on a six-minute block average basis; and
3. Pleasant River shall keep records of the date, time, and duration of each startup.

Use of the work practice standards and alternative visible emissions standard in lieu of the normal operating standard is limited to no more than once per day.

Note: This does not limit the engine to one startup per day. It only limits the use of the alternative emission standard to once per day.

[06-096 C.M.R. ch. 101, § 4(A)(4)]

D. The Generator and the Fire Pump shall meet the applicable requirements of 40 C.F.R. Part 63, Subpart ZZZZ, including the following: [incorporated under 06-096 C.M.R. ch. 115, BACT]

1. Pleasant River shall meet the following operational limitations for each of the compression ignition emergency engines:

   a. Change the oil and filter every 500 hours of operation or within 1 year + 30 days of the previous change, whichever comes first;
   b. Inspect the air cleaner every 1,000 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary; and
   c. Inspect the hoses and belts every 500 hours of operation or within 1 year + 30 days of the previous inspection, whichever comes first, and replace as necessary.

   Records shall be maintained documenting compliance with the operational limitations.

   [40 C.F.R. § 63.6603(a) and Table 2(d); and 06-096 C.M.R. ch. 115]

2. Oil Analysis Program Option
   Pleasant River has the option of utilizing an oil analysis program which complies with the requirements of § 63.6625(i) in order to extend the specified oil change requirement. If this option is used, Pleasant River must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for each engine. The analysis program must be part of the maintenance plan for each engine. [40 C.F.R. § 63.6625(i)]

3. Non-Resettable Hour Meter
   A non-resettable hour meter shall be installed and operated on each engine. [40 C.F.R. § 63.6625(f)]

4. Maintenance, Testing, and Non-Emergency Operating Situations

   a. As emergency engines, the units shall each be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving, demand response, or to generate income for a facility by providing power to an electric grid or otherwise to supply power as part of a financial arrangement with another entity). These limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written logs) of all engine operating hours. [40 C.F.R. § 63.6640(f) and 06-096 C.M.R. ch. 115]

b. Pleasant River shall keep records that include maintenance conducted on the engines and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the number of hours each unit operated for emergency purposes, the number of hours each unit operated for non-emergency purposes, and the reason each engine was in operation during each time. [40 C.F.R. §§ 63.6655(e) and (f)]

5. Operation and Maintenance
The engines shall be operated and maintained according to the manufacturer's emission-related written instructions, or Pleasant River shall develop a maintenance plan which provides to the extent practicable for the maintenance and operation of each engine in a manner consistent with good air pollution control practice for minimizing emissions. [40 C.F.R. § 63.6625(e)]
Pleasant River shall have available for review by the Department a copy of the manufacturer's emission-related written instructions for engine operation and maintenance. [06-096 C.M.R. ch. 115, BPT]

6. Startup Idle and Startup Time Minimization
During periods of startup, the facility must minimize each engine's time spent at idle and minimize each engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 C.F.R. § 63.6625(h) & 40 C.F.R. Part 63, Subpart ZZZZ Table 2d]

(19) **Kilns**

A. Pleasant River shall not exceed a yearly combined kilns throughput of 130.0 million board feet per year, of spruce and pine lumber, based on a 12-month rolling total. [06-096 C.M.R. ch. 115, BPT]

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 emissions limit, Pleasant River shall maintain a record for the Drying Kilns including quantity of wood dried, species dried, drying dates, and calculated VOC emissions, determined 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, including identification of the species and drying dates. [06-096 C.M.R. ch. 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 cyclone and silo once per week and maintain a log of the condition of the cyclone and silo as well as any repairs and maintenance performed.

(21) **Tank #1**

A. Tank #1 shall store only distillate fuel. Pleasant River shall maintain records of the type and maximum true vapor pressure for each product stored in Tank #1. [06-096 C.M.R. ch. 115, BACT]

B. Pleasant River shall maintain the necessary records to calculate emissions from Tank #1 in accordance with the procedures in AP-42 or other alternative method approved by the Department. Calculations of emissions from Tank #1 shall be performed at least once annually and included in the annual emissions statement submitted pursuant to *Emission Statements*, 06-096 C.M.R. ch. 137. Additional calculations of emissions from any continuous 12-month period shall be performed upon request by the Department. [06-096 C.M.R. ch. 115, BACT]

(22) **General Process Sources**

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

(23) **Fugitive Emissions** [06-096 C.M.R. ch. 101, § 4(C)]

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

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

(24) **Annual Emission Statements**

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

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

1. The amount of wood fired (at approximately 36.7% moisture by weight) in Boiler #3A on a monthly basis;
2. The amount of distillate fuel fired in Boiler #3 on a monthly basis;
3. The sulfur content of the distillate fuel fired in Boiler #3;
4. Annual emissions from Tank #1;
5. Total kilns throughput on a monthly basis;
6. Calculations of the VOC and/or HAP emissions from the Kilns on a 12-month rolling basis; and
7. Hours each emission unit was operating on a monthly basis.

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

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

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

DONE AND DATED IN AUGUSTA, MAINE THIS 21st DAY OF NOVEMBER, 2025.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____ for _____
MELANIE LOYZIM, COMMISSIONER

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

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

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: March 21, 2024
Date of application acceptance: March 22, 2024

This Order prepared by Zac Hicks, Bureau of Air Quality.