STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

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COMMISSIONER

Woodland Pulp LLC
Washington County
Baileyville, Maine
A-126-71-Q-N (SM)

Departmental
Findings of Fact and Order
Air Emission License

After review of the air emissions license application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., §344 and §590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Woodland Pulp LLC (Woodland Pulp) has applied for a new Air Emission License permitting the fuel conversion and operation of an existing boiler which was dormant when purchased from the previous owner. The boiler will be converted to natural gas (from its original biomass fuel design) and will be used to generate electricity through its steam turbine. No other previously licensed equipment will be operated at the site.

The equipment addressed in this license is located at 156 Track Road, Baileyville, ME.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Boiler

Equipment	Maximum Capacity (MMBtu/hr)	Maximum Firing Rate (scf/hr)	Fuel Type	Install. Date	Stack #
Boiler	190	186,275 *	Natural Gas	1975	1

* Based on a heating value of 1020 Btu/scf.

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

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

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

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

web site: www.maine.gov/dep

Emergency Fire Pump Engines

Equipment	Horse Power (HP)	Maximum Capacity (MMBtu/hr)	Fuel Type, % sulfur	Install. Date
Fire Pump Engine #1	168	1.3	Diesel, 0.0015%	1974
Fire Pump Engine #2	168	1.3	Diesel, 0.0015%	1980

C. Application Classification

Woodland Pulp LLC is classified as an existing source that is applying for a new air emission license after the previous owner did not renew and kept the facility off-line. The source is classified as either a major or minor source based on whether or not expected emissions exceed the "Significant Emission Levels" as defined in the Department's regulations. The emissions for the facility are determined by the maximum future license allowed emissions, as follows:

Pollutant	Max. Future License (TPY)	Sig. Level (TPY)
PM	8.3	100
PM_{10}	8.3	100
SO_2	4.9	100
NO_x	99.9	100
CO	97.6	100
VOC	8.3	50
CO_2e	94,000	100,000

The Department has determined that Woodland Pulp is a 'new' minor source and the application has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (as amended). Based on the fuel limit, the facility will be licensed below the major source thresholds and is considered a synthetic minor.

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

B. Historical Background

The facility was previously licensed and operated as an oriented strand board (OSB) plant owned by Louisiana-Pacific. Various pieces of equipment, including a dryer and a biomass boiler, were part of the manufacturing process. The potential emissions from the facility were greater than the major source thresholds and the facility was issued a Part 70 air emission license (A-126-70-A-I) on December 28, 2004. However, the last time the facility operated the OSB equipment was on November 18, 2004. The Part 70 license was kept active for its five year term, but was not renewed.

Ownership of the facility was transferred to Woodland Pulp in August 2011. Woodland Pulp proposes to convert the biomass boiler to allow only natural gas to be fired. The boiler will be used to generate electricity through its associated steam turbine. No other OSB manufacturing equipment left on site will be operated except for the two emergency fire pump engines. Based on firing 1585 MMcf/year of natural gas and operating restrictions on the fire pump engines, emissions are below the major source thresholds and this license is being processed as a new minor source under 06-096 CMR 115 (as amended).

C. Boiler

The boiler is a Kipper unit manufactured in 1975 with a 190 MMBtu/hr maximum heat input capacity. Woodland Pulp will convert the boiler to fire natural gas only (from its current biomass configuration). The boiler will be used to generate electricity through its associated steam turbine (rated at 9.375 MW). The boiler exhausts through a 110 foot stack.

1. Federal Regulations

a. New Source Performance Standards (NSPS)

Woodland Pulp proposes that the addition of natural gas in the boiler does not constitute a modification or reconstruction of the boiler, as defined by the NSPS regulations.

New units or modifications/reconstruction to existing units greater than 100 MMBtu/hr are subject to the requirements of 40 CFR Part 60, Subpart Db, *Standards of Performance for Industrial-Commercial-Institutional*

Steam Generating Units. The NSPS definition of 'modification' is, in part, any physical or operation change that results in an increase in the emissions rate to the atmosphere of any pollutant to which a standard applies (§60.14(a)). In addition, §60.14(b) states that the emission rate shall be expressed as kg/hr of any pollutant discharged into the atmosphere for which a standard is applicable and EPA's AP-42 Compilation of Air Pollutant Emission Factors may be used to demonstrate that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.

The standards addressed in 40 CFR Part 60, Subpart Db are for PM, SO_2 and NO_X. As seen in the table below, all three pollutants are lower for natural gas than for biomass.

Comparison of Biomass and Natural Gas lb/hr Values

Pollutant	Estimated Biomass Emission Rate (lb/hr)	Estimated Natural Gas Emission Rate (lb/hr)
PM	12.5	1.4
SO_2	4.8	0.1
NO_X	41.8	22.8

Table Note: AP-42 emission factors were used (Section 1.6 for Biomass and Section 1.4 for Natural Gas) for all pollutants, except NO_X on natural gas, since the proposed NO_X limit of 0.12 lb/MMBtu is lower than the AP-42 value.

The NSPS definition of 'reconstruction' includes, in part, that (1) the fixed capital cost of the new components exceeds 50 percent of the fixed capital cost that would be required to construct a comparable entirely new facility, and (2) it is technologically and economically feasible to meet the applicable NSPS standards (§60.15(b)). The capital cost required to convert the existing biomass boiler to natural gas will be well below 50% of the capital cost to construct a new boiler.

b. National Emission Standards for Hazardous Air Pollutants

The unit is subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63, Subpart JJJJJJ); however, the rule has an exemption for units that fire only natural gas. Therefore, once firing

natural gas, the requirements of 40 CFR Part 63, Subpart JJJJJJ do not apply to the boiler.

2. BACT Findings

The BACT emission limits for the boiler were based on the following:

PM/PM_{10}

Particulate matter emissions from natural gas firing are generally negligible. Due to the low PM concentrations in the exhaust, add-on control devices would have minimal environmental benefit and would not be cost effective. The wet scrubber, installed in 1975, to control particulate matter emissions from firing biomass will not be operated since the unit will be firing only natural gas, an inherently cleaner fuel.

Combustion controls shall be used to meet a BACT PM emission limit of 1.90 lb/hr from the boiler. This limit is based on a PM emission rate of 0.01 lb/MMBtu.

SO_2

Sulfur dioxide emissions from the firing of natural gas are directly dependent on the sulfur content of the fuel. Pipeline quality natural gas contains inherently low amounts of sulfur. Due to the low sulfur content, add-on control devices such as wet or dry scrubbers would have minimal environmental benefit and would not be cost effective.

The use of pipeline quality natural gas shall be used to meet a BACT SO_2 emission limit of 1.14 lb/hr from the boiler. This limit is based on an SO_2 emission rate 0.006 lb/MMBtu.

NO_X

Nitrogen oxide emissions from natural gas firing can be reduced by combustion controls or add-on controls. Combustion controls that limit NO_X formation by controlling excess air levels and flame temperatures include low NO_X burners, combustion air staging, flue gas recirculation, and oxygen trim. Add-on NO_X controls include injections of an ammonia based reagent with selective catalytic reduction (SCR) technology or with selective non-catalytic reduction (SNCR) technology.

Combustion controls are typically used to minimize NO_X emissions from natural gas units as found in a review of EPA's RACT/BACT/LAER Clearinghouse and a review of recently issued BACT determinations for licensed sources in Maine with natural gas retrofits. The specific combustion controls to be used by Woodland

Pulp will be determined on an evaluation of the existing boiler system and the engineering, operational and physical space considerations related to retrofitting the boiler for natural gas.

The additional capital and operating costs of add-on controls are not economically feasible based on the expected minimal air quality benefits.

Combustion controls shall be used to meet a BACT NO_X limit of 0.12 lb/MMBtu and 22.8 lb/hr from the boiler. The 0.12 lb/MMBtu limit shall become effective 240 days from initial boiler startup.

CO

Carbon monoxide emissions from natural gas firing can be reduced by combustion controls or add-on controls. Combustion controls can limit CO formation by controlling excess air levels and establishing effective fuel/air mixing ratios. A balance must be found when controlling both NO_X and CO since the formation mechanisms of the two pollutants can be inversely related. Add-on CO controls include an oxidation catalyst.

Combustion controls are typically used to minimize CO emissions from natural gas units as found in a review of EPA's RACT/BACT/LAER Clearinghouse and a review of recently issued BACT determinations for licensed sources in Maine with natural gas retrofits. The additional capital and operating costs of a CO oxidation catalyst are not economically feasible based on the expected minimal air quality benefits.

Combustion controls shall be used to meet a BACT CO emission limit of 22.8 lb/hr from the boiler. This limit is based on a CO emission rate of 0.12 lb/MMBtu.

VOC

Volatile organic compound emissions from natural gas firing are generally negligible. Due to the low VOC concentrations in the exhaust, add-on control devices would have minimal environmental benefit and would not be cost effective.

Combustion controls shall be used to meet a BACT VOC emission limit of 1.90 lb/hr from the boiler. This limit is based on a VOC emission rate of 0.01 lb/MMBtu.

Opacity

Visible emissions from the boiler shall not exceed an opacity of 10% on a 6 minute block average basis, except for no more than one (1) six (6) minute block average in a 3 hour period.

Woodland Pulp shall be limited to 1585 MMcf/yr of natural gas on a 12 month rolling total basis.

3. 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), means the aggregate group of the following gases: Carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Greenhouse gases (GHG) for purposes of licensing are calculated and reported as carbon dioxide equivalents (CO_2 e).

Based on the emission factors found in *Mandatory Greenhouse Gas Reporting*, 40 CFR Part 98, and the global warming potentials (GWP) contained in 40 CFR Part 98, Woodland Pulp is below the major source threshold of 100,000 tons of CO_2e per year with the annual natural gas fuel restriction and the fire pump engine operation restrictions. No additional licensing requirements are needed to address GHG emissions at this time.

4. Periodic Monitoring

Periodic monitoring for the boiler shall include recordkeeping to document fuel use both on a monthly and 12 month rolling total basis. Stack testing shall be performed within 240 days of startup to document compliance with the NO_X and CO emission limits.

D. <u>Emergency Diesel Fire Pump Engines</u>

The two emergency diesel fire pumps are Cummins models with rated power outputs of 168 hp each (1.3 MMBtu/hr). Fire Pump Engine #1 was installed in 1974 and Fire Pump Engine #2 was installed in 1980. The units shall fire ultra low sulfur diesel fuel with a maximum sulfur content of 0.0015% (15 ppm).

1. BACT Findings

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

PM/PM_{10} – 0.31 lb/MMBtu from AP-42 Table 3.3-1 (dated 10/96);
SO_2 –based on firing 0.0015% sulfur, 0.0015 lb/MMBtu;
NOx – 4.41 lb/MMBtu, AP-42, Table 3.3-1 (dated 10/96);
CO – 0.95 lb/MMBtu, AP-42, Table 3.3-1 (dated 10/96);
VOC – 0.35 lb/MMBtu, AP-42, Table 3.3-1 (dated 10/96);
Opacity – Visible emissions from each of the emergency fire pump engines shall not exceed 20% opacity on a 6 minute block average, except for no more than two (2) six (6) minute block averages in a 3 hour period.

Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Fire Pump Engine #1 (1.3 MMBtu/hr) Diesel	0.40	0.40	0.002	5.73	1.24	0.46
Fire Pump Engine #2 (1.3 MMBtu/hr) Diesel	0.40	0.40	0.002	5.73	1.24	0.46

Each of the emergency engines shall be limited to 500 hours of operation a year, based on a 12 month rolling total. Woodland Pulp shall keep records of the hours of operation for each unit.

2. 40 CFR Part 63, Subpart ZZZZ

The federal regulation 40 CFR Part 63, Subpart ZZZZ, *National Emission Standards for Hazardous Air Pollutants (NESHAP) for Stationary Reciprocating Internal Combustion Engines* 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 specifically does not exempt these units from the federal requirements.

Emergency Definition:

Emergency stationary reciprocating internal combustion engine (RICE) is defined in 40 CFR Part 63, Subpart ZZZZ as any stationary internal combustion engine whose operation is limited to emergency situations and required testing and maintenance. Examples include stationary RICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary RICE used to pump water in the

case of fire or flood, etc. Stationary RICE used for peak shaving are not considered emergency stationary RICE. Stationary RICE used to supply power to an electric grid or that supply non-emergency power as part of a financial arrangement with another entity are not considered to be emergency engines, except as permitted under §63.6640(f).

§63.6640(f) limits maintenance checks and readiness testing of the units to 100 hours per year. Emergency stationary RICE may operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. The 50 hours per year for non-emergency situations cannot be used for peak shaving or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity; except that owners and operators may operate the emergency engine for a maximum of 15 hours per year as part of a demand response program if the regional transmission organization or equivalent balancing authority and transmission operator has determined there are emergency conditions that could lead to a potential electrical blackout, such as unusually low frequency, equipment overload, capacity or energy deficiency, or unacceptable voltage level. The engine may not be operated for more than 30 minutes prior to the time when the emergency condition is expected to occur, and the engine operation must be terminated immediately after the facility is notified that the emergency condition is no longer imminent. The 15 hours per year of demand response operation are counted as part of the 50 hours of operation per year provided for non-emergency situations. The supply of emergency power to another entity or entities pursuant to financial arrangement is not limited by this paragraph, as long as the power provided by the financial arrangement is limited to emergency power.

40 CFR Part 63, Subpart ZZZZ Requirements:

	Compliance Dates	**Operating Limitations* (40 CFR §63.6603(a) and Table 2(d))**
Compression ignition units: Fire pump engine #1 Fire pump engine #2	No later than May 3, 2013	- Change oil and filter every 500 hours of operation or annually, whichever comes first; - Inspect the air cleaner every 1000 hours of operation or annually, whichever comes first; - Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary

* Note: Due to the 500 hour operation limit on each generator, the inspections and oil/filter changes shall be performed annually to meet the requirements of 40 CFR Part 63, Subpart ZZZZ.

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

A non-resettable hour meter shall be installed and operated on each engine. [40 CFR §63.6625(f)]

The engines shall each be limited to 100 hours/year for maintenance and testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving or generating income or a financial arrangement with another entity). A maximum of 15 hours per year (of the 50 hours/year) may be used as part of a demand response program. [40 CFR §63.6640(f)(1)]

Woodland Pulp shall keep records that include maintenance conducted on the two engines and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the hours spent for emergency operation, including what classified the operation as emergency and how many hours spent for non-emergency. If the engines are used for demand response operation, Woodland Pulp must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response. [40 CFR §63.6655(e) and (f)]

E. Annual Emissions

Woodland Pulp shall be restricted to the following annual emissions, based on a 12 month rolling total. The tons per year limits were calculated based on firing 1585 MMcf/year of natural gas and 500 hours/year for each of the two emergency fire pump engines:

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	8.08	8.08	4.85	97.00	97.00	8.08
Fire Pump Engines (two total)	0.20	0.20	0.001	2.87	0.62	0.23
Total TPY	**8.3**	**8.3**	**4.9**	**99.9**	**97.6**	**8.3**

GHG emissions (CO_2e) shall be below 100,000 tons, based on the natural gas fuel limit and generator operating hours.

III. AMBIENT AIR QUALITY ANALYSIS

According to 06-096 CMR 115, the level of air quality analyses required for a minor new source shall be determined on a case-by case basis. The source does not have to submit an ambient air quality analysis if the emissions do not exceed the following and no extenuating circumstances exist:

Pollutant	Tons/Year
PM	25
PM_{10}	25
SO_2	50
NO_x	100
CO	250

Based on the total facility licensed emissions, Woodland Pulp is below the emissions level required for modeling. Based on the information available in the file and the similarity to existing sources, Maine Ambient Air Quality Standards (MAAQS) will not be violated by this source.

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,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants Air Emission License A-126-71-Q-N subject to the following conditions.

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

STANDARD 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 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 emission 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 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**

A. The boiler shall fire only natural gas. [06-096 CMR 115, BACT]

B. Emissions from the boiler (190 MMBtu/hr, on a 24 hour block average basis) shall not exceed the following limits [06-096 CMR 115, BACT]:

Pollutant	Limit (lb/MMBtu)	Limit (lb/hr)
PM	-	1.90
PM_{10}	-	1.90
SO_2	-	1.14
NO_X	0.12 on a 24 hr block avg (effective 240 days from initial startup)	22.8
CO	-	22.8
VOC	-	1.90

C. Visible emissions from the boiler shall not exceed 10% opacity on a six (6) minute block average basis, except for no more than one (1) six (6) minute block average in a 3-hour period. [06-096 CMR 101]

D. Fuel Use
1. Woodland Pulp shall be limited to 1585 MMcf/year of natural gas, based on a 12 month rolling total.
2. Woodland Pulp shall maintain records of natural gas fired in the boiler, on a monthly and 12 month rolling total basis.

[06-096 CMR 115, BACT]

E. Stack Testing
1. Compliance with the emission limits shall be based on stack test results using the appropriate EPA reference methods.
2. Woodland Pulp shall perform stack testing for PM, SO_2, and VOC upon request of the Department.
3. Woodland Pulp shall perform stack testing for NO_X and CO within 240 days of initial startup of the boiler and upon request of the Department thereafter.

[06-096 CMR 115, BACT]

(17) **Emergency Diesel Fire Pump Engines**

A. The emergency fire pump engines are each limited to 500 hours per year total operation, based on a 12 month rolling total. Compliance shall be demonstrated by a written log of all engine operating hours. [06-096 CMR 115, BACT]

B. The fuel oil sulfur content for emergency Fire Pump Engines #1 and #2 shall be limited to 0.0015% sulfur. Compliance shall be demonstrated by fuel records from the supplier documenting the type of fuel delivered and the sulfur content of the fuel. [06-096 CMR 115, BACT]

C. Emissions shall not exceed the following [06-096 CMR 115, BACT]:

Unit	PM (lb/hr)	PM_{10} (lb/hr)	SO_2 (lb/hr)	NO_x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Fire Pump Engine #1 (1.3 MMBtu/hr) Diesel	0.40	0.40	0.002	5.73	1.24	0.46
Fire Pump Engine #2 (1.3 MMBtu/hr) Diesel	0.40	0.40	0.002	5.73	1.24	0.46

D. Visible Emissions

Visible emissions from each of the emergency diesel fire pumps shall not exceed 20% opacity on a 6 minute block average, except for no more than two (2) six (6) minute block averages in a 3 hour period. [06-096 CMR 101]

E. The emergency diesel fire pumps shall meet the applicable requirements of 40 CFR Part 63, Subpart ZZZZ, including the following:

1. No later than May 3, 2013, Woodland Pulp shall meet the following operational limitations for each of the compression ignition emergency engines (Fire Pump Engines #1 and #2):

   a. Change the oil and filter annually,
   b. Inspect the air cleaner annually, and
   c. Inspect the hoses and belts annually and replace as necessary.

   A log shall be maintained documenting compliance with the operational limitations.

   [40 CFR §63.6603(a) and Table 2(d); and 06-096 CMR 115]

2. A non-resettable hour meter shall be installed and operated on each engine. [40 CFR §63.6625(f)]

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

   a. The engines shall each be limited to 100 hours/year for maintenance and testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations (this does not include peak shaving or generating income or a financial arrangement with another entity). A maximum of 15 hours per year (of the 50 hours/year) may be used as part of a demand response program. These limits are based on a 12 month rolling total. Compliance shall be demonstrated by a written log of all engine operating hours. [40 CFR §63.6640(f)(1) and 06-096 CMR 115]

   b. Woodland Pulp shall keep records that include maintenance conducted on the two engines and the hours of operation of each engine recorded through the non-resettable hour meter. Documentation shall include the hours spent for emergency operation, including what classified the operation as emergency and how many hours spent for non-emergency. If the engines are used for demand response operation, Woodland Pulp must keep records of the notification of the emergency situation, and the time the engine was operated as part of demand response. [40 CFR §63.6655(e) and (f)]

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

(18) **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:

1) A computer program and accompanying instructions supplied by the Department; or
2) A written emission statement containing the information required in 06-096 CMR 137.

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

(19) Woodland Pulp 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 28th DAY OF February, 2012.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Melanie Loyzim for
PATRICIA W. AHO, COMMISSIONER

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

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: December 2, 2011
Date of application acceptance: December 6, 2011

Date filed with the Board of Environmental Protection:

This Order prepared by Kathleen E. Tarbuck, Bureau of Air Quality.

Filed
FEB 28 2012
State of Maine
Board of Environmental Protection