



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

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COMMISSIONER

**Cascades Holding US Inc.
Androscoggin County
Auburn, Maine
A-600-71-K-R/M**

**Departmental
Findings of Fact and Order
Air Emission License
Renewal/Minor Revision**

FINDINGS OF FACT

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

I. REGISTRATION

A. Introduction

Cascades Holding US Inc. (Cascades) has applied to renew their Air Emission License permitting the operation of emission sources associated with their wood free fiber-making facility. Cascades has also requested a minor revision to their license in order to license an existing parts washer and clarify boiler tune-up requirements.

The equipment addressed in this license is located at 586 Lewiston Junction Road, Auburn, Maine.

B. Emission Equipment

The following equipment is addressed in this air emission license:

Boilers

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (gal/hr OR scf/hr)</u>	<u>Fuel Type, % sulfur</u>	<u>Date of Manuf.</u>	<u>Stack #</u>
Boiler 1	36	35,000 scf/hr	Natural Gas, Negl. Sulfur	1994	1
		398 gal/hr	Propane, Negl. Sulfur		
Heater 1	3	2,913 scf/hr	Natural Gas, Negl. Sulfur	1994	NA
		33.2 gal/hr	Propane, Negl. Sulfur		

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<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (gal/hr OR scf/hr)</u>	<u>Fuel Type, % sulfur</u>	<u>Date of Manuf.</u>	<u>Stack #</u>
Heater 2	3	2,913 scf/hr	Natural Gas, Negl. Sulfur	1994	NA
		33.2 gal/hr	Propane, Negl. Sulfur		
Heater 3	3	2,913 scf/hr	Natural Gas, Negl. Sulfur	1994	NA
		33.2 gal/hr	Propane, Negl. Sulfur		
Heater 4	3	2,913 scf/hr	Natural Gas, Negl. Sulfur	1994	NA
		33.2 gal/hr	Propane, Negl. Sulfur		

Fire Pump

<u>Equipment</u>	<u>Horse Power (HP)</u>	<u>Firing Rate (gal/hr)</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Fuel Type, % sulfur</u>	<u>Date of Manuf.</u>
Fire Pump 1	105	5.84	0.8	Distillate fuel, 0.0015% by weight	1994

C. Definitions

Distillate Fuel means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials 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.

D. Application Classification

The application for Cascades includes the inclusion of a parts washer, but it does not include the licensing of increased emissions. Therefore, the license is considered to be a renewal of currently licensed emission units and a minor revision and has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 Code of Maine Rules (CMR) 115 (as amended). The facility is licensed below the major source thresholds for criteria pollutants and is therefore considered a minor source. The facility is also licensed below the major source thresholds for hazardous air pollutants (HAP) and is considered an area source of HAP.

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

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

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. Process Overview

Cascades is a market deinked pulp mill. The facility processes sorted waste papers such as mixed office waste, white and coated ledgers, and hard white papers. The final product is a recycled fiber which is sold and used by paper manufacturing facilities as the “recycled fiber” component of their products.

C. Boiler 1 and Heaters 1-4

Cascades operates one boiler, Boiler 1, for process steam and four in-plant makeup heaters, Heaters 1-4, for facility heating. The boiler is rated at 36 MMBtu/hr and fires natural gas with propane as a backup fuel. The Heaters also fire natural gas and propane, and they are each rated at 3 MMBtu/hr. The Boiler and the Heaters were all installed in 1995. The Boiler exhausts through its own stack, and the heaters exhaust as fugitive emissions.

Boiler 1 utilizes flue gas recirculation and low NO_x burners to minimize NO_x emissions. The combustion zone of the boiler is also extended in the fire tube design. This improves fuel residence time and carbon burnout. Additionally, fuel and air valves are controlled for the boiler, by preset levers with setpoint fuel to air ratios corresponding to low-high firing rates.

1. BPT Findings

The BPT emission limits for Boiler 1 were based on the following:

Propane or Natural Gas

PM/PM ₁₀	– 0.01 lb/MMBtu based on A-600-73-B-A (dated 09/29/1993), BACT
SO ₂	– 0.01 lb/MMBtu based on A-600-73-B-A (dated 09/29/1993), BACT
NO _x	– 0.08 lb/MMBtu based on A-600-73-B-A (dated 09/29/1993), BACT
CO	– 0.15 lb/MMBtu based on A-600-73-B-A (dated 09/29/1993), BACT
VOC	– 0.005 lb/MMBtu based on A-600-73-B-A (dated 09/29/1993), BACT
Opacity	– 06-096 CMR 101

The BPT emission limits for the heaters were based on the following:

Propane or Natural Gas

PM/PM ₁₀	– 0.01 lb/MMBtu based on A-600-73-B-A (dated 09/29/1993), BACT
SO ₂	– 0.001 lb/MMBtu based on A-600-73-B-A (dated 09/29/1993), BACT
NO _x	– 0.1 lb/MMBtu based on A-600-73-B-A (dated 09/29/1993), BACT
CO	– 0.02 lb/MMBtu based on A-600-73-B-A (dated 09/29/1993), BACT
VOC	– 0.005 lb/MMBtu based on A-600-73-B-A (dated 09/29/1993), BACT
Opacity	– Based on A-600-73-B-A (dated 09/29/1993), BACT

The BPT emission limits for the boiler and the heaters are the following:

Unit	Pollutant	lb/MMBtu
Boiler 1	PM	0.01
Heater 1	PM	0.01
Heater 2	PM	0.01
Heater 3	PM	0.01
Heater 4	PM	0.01

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Boiler 1 Propane or Natural Gas	0.36	0.36	0.36	2.88	5.4	0.18
Heater 1 Propane or Natural Gas	0.03	0.03	0.003	0.30	0.06	0.02
Heater 2 Propane or Natural Gas	0.03	0.03	0.003	0.30	0.06	0.02
Heater 3 Propane or Natural Gas	0.03	0.03	0.003	0.30	0.06	0.02
Heater 4 Propane or Natural Gas	0.03	0.03	0.003	0.30	0.06	0.02

Visible emissions from Boiler 1 and from the heaters shall each not exceed 10% opacity on a six-minute block average basis, except for no more than one six-minute block average in a three-hour period.

2. Periodic Monitoring

Periodic monitoring for the boiler shall include recordkeeping to document fuel use both on a monthly and calendar year basis. Documentation shall include the type and amount of fuel used.

3. The following requirements were established in license A-600-73-C-R, dated 01/09/1996 for Boiler 1 as a replacement of flue gas recirculation monitoring and recording, and analog flue gas oxygen monitoring and recording:

- a. Cascades shall perform annual tune-ups as prescribed in 06-096 CMR 138;
- b. A tune-up procedure must be kept on-site and be made available to the Department upon request;
- c. An oxygen/carbon monoxide curve or an oxygen/smoke curve must be kept on-site; and
- d. Cascades shall operate and maintain the boiler according to the manufacturer's emission-related written instructions, in a manner consistent with good air pollution control practice for minimizing emissions.

4. 40 CFR Part 60, Subpart Dc

Due to the size and year of manufacture, Boiler 1 is subject to the New Source Performance Standards (NSPS) 40 CFR Part 60, Subpart Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units*, for units greater than 10 MMBtu/hr manufactured after June 9, 1989.

Pursuant to 40 CFR Part 60, Subpart Dc, Cascades shall record and maintain records of the amount and type of fuel combusted by Boiler 1 either daily or on a calendar month basis. Cascades may alternatively elect to record and maintain records of the total amount of each fuel delivered to that property during each calendar month. [40 CFR §60.48c(g)(1)-(3)]

All records required under this section shall be maintained by Cascades for a period of two years following the date of such record. [40 CFR §60.48c(i)]

5. 40 CFR Part 63, Subpart JJJJJ

Boiler 1 and Heaters 1-4 are only designed to fire gaseous fuel and are therefore not subject to the *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources* (40 CFR Part 63 Subpart JJJJJ). [40 CFR §63.11195(e)]

D. Fire Pump 1

Cascades operates one fire pump, Fire Pump 1. Fire Pump 1 has an engine rated at 0.8 MMBtu/hr which fires distillate fuel and it was manufactured in 1994.

1. BPT Findings

The BPT emission limits for the Fire Pump 1 are based on the following:

PM/PM ₁₀	--	0.12 lb/MMBtu based on 06-096 CMR 103
SO ₂	--	0.0015 lb/MMBtu based on the combustion of distillate fuel with a maximum sulfur content of 15 ppm (0.0015% sulfur by weight)
NO _x	--	4.41 lb/MMBtu from AP-42 table 3.3-1, dated 10/96
CO	--	0.85 lb/MMBtu from AP-42 table 3.3-1, dated 10/96
VOC	--	0.09 lb/MMBtu from AP-42 table 3.3-1, dated 10/96
Visible Emissions	--	06-096 CMR 101

The BPT emission limits for Fire Pump 1 are the following:

Unit	Pollutant	lb/MMBtu
Fire Pump 1	PM	0.12

Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
Fire Pump 1 (0.8 MMBtu/hr) Distillate fuel	0.10	0.10	0.01	3.53	0.76	0.29

Visible emissions from Fire Pump 1 shall not exceed 20% opacity on a six-minute block average basis, except for no more than two six-minute block averages in a three-hour period.

2. National Emission Standards for Hazardous Air Pollutants (NESHAP):
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 fire pump listed above. The unit is considered an existing, emergency stationary reciprocating internal combustion engine at *an area* HAP source and is 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 CFR §63.6585]

- a. Emergency Engine Designation and Operating Criteria

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

(2) Non-Emergency Situation Operation

An emergency engine may be operated up to a maximum of 100 hours per calendar year for Maintenance Checks, Readiness Testing, and other non-emergency situations as described below.

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

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

b. 40 CFR Part 63, Subpart ZZZZ Requirements

(1) Operation and Maintenance Requirements

	<u>Operating Limitations</u>
Compression ignition (distillate fuel) units: Fire Pump	<ul style="list-style-type: none">- 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, and replace as necessary; and- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

The fire pump shall be operated and maintained according to the manufacturer's emission-related written instructions, or Cascades 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)]

(2) Optional Oil Analysis Program

Cascades 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, Cascades must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR §63.6625(i)]

(3) Non-Resettable Hour Meter Requirement

A non-resettable hour meter shall be installed and operated on the Fire Pump. [40 CFR §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 CFR §63.6625(h) and 40 CFR Part 63, Subpart ZZZZ Table 2d]

(5) Annual Time Limit for Maintenance and Testing

As an emergency engine, the Fire Pump shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations. [40 CFR §63.6640(f)]

(6) Recordkeeping

Cascades shall keep records that include maintenance conducted on the Fire Pump and the hours of operation of the Fire Pump recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, including what classified the operation as emergency, and the number of hours the unit operated for non-emergency purposes. [40 CFR §63.6655(f)]

E. Wetlap Machine and Recycled Paper

At the end of the pulping process, Cascades utilizes a wetlap machine to dry the pulp in order to create the finished product. Cascades wetlap machine has the capacity to dry 320 tons per year of pulp, producing 240 tons per year of their recycled fiber. The machine was manufactured in 1994 and installed at the facility in 1995. While the process preceding wetlapping takes place inside, particulate emissions from the wetlap machine have the potential to escape to the atmosphere through adjacent shipping/receiving doors. The end of the wetlapping process also shares a room with the stored recycled paper, another potential source of particulate emissions.

The wetlap machine is not subject to any specific federal regulations; however, because of the potential for particulate emissions to be emitted into the atmosphere, BPT for the wetlap machine and for the storage of recycled paper is meeting the visible emissions standards for General Process Emissions as outlined in 06-096 CMR 101.

F. General Process Emissions

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

G. Fugitive Emissions

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20%, except for no more than five minutes in any one-hour period. Compliance shall be determined by an aggregate of the individual fifteen-second opacity observations which exceed 20% in any one-hour.

H. Parts Washer

The parts washer has a design capacity of 15 gallons. The parts washer is subject to *Solvent Cleaners*, 06-096 CMR 130 (as amended) and records shall be kept documenting compliance.

I. Annual Emissions

1. Total Annual Emissions

Cascades shall be restricted to the following annual emissions, on a calendar year basis. The tons per year limits were based on 8,760 hours of operation of the heaters and Boiler 1, and on 100 hours of non-emergency operation of the Fire Pump:

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 1	1.6	1.6	1.6	12.6	23.7	0.8
Heaters 1-4	0.5	0.5	0.1	5.3	1.1	0.3
Fire Pump 1	0.1	0.1	0.1	0.2	0.1	0.1
Total TPY	2.2	2.2	1.8	18.1	24.9	1.2

2. Greenhouse Gases

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

purposes, greenhouse gases (GHG) are calculated and reported as carbon dioxide equivalents (CO₂e).

The quantity of CO₂e emissions from this facility is less than 100,000 tons per year, based on the following:

- the facility's fuel use limit;
- worst case emission factors from the following sources: U.S. EPA's AP-42, the Intergovernmental Panel on Climate Change (IPCC), and 40 CFR Part 98, *Mandatory Greenhouse Gas Reporting*; and
- global warming potentials contained in 40 CFR Part 98.

No additional licensing actions to address GHG emissions are required at this time.

III. AMBIENT AIR QUALITY ANALYSIS

The level of ambient air quality impact modeling required for a minor source shall be determined by the Department on a case-by case basis. In accordance with 06-096 CMR 115, an ambient air quality impact analysis is not required for a minor source if the total 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
SO ₂	50
NO _x	50
CO	250

Cascades previously submitted an ambient air quality impact analysis for air emission license A-600-73-B-A (dated September 29, 1993) demonstrating that emissions from the facility, in conjunction with all other sources, do not violate Ambient Air Quality Standards (AAQS). An additional air quality impact analysis is not required for this renewal.

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-600-71-K-R/M 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 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 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 1 and Heaters 1-4

A. Fuel

- Boiler 1 and Heaters 1-4 are licensed to fire natural gas and propane.
- Compliance shall be demonstrated by fuel records from the supplier showing the quantity and type of the fuel delivered (if applicable). Records of annual fuel use shall be kept on a monthly and calendar year total basis. [06-096 CMR 115, BPT]

B. Emissions shall not exceed the following:

Emission Unit	Pollutant	lb/MMBtu	Origin and Authority
Boiler 1	PM	0.01	A-600-73-B-A (dated 09/29/1993), BACT
Heater 1	PM	0.01	A-600-73-B-A (dated 09/29/1993), BACT
Heater 2	PM	0.01	A-600-73-B-A (dated 09/29/1993), BACT

<u>Emission Unit</u>	<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>Origin and Authority</u>
Heater 3	PM	0.01	A-600-73-B-A (dated 09/29/1993), BACT
Heater 4	PM	0.01	A-600-73-B-A (dated 09/29/1993), BACT

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

<u>Emission Unit</u>	<u>PM (lb/hr)</u>	<u>PM₁₀ (lb/hr)</u>	<u>SO₂ (lb/hr)</u>	<u>NO_x (lb/hr)</u>	<u>CO (lb/hr)</u>	<u>VOC (lb/hr)</u>
Boiler 1	0.36	0.36	0.36	2.88	5.4	0.18
Heater 1	0.03	0.03	0.003	0.30	0.06	0.02
Heater 2	0.03	0.03	0.003	0.30	0.06	0.02
Heater 3	0.03	0.03	0.003	0.30	0.06	0.02
Heater 4	0.03	0.03	0.003	0.30	0.06	0.02

D. Visible emissions from Boiler 1 shall not exceed 10% opacity on a six-minute block average, except for no more than one six-minute block average in a three-hour period. [A-600-73-B-A (dated 09/29/1993), BACT]

E. Visible emissions from the heaters shall each not exceed 10% opacity on a six-minute block average basis, except for no more than one six-minute block average in a three-hour period. [A-600-71-I-R/M (dated 04/14/2006), BPT]

F. Cascades shall perform annual tune-ups as prescribed in 06-096 CMR 138 on Boiler 1. In accordance, the following conditions shall be met:

1. A tune-up procedure shall be kept on-site and be made available to the Department upon request;
2. An oxygen/carbon monoxide curve or an oxygen/smoke curve shall be kept on-site; and
3. Cascades shall operate and maintain the boiler according to the manufacturer's emission-related written instructions, in a manner consistent with good air pollution control practice for minimizing emissions.

G. 40 CFR Part 60, Subpart Dc

Cascades shall comply with all requirements of 40 CFR Part 60, Subpart Dc applicable to Boiler 1 including, but not limited to, the following:

1. Cascades shall record and maintain records of the amounts of each fuel combusted during each day or each calendar month and maintain records of fuel certifications. [40 CFR §60.48c(g)]
2. Cascades shall submit to EPA and the Department semi-annual reports. These reports shall include the calendar dates covered in the reporting period and records of fuel supplier certifications. The semi-annual reports are due within 30 days of the end of each 6-month period.
3. The following address for EPA shall be used for any reports or notifications required:

U.S. Environmental Protection Agency, Region I
5 Post Office Square, Suite 100 (OES04-2)
Boston, MA 02109-3912
Attn: Air Compliance Clerk

(17) **Fire Pump 1**

- A. Cascades' Fire Pump 1 shall be limited to 100 hours of operation per calendar year, excluding operating hours during emergency situations. [06-096 CMR 115, BPT]
- B. The sulfur content for the distillate fuel fired in Fire Pump 1 shall be limited to 0.0015% sulfur by weight. 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, BPT]
- C. Emissions shall not exceed the following:

<u>Unit</u>	<u>Pollutant</u>	<u>lb/MMBtu</u>	<u>Origin and Authority</u>
Fire Pump 1	PM	0.12	06-096 CMR 103(2)(B)(1)(a)

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

<u>Unit</u>	<u>PM (lb/hr)</u>	<u>PM₁₀ (lb/hr)</u>	<u>SO₂ (lb/hr)</u>	<u>NO_x (lb/hr)</u>	<u>CO (lb/hr)</u>	<u>VOC (lb/hr)</u>
Fire Pump 1 (0.8 MMBtu/hr) distillate fuel	0.10	0.10	0.01	3.53	0.76	0.29

E. Visible Emissions

Visible emissions from Fire Pump 1 shall not exceed 20% opacity on a six-minute block average basis, except for no more than two six-minute block averages in a three-hour period. [06-096 CMR 101]

F. Fire Pump 1 shall meet the applicable requirements of 40 CFR Part 63, Subpart ZZZZ, including the following:

1. Cascades shall meet the following operational limitations for Fire Pump 1:

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

Records shall be maintained documenting compliance with the operational limitations.

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

2. Oil Analysis Program Option

Cascades 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, Cascades 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 CFR §63.6625(i)]

3. Non-Resettable Hour Meter

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

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

- a. As an emergency engine, the unit shall be limited to 100 hours/year for maintenance checks and readiness testing. Up to 50 hours/year of the 100 hours/year may be used in non-emergency situations. These limits are based on a calendar year. Compliance shall be demonstrated by records (electronic or written logs) of all engine operating hours. [40 CFR §63.6640(f) and 06-096 CMR 115]
- b. Cascades shall keep records that include maintenance conducted on the engine and the hours of operation of the engine recorded through the non-resettable hour meter. Documentation shall include the number of hours the unit operated for emergency purposes, including what classified the operation as

emergency, and the number of hours the unit operated for non-emergency purposes. [40 CFR §63.6655(e) and (f)]

5. Operation and Maintenance

The engine shall be operated and maintained according to the manufacturer's emission-related written instructions, or Cascades shall develop a maintenance plan which provides 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)]

6. Startup Idle and Startup Time Minimization

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. [40 CFR §63.6625(h) & 40 CFR Part 63, Subpart ZZZZ Table 2d]

(18) **Process Equipment**

Visible emissions from the wetlap machine and from recycled paper storage shall not exceed an opacity of 20% on a six-minute block average basis, except for no more than one six-minute block average in a one-hour period. [06-096 CMR 115, BPT]

(19) **Parts Washer**

Parts washers at Cascades are subject to *Solvent Cleaners*, 06-096 CMR 130 (as amended).

A. Cascades shall keep records of the amount of solvent added to each parts washer. [06-096 CMR 115, BPT]

B. The following are exempt from the requirements of 06-096 CMR 130 [06-096 CMR 130]:

1. Solvent cleaners using less than two liters (68 oz) of cleaning solvent with a vapor pressure of 1.00 mmHg, or less, at 20° C (68° F);
2. Wipe cleaning; and,
3. Cold cleaning machines using solvents containing less than or equal to 5% VOC by weight.

C. The following standards apply to cold cleaning machines that are applicable sources under Chapter 130.

1. Cascades shall attach a permanent conspicuous label to each unit summarizing the following operational standards [06-096 CMR 130]:
 - a. Waste solvent shall be collected and stored in closed containers.
 - b. Cleaned parts shall be drained of solvent directly back to the cold cleaning machine by tipping or rotating the part for at least 15 seconds or until dripping ceases, whichever is longer.
 - c. Flushing of parts shall be performed with a solid solvent spray that is a solid

fluid stream (not a fine, atomized or shower type spray) at a pressure that does not exceed 10 psig. Flushing shall be performed only within the freeboard area of the cold cleaning machine.

- d. The cold cleaning machine shall not be exposed to drafts greater than 40 meters per minute when the cover is open.
 - e. Sponges, fabric, wood, leather, paper products and other absorbent materials shall not be cleaned in the parts washer.
 - f. When a pump-agitated solvent bath is used, the agitator shall be operated to produce no observable splashing of the solvent against the tank walls or the parts being cleaned. Air agitated solvent baths may not be used.
 - g. Spills during solvent transfer shall be cleaned immediately. Sorbent material used to clean spills shall then be immediately stored in covered containers.
 - h. Work area fans shall not blow across the opening of the parts washer unit.
 - i. The solvent level shall not exceed the fill line.
2. The remote reservoir cold cleaning machine shall be equipped with a perforated drain with a diameter of not more than six inches. [06-096 CMR 130]

(20) **Fugitive Emissions**

Visible emissions from a fugitive emission source (including stockpiles and roadways) shall not exceed an opacity of 20%, except for no more than five-minutes in any one-hour period. Compliance shall be determined by an aggregate of the individual fifteen-second opacity observations which exceed 20% in any one-hour. [06-096 CMR 101]

(21) **General Process Sources**

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

Cascades Holding US Inc.
Androscoggin County
Auburn, Maine
A-600-71-K-R/M

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**Departmental
Findings of Fact and Order
Air Emission License
Renewal/Minor Revision**

- (22) Cascades 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 21 DAY OF September, 2016.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marc Allen Robert Case for
PAUL MERCER, COMMISSIONER

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

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

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 03/09/2016

Date of application acceptance: 03/14/2016

Date filed with the Board of Environmental Protection:

This Order prepared by Colby Fortier-Brown, Bureau of Air Quality.

