



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE
GOVERNOR

PATRICIA W. AHO
COMMISSIONER

Verso Androscoggin LLC
Franklin County
Jay, Maine
A-203-77-21-A

Departmental
Findings of Fact and Order
New Source Review
NSR #21

FINDINGS OF FACT

After review of the New Source Review (NSR) air emission license 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.), Section 344 and Section 590, the Maine Department of Environmental Protection (the Department) finds the following facts:

I. REGISTRATION

A. Introduction

FACILITY	Verso Androscoggin, LLC
LICENSE TYPE	06-096 CMR 115, Minor Modification
NAICS CODES	322121
NATURE OF BUSINESS	Pulp & Paper Mill
FACILITY LOCATION	Riley Road, Jay, Maine

B. New Source Review (NSR) License Description

Verso Androscoggin LLC (Verso) has submitted an application to license the installation and operation of a small furnace in the Water Treatment Plant used for seasonal space heating. The unit replaces the small furnace previously licensed for use at the Water Treatment Plant which had a similar capacity. The Water Treatment Plant process includes drawing water from the Androscoggin River to supply mill process water needs, including boiler feedwater. The river water is filtered and treated before being distributed to the Mill system. The Mill operates an existing Water Treatment Plant (WTP) Main Furnace and the proposed new WTP Small Furnace for space heating.

C. Emission Equipment

The following equipment is addressed in this air emission license:

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 04769
(207) 764-0477 FAX: (207) 760-3143

Fuel Burning Equipment

<u>Equipment</u>	<u>Max. Capacity (MMBtu/hr)</u>	<u>Fuel Type, % sulfur</u>	<u>Dates of Manuf./Installation</u>	<u>Stack #</u>
<i>Water Treatment Plant (WTP)</i>				
WTP Small Furnace*	1.06	Distillate Fuel, ASTM D396 compliant	1980	Furnace Vent
WTP Small Furnace	1.05		2014	WT

* This unit is being replaced by a new unit of similar size and firing the same fuel. The designation "WTP Small Furnace" shall refer to the 2014 unit from this point forward in this NSR license.

D. Application Classification

The application for the replacement of the Water Treatment Plant (WTP) Small Furnace does not violate any applicable federal or state requirements and does not reduce monitoring, reporting, testing, or recordkeeping requirements.

A modification of a major source is identified as major or minor based on whether or not emissions increases due to the modification exceed the "Significant Emissions Increase" levels as given in *Definitions Regulation*, 06-096 Code of Maine Rules (CMR) 100 (as amended). The emissions increases from the installation of the new WTP Small Furnace for each regulated pollutant are presented in the following table.

<u>Pollutant</u>	<u>Potential Emissions (ton/year)</u>	<u>Significance Emissions Increase Levels (ton/year)</u>
PM	0.07	25
PM ₁₀	0.09	15
PM _{2.5}	0.09	10
SO ₂	2.32	40
NO _x	0.66	40
CO	0.16	100
VOC	0.01	40
H ₂ SO ₄	0.12	7
CO _{2e}	742	75,000

Note: The above numbers are for the 2014 WTP Small Furnace only. No other equipment at the facility is affected by this amendment.

Therefore, this NSR license is determined to be a minor modification under *Minor and Major Source Air Emission License Regulations* 06-096 CMR 115 (as amended) since the changes being made are not addressed or prohibited in the Part 70 air emission license. An application to incorporate the requirements of this NSR license into the Part 70 air emission license shall be submitted no later than 12 months from commencement of the requested operation.

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 06-096 CMR 100. BACT is a top-down approach to selecting air emission controls considering economic, environmental and energy impacts.

B. WTP Small Furnace

Verso operates the WTP Small Furnace for facility space heating. The unit is rated at 1.05 MMBtu/hour and fires distillate fuel. The furnace was installed between December 2014 and January 2015 and exhausts through its own stack.

Due to the size, the furnace is not 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/hour manufactured after June 9, 1989.

1. BACT Findings

The identified BACT emission limits for the WTP Small Furnace were based on the following emission factors for distillate fuel; the furnace's design capacity of 1.05 MMBtu/hour; and a fuel heat content of 0.14 MMBtu/gallon:

Pollutant	Emission Factor (lb/1000 gal)	Source of Emission Factor	Emission Limit (lb/hr)*
PM	2	AP-42 Table 1.3-1 (5/10)	0.02
PM ₁₀	3.3	AP-42 Tables 1.3-1 and 1.3-2 (5/10)	0.02
PM _{2.5}	3.3		0.02
SO ₂	142S	AP-42 Table 1.3-1 (5/10)	0.53
NO _x	20		0.15
CO	5		0.04
VOC	0.34	AP-42 Table 1.3-3 (5/10)	0.01

* Rounded to nearest hundredth of a pound

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

Prior to July 1, 2016, or by the date otherwise stated in 38 MRSA §603-A(2)(A)(3), the distillate fuel fired in the WTP Small Furnace shall be ASTM D396 compliant #2 fuel oil (maximum sulfur content of 0.5% by weight). Per 38 MRSA §603-A(2)(A)(3), beginning July 1, 2016, or on the date specified in the statute, distillate fuel fired at the facility shall not exceed a maximum sulfur content of 0.005% by weight (50 ppm); and beginning January 1, 2018, or on the date specified in the statute, distillate fuel fired at the facility shall not exceed a maximum sulfur content of 0.0015% by weight (15 ppm).

2. Periodic Monitoring

Documentation shall include the type of fuel used and sulfur content of the fuel.

3. National Emissions Standards for Hazardous Air Pollutants (NESHAP):
40 CFR Part 63, Subpart DDDDD

The WTP Small Furnace is an indirect-fired unit used for space heating. In accordance with the definitions of 40 CFR Part 63, Subpart DDDDD, §63.7575, the unit is not a boiler or process heater subject to this Subpart.

C. Incorporation into the Part 70 Air Emission License

The requirements in this 06-096 CMR 115 New Source Review license shall apply to the facility upon license issuance. Per *Part 70 Air Emission License Regulations*, 06-096 CMR 140 (as amended), Section 1(C)(8), for a modification that has undergone NSR requirements or been processed through 06-096 CMR 115, the source must then apply for an amendment to the Part 70 license within one year of commencing the proposed operations as provided in 40 CFR Part 70.5.

D. Annual Emissions

Because this furnace is replacing a furnace which has already been licensed and is of comparable size (New furnace: 1.05 MMBtu/hour; Furnace being replaced: 1.06 MMBtu/hour), and the new furnace will be firing the same fuel as the unit being replaced, no change in the annual emissions from the facility is expected to result from this project.

III. AMBIENT AIR QUALITY ANALYSIS

Verso previously submitted an ambient air quality analysis demonstrating that emissions from the facility, in conjunction with all other sources, do not violate ambient air quality standards. An additional ambient air quality analysis is not required for this NSR license.

ORDER

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

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

The Department hereby grants Air Emission License A-203-77-21-A pursuant to the preconstruction licensing requirements of 06-096 CMR 115 and subject to the conditions below.

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.

SPECIFIC CONDITIONS

(1) The Water Treatment Small Furnace is licensed to fire distillate fuel meeting ASTM standards.

A. Prior to July 1, 2016, or the date otherwise stated in 38 MRS §603-A(2)(A)(3), the distillate fuel fired shall be ASTM D396 compliant #2 fuel oil (maximum sulfur content of 0.5% by weight).

Per 38 MRS §603-A(2)(A)(3), beginning July 1, 2016, or on the date specified in the statute, distillate fuel fired at the facility shall not exceed a maximum sulfur content of 0.005% by weight (50 ppm).

Beginning January 1, 2018, or the date as specified in the statute, distillate fuel delivered on-site to be fired in the WTP Small Furnace shall not exceed a maximum sulfur content limit of 0.0015% by weight (15 ppm).

[06-096 CMR 106 (3)(A)(2)]

B. Sulfur content compliance shall be demonstrated based on purchasing receipts documenting ASTM D396 compliant distillate fuel or fuel receipts documenting ULS fuel (ultra-low sulfur fuel, i.e., fuel with sulfur content no greater than 15 ppm by weight). [06-096 CMR 115, BPT]

C. Emissions from the Water Treatment Small Furnace shall not exceed the following limits:

Pollutant	Emission Limit, lb/hr *
PM	0.02
PM ₁₀	0.02
PM _{2.5}	0.02
SO ₂	0.53
NO _x	0.15
CO	0.04
VOC	0.01

* Rounded to nearest hundredth of a pound

Visible emissions from the WTP Small Furnace shall not exceed 20% opacity on a six-minute block average basis, except for no more than one six-minute block average in a three-hour period. [06-096 CMR 101, 2(B)(1)(b)]

D. Compliance with the above emission limits shall be demonstrated through testing according to the applicable emissions test method of 40 CFR Part 60, Appendix A, on the request of the Department. [06-096 CMR 115, BPT]

(2) Verso shall submit an application to incorporate the terms and conditions of this NSR license into the Part 70 air emission license no later than 12 months from commencement of the requested operation. [06-096 CMR 140, Section 1(C)(8)]

DONE AND DATED IN AUGUSTA, MAINE THIS 20 DAY OF February, 2015.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: January 20, 2015

Date of application acceptance: January 20, 2015

Date filed with the Board of Environmental Protection:

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

