



STATE OF MAINE  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



PAUL R. LEPAGE  
GOVERNOR

PATRICIA W. AHO  
COMMISSIONER

**Verso Bucksport LLC  
Hancock County  
Bucksport, Maine  
A-22-77-12-M**

**Departmental  
Findings of Fact and Order  
New Source Review  
NSR #10**

**FINDINGS OF FACT**

After review of the Minor Revision 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**

Facility	Verso Bucksport LLC (Verso Bucksport)
License Amendment Type	06-096 CMR 115 Minor Revision
NAICS Code	322121 (pulp mill that produces paper)
Nature of Business	Groundwood and thermomechanical pulp; papermaking
Facility Location	2 River Road, Bucksport, Maine

Verso Bucksport LLC (Verso Bucksport) operates a pulp and paper mill and is licensed as a major source through its Part 70 Air Emission License (A-22-70-A-I, December 30, 2004) with various Part 70 amendments and New Source Review amendments.

Verso Bucksport submitted a New Source Review minor revision request to establish the averaging time for carbon monoxide (CO) from Boiler 5 as a 30 day rolling average. Verso Bucksport is planning on installing a CO continuous emissions monitoring system (CEMS) on the unit for operational and compliance purposes. Boiler 5 was licensed to convert from fuel oil to natural gas in air emission license A-22-77-11-A (January 17, 2014).

**B. Emission Equipment**

The emission unit addressed in this amendment is natural gas fired Boiler 5, rated at 371 MMBtu/hr heat input.

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C. Application Classification

This minor revision for a 30 day averaging time on the CO lb/MMBtu limit for Boiler 5 will not increase emissions. The licensed concentration, mass emission, and tons/year limits for CO from the unit will remain the same. Therefore, the Department has classified the application as a minor revision to New Source Review license A-22-77-11-A and the revision request has been processed through *Major and Minor Source Air Emission License Regulations*, 06-096 CMR 115 (as amended).

**II. MINOR REVISION DESCRIPTION**

Verso Bucksport will be installing a CO continuous emission monitoring system (CEMS) on Boiler 5, a 371 MMBtu/hr natural gas fired boiler, for operational and compliance purposes. Air emission license amendment A-22-77-11-A was issued in January 2014 to allow the conversion of the boiler from oil to natural gas. The amendment included a CO limit of 0.08 lb/MMBtu and 29.68 lb/hr, with compliance demonstrated by a stack test performed upon request of the Department.

With the installation of a CO CEMS, Verso Bucksport has requested the 0.08 lb/MMBtu limit be based on a 30 day rolling average. This averaging time is typical for pollutants with a CEMS to account for operational variability. The averaging time shall begin once the CO CEMS is certified in accordance with 40 CFR, Part 60, Appendix B and 06-096 CMR 117. The CO lb/hr limit will continue to be based on stack tests performed upon request of the Department.

Verso Bucksport shall operate the CO CEMS in accordance with 40 CFR Part 60, Appendix B and 06-096 CMR 117, *Source Surveillance – Emissions Monitoring*, as amended.

Although Boiler 5 is subject to 40 CFR Part 63, Subpart DDDDD, *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heater*, there are no applicable CO emission limits or monitoring requirements as part of the rule since the unit fires natural gas only.

## ORDER

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

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

The Department hereby grants Air Emission License A-22-77-12-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.

### SPECIFIC CONDITIONS

**The following shall replace Condition 1 in Air Emission License A-22-77-11-A:**

**(1) Boiler 5**

A. Natural Gas

- a. Boiler 5 shall be converted from an oil-fired boiler to a natural gas fired boiler. Once the natural gas conversion is complete, the boiler shall no longer fire oil. [06-096 CMR 115, BACT]
- b. Verso Bucksport shall maintain monthly fuel use records of the natural gas fired in Boiler 5. [06-096 CMR 115, BACT]

B. Emissions from Boiler 5 when firing natural gas shall not exceed the following [06-096 CMR 115, BACT]:

Pollutant	lb/MMBtu	lb/hr
PM*	-	0.68
PM <sub>2.5</sub> **	-	5.00
PM <sub>10</sub> **	-	5.00
SO <sub>2</sub>	-	0.21
NO <sub>x</sub>	0.18 (on a 30 day rolling average once the CEMS is installed and certified)	66.78
CO	0.08 (on a 30 day rolling average once the CEMS is installed and certified)	29.68
VOC	-	2.23

\* PM includes filterables only.

\*\* PM<sub>2.5</sub> and PM<sub>10</sub> includes condensables and filterables.

C. If Boiler 5 is the only boiler exhausting to the common stack, visible emissions from the common stack 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 block period. [06-096 CMR 101]

D. Compliance Methods

1. Compliance with the emission limits in Condition (1)(B) above shall be demonstrated with a stack test performed upon request of the Department using the appropriate stack test method, except as stated in Condition (1)(D)(2).
2. CEMS
  - a. NO<sub>x</sub> CEMS - Within 60 days of documentation that Verso Bucksport operated Boiler 5 in exceedance of 30% of the unit's annual capacity factor, Verso Bucksport shall install, calibrate, maintain, and operate a continuous emission monitoring system for NO<sub>x</sub> on the unit in accordance with the applicable performance specifications set forth in 40 CFR Part 60, Appendix B and the requirements of 06-096 CMR 117. Exceedance of the 30% annual capacity factor limit shall be determined by a heat input of more than 974,988 MMBtu/yr in Boiler 5 (annual capacity factor means the ratio between the actual heat input to a steam generating unit from fuels during a calendar year, and the potential heat input to the steam generating unit had it been operating for 8760 hours at a maximum steady state design heat input capacity). [06-096 CMR 115, BACT and 06-096 CMR 117]

- b. CO CEMS – Once the continuous emission monitoring system for CO is installed, Verso Bucksport shall calibrate, maintain, and operate the CO CEMS on Boiler 5 in accordance with the applicable performance specifications set forth in 40 CFR Part 60, Appendix B and the requirements of 06-096 CMR 117. [06-096 CMR 117]

E. 40 CFR Part 63, Subpart DDDDD

Verso Bucksport shall comply with the requirements of 40 CFR Part 63, Subpart DDDDD applicable to Boiler 5, including, but not limited to operational and work practice standards, and notification, reporting, and recordkeeping requirements. [40 CFR Part 63, Subpart DDDDD]

**The following is a new condition:**

- (1) Verso Bucksport shall submit an application to incorporate this amendment 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 27 DAY OF May, 2014.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY:

Maureen Allen Robert Corne for  
PATRICIA W. AHO, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: April 14, 2014

Date of application acceptance: April 14, 2014

Date filed with the Board of Environmental Protection:

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

