



STATE OF MAINE
DEPARTMENT OF ENVIRONMENTAL PROTECTION

PAUL R. LEPAGE
GOVERNOR

JAMES P. BROOKS
ACTING COMMISSIONER

**Verso Bucksport LLC
Hancock County
Bucksport, Maine
A-22-77-3-A**

**Departmental
Findings of Fact and Order
New Source Review
Amendment #3**

After review of the air emissions license amendment 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., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

FACILITY	Verso Bucksport LLC
LICENSE NUMBER	A-22-77-3-A
LICENSE TYPE	Chapter 115 Minor Modification
NAICS CODES	322121 (pulp mill that produces paper)
NATURE OF BUSINESS	Groundwood and Thermomechanical pulp, paper making
FACILITY LOCATION	Bucksport, Maine
NSR AMENDMENT ISSUANCE DATE	June 7, 2011

B. Amendment Description

Verso Bucksport, LLC. (Verso Bucksport) operates a pulp and paper mill in Bucksport, Maine. This Chapter 115 Minor Modification amendment is to allow for the replacement of the steam heated dryers in the coating section of the No. 5 Paper Machine (No. 5 PM) with two non-contact natural gas fired air cap dryers.

Verso Bucksport currently makes both Offset and Rotogravure coated papers on its paper machines. The No. 5 PM cannot make Offset coated paper efficiently with its current steam heated dryers and so the proposed project would replace the coater section steam heated dryers with natural gas fired dryers. The project would also add doctor blades to several after dryers and add a trim system to the reel.

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The current steam dryers are old, inefficient, and use very expensive 410 pound steam. The proposed natural gas fired dryers will be much more efficient and will reduce steam consumption on the paper machine. Rotogravure paper has a much lower drying intensity requirement than Offset paper forcing the No. 5 PM to be operated at slower speeds to properly dry the coating. The new air cap dryers will allow the machine to be operated at its optimum speed while processing Offset paper. The additional doctor blades are needed to keep the after dryer rolls properly cleaned and trim system is needed to prevent stuck edges which are more prevalent on Offset grades.

This project will not include increases in capacity or design speed on the paper machine, increases in pulp production, increases in paper production, or increases in steam production. The project will provide for more flexibility in the types and grades of paper that are made on the paper machines.

C. Emission Equipment

The following equipment is addressed in this air emission license:

Fuel Burning Equipment

<u>Equipment</u>	<u>Maximum Capacity (MMBtu/hr)</u>	<u>Maximum Firing Rate (scf/hr)</u>	<u>Fuel Type, % sulfur</u>	<u>Stack #</u>
No. 5 Paper Machine Coater Dryer Air Caps	14	14,000	Natural Gas, neg.	11

D. Application Classification

A new emission unit at a major source is considered a major modification based on whether or not expected emission increases exceed the "Significant Emission Increase Levels" as defined in the Department's regulations. The emission increases for a new source are determined by the potential emissions, as follows:

<u>Pollutant</u>	<u>Net Change (TPY)</u>	<u>Sig. Level</u>
PM	0.5	25
PM ₁₀	0.5	15
SO ₂	0.04	40
NO _x	3.1	40
CO	13.6	100
VOC	0.4	40

Note: The above numbers are for the proposed No. 5 PM Coater Dryer Air Caps only. None of the other equipment at the facility is affected by this amendment.

Therefore, this amendment 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. This amendment will be incorporated into the Part 70 air emission license 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. No. 5 Paper Machine Coater Dryer Air Caps

A summary of the BACT analysis for the No. 5 PM Coater Dryer Air Caps is the following:

1. Pipeline quality natural gas, or an equivalent fuel as determined by the Department, shall be fired.
2. Natural gas contains inherently low levels of sulfur. The SO₂ emission limit is based upon AP-42 data, dated 7/98.
3. Chapter 103 regulates PM emission limits, however, the Department finds that a PM emission limit based upon AP-42 data, dated 7/98 is more appropriate. The PM₁₀ emission limit is derived from the PM emission limit.
4. NO_x emissions shall be limited through the use of low NO_x burners in the No. 5 PM Coater Dryer Air Caps and the NO_x emission limit is based upon AP-42 data, dated 7/98.
5. The CO emission limit is based on vendor guarantees.
6. The VOC emission limit is based upon AP-42 data, dated 7/98.
7. Visible emissions from the No. 5 PM Coater Dryer Air Cap vents shall not exceed 10% opacity on a six (6) minute block average.

C. Incorporation into the Part 70 Air Emission License

The requirements in this 06-096 CMR 115 New Source Review amendment shall apply to the facility upon amendment issuance. Per *Part 70 Air Emission License Regulations*, 06-096 CMR 140 (as amended), Section 2(J)(2)(d), 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

The proposed changes will result in no changes to any of the annual emission limits currently contained in Verso Bucksport's Air Emission Licenses, including any amendments.

III. AMBIENT AIR QUALITY ANALYSIS

Verso Bucksport 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 minor modification.

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-22-77-3-A pursuant to the preconstruction licensing requirements of 06-096 CMR 115 and subject to the standard and special conditions below.

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

(1) No. 5 Paper Machine Coater Dryer Air Caps

A. Pipeline quality natural gas, or an equivalent fuel as determined by the Department, shall be fired. Compliance shall be demonstrated by fuel records from the supplier showing the quantity and type of fuel supplied. Records of annual fuel use shall be kept on a 12-month rolling total basis.
[06-096 CMR 115, BACT]

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

Emission Unit	PM (lb/hr)	PM ₁₀ (lb/hr)	SO ₂ (lb/hr)	NO _x (lb/hr)	CO (lb/hr)	VOC (lb/hr)
No. 5 PM Coater Dryer Air Caps	0.11	0.11	0.008	0.7	3.1	0.08

C. Visible emissions from the No. 5 PM Coater Dryer Air Cap vents shall not exceed 10% opacity on a six (6) minute block average. [06-096 CMR 115, BACT]

DONE AND DATED IN AUGUSTA, MAINE THIS 7th DAY OF June, 2011.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Melanie P. Brooks
JAMES R. BROOKS, ACTING COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: June 17, 2010

Date of application acceptance: June 24, 2010

Date filed with the Board of Environmental Protection:

This Order prepared by Eric Kennedy, Bureau of Air Quality.



