



DEPARTMENT ORDER

Verso Androscoggin LLC
Franklin County
Jay, Maine
A-203-70-W-A

Departmental
Findings of Fact and Order
Part 70 Air Emission License
Amendment #2

FINDINGS OF FACT

After review of the Part 70 License amendment application, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 Maine Revised Statutes (M.R.S.) § 344 and § 590, the Maine Department of Environmental Protection (Department) finds the following facts:

I. REGISTRATION

A. Introduction

FACILITY	Verso Androscoggin LLC
LICENSE TYPE	Part 70 Significant License Modification
NAICS CODES	322121
NATURE OF BUSINESS	Pulp & Paper Mill
FACILITY LOCATION	Riley Road, Jay, Maine

Verso Androscoggin LLC is an integrated pulp and paper manufacturing facility located in Jay, Maine. Established in 1965, this facility utilizes both chemical and mechanical pulping processes to produce a wide variety of pulp and paper products. The facility is owned by Verso Corporation and operated as Verso Androscoggin, LLC. The facility will be referred to in this license by any of the following terms: Verso, Verso Androscoggin, or the Mill.

Verso Androscoggin has submitted an application in accordance with *Part 70 Air Emission License Regulations*, 06-096 Code of Maine Rules (C.M.R.) ch. 140 to amend existing conditions in their air emission license A-203-70-G-R/A (issued May 20, 2015) to update stack testing requirements to reflect recent operating changes made to the mill and to clarify particulate matter (PM) testing requirements for Boiler 3.

B. Emission Equipment

The following emission units are addressed by this Part 70 License Amendment:

<u>Unit</u>	<u>Max. Capacity</u>	<u>Fuel Type; % sulfur</u>	<u>Year of Installation</u>	<u>Stack #</u>
<i>Power Plant Boiler</i>				
Boiler 3 (PB3; formerly called the Waste Fuel Incinerator, or WFI)	480 MMBtu/hr (biomass) 240 MMBtu/hr (oil or natural gas)	Biomass, #6 oil, distillate fuel oil, used oil, pulp and paper WWTP sludge, natural gas	1976	PB3
<i>Recovery Boilers and Smelt Dissolving Tanks</i>				
Recovery Boiler #1 (RB1)	2.5 MMlb BLS/day	Black liquor, #6 oil, distillate fuel, used oil, natural gas	1965	CRB (Combined Recovery Boiler Stack)
	315 MMBtu/hr *			
#1 Smelt Dissolving Tank (SDT1)	2.5 MMlb BLS/day	N.A.	1965	SDT1
<i>Recausticizing Area</i>				
A Lime Kiln (LKA)	80 MMBtu/hr (fuel firing)	fuel oil (including #6 fuel oil, distillate fuel, specification used oil and off-specification used oil); propane pilot gas; and natural gas	1965	LKA
	248 tons/day calcium oxide (CaO)			

C. Application Classification

All rules, regulations, or statutes referenced in this air emission license refer to the amended version in effect as of the issued date of this license.

The application for Verso Androscoggin does not include the licensing of increased emissions; however, the revision of stack testing requirements for the above specified units could be considered a relaxation of testing and reporting license terms or conditions. Therefore the license application is considered to be a Part 70 Significant License Modification processed under *Part 70 Air Emission License Regulations*, 06-096 C.M.R. ch. 140.

II. SIGNIFICANT LICENSE MODIFICATION DESCRIPTION

A. Changes to Stack Testing Requirements for RB1, SDT1, and LKA

Verso Androscoggin plans to idle Recovery Boiler #1, #1 Smelt Dissolving Tank, and A Lime Kiln indefinitely beginning in the first quarter of 2017. These units may be shut down temporarily or permanently, depending on a number of factors still to be determined. The A Lime Kiln will be maintained to provide backup

non-condensable gas control, but it will only be started as needed when the B Lime Kiln is unavailable.

The facility requires flexibility to defer required stack testing for equipment that is shut down. If the source is shut down and not operating during the year the stack testing is required, Verso Androscoggin has requested that stack testing not be required during that year and be postponed to when the equipment returns to normal operation. The facility has requested that *normal operation*, for the purposes of testing postponement, be defined as when the unit is operated for more than 2,190 operating hours during the calendar year.

The following table summarizes the stack tests that are affected by changes to the Mill's operating configuration.

Source	Test	Current Testing Frequency	Proposed Testing Frequency
Recovery Boiler #1 (RB1)	PM	1 every 5 years	If RB1 is operating, every 5 years. If RB1 is in a shutdown state, testing can be deferred to within 6 months upon operation of RB1 firing black liquor solids for more than 2,190 operating hours during the calendar year.
#1 Smelt Dissolving Tank (SDT1)	PM	1 every 5 years	If SDT1 is operating, every 5 years. If SDT1 is in a shutdown state, testing can be deferred to within 6 months upon operation of SDT1 for more than 2,190 operating hours during the calendar year.
	TRS	1 every 2 years	If SDT1 is operating, every 2 years. If SDT1 is in a shutdown state, testing can be deferred to within 6 months upon operation of SDT1 for more than 2,190 operating hours during the calendar year.
A Lime Kiln (LKA)	PM	1 every 5 years	If LKA is operating, every 5 years. If LKA is in a shutdown state, testing can be deferred to within 6 months upon operation of production of CaO for more than 2,190 operating hours during the calendar year.
	NO _x		

The Department finds the proposed testing changes for units whose operations are being idled for indefinite periods of time to be reasonable and appropriate and authorized under applicable regulations. Natural gas-only firing or no-load-only firing is not to be included in the annual operating hour limitation for determining when stack testing is required. Specific Conditions of the Part 70 license are amended herein as specified above.

B. Boiler 3 PM Testing Requirements

The Mill is required to test particulate matter (PM) emissions from Boiler 3 to demonstrate compliance with emission standards from the federal regulation *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters*, 40 Code of Federal Regulations (C.F.R.) Part 63, Subpart DDDDD and with emission standards from the Part 70 license under state authority from *Part 70 Air Emission License Regulations*, 06-096 C.M.R. ch. 140.

Subpart DDDDD requires annual PM testing which can be deferred to once every three years if the previous test results are less than 75% of the standard. Subpart DDDDD testing is to be conducted under the unit's worst case emissions scenario, and the facility is to re-establish values for boiler and wet scrubber operating parameters with each Subpart DDDDD test.

Testing to demonstrate compliance with the lb/MMBtu and lb/hour emission standards in the Part 70 license which are *not* required per Subpart DDDDD is to be conducted annually and under normal boiler and scrubber operations. As currently licensed, the facility may utilize Subpart DDDDD performance testing to satisfy the Part 70 license required testing for a given year in which the Subpart DDDDD testing was required. However, there are presently no deferment criteria for state-only testing requirements.

The State statute found at 30 M.R.S. § 589, §§ 2 provides the following:

Facilities monitored by a continuous opacity monitor or appropriate surrogate parameters as required by the commissioner shall not be required to stack test for PM more than once every five years. If visible emissions, operating parameters, federal requirements, or other information indicates that the source may be operating out of compliance, additional testing may be required upon request of the Department.

Although Verso Androscoggin is not required to continuously monitor opacity of emissions from Boiler 3 using a continuous opacity monitor, their Part 70 license requires the monitoring of surrogate parameters, namely the scrubber differential pressure and scrubbing fluid flow rate, for the Venturi scrubber operated to control boiler emissions. Thus, the PM testing may be required on a less frequent basis than annually under this statutory authority. In addition, the results of previously conducted PM testing show consistent compliance with the licensed standards.

In accordance with the application submitted by the facility, stack testing for PM from Boiler 3 shall be required every other calendar year. If PM testing is conducted to satisfy requirements of Subpart DDDDD in a calendar year during which the state-required PM testing is due, the Subpart DDDDD testing shall be considered to satisfy the state-required testing for that calendar year.

This license change in no way compromises the State's authority to request additional testing if visible emissions, operating parameters, federal requirements, or other information indicates that the source may be operating out of compliance.

C. Facility Annual Emissions

The facility's annual emissions are not being revised with this amendment and shall remain as currently licensed.

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

The Department hereby grants the Part 70 License Amendment A-203-70-W-A pursuant to 06-096 C.M.R. 140 and the preconstruction permitting requirements of *Major and Minor Source Air Emission License Regulations*, 06-096 C.M.R. ch. 115, and subject to the conditions found in Air Emission License A-203-70-G-R/A, in amendment A-203-70-V-A, and the following conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in 06-096 C.M.R. ch. 115 for making such changes and pursuant to the applicable requirements in 06-096 C.M.R. ch. 140.

For each specific condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only.**

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

Specific Condition (16) D of Air Emission License A-203-70-G-R/A shall be replaced with the following:

(16) Boiler 3

D. Emission Limit Compliance Methods

Compliance with the emission limits associated with Boiler 3 shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Pollutant	Emission Limit	Compliance Method	Frequency
PM	lb/MMBtu and lb/hr limits	Emissions Testing according to 40 C.F.R. Part 60, Appendix A, Method 5	For the emission limit in Table 2 of 40 C.F.R. Part 63, <u>Subpart DDDDD</u> : Annually, or otherwise in accordance with 40 C.F.R. Part 63, Subpart DDDDD * For the emission limit of <u>0.10 lb/MMBtu and 48 lb/hr</u> : At least once every two calendar years **
PM ₁₀	lb/hr limit	Emissions Testing according to 40 C.F.R. Part 60, Appendix A, Method 5	As requested
SO ₂	lb/MMBtu limit	CEMS	Continuously
	lb/hr limit	Emissions Testing according to Applicable Method of 40 C.F.R. Part 60, Appendix A	As requested
NO _x	lb/MMBtu limit	CEMS	Continuously
	lb/hr limit	Emissions Testing according to Applicable Method of 40 C.F.R. Part 60, Appendix A	As requested
CO	ppmvd limit	Emissions Testing according to Applicable Method of 40 C.F.R. Part 60, Appendix A; or CEMS if alternative monitoring is selected for Boiler MACT	<u>As requested</u> if stack testing standard is chosen. <u>Annually</u> , or otherwise in accordance with 40 C.F.R. Part 63, Subpart DDDDD *
	lb/hr limit	Emissions Testing according to Applicable Method of 40 C.F.R. Part 60, Appendix A	As requested

<u>Pollutant</u>	<u>Emission Limit</u>	<u>Compliance Method</u>	<u>Frequency</u>
VOC	lb/hr limit	Emissions Testing according to Applicable Method of 40 C.F.R. Part 60, Appendix A	As requested
Visible Emissions	opacity limit	40 C.F.R. Part 60, Appendix A, Method 9	As requested

* In accordance with 40 C.F.R. § 63.7515, if performance tests for a given pollutant for at least two consecutive years show emissions at or below 75% of the emission limit for that pollutant, and if there are no changes in operation of the boiler or air pollution control equipment that could increase emissions, Verso may opt to conduct performance testing every third year on this unit. Such option and conditions shall be in accordance with the requirements and specifications of 40 C.F.R. § 63.7515.

** In calendar years that stack testing is required under Subpart DDDDD, that stack testing can be used to show compliance with the particulate matter emission limits of 0.10 lb/MMBtu and 48 lb/hr.

Specific Condition (17) D of Air Emission License A-203-70-G-R/A shall be replaced with the following:

(17) Recovery Boiler #1 and Recovery Boiler #2

D. Emission Limit Compliance Methods

Compliance with the emission limits for Recovery Boilers #1 and #2 shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

<u>Pollutant</u>	<u>Applicable Emission Limit</u>	<u>Compliance Method</u>	<u>Frequency</u>
PM	gr/dscf and lb/hr limits (combined emissions from RB1 and RB2)	40 C.F.R. Part 60, App. A, Method 5	Once every 5 calendar years. If RB1 is in a shutdown state, RB1 testing can be deferred to within 6 months upon operation of RB1 firing black liquor solids for more than 2,190 operating hours during the calendar year. *
PM ₁₀	lb/hr limit (combined emissions from both RBs)	40 C.F.R. Part 60, App. A, Method 5	As requested
SO ₂	ppmdv limits (individual units only)	SO ₂ CEMS	Continuously

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
SO ₂	lb/hr limit (combined stack only)	SO ₂ CEMS on the shared stack	Continuously
NO _x	ppmdv limits	NO _x CEMS	Continuously
	lb/hr limits	Emissions Testing according to Applicable Method of 40 C.F.R. Part 60, Appendix A	As requested
CO	lb/hr limits		As requested
VOC	lb/hr limits	Emissions Testing according to Applicable Method of 40 C.F.R. Part 60, Appendix A	As requested
Visible Emissions	Opacity limit	COMS monitoring emissions from the common stack	Continuously
TRS	ppmdv limit	TRS CEMS	Continuously

- * If Recovery Boiler #1 starts up and fires only natural gas, particulate matter stack testing will not be required. Natural gas-only firing is not to be included in the annual operating hour threshold for determining when stack testing is required. Any required stack testing per 40 C.F.R. Part 63, Subpart MM shall be done in accordance with Subpart MM requirements.

Specific Condition (18) C of Air Emission License A-203-70-G-R/A shall be replaced with the following:

(18) Smelt Dissolving Tanks #1 and #2

C. Emission Limit Compliance Methods

Compliance with the emission limits associated with Smelt Dissolving Tanks #1 and #2 shall be demonstrated in accordance with the methods and frequencies indicated in the table below or other methods or frequencies as approved by the Department.

Pollutant	Applicable Emission Limit	Compliance Method	Frequency
PM	lb/ton BLS fired and lb/hour limits	Emissions testing in accordance with applicable method of 40 C.F.R. Part 60, Appendix A	Once every five years. If SDT1 is in a shutdown state, testing can be deferred to within 6 months upon operation of SDT1 for more than 2,190 operating hours during the calendar year. *
PM ₁₀	lb/hour limits		As requested
SO ₂	lb/hour limits	Emissions testing in accordance with applicable method of 40 C.F.R. Part 60, Appendix A	As requested
TRS	lb/ton BLS (as H ₂ S) limit	Emissions testing in accordance with applicable method of 40 C.F.R. Part 60, Appendix A	Once every two years. If SDT1 is in a shutdown state, testing can be deferred to within 6 months upon operation of SDT1 for more than 2,190 operating hours during the calendar year.
Visible Emissions	opacity limit	Emissions testing in accordance with 40 C.F.R. Part 60, Method 9	As requested

* Any required stack testing per 40 C.F.R. Part 63, Subpart MM shall be done in accordance with Subpart MM requirements.

Specific Condition (19) C of Air Emission License A-203-70-G-R/A shall be replaced with the following:

(19) **A and B Lime Kilns**

C. Emission Limit Compliance Methods

Compliance with the emission limits associated with A and B Lime Kilns shall be demonstrated in accordance with the methods and frequencies for each unit as indicated in the table below or other methods or frequencies as approved by the Department.

Pollutant	Emission Limit	Compliance Method	Frequency
PM	gr/dscf and lb/hr limits	Emissions testing in accordance with the applicable method of 40 C.F.R. Part 60, Appendix A	Once every five years. If LKA is in a shutdown state, testing can be deferred to within 6 months upon operation of production of CaO for more than 2,190 operating hours during the calendar year.*
PM ₁₀	lb/hr limits		As requested
PM _{2.5}	lb/hr limits		
SO ₂	lb/hr limits	Emissions testing in accordance with 40 C.F.R. Part 60, Appendix A, Method 6	As requested
NO _x	ppmv (wet) and lb/hr limits	Emissions testing in accordance with 40 C.F.R. Part 60, Appendix A, Method 7E	Once every five calendar years. If LKA is in a shutdown state, testing can be deferred to within 6 months upon operation of production of CaO for more than 2,190 operating hours during the calendar year.**
CO	lb/hr limits	Emissions testing in accordance with the applicable method in 40 C.F.R. Part 60, Appendix A	As requested
VOC	lb/hr limits	Emissions testing in accordance with the applicable method in 40 C.F.R. Part 60, Appendix A	As requested

* In accordance with 38 M.R.S. § 589, §§ 2, if visible emissions, operating parameters, federal requirements, or other information indicates the source may be operating out of compliance, additional testing may be required upon request of the Department. Natural gas-only firing or no-load-only

firing is not to be included in the annual operating hour threshold for determining when stack testing is required.

If the A Lime Kiln is operating periodically as an incinerator only for NCG control or otherwise under no-load conditions, PM stack testing will not be required. Any required stack testing per 40 C.F.R. Part 63, Subpart MM shall be done in accordance with Subpart MM requirements.

- ** If operating parameters, federal requirements, or other information indicates the source may be operating out of compliance, additional testing may be required upon request of the Department. Natural gas-only firing or no-load-only firing is not to be included in the annual operating hour threshold for determining when stack testing is required.

If the A Lime Kiln is operating periodically as an incinerator only for NCG control or otherwise under no-load conditions, NO_x stack testing will not be required. Any required stack testing per 40 C.F.R. Part 63, Subpart MM shall be done in accordance with Subpart MM requirements.

Pollutant	Emission Limit	Compliance Method	Frequency
TRS	ppm limit	CEMS – monitoring TRS concentration on a dry basis and % O ₂ by volume on a dry basis of emissions	Calculate and record daily: 12-hour block average TRS @ 10% O ₂ and O ₂ concentrations for the two consecutive periods of each operating day, determined as the arithmetic mean of the appropriate 12 contiguous, one-hour averages from the CEMS

DONE AND DATED IN AUGUSTA, MAINE THIS 30 DAY OF June, 2017.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: Marie Allen Robert Corne for
PAUL MERCER, COMMISSIONER

The term of this amendment shall be concurrent with the term of Air Emission License A-203-70-G-R/A.

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 2/21/2017

Date of application acceptance: 2/28/2017

Date filed with the Board of Environmental Protection:

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

