



# DEPARTMENT OF ENVIRONMENTAL PROTECTION

ANGUS S. KING, JR.  
GOVERNOR

EDWARD O. SULLIVAN  
COMMISSIONER

James River Corporation	)	Departmental
Penobscot County	)	Finding of Fact and Order
Old Town, Maine	)	Air Emission License
A-180-71-R-M	)	Minor Revision/Amendment #6

After review of the air emission license minor revision information, staff investigation reports, and other documents in the applicant's file in the Bureau of Air Quality Control, pursuant to 38 M.R.S.A, Section 344 and Section 590, the Department finds the following facts:

## I. REGISTRATION

James River Company, located in Old Town, has submitted a letter stating the facility is following the provisions of Chapter 134 - Reasonable Available Control Technology (RACT) for facilities that emit volatile organic compounds (VOC) as described in Section 3(A)(4), Option D: RACT control for pulp and paper processes. This minor revision summarizes those Chapter 134 requirements applicable to the James River mill.

## II. MINOR REVISION DESCRIPTION

### RACT for VOC Emissions

James River operates the following sources which are eligible to achieve compliance with VOC RACT pursuant to Chapter 134, Section 3(A), Option D of the Department's regulations:

- a. Bleach Plant/ClO<sub>2</sub> Generation
- b. Waste Water Treatment Plant
- c. Pulp Stock Washer Systems and Pulp Liquor Storage Tanks
- d. Digester System, Multiple Effect Evaporator System, Smelt Dissolving Tank, and Lime Kiln

Various other sources are exempt from VOC RACT pursuant to Chapter 134, Section 1(C) of the Department's regulations including the power boilers, the kraft recovery furnace, the wood yard, the paper making area, and the converting area.

### Bleach Plant

James River is required, pursuant to Chapter 122, to collect emissions from the

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bleach plant and have the chlorine and chlorine dioxide emissions controlled by the bleach plant scrubber system. Total facility bleach plant chlorine and chlorine dioxide emissions are each limited to 3.0 lb/hr after control by the wet scrubber system. As a result of this control requirement, some of the VOC emissions from the bleach plant are also collected and controlled by the bleach plant scrubber system. In addition, James River has eliminated the use of sodium hypochlorite as a primary bleaching agent at the bleach plant.

The control of emissions from the bleach plant by the bleach plant scrubber system pursuant to Chapter 122 (for the control of chlorine and chlorine dioxide emissions) and the discontinued use of sodium hypochlorite as a primary bleaching stage is determined to be meeting VOC RACT. The Department has determined that additional VOC controls for the bleach plant are not feasible at this time.

#### Waste Water Treatment Facility

James River is required by Federal regulation to comply with their National Pollution Discharge Elimination System (NPDES) permit. By complying with their NPDES permit, VOC emissions from James River's waste water treatment facility are controlled and thus James River is determined to be meeting VOC RACT.

#### Pulp Stock Washer Systems and Pulp Liquor Storage Tanks

The Paper Industry Information Office performed a VOC RACT analysis on various VOC sources from a representative paper mill in Maine. From that analysis it was determined that the control of VOCs from the pulping area (which contain pulp stock washers) and the chemical recovery area (which contain pulp liquor storage tanks) would have a \$17,402/ton and \$29,089/ton cost effectiveness, respectively. Based on the economic impact, the control of VOCs from these sources is therefore rejected as RACT. VOC emissions from the pulp stock washer systems and Pulp Liquor Storage Tanks as currently configured are determined to be meeting VOC RACT and the Department has determined that additional VOC controls are not feasible at this time.

#### Digester System and the Multiple Effect Evaporator System

James River is required by Chapter 124 to collect emissions from the digester system and the multiple effect evaporator system. The total reduced sulfur (TRS) emissions from these sources are to be collected and incinerated within the #2 boiler or within the lime kiln as backup. As stated in license A-180-71-M-A, by December 31, 1997 James River shall utilize the lime kiln as the primary incineration source with boilers #5 and #6 as back up. As a direct result of the TRS collection and control, VOC emissions from the digester system and the multiple effect evaporator system are also collected and incinerated within the #2 boiler or within the lime kiln (or either boilers #5 and #6 as future back up).

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The control of VOC emissions from the digester system and the multiple effect evaporator system by the #2 boiler or the lime kiln, which complies with Chapter 124 for the control of TRS emissions, is determined to be meeting VOC RACT. The Department has determined that additional VOC controls for the digester system and the multiple effect evaporator system are not feasible at this time.

Smelt Tank

James River is required by Chapter 124 to meet a TRS emissions limit of 0.016 g/kg black liquor solids as H<sub>2</sub>S (0.033 lb/ton black liquor solids as H<sub>2</sub>S) and has a current license limit of 0.0168 lb/ton black liquor solids. In addition, the particulate emissions from this source are required by the license to be controlled by a wet scrubber system. As a result of the scrubber system, some of the VOC emissions from the smelt tank are also controlled. The control of emissions from the smelt tank by the wet scrubber system, operated to meet the license limit for particulate matter and TRS, is also determined to be meeting VOC RACT. The Department has determined that additional VOC controls for the smelt tank are not feasible at this time.

Lime Kiln

James River is required to maintain adequate combustion conditions within the lime kiln to meet a TRS emissions limit of 20.0 ppmv corrected to 10% O<sub>2</sub> on a dry basis, as required by Chapter 124. As a result, VOC emissions from the lime kiln are also controlled by maintaining adequate combustion conditions.

The control of VOC emissions from the lime kiln by maintaining adequate combustion conditions to comply with Chapter 124 for the control of TRS emissions is also determined to be meeting VOC RACT. The Department has determined that additional VOC controls for the lime kiln are not feasible at this time.

**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, or increment standards either alone or in conjunction with emissions from other sources.~~

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Therefore the Department grants this amendment A-180-71-R-M, subject to the ~~conditions found in air emission license #1782 and subsequent amendments A-180-71-F-A, A-180-71-K-A, A-180-71-O-M, A-180-71-M-A, and A-180-71-P-A, in addition to the following conditions:~~

- (1) James River shall meet the following VOC RACT requirements:
- James River shall not utilize, without a prior license revision, sodium hypochlorite as a primary bleaching agent in the bleach plant. James River shall operate the bleach plant scrubber when the bleach plant is in operation.
  - James River shall comply with the terms and conditions of the facility's NPDES permit.
  - James River shall collect and control emissions from the digester system and the multiple effect evaporator system for TRS control as required by Chapter 124 of the Department's regulations.
  - James River shall operate the smelt tank scrubber when the smelt tank is in operation and shall not exceed the emission limits set forth in Chapter 124 of the Department's regulation from the smelt tank.
  - James River shall meet a TRS emissions limit of 20.0 ppmv corrected to 10% O<sub>2</sub> on a dry basis, as required by Chapter 124 of the Department's regulations from the lime kiln.

(2) The term of this order shall be concurrent with the term of air emission license #1782

DONE AND DATED IN AUGUSTA, MAINE THIS 8th DAY OF December 1995.

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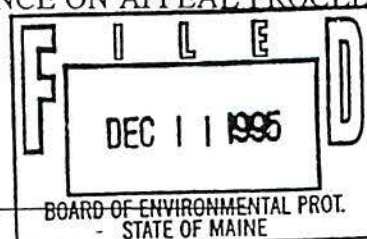
BY: James P. Brooks for  
Edward O. Sullivan, Commissioner

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: May 31, 1995

Date of application acceptance: May 31, 1995

Date filed with Board of Environmental Protection: \_\_\_\_\_



This order prepared by Kathleen E. Neil, Bureau of Air Quality Control