DTTOCHMENT#14



## State of Wisconsin

# **DEPARTMENT OF NATURAL RESOURCES**

**LICENED** 

JAN 1 3 1988

Secretary M 4530-1

Carroll D. Besedny

December 23, 1987

An Consistion Branch Line, Gra Region V

CERTIFIED MAIL RETURN RECEIPT REQUESTED

Mr. Richard J. Grund Nekoosa Papers, Incorporated 100 Wisconsin River Drive Port Edwards, Wisconsin 54469

Dear Mr. Grund:

Your application for an air pollution control permit has been processed in accordance with Section 144.3925, Wisconsin Statutes.

The enclosed permit is issued to provide authorization for your source to operate in accordance with the requirements and conditions set forth within Parts I and II of the permit. Please read it carefully.

This permit is effective immediately unless a petition for a contested case hearing for administrative review of the permit is filed with the Department under Section 144.403, Wisconsin Statutes, within 30 days after the date of the permit. Any petition for a hearing should name the Wisconsin Department of Natural Resources as respondent. The petition should set forth specifically the issue sought to be reviewed, the interest of the petitioner, the reasons why a hearing is warranted and the relief desired.

A copy of this permit should be available at the source for inspection by any authorized representative of the Department. Questions about this permit should be directed to the Bureau of Air Management, P.O. Box 7921, Madison, WI 53707, (608)266-7718, or the Wisconsin Department of Natural Resources, North Central District Air Program, P.O. Box 818, Rhinelander, WI 54501, (715)362-7616.

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES

Neal Bandhing

Neal Baudhuin, Engineer Bureau of Air Management

Attach. cc: Air Enforcement Branch, EPA, Region V North Central District Air Program, Rhinelander

#### AIR POLLUTION CONTROL PERMIT ELECTIVE OPERATION PERMIT FOR AN EXISTING AIR CONTAMINANT SOURCE

FACILITY	ID No.	772010580	SIC No.	2621
ELECTIVE	OPERATION	PERMIT NO.	87-NEB-701	· · · · · · · · · · · · · · · · · · ·
TYPE OF S	SOURCE:	Sulfite Pulp	and Paper Mill	

THIS ELECTIVE OPERATING PERMIT IS PERMANENT UNLESS ALTERED, REVOKED OR SUSPENDED.

In compliance with the provisions of Chapter 144, Wisconsin Statutes, and Chapters NR 400 to 499, Wisconsin Administrative Code,

> Name of Source: Nekoosa Papers, Incorporated-Port Edwards Mill Street Address: 100 Wisconsin River Drive, Port Edwards, Wisconsin 54469 Principal Officer or Authorized Representative, & Title: Richard J. Grund, Corporate Supervisor of Environmental Protection

is authorized to operate a sulfite pulp and paper mill located at 100 Wisconsin River Drive, Port Edwards, Wisconsin 54469 in accordance with the alternate sulfur dioxide emission limit request dated February 28, 1985, and subsequent submittals in support of the application and in accordance with the conditions stated herein.

This authorization requires compliance by the permit holder with the emission limitations, monitoring requirements and other terms and conditions set forth in Parts I and II hereof.

Dated at Madison, Wisconsin, this 23rd day of December , 1987.

STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES For the Secretary

By Longla Theil

Donald F. Theiler, Director Bureau of Air Management

### PART I

### SPECIFIC PERMIT CONDITIONS

BY CATEGORY OF EMISSION UNITS:

A. Boiler B20 emitting from Stack S10

Process/Pollutant	Applicable Wis. Adm. Code or Wis. Statute	Limitation/Requirement
Particulate Matter	s. NR 415.06(1)(a), Wis. Adm. Code	0.6 pounds per million BTU input to any stack.
so <sub>2</sub>	s. NR 417.07(5)(c), Wis. Adm. Code	3.0 pounds per million BTU input from the boiler to any stack.
NO <sub>2</sub>	s. NR 428.03, Wis. Adm. Code	28.88 pounds per hour
СО	s. NR. 426.025, Wis. Adm. Code	4.20 pounds per hour
Organic Compounds	s. NR 419.03(1), Wis. Adm. Code	0.51 pounds per hour
Lead	s. NR 427.025, Wis. Adm. Code	0.003 pounds per hour
Visible Emissions	s. NR 431.04(1), Wis. Adm. Code	#2 of the Ringelmann chason 40% opacity

Boiler B21 emitting from Stack S10 Β.

Process/Pollutant	Applicable Wis. Adm. Code or Wis. Statute	Limitation/Requirement
Particulate Matter	s. NR 415.06(1)(a), Wis. Adm. Code	0.6 pounds per million BTU input to any stack
so <sub>2</sub>	s. NR 417.07(5)(c), Wis. Adm. Code	3.0 pounds per million BTU input from the boil to any stack
NO <sub>2</sub>	s. NR 428.03, Wis. Adm. Code	28.88 pounds per hour
СО	s. NR. 426.025, Wis. Adm. Code	4.20 pounds per hour
Organic Compounds	s. NR 419.03(1), Wis. Adm. Code	0.51 pounds per hour
Lead	s. NR 427.025, Wis. Adm. Code	0.003 pounds per hour
Visible Emissions	s. NR 431.04(1), Wis. Adm. Code	#2 of the Ringelmann ch or 40% opacity

C. Boiler B24 emitting from Stack S10

•

Process/Pollutant	Applicable Wis. Adm. Code or Wis. Statute	Limitation/Requirement
Particulate Matter	s. NR 415.06(1)(a), Wis. Adm. Code	0.6 pounds per million BTU input to any stack
so <sub>2</sub>	s. NR 417.07(5)(c), Wis. Adm. Code	3.0 pounds per million BTU input from the boile to any stack
NO2	s. NR 428.03, Wis. Adm. Code	72.88 pounds per hour
со	s. NR. 426.025, Wis. Adm. Code	10.60 pounds per hour
Organic Compounds	s. NR 419.03(1), Wis. Adm. Code	1.13 pounds per hour
Lead	s. NR 427.025, Wis. Adm. Code	0.006 pounds per hour
Visible Emissions	s. NR 431.04(1), Wis. Adm. Code	#2 of the Ringelmann chε or 40% opacity

D. Boiler B25 emitting from Stack S13

Process/Pollutant	Applicable Wis. Adm. Code or Wis. Statute	Limitation/Requirement
Particulate Matter	s. NR 415.06(2)(a), Wis. Adm. Code	0.15 pounds per million BTU input to any stack
so <sub>2</sub>	s. NR 417.07(5)(c), Wis. Adm. Code	3.0 pounds per million BTU input from the boiler to any stack
NO2	s. NR 428.03, Wis. Adm. Code	37.24 pounds per hour
со	s. NR 426.025, Wis. Adm. Code	3.39 pounds per hour
Organic Compounds	s. NR 419.03(1), Wis. Adm. Code	0.19 pounds per hour
Lead	s. NR 427.025, Wis. Adm. Code	0.003 pounds per hour
Visible Emissions	s. NR 431.05(1), Wis. Adm. Code	<pre>#1 of the Ringelmann chap or 20% opacity.</pre>

E. Process P30-Sulfite Recovery Furnace emitting from Stack S11

Process/Pollutant	Applicable Wis. Adm. Code or Wis. Statute	Limitation/Requirement
Particulate Matter	s. NR 415.06(2)(c), Wis. Adm. Code	0.10 pounds per million BTU input to any stack
so <sub>2</sub>	s. NR 417.07(5), Wis. Adm. Code	* 1,633 pounds per hour averaged over any con- secutive 24-hour period
NO <sub>2</sub>	s. NR 428.03, Wis. Adm. Code	484.00 pounds per hour
СО	s. NR 426.025, Wis. Adm. Code	2.00 pounds per hour
Organic Compounds	s. NR 419.03(1), Wis. Adm. Code	0.30 pounds per hour
Lead	s. NR 427.025, Wis. Adm. Code	0.002 pounds per hour
Visible Emissions	s. NR 431.05(1), Wis. Adm. Code	<pre>#1 of the Ringelmann chart or 20% opacity</pre>

If a source performance test is used to demonstrate compliance, compliance . ★ shall be determined for the period of the test as conducted in accordance with section NR 439.07(1)(h)10., Wisconsin Administrative Code, incorporated by reference in chapter NR 484.

F. Miscellaneous Pulp Mill Process Sources - Filtrate Tank Vent, #1 Washer Vent and #2 Washer Vent

Process/Pollutant	Applicable Wis. Adm. Code or Wis. Statute	Limitation/Requirement
Sulfur Dioxide	s. NR 417.07(5), Wis. Adm. Code	* 12.10 pounds per hour averaged over any con- secutive 24-hour period, for each vent.

\* If a source performance test is used to demonstrate compliance, compliance shall be determined for the period of the test as conducted in accordance with section NR 439.07(1)(h)10., Wisconsin Administrative Code, incorporated by reference in chapter NR 484.

#### GENERAL CONDITIONS APPLICABLE TO THE ENTIRE FACILITY

- A. Source performance emission tests shall be conducted within 90 days after the issuance of this permit to prove compliance with the following limits:
  - 3.0 pounds of sulfur dioxide per million BTU heat input from Boilers B20, B21, and B24 to Stack S10. It is acceptable to perform one test on the common stack S10 provided all three boilers are being fired with residual fuel oil from a common source at the facility.
  - 3.0 pounds of sulfur dioxide per million BTU heat input from Boiler B25 to Stack S13.
  - 3. 1,633 pounds of sulfur dioxide per hour averaged over any consecutive 24-hour period from Process P30, the sulfite recovery furnace, to Stack S11.
  - 4. 12.10 pounds of sulfur dioxide per hour averaged over any consecutive 24-hour period from the filtrate tank vent.
  - 5. 12.10 pounds of sulfur dioxide per hour, averaged over any consecutive 24-hour period from the #1 washer vent.
  - 6. 12.10 pounds of sulfur dioxide per hour averaged over any consecutive 24-hour period from the #2 washer vent.
  - 7. 0.15 pound of particulate matter per million BTU heat input from Boiler B25 to Stack S13.
  - \* Compliance shall be determined for the period of the test as conducted in accordance with section NR 439.07(1)(h)10., Wisconsin Administrative Code, incorporated by reference in chapter NR 484.

NOTE: Compliance with the sulfur dioxide emission limitations shall be certified to the Department on or before December 31, 1987.

- B. All stack tests shall be performed with the equipment operating at a minimum of 80% of maximum rated input capacity.
- C. During stack tests, Boilers B20, B21, B24, and B25 shall be fired with residual fuel oil with sulfur content at least 80% of the highest sulfur content residual fuel oil used within the previous six months.
- D. The Department shall be informed at least 20 working days prior to the tests so that a Department representative can witness the testing. At the time of notification, a stack test plan following the provisions set forth in Section NR 439.07(1), Wisconsin Administrative Code, shall also be submitted for approval. Two copies of the report on the tests shall be submitted to the Department for evaluation within 30 days after the tests.

- Ε. The sulfur dioxide source performance emission tests for Boilers B20, B21. and B24 emitting to Stack S10, Boiler B25 emitting to Stack S13, Process P30. the sulfite recovery furnace, emitting to Stack Sll, the filtrate tank vent, #1 washer vent and #2 washer vent shall be performed at least once every 24 months as long as this permit remains valid. Each test shall be performed within 90 days of the anniversary date of the issuance of the permit, or within 90 days of an alternate date specified by the Department.
  - 1. The Department may grant a written waiver of a scheduled test for:
    - The direct stationary source associated with the emission point a. subject to the testing requirement will be ceasing operation within one year of a scheduled test.
    - A direct stationary source whose most recently completed test Ъ. results from a test conducted according to the methods and procedures specified in Section NR 439.07, Wisconsin Administrative Code, demonstrate that the emissions of the air contaminant for which compliance emission testing is required are 50% or less of the applicable emission limitation. This waiver only applies to the next scheduled test for the air contaminant requiring testing.
    - The direct stationary source associated with the emission point с. subject to the testing requirement has not operated more than 360 hours in the previous 12-month period prior to the scheduled test date. This waiver only applies to the next scheduled test for the air contaminant requiring testing.
  - 2. There are no periodic compliance emission test requirements for affected emission points equipped with continuous emission monitors for the air contaminants requiring testing if the monitor meets the performance specification requirements of Section NR 439.07(3), Wisconsin Administrative Code.
  - No periodic compliance stack emission tests are required for affected 3. emission points at fuel burning installations that only fire natural gas, propane or distillate fuel oil or any combination of these fuels.
  - 4. All requests for waivers under 1. shall be submitted in writing for Department review and approval at least 60 days prior to the required test date.
- Liquid fossil fuel sampling shall be performed for each storage tank of F. residual fuel oil. These samples shall be analyzed for sulfur content and heat content. Sampling and analysis shall be performed according to the following ASTM methods, or Department approved equivalents.
  - 1. ASTM D4057-81 or ASTM D4177-82, Standard Methods for Manual or Automatic Sampling Petroleum and Petroleum Products.
  - ASTM D240-76, Standard Test Method for Heat of Combustion of 2. Liquid Hydrocarbon Fuels by Bomb Calorimeter.
  - ASTM D129-78 or ASTM D4294-83 for Sulfur in Petroleum Products. 3.

- G. Operating parameters for the sulfite recovery furnace absorption tower shall be monitored to ensure proper and efficient operation. Parameters to be monitored are the liquor burning rate, the differential pressure across the tower and scrubbing solution inlet pH. Parameters are to be recorded on an hourly or continuous basis.
- H. A malfunction prevention and abatement plan in accordance with NR 439.11, Wisconsin Administrative Code, shall be filed with the Department for the sulfite recovery furnace absorption tower.
- I. Fuels other than residual fuel oil, natural gas, tall oil or pulping liquor may not be used in Boilers B20, B21, B24, B25 or Process P30 without receiving approval from the Department prior to their use.
- J. Source performance emission stack tests used to determine compliance shall be conducted in accordance with the following test methods and procedures described in 40 C.F.R. pt. 60, Appendix A, incorporated by reference in chapter NR 484, Wisconsin Administrative Code, unless the Department approves the use of an equivalent method.
  - 1. Method 6, 6A, 6B, 6C or 8 for sulfur dioxide emissions.
  - 2. Method 5, 5A, 5D or 17 for nonfugitive particulate emissions.
- K. Beginning no later than 30 days following the source performance emission tests required under General Condition A. above, and at the end of every month thereafter, the permittee shall calculate and record the hourly and 24-hour average sulfur dioxide emissions for Stack S11 from Process P30, the sulfite recovery furnace, for the preceding month. The calculations shall be based on liquor flow rate and sulfur content, secondary fuel flow rate and sulfur content, absorption tower operating conditions, and stack test data.
- L. Quarterly reports shall be submitted to the Department within 30 days following the end of each calendar quarter beginning with the first quarter of 1988. The reports shall include the following information:
  - 1. Total quantity of residual fuel oil burned expressed in thousands of gallons for each month during the calendar quarter.
  - 2. Weighted average percent of the sulfur content of the residual fuel oil burned for each month during the calendar quarter.
  - 3. Weighted average heat content expressed in BTU per gallon of residual fuel oil burned for each month during the calendar quarter.
  - 4. Weighted average sulfur dioxide emission rate expressed in terms of pounds of sulfur dioxide per million BTU heat input from the residual fuel oil burned for each month during the calendar quarter.
  - 5. Average sulfur dioxide emissions for Stack S11 from Process P30, the recovery furnace, expressed in terms of pounds of sulfur dioxide per hour average over a 24-hour period, for each consecutive 24-hour period during the calendar quarter.

M. All required records shall be retained for a period of three years. Records shall be available for inspection to authorized representatives of the Department during normal business hours.

.