



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VI

DALLAS, TEXAS 75270



File under Nekoosa Co. Mar 8, 1978

CERTIFIED MAIL: RETURN RECEIPT REQUESTED #317045

FEB 17 1978 MAR 30 1978

Mr. Philip R. Campbell
Corporate Supervisor of
Environmental Protection
~~Nekoosa Papers, Inc.~~
100 Wisconsin River Drive
Port Edwards, Wisconsin 54469

Dear Mr. Campbell:

A review of your application for authority to expand the Ashdown Mill at Ashdown, Arkansas, as specified in your Significant Deterioration Review, Application Number PSD-AR-42, dated November 14, 1977, has been completed by the Environmental Protection Agency (EPA). A determination has been made to approve your project. Our final determination indicates that you have met the requirements of the prevention of significant deterioration regulations of 40 CFR 52.21, as amended by the Clean Air Act Amendments of 1977, that is, the operation of your proposed project at the location specified, (1) will not cause a violation of the Class II air quality deterioration increments, (2) will not cause a violation of the National Ambient Air Quality Standards, (3) will not have an impact on the air quality of any mandatory Class I areas, and (4) will use best available control technology to control emissions of sulfur dioxide (SO₂) and particulate matter (TSP).

A violation of any condition issued as part of this approval as well as any construction which proceeds at variance with information submitted in the application is regarded as a violation of construction authority and is subject to enforcement action. Also, before you start construction you must meet, if applicable, all other Federal EPA requirements such as the 40 CFR part 60 (New Source Performance Standards), the National Pollutant Discharge Elimination System (NPDES), and the National Environmental Policy Act (NEPA). Commencement of construction prior to the completion of the NEPA process may result in enforcement action pursuant to Section 6.906 of 40 CFR Part 6, Preparation of Environmental Impact Statement. Furthermore, it must be pointed out that issuance of your prevention of significant deterioration certification does not free you of the responsibility to comply with other air pollution control strategies and all local, State, and Federal regulations which are part of the Arkansas State Implementation Plan.

This approval is issued in accordance with the following conditions:

1. The source will be constructed in accordance with the application and supportive facts submitted for EPA review.
2. The source shall comply with the Standards of Performance for Kraft Pulp Mills (40 CFR Part 60, Subpart BB) for particulate matter (TSP) emissions from the #2 Recovery Boiler, the Lime Kiln and the #2 Dissolving Tank Vent along with the applicable test methods and procedures specified in 40 CFR 60.285 (proposed).
3. The maximum sulfur dioxide (SO₂) emission rates for the Lime Kiln and the #2 Dissolving Tank Vent (stacks 1 and 2 combined) shall be 16.7 lbs/hr and 10.4 lbs/hr, respectively. Compliance with the required emission limitations shall be determined by EPA Reference Method 6, and the following test procedures shall be followed:
 - (a) The sampling point in the duct shall be at the centroid of the cross section or at a point no closer to the walls than 3.28 feet (1 meter).
 - (b) The samples shall be extracted at a constant rate of approximately 0.035 cubic feet/minute (1 liter/minute).
 - (c) The minimum sampling time shall be 20 minutes, and the minimum sampling volume shall be (0.02 dscm) 0.71 dry standard cubic feet (dscf) for each sample.
 - (d) The arithmetic mean of two samples shall constitute one run. Two samples shall constitute one run. Samples shall be taken at approximately 30-minute intervals.
 - (e) Emission rate shall be the arithmetic mean of results of three (3) test runs.
4. The #2 Recovery Boiler shall meet an SO₂ emission limitation of 250 parts per million. Compliance with the required emission limitation shall be determined by EPA Reference Method 6 and the test procedures specified in item 3a thru 3e above with the exception that item 3e is amended as follows:
 - (e) Emission rate shall be the arithmetic mean of results of three (3) test runs with an interval of at least six hours between runs.

5. Approval under the prevention of significant deterioration requirements shall take effect on the date of this notice. In accordance with the proposed prevention of significant deterioration rules which appeared in the Federal Register of December 8, 1977, construction must commence before December 1, 1978. If construction is not commenced by December 1, 1978, (where the term "commenced" is defined under 40 CFR 52.21(b)(7) as promulgated in the Federal Register on November 3, 1977), then this approval shall become invalid, and it will be necessary to resubmit an application under the new prevention of significant deterioration regulations which are expected to be promulgated on March 1, 1978.

The complete analysis including public comments, which justifies this approval, has been fully documented by the EPA Regional Office for future reference, if necessary. Any questions concerning this approval may be directed to Oscar Cabra by phone at (214) 767-2742 or by letter to this office.

Sincerely,

Adlene Harrison
Regional Administrator

cc: John M. Mitchell, Chief ✓
Air Pollution Control Division

bcc: 6AE
6AP
6AGC
FOI Officer

APPLICATION PSD-AR-42

PRELIMINARY DETERMINATION SUMMARY

I. APPLICANT

Nekoosa Papers Inc.
100 Wisconsin River Drive
Port Edwards, Wisconsin 54469
Phone: (715) 887-5111

II. PROJECT LOCATION

The source, a bleached kraft pulp and paper mill, is known as the Ashdown Mill, and it is situated in Little River County, Arkansas about five kilometers (3 miles) southeast of the City of Ashdown.

III. PROJECT DESCRIPTION

The applicant proposes to expand the Ashdown Mill's pulping capacity by 735 air dry tons per day (ADTPD) of bleached softwood pulp (increasing the Mill's pulping capacity to 1300 ADTPD) and to produce 750 ADTPD of float dried softwood market pulp. The proposed project is designated the Ashdown Mill Expansion and will entail the installation of a recovery boiler, multiple effect evaporators, a continuous digester, continuous diffusion washers and a lime kiln with additional recausticizing facilities and other associated changes as described in the applicant's submittal.

IV. SOURCE IMPACT ANALYSIS

The source impact analysis, which was prepared, consisted of four components: (1) an emissions and design analysis of the proposed project to ensure that emission limitations and Best Available Control Technology (BACT) requirements were met, (2) a determination that the estimated sulfur dioxide (SO₂) and particulates (TSP) emissions would not contribute to projected air quality levels in such a way that a violation of the Class II increments would occur (see Table 1), (3) a determination that the projected air quality levels would not exceed the National Ambient Air Quality Standards (NAAQS) as shown in Table 2, and (4) pursuant to Section 162(a) of the Clean Air Act Amendments of 1977, an analysis to ensure that the proposed project would not adversely impact the air quality in mandatory Class I areas.

TABLE 1

CLASS II INCREMENTS

<u>Pollutant</u>	<u>Averaging Time</u>	Maximum Allowable Increases (Increments) <u>Micrograms/Meter³</u>
Sulfur Dioxide (SO ₂)	Annual Mean	20
	24-Hr.	91 ^a
	3-Hr.	512 ^a
Particulate Matter (TSP)	Annual Mean	19
	24-Hr.	37 ^a

^aThe applicable maximum allowable increase may be exceeded during one such period per year at any receptor site.

TABLE 2

NATIONAL AMBIENT AIR QUALITY STANDARDS

<u>Pollutant</u>	<u>Averaging Time</u>	Ambient Ceilings ^a <u>Micrograms/Meter³</u>
Sulfur Dioxide	Annual	
	Arithmetic Mean	80
	24-Hr. ^b	365
	3-Hr. ^b	1300
Particulate Matter	Annual	
	Geometric Mean	60
	24-Hr. ^b	150
Carbon Monoxide	8-Hr. ^b	10
	1-Hr. ^b	40
Nitrogen Dioxide	Annual	
	Arithmetic Mean	100
Photochemical Oxidants	1-Hr. ^b	160

^aThe lower concentration of either the primary or secondary NAAQS.

^bNot to be exceeded more than once per year.

Considering the growth in the impact area and the decreases in TSP emissions that will result from the proposed project, the incremental changes in air quality against the baseline levels established on January 6, 1976 are predicted as follows:

TABLE 3

<u>Pollutant</u>	<u>Averaging Time</u>	<u>Predicted Maximum Concentration Micrograms/Meter³</u>
(SO ₂)	Annual Mean	1.9
	Max. 24-Hr.	26
	Max. 3-Hr.	163
(TSP)	Annual Mean	-0.1
	Max. 24-Hr.	-6

A comparison with the Class II increments in Table 1 indicates that a violation will not occur as a result of the construction of the proposed project.

The air quality impact of the proposed project on the NAAQS (ceilings) (shown in Table 2) for SO₂ and TSP was determined through dispersion modeling in which point sources within about 100 kilometers of the Ashdown Mill were modeled as background. The following concentrations, when compared with the appropriate NAAQS, show that there will not be a violation as a result of the construction of the proposed project:

<u>Pollutant</u>	<u>Averaging Time</u>	<u>Concentration Micrograms/Meter³</u>
(SO ₂)	Annual Mean	4.5
	Second-highest 24-Hr.	133
	Second-highest 3-Hr.	846
(TSP)	Annual Mean	2.8
	Second-highest 24-Hr.	39

Emissions information provided by the applicant for hydrocarbons (oxidants), carbon monoxide and nitrogen oxides, which are projected to be emitted as a result of the proposed construction, indicates that violation of these NAAQS will not occur.

Finally, based on the projected impact area of the proposed project, it was determined that the proposed construction would not cause a violation of the Class I increments in any mandatory Class I area.

V. CONCLUSION

On the basis of the air quality impact analysis and through the use of BACT as defined under 40 CFR 52.01, the Environmental Protection Agency proposes a preliminary determination of approval for the construction of the proposed project. The following conditions will be specified by the Regional Administrator for final approval:

As conditions to final approval, the following are specified:

1. The source shall comply with the NSPS for Kraft Pulp Mills (40 CFR Part 60, Subpart BB).
2. The maximum SO₂ and TSP emission rates for the following facilities are specified as follows:

<u>Emission Source</u>	<u>Pollutant Emission Rates (lb/hr)</u>	
	<u>SO₂</u>	<u>TSP</u>
1. Lime Kiln	16.7	51.0
2. #2 Dissolving Tank Vent (Stacks 1 and 2 combined)	10.4	14.6

3. The combination power boiler shall be in compliance with the NSPS for Fossil Fuel-Fired Steam Generators (40 CFR Part 60, Subpart D).
4. The #2 Recovery Boiler shall meet an SO₂ emission limitation of 250 ppm, 24-hour average. The maximum TSP emission rate from the #2 Recovery Boiler shall be 84.4 lb/hr.