

ENVIRONMENTAL ANALYSIS AND DECISION ON THE NEED
FOR AN ENVIRONMENTAL IMPACT STATEMENT (EIS)

Form 1600-1

Rev. 6-2001

Department of Natural Resources (DNR)

Region or Bureau
NER / Air

Type List Designation
II

NOTE TO REVIEWERS: This document is a DNR environmental analysis that evaluates probable environmental effects and decides on the need for an EIS. The attached analysis includes a description of the proposal and the affected environment. The DNR has reviewed the attachments and, upon certification, accepts responsibility for their scope and content to fulfill requirements in s. NR 150.22, Wis. Adm. Code. Your comments should address completeness, accuracy or the EIS decision. For your comments to be considered, they must be received by the contact person before 4:30 p.m., Insert Date.

Contact Person:

Don C. Faith III

Title: Review Engineer

Address: P.O. Box 7921

Madison, WI 53707

Telephone Number

(608) 267-3135

Applicant: Stora Enso North America – Niagara Mill

Address: 1101 Mill Street
Niagara, WI 54151

Title of Proposal: Paper Machine Modifications

Location: County: Marinette City/Town/Village: Niagara

Township Range Section(s): Township - 38N Range – 20E Section (s) - 10

PROJECT SUMMARY

1. Brief overview of the proposal including the DNR action (include cost and funding source if public funds involved)

The project described in this permit application includes several changes proposed to create production increases on both paper machine complexes at the Niagara Mill: modifications to the 43 and 44 paper machine complexes.

Specifics of the proposed modifications within each paper machine complexes are presented below along with detail.

No. 43 Paper Machine Complex

- Modify tailing ropes in Wet End Dryers, High Velocity Dryers, Dry End Dryers
- Replacement of all defective and worn-out infrared emitters
- Install pressure screens in stock system for removal of impurities
- Convert 1st dry end dryers section to unorun section
- Modification and replacement of wet end dryer gearing

- Replacement of Dryer Cans
- Replacement of on-machine doctoring systems
- Machine speed increases by 300 fpm to max of 3300 fpm

No. 44 Paper Machine Complex

- Installation of base sheet trim slitter system
- Replacement of two vacuum flat boxes with a trivac box
- Modification of reel trim removal system
- Upgrade flat box vacuum pump motor (“after-the-fact” application)
- Replacement of all defective and worn-out infrared emitters
- Replacement dryer cans and dryer cases
- Machine speed increases by 400 fpm to max of 3500 fpm

These project elements may also result in an increase in steam production requirements from the existing power boilers, along with increases in production in PGW pulp at the Niagara Mill. There will be no modifications to the power boilers or the PGW complex as a result of this project.

In addition to the projects described above, this permit application is intended to cover the following “after-the-fact” construction/improvement projects on paper machines 43 and 44:

Paper Machine 43 -

- Vacuum Pump Upgrade – Phase II
- Hi-Velocity Steam Coils Replacement
- First Press Suction Roll
- Supercalendars
- Machine Chest Pump
- Dryers
- Clearwell Pump
- Paper Machine Gear Failure Repairs
- Dry End Dryer Siphons
- Paper Machine Drive Modification
- Base sheet Trim Slitters

Paper Machine 44 –

- Dryer Lube System
- Press Doctor
- Rebuild 4th Dryer Section Gearing
- Rebuild 3rd Dryer Section Gearing
- Fourdrinier Frame Rebuild
- 2nd Section Unorun
- Spoiler Bars
- Applicator Roll Upgrade
- Thick Stock Screening
- Quality Problem Resolution – PM44 Dryer Section
- Unorun Blow Box Showers
- Dry End Pulper Repairs
- Wet End Dryer Hood Roof Replacement
- Shower Water Heat Exchanger Replacement
- New Lube System on 1st Wet End Dryer
- Granite Roll Doctor Brackets
- Clothing Shower/Wire Couch Doctor
- Wet End Dryer Modifications
- 2nd Wet End Dryer Gearing

- Fan Pump Transformer Upgrade
- Replace 44 & 45 Dryer Siphons with Stationary Siphons
- Wet End Dryer Fan Replacement
- Flatbox Vacuum Pump Motor Upgrade

2. Purpose and Need (include history and background as appropriate)

The modifications will allow the Niagara to improve the quality of paper produced to remain competitive in a global market.

3. Authorities and Approvals (list local, state and federal permits or approvals required)

Chapter NR 405, Wis. Adm. Code
 Chapter NR 406, Wis. Adm. Code
 Chapter 285, Wisconsin Statutes

PROPOSED PHYSICAL CHANGES (more fully describe the proposal)

4. Manipulation of Terrestrial Resources (include relevant quantities - sq. ft., cu. yard, etc.)

None. This project involves the modifications of existing processes inside existing structures. Furthermore, they will not require the expansion of the current facilities including buildings, roadways, and other on-site or off-site support structures.

5. Manipulation of Aquatic Resources (include relevant quantities - cfs, acre feet, MGD, etc.)

No increase in water consumption from the Menominee River is attributable to these projects.

6. Buildings, Treatment Units, Roads and Other Structures (include size of facilities, road miles, etc.)

None, as noted under (4).

7. Emissions and Discharges (include relevant characteristics and quantities)

See Table in ATTACHMENT A

8. Other Changes

None

9. Identify the maps, plans and other descriptive material attached

- | | |
|--------------|--|
| Attachment | County map showing the general area of the project |
| Attachment X | USGS topographic map |
| Attachment | Site development plan |
| Attachment | Plat map |
| Attachment | DNR county wetlands map |
| Attachment | Zoning map |
| Attachment X | Other - Describe: Facility Layout |

AFFECTED ENVIRONMENT (describe existing features that may be affected by proposal)

10. Information Based On (check all that apply):

Literature/correspondence (specify major sources)

Permit application and review, BACT analysis.

Personal Contacts (list in item 26)

Field Analysis By: Author Other (list in item 26)

Past Experience With Site By: Author Other (list in item 26)

11. Physical Environment (topography, soils, water, air)

The only environmental aspect expected to be affected is air quality. The surrounding area has variable terrain due to the river valley. The air quality in the Niagara area is classified as attainment/unclassified for all criteria air pollutants.

12. Biological Environment (dominant aquatic and terrestrial plant and animal species and habitats including threatened/endangered resources; wetland amounts, types and hydraulic value)

The area is typical of Northeast Wisconsin. Fauna includes deer, small mammals, and many types birds, etc. No known endangered resources.

13. Cultural Environment

a. Land use (dominant features and uses including zoning if applicable)

The facility site is currently zoned for industry. Surrounding properties are zoned as residential or undeveloped.

b. Social/Economic (including ethnic and cultural groups)

The improvement of product quality will keep the Niagara Mill competitive which should help to preserve current jobs.

c. Archaeological/Historical

None

14. Other Special Resources (e.g., State Natural Areas, prime agricultural lands)

The Niagara Mill is not located near any Class I areas such as national monuments, preserves, or refuges. There are no known archeological, historical, endangered species, or wetlands considerations involved with this project.

ENVIRONMENTAL CONSEQUENCES (probable adverse and beneficial impacts including indirect and secondary impacts)

15. Physical (include visual if applicable)

There will be an increase in the air emissions of pollutants into the atmosphere as stated in Item 7.

The effect of these emission increases was simulated with dispersion modeling. Predicted maximum concentrations from these emission increases were below standards designed to protect human health and welfare. The Niagara area is in attainment of national and state ambient air quality standards. As such this project is not expected to have any significant environmental consequences.

16. Biological (including impacts to threatened/endangered resources)

See item 15 above.

17. Cultural

a. Land Use (including indirect and secondary impacts)

No consequences are anticipated.

b. Social/Economic (including ethnic and cultural groups, and zoning if applicable)

The improvement of product quality will keep the Niagara Mill competitive which should help to preserve current jobs.

c. Archaeological/Historical

No adverse impact is expected.

18. Other Special Resources (e.g., State Natural Areas, prime agricultural lands)

No other consequences are anticipated.

19. Summary of Adverse Impacts That Cannot Be Avoided (more fully discussed in 15 through 18)

Since the expansion falls under the PSD rules, future expansion of air-emitting sources in the area may be restricted due to the use of available PSD air quality increments. The potential emission increases were simulated with dispersion modeling. Predicted maximum concentrations from the potential emission increases were below standards designed to protect human health and welfare.

DNR EVALUATION OF PROJECT SIGNIFICANCE (complete each item)

20. Environmental Effects and Their Significance

a. Discuss which of the primary and secondary environmental effects listed in the environmental consequences section are long-term or short-term.

There will be a potentially long term increase in the air emissions of pollutants into the atmosphere as stated in Item 7.

- b. Discuss which of the primary and secondary environmental effects listed in the environmental consequences section are effects on geographically scarce resources (e.g. historic or cultural resources, scenic and recreational resources, prime agricultural lands, threatened or endangered resources or ecologically sensitive areas).

The effect of these emission increases was simulated with dispersion modeling. Predicted maximum concentrations from these emission increases were below thresholds designed to protect human health and welfare. The Niagara area is in attainment of national and state ambient air quality standards. As such this project is not expected to have any significant environmental consequences.

- c. Discuss the extent to which the primary and secondary environmental effects listed in the environmental consequences section are reversible.

The impact of increased air pollutant emissions is expected to be largely reversible.

21. Significance of Cumulative Effects

Discuss the significance of reasonably anticipated cumulative effects on the environment (and energy usage, if applicable). Consider cumulative effects from repeated projects of the same type. Would the cumulative effects be more severe or substantially change the quality of the environment? Include other activities planned or proposed in the area that would compound effects on the environment.

Since the expansion falls under the PSD rules, future expansion in the area may be restricted due to the use increment. The emissions that may result from this project would add to the pollutant loading into the environment. However, the effect of these emission increases was simulated with dispersion modeling. Predicted maximum concentrations from these emission increases were below standards designed to protect human health and welfare. As such, no substantial change to the quality of the environment is expected.

22. Significance of Risk

- a. Explain the significance of any unknowns that create substantial uncertainty in predicting effects on the quality of the environment. What additional studies or analysis would eliminate or reduce these unknowns?

Air modeling was conducted. The effect of these emission increases was simulated with dispersion modeling. Predicted maximum concentrations from these emission increases were below thresholds designed to protect human health and welfare. The Niagara area is in attainment of national and state ambient air quality standards. As such this project is not expected to have any significant environmental consequences.

- b. Explain the environmental significance of reasonably anticipated operating problems such as malfunctions, spills, fires or other hazards (particularly those relating to health or safety). Consider reasonable detection and emergency response, and discuss the potential for these hazards.

Existing operations include emergency response procedures that are adequate to respond to potential operating problems. No new operations, hazards, or response requirements are anticipated as a result of these projects.

23. Significance of Precedent

Would a decision on this proposal influence future decisions or foreclose options that may additionally affect the quality of the environment? Describe any conflicts the proposal has with plans or policy of local, state or federal agencies. Explain the significance of each.

This area has been baselined for emissions in accordance with the PSD rules. This project has used air quality increment. Future expansions of sources in the area may be restricted due to the use of this increment.

24. Significance of Controversy Over Environmental Effects

Discuss the effects on the quality of the environment, including socio-economic effects, that are (or are likely to be) highly controversial, and summarize the controversy.

This project will be permitted in accordance with state and federal law. All modifications are to take place on existing equipment, in existing buildings. No conflicts with any regulatory agency or local business are anticipated.

ALTERNATIVES

25. Briefly describe the impacts of no action and of alternatives that would decrease or eliminate adverse environmental effects. (Refer to any appropriate alternatives from the applicant or anyone else.)

“No action.” would not reduce the emissions from the existing facility while potentially reducing the facility’s ability to compete and provide employment. By undergoing permit review and issuance, the emissions from the facility paper machines are quantified and restricted to a level determined to constitute Best Available Control Technology.

SUMMARY OF ISSUE IDENTIFICATION ACTIVITIES

26. List agencies, citizen groups and individuals contacted regarding the project (include DNR personnel and title) and summarize public contacts, completed or proposed).

<u>Date</u>	<u>Contact</u>	<u>Comment Summary</u>
N/A	Dave Schmutzler Niagara Mill	Discussion of Project
N/A	Annabeth Reitter Stora Enso North America	Discussion of Project
N/A	Daniel Guido URS	Air Permitting Consultant Air Permit Application
1/18/02	Don C. Faith III, Wisc. DNR	Air Permit Reviewer

Project Name: SENA – Niagara Mill Paper Machine Upgrade

County: Marinette

DECISION (This decision is not final until certified by the appropriate authority)

In accordance with s. 1.11, Stats., and Ch. NR 150, Adm. Code, the Department is authorized and required to determine whether it has complied with s.1.11, Stats., and Ch. NR 150, Wis. Adm. Code.

Complete either A or B below:

A. EIS Process Not Required

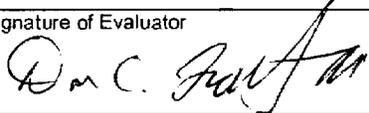


The attached analysis of the expected impacts of this proposal is of sufficient scope and detail to conclude that this is not a major action which would significantly affect the quality of the human environment. In my opinion, therefore, an environmental impact statement is not required prior to final action by the Department.

B. Major Action Requiring the Full EIS Process



The proposal is of such magnitude and complexity with such considerable and important impacts on the quality of the human environment that it constitutes a major action significantly affecting the quality of the human environment.

Signature of Evaluator 	Date Signed 11/4/02
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Number of responses to news release or other notice: 1, from facility regarding draft permit (only)

Certified to be in compliance with WEPA	
Environmental Analysis and Liaison Program Staff 	Date Signed 11/4/02

NOTICE OF APPEAL RIGHTS

If you believe that you have a right to challenge this decision, you should know that Wisconsin statutes and administrative rules establish time periods within which requests to review Department decisions must be filed.

For judicial review of a decision pursuant to sections 227.52 and 227.53, Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to file your petition with the appropriate circuit court and serve the petition on the Department. Such a petition for judicial review shall name the Department of Natural Resources as the respondent.

To request a contested case hearing pursuant to section 227.42, Stats., you have 30 days after the decision is mailed, or otherwise served by the Department, to serve a petition for hearing on the Secretary of the Department of Natural Resources. The filing of a request for a contested case hearing is not a prerequisite for judicial review and does not extend the 30-day period for filing a petition for judicial review.

Note: Not all Department decisions respecting environmental impact, such as those involving solid waste or hazardous waste facilities under sections 144.43 to 144.47 and 144.60 to 144.74, Stats., are subject to the contested case hearing provisions of section 227.42, Stats.

This notice is provided pursuant to section 227.48(2), Stats.

Appendix A

Emission Information for Paper Machine Modification Projects Niagara Paper Mill, Niagara, Wisconsin

Net Emission Increase from Proposed Paper Machine Modifications

SOURCE		NO _x	SO ₂	PM	PM ₁₀	CO	VOC
B21	PTE	1409.68	6046.50	1133.72	1133.72	638.11	16.82
	98-99 Actual	171.26	412.79	9.04	8.90	143.68	2.77
	Difference	1238.42	5633.71	1124.68	1124.82	494.43	14.05
B22	PTE	1409.68	6046.50	1133.72	1133.72	638.11	16.82
	98-99 Actual	221.10	560.83	11.34	3.43	131.55	2.72
	Difference	1188.58	5485.67	1122.38	1130.29	506.56	14.1
B23	PTE	427.80	1509.50	25.12	5.70	12.22	1.42
	98-99 Actual	322.06	851.59	15.88	3.65	9.20	1.07
	Difference	105.74	657.91	9.24	2.05	3.02	0.35
B24	PTE	186.70	1225.41	0.31	0.20	84.90	0.85
	98-99 Actual	114.21	498.05	0.17	0.17	45.87	0.46
	Difference	72.49	727.36	0.14	0.03	39.03	0.39
PGW	PTE	0	0	0	0	0	46.97
	98-99 Actual	0	0	0	0	0	4.63
	Difference	0	0	0	0	0	42.34
Paper Machines	PTE	6.02	0.09	35.74	35.74	3.01	57.21
PM43 & PM44	99-00 Actual	2.49	0.04	18.33	18.33	1.24	40.64
	Difference	3.53	0.05	17.41	17.41	1.77	16.57
41PM Shutdown	1998 Actual	-0.88	-0.01	-0.03	-0.03	-0.18	-4.94
Contemporaneous Decrease	Difference	-0.88	-0.01	-0.03	-0.03	-0.18	-4.94
TOTAL DIFFERENCE		2613.9	12504.78	2309.56	2310.31	1047.64	140.07
NSR Triggers		40	40	25	15	100	40

Potential to Emit for paper machine complexes represents PTE after project modifications; PTE for boilers represent existing boiler capacity (no modifications proposed as a result of this project)

The emission values presented in this table represents the “actual to potential” net emission increase calculus for the proposed project to determine permitting applicability and requirements.

Department of Natural Resources, Air Management Program, Preliminary Determination on an Air Pollution Control Permit and Permit to Operate an Air Contaminant Source at Niagara, Marinette County, Wisconsin.

Pollution Construction and Operation Permit Nos. 01-DCF-105 and 01-DCF-105-OP / 438 039 360-PO2

Stora Enso America Niagara Mill, 1101 Mill St. has submitted to the Department of Natural Resources (DNR) permit applications including plans and specifications for the modification of two paper machines.

The Northeast Region Air Program of the DNR has analyzed these materials and has preliminarily determined that the project should meet applicable criteria for permit approval as stated in s. 285.63, Wis. Stats., including both the emission limits and the ambient air standards and should, therefore, be approved.

The issuance of a construction permit allows the construction or modification and initial operation of a source. An operation permit allows continued operation of a source. An operation permit may be issued after the permittee demonstrates compliance with the applicable requirements.

The permit application is reviewed under the Prevention of Significant Deterioration (PSD) Program (ch. NR 405, Wis. Adm. Code) for Volatile Organic Carbon (VOC's), Nitrogen Oxides (NO_x), Sulfur Dioxide (SO₂), Carbon Monoxide (CO) and Particulate Matter (PM). The proposed project sets the NO_x and SO₂ baseline and the modified facility will consume the following increments (no NO_x or PM increment consumed):

SO₂ - 3 hr; 0.22 pg/m³ out of 512.0 pg/m³ (0.04%)

SO₂ - 24 hr; 0.09 pg/m³ out of 91.0 pg/m³ (0.1%)

SO₂ - annual; 0.1 pg/m³ out of 30.0 pg/m³ (0.05%)

In addition, the DNR has prepared an Environmental Assessment in accordance with ch. NR 150, Wis. Adm. Code and has made a preliminary determination that an Environmental Impact Statement will not be required before a final decision is made on the proposed project. The DNR has determined that the proposed project will not cause significant adverse environmental effects. This preliminary determination does not constitute approval from the Air Management Program or any other DNR sections which may also require a review of the project.

The DNR hereby solicits written comments from the public regarding the preliminary determination to approve the construction and operation permit application. These comments will be considered in the DNR's final decision regarding this proposal. Information, including plans and the DNR's preliminary analysis, is available for public inspection at the Department of Natural Resources Bureau of Air Management Headquarters, Seventh Floor, 101 South Webster Street, Madison, Wisconsin, at the Northeast Region Air Program, 1125 North Military Avenue, P.O. Box 10448, Green Bay, WI 54307, Phone (920) 492-5800 and at Marinette County Consolidated Public Library Service; 1700 Hall Ave.; Marinette WI 54143-1798 or contact Don C. Faith III, P.E. at (608) 267-3135. This information is also available for downloading from the internet using a world wide web browser at: <http://www.dnr.state.wi.us/org/aw/air/reg/regs.htm>

Interested persons wishing to comment on the proposal and preliminary determinations should submit written comments within 30 days to:

Wisconsin Department of Natural Resources, Bureau of Air management, P.O. Box 7921, Madison, Wisconsin 53707, (608)266-7718
Attn: Don C. Faith III, P.E.

A public hearing may be requested by individuals if the project is of significant concern to them. The request for hearing should indicate the interest of the party filing the request and reasons why a hearing is warranted. The DNR may then hold a public hearing if it determines that there is a significant public interest in holding a hearing.

Reasonable accommodation, including the provision of informational material in an alternative format, will be provided for qualified individuals with disabilities upon request.

Dated at Madison, Wisconsin May 22, 2002.

STATE OF WISCONSIN
DEPARTMENT OF NATURAL RESOURCES
For the Secretary

By /s/ Jeffrey C. Hanson for
Lloyd L. Eagan, Director
Bureau of Air Management

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