



STATE OF MAINE
 DEPARTMENT OF
 ENVIRONMENTAL PROTECTION
 17 STATE HOUSE STATION
 AUGUSTA, MAINE
 04333

ANGUS S. KING, JR.
 GOVERNOR

DEPARTMENT ORDER
 IN THE MATTER OF

GREAT NORTHERN PAPER, INC.) SITE LOCATION OF DEVELOPMENT
 East Millinocket, Penobscot County)
 MILL EXPANSION- TMP PLANT PROJECT)
 L-16637-20-O-A (approval)) FINDINGS OF FACT AND ORDER

Pursuant to the provision of Title 38 M.R.S.A. Section 481 et seq., the Department of Environmental Protection has considered the application of GREAT NORTHERN PAPER, INC. with its supportive data, agency review comments, and other related materials on file and finds the following facts:

1. PROJECT DESCRIPTION:

A. History of Project: In Department Order #L-16637-20-A-N, dated April 24, 1990, the Department approved post-1970 development at the Great Northern paper mill in East Millinocket.

In Department Order #W-999999-22-B-T dated 12/6/91, the Department approved with conditions the transfer of all Department licenses, license amendments, modifications, condition compliances, certifications, and other approvals held by Great Northern Nekoosa Corporation, a wholly-owned subsidiary of Georgia-Pacific Corporation to Bowater Incorporated and Great Northern Paper, Inc. Included in this transfer were the licenses for the pulp and paper mill in East Millinocket.

There have been a number of mill improvements and modifications since the Department issued the April 24, 1990 Order.

B. Summary: The applicant is proposing construction of a new Thermomechanical Pulp Mill (TMP) at the East Millinocket Paper Mill facility. The project will include rail and truck unloading of wood chips, chip storage and screening, chip refining, pulp screening, and a stock and water distribution system. Major structures will include: an approximately 57,000 square foot process building, a 30,000 square foot electrical substation expansion, a 5,600 square foot chip silo, a 1,500 square foot truck and rail chip unloading station, rail siding, and a 1,000 square foot chip conveying system. Approximately 2.75 acres of new paved areas will be constructed.

The project design is shown on a plan sheet entitled "East & Utilities Strategic Projects, East Millinocket Mill, Strategic Projects, Permit Application Drawing, Site Development, YA-2018," drawn by Great Northern Paper, and dated June 18, 1998. The project site is located on Route 157 (Main Street), in the Town of East Millinocket, Maine.



C. **Current Use Of Site:** The TMP Mill will occupy approximately 5 acres southwest of the Recycle Fiber Plant. Currently, this area is being used for reject pulpwood storage. The site is bounded on the north and west by an existing woodyard, on the east by the Recycle Fiber Plant, and on the south by the bark prep area.

2. FINANCIAL CAPACITY:

The total cost of the project is estimated by the applicant to be \$106,200,000. The applicant has submitted a copy of Bowater Inc.'s 1997 annual report and Form 10-K. The Department finds that these reports demonstrate that the financial capacity of Bowater and its wholly owned subsidiary, Great Northern Paper, Inc., is adequate to construct, operate, and maintain the proposed TMP Plant.

3. TECHNICAL ABILITY:

Great Northern Paper Company, Inc., a wholly-owned subsidiary of Bowater, Inc., with facilities in Millinocket and East Millinocket, has established, operated, and expanded these pulp and paper mills over the last 95 years. Most recent expansions at the East Millinocket facility include modernization of the woodyard area and construction of a Recycle Fiber Plant. Bowater, Inc. also operates a TMP facility in Colhoun, Tennessee.

The applicant has retained NLK, a major full-service engineering firm, to assist in the design of the project. GNP provided information describing NLK's qualifications and areas of expertise.

Based on the above facts, the Department finds that the applicant has adequate technical ability to complete the project in an environmentally sound manner.

4. NOISE:

According to the applicant, the TMP Mill will be constructed with state-of-the art noise abatement technology including a silencer on the heat recovery bypass vent scrubber, scrubber vents, and acoustically lined ventilation hoods. The applicant provided a Noise Study conducted by J.E. Coulter Associates Limited at an operating TMP mill in Ontario, Canada. The study indicates that a sound increase of only 1.5 dBA can be expected from the plant at a distance of 650 feet away. The closest protected locations are located at least 700 feet away from the proposed East Millinocket TMP facility. Also, the TMP building will be constructed behind the existing Recycle Fiber Plant, and virtually all vents will be located on the river side of the mill. Finally, with the start-up of the TMP mill, the existing woodroom, slasher, and log handling system will be shut down. The Department finds that the applicant has provided sufficient evidence to show that the project will be a minor sound source and will not have a significant impact on noise levels at this industrial site.

5. SCENIC CHARACTER:

Given that the site has historically been a heavily developed industrial site, and the TMP Mill will be located within the existing industrial facility, no adverse effects on scenic character are anticipated.

6. WILDLIFE AND FISHERIES:

The proposed project has been reviewed by the Maine Department of Inland Fisheries and Wildlife (IF&W). In its comments, IF&W stated that they found no records of any known deer wintering areas, essential and/or significant wildlife habitat, or other special wildlife habitats associated with this site.

7. HISTORIC SITES AND UNUSUAL NATURAL AREAS

The project site has been reviewed by the Maine Historic Preservation Commission, which has found that the proposed project will have no effect upon any structure or site of historic, architectural, or archaeological significance as defined by the National Historic Preservation Act of 1966.

There is no record of any known rare or unusual features on the property. This is based on a review of the Maine Natural Areas Program database.

8. BUFFER STRIPS:

No formal buffer strips are proposed for this project. The facility will be surrounded by existing industrial development. The applicant has indicated that major features that provide visual buffering of the mill site will not be impacted by the construction of the TMP Mill. Based on these facts, the Department finds that the applicant has made adequate provisions for buffers.

9. SOILS:

Given the soils information provided and the history of development at the site, the Department finds that the soils on the site present no limitations to the proposed project which cannot be overcome through standard engineering practices.

10. STORMWATER MANAGEMENT:

The paper mill property drains directly to the Penobscot River. The applicant proposes discharges of treated wastewater and stormwater associated with this project. Reference is made to the Wastewater finding of this Order for discussion of the discharge of treated wastewater.

The proposal to construct a TMP Mill will not result in an increase in impervious area at the paper mill. The existing site consists of gravel surfaces, pavement, and roof tops. Drainage off the chip storage areas will be directed to the process sewer. Other surface water drainage off the site will be conveyed through adequately sized drainage structures to

a series of two sedimentation ponds prior to discharge into the Penobscot River. The paper mill facility is subject to NPDES permit requirements established by the Environmental Protection Agency.

The stormwater management plan has been reviewed by the Bureau of Land and Water Quality's Division of Watershed Management. The Bureau of Land and Water Quality has found that, based on the information presented, the plan meets the stormwater standards set forth by the Department.

11. EROSION AND SEDIMENTATION CONTROL:

The applicant has submitted an Erosion and Sedimentation Control Plan as Section 24 of the application. This narrative plan, and the site plan which contains erosion control details ("East & Utilities Strategic Projects, East Millinocket Mill, Strategic Projects, Erosion and Sedimentation Control Permit Drawing, YA-2019," drawn by Great Northern Paper, and dated October 26, 1998) have been reviewed by and revised in response to the comments of the Bureau of Land and Water Quality's Division of Watershed Management. The Division of Watershed Management found the revised plans to be in accordance with Departmental standards for erosion and sediment control. The Division of Watershed Management raised concerns about the existing volume of the sedimentation ponds to be used by the project. In response, GNP indicated that the pond was measured in August of 1998, and found to have adequate volume to support the proposed project.

The Department finds that the applicant has provided an adequate erosion control plan.

12. GROUNDWATER:

The proposed project does not propose any withdrawal from, or direct discharge to, any groundwater. Chip storage and handling will be conducted in silos or on tar pads with any surface water runoff drained to the process sewer. The paper mill has an existing Spill Prevention Control and Countermeasures Plan (SPCC) which will be revised to include the facilities to be installed for this project. Chemical storage tanks will be located inside the buildings and will be provided with spill containment facilities directing any spill to the process sewer. Chemical unloading areas and pulp storage tanks will be provided with spill containment facilities to direct any spill or leakage to the process sewer. Containment will be installed around the new transformer farm site.

The application was reviewed by the Division of Environmental Assessment (DEA), which requested that a copy of the revised SPCC plan, and plans for containment at the new transformer farm be submitted to the Department. This division also recommended that blasting, if it is found to be necessary, be restricted to an allowable charge weight of approximately 32 pounds of explosive per delay of eight milliseconds or greater, and that any ground vibration monitoring meet the limits established in Figure B-1 of Appendix B of the U.S. Bureau of Mines Report of Investigations 8507.

Provided that the plans are submitted as requested, and blasting is conducted as recommended by DEA, the Department finds that the project will not result in an unreasonable adverse impact to groundwater quality or quantity.

13. WATER SUPPLY:

Water will be supplied from two sources. Process water (3,000,000 gallons per day) for the mill operations will come from the Penobscot River via an existing screening and filtering mill. Initially, this water use will represent a 13% increase. However, the applicant has proposed to take the stone groundwood facility out of service, which results in a net reduction in process water usage. Potable water will be supplied by the Town of East Millinocket at an expected peak rate of 3,600 gallons per day. The applicant has submitted a letter from the Town of East Millinocket dated April 15, 1998, indicating that they will be capable of servicing this project. The Department finds that there will be an adequate water supply for the project.

14. WASTEWATER DISPOSAL:

Process wastewater from the TMP Mill estimated to be 2,900,000 gallons per day, will be treated at the existing Great Northern Wastewater Treatment Plant. The discharge to the treatment plant requires an amendment to the operating license issued by the Department. The project will result in a net reduction in wastewater volume when the TMP Mill is on-line, and the stone groundwood facility is taken out of service. No increase in licensed discharge limits has been requested. Modifications will be made to the treatment plant to accommodate an increase in Biological Oxygen Demand loading.

Sanitary wastewater from the TMP Mill, estimated to be approximately 3,000 gallons per day, will be treated by the Town of East Millinocket Municipal Wastewater Treatment Plant. The applicant has submitted a letter dated April 15, 1998, from the Town of East Millinocket indicating that it will accept these flows.

This project application was reviewed by the Division of Water Resource Regulation of the Bureau of Land and Water Quality which indicated, in a memo dated October 19, 1998, that a license amendment had not been approved, and that the Division was awaiting results of a GNP conducted temperature study. That study was submitted and accepted by the Bureau of Land and Water Quality on December 4, 1998. Therefore, the Department finds that it is likely that a wastewater discharge permit amendment will be issued, and, for the purposes of the Site Location of Development Act, the applicant has made adequate provisions for wastewater disposal from the TMP Mill.

15. SOLID WASTE:

When completed the proposed project is anticipated to generate 140 tons of solid waste material per day. Of that amount approximately 74% will be chip screening fines, knots, sand and reject chips. The remaining portion of the waste stream will be sludge. Both of these waste types

will either be used as fuel at the East Millinocket bark boiler or disposed of at the Dolby III Landfill. The project will also result in generation of construction debris (4 to 5 truck loads), ash (from incineration of solid waste), and general solid waste (approximately 3 tons per day) that will be disposed of at the Dolby Landfill. The Bureau of Remediation and Waste Management commented that all solid waste issues are adequately addressed. As of September 4, 1998, the Dolby III/II Landfill is currently in substantial compliance with the Solid Waste Management Regulations of the State of Maine, and the landfill licenses and renewal application.

16. FLOODING:

The proposed project is not located within the 100 year floodway of any river or stream and is not anticipated to cause or increase flooding or cause an unreasonable flood hazard to any structure.

17. AIR QUALITY:

The air emissions associated with the TMP Mill consist of VOC's, particulate matter less than 10 microns in diameter (PM10), and particulate matter or dust (PM). The major VOC emitting vents will be routed to condenser(s), and/or scrubbers during normal operation. During start-ups, shutdowns, and malfunctions, the refineries will be vented directly to a scrubber. VOC emissions from all TMP point sources will be far less than those currently emitted from the wood room, grinder room, and screen room which will be shutdown at start-up of the TMP Plant. Area sources of VOC's will include the chip storage area. Those sources will be less than those from the existing wood yard operations that will be shutdown upon start-up of the TMP Mill. The paper mill area sources of PM10 (chip storage areas), and PM (roads and parking areas) will be approximately the same before and after start-up of the TMP Mill.

The TMP Mill requires an Air Emission license amendment from the Department. The Bureau of Air Quality Control approved an amendment on November 24, 1998. The Department finds, for the purposes of the Site Location of Development Act, that the project will not have a significant impact on air quality.

18. ODORS

Based on their experience in operating and observing similar facilities, the applicant has indicated that the proposed project will not be a significant source of odors. According to the applicant, the materials and chemicals used in the TMP process are not known to have significant odors. The Department finds the arguments credible and that the project will not result in generation of significant odors.

19. ALTERATION OF CLIMATE/WATER VAPOR:

The applicant has proposed to vent virtually all of the vapors from the chip pre-steaming to the latency chest to one or more condensers or scrubbers. The outlet temperatures on the control equipment will be targeted for 120 degrees during normal operations. The refineries will be

vented to a heat exchanger, condenser, and scrubber. These scrubbers will also be targeted for 120 degree outlet temperature during normal operation. During start-ups, shutdowns, or malfunctions, the refiners will be vented through a scrubber. Many of the vapor sources will be vented on the river side of the TMP Mill, reducing the amount of vapors directed toward the road side of the mill. All water vapor sources from the TMP Mill, are expected by the applicant to emit significantly less vapor than those currently being emitted from the wood room, grinder room, and screen room, which are to be shut down upon start-up of the TMP Mill. Based on the above, the Department finds that the expansion project will not have a significant impact on the local climate.

BASED on the above findings of fact, and subject to the Conditions listed below, the Department makes the following conclusions pursuant to 38 M.R.S.A. Section 481 et seq.:

- A. The applicant has provided adequate evidence of financial capacity and technical ability to develop the project in a manner consistent with state environmental standards.
- B. The applicant has made adequate provision for fitting the development harmoniously into the existing natural environment and the development will not adversely affect existing uses, scenic character, air quality, water quality or other natural resources in the municipality or in neighboring municipalities.
- C. The proposed development will be built on soil types which are suitable to the nature of the undertaking and will not cause unreasonable erosion of soil or sediment nor inhibit the natural transfer of soil provided that all necessary erosion controls are implemented and maintained properly by the applicant.
- D. The proposed development meets the standards for storm water management in section 420-D and the standard for erosion and sedimentation control in section 420-C.
- E. The proposed development will not pose an unreasonable risk that a discharge to a significant groundwater aquifer will occur provided that a copy of the revised SPCC plan, and plans for containment at the new transformer farm are submitted to the Department, any blasting is restricted such that it is equal to or below an allowable charge weight of approximately 32 pounds of explosive per delay of eight milliseconds or greater, and any ground vibration monitoring conducted at the site meets the limits established in Figure B-1 of Appendix B of the U.S. Bureau of Mines Report of Investigations 8507.
- F. The applicant has made adequate provision of utilities, including water supplies, sewerage facilities, solid waste disposal and roadways required for the development and the development will not have an unreasonable adverse effect on the existing or proposed utilities and roadways in the municipality or area served by those services.

G. The activity will not unreasonably cause or increase the flooding of the alteration area or adjacent properties nor create an unreasonable flood hazard to any structure.

THEREFORE, the Department APPROVES the application of Great Northern Paper, Inc. to construct a new TMP Plant at the East Millinocket Paper Mill facility, SUBJECT TO THE FOLLOWING CONDITIONS, and all applicable standards and regulations:

1. The Standard Conditions of Approval, a copy attached.
2. In addition to any specific erosion control measures described in this order, the applicant shall take all necessary actions to ensure that its activities or those of its agents do not result in noticeable erosion of soils or fugitive dust emissions on the site during the construction and operation of the project covered by this approval.
3. Prior to initiating construction of the containment area for the new transformer farm, the applicant shall submit to the Bureau of Land and Water Quality for review and receive approval of design plans for the containment facility.
4. Prior to initiating start-up of the TMP Mill, the applicant shall submit to the Bureau of Land and Water Quality a copy of the revised SPCC plan for the facility.
5. Any blasting, that is conducted during construction of the expansion project approved pursuant to this order, shall be restricted such that it is equal to or below an allowable charge weight of approximately 32 pounds of explosive per delay of eight milliseconds or greater. Any ground vibration monitoring conducted during construction shall meet the limits established in Figure B-1 of Appendix B of the U.S. Bureau of Mines Report of Investigations 8507.

DONE AND DATED AT AUGUSTA, MAINE, THIS 22nd DAY OF December, 1998.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

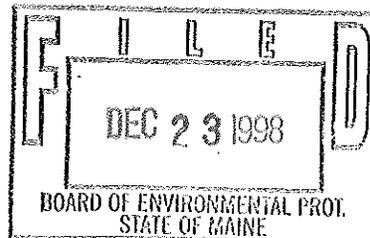
BY: *Edward O. Sullivan*
EDWARD O. SULLIVAN, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 7/17/98

Date application accepted for processing: 8/7/98

Date filed with Board of Environmental Protection
SB/L166370A



STANDARD CONDITIONS

STRICT CONFORMANCE WITH THE STANDARD AND SPECIAL CONDITIONS OF THIS APPROVAL IS NECESSARY FOR THE PROJECT TO MEET THE STATUTORY CRITERIA FOR APPROVAL.

- 1. This approval is dependent upon and limited to the proposals and plans contained in the application and supporting documents submitted and affirmed to by the applicant. Any variation from the plans, proposals and supporting documents is subject to the review and approval of the Board prior to implementation. Further subdivision of proposed lots by the applicant or future owners is specifically prohibited, without prior approval by the Board of Environmental Protection, and the applicant shall include deed restrictions to this effect.**
- 2. The applicant shall secure and comply with all applicable Federal, State and local licenses, permits, authorizations, conditions, agreements, and orders, prior to or during construction and operation as appropriate.**
- 3. The applicant shall submit all reports and information requested by the Board or Department demonstrating that the applicant has complied or will comply with all conditions of this approval. All preconstruction terms and conditions must be met before construction begins.**
- 4. Advertising relating to matters included in this application shall refer to this approval only if it notes that the approval has been granted WITH CONDITIONS, and indicates where copies of those conditions may be obtained.**
- 5. Unless otherwise provided in this approval, the applicant shall not sell, lease, assign or otherwise transfer the development or any portion thereof without prior written approval of the Board where the purpose or consequence of the transfer is to transfer any of the obligations of the developer as incorporated in this approval. Such approval shall be granted only if the applicant or transferee demonstrates to the Board that the transferee has the technical capacity and financial ability to comply with conditions of this approval and the proposals and plans contained in the application and supporting documents submitted by the applicant.**
- 6. If the construction or operation of the activity is not begun within two years, this approval shall lapse and the applicant shall reapply to the Board for a new approval. The applicant may not begin construction or operation of the development until a new approval is granted. Reapplications for approval shall state the reasons why the development was not begun within two years from the granting of the initial approval and the reasons why the applicant will be able to begin the activity within two years from the granting of a new approval, if granted. Reapplications for approval may include information submitted in the initial application by reference.**
- 7. If the approved development is not completed within five years from the date of the granting of approval, the Board may reexamine its approval and impose additional terms or conditions or prescribe other necessary corrective action to respond to significant changes in circumstances which may have occurred during the five-year period.**
- 8. A copy of this approval must be included in or attached to all contract bid specifications for the development.**
- 9. Work done by a contractor pursuant to this approval shall not begin before the contractor has been shown by the developer a copy of this approval.**