#### SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT:Department of Aboriginal and Northern AffairsPROPOSAL NAME:Cross Lake Wastewater Treatment LagoonCLASS OF DEVELOPMENT:2TYPE OF DEVELOPMENT:Wastewater Treatment Lagoon-Waste/ScrapCLIENT FILE NO.:4740.00

#### **OVERVIEW:**

On February 7, 2002, the Department received a Proposal from Stantec Consulting Ltd. on behalf of the Cross Lake Community Council for a Development to construct and operate a new wastewater treatment lagoon. The lagoon facility will be located on the south-east quarter of Section 24-65-3 WPM. The treated wastewater will be discharged to a natural wetland which discharges into Cross Lake.

The Department, on February 22, 2002, placed copies of the Proposal in the Public Registries located at 123 Main St. (Union Station), the Centennial Public Library, the Thompson Public Library and the Cross Lake Community Council Office. As well, copies of the Proposal were provided to the Interdepartmental Planning Board and TAC members. The Department placed a public notification of the Proposal in the Thompson Nickel Belt News on Monday, March 4, 2002. The newspaper and TAC notification invited responses until March 18, 2002.

#### **COMMENTS FROM THE PUBLIC:**

No comments were received from the Public.

### **COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:**

#### **Agriculture and Food**

• No comment.

#### **Conservation - Sustainable Resource Management**

- In Section 6.0 of the Feasibility Study two different hydraulic loading values are used. There is no justification for the use of the lower value for calculations.
- A specific clause should be added to the licence to ensure that the dumping station is suitably equipped.
- It is stated in the Feasibility Study that the minimum freeboard will be 0.6 metres. It is recommended that the minimum freeboard be 1.0 metres as outlined in departmental guidelines.
- No information is provided on the characteristics of the wetland or its ability to provide for treatment of the effluent from the lagoon. Monitoring of the wetland should be considered as part of the licence conditions to ensure that the surrounding environment is adequately protected.

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- The proponent may be assessed timber dues on any merchantable timber on the site.
- Engineering design and installation must be carried out by qualified personnel as experience has shown that these aspects are critical to developments in locations similar to this.
- The fuel storage system for the standby power must be designed, installed, operated and maintained in strict accordance with Manitoba Regulation 188/2001 and the CCME Codes of Practice.
- It should be stipulated in the licence that regular "certified" systems checks and reporting requirements will be required to ensure that the standby power is in proper working order.
- The proponent should be required to actively participate in any future watershed based management study, plan or nutrient reduction program, approved by the Director, for Cross Lake and associated waterways and watersheds.

# Additional Comments:

• The current sludge disposal pond located at the Cross Lake Waste Disposal Site is full. The proponent advised that sludge would be taken to this location as part of the decommissioning of the existing facility. An acceptable alternative solution must be proposed.

Disposition:

- The lower value applies to new development areas with newer piped systems and lower infiltration than the existing gravity collection system.
- The draft Licence includes a clause requiring the maintenance of an appropriate truck dumping station.
- The minimum freeboard will be 1.0 metres.
- Additional information regarding the use of the wetland was provided by the proponent. The draft Licence requires that all effluent discharged from the lagoon must meet water quality limits for biochemical oxygen demand and fecal and total coliforms.
- The proponent indicated that the engineering design and construction services will be carried out by a professional engineer registered in Manitoba.
- The proponent indicated that the fuel storage system for standby power generation will be designed in accordance with applicable regulations.
- The draft Licence includes a clause requiring the proponent to submit and carry out a testing and reporting plan to ensure that standby power to the lift station is maintained in proper working order.
- The draft Licence includes a clause requiring the proponent to participate in a nutrient reduction program, should one be developed.
- The draft Licence requires the proponent to submit a revised decommissioning plan, which includes the sludge disposal plan, to the Director for approval.

# Culture, Heritage and Tourism - Historic Resources

• No concerns.

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## <u>Health</u>

• No comment.

### **Transportation and Government Services**

• No comment.

## **Intergovernmental Affairs**

• No concerns.

## **Canadian Environmental Assessment Agency**

- Application of The Canadian Environmental Assessment Act with respect to this proposal will be required if requested funding under the Canada-Manitoba Infrastructure Program is approved. The coordinating contact is Ivan Didiuk, Canada-Manitoba Infrastructure Secretariat.
- The following federal department provided comments:
  - Environment Canada
    - Since the proposed lagoon is close to federal lands, Environment Canada has an interest in the project and would like to participate in the provincial review process under Clause 59 of the Canada-Manitoba Agreement on Environmental Assessment Co-operation. The following comments are provided:
      - Information should be included on the various wastewater treatment options considered and why these options were rejected.
      - The specific references, regarding use of natural peat wetlands for effluent polishing, mentioned on page 3 of the report should be included, as well as a brief summary of the research study results.
      - The Environmental Impact Assessment report contains insufficient information on the potential impacts of the access road construction and the lagoon construction and operation on wildlife and their habitat, as well as appropriate mitigation measures.
      - Additional information should be provided to support the estimated retention time of 0.65 to 2 years for the treated effluent in the marsh. How were these estimates derived?
      - No impact assessment information is provided on decommissioning of existing wastewater treatment facility and site restoration.
      - What are the reasons for choosing steeper slopes for the berms (3:1) and what are the potential implications for long-term berm stability.

Disposition:

• The requested additional information was provided by the proponent and forwarded to Environment Canada. Environment Canada had no further comments.

# **PUBLIC HEARING:**

A public hearing is not recommended.

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## **RECOMMENDATION:**

The Proponent should be issued a Licence for the construction and operation of the wastewater treatment lagoon in accordance with the specifications, terms and conditions of the attached draft Licence. Enforcement of the Licence should be assigned to the Approvals Branch until the soil testing has been completed.

### **ADDITIONAL COMMENTS:**

Following the review of the draft Licence, the Proponent indicated that the Proposal had identified a maximum liquid depth in the lagoon of 1.8 metres. The standard maximum allowable liquid depth for lagoons is 1.5 metres. The Proponent indicated that *in order to construct the perimeter berms on solid ground above the water table the depth in the lagoon must be 1.8 m. If the shallower depth of 1.5 m must be achieved, it would result in part of the berms extending out into the wetland and the associated construction complications.* 

Disposition:

Construction of berms in the wetland is likely to increase the potential environmental effects of the construction and operation of the wastewater treatment lagoon. The odour nuisance clause should be included in the Licence to improve enforceability should odours develop due to the increased liquid depth in the lagoon. Discharge effluent limits have not been altered.

The revised Licence stipulates a maximum liquid depth in the lagoon of 1.8 metres and contains the odour nuisance clause.

PREPARED BY:

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