

SUMMARY REPORT

PROPONENT:

DEPARTMENT OF NORTHERN AFFAIRS/COMMUNITY OF BISSETT

PROPOSAL NAME:

BISSETT WASTEWATER TREATMENT LAGOON

CLASS OF DEVELOPMENT:

Two

TYPE OF DEVELOPMENT:

WASTE TREATMENT AND STORAGE AND SCRAP PROCESSING - WASTEWATER TREATMENT LAGOON

CLIENT FILE NO.:

4200.00

OVERVIEW:

On August 1, 1996, the Department received a Proposal on behalf of the Community of Bissett to construct and operate a new 2-cell wastewater treatment lagoon. On August 27, the Department received a revised Proposal form indicating that the Department of Northern Affairs and the Community of Bissett were joint proponents for this development.

The Proponent proposes to locate the lagoon on Section 11-24-13 EPM approximately 800 metres east of the existing trailer park at Round Lake. The Proponent indicated that treated wastewater will be discharged between June 15 and November 1 of each year into a creek which drains into Rice Lake.

The Proposal and supporting documentation prepared by J. R. Cousin Consultants Ltd., identifies the in situ soil conditions as silty clay and clay. The Proposal is to construct the lagoon cells with a 1 metre thick clay liner.

The Department, on August 30, 1996, placed copies of the Proposal in the Public Registries located at Building 2, 139 Tuxedo Avenue; the Centennial Public Library; and the Bissett Community Council Office and provided copies of the Proposal to the Interdepartmental Planning Board and TAC members. As well, the Department place public notification of the Proposal in the Pine Falls Community Voice on Wednesday, September 11, 1996. The newspaper and TAC notification invited responses until September 25, 1996.

COMMENTS FROM THE PUBLIC:

No public responses were received.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Highways - The proponent may be required by Manitoba Highways, to enter into an "Agreement for Installations Adjacent Provincial Highways" for the proposed wastewater installations.

Disposition:

Information will be supplied to the proponent.

Natural Resources - Effluent which is discharged into the creek could be carried through the length of the creek and into Rice Lake in a relatively short time. In order for the effluent to comply with provincial guidelines it will likely have to be chlorinated. No assessment has been made in this proposal of the impacts of the effluent on the receiving stream and how these impacts might affect fish stocks in Rice Lake.

The discharge route passes through the DNR District Office Yard. It is suggested that the DNR District Office be given a seven day notice of intent to discharge.

Disposition:

The proponent was requested to address the concern respecting impacts on Rice Lake. The lagoon should treat the effluent to acceptable quality levels prior to discharge without chlorination. The notice of discharge is addressed in the Licence.

Historic Resources - No concerns.

Health

- The lagoon should be fenced.
- Odours should be minimized

Disposition:

Draft Licence include clauses which address these concerns.

Rural Development - No concerns.

Environment-Operations Division

- It will be critical to have enough liquid in the lagoon to prevent freezing.
- Compaction during freezing conditions should be prohibited.
- The tie-in of all service to the lagoon via low pressure sewer would be appropriate.
- It would be appropriate to require a monitoring and assessment report on impact to Rice Lake.
- It would be appropriate to have all annual pumped solids from the mine septic tanks go to the lagoon.

Disposition:

The Draft Licence will address the environmental concerns. The issue of tie-in service and mine septic tanks can best be addressed with the proponent outside the Licence requirements.

Environment-Water Quality Management - It seems likely that the discharged effluent may reach Rice Lake. The lake is a recreational water body and has been stocked with smallmouth bass by the residents of Bissett. Rice Lake drains into Wanipigow Lake, another important recreational lake.

It seems possible that there may be potential for accelerated eutrophication in the lake with the additional nutrient loading. The proponent has not attempted to estimate the travel time of the effluent during discharge periods, and has not estimated what impact the additional nutrient loading may have on the lake.

The lake also supplies the Town of Bissett with its water supply. Consequently it is not advisable to discharge effluent to the body of water which is used for domestic consumption. The potential for transmission of Giardia and Cryptosporidium should be considered. Furthermore, if eutrophic conditions develop in the lake, the community may be faced with increased treatment costs and poorer drinking water.

It would be preferable to divert the effluent to a surrounding wetland area to facilitate nutrient removal, prior to the effluent reaching Rice Lake. Alternate disposal options for the effluent should be considered. If no suitable alternatives exist for effluent disposal, a monitoring program should be established to determine if significant amounts of nutrients are reaching Rice Lake.

Disposition:

The comments were forwarded to the proponent for response.

Canadian Environmental Assessment Agency - CEAA has indicated that application of The Canadian Environmental Assessment Act with respect to this proposal will not be required.

Proponent Follow-up - The proponent filed a letter of response to the concerns noted on October 7, 1996. The proponent maintains the position that there will be adequate treatment in the lagoon and nutrient removal along the discharge route which will result in no significant impact to Rice Lake. An alternate discharge route is not readily available.

PUBLIC HEARING:

A public hearing is not required.

RECOMMENDATION:

A Licence be issued in accordance with the attached draft. Enforcement of the Licence should be assigned to the Approvals Branch until the soils sampling results and monitoring program are received and approved.

PREPARED BY

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September 26, 1996

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October 4, 1996