SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: Department of Northern Affairs: Applicant PROPOSAL NAME: Dawson Bay Wastewater Treatment Lagoon

CLASS OF DEVELOPMENT: 2

TYPE OF DEVELOPMENT: Wastewater Treatment Lagoon

CLIENT FILE NO.: 4336.00

OVERVIEW:

On April 30, 1998, the Department received a Proposal from the Department of Northern Affairs to construct a wastewater treatment lagoon to service the Community of Dawson Bay. The wastewater treatment lagoon will be located on Section 23-46-25 WPM. The Proposal indicated that treated wastewater will discharged into a low lying area filled with muskeg, willow and alder located northeast of the site and approximately 250 metres from Lake Winnipegosis.

The Proposal indicated that suitable clay soils can be found at or near the site which will meet the provincial hydraulic conductivity requirements for the construction of the wastewater treatment lagoon.

The Department, on August 26, 1998, placed copies of the Proposal in the Public Registries located at 123 Main St. (Union Station); the Centennial Public Library, the North-West Regional Library, MKO office, Sapotaweyak Cree Nation Band Office and provided copies of the Proposal to the Interdepartmental Planning Board and TAC members. As well, the Department placed a public notification of the Proposal in the Swan River Star & Times on Wednesday, September 2, 1998 and the Cree Nation in the September 1, 1998 issue. The newspaper and TAC notification invited responses until October 5, 1998.

COMMENTS FROM THE PUBLIC:

No responses were received to the public notification.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Highways

• No comment.

Natural Resources

- Consideration should be given to designing the discharge route of the lagoon to utilize the adjacent marshy area to provide for additional nutrient removal.
- Merchantable wood should be salvaged. A work permit enabling this will be issued by DNR Natural Resource Officer in Mafeking.

- If possible the lagoon development should include provisions to prevent colonial nesting birds, from becoming habituated to the lagoon site.
- Information is needed on depth to bedrock at the site, lagoon construction methods and location of residential wells in relation to the lagoon.
- The Fisheries Branch had no concerns with the proposal.
- There was a concern with the quality of supporting documentation that was provided. The environmental assessment was very abbreviated and did not adequately describe the relevance of the raw data provided. Additional information, such as the depth to bedrock and distance from the proposed lagoon to the nearest residence with wells are required to complete the review.

Disposition:

- The proposal indicated that the effluent would be discharged into a low lying area filled with muskeg, willow and alder located northeast of the site.
- The draft Licence addresses maintenance requirements for the site.
- The quality of the Proposal received was poor and it was necessary to request additional information from the proponent. The proponent will be asked to improve environmental submissions in the future.
- The concerns about depth to bedrock and distance to the nearest residence with a well will be addressed by the terms of the draft Licence respecting lagoon liner construction. The lagoon is being constructed to replace septic fields in the community which are causing contamination in the residential area. The distance from the residential area to the lagoon site is approximately 450 metres.
- Construction requirements for the lagoon liner are included in the draft Licence.

Historic Resources

• No concerns.

Rural Development

• No concerns.

Health

No comment.

Environment-Operations Division

No concerns.

Environment-Water Quality Management

- The proposal is poorly organized and vague in several areas.
- The proposal states that well water is the source of drinking water and that the lagoon is required because septic fields are contaminating the groundwater in the area. Can the proponents be completely confident that there will be no greater risk to groundwater contamination by the construction of the lagoon?
- Is there no risk to groundwater contamination via discharge of the effluent to the muskeg area?
- *Very few details about the discharge area are provided in the proposal.*

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- The description of the effluent movement in the discharge area is also unclear. Is there direct flow of the water through the muskeg area into the lake? What is the expected travel time of the effluent from the secondary cell, through the muskeg, into the lake?
- The proponents indicate that the discharge area is potentially subject to flooding, albeit on a relatively rare occasion. No plans were put forth in the proposal to mitigate any environmental impacts that might result from flooding of the discharge area.
- It is never clearly stated how often the proponent plans to discharge the secondary effluent and when this discharge(s) will take place. Will discharge take place in the summer, when vegetation growth and subsequent assimilation of contaminants will be at their maximum rates? Will discharges be scheduled so as not to interfere with fish spawning in the lake.

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Disposition:

- The quality of the Proposal received was poor and it was necessary to request additional information from the proponent. The proponent will be asked to improve environmental submissions in the future.
- The risk of groundwater contamination will be significantly reduced from the current septic fields provided the lagoon is constructed to meet the seepage control requirements of the draft Licence. The distance from the residential area to the lagoon site is approximately 450 metres. The removal of the wastewater from the residential area adds a second level of protection to the potable water supply.
- The draft Licence requires that effluent quality meet the requirements that would apply to a surface discharge to Lake Winnipegosis. This ensures that concerns about impacts to surface waters are satisfied (e.g. flooding of the discharge area, fish spawning, etc.)

Canadian Environmental Assessment Agency

• The application of the Canadian Environmental Assessment Act with respect to this proposal will not be required.

PUBLIC HEARING:

A public hearing is not required.

RECOMMENDATION:

A Licence should be issued in accordance with the attached draft. Enforcement of the Licence should be assigned to the Approvals Branch until the soil testing has been completed.

PREPARED BY:

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