

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPOSAL NAME: Manitoba Aboriginal & Northern Affairs
Community of Barrows Wastewater
Treatment Lagoon

CLASS OF DEVELOPMENT: 2

TYPE OF DEVELOPMENT: Waste/Scrap Wastewater Treatment Lagoons

CLIENT FILE NO.: 2677.10

OVERVIEW:

On November 30, 2006, the Department received a Proposal from Cochrane Engineering Ltd. on behalf of the Manitoba Aboriginal and Northern Affairs for the remediation, expansion and operation of a wastewater treatment lagoon located in the southwest quarter of Section 3-45-28 WPM and the northwest quarter of Section 34-44-28 WPM at Barrows, Manitoba to service the Community of Barrows and surrounding area. Treated wastewater from the wastewater treatment lagoon will be discharged between June 15th and October 31st of any year and proceed in a northerly direction into a swale which connects with a tributary of Red Deer Lake.

On January 29, 2007, the Department received the necessary additional information from the consultant to proceed with the review process. The Department, on February 20, 2007, placed copies of the Proposal in the Public Registries located at 123 Main St. (Union Station), the Winnipeg Public Library, the Manitoba Eco-Network, and the R.M. of Mountain Office. Copies of the Proposal were also provided to the Technical Advisory Committee (TAC) members. The Department placed public notification of the Proposal in the Swan River Star & Times on Tuesday, February 27, 2007. The newspaper and TAC notifications invited responses until March 23, 2007.

COMMENTS FROM THE PUBLIC:

- *No comments were received from the public.*

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Agriculture, Food and Rural Initiatives

- *No comments received.*

Conservation - Sustainable Resource & Policy Management

- *The proposal indicates that a search of the Conservation Data Centre (CDC) database did not find any records of rare or endangered species within or near the project area. However, the proponent should be aware that since many areas of the province have not been thoroughly surveyed, the absence of data in the CDC database in any particular geographic area does not necessarily mean that species or ecological communities of concern are not present. The information should therefore not be regarded as a final statement on the occurrence of any species of concern nor can responsibility of the proponent to inspect the project area prior to and during construction to determine if any rare or endangered species may be impacted. The proponent needs to be aware that if rare or endangered species are present, removal*

or destruction of individuals or their habitat may be in contravention of Subsection 10(1) "Prohibition" of The Endangered Species Act (Manitoba). In addition, the federal Species at Risk Act prohibits any activities that kill or otherwise harm COSEWIC-listed plant or animal species and prohibits destruction of habitat for these species. If species of concern are present, the proponent must contact the Biodiversity Conservation Section of the Wildlife and Ecosystem Protection Branch to discuss possible mitigation options well in advance of any disturbance.

- *Killing or harming migratory birds and disturbance, destruction or taking of their nests or eggs is prohibited under the Migratory Birds Convention Act. The proponent is responsible for ensuring that no migratory birds will be harmed and no active nests or migratory birds will be destroyed as a result of the development. If migratory birds or their nests may be harmed by this development, the proponent must contact the Canadian Wildlife Service for further direction.*
- *In respect of Crown Land, no land tenure is granted by way of an environmental approval. Aboriginal & Northern Affairs must apply for applicable Crown Lands Act allocation or reservation which will be subject to the standard Crown Land & Property Agency review process.*

Proponent Response (June 13, 2007):

- A detailed site survey is not planned for the development area, however if rare or endangered species are encountered before or during construction, the proper authorities will be consulted for direction.
- As stated in Section 2.1 of the EAP, the process to reserve the Crown Lake is underway, initiated by Mr. Trevor Ouellette of Manitoba Aboriginal and Northern Affairs (MANA).

Conservation - Sustainable Resource & Policy Management Response (December 21, 2007):

- *The project area for this development is small, already partially disturbed, and is not considered rare habitat for species in the region. As such, the Wildlife Branch does not see the need for a detailed vegetation survey or species inventory of the project area. However, the proponent should still use due diligence and strive to keep any disturbance activity to a minimum within the project area, and ensure that natural habitat bordering the project area is not impacted by the development.*

Disposition:

- The draft Licence does not require the submission of a vegetation survey or species inventory, as recommended by the Wildlife Branch.

Water Stewardship

- *There is a concern with any discharges that have the potential to impact the aquatic environment and/or restrict present and future uses of the water. Therefore it is recommended that the license require the proponent to actively participate in any future watershed based management study, plan/or nutrient reduction program, approved by the Director, for Red Deer Lake and associated waterways.*

- *While the discharge won't occur until after June 15th, the effluent will be discharged during periods of potential low flow into a swale which enters Whisky Creek a tributary of Red Deer Lake. Red Deer Lake has a number of commercial and sport fish species. We would want to ensure that the effluent meets or exceeds the Manitoba Water Quality Standards, Objectives and Guidelines. Effluent monitoring should be implemented where it enters the creek.*
- *With effluent being discharged from both secondary cells will each secondary cell be tested prior to discharge?*
- *Regarding discharge timing windows, rate of discharge and construction works that could result in the addition of sediment to the receiving waters, as long as DFO is involved in reviewing this proposal and manages fish habitat to meet the intent of their no net loss policy, provincial fisheries management interests should be met.*
- *The proposal states that ditching will be constructed and maintained to provide positive drainage for surface water around the lagoon. These works will require a licence from Water Stewardship.*

Proponent Response (June 13, 2007):

- Any party involved in a future watershed based management study, plan/or nutrient reduction program for Red Deer Lake and associated waterways is welcome to contact the Community of Barrows.
- Monitoring will be performed as detailed by Manitoba Conservation in the new Environment Act Licence. If in fact monitoring is imposed by Manitoba Conservation, it seemingly would be practical to assign a limit (ex. 3 years) to the sampling.
- Testing of the effluent will occur in each isolated secondary cell to be discharged.
- It is our understanding that DFO is a member of Manitoba Conservation's technical advisory committee responsible for reviewing the proposal.
- Water Control Works & Drainage Licensing – Manitoba Water Stewardship was contacted to inquire about the licensing requirements. In order to not activate the licensing process for water control works, all existing ditching will be maintained and it will be specified that any new ditching required will be constructed to a depth of 0.3 metres or less.

Disposition:

After receiving the additional information from the proponent, no further comments were received from Water Stewardship. This was assumed to indicate that the original comments were satisfied.

Culture, Heritage and Tourism - Historic Resources

- *No concerns.*

Health

- *No comments received.*

Infrastructure and Transportation

- *No concerns.*

Intergovernmental Affairs & Trade

- *No comments received.*

Canadian Environmental Assessment Agency

- *Following a review by all federal departments with a potential interest in the proposed development, the application of the CEAA will not be required.*

Health Canada:

- *The EAP indicated the potential use of non potable water resources. What may be some acceptable uses of these resources? And what is the criteria and what is it based on?*
- *The EAP indicates that the current lagoon is leaking. Has groundwater monitoring been undertaken to determine whether local ground waters have been impacted?*
- *The EAP does not indicate whether the wastewater treatment operators meet the applicable Manitoba certification requirements necessary for the operation of the lagoon.*
- *The EAP does not indicate whether during expansion and operation of the lagoon that all applicable Occupational Health and Safety Guidelines will be followed.*
- *Section 6.1 states that odours may be significant during spring thaw. The proposed facility is to be located north of the community. The EAP does not indicate the prevailing wind direction and assess the potential impact to any receptors during this time frame or when most of the septage is dumped.*

Proponent Response (June 13, 2007):

- The reference to non potable water resources is from page 2 of the appended geotechnical report. This reference is a general statement about the quality of the bedrock aquifer at 21-45-28 WPM. Use of this aquifer as a resource is outside the project scope.
- No groundwater monitoring has been implemented. Monitoring will be performed as detailed by Manitoba Conservation in the new Environment Act Licence.
- The lagoon operators have not completed all certification courses, but have received training. A lagoon operations manual will be provided to the operators.
- During the design, construction and operation of the lagoon, appropriate signage will be posted. Our tender documents typically contain a clause specifying that site safety regulations comply with requirements of Manitoba Workplace, Safety and Health Department, as well as other Province of Manitoba regulations.
- A perimeter fence (with lockable access gate) will be maintained around the site and signage identifying the nature of the facility and contact information for the Community of Barrows will be placed accordingly.
- Section 6.1 only mentions *minor* odours during the spring thaw, not *significant* odours. As mentioned in the EAP, the new primary cell of the Barrows lagoon has been designed with a 35 kg-BOD₅/ha/d loading, which is 63% of the allowed.

Additionally, the lagoon area is well removed from the Community of Barrows and other residences and is surrounded by forest. Therefore, the potential impact to any receptors is expected to be minimal.

Health Canada Response (July 27, 2007):

- *The proponent's consultant indicates that no monitoring is planned in regards to the leaking wastewater lagoon. As you are aware, groundwater monitoring may be prudent depending on several factors including proximity to receptors, types of groundwater use, direction and depths of aquifers, source/type of wastewater, geology, etc. We recognize that any licence conditions such as monitoring wells lies with provincial authority.*

Disposition:

A clause requiring the submission and implementation of an approved groundwater monitoring plan is included in the draft Licence.

Environment Canada:

- *EC understands that the Manitoba Aboriginal and Northern Affairs propose to install a 30-mil PVC liner in the cells. EC notes that geomembrane material properties (ASTM method) indicate that 30-mil Linear Low Density Polyethylene (LLDPE) and 60-mil High Density Polyethylene (HDPE) geomembranes are superior of 30-mil PVC. Therefore, it is not clear why the proponent is opting to use 30-mil PVC.*

Proponent Response (June 13, 2007):

- To our knowledge, LLDPE is not an approved liner according to Manitoba Conservation and we defer to them this half of the question. Currently, the Manitoba Conservation approved liners are 30-mil PVC and 60-mil HDPE, both of which are required to be covered by a 0.3 metre perpendicular layer of granular cover or sand. At present, 30-mil PVC is more economical to install, although bidding contractors are welcome to quote the installation of a 60-mil HDPE if they are able to acquire a more competitive price.

Disposition:

- After receiving the additional information from the proponent, no further comments were received from Environment Canada. This was assumed to indicate that the original comments were satisfied.
- Manitoba Conservation has licensed wastewater treatment lagoons with LLDPE liners.

PUBLIC HEARING:

A public hearing is not recommended.

RECOMMENDATION:

The Proponent should be issued a Licence for the remediation, expansion and operation of a 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 Environmental Assessment and Licensing Branch until the liner testing has been completed and the Development is commissioned.

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