

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPOSER: Sandybank Holding Co. Ltd.: Applicant
PROPOSAL NAME: Cypress Colony Wastewater Treatment Lagoon
CLASS OF DEVELOPMENT: 2
TYPE OF DEVELOPMENT: Wastewater Treatment Lagoon
CLIENT FILE NO.: 1026.10

OVERVIEW:

On June 10, 1998, the Department received a Proposal from Sandybank Holding Co. Ltd. to reconstruct, expand and operate a wastewater treatment lagoon to service the Cypress Colony farmsite. The wastewater treatment lagoon will be located on southeast quarter of Section 22-7-13 WPM. The Proposal indicated that treated wastewater will be discharged by spray irrigation onto agricultural land owned by the proponent.

The Proposal indicated that a geosynthetic membrane liner would be used to meet the provincial guidelines for the construction of wastewater treatment lagoons.

The Department, on July 28, 1998, placed copies of the Proposal in the Public Registries located at 123 Main St. (Union Station); the Centennial Public Library, the Western Manitoba Regional Library 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 Glenboro Gazette on August 18, 1998. The newspaper and TAC notification invited responses until August 31, 1998.

COMMENTS FROM THE PUBLIC:

- No responses were received to the public notification.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Highways

- *No comment.*

Natural Resources

- *The Cypress Colony is located ovetop of the southern portion of the Assiniboine Delta Aquifer, which is unconfined and very sensitive to contamination. Consideration should be given to requiring the installation of an additional liner as a backup.*
- *Water quality monitoring wells should be established, especially between the lagoon and the colony's water supply wells.*
- *Testing should be carried out to ensure that the land spreading does not overload the soil ecological systems and cause unacceptable groundwater contamination.*

Disposition:

- The draft Licence requires that the lagoon be constructed with a geosynthetic liner that will be tested during construction.
- Groundwater monitoring wells will confirm the known historical seepage problem. Therefore groundwater monitoring results will not reflect the performance of the liner. A requirement for groundwater monitoring wells has not been included in the draft Licence.

- Periodic soil testing requirements have not been included because the effluent has a low nitrogen content. Unlike livestock waste, the agricultural value of effluent irrigation with treated domestic wastewater is in the recycling of the water, not the nutrients. On a comparative basis treated domestic wastewater contains very little nutrient value. The draft Licence includes effluent irrigation requirements including the application of wastewater onto agricultural crops to provide for nutrient uptake by the plants.

Historic Resources

- *No concerns.*

Rural Development

- *Groundwater issues are significant in this area, and a high degree of scrutiny and supervision of the lagoon liner would be desirable;*
- *No major concerns provided the lagoon is constructed with an liner and operated in accordance with the engineering recommendation.*

Disposition:

The draft Licence addresses these issues.

Health

- *The need for fencing around the facility should be included to ensure public safety;*
- *Consideration should be given to including an odour nuisance clause;*
- *Effluent should not be discharged to a water course or a municipal ditch system. Effluent discharge should not occur in proximity to the colony's wells;*
- *The liner should provide the best possible groundwater protection for the area;*
- *Effluent discharge should follow established guidelines;*
- *Consideration should be given to the inclusion of a perimeter drainage swale to protect the structure from surface runoff flow.*

Disposition:

- The draft Licence requires the construction of a fence to limit public access.
- The odour nuisance clause is not included in the draft Licence because the facility is located in an agricultural area and is removed from neighbouring residences. Any odour from the development will be masked by odours from intensive livestock operations located on the same farmsite.

- The Proposal indicated that effluent would be discharged by irrigation and not by drainage into surface waterways. The draft Licence includes restrictions on irrigation sites.
- The draft Licence requires that the lagoon be constructed with a geosynthetic liner that will be tested during construction.
- The draft Licence does not include a requirement for a perimeter swale because surface runoff flow is not expected around the structure.

Environment-Operations Division

- *Laboratory results should be provided prior to discharge of the effluent;*
- *Irrigation of the effluent is limited to required set back distances and performed in such a manner as to not contaminate groundwater or cereal crops;*
- *Gas relief is installed under the reconstructed primary cell's synthetic liner.*

Disposition:

The draft Licence addresses these issues.

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 construction of the wastewater treatment lagoon, including the lining system, has been completed.

PREPARED BY:

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