

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: Sprucedale Holding Co. Ltd.
PROPOSAL NAME: Maple Grove Colony Wastewater Treatment Lagoon
CLASS OF DEVELOPMENT: 2
TYPE OF DEVELOPMENT: Wastewater Treatment Lagoon
CLIENT FILE NO.: 4349.00

OVERVIEW:

On May 7, 1998, the Department received a Proposal on behalf of Sprucedale Holding Co. Ltd. to construct a wastewater collection system and a wastewater treatment lagoon to service the Maple Grove Colony. The wastewater treatment lagoon will be located on the northwest quarter of Section 24-5-25 WPM in the Rural Municipality of Cameron. The Proposal indicated that treated wastewater would be disposed of by irrigation onto agricultural land owned by the Colony.

The Proposal indicated that the wastewater treatment lagoon cells will be lined with clay which will meet the hydraulic conductivity guidelines

The Department, on June 30, 1998, placed copies of the Proposal in the Public Registries located at 123 Main St. (Union Station); the Centennial Public Library and 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 Souris Plaindealer on Monday, July 4, 1998. The newspaper and TAC notification invited responses until July 31, 1998.

COMMENTS FROM THE PUBLIC:

- No responses were received to the public notification.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Highways

- *No concerns.*

Natural Resources

- *The dykes around the lagoon should be of sufficient height and stability to prevent 100 year flood events on the Souris River from inundating the lagoon.*
- *A 30 metre no-spray buffer area, dependent on topography and vegetation, should be maintained along the Souris River.*
- *Periodic testing of soil nutrients should be done to ensure the capacity of the land base to assimilate the effluent application rates.*

- *Monitoring wells should be installed into the shallow aquifer to monitor possible seepage from the lagoon.*

Disposition:

- The draft Licence addresses required dyke elevations for flood protection.

- The draft Licence includes a 100 metre buffer along water courses and groundwater wells.
- 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.
- The draft licence requires that the lagoon be constructed with a liner which will be tested after construction is completed. A requirement for groundwater monitoring wells has not been included in the draft Licence.

Historic Resources

- *No concerns.*

Health

The health concerns with a wastewater treatment lagoon are:

- *minimization of odours – consideration for inclusion of the odour nuisance clause;*
- *protection of groundwater sources – best containment design should be included;*
- *public safety i.e. fencing, etc;*
- *protection of surface waters- by preventing the discharge of effluent to a watercourse; and*
- *protection from surface runoff flow with the inclusion of a perimeter drainage swale.*

Disposition:

- The odour nuisance clause has not been included. The nearest neighbour, according to Rural Development, will be about one mile away from the site. The facility is located in an agricultural area with intensive agricultural operations. Any odour from the wastewater treatment facility will not be significant to other odours in the area.
- The draft Licence addresses the other concerns raised

Rural Development

- *The site is located in an agricultural area populated by people involved in family farm operations.*
- *The closest farm neighbour will be about one mile southwest of the site and there are only four farm yards within a two mile radius.*
- *There are no local land-use planning policies or requirements that apply to the proposed development.*
- *There are no provisions of the Provincial Land Use Policies that would prevent the proposed development from proceeding.*
- *No concerns were identified.*

Environment-Operations Division

- *Effluent quality should be checked and laboratory results provided to the environment officer 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 ground water or cereal crops.*

Disposition:

- The draft Licence requires the testing of effluent quality and the submission of laboratory results.
- The draft Licence includes set back distances and other restrictions on effluent irrigation.

Environment-Water Quality Management

- *If the land that is to receive the effluent is located near the Souris River, the proponent should take measures to ensure that there is an adequate buffer zone between the river and the discharge area.*

Disposition:

- The draft Licence includes a 100 metre buffer along water courses and groundwater wells.

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:

Mike Van Den Bosch, P. Eng.
Environmental Engineer
Municipal & Industrial Approvals
February 5, 1999

Telephone: (204) 945-7015
Fax: (204) 945-5229
E-mail Address: mvandenbos@gov.mb.ca