

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: Acadia Holding Co. Ltd.
PROPOSAL NAME: Acadia Colony Wastewater Treatment Lagoon
CLASS OF DEVELOPMENT: 2
TYPE OF DEVELOPMENT: Waste/Scrap–Wastewater Treatment Lagoon
CLIENT FILE NO.: 4726.00

OVERVIEW:

On December 10, 2001, the Department received a Proposal from Cochrane Engineering Ltd. on behalf of Acadia Holding Co. Ltd. for a Development to construct and operate a new wastewater treatment lagoon. The Riverbend Colony is establishing the new Acadia Colony in the north-east quarter of Section 14-11-14 WPM in the Rural Municipality of North Cypress. The lagoon facility will be located in the same quarter section. The treated wastewater will be discharged to an adjacent wooded area and marsh within the Pine Creek watershed.

The Department, on December 28, 2001, 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 in Brandon. As well, copies of the Proposal were provided to the Interdepartmental Planning Board and TAC members. The Department placed a public notification of the Proposal in the Carberry News Express on Monday, January 07, 2002. The newspaper and TAC notification invited responses until January 31, 2002.

COMMENTS FROM THE PUBLIC:

Cypress Planning District

The Rural Municipality of North Cypress hired Dr. Dinko Tuhtar of BOMA Environmental and Safety to review the proposal. Dr. Tuhtar's comments are as follows:

- *The proposal is well written and technically sound.*
- *Potential environmental impacts concern effluent quality, odour, and impact of the pond effluent on the wooded area north of the wastewater treatment pond.*
- *Because the local soil is porous, and a swampy area is located in the vicinity of the pond site, it is likely that further polishing of the effluent quality will be occurring by natural attenuation, thus minimizing any potential effect of the pond effluent.*
- *In many instances Manitoba Conservation considers land application of lagoon effluent as a preferred means of discharge.*
- *Because of the high risk to the water quality of the Assiniboine Delta Aquifer the following parameters should be sampled and analysed before the effluent discharge:*
 - *BOD₅, pH, electrical conductivity and total suspended solids;*
 - *Total and fecal coliforms;*
 - *Sodium, chloride and magnesium (SAR);*
 - *Nitrogen compounds (ammonia, nitrite, nitrate);*

- *Total phosphorous; and*
- *Toxicity.*
- *Consideration should be given to water sampling of the swampy area that would eventually receive the pond effluent to detect any effect of the pond discharge on the aquatic life in the swamp.*
- *The sampling and analysis of water quality should be conducted by an independent party which would provide the results to both the Colony and the Rural Municipality of North Cypress.*

Disposition:

- The attached Draft Licence requires sampling of the effluent prior to discharge and analysis of BOD, total coliforms and fecal coliforms. The draft Licence includes provisions to require the sampling, monitoring, analysis or investigation of specific areas of concern, as requested by the Director.
- The attached Draft Licence requires that all analyses be carried out by an accredited laboratory and submitted to the Director within a specified period.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Agriculture and Food

- *No concerns, provided that the lagoon construction and effluent quality to be discharged into the drainage discharge route to Pine Creek meets the criteria and limits set by Manitoba Conservation.*

Conservation - Sustainable Resource Management

- *Will it be possible to inspect the integrity of the synthetic liner after the facility becomes operational?*
- *It is unclear where the effluent will go after it is discharged to the wooded area northeast of the lagoon. Few details are provided regarding the topography, soil profile characteristics and vegetation of the areas through which the effluent would flow.*
- *Is the marsh an aquifer recharge or discharge area?*
- *The proposal does not indicate how the effluent might impact the natural vegetation in the wooded area and the vegetation and water quality of the marsh.*
- *Is it possible to monitor and manage the flow through the wooded area and the marsh?*
- *Is the outflow from the marsh area to Pine Creek perennial or intermittent?*
- *The option of land application of the effluent should be fully investigated.*

Disposition:

- Liner testing requirements are included in the attached Draft Licence.
- The proponent provided additional details of the discharge area, which were provided to Sustainable Resource Management for additional comment.

Culture, Heritage and Tourism - Historic Resources

- *No concerns.*

Health

- *The requirement for fencing, gates and warning signs should be included in the licence.*
- *Consideration should be given to including the odour nuisance clause.*
- *Discharge of effluent should be in compliance with Manitoba's guidelines.*
- *Will the proposed PVC liner provide the best possible groundwater protection?*

Disposition:

- The attached draft Licence addresses the concerns identified above.
- The Proponent has identified that the lagoon will be lined with an HDPE liner. Liner testing requirements are included in the attached Draft Licence.

Transportation and Government Services

- *No concerns.*

Intergovernmental Affairs

- *No objections.*
- *The report indicates that this location is "on the side of a modest escarpment". Presumably the design consultant will consider the existing slope conditions, and any potential for damage to the structure and/or lining in the event of any shifting that might occur, due to the additional weight of the water in the lagoon.*
- *The proponent should be advised to contact the local development officer to initiate the process to obtain municipal approval of this process.*

Disposition:

- The Proponent advised that the slope conditions were considered.
- The municipal approval process has been initiated.

Canadian Environmental Assessment Agency

- *The application of the Canadian Environmental Assessment Act with respect to this project will not be required.*

PUBLIC HEARING:

A public hearing is not recommended.

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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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June 10, 2002

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