

## **SUMMARY OF COMMENTS/RECOMMENDATIONS**

**PROPONENT:** Treesbank Colony Farms Ltd.  
**PROPOSAL NAME:** Treesbank Colony Wastewater Treatment Lagoon  
**CLASS OF DEVELOPMENT:** 2  
**TYPE OF DEVELOPMENT:** Waste/Scrap–Wastewater Treatment Lagoon  
**CLIENT FILE NO.:** 4688.00

### **OVERVIEW:**

On November 30, 2001, the Department received a Proposal from Cochrane Engineering Ltd. on behalf of Treesbank Colony Farms Ltd. for a Development to construct and operate a new wastewater treatment lagoon. The lagoon facility will be located on the north-east quarter of Section 31-7-16 WPM. The treated wastewater will be discharged twice annually to the Souris River.

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 Glenboro Gazette on Tuesday, January 8, 2002. The newspaper and TAC notification invited responses until January 31, 2002.

### **COMMENTS FROM THE PUBLIC:**

The following comments were received from the Public:

#### **Randy Dowd**

- *Expressed concern that sewage would be dumped into the Souris River;*
- *Lives downstream of proposed site;*
- *Operates a tourist business on the Assiniboine River;*
- *Expressed concern regarding the impacts of the development on the river system.*

Disposition:

- The original proposal was for treated wastewater meeting water quality standards to be discharged into the Souris River. The proposal was revised to discharge the treated wastewater into a wetland on the proponent's land with no direct discharge to the Souris River.

#### **Cypress Planning District**

*The Rural Municipality of South 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 water quality of the Souris River downstream.*
- *Principal concerns with the proposed wastewater treatment pond are as follows:*
  - *Wastewater treatment pond location – the pond effluent plume, once mixed with water from the Souris River may be potentially impacting groundwater at the site of the Colony’s existing drinking water well, which appears to be located downstream of the pond effluent discharge point.*
  - *The preferred method of lagoon effluent discharge in Manitoba is land application. Effluent discharge into the Souris River should be discouraged.*
  - *Concerns remain as to the size and shape of the mixing zone in times of low flow.*
  - *Monitoring considerations – because the Souris River empties into the Assiniboine River and because both rivers support fish and are used for other purposes, the following parameters should be sampled and analysed:*
    - *BOD<sub>5</sub>, 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.*
- *The sampling points should include the secondary cell and points upstream and downstream of the proposed point of effluent discharge into the Souris River.*
- *If the Licence does not request that the Colony participate in any future nutrient reduction program, the Rural Municipality should do so.*
- *What does the Colony do if the water quality of the secondary cell does not meet the effluent quality requirements.*
- *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 South Cypress.*

Disposition:

- The proponent indicated that the Colony’s livestock and drinking water wells would not be impacted by discharge of treated effluent to the river or to the wetland.
- 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 the Proponent to participate in a nutrient management study, should one be developed, for the Souris River.
- The attached draft Licence requires that sampling results be submitted prior to discharge of effluent. The required action to ensure that the Licence conditions are met will depend on which parameter does not meet the requirements.
- 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 to be discharged into the Souris River meets the criteria and limits set by Manitoba Conservation.*

### **Conservation - Sustainable Resource Management**

- *Concerns with locating the lagoon on the valley floor. River flooding or failure of the liner membrane could lead to problems difficult to address on the valley floor.*
- *Release of effluent from the lagoon to the river, especially during low flow periods, may have detrimental effects on a river system that is already fully allocated.*
- *What type of domestic wastewater disposal system is presently used by the colony?*
- *Will it be possible to monitor the integrity of the liner in the future?*
- *Are there any downstream users who may be impacted by this development?*
- *The proponent may be asked to participate in a watershed or drainage basin management plan that may be developed for the Souris River watershed in the future.*

### **Disposition:**

- *There is no regulatory authority to prevent the lagoon from being constructed on the valley floor. There does not appear to be grounds to prohibit the lagoon construction at the proposed site. The draft Licence requires the dykes to be constructed 0.6 metres above the 100 year flood level of the Souris River.*
- *The revised proposal is for discharge to a wetland on the proponent's land with no direct discharge into the Souris River.*
- *The current disposal system consists of untreated sewage released onto the surface. The proposal under consideration was submitted in response to the unacceptable system in use at the colony.*
- *The draft Licence includes requirements for installation and maintenance of the liner.*
- *The attached draft Licence requires the Proponent to participate in a nutrient management study, should one be developed, for the Souris River.*

### **Culture, Heritage and Tourism - Historic Resources**

- *The Historic Resources Branch has concerns with regard to this project's potential to impact heritage resources.*
- *Archaeological site distribution in the area indicates the potential for intact heritage objects on this property.*
- *The Branch's Impact Evaluation Archaeologist will examine this area when scheduling and conditions permit in the Spring of 2002, to determine the location and significance of any heritage resources.*
- *If significant heritage resources are present, the proponent will be contacted and a mutually acceptable heritage resource management strategy can be implemented.*

Disposition:

- The Historic Resources Branch completed its examination of the subject property. No significant heritage resources were identified. No further 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; and*
- *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 a PVC liner. Liner testing requirements are included in the attached Draft Licence.

**Transportation and Government Services**

- *No concerns.*

**Intergovernmental Affairs**

- *No objections.*
- *The potential for flooding should be evaluated by the Water Branch of Manitoba Conservation.*
- *The proponent should be advised to contact the local development officer to initiate the process to obtain municipal approval of this proposal. If the structure is located within 125 feet of a government road allowance, a variation order might also be required to provide compliance with the local zoning.*

**Canadian Environmental Assessment Agency**

- *The application of the Canadian Environmental Assessment Act with respect to this project will not be required.*
- *The following federal department provided comments:*  
*Fisheries and Oceans Canada*
  - *In order to assess the potential impacts to fish and fish habitat that may result from the works in question, additional information is required in the following areas:*
    - *Information should be provided about the effluent outfall structure to the Souris River including design drawings and construction details, timing of any in-water work, erosion and sediment control plans during and after construction of the outfall. Drawings showing the location of the outfall structure on the bank of the Souris River in relation to the average annual high water level should also be provided.*
    - *Information should be provided about the physical habitat that may be impacted in the Souris River at the site of effluent discharge. This would include a description of substrate and bank material, slope and condition of*

*banks, stream width and depth, and aquatic and riparian vegetation information. This would also include a description of the size of area to be impacted in the Souris River and photos of the river and banks at the impact site.*

- *Information should be provided about the current use of the discharge site by fish, including any known use of the site for spawning.*

Disposition:

- The revised proposal is for discharge to a wetland on the proponent's land with no direct discharge into the Souris River.

**PUBLIC HEARING:**

A public hearing is not recommended.

**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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