

## **SUMMARY OF COMMENTS/RECOMMENDATIONS**

**PROPONENT:** Sommerfeld Holding Co. Ltd.: Applicant  
**PROPOSAL NAME:** Sommerfeld Colony Wastewater Treatment Lagoon  
**CLASS OF DEVELOPMENT:** 2  
**TYPE OF DEVELOPMENT:** Wastewater Treatment Lagoon  
**CLIENT FILE NO.:** 4314.00

### **OVERVIEW:**

On March 12, 1998, the Department received a Proposal on behalf of the Sommerfeld Holding Co. Ltd. to reconstruct a portion of its existing wastewater treatment lagoon as a primary cell and to construct a new secondary cell to service Sommerfeld Colony farmsite. The wastewater treatment lagoon will be located on the northwest quarter of Section 34-12-5 WPM in the Rural Municipality of Portage la Prairie. The Proposal indicated that treated wastewater will be discharged between June 15 and November 1 of each year, into a drainage ditch which flows east for 2.6 km and then north into Long Lane Creek which flows into the Assiniboine River.

The Proposal prepared by Cochrane Engineering Ltd., indicated that the lagoon will have to be constructed with a liner. The liner would consist of a clay cutoff which would be keyed into an insitu clay layer located below the site.

The Department, on March 24, 1998, placed copies of the Proposal in the Public Registries located at 123 Main St. (Union Station); the Centennial Public Library and the Portage Plains 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 Portage Herald on Tuesday, March 31, 1998. The newspaper and TAC notification invited responses until April 27, 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 report does not show the distance to the colony wells or indicate the aquifer used by the colony. The potential for the lagoon to cause problems for the Colony's wells should be considered.*

Disposition:

- The distance to the Colony's wells will not be changing significantly since the existing secondary cell will become the new primary cell and a new secondary cell will be constructed adjacent to it.
- The purpose of the reconstruction of the lagoon system is to ensure that an effective liner is installed which would protect the Colony's wells.

### **Historic Resources**

- *No concerns.*

### **Health**

- *The health concerns with a wastewater treatment lagoon are:*
  - *minimization of odours*
  - *protection of groundwater sources*
  - *public safety i.e. fencing*

Disposition:

- These concerns have been addressed in the draft Licence.

### **Environment-Operations Division**

- *Based on information provided in the report and the condition of the existing lagoon facility, close supervision of the construction is recommended to ensure that the cells will meet the Department's construction criteria.*

Disposition:

- The draft Licence includes clauses setting out the construction requirements for the liner, the post construction soil sampling and the soil testing procedures. Construction supervision is a responsibility of the owner and is not addressed in the draft Licence. It would be prudent for the owner to have construction supervision on site at all times since the saturated sands above the clay will have a tendency to collapse into the cutoff trench.

### **Environment-Water Quality Management**

- *The proposed lagoon upgrade calls for a retention period of 227 days before discharge and that the discharge will take place between June 15 and October 31. This should reduce the levels of contaminants, nutrients, and unionized ammonia in the effluent and thus reduce the risk of negative impacts on aquatic environment in Long Lake Creek and the Assiniboine River.*
- *The report is lacking background information about the project and the surrounding environment.*
  - *More information about water flow in the drainage ditch and the creek would be useful.*
  - *Information on the current discharge method is not provided.*
  - *The report does not indicate why the development is necessary.*

- *The upgrade is designed to handle wastewater from a maximum of 150 people. It does not state what the present population of the Colony is, nor does it predict when the new facility will reach its design capacity.*
- *The report states that discharging after June 15 should minimize any impact on fish spawning in the Assiniboine River. The report fails to indicate whether there are any fish in Long Lake Creek that may be affected by the discharge.*
- *Is water from Long Lake Creek, downstream of the proposed discharge site, used for any agricultural purposes such as crop irrigation or livestock watering.*
- *Is the Sommerfeld Colony the only site that discharges into Long Lake Creek or are there other sites in the area that also discharge into the creek. If there are others, the discharge periods should be coordinated in such a way as to lessen the impact on the creek waters.*
- *Have any other alternatives discharge methods such as land irrigation been investigated.*

**Disposition:**

- It is natural to want additional information however it may not be available or necessary.
- Information on the current discharge method was not provided. The facility discharges by seepage to the groundwater. The department requested the Colony to upgrade its facility due to this concern.
- Comments on the impact to aquatic life would apply to Long Lake Creek as well as to the Assiniboine River.
- The report includes a comparison of expected effluent quality to parameters listed in the Manitoba Water Quality Objectives for irrigation. The information in the report indicates that if water from Long Lake Creek is used for irrigation now or in the future, it should not impact on irrigation practices. Based on the expected effluent quality there is no reason to believe it will impact on downstream watering of livestock if such a use were to occur.
- Proponents are not required to review alternative discharge options unless there is a need for an alternative discharge option. The Manitoba Water Quality Objectives has a Class 6 use category which includes the disposal of wastewater.

**Canadian Environmental Assessment Agency**

- *CEAA has indicated that P. F. R. A. will conduct an environmental assessment under The Canadian Environmental Assessment Act with respect to this proposal.*

**PUBLIC HEARING:**

A public hearing is not required.

**RECOMMENDATION:**

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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:

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