#### SUMMARY OF COMMENTS/RECOMMENDATIONS

**PROPONENT:** Long Lake Holding Co. Ltd.

**PROPOSAL NAME:** Woodlands Colony Wastewater Treatment

Lagoon

CLASS OF DEVELOPMENT: 2

TYPE OF DEVELOPMENT: Wastewater Treatment Lagoon

**CLIENT FILE NO.:** 1119.10

# **OVERVIEW:**

On January 22, 1999, the Department received a Proposal on behalf of Woodlands Holding Co. Ltd. to construct a new wastewater treatment lagoon and to redirect the effluent discharge. The new wastewater treatment lagoon will be located on the southeast quarter of Section 15-13-4 WPM approximately 400 metres from the existing lagoon. The existing Environment Act Licence requires that effluent be disposed of by effluent irrigation onto land owned by the Licencee. The Proposal indicated that treated wastewater will be discharged to the Long Lake drain, which empties into the Assiniboine River.

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

The Department, on February 22, 1998, placed copies of the Proposal in the Public Registries located at 123 Main St. (Union Station); the Centennial Public Library and the Selkirk Community 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 Stonewall Argus on March 1, 1999. The newspaper and TAC notification invited responses until March 26, 1999.

## **COMMENTS FROM THE PUBLIC:**

No responses were received to the public notification.

## **COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:**

## **Highways**

• No comment.

#### **Natural Resources**

• Nutrients associated with the wastewater effluent should be kept to a minimum to prevent increased vegetation growth in the Long Lake Drain.

## Disposition:

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• The draft Licence does not require nutrient removal. The draft Licence requires the Licencee to participate in any future nutrient control program provided the program addresses both point and non-point discharges of nutrients.

# **Historic Resources**

• No concerns.

## Health

No comments.

#### **Rural Development**

• No comments.

## **Environment-Operations Division**

- The proposal indicates that a barbed wire fence will be installed to control access to the site. A barbed wire fence is inadequate to keep out curious children. A page wire fence is considered a better deterrent. The lagoon will be located approximately 500 metres from the colony farmsite.
- A better map of the area should have been included in the proposal. Flooding should not be an issue. The area is mostly farmland and there appears to be very few residents located along the Long Lake Drain in the immediate area.
- The proposal does not indicate if the Long Lake Drain has fish in it. If fish are present discharge considerations should be made regarding chlorination so as not to impact fish.
- The chlorinated effluent should be resampled 24 hours after chlorination.

#### Disposition:

- The draft Licence requires the installation of a fence to control access to the site. The draft Licence does not specify the type of fence; however a barbed wire fence is considered adequate and is the standard type of fence used around wastewater treatment lagoon facilities.
- The use of chlorine should not be required to meet the microbiological limits however if chlorine is used in an emergency situation, the impact would be limited due to the length of the discharge cycle. Effluent quality parameters and testing procedures will not change.

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

- The proposal does not indicate why the new lagoon is required.
- The actual distance that the effluent will travel in Long Lake Drain to the Assiniboine River is approximately 10 km.
- There is a general concern about the impact of the discharge, in combination with other upstream discharges, on the water quality of the drain.
- Land application is another option for effluent disposal. The SAR value of the wastewater is above the objective for irrigation water. If the high SAR results from the use of water softening salts, then it would be prudent for the proponent to reevaluate the water softening process.
- The proponent should be encouraged to identify the sources of sodium in the wastewater and attempt to reduce inputs to minimize any negative effects on the soils so as to permit land application of the wastewater.

#### Disposition:

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- The wastewater treatment lagoon is being relocated further away from the residential housing on the colony.
- The draft Licence requires the Licencee to participate in any future nutrient control program provided the program addresses both point and non-point discharges of nutrients.
- The Sodium Adsorption Ratio (SAR) of the effluent referenced in the report indicates that it should not be used for irrigation due to the high salt content.
- No impacts have been identified to downstream uses which might result from the
  proposed discharge. Therefore the draft Licence does not prohibit the discharge to
  the Long Lake Drain. Although effluent disposal by irrigation may be preferred if
  the SAR values were lower, the proponent does have a reasonable basis to justify
  the request for the proposed discharge.

## **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:

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