

## **SUMMARY OF COMMENTS/RECOMMENDATIONS**

**PROPONENT:** Sunnyside Holding Co. Ltd.  
**PROPOSAL NAME:** Sunnyside Wastewater Treatment Lagoon  
Alteration  
**CLASS OF DEVELOPMENT:** 2  
**TYPE OF DEVELOPMENT:** Wastewater Treatment Lagoon  
**CLIENT FILE NO.:** 1172.20

### **OVERVIEW:**

On July 21, 2005, the Department received an Environment Act Proposal (EAP) on behalf of the Sunnyside Holding Co. Ltd. for the alteration of an existing wastewater treatment lagoon located on SE 32-10-5WPM in the Rural Municipality of Portage la Prairie that serves the Sunnyside Colony farmsite. The current Environment Act Licence, No. 2383, permits discharge of treated wastewater from the wastewater treatment lagoon only by irrigation onto agricultural land owned by the Sunnyside Holding Co. Ltd. between May 1<sup>st</sup> and October 15<sup>th</sup> of any year. The most recent proposal requests that during years when crop types are such that they are not able to be irrigated with treated wastewater, the wastewater treatment lagoon would be allowed to discharge between June 15<sup>th</sup> and November 1<sup>st</sup> of any year via temporary pipeline into Crooked Lake Channel that flows into Elm Creek Channel that flows into the La Salle River.

The Department, on August 15, 2006, placed copies of the EAP report in the Public Registries located at 123 Main St. (Union Station); the St. James-Assiniboia Public Library, Manitoba Eco-Network, and the Portage la Prairie City Library and provided copies of the EAP report to the Canadian Environmental Assessment Agency and TAC members. As well, the Department placed public notifications of the EAP in the Central Plains Herald Leader on Saturday, August 20, 2005. The newspaper and TAC notifications invited responses until September 22, 2005.

There were several requests for additional information from the TAC. Based on the responses to their survey of the EAP the Canadian Environment Assessment Agency (CEAA) indicated that application of the Canadian Environmental Assessment Act would not be required for this project. Environment Canada, Health Canada and Indian and Northern Affairs Canada (INAC) indicated that they may be able to provide specialist advice with respect to the project review. INAC asked to participate in the provincial review of this EAP.

On December 2, 2005, Manitoba Conservation forwarded the requests for additional information to the proponent's consultant.

On January 17, 2006 Manitoba Conservation received a response to the requests. The responses were distributed to the TAC representatives from which the requests came.

There were no additional requests from TAC. However, a March 15, 2006 letter from Manitoba Conservation requested confirmation regarding legal agreements for properties that would be traversed by the temporary discharge piping as well as confirmation regarding authorization to use the proposed municipal drain were requested.

On April 4, 2006 the consultant responded with a letter indicating that the Colony owns the land on which the temporary discharge pipe would be placed.

On April 20, 2006 the consultant forwarded a letter from the Rural Municipality of Portage la Prairie to Manitoba Conservation that approves the proposed alterations.

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

There were no comments from the public.

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

##### **Water Stewardship – Ecological Services Division**

- *Clarify that the discharge route is as indicated on page 13 of the proposal and not as on page 1 of Appendix 5 (200m north to an intermittent creek which flow to La Salle;*
- *Monitor the pipe discharge into Crooked Lake Channel for erosion and implement erosion and sediment control measure as required; and*
- *Monitor the SAR and chloride levels to ensure that they are mitigated to background levels as anticipated upon discharging into a wetted channel. While there has been abundant water quantity the last couple of years this may not always occur during the proposed discharge times.*

##### **Proponent Responses – January 11, 2006:**

- Appendix 5 contains the 1998 Geotechnical Report for the construction of the lagoon modification. The report is provided as background information. Licence 2383,

issued February 17, 1999, required that the effluent be applied to the agricultural land. This EAP requests a discharge option to surface drainage, which we are confident is more acceptable than the previously requested discharge route in the 1998 proposal.

- Monitoring of erosion and/or wastewater levels will be performed as required by Manitoba Conservation.

### **Water Stewardship – Ecological Services Division**

- *The proposal includes little information about Crooked Lake Channel. Are there any downstream uses of the channel (such as livestock watering) that may be impacted by the lagoon discharge?*
- *With respect to the construction of the culvert the following recommendations are provided:*
  - *Minimal removal of vegetation and soil should be observed during the construction and the placement of the culvert.*
  - *Erosion control methodologies should be used on both sides of the culvert according to the guidelines outlined in Manitoba Stream Crossing Guidelines for the Protection of Fish and Fish Habitat.*
- *Erosion control measures should also be implemented at the point where the pipeline discharges into Crooked Lake Channel.*
- *The Water Quality Management Section is concerned with any discharges that have the potential to impact the aquatic environment and/or restrict present and future uses of the water. Therefore it is recommended that the license require the proponent to actively participate in any future watershed based management study, plan/or nutrient reduction program, approved by the Director, for the La Salle River, the Red River, Lake Winnipeg and associated waterways and watersheds.*

### **Proponent Responses – January 11, 2006:**

- An information request with Water Stewardship – water licensing database returned a list of four users. All licensed users on the La Salle River use water for irrigation purposes, and the lone user (Starlite Holding Co. Inc.) that uses the water for municipal purposes obtains water from wells.
- The proposed culvert installation will be performed in a manner that minimizes the removal and disturbance of vegetation and soil. The culvert will not be installed at a low point along the road and will not be a means of water conveyance. Its only purpose is to permit the crossing of the Sunnyside Colony's temporary pipeline through the municipal road between 32-10-05WPM and 29-10-05WPM.
- Rip rap is necessary at the point where the temporary pipeline discharges into the Crooked Lake Channel and will be clean, free of fine materials, and of sufficient size to resist displacement during peak storm events.

- Those involved in a future watershed based management study, plan/or nutrient reduction program are welcome to contact the Sunnyside Colony.

### **Historic Resources**

- *No concerns.*

### **Intergovernmental Affairs**

- *No concerns;*
- *However, please note that our review of this matter has found (and as noted in 6.3 Design Specifications p.12 of the June 2005 Cochrane Engineering report), a single family residence is located with 1000' (305 metres) of the existing lagoon;*
- *In accordance with the R.M. of Portage la Prairie Zoning By-law 2459 Part IV – General Provisions For All Zones 11.(1) “No development shall be permitted within two thousand six hundred (2,600) feet of a waste disposal site or sewage treatment plant or lagoon.” The second cell, which was completed in 2002 would have required a variation order in order to be constructed. The current proposal makes reference to an Environment Act Proposal undertaken in 1998 by Cochrane Engineering Ltd. for the building of the second cell. We do not have a copy of the license for the second cell, nor do we have any documentation in our office indicating our comments at that time or any evidence that a variation order was issued for the building of the second cell.*

### **Proponent Responses – January 11, 2006:**

- Page 12 of the Sunnyside Colony EAP states that the WWSP is approximately 305 metres (1000 ft) from the nearest neighboring residence, which is an acceptable distance according to the Manitoba Conservation guideline for Design Objectives for Standard Sewage Lagoons. Cochrane Engineering confirmed this distance in 2002, at the residence owner’s request for measurement; and
- Until recent correspondence, the R.M. of Portage la Prairie was unaware of the earlier lagoon expansion completed in 2002. Additionally, as part of this correspondence they expected that the current alteration would require a variance order.

### **Sustainable Resource Management Branch**

- *The proposal indicates that the sodium absorption ratio (SAR) of the wastewater effluent will likely exceed water quality objectives for irrigation. The proponent should provide some level of confidence that a high SAR in the effluent will not*

*negatively impact vegetation in Crooked Creek Channel. There is the potential for increased soil erosion along the channel if vegetation in the channel is negatively impacted by the effluent. A program should be implemented to monitor the SAR in the effluent and receiving water and assess any impacts on vegetation growth and erosion in the channel; and*

- It is the responsibility of the proponent to inspect the construction site prior to and during construction to determine if any species listed as rare or endangered may be impacted by the development. The proponent needs to be aware that if rare or endangered species are present, removal or destruction of the species or their habitat may be in contravention of Subsection 10(1) "Prohibition" of The Endangered Species Act (Manitoba). Since many areas of the province have never been thoroughly surveyed, the absence of records of listed species in this area does not mean that listed species or other species or ecological communities of concern are not present. If species of concern are present, the proponent must contact the Biodiversity Conservation Section of the Wildlife and Ecosystem Protection Branch (Nicole Firlotte, 945-6998) to discuss possible mitigation options.*

Proponent Responses – January 11, 2006:

- The Sunnyside Colony now receives their water from the Cartier water plant. Previous to this source, the Colony softened very hard well water for their use. It is therefore expected that the SAR levels will decrease. Monitoring of the SAR in the effluent will be performed as required by Manitoba Conservation.
- A file search with the Biodiversity Construction Section of the Wildlife and Ecosystem Protection Branch of Manitoba Conservation returned no listings of known rare species for the immediate areas 32-10-05WPM and 29-10-05EPM potentially affected by the development site.

Disposition:

- Limits, terms and conditions of the draft Environment Act Licence provide construction requirements and standard operating criteria regarding monitoring and controlling effluent discharges that are conventional for standard lagoons in Manitoba.
- The draft Environment Act Licence requires that the Licencee monitor and report the SAR of the effluent prior to any discharge to Crooked Lake Channel.
- The draft Environment Act Licence requires that the Licencee actively participate in any future watershed-based management study, plan and/or nutrient reduction program, approved by the Director, for the La Salle River, Red River, Lake Winnipeg and/or associated waterways and watersheds.

### **Canadian Environmental Assessment Agency**

- *CEAA responses have indicated that application of The Canadian Environmental Assessment Act with respect to this proposal will not be required.*

### **Environmental Canada**

- *The pH levels seem to be high and may be a concern under the general prohibition of s. 36(3) of the Fisheries Act. Sunnyside Colony attributed the high pH value to the old water softening system and states new water source would result in lower pH values. It may be useful to determine what caused the high pH values in the first place. The range of pH values in the Guidelines for Effluent Quality and Wastewater Treatment at Federal Establishments Report # EPS-1-EC-76-1, April 1976 is 6-9; and*
- *EC recommends that the colony be required to do some downstream monitoring during discharge to determine actual pH levels. The Sunnyside Colony also states that no fish presence is expected in Crooked Lake Channel. Fisheries and Oceans may be consulted for confirmation.*

### **Proponent Responses – January 11, 2006:**

- The Sunnyside Colony water source is now the Cartier water plant, which typically supplies water at an approximate pH of 8.0, and it is expected that wastewater pH levels will be below 9.0. Any downstream monitoring during discharge will be performed as required by Manitoba Conservation.

### **Fisheries and Oceans Canada**

- *Temporary and permanent erosion and sediment control measures to prevent the introduction of sediment to any fish habitat from any aspect of the work should be planned for use before, during and after construction until all areas affected by the work are permanently stabilized; and*
- *Surface drainage facilities should be sized, designed, and planned for construction such that channels and culverts are stable, resistant to erosion, and do not permit the transport of sediment, oil, silt, or grit fish habitat.*

### **Disposition:**

- Where practical, the concerns identified by DFO have been addressed through limits, terms and conditions as well as through specific monitoring and reporting requirements of the draft Environment Act Licence.

**PUBLIC HEARING:**

A public hearing has not been requested.

**RECOMMENDATION:**

Issue an Environment Act Licence in accordance with the attached draft. Enforcement of the Licence should be assigned to Regional Operations Branch.

**PREPARED BY:**

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June 27, 2006

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