

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: Sunnyside Holding Co. Ltd.
PROPOSAL NAME: Sunnyside Colony Wastewater Treatment Lagoon
CLASS OF DEVELOPMENT: 2
TYPE OF DEVELOPMENT: Wastewater Treatment Lagoon
CLIENT FILE NO.: 1172.10

OVERVIEW:

On June 10, 1998, the Department received a Proposal on behalf of Sunnyside Holding Co. Ltd. to reconstruct its wastewater treatment lagoon and to redirect the effluent discharge. The wastewater treatment lagoon is located on the southeast quarter of Section 32-10-5 WPM. 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 into a nearby intermittent creek, which empties into the La Salle River, 30 km southeast of the lagoon site. There were concerns regarding the discharge into the creek when the lagoon was originally licenced.

The Proposal indicated that the wastewater treatment lagoon cells will be lined with clay which will meet the hydraulic conductivity guidelines. The proposal does not address impacts of effluent discharge on downstream uses of the creek from people drawing water directly for filling dugouts or indirectly for infiltration wells.

The Department, on July 28, 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 Leader on Tuesday, August 4, 1998. The newspaper and TAC notification invited responses until August 31, 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 site is underlain by shallow sand units in some locations. Care should be taken to ensure that the lagoon is constructed so that it does not leak.*

- *Consideration should be given to the installation of water quality monitoring wells at this site.*

Disposition:

- The proposal was filed because the South-Central Region determined that the facility had a seepage problem.
- The concerns about the construction of the liner have been addressed in the draft Licence.
- Groundwater monitoring wells will confirm the known historical seepage problem. Therefore groundwater monitoring results will not reflect the performance of the liner. A requirement for groundwater monitoring wells has not been included in the draft Licence.

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.

Rural Development

- *No concerns.*

Environment-Operations Division

- *The South-Central Region had identified concerns with respect to the operation of the existing lagoon facility. The proposal addresses these concerns by reconstruction of the lagoon in accordance with requirements under the Environment Act.*
- *The South-Central Region had identified concerns with respect to impacts on the downstream uses of Scott Creek (shallow infiltration wells) and approval should not be given to discharge into the creek if there will be a negative impact on those uses.*

Disposition:

- The draft Licence requires the lagoon cells to be lined to current departmental standards.
- The proposal does not address impacts to downstream users of the creek even though downstream use was an issue when the lagoon was initially licenced for effluent irrigation disposal. The draft Licence does not permit the discharge to Scott Creek and requires the Licencee to continue disposing of effluent by

irrigation. This may result in the Licencee having to change the water softening process that is being used in order to reduce the salinity level in the effluent.

Environment-Water Quality Management

- *The proposal should have stated whether the Colony was currently licenced to discharge into a surface waterway and the name of the waterway.*
- *The proposal provides little information about the creek. Assuming that Scott Creek is the receiving waterway, according to a 1988 topographical map of the region, there are at least four other similar sized lagoon facilities along the course of the creek. The 1988 topographical map of the area also shows a number water dugouts along the creek. If these facilities are still in use, the discharge from this lagoon facility may have an effect on the use of the dugouts.*
- *The report does not indicate whether any alternative means of effluent discharge, such as land irrigation, have been investigated.*

Disposition:

- The receiving waterway is known as Scott Creek.
- An inspection of the area indicated that dugouts have been constructed along Scott Creek. The South Central Region indicated that there are several infiltration wells along the creek downstream of the proposed discharge point.
- An Environment Act Licence issued for the wastewater treatment lagoon restricted the discharge to effluent irrigation.
- 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.
- The draft Licence does not permit the discharge to Scott Creek and requires the Licencee to continue disposing of effluent by irrigation. This may result in the Licencee having to change the water softening process that is being used in order to reduce the salinity level in the effluent.

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:

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:

Sunnyside Holding Co. Ltd.
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Mike Van Den Bosch, P. Eng.
Environmental Engineer
Municipal & Industrial Approvals
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Telephone: (204) 945-7015
Fax: (204) 945-5229
E-mail Address: mvandenbos@gov.mb.ca