SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPOSED: Lord Selkirk School Division
PROPOSAL NAME: Lockport School Wastewater Treatment Plant
Holding Pond
CLASS OF DEVELOPMENT: 2
TYPE OF DEVELOPMENT: Sewage Treatment Plant
CLIENT FILE NO.: 1740.10

OVERVIEW:

On April 29, 2003 the Department received a Notice of Alteration (NoA) on behalf of Lord Selkirk School Division No. 11 for the alteration and expansion of an existing wastewater treatment facility. All components of the wastewater treatment facility would be located within the property that is owned by Lord Selkirk School Division in River Lots 104, 105 and 106, Plan 2565 in the Parish of St. Andrews in the Rural Municipality of St. Andrews. The NoA described proposed upgrades to an existing effluent holding pond and the addition of a supplementary effluent holding pond. The supplementary effluent holding pond would be located to the east of and immediately adjacent to the existing effluent holding pond. No changes to the sewage treatment plant, the periods of each year when effluent discharge is permissible, or the effluent discharge route were proposed. The existing Environment Act Licence No. 1150 restricts effluent to between May 1st and June 15th of any year and between October 1st and November 1st of any year. Effluent discharge is to a drainage route that flows east to the railway line, north along the west side of the railway line to a drain which flows east, crosses PTH 9 and passes through the Lower Fort Garry site to the Red River.

Upon preliminary review of the NoA it was determined that the potential environmental effects of the proposed changes may be significant and an Environment Act Proposal (EAP) report would be required. On May 30, 2003 the Department supplied the proponent with a letter notifying them of this determination and requesting additional information regarding the existing wastewater treatment facility.

On June 24, 2003 the Department received an Environment Act Proposal (EAP) on behalf of Lord Selkirk School Division No. 11 for the upgrade and operation of its existing wastewater treatment facility. In addition, a July 4, 2003 letter from the proponent identified an adjustment to the original proposal. The adjustment included a request that the original request to alter the discharge schedule of the holding ponds be disregarded. The July 4, 2003 letter also confirmed that the proponent had no intention of
altering the existing wastewater treatment plant as a component of activities relating to this EAP.

The Department, on July 14, 2003, placed copies of the EAP report in the Public Registries located at 123 Main St. (Union Station); the Centennial Public Library; the Manitoba Eco-Network; and the Selkirk and St. Andrews Regional Library and provided copies of the EAP report to the Canadian Environmental Assessment Agency, the Interdepartmental Planning Board, and TAC members. As well, the Department placed public notifications of the EAP in the Selkirk Journal on Monday, July 21, 2003. The newspaper and TAC notifications invited responses until August 5, 2003.

There were no responses from the public during the response period. The Rural Municipality of St. Andrews requested additional time to allow their Council to assess the EAP. On September 8, 2003 the Council for the Rural Municipality of St. Andrews confirmed that they had no concerns with respect to this EAP.

On October 20, 2003, Manitoba Conservation forwarded a letter to the proponent’s consultant that summarized the comments that had been received from the TAC. Additional information that would address the concerns presented in the comments from the TAC was requested from the proponent.

On November 19, 2003, Manitoba Conservation received a response to the requests for additional information. A representative of the Lord Selkirk School Division authored the response.

On November 28, 2003, Manitoba Conservation distributed the responses to the TAC representation for review and comments if any.

On December 29, 2003, Sustainable Resource Management Branch responded, indicating that their review of the additional information supplied by the proponent had not generated any further comments.

**COMMENTS FROM THE PUBLIC:**

There were no comments from the public.

**COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:**

**Agriculture and Food**

- No concerns.
Historic Resources

- No concerns.

Sustainable Resource Management Branch

- As the flows are increased due to the anticipated increase in student population the treatment capacity of the existing RBC wastewater treatment plant should be monitored to ensure that the quality of the effluent meets the requirements approved under the Notice of Alteration;

- Effluent quality should be monitored prior to discharge to the ditches and at the entrance to the Red River to ensure that there is no adverse impact to the quality of water in the river;

- Provisions should be taken to ensure that the water quality in the existing domestic wells is not impaired;

- The proponent has not supplied any effluent quality information such as what ammonia levels are present in the effluent;

- Although it is unlikely that the small volume of effluent will cause problems in the Red River it may be prudent to consider minimizing nutrients from this facility;

- To minimize the hydraulic loading to this facility the school should consider the installation of low flush toilets and other water saving devices; and

- The holding pond should be securely fenced to prevent access by school children during and after construction.

Disposition:

- The draft Environment Act Licence includes a Clause that requires the Licencee to submit to the Director for approval, within six months of the date of this Licence, an assessment plan respecting the operation and performance the sewage treatment plant. The approved assessment plan must result in a conclusive report being generated and submitted to the Director within one year of the date of the approval of the plan by the Director and include the assessment and consideration of parameters and components that will assess and identify the performance sewage treatment plant;

- The draft Environment Act Licence includes a Clause that requires effluent stored in the effluent holding ponds meets standard specified requirements prior to discharge;

- The draft Environment Act Licence includes Clauses that require the Licencee to operate the wastewater treatment facility within standard operating criteria. Compliance with such operating criteria will protect existing domestic wells from being impaired by the operation of the wastewater treatment facility;
The draft Environment Act Licence restricts the discharge of the holding ponds to between October 1st and November 1st of the same year. Effluent ammonia concentrations will not be an issue as the discharge period does not include times of the year during which effluent ammonia concentrations, and sensitivities to them, are elevated;

- The draft Environment Act Licence includes a Clause that 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 Red River and/or associated waterways and watersheds;

- Control of the mechanisms by which the hydraulic loading of domestic wastewater treatment facilities is generated is not provided through a Licence and would occur at the discretion of the Licencee; and

- The draft Environment Act Licence includes a Clause that requires that the Licencee shall install and maintain a fence around the effluent holding ponds to control access. The fence shall be provided with a gate that is kept locked at all times except to allow access to each effluent holding pond.

**Regional Operations Representation - Red River Region**

- The proposal only deals with the expansion of the holding ponds, however it may also be beneficial for the school division to also do a review of the rotating biological contactor sewage treatment plant. In the past the school division has had trouble meeting the discharge limits for total and fecal coliform and as such have had to request suspension of Clause 3 of the Licence. They have had to chlorinate at the discharge outlet. The sewage treatment plant and disinfection process should treat the sewage to acceptable levels prior to reaching the pond. The cause may be related to sewage treatment plant plant/disinfection failure or may be related to maintenance of the plant. I recommend that the school division undertake an assessment of the sewage treatment plant and disinfection system to make sure that the plant is working properly; and

- The discharge ditch running to the east parallel with the school property (the discharge ditch adjacent to the existing and proposed pond) appears to be very shallow has the potential to flood out the neighboring farm field. The engineers should thoroughly examine this ditch to determine if additional ditch work is required as part of this project.

Disposition:

- The draft Environment Act Licence includes a Clause that requires the Licencee to submit to the Director for approval, within six months of the date of this Licence, an assessment plan respecting the operation and performance the sewage treatment plant. The approved assessment plan must result in a conclusive report being generated and submitted to the Director within one year of the date of the approval of the plan by the
Director and include the assessment and consideration of parameters and components that will assess and identify the performance sewage treatment plant.

**Transportation and Government Services**

- No concerns.

**Canadian Environmental Assessment Agency**

- The August 19, 2003 CEAA response indicated that the application of the Canadian Environmental Assessment Act with respect to this project would not be required.

**Summary of TAC Requests For Additional Information:**

On October 20, 2003, Manitoba Conservation forwarded a letter that summarized the comments and requests for additional information that had been received from the TAC to the proponent’s consultant. The letter included requests for additional information regarding:

- evidence that the sewage treatment plant is performing at a level that is in accordance within its standard operating criteria;
- impacts of increasing student populations on the sewage treatment plant; estimated holding pond discharge schedules;
- expected ammonia concentrations in the effluent during discharge periods; and,
- the ability of the existing drainage route to provide effective drainage for the wastewater treatment facility.

**Proponent’s Responses (November 19, 2003):**

- It is my understanding that the Division has requested a suspension to Clause 3 of the License “one time only”. The treatment plant process was interrupted during a prolonged shutdown for repairs and preventative maintenance to the plant. Compliance to this license requirement was never an issue. The plant is now 100% full functioning capacity;
- There is no significant increase in student enrollment at Lockport School in the foreseeable future that could impact the original loading specifications of the plant;
- With the new expansion, discharge schedules could be restricted to late summer, after the spawning cycle of area fish population. Ammonia concentrations, I understand, would therefore not harm the reproduction cycle; and
- The discharge ditch in question is maintained by the Provincial Government and has (this summer) regraded the applicable ditches. During discharge, it was noted that the grade was good with no significant pooling and of sufficient depth.
The responses were distributed to the TAC representation for review and comments if any. The TAC representation responded, indicating that their review of the additional information supplied by the proponent had not generated any further comments.

The draft Environment Act Licence contains components of Specifications, Limits, Terms and Conditions and Monitoring and Reporting clauses that address the concerns of the TAC that remained unresolved following the review. The concerns relate to ammonia impacts, discharge schedule, and treatment capabilities of the sewage treatment plant.

**PUBLIC HEARING:**

A public hearing was not requested.

**RECOMMENDATION:**

An Environment Act Licence 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:**

Robert Boswick, P. Eng.
Environmental Engineer
Municipal & Industrial Approvals
March 10, 2004

Telephone: (204) 945-6030
Fax: (204) 945-5229
E-mail Address: rboswick@gov.mb.ca