

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPOSER: City of Brandon
PROPOSAL NAME: Wastewater Treatment Plant Alterations
CLASS OF DEVELOPMENT: Class 2
TYPE OF DEVELOPMENT: Wastewater Treatment Facility
CLIENT FILE NO.: 102.5

OVERVIEW:

An Environment Act Proposal, dated June 19, 1998, respecting three proposed alterations to the City of Brandon's existing Wastewater Treatment Facility, and submitted by the City of Brandon, was received by the Department on June 22, 1998.

The City of Brandon proposes the following three alterations:

1) Item No.1

To operate the wastewater treatment facility with a separate direct discharge effluent line from the wastewater treatment plant to the Assiniboine River in addition to the existing effluent discharge line from the wastewater treatment lagoon system.

2) Item No.2

To install and operate an ultra-violet light disinfection system on the direct effluent discharge line from the wastewater treatment plant to the Assiniboine River.

3) Item No.3

To make sole use of the wastewater treatment lagoon system for treatment of wastewater during the plant alterations at the wastewater treatment plant, concerning a hydraulic upgrade to the plant to increase the influent flow capacity of the plant.

The Proposal incorporating only alteration item No.3 was issued an Environment Act Licence No. 2351 S1 on September 11, 1998. Additional information on each of the alteration items No.1 and No.2 was to be provided in the future, at which time they were to be re-advertised for public review and comment.

The additional information on the Alteration Proposal respecting Items No. 1 and No. 2 were received by the Department from the City of Brandon on July 12, 1999. The Proposal was advertised in the Brandon Sun and the Portage Daily on Saturday, July 24, 1999, as well as in the Portage Herald on Tuesday July 27, 1999. Copies of the Proposal were placed in Public Registries at: the Environment Library (Main) in Winnipeg; the Centennial Public Library in Winnipeg; the Western Manitoba Regional Library in Brandon; the Portage Plains Regional Library in Portage la Prairie; and the Manitoba Eco-Network. The closing date for the receipt of public comments was specified as August 20, 1999.

Copies of the Proposal were also sent to the applicable members of the interdepartmental Technical Advisory Committee for their review and comment by no later than August 20, 1999.

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COMMENTS FROM THE PUBLIC:

Only one public response was received by the Department. The comments came from Mr. Ron Dalmyn on behalf of The Organization, a Provincial Coalition for Responsible Resource Management. The comments were largely derogatory statements aimed at reinforcing the author's subjective viewpoints on the general subject matter.

Disposition

Copies of all the comments received from the public, were placed into the public registries, with a copy sent to the City of Brandon for their information.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Relating only to alteration items No.1 and No. 2:

Historical Resources commented that they have no concerns.

Natural Resources commented:

- Ensuring that the ammonia content in the Brandon WWTF effluent, when combined with the other effluent sources, does not exceed the assimilative capacity of the Assiniboine River will be difficult.
- Complicating the matter even more is that the frequency and amount of septage discharges to the Brandon WWTF are presently unknown.
- The Master Plan should include a contingency plan, which outlines measures to ensure that human errors are averted and accidents are controlled and minimized.
- As a potential method for reducing nutrient loading to the Assiniboine River, consideration should be given to the use of constructed wetlands or polishing ponds.

Disposition

The comments were referred to the proponent for consideration and response. The Proponent replied to Natural Resources who then indicated that they had no further comments.

Manitoba Health commented:

- The proposed alterations, and utilizing UV as a form of disinfection, are supported.

- Why is the discharge from Ayerst Organics washdown not included in the design loadings calculation if it is anticipated that the discharge of this type of wastewater into the sewer system is expected to be higher than those listed in Table ES2.6?
- Regarding measurements of plant performance, why aren't coliform levels included?
- In view of the concerns regarding the possible need for phosphorus removal in the future, why is this not being considered in the pre-design stage?

Disposition

The comments were referred to the proponent for consideration and response. The Proponent replied to Manitoba Health. No additional or outstanding concerns were subsequently raised by Manitoba Health.

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Water Quality Management commented:

- The report indicated that future work would be undertaken to resolve the influent loading problem from Ayerst washdown and hauled septage. It is important that these issues be dealt with and the solution included as an addendum to this report.
- The report indicated that the gravity flow UV disinfection system will not function during a 1:20 year flood event when the high water mark of the river is expected to reach an elevation of 357.2 metres above sea level, such that at higher river elevations the disinfection system would be bypassed. Further clarification is needed as to the impacts on the river should this occur. Consideration should also be given to investigating the diversion of the treated but non-disinfected effluent to the lagoons during this time.

Disposition

The comments were received too late for referral to the Proponent. The concerns have, however, been addressed in the draft licence.

Canadian Environmental Assessment Agency (CEAA) commented:

- Is there any recent data to indicate how effective the hydraulic upgrade has been in reducing the excess wet weather flows?
- The peak wet weather flows (PWWF) are assumed in the report to be the same from 1999 onwards, while other flows are predicted to increase. One would expect that as a result of future expansion of the City more urban areas would be capturing run-off.
- We note that the per capita wastewater generation is predicted to top out at 400 L/cap/day in 2008. What is the rationale for choosing this particular year? If water conservation awareness can be expected to increase in the future, why is it that the per capita flow will continue to increase beyond current levels? Is the City planning to undertake any specific initiatives to increase water conservation?
- The statement that "The critical time period (for ammonia) occurs during periods of low flow in the river" is only partially correct. For example, at a pH of 7.5-7.6 or

lower, temperature will also have a significant effect on the unionized ammonia concentration.

- The statement "Effluent toxicity is already addressed by Brandon's WWTP by incorporating ammonia removal" is misleading. There is also no mention in the report of the Fisheries Act requirements prohibiting the deposit of deleterious substances into waters frequented by fish.
- Whereas it is recommended that improved nitrification could be achieved by heating the incoming wastewater with steam from Manitoba Hydro's thermal generating station and by adding more nitrifiers in the cold months. Since Manitoba Hydro's plant is a peaking plant would Hydro be able to supply steam heat all winter long or only during peak operating periods? How would the use of additional nitrifiers alone in the cold months be expected to improve nitrification when low temperatures would still inhibit nitrifier growth?

Disposition

The comments were referred to the proponent for consideration and response. The Proponent replied to the Canadian Environmental Assessment Agency. No additional or outstanding concerns were subsequently raised by CEAA.

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PUBLIC HEARING:

A request for a public hearing on the alterations to this Development was re-iterated by Mr. Dalmy, however, the main environmental effects from this Development are aquatic environmental effects which are closely linked to the aquatic environmental effects from the Maple Leaf Meats hog processing plant wastewater treatment facility. A public hearing on this facility had been repeatedly denied on the grounds that a public hearing would not resolve this issue, and that the environmental effects were being investigated and modeled through an ongoing Assiniboine River Monitoring Study.

RECOMMENDATION:

A short term draft Stage 2 Licence, authorizing the proposed major alterations No. 1 and No. 2, and updating the existing Stage 1 Licence No. 2351 S1, has been prepared and is enclosed for the Director's consideration. The Stage 2 Licence is expected to be replaced by a long-term operating Licence by about August of 2000, at which time Alterations No. 1 and No. 2 are expected to be operationally ready and at which time specific ammonia limits can be identified in harmonization with ammonia limits to be issued to the Maple Leaf Meats hog processing facility wastewater treatment facility. It is recommended that the licence, if approved, be assigned to the Park-West Region for administration,

surveillance, monitoring, ongoing compliance evaluation and enforcement responsibilities.

PREPARED BY:

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Municipal and Industrial Approvals
November 15, 1999

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