

## **SUMMARY OF COMMENTS/RECOMMENDATIONS**

**PROPOSER:** Rural Municipality of Lorne  
**PROPOSAL NAME:** Swan Lake Water Treatment Plant  
Wastewater Disposal  
**CLASS OF DEVELOPMENT:** One  
**TYPE OF DEVELOPMENT:** Waste Disposal - Water Treatment Plants  
(Wastewater)  
**CLIENT FILE NO.:** 5428.00

### **OVERVIEW:**

The Proposal was received on September 14, 2009. It was dated September 9, 2009. The advertisement of the proposal was as follows:

“A Proposal has been filed by J. R. Cousin Consultants Ltd. on behalf of the Rural Municipality of Lorne for the disposal of wastewater from the Swan Lake water treatment plant. Backwash water from the plant’s manganese greensand filter system is currently discharged to the community’s wastewater treatment lagoon. It is proposed to redirect this backwash water through a buried pipeline along the north and west edges of the community to the southwest corner of the community where it would discharge to a creek which is a tributary of the Pembina River. Weeping tile water from the plant and the school would also be discharged to this location using the same pipeline. Backwash water consists of treated water with elevated levels of manganese removed by the treatment process. Approximately 4,600 litres of backwash water is generated once every three days by the plant, which is not being otherwise changed by the project. It is proposed to begin redirecting the backwash water in the fall of 2009.”

The Proposal was advertised in the Treherne Times on Monday, October 26, 2009 and the Pilot Mound Sentinel-Courier on Tuesday, October 27, 2009. It was placed in the Main, Eco-Network, Millennium Public Library (Winnipeg) and South Central Regional Library (Morden) public registries as well as in the office of the Rural Municipality of Lorne as a public registry location. The Proposal was distributed to TAC members on October 19, 2009. The closing date for comments from members of the public and TAC members was November 25, 2009.

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

No public comments were received.

**COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:**

**Manitoba Conservation – Sustainable Resource and Policy Management Branch**

No concerns.

**Manitoba Conservation – Environmental Services Branch**

Environmental Services have reviewed the EAP of the subject project submitted on September 09, 2009 by J.R. Cousin Consultants Ltd. on behalf of the RM of Lorne. Please see below our comments and please provide more information if necessary.

1. Please provide detailed information regarding road crossing.
2. Please submit authorization or appropriate utility crossing documents for any locations where the excavation is crossing a utility (MTS, Hydro, Centra gas).
3. The preliminary drawing on plan 1 indicates the presence of some water distribution lines and domestic sewer lines crossing the proposed piping installation. Please provide detailed information regarding these crossings showing separation distances.
4. Please also provide details in the drawing how all the crossings mentioned will be constructed.

Disposition:

Engineering design details pertaining to the proposed pipeline are the responsibility of the proponent's consultant. The need for utility crossing approvals will be brought to the consultant's attention for information.

**Manitoba Conservation – Parks and Natural Areas Branch**

No comments.

**Manitoba Water Stewardship – Planning and Coordination Branch**

- *The Water Rights Act* indicates that no person shall control water or construct, establish or maintain any "water control works" unless he or she holds a valid licence to do so. "Water control works" are defined as any dyke, dam, surface or subsurface drain, drainage, improved natural waterway, canal, tunnel, bridge, culvert borehole or contrivance for carrying or conducting water, that temporarily or permanently alters or may alter the flow or level of water, including but not limited to water in a water body, by any means, including drainage, OR changes or may change the location or direction of flow of water, including but not limited to water in a water body, by any means, including drainage. If a proposal advocates any of the aforementioned activities, an application for a Water Rights Licence to Construct Water Control Works is required. Application forms are available from any office of Manitoba Water Stewardship.

- The proponent needs to be informed that if the proposal in question advocates any construction activities, erosion and sediment control measures should be implemented until all of the sites have stabilized.
- Based on available information, a public water system's water intake does not appear to be located downstream of the proposed discharge pipe outfall. The proposed development should not have any effect upon any other existing public water system.
- Manitoba Water Stewardship's concern with this proposal is the question of ice accumulation at the outlet to the discharge pipe. The consultant noted that this "should not be a problem" and that, if icing does occur, municipal staff can excavate and remove the ice.
  - The *Environment Act* Proposal drawings show the pipe outfall at the creek to be an open end type and do not indicate it will be submerged in flowing creek water at all times. In fact, it is noted in the Proposal that the creek has "very little flow" and "zero flow at times."
  - Manitoba Water Stewardship's opinion is the *Environment Act* Proposal underestimates the potential seriousness of this problem of ice accumulation. Periods of zero flow would likely occur in the middle of winter and the water plant would be discharging wastewater to essentially a dry ditch. In a typical Manitoba winter, this would quickly form a large flow of very solid ice which would be difficult, if not impossible, for municipal staff to remove without damaging the discharge end of the pipe. If this discharge were to freeze, it would mean the filter in the water plant would no longer be able to backwash, which would disrupt the filtration process and affect treated water quality.
    - Manitoba Water Stewardship recommends for the proponent to amend the design to either of the following:
      - 1. Provide a heat budget/heat loss calculation, with any assumptions clearly justified, which demonstrates the discharge end of the pipe, as presently designed, will not be susceptible to freezing under most winter conditions.
      - 2. If calculations as noted in 1. cannot provide a reasonable assurance that the proposed design will not become an on-going problem with icing, the proponent shall examine other options such as:
        - 2.1. The possibility of extending the proposed discharge pipe to a point where it can discharge underwater to a watercourse which has substantial enough flow year round that the discharge pipe end would be below ice level at all times.

- 2.2. As a back-up, pipework in the water plant be installed such that, were the creek discharge pipe to freeze, the backwash water could, as a temporary measure, be diverted to the municipal sewer until the freezing problem was resolved.
- The *Environment Act* Proposal indicates the municipality regularly cleans out ditches prior to spring thaw. Additionally, if snow or ice is a problem, the municipality would excavate and remove ice, that may result from discharging the water plant wastewater, should it hinder creek flow.
  - Manitoba Water Stewardship recommends for an *Environment Act* Licence to include the following requirements:
    - The removal of ice and/or snow from the creek bed or bank shall be reviewed by the Department of Fisheries and Oceans. This proposed removal of ice and/or ice has a potential to transport sediment downstream.
    - The proponent is required to implement temporary erosion and sediment control measures until the site has stabilized along with monitoring.

Disposition:

These comments were provided to the proponent's consultant for information. Many of the comments can be addressed as licence conditions.

**Manitoba Culture, Heritage, Tourism and Sport – Historic Resources Branch**

The Historic Resources Branch has no concerns with regard to this project's potential to impact heritage resources.

If at any time however, significant heritage resources are recorded in association with these lands during development, the Historic Resources Branch may require that an acceptable heritage resource management strategy be implemented by the developer to mitigate the affects of development on the heritage resources.

Disposition:

These comments were provided to the proponent's consultant for information.

**Manitoba Intergovernmental Affairs - Community Planning Services Branch** No concerns.

**Manitoba Infrastructure and Transportation - Highway Planning and Design Branch** No concerns.

**Canadian Environmental Assessment Agency** I have completed a survey of federal departments with respect to determining interest in the project noted. I can confirm that the project information that was provided has been forwarded to federal departments with a potential interest. Based on the responses to the survey, application of the Canadian Environmental Assessment Act (the Act) will not be required for this project. Please note that Health Canada may provide expert advice on this project if specifically requested.

**ADDITIONAL INFORMATION:**

No additional information was required to address Technical Advisory Committee comments on the project.

**PUBLIC HEARING:**

As no public requests for a hearing were filed, a public hearing is not recommended.

**RECOMMENDATION:**

Comments received on the Proposal can be addressed through licence conditions. It is recommended that the Development be licensed under The Environment Act subject to the limits, terms and conditions as described on the attached Draft Environment Act Licence. It is further recommended that enforcement of the Licence be assigned to the Central Region.

PREPARED BY:

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Environmental Assessment and Licensing – Environmental Land Use Section

December 3, 2009

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