

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPONENT: Town of Boissevain
PROPOSAL NAME: Water Treatment Plant Residuals Pond
CLASS OF DEVELOPMENT: One
TYPE OF DEVELOPMENT: Waste Disposal - Water Treatment Plants
(Wastewater)
CLIENT FILE NO.: 4461.00

OVERVIEW:

The Proposal was received on July 30, 1999. It was dated July 14, 1999. The advertisement of the proposal was as follows:

“A Proposal has been filed by Cochrane Engineering Ltd. on behalf of the Town of Boissevain for the construction and operation of a water treatment plant located at Mountain Street and Cook Street. The proposed treatment process includes preoxidation, cold lime softening, recarbonation, filtration, carbon adsorption and chlorine disinfection. Lime sludge would be discharged to two sludge ponds adjacent to the plant. Filter backwash water would be discharged to a third pond. Effluent from all three ponds would be collected by weeping tiles under the ponds and discharged to a slough south of the plant site. The slough discharges to a drain which leads to Whitewater Lake. Estimated flows from the ponds would total 60,000 litres/day or 22 cubic decametres/year. It is anticipated that the quality of effluent from the ponds would be similar to potable water except for a slightly elevated pH level. Construction of the plant is proposed for the fall of 1999.”

The Proposal was advertised in the Boissevain Recorder on Wednesday, August 18, 1999. It was placed in the Environment, Centennial and Lakeland Regional Library (Killarney) public registries. The Proposal was distributed to TAC members on August 9, 1999. The closing date for comments from members of the public and TAC members was September 17, 1999.

COMMENTS FROM THE PUBLIC:

R. M. of Winchester - Whitewater Lake happens to be an inter-municipal body of water and as such, Council has some grave concerns regarding the drainage into the said body of water. Please contact our office with further details.

Disposition:

A copy of the Proposal was forwarded to the R. M. for information. The R. M. was asked to forward any comments by October 1, 1999. A letter was received from the R. M. on September 30, 1999 indicating that the Proposal had been reviewed and that the R. M. had no concerns.

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COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Manitoba Environment - Park-West Region - Sludge ponds should be designed and maintained for the removal of sludge as required. Ensure that the flow of wastewater into the sludge and filter backwash dugouts will not be impeded by ice buildup during winter operation. There is concern over releasing up to 60,000 l/day of wastewater at a pH of 8.5 - 9 into the watershed. The drinking water guidelines list the aesthetic objective for pH as 6.5 to 8.5.

Disposition:

The sludge and filter backwash ponds have been designed to accommodate periodic sludge removal and winter operation. Manitoba Water Quality Objectives list acceptable pH values from 6.5 to 8.5 for domestic consumption, but list values from 6.5 to 9 for aquatic life and wildlife. The pH value of the effluent stream would quickly be neutralized by water in the receiving slough, and even undiluted effluent would be in the acceptable range for aquatic life and wildlife. No domestic use of the slough is likely. Operation of the system under ice conditions can be addressed through licence conditions.

Manitoba Environment - Water/Terrestrial Quality Management - No major concerns. Agree with the assumption that it is unlikely that the high pH of the subnatant would have any negative effects on the receiving waters. However, a water quality monitoring program should be implemented to test this assumption. The “unnamed fourth order drain” mentioned in Section 8 should have been referred to by its given name - Cherry Creek. Correct nomenclature is an important aspect of proposals since it serves to place the proposed project into a proper geographic context.

Disposition:

The suggestion concerning a monitoring program can be addressed through standard licence conditions.

Manitoba Environment - Pollution Prevention - The following additional information should be requested: a water conservation plan, including percent unaccounted for water,

information on whether all water use is metered, whether untreated water can be used for spraying, rate structure and price. A copy of the Department's recent Information Bulletin should be provided to the consultant.

Disposition:

This information will be requested.

Historic Resources Branch - No concerns.

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Highway Planning Branch - No concerns.

Community Economic Development Services - No concerns.

Medical Officer of Health - South Westman Regional Health Authority - Please minimize the risk of surface or groundwater contamination. (The water table is at 5 - 10 metres below ground level according to drill logs.) Please ensure appropriate waste disposal as per existing regulations.

Disposition:

These comments can be addressed as licence conditions.

Natural Resources - A potential sandstone aquifer exists at seven to eight metres below grade. Zones of sand are present in the material that overlies this aquifer. Good quality low permeability material should be maintained under the facilities to ensure the integrity of this underlying aquifer. As the new system is supposed to discharge into sloughs adjacent to Whitewater Lake, the possibility of additional nutrient loading into the lake should be considered. It is assumed that the existing sludge pond will no longer be required. If this is the case, the old sludge pond should be reclaimed in an appropriate manner with regard to safety, aesthetics and surrounding water quality protection. Any changes/decommissioning of the existing facility must include maintaining the operation of the present aeration unit in the winter to maintain the fishery on the reservoir.

Disposition:

The concern about groundwater protection can be addressed as a licence condition. The plant will not discharge any materials which would contribute nutrients to the

downstream aquatic system. Rehabilitation of decommissioned works can be addressed as a licence condition. The reservoir will continue to be used to supply water to the new plant, so no change in aeration would result from the project.

Canadian Environmental Assessment Agency - The application of the Canadian Environmental Assessment Act with respect to this project will not be required. Environment Canada would be able to provide specialist advice in accordance with subsection 12(3) of the Act.

ADDITIONAL INFORMATION:

Additional information concerning water conservation measures was requested on September 24, 1999. A discussion addressing the requested information was provided on October 4, 1999.

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PUBLIC HEARING:

As no public concerns were identified, a public hearing is not recommended.

RECOMMENDATION:

All comments received on the Proposal can be addressed as licence conditions. Therefore, 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 Park-West Region.

PREPARED BY:

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October 4, 1999

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