

SUMMARY OF COMMENTS/RECOMMENDATIONS

PROPOSER: Town of Carman
PROPOSAL NAME: Water Treatment Plant Sludge Management

CLASS OF DEVELOPMENT: One
TYPE OF DEVELOPMENT: Waste Disposal - Water Treatment Plants
(Wastewater)

CLIENT FILE NO.: 4990.00

OVERVIEW:

The Proposal was received on September 29, 2003. It was dated September 16, 2003. The advertisement of the proposal was as follows:

“A Proposal has been filed by Dillon Consulting Limited on behalf of the Town of Carman for the construction of a two cell sludge dewatering facility for effluent from the town’s water treatment plant. Wastewater from the plant is currently discharged directly to the Boyne River near the water treatment plant. It is proposed that filter backwash water and sludge from the water treatment plant would be piped to the dewatering cells, which would be located on the site of an abandoned wastewater treatment lagoon in NW 30-6-4W. Settled water from the ponds would be collected by an underdrain system and a decant weir system and discharged to the Boyne River.”

The Proposal was advertised in the Carman Valley Leader on Monday, November 17, 2003. It was placed in the Main, Eco-Network and South Central Regional Library (Morden) public registries. The Proposal was distributed to TAC members on November 12, 2003. The closing date for comments from members of the public and TAC members was December 15, 2003.

NOTE: In reviewing the Proposal in detail, it was determined that filter backwash water is not proposed for disposal in the sludge dewatering ponds. Only excess clarifier sludge is proposed for disposal in this facility. Filter backwash water would continue to be discharged directly to the Boyne River.

COMMENTS FROM THE PUBLIC:

No public comments were received.

COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:

Manitoba Conservation – Sustainable Resource Management It is suggested that the proponent provide a detailed environmental assessment of the impact of the discharge of all flows from the treatment plant on the Boyne River.

All modifications to the existing plant should be supported by design plans. Detailed design plans and construction specifications should also be provided for the holding pond cells.

Consideration should be given to specifying concentration limits in the discharge for pH, turbidity, total hardness, non-filterable residue, calcium, magnesium and any other parameters deemed necessary to insure the quality of the Boyne River. The residual chlorine level in the backwash water should also be such as to prevent harmful effects to the aquatic environment.

Disposition:

With respect to a detailed environmental assessment of the impact of discharges to the Boyne River, it is noted that this material is currently discharged to the Boyne River without any treatment. The proposed project would remove most solids in the wastewater, and bring the water treatment plant discharge system in line with current practice at newer plants in the province. As such, a more detailed assessment of the impacts of the decanted wastewater on the Boyne River does not appear to be warranted. The provision of detailed plans for all new and modified works may be addressed as a standard licence condition. Monitoring of water quality parameters in the pond effluent and in the Boyne River upstream and downstream of the discharge point can also be addressed as a standard licence condition. Should monitoring show undesirable concentrations of any parameters, remedial action can be required through another standard licence condition. As filter backwash water will not be discharged to the sludge dewatering facility, monitoring of chlorine will not be necessary.

Historic Resources Branch No concerns.

Highway Planning and Design Branch No concerns.

Community Planning Services Branch The Town of Carman Water Treatment Plant is located on Lots 21/29, Block 3, Plan 24 in the Town of Carman. The Town of Carman Development Plan designates the location of the water treatment plant as Commercial. Policy 2.2.1 provides for public institutions. The water treatment plant is located within the “CC” Commercial Central zone. Public Works are a permitted use. The minimum required site size is 15,000 square feet. The minimum required site width is 150 feet.

The old sewage lagoon, under consideration for use as a sludge decant pond is located in an area designated as Industrial. Policies 3.2.8 and 3.2.9 address servicing in the Industrial Area and the old lagoon. Policies 6.2.1, and 6.2.2 provide for the provision of an effective water

supply. The old sewage lagoon is within the “MH” Industrial Heavy zone. Public Works are a permitted use. The minimum site requirements are not specified.

Community Planning Services has no concerns.

Soils and Crops Branch Our comments are limited to Sec. 6 - Lime Cake Alternative Uses.

Re land application:

Most of Manitoba's soils already have a pH above 7, and therefore would not benefit from an increase in pH following lime application. In fact, high soil pH can create agronomic problems such as reduced plant availability of some nutrients (e.g. phosphorus). Generally speaking, there would have to be soils in the vicinity of Carman with pH below approximately 6.5 to justify the rationale behind lime application to agricultural land.

The proponent should ultimately be required to:

- explain the merits of soil pH adjustment using lime,
- document the soil types that would be appropriate for this practice,
- identify appropriate soil types in the vicinity of Carman that could feasibly be used in a lime application program and
- estimate required and available acreages for such a program.

Disposition:

Disposal of dried lime sludge at a waste disposal ground may be specified as a licence condition. Should the Proponent wish to use the dried sludge for land application, additional information as suggested should be required as a licence condition prior to approval of the land application.

Canadian Environmental Assessment Agency The application of the Canadian Environmental Assessment Act will not be required for this project. Four federal government departments would be able to offer specialist advice with respect to the project review. These departments include Fisheries and Oceans Canada, the Canadian Coast Guard, Environment Canada and Health Canada. Two federal departments (the Canadian Coast Guard and Western Diversification) have an interest in the project and would like to participate in the provincial review, pursuant to Clause 59 of the Canada-Manitoba Agreement on Environmental Assessment Cooperation. Please contact the representatives of these departments directly to ensure that they can participate in the provincial review of the project.

Disposition:

The Canadian Coast Guard has already requested additional information on the project directly from the Proponent. Western Diversification is interested in the project as an application for funding has been filed with the Canada-Manitoba Infrastructure

Program. In both cases, the interested federal departments can be provided with project summaries and draft and final licences.

PUBLIC HEARING:

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

RECOMMENDATION:

All 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 Red River Region.

PREPARED BY:

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