

## **SUMMARY OF COMMENTS/RECOMMENDATIONS**

**PROPONENT:** Town of Deloraine  
**PROPOSAL NAME:** Deloraine Water Treatment Plant Upgrade

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

**CLIENT FILE NO.:** 5639.00

### **OVERVIEW:**

The Proposal was received on March 11, 2013. It was dated March 6, 2013. The advertisement of the proposal was as follows:

“A proposal has been received from the Manitoba Water Services Board on behalf of the Town of Deloraine for the upgrading of the Deloraine water treatment plant to meet current and future drinking water safety standards. The upgraded plant would be located adjacent to the existing water treatment plant. Raw water for the system would continue to be obtained from the Deloraine Reservoir on Turtlehead Creek. Reject water from the water treatment plant would be stored in a holding pond near the plant, and would be discharged twice a year to a ditch leading to the East Medora Creek. The plant capacity would be 12 litres per second, with reject water totaling 4.7 litres per second. Construction of the upgraded plant is proposed to begin in the late spring of 2013 and be completed by the end of the year.”

The Proposal was advertised in the Brandon Sun on Saturday, March 30, 2013, and in the Deloraine Times and Star on Friday, April 5, 2013. It was placed in the online public registry, the Legislative Library, Eco-Network, Millennium Public Library (Winnipeg) and Western Manitoba Regional Library (Brandon) public registries. The Proposal was distributed to TAC members on March 25, 2013. The closing date for comments from members of the public and TAC members was May 3, 2013.

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

No public comments were received.

**COMMENTS FROM THE TECHNICAL ADVISORY COMMITTEE:****Manitoba Conservation and Water Stewardship – Environmental Compliance and Enforcement Branch****Observations:**

1. The Town of Deloraine (RM of Winchester) ('applicant' hereafter) aims at upgrading its existing conventional water treatment plant (WTP) to meet current and future needs and associated drinking water safety requirements. The existing WTP provides treatment and disinfection for 977 people with a rated capacity of 7.5L/Sec and 454 m<sup>3</sup> of reservoir storage capacity. The upgraded system will be located (adjacent to the existing water treatment plant and includes construction of 12L/Sec membrane WTP.
2. The proposed treatment plant will have reject water equivalent to 25% of the raw water usage (approx. 108,000L/day). Highly mineralized reject water that would be stored in a holding pond 160 m to the east of the WTP and would be discharged twice a year in the spring and fall to a ditch leading to the East Medora Creek which eventually empties into the Souris river near the Village of Napinka. The 22,555m<sup>3</sup> storage pond will be constructed to hold equivalent of 200 days of storage (November to May). The holding pond will include the volume of the existing lime sludge cells, which will be converted and expanded to the north of the existing cells.
3. Currently, the applicant holds an EAL (No. 1734, file No. 3605.00, issued on December 17, 1993) for discharge of supernatant to the East Branch of the Deloraine drain and the final disposal of dewatered sludge at the Deloraine Waste Disposal Ground with major conditions that the suspended solids content of the effluent will not be in excess of 25mg/L, and the effluent from the sludge dewatering beds would not be discharged between 1<sup>st</sup> May of November of any year and 1<sup>st</sup> May of the following year.
4. Impacts of the development on the groundwater, vegetation, wildlife habitat, climate change, human health, air quality, soil, surface water, groundwater and fisheries are insignificant.
5. The applicant needs to comply with the standard construction specifications applicable for the holding pond with clay or other suitable material such that interior surfaces of the holding pond incorporate a continuous layer.

**Conclusive comment:**

The Environmental Compliance and Enforcement Branch and Manitoba Conservation has NO CONCERN about the proposed development. However, the contractor needs to

comply with standard specifications for holding pond, and no fuel-related activities should be permitted within 100m of the watercourses during construction.

Disposition:

These comments can be addressed as licence conditions.

**Manitoba Conservation and Water Stewardship – Sustainable Resource and Policy Management Branch, Lands Branch**

No concerns.

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

No comments.

**Manitoba Conservation and Water Stewardship – Wildlife Branch**

No concerns.

**Manitoba Conservation and Water Stewardship – Environmental Programs and Strategies Branch, Air Quality Management Section**

No comment. No significant impact on air quality.

**Manitoba Conservation and Water Stewardship – Water Science and Management Branch**

- The Water Quality Management Section is concerned with any discharges that have the potential to impact the aquatic environment and/or restrict present and future uses of the water. Therefore it is recommended that the license require the proponent to actively participate in any future watershed based management study, plan/or nutrient reduction program, approved by the Director.

Disposition:

These comments can be addressed through licence conditions.

**Manitoba Conservation and Water Stewardship – Fisheries Branch**

Fisheries Branch has reviewed this request to upgrade the Deloraine water treatment plant in NE 03-03-23 W and SW 03-03-23 W by constructing a 12L/s membrane WTP located

next to the existing plant. The highly mineralized reject water will be discharged to a storage pond located 160 m to the east of the WTP and will be drained twice per year between May 1 and November 1, to the East Medora Creek which empties into the Souris River. *Based on the proposed storage pond design a maximum discharge rate of concentrate to the East Medora Creek is estimated to be 36.7 L/s. The reject water ultimately flows to the Souris River. During high flow conditions, the impact of the discharged concentrate is negligible. During low flow conditions there is a small measurable impact. At low flow conditions, TDS is increased approximately by 5%. It should be noted that during the fall discharge the East Medora Creek flow may only consist of the membrane concentrate alone.* The source of the raw water is from the Deloraine Reservoir. The annual usage of water for the new treatment system will still be below the current licensed amount however an amendment will be needed to increase the pumping rate to a maximum of 0.017 m<sup>3</sup>/s. The applicants indicate they will monitor water quality of East Medora Creek.

Medora Creek supports large and small bodied fish species. It is important that the discharge meet or exceed Manitoba Water Quality Standards, Objectives and Guidelines to which we defer to our colleagues in Water Quality Management section on recommendations for monitoring (preferably East Medora Creek) and parameters. We note that the discharge window they have identified is different than the window for waste water effluent. Is the window they've identified correct?

Disposition:

These comments can be addressed through licence conditions.

### **Manitoba Conservation and Water Stewardship – Office of Drinking Water**

I went through the above noted EAP for discharge of UF/RO reject water from a new UF/RO treatment process at the Town of Deloraine water treatment plant. The EAP gives a schedule of beginning construction of the new plant in “spring 2013”. It should be noted that, under *The Drinking Water Safety Act*, work cannot begin on this project until a Permit to Construct or Alter A Public Water System has been issued by our Office. To date, we have not received a Permit application for this project. For projects of this size and complexity, the Permit preparation process can take some time and it cannot begin until we get the application package.

The Proponent should be encouraged to get their Permit application into our Office as soon as possible.

Beyond this point, we have no other concerns with this EAP or the proposed development.

Disposition:

This comment will be provided to the consultant for information, and can be addressed in a licence condition.

**Manitoba Conservation and Water Stewardship – Water Control Works and Drainage Licensing Section**

Any water control works pertinent to this project would require a licence.

Disposition:

This comment was provided to the consultant for information.

**Manitoba Infrastructure and Transportation - Highway Planning and Design Branch, Environmental Services Section**

No concerns.

**Manitoba Local Government – Community Planning Services Branch**

No land use concerns with this proposal which is allowed by the local zoning by-law.

**Manitoba Health – Prairie Mountain Health**

1. Environmental License clauses should ensure the following are addressed:

- i. adherence to the Guidelines for Canadian Drinking Water Quality
- ii. adherence to The Public Health Act Manitoba Regulations 330/88R and to applicable regulations in The Drinking Water Safety Act
- a) monitoring of the East Medora Creek should be considered to determine the environmental impact of the reject water from the water treatment process.

2. Other issues:

- i. Will the old WTP be decommissioned? If so, how will this occur?

Disposition:

All regulatory and monitoring requirements will be met through project design and licence conditions. With respect to decommissioning of the existing plant, the existing plant will be decommissioned by removing the old water treatment equipment following the commissioning of the new plant.

**ADDITIONAL INFORMATION:**

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

**PUBLIC HEARING:**

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

**CROWN-ABORIGINAL CONSULTATION:**

The Government of Manitoba recognizes it has a duty to consult in a meaningful way with First Nations, Métis communities and other Aboriginal communities when any proposed provincial law, regulation, decision or action may infringe upon or adversely affect the exercise of a treaty or Aboriginal right of that First Nation, Métis community or other Aboriginal community.

The Town of Deloraine Water Treatment Plant Upgrade proposal involves a change in the water treatment process which will reduce the usage of chemicals in the treatment process and eliminate the generation of sludge from the water treatment plant. Since resource use is not affected by the project, it is concluded that Crown-Aboriginal consultation is not required for the project.

**RECOMMENDATION:**

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 Western Regional office of the Environmental Compliance and Enforcement Branch.

PREPARED BY:

---

Bruce Webb, P. Eng.  
Environmental Approvals Branch – Energy, Land and Air Section  
for Mines and Wastewater Section  
May 15, 2013  
Tel: (204) 945-7021 Fax: (204) 945-5229 e-mail: bruce.webb@gov.mb.ca