



**Conservation and Water Stewardship**

Environmental Stewardship Division  
Environmental Approvals Branch  
123 Main Street, Suite 160, Winnipeg, Manitoba R3C 1A5  
T 204 945-8321 F 204 945-5229  
[www.gov.mb.ca/conservation/eal](http://www.gov.mb.ca/conservation/eal)

**File: 5697.00**

April 4, 2014

Ken Anderson, P. Eng.  
Associated Engineering (Sask.) Ltd.  
203 – Number Five Donald St.  
Winnipeg, MB R3L 2T4

Dear Mr. Anderson:

**Re: Town of Virden – Wastewater Treatment Plant Upgrade – Environment Act Proposal**

The initial review of the Environment Act Proposal (EAP) for the upgrade of the Town of Virden wastewater treatment plant has been completed.

The initial review has generated comments and requests for additional information. Please respond to the comments and requests from the Technical Advisory Committee presented in the attached items being:

1. Memorandum from Water Quality Management Section, Water Science and Management Branch – Manitoba Conservation and Water Stewardship, dated April 3, 2014;
2. Email message from Groundwater Management Section – Water Science and Management Branch – Manitoba Conservation and Water Stewardship, dated March 25, 2014;
3. Email message from Office of Drinking Water – Manitoba Conservation and Water Stewardship, dated March 25, 2014; and
4. Letter from Medical Officer of Health – Prairie Mountain Health, dated March 20, 2014.

Please address and respond to the comments and requests for additional information. Resulting responses that are specifically pertinent to the EAP review are to be directed through Manitoba Conservation and Water Stewardship's Environmental Approvals Branch. The EAP review process will continue upon receipt of your responses.

If you have any questions or would like to discuss these items, please contact me at 204-945-6030.

Yours truly,

*“original signed by”*

Robert Boswick, P. Eng.  
Environmental Engineer

#### Attachments

- c: Don Labossiere, Director – Environmental Compliance and Enforcement, Manitoba  
Conservation and Water Stewardship
- Tim Prawdzik, Provincial Manager – Environmental Compliance and Enforcement, Manitoba  
Conservation and Water Stewardship  
Public Registries



Mr. Robert Boswick  
Environmental Engineer  
Manitoba Conservation and Water Stewardship  
123 Main Street, Suite 160  
Winnipeg, Manitoba, R3C 1A5  
Email: [Robert.boswick@gov.mb.ca](mailto:Robert.boswick@gov.mb.ca)

March 20, 2014

Dear Mr Boswick:

Re: TOWN OF VIRDEN -WASTEWATER TREATMENT PLANT UPGRADES – FILE: 5697.00

I have reviewed the proposal and it appears that the areas outlined below have been addressed. If any of these areas has not been adequately addressed, please ensure that they are.

1. Odour control and monitoring.
2. Air emission criteria will be met, including greenhouse gas emissions.
3. Any discharge of effluent is in compliance with Manitoba Environment's guidelines.
4. Ongoing reporting and appropriate disposal of all hazardous wastes.
5. Leachate, soil and groundwater monitoring.
6. Containment design provides the best possible groundwater protection for the area.
7. Prevention of pollutant or contaminated wastewaters from entering sewage disposal and municipal ditch systems.
8. Fencing, gates, and warning signs included to ensure public safety, in case of unsupervised public access to the development.
9. Noise level concerns addressed.
10. Availability for review of an emergency response plan.

Sincerely,

“Original Signed By”

Dr. Amy Frykoda, MD, CCFP, MSc  
Medical Officer of Health  
Prairie Mountain Health



**Subject:** FW: Request for comments EA Proposal Town of Virden - File: 5697.00 due March 28, 2014

**From:** Frost, Laurie (CWS)

**Sent:** March-25-14 3:36 PM

**To:** Boswick, Robert (CWS)

**Cc:** Phipps, Graham (CWS)

**Subject:** RE: Request for comments EA Proposal Town of Virden - File: 5697.00 due March 28, 2014

In response to your request for comments on the EA Proposal - For a New Wastewater Treatment Facility in Virden, Manitoba, the Groundwater Management Section is pleased to provide the following:

The report (section 5.2.6.2) states,

During the operational phase, treated effluent will be continuously discharged to the discharge channel, and subsequently into Gopher Creek, and eventually the Assiniboine River. Some infiltration is expected based on the coarse nature of the shallow soils at the project site and surrounding project area. As noted in the discussion on surface water quality (Section 5.2.7), the treated effluent to be discharged to the environment will be improved in quality by a significant amount, and will meet draft criteria established by Manitoba Conservation that are prescriptive for the protection of the environment.

The effluent design requirements for fecal coliform and *E.coli* (presented in Table 1-2) is  $\leq 200$  MPN/100 mL. However, this is above the Manitoba Water Quality Standards, Objectives, and Guidelines value of 0 MPN/100 mL for fecal coliform bacteria and *E.coli* in groundwater as a drinking water source (TIER II – Water Quality Objectives). Due to the potential for the infiltration of treated effluent into shallow soils along the discharge channel, it would be prudent to determine if any water well users are located in close proximity to the discharge channel, and if so, assess any environmental effects and mitigation.

Regards,

Laurie Frost, M.Sc., P. Eng.  
Hydrogeologist  
Water Science and Management Branch  
Groundwater Management Section  
Box 18, 200 Saulteaux Cresc.  
Winnipeg, Manitoba R3J 3W3  
phone (204) 945-3737  
fax (204) 945-7419

**From:** [Stibbard, James \(CWS\)](#)  
**To:** [Boswick, Robert \(CWS\)](#)  
**Subject:** Re: 5697.00 Town of Virden New Ww treatment Plant EAP  
**Date:** March-25-14 3:07:22 PM

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Rob,

I reviewed the above noted EAP. The only concern I have respecting drinking water safety is that the effluent outfall from the Virden WW plant is upstream from the raw water intake for the City of Brandon Water Treatment Plant. Under normal operating conditions the Brandon water plant can treat the river water, but if a major spill of untreated or partly treated wastewater into the river from the Virden WW plant were to occur, it would have the potential to adversely affect treatment facilities downstream. As such, ODW recommends that contact information for the Brandon water treatment plant be included in the Emergency Response Plan for the new Virden WW Plant, with instructions that, in the event of a major spill of partially treated or untreated wastewater from the Virden WW plant, the operators at the Brandon Water Plant be notified.

Apart from this point, ODW has no other concerns with the EAP or the proposed development. If you have any questions, please call.

Regards,

James Stibbard P. Eng.  
Approvals Engineer  
Office of Drinking Water  
1007 Century Street  
Winnipeg MB R3H 0W4  
phone: (204) 945-5949  
fax: (204) 945-1365  
email: [James.Stibbard@gov.mb.ca](mailto:James.Stibbard@gov.mb.ca)  
website: [www.manitoba.ca/drinkingwater](http://www.manitoba.ca/drinkingwater)

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## Memorandum

**DATE:** April 3, 2014

**TO:** Robert Boswick  
Environmental Approvals Branch  
160-123 Main Street, Winnipeg,  
MB  
R3C 1A5

**FROM:** Joy Kennedy  
Water Quality Management Section  
Water Science and Management Branch  
160-123 Main Street, Winnipeg, MB  
R3C 1A5

**Cc** Elaine Page  
Nicole Armstrong

**TELEPHONE:** 945-7908  
**FACSIMILE:** 948-2357  
**EMAIL:** joy.kennedy@gov.mb.ca

**SUBJECT: ENVIRONMENT ACT PROPOSAL FILE: 5607.00 TOWN OF VIRDEN  
WASTEWATER TREATMENT FACILITY**

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- The following effluent standards should be in place for the Town of Virden wastewater treatment facility as per the *Manitoba Water Quality Standards, Objectives and Guidelines Regulation* (196/2011).
  - BOD<sub>5</sub> 25 mg/L
  - TSS 25 mg/L
  - Fecal Coliforms 200 MPN / 100mL
  - Total phosphorus <1 mg/L
  - Ammonia concentrations as outlined in Table 1 of Manitoba Water Quality Standards, Objectives, and Guidelines using Equations 3 & 6 and based on effluent pH.
- 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.

Joy Kennedy