



Conservation and Water Stewardship

Climate Change and Environmental Protection 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

CLIENT FILE NO.: 5806.00

March 23, 2016

Dan McDermid, P.Eng.
City of Selkirk
200 Eaton Avenue
Selkirk MB R1A 0W6

Dear Mr. McDermid:

Enclosed is **Environment Act Licence No. 3173** dated March 23, 2016 issued to the **City of Selkirk** for the construction and operation of the Development being a groundwater supply and treatment system for municipal purposes in accordance with the proposal filed under *The Environment Act* dated December 1, 2015.

In addition to the enclosed Licence requirements, please be informed that all other applicable federal, provincial and municipal regulations and by-laws must be complied with. A Notice of Alteration must be filed with the Director for approval prior to any alteration to the Development as licensed.

For further information on the administration and application of the Licence, please feel free to contact Mike Baert, Environment Officer, at 204 785-5349.

Pursuant to Section 27 of *The Environment Act*, this licensing decision may be appealed by any person who is affected by the issuance of this Licence to the Minister of Conservation and Water Stewardship within 30 days of the date of the Licence.

Yours truly,

“original signed by”

Tracey Braun, M.Sc.
Director
Environment Act

c: Don Labossiere, Donna Smiley, Mike Baert, Environmental Compliance and Enforcement Branch
Jeff Bell, Friesen Drillers Ltd.; Travis Parsons, Manitoba Water Services Board
Public Registries

NOTE: Confirmation of Receipt of this Licence No. 3173 (by the Licensee only) is required by the Director of Environmental Approvals. Please acknowledge receipt by signing in the space provided below and faxing a copy (letter only) to the Department by April 6, 2016.

On behalf of the City of Selkirk

Date

****A COPY OF THE LICENCE MUST BE KEPT ON SITE AT THE DEVELOPMENT AT ALL TIMES****

LICENCE

Licence No. / Licence n° 3173

Issue Date / Date de délivrance March 23, 2016

In accordance with *The Environment Act* (C.C.S.M. c. E125) /
Conformément à *la Loi sur l'environnement* (C.P.L.M. c. E125)

Pursuant to Section 11 / Conformément au Paragraphe 11

THIS LICENCE IS ISSUED TO: / CETTE LICENCE EST DONNÉE À:

CITY OF SELKIRK;
"the Licencee"

for the construction and operation of the Development being a groundwater supply and treatment system for municipal purposes with the following components:

- a) four existing wells within the City of Selkirk in the Carbonate Aquifer (Christie, McLean, Tower and Rosser wells);
- b) two wells to be installed in NW 14-14-4E in the Carbonate Aquifer (Meadowdale Road south of McRae Road in the Rural Municipality of St. Andrews);
- c) raw water pipelines connecting the wells to the water treatment plant;
- d) a lime-soda ash water treatment plant and reservoir at 405 McLean Avenue; and
- e) treated water distribution pipelines within the City of Selkirk.

in accordance with the proposal filed under *The Environment Act* dated December 1, 2015 and subject to the following specifications, limits, terms and conditions:

DEFINITIONS

In this Licence,

"**Director**" means an employee so designated pursuant to *The Environment Act*; and

"**Environment Officer**" means an employee so designated pursuant to *The Environment Act*.

GENERAL TERMS AND CONDITIONS

This Section of the Licence contains requirements intended to provide guidance to the Licencee in implementing practices to ensure that the environment is maintained in such a manner as to sustain a

high quality of life, including social and economic development, recreation and leisure for present and future Manitobans.

1. In addition to any of the limits, terms and conditions specified in this Licence, the Licencee shall, upon the request of the Director:
 - a) sample, monitor, analyze and/or investigate specific areas of concern regarding any segment, component or aspect of pollutant storage, containment, treatment, handling, disposal or emission systems, for such pollutants or ambient quality, aquatic toxicity and discharge or emission rates, for such duration and at such frequencies as may be specified;
 - b) determine the environmental impact associated with the release of any pollutant(s) from the Development;
 - c) conduct specific investigations in response to the data gathered during environmental monitoring programs; or
 - d) provide the Director, within such time as may be specified, with such reports, drawings, specifications, analytical data, descriptions of sampling and analytical procedures being used, bioassay data, flow rate measurements and such other information as may from time to time be requested.
2. The Licencee shall submit all information required to be provided to the Director or Environment Officer under this Licence, in written and electronic format, in such form (including number of copies) and of such content as may be required by the Director or Environment Officer, and each submission shall be clearly labeled with the Licence Number and Client File Number associated with this Licence.
3. The Licencee shall construct and operate the water supply system in accordance with Manitoba Regulations under *The Public Health Act*, *The Drinking Water Safety Act*, and all operating requirements as recommended by Manitoba Conservation and Water Stewardship.
4. The Licencee shall collect and dispose of all used oil products and other regulated hazardous wastes generated by the machinery used in the construction and operation of the Development in accordance with applicable Manitoba Conservation and Water Stewardship and legislation requirements.
5. The Licencee shall not permit the interconnection of a private water supply system with the Development.
6. The Licencee shall maintain the water supply wells associated with the Development to prevent the contamination of groundwater by surface water:
 - a) entering the well casings through the top of the casings; and
 - b) entering the well casings through the sides of the casings.

SPECIFICATIONS, LIMITS, TERMS AND CONDITIONS

Construction - General

7. The Licencee shall, in any year in which construction of the Development occurs, notify the Environment Officer responsible for the administration of this Licence not less than two weeks prior to construction. The notification shall include the intended starting date of construction and the name of the contractor responsible for the construction.
8. The Licencee shall, prior to the construction of the Development, obtain a Permit to Construct or Alter a Public Water System from the Office of Drinking Water of Manitoba Conservation and Water Stewardship.
9. The Licencee shall, prior to the operation of the Development, provide a risk assessment of changes in the migration of contamination from the Rockwood Sensitive Area plume and changes in induced surface water recharge northwest of the Meadowdale Road wells for the approval of the Director. The risk assessment shall examine estimated conditions 5, 10, 20 and 30 years from the commencement of pumping from the Meadowdale Road wells, and shall be used to propose monitoring locations required in Clause 30 and Schedule A of this Licence.
10. The Licencee shall, during construction of the Development, operate, maintain and store all materials and equipment in a manner that prevents any deleterious substances (fuel, oil, grease, hydraulic fluids, coolant, paint, uncured concrete and concrete wash water, etc.) from entering watercourses, and have an emergency spill kit for in-water use available on site during construction.
11. The Licencee shall establish fuel storage and equipment servicing areas for the construction and operation of the Development:
 - a) a minimum distance of 100 metres from any waterbody; and
 - b) in compliance with the requirements of *Manitoba Regulation 188/2001* respecting *Storage and Handling of Petroleum Products and Allied Products* or any future amendment thereof.
12. The Licencee shall, in the case of physical or mechanical equipment breakdown or process upset where such breakdown or process upset results or may result in the release of a pollutant in an amount or concentration, or at a level or rate of release, that causes or may cause a significant adverse effect, immediately report the event by calling 204-944-4888 (toll-free 1-855-944-4888). The report shall indicate the nature of the event, the time and estimated duration of the event and the reason for the event.
13. The Licencee shall, following the reporting of an event pursuant to Clause 12:
 - a) identify the repairs required to the mechanical equipment;
 - b) undertake all repairs to minimize unauthorized discharges of a pollutant;
 - c) complete the repairs in accordance with any written instructions of the Director and/or the Environment Officer; and

- d) submit a report to the Director about the causes of breakdown and measures taken, within one week of the repairs being done.

Construction – Pipelines

14. The Licencee shall, prior to tendering components of the Development on or adjacent to highway rights-of-way, obtain all necessary approvals from Manitoba Infrastructure and Transportation and the Highway Traffic Board.
15. The Licencee shall, during construction and maintenance of the Development, prevent the introduction and spread of foreign aquatic and terrestrial biota by cleaning equipment prior to its delivery to the site of the Development.
16. The Licencee shall not release chlorinated water from pipeline testing and startup activities associated with the Development to a surface water body until total residual chlorine level concentrations are equal to or less than 0.02 milligrams per litre. Releases of chlorinated water at higher concentrations may be made to vegetated land or dry waterways, provided that total residual chlorine level concentrations have decayed to 0.02 milligrams per litre or less before the released water reaches any body of surface water.
17. The Licencee shall construct waterway crossings on flowing waterways by augering, tunneling or boring. Open cut crossings on flowing waterways shall not be made unless prior consultation with Manitoba Conservation and Water Stewardship and Department of Fisheries and Oceans staff has occurred and the prior written approval of the Director has been obtained. Dry or non-flowing (i.e. hydraulically unconnected to downstream flowing water) natural and artificial waterways may be crossed with open cut techniques where approval has been obtained where necessary from the authority responsible for the channel.
18. The Licencee shall complete augered, tunneled or bored waterway crossings in accordance with the Fisheries and Oceans Canada Manitoba Operational Statement on High-Pressure Directional Drilling, and notify the Environment Officer if a frac out occurs.
19. The Licencee shall, where conditions allow, excavate endpoints for directional drilling operations a minimum of 30 m from the high water mark of third and higher order waterways, and a minimum of 15 m from the high water mark of first and second order waterways.
20. The Licencee shall, where open cut stream crossing techniques are used on intermittent waterways and artificial drainage channels, not construct open cut crossings associated with the Development between March 15 and June 15 of any year.
21. The Licencee shall construct open cut stream crossings associated with the Development in accordance with the methodologies described in the October, 2005 publication “Pipeline Associated Watercourse Crossings Third Edition”, published by the Canadian Pipeline Water Crossing Committee, and the May, 1996 publication “Manitoba Stream Crossing Guidelines for

the Protection of Fish and Fish Habitat”, published by the Department of Fisheries and Oceans and Manitoba Natural Resources.

22. The Licencee shall, where open cut stream crossing techniques are used on intermittent waterways and artificial drainage channels, minimize disturbance to riparian areas and restore the bottom and banks of the waterways to their original elevations and shapes.
23. The Licencee shall not alter local drainage patterns by the construction of the Development.

Operation

24. The Licencee shall obtain and maintain classification of the Development pursuant to *Manitoba Regulation 77/2003* respecting *Water and Wastewater Facility Operators* or any future amendment thereof, and maintain compliance with all requirements of the regulation including, but not limited to, the preparation and maintenance of a Table of Organization, Emergency Response Plan and Standard Operating Procedures.
25. The Licencee shall carry out the operation of the Development with individuals properly certified to do so pursuant to *Manitoba Regulation 77/2003* respecting *Water and Wastewater Facility Operators* or any future amendment thereof.
26. The Licencee shall operate the Development with respect to the volume and rate of water diverted in accordance with Water Rights licences issued pursuant to *The Water Rights Act*.
27. The Licencee shall develop, maintain and implement a wellhead protection plan for the wells of the Development that addresses disruption and contamination due to natural disasters, spills of contaminants and vandalism.
28. The Licencee shall decommission private wells made redundant by the Development in accordance with Manitoba water well industry standards.
29. The Licencee shall dispose of lime sludge from the water treatment plant of the Development at a waste disposal ground operating under the authority of a permit issued pursuant to *Manitoba Regulation 150/91* respecting *Waste Disposal Grounds*, or after July 1, 2016, issued pursuant to *Manitoba Regulation 37/2016* respecting *Waste Management Facilities*, or any future amendment thereof, or a Licence issued pursuant to *The Environment Act*.
30. The Licencee shall implement the monitoring, reporting and follow-up program in accordance with Schedule "A" attached to this Licence.

REVIEW AND REVOCATION

- A. If, in the opinion of the Director, the Licencee has exceeded or is exceeding or has or is failing to meet the specifications, limits, terms, or conditions set out in this Licence, the Director may, temporarily or permanently, revoke this Licence.
- B. If construction of the Development has not commenced within three years of the date of this Licence, the Licence is revoked.
- C. If, in the opinion of the Director, new evidence warrants a change in the specifications, limits, terms or conditions of this Licence, the Director may require the filing of a new proposal pursuant to Section 11 of *The Environment Act*.

“original signed by”

Tracey Braun, M.Sc.
Director
Environment Act

Client File: 5806.00

Schedule "A" to Environment Act Licence No. 3173
Project monitoring, reporting and follow-up pursuant to Clause 30

Monitoring:

Implement an annual monitoring program for water levels and water quality:

- a) at a minimum of five observation wells in the area of the Meadowdale Road wells to monitor drawdown effects;
- b) at a minimum of two locations between the Meadowdale Road wells and the Rockwood Sensitive Area to monitor effects of the wells on the Rockwood Sensitive Area contamination plume; and
- c) at a minimum of two locations between the Meadowdale Road wells and areas of spring discharge northwest of the wells to monitor effects of the wells on induced surface water recharge.

Locations and monitoring parameters shall be approved by the Director prior to implementation.

Reporting:

1. Implement reporting on the annual monitoring program by placing water level results on the Licencee's website within one month of downloading the data, and by placing water quality results on the Licencee's website within one month of the analysis of each set of samples. Water quality results shall include those from the observation wells above and raw water monitoring from the Meadowdale Road wells as required under *The Drinking Water Safety Act*.
2. Implement reporting on a five year cycle on interaction between the Meadowdale Road wells and:
 - a) groundwater within the Rockwood Sensitive Area, focusing on migration of the Rockwood Sensitive Area contamination plume induced by the Meadowdale Road wells, and predicted long term effects; and
 - b) induced recharge from surface water, focusing on the potential effect on other groundwater users between the recharge area and the wells, especially during drought periods.

Five year reports shall be provided to the Director for approval and placed on the Licencee's website, beginning five years from the date of this Licence. The reports shall include recommendations for adjustments in the monitoring program to address changes in conditions observed over the reporting period.

Follow-up:

- Implement an independent groundwater interference program in the area affected by drawdown from the Meadowdale Road wells. Wells determined to be negatively impacted by drawdown from the Development shall be repaired or modified by the Licencee.
- Establish an aquifer use committee consisting of staff from the Licencee and residents appointed by the Rural Municipality of St. Andrews to review monitoring results annually and report on the review to the Licencee and the Rural Municipality of St. Andrews.