January 17, 2014

Wes Unrau, Chief Administrative Officer
Town of Manitou
Box 280
Manitou MB R0G 1G0

Dear Mr. Unrau:

Enclosed is **Environment Act Licence No. 3085** dated January 17, 2014 issued to the **Town of Manitou** for the construction and operation of the Development being a water supply and treatment system for municipal purposes, with the following components: a water intake on the Mary Jane Reservoir in NE 9-4-9W, a raw water pipeline connecting the intake and the water treatment plant, a 10.5 litre per second (net) reverse osmosis and ultrafiltration water treatment plant in SW 30-3-8W, reject water storage ponds located in NW 30-3-8W northeast of the water treatment plant, discharging twice annually to a drain leading to Mary Jane Creek, and treated water reservoirs at the water treatment plant and a municipal water distribution system; in accordance with the Proposal filed under **The Environment Act** dated August 19, 2013.

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 Donna Smiley, Environment Officer at 204-945-7072.

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, Director, Environmental Compliance and Enforcement
Jaimee Schmidt, Manitoba Water Services Board – **via email**
Public Registries

**NOTE:** Confirmation of Receipt of this Licence No. 3085 **(by the Licencee 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 January 30, 2014.

**On behalf of the Town of Manitou**

**Date**

**A COPY OF THE LICENCE MUST BE KEPT ON SITE AT THE DEVELOPMENT AT ALL TIMES**
Licence No. / Licence no 3085
Issue Date / Date de délivrance January 17, 2014

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(1) / Conformément au Paragraphe 11(1)

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

TOWN OF MANITOU:
"the Licencee"

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

a) a water intake on the Mary Jane Reservoir in NE 9-4-9W;
b) a raw water pipeline connecting the intake and the water treatment plant;
c) a 10.5 litre per second (net) reverse osmosis and ultrafiltration water treatment plant in SW 30-3-8W;
d) reject water storage ponds located in NW 30-3-8W northeast of the water treatment plant, discharging twice annually to a drain leading to Mary Jane Creek; and
e) treated water reservoirs at the water treatment plant and a municipal water distribution system;

in accordance with the Proposal filed under The Environment Act dated August 19, 2013, and subject to the following specifications, limits, terms and conditions:

DEFINITIONS

In this Licence,

"accredited laboratory" means an analytical facility accredited by the Standard Council of Canada (SCC), or accredited by another accrediting agency recognized by Manitoba Conservation and Water Stewardship to be equivalent to the SCC, or be able to demonstrate, upon request, that it has the quality assurance/quality control (QA/QC) procedures in place equivalent to accreditation based on the international standard ISO/IEC 17025, or otherwise approved by the Director;

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"approved" means approved by the Director, or an assigned Environment Officer, in writing;

"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; or
   c) 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 writing, 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 revegetate soil exposed during the construction of the Development with native or introduced grasses or legumes. Native species shall be used to revegetate areas where native species existed prior to construction. Revegetation is not required for pipelines installed by chain trenching or ploughing on previously disturbed ground including road allowances.

6. The Licencee shall not permit the interconnection of a private water supply system with the Development.

**SPECIFICATIONS, LIMITS, TERMS AND CONDITIONS**

**Construction – General**

7. The Licencee shall, in any year in which construction of the Development occurs, notify the Environmental Compliance and Enforcement Branch of Manitoba Conservation and Water Stewardship 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 new water treatment, treated water storage and water distribution components 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, 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.

10. 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.

11. 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.
12. The Licencee shall, following the reporting of an event pursuant to Clause 11:
   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.

13. The Licencee shall not, during construction and operation of the Development, remove, destroy or disturb species listed as rare, endangered, or of special concern, or their habitats. These species are listed in *Manitoba Regulation 25/98 respecting Threatened, Endangered and Extirpated Species* or any future amendment thereof, and in the federal Species at Risk Act.

14. The Licencee shall not construct the Development in areas likely to provide bird habitat before August 1 of any year. Construction in wetland areas and in riparian zones adjacent to rivers shall not occur before August 15 of any year.

15. The Licencee shall, during construction of the Development, implement all necessary measures to prevent the erosion of exposed soil into any waterbodies. Construction adjacent to waterbodies shall not occur during high rainfall events.

16. 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.

17. The Licencee shall, during construction of the Development, dispose of non-reusable construction debris at a waste disposal ground operating under the authority of a permit issued under *Manitoba Regulation 150/91 respecting Waste Disposal Grounds* or any future amendment thereof, or a Licence issued pursuant to *The Environment Act*.

**Construction – Raw Water Pipeline**

18. The Licencee shall, prior to commencing construction of the raw water pipeline 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.

19. The Licencee shall not release chlorinated water from pipeline testing and startup activities associated with the Development to a surface water body until 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 chlorine level concentrations have decayed to 0.02 milligrams per litre or less before the released water reaches any body of surface water.
20. The Licencee shall minimize impacts on land adjacent to the pipeline route during construction of the raw water pipeline of the Development. Previously disturbed publicly owned rights-of-way shall be followed where possible.

21. 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.

22. 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.

23. 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.

24. 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.

25. 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.

26. 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.

27. The Licencee shall not alter local drainage patterns by the construction of the Development, including inflows and outflows from small wetlands adjacent to the route of the raw water pipeline.
28. The Licencee shall separate and replace topsoil from backhoe and trenching operations associated with the Development in accordance with the methodology described in Figures 1, 2 and 3 attached to this Licence. This requirement is not applicable where the topsoil has been previously disturbed due to the construction of roads or drains.

29. The Licencee shall, where Crown lands are adjacent to the raw water pipeline of the Development, notify the Regional Lands Manager of Manitoba Conservation and Water Stewardship and follow any mitigation measures provided by the Regional Lands Manager.

30. The Licencee shall, if the raw water pipeline of the Development will be installed in Crown lands, obtain access to the Crown lands in accordance with *The Crown Lands Act* from the Crown Land and Property Agency.

**Operation**

31. 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.

32. 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.

33. The Licencee shall, when discharging reject water from the reject water storage ponds of the Development, control outflows from the ponds so that discharges are maintained at a uniform rate over a period of not less than two weeks.

34. The Licencee shall operate the Development with respect to the volume and rate of water diverted in accordance with a Water Rights Licence issued pursuant to *The Water Rights Act*.

35. The Licencee shall screen the pump intake associated with the Development in accordance with the Department of Fisheries and Oceans publication "Freshwater Intake End-of-Pipe Fish Screen Guideline" (March, 1995).

36. The Licencee shall actively participate in any watershed and/or aquifer based management study or nutrient reduction program, approved by the Director, for the Mary Jane Creek and Pembina River watersheds and associated waterways and watersheds.
Respecting Monitoring

37. The Licencee shall conduct an effluent monitoring program as described in Clauses 38 to 41 of this Licence, for a period of two years commencing with the operation of the Development. Following this period, the duration of the monitoring program may be extended by the Director or Environment Officer if the results, in the opinion of the Director, indicate that a longer monitoring period is appropriate.

38. The Licencee shall, in the spring and fall of each year while discharges are being made from the reject water storage ponds of the Development, for the duration of the effluent monitoring program, collect grab samples at locations approved by the Environment Officer in the reject water stream within the water treatment plant, in the effluent being discharged from the reject water storage ponds and in the receiving waterway upstream and downstream of the effluent discharge outlet.

39. The Licencee shall transport the grab samples collected pursuant to Clause 38 of this Licence, to an accredited laboratory for analysis. The samples shall be stored and transported in accordance with procedures specified by Manitoba Conservation and Water Stewardship to ensure that the samples are suitable for analysis.

40. The Licencee shall, at an accredited laboratory, have the samples collected pursuant to Clause 38 of this Licence, analysed for the following parameters:
   a) iron;
   b) hardness as CaCO₃;
   c) sodium;
   d) chloride;
   e) magnesium;
   f) manganese;
   g) sulphate;
   h) total nitrogen;
   i) dissolved nitrogen;
   j) nitrate;
   k) ammonia;
   l) total phosphorus;
   m) dissolved phosphorus; and
   n) total dissolved solids.

41. The Licencee shall, not more than 30 days after the results of each analysis are available, submit the results to the Environment Officer responsible for the administration of this Licence.
REVIEW AND REVOCATION

A. Environment Act Licence No. 2504 is rescinded upon approved commissioning of the upgraded water treatment plant.

B. 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.

C. If construction of the Development has not commenced within three years of the date of this Licence, the Licence is revoked.

D. 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.

“Originally signed by”

Tracey Braun, M.Sc.
Director
Environment Act

Client File: 5667.00
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WIDTH OF TOPSOIL STRIPPING

COMPACTION OF BACKFILL

ROACHING THE TRENCH

Reach the trench to compensate for settlement and changes in natural drainage patterns. The height of the roach depends upon land use, the degree of compaction achieved.