

#### Conservation

Environmental Stéwardship Division Environmental Assessment and Licensing Branch 123 Main Street, Suite 160, Winnipeg, Manitoba R3C 1A5 T 204 945-7100 F 204 945-5229 www.gov.mb.ca/conservation/eal

FAXED

**CLIENT FILE NO.: 5396.00** 

June 24, 2009

Jim Dowsett, C.A.O. Rural Municipality of Killarney - Turtle Mountain Box 160 Killarney, MB R0K 1G0

Dear Mr. Dowsett,

Enclosed is **Environment Act Licence No. 2886** dated June 24, 2009 issued in accordance with The Environment Act to the **Rural Municipality of Killarney** – **Turtle Mountain** for the construction and operation of the Development being a groundwater supply system for the Town of Killarney, with the following components:

- a) two groundwater wells in SW 21-3-16W;
- b) a water treatment plant located in Killarney on Young Street, on the north shore of Killarney Lake, using reverse osmosis treatment with manganese greensand filtration on the by-pass;
- c) raw water pipeline connecting the wells to the water treatment plant;
- d) conversion of the existing intake on Killarney Lake to discharge membrane concentrate from the water treatment plant; and
- e) continued discharge of filter backwash to Killarney's wastewater treatment lagoon

in accordance with the Proposal filed under The Environment Act and dated March 5, 2009, and additional information dated May 19, 2009.

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.

For further information on the administration and application of the Licence, please feel free to contact Peter Crocker, Environment Officer at (204) 726-6565.

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 within 30 days of the date of the Licence.

Yours truly,

Tracey Braun, M. Sc. Director, Environment Act

Enc.

c: Don Labossiere, Director, Environmental Operations Peter Crocker, Environment Officer, Western Region Steve Wiecek, W.L. Gibbons & Associates Inc. Ben Neufeld/Frank Render Public Registries

NOTE:

Confirmation of Receipt of this Licence No. 2886 (by the Licencee only) is required by the Director of Environmental Assessment and Licensing. Please acknowledge receipt by signing in the space provided below and faxing a copy (letter only) to the Department by July 9, 2009.

On behalf of the R.M of Killarney - Turtle Mountain

Date

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



# THE ENVIRONMENT ACT LOI SUR L'ENVIRONNEMENT



# LICENCE

Licence No. / Licence no	2886
Issue Date / Date de délivra	nce June 24, 2009

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 :

# The Rural Municipality of Killarney - Turtle Mountain: "the Licencee"

for the construction and operation of the Development being a groundwater supply system for the Town of Killarney, with the following components:

- a) two groundwater wells in SW 21-3-16W;
- b) a water treatment plant located in Killarney on Young Street, on the north shore of Killarney Lake, using reverse osmosis treatment with manganese greensand filtration on the by-pass;
- c) raw water pipeline connecting the wells to the water treatment plant;
- d) conversion of the existing intake on Killarney Lake to discharge membrane concentrate from the water treatment plant; and
- e) continued discharge of filter backwash to Killarney's wastewater treatment lagoon

in accordance with the Proposal filed under The Environment Act and dated March 5, 2009, and additional information dated May 19, 2009, 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 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; and

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"as constructed drawings" means engineering drawings complete with all dimensions which indicate all features of the Development as it has actually been built.

# **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. The Licencee shall, in addition to any of the following specifications, limits, terms and conditions specified in this Licence, upon the request of the Director:
  - a) sample, monitor, analyse or investigate specific areas of concern regarding any segment, component or aspect of pollutant storage, containment, treatment, handling, disposal or emission systems, for such duration and at such frequencies as may be specified;
  - b) determine the environmental impact associated with the release of any pollutants from the said 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, flow rate measurements and such other information as may from time to time be requested.
- 2. The Licencee shall design, construct and operate the water treatment and supply system in accordance with Manitoba Regulations under the Public Health Act and The Drinking Water Safety Act and all operating requirements as recommended by Manitoba Water Stewardship.
- 3. 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 legislation requirements.
- 4. 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.
- 5. The Licencee shall:

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- a) prepare "As Constructed" drawings for the Development and shall label the drawings "As Constructed"; and
- b) provide to the Director, within one year of the completion of construction of the Development, two sets of "As Constructed" drawings.

## SPECIFICATIONS, LIMITS, TERMS AND CONDITIONS

# **Respecting Construction:**

- 6. The Licencee shall notify the Western Regional Office of Manitoba Conservation in Brandon not less than two weeks prior to commencing construction of the Development in any year in which construction occurs. The notification shall include the intended starting date of construction and the name of the contractor(s) responsible for the construction.
- 7. The Licencee shall, prior to commencing construction of the Development, obtain all necessary approvals from Manitoba Infrastructure and Transportation and the Highway Traffic Board.
- 8. The Licencee shall notify the Historic Resources Branch not less than one month prior to commencing construction of the Development in any year in which construction occurs, in compliance with the requirements of The Heritage Resources Act. The notification shall include pipeline route locations.
- 9. The Licencee shall, during construction of the Development, dispose of non-reusable construction and demolition 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.
- 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, at all times during the construction of the Development, maintain materials to contain and recover spills of fuel and other fluids associated with construction machinery at construction sites.
- 12. The Licencee shall, during construction and operation of the Development:

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- a) immediately report any reportable spills to Manitoba Conservation's Accident Reporting Line at (204) 944-4888; and
- b) provide a follow-up report to the Director on a reportable environmental accident outlining the cause(s) and proposing corrective action to prevent reoccurrence.
- 13. 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 pipelines.
- 14. 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.
- 15. 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 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.
- 16. 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 April 1 and June 15 of any year.
- 17. 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.
- 18. 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.

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- 19. 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.
- 20. 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.
- 21. 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*, or any future amendment thereof, respecting *Threatened*, *Endangered and Extirpated Species* and in the federal Species at Risk Act.
- 22. 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.

#### **Respecting Operation:**

- 23. The Licencee shall, prior to the commencement of operation of the Development, receive approval pursuant to The Drinking Water Safety Act for final plans for the Development.
- 24. The Licencee shall properly train or qualify individuals to carry out the operation of the Development pursuant to the requirements of *Manitoba Regulation* 77/2003 respecting *Water and Wastewater Facility Operators*, or any future amendment thereof.
- 25. 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 0.1 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 0.1 milligrams per litre or less before the released water reaches any body of surface water.
- 26. The Licencee shall not permit the interconnection of a private water supply system with the Development.

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27. 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.

# Respecting Monitoring and Reporting:

- 28. The Licencee shall conduct an effluent monitoring program as described in Clauses 29 to 31 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 if the results, in the opinion of the Director, indicate that a longer monitoring period is appropriate.
- 29. The Licencee shall, on a quarterly basis for the duration of the effluent monitoring program, collect grab samples at locations approved by the Director in the reverse osmosis concentrate wastewater stream within the water treatment plant, on the shore of Killarney Lake adjacent to the effluent discharge pipeline, and on the southwest shore of Killarney Lake. The Licencee shall record the temperature at the same time as samples are taken.
- 30. The Licencee shall transport the grab samples collected pursuant to Clause 29 of this Licence, to an accredited laboratory for analysis. The samples shall be stored and transported in accordance with procedures specified by Manitoba Water Stewardship to ensure that the samples are suitable for analysis.
- The Licencee shall, at an accredited laboratory, have the samples collected pursuant to Clause 29 of this Licence, analysed for the following parameters:
  - a) pH;
  - b) hardness;
  - c) total dissolved solids;
  - d) iron;
  - e) manganese;
  - f) magnesium;
  - g) calcium;
  - h) sodium; and
  - i) chloride.
- 32. The Licencee shall, not more than 30 days after the results of each quarterly analysis are available, submit the results to the Director.
- 33. The Licencee shall implement the groundwater water quality and groundwater level sampling programs described in Section 5.4 of the Environment Act Proposal, prepared by W.L. Gibbons & Associates Inc., March, 2009.

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- 34. The Licencee shall submit within ninety (90) days of the date of this Licence, for the approval of the Director, a detailed long term water quality monitoring plan for Killarney Lake.
- 35. The Licencee shall, within one (1) year of the date of this Licence, submit a comprehensive water conservation plan and implementation strategy for the approval of the Director.
- 36. The Licencee shall implement the water conservation plan as approved by the Director.

### **REVIEW AND REVOCATION**

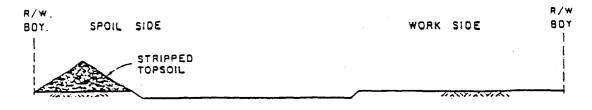
- A. If, in the opinion of the Director, the Licencee has exceeded or is exceeding or has or is failing to meet the specifications, limits, terms, or conditions set out in this Licence, the Director may, temporarily or permanently, revoke this Licence.
- B. If construction of the development has not 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.

Tracey Braun, M.Sc.

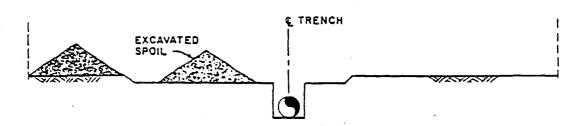
Director

**Environment Act** 

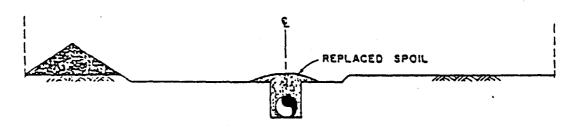
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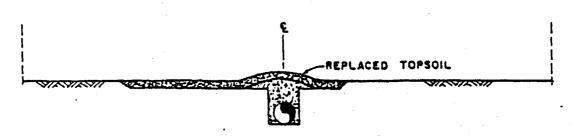
#### I. TOPSOIL STRIPPED



# 2. TRENCH EXCAVATED



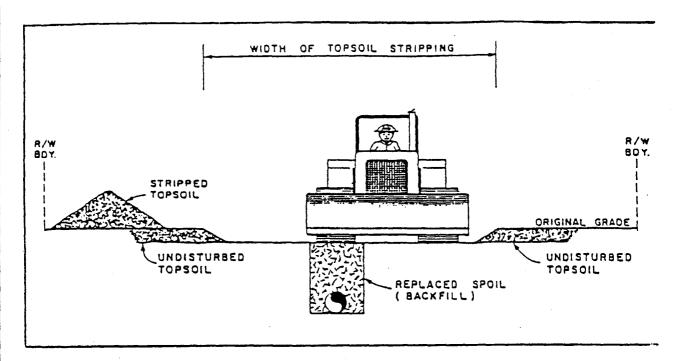
# 3. TRENCH BACKFILLED



4. TOPSOIL REPLACED

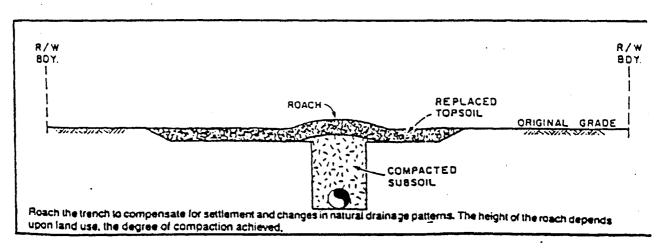
# SEQUENCE OF TOPSOIL HANDLING

Figure 1



COMPACTION OF BACKFILL

Figure 2  $\epsilon j$ 



ROACHING THE TRENCH

Figure 3