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**MINISTER OF  
CONSERVATION AND WATER STEWARDSHIP**

Legislative Building  
Winnipeg, Manitoba, CANADA  
R3C 0V8

**Client File: 3269.00**

November 16, 2015

Mr. Gord Martel, P. Eng., Chief Executive Officer  
Pembina Valley Water Cooperative Inc.  
P. O. Box 1180  
Altona MB R0G 0B0

Dear Mr. Martel:

This is in response to a letter of August 25, 2015 from Justin Rak-Banville of WSP Canada Inc., requesting an alteration to Environment Act Licence No. 2847 to address a change in the Cooperative's Stephenfield water treatment plant. The water treatment process would be changed from a cold lime process to a microfiltration/nanofiltration process, and the net capacity of the plant would be increased from 20 litres per second to 40 litres per second. Membrane reject water from the treatment system would be discharged to Stephenfield Lake, and cleaning water containing water treatment chemicals would be discharged to the plant's existing sludge dewatering ponds.

Department staff has reviewed the environmental effects of the proposed alteration and determined that they are insignificant. Accordingly, approval is hereby provided in accordance with Section 14(2) of *The Environment Act* to implement the proposed alteration. **Environment Act Licence No. 2847 R is enclosed.**

Please contact Tyler Kneeshaw at (204) 239-3608 or Tyler.Kneeshaw@gov.mb.ca if you have any questions concerning this licence.

Pursuant to Section 28 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 sincerely,

*“original signed by”*

Tom Nevakshonoff

Minister

- c. Justin Rak-Banville, WSP  
Don Labossiere/Donna Smiley/Tyler Kneeshaw, Environmental Compliance and Enforcement  
Public Registries

**NOTE:** Confirmation of Receipt of this Licence No. 2847 R (*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 November 30, 2015.

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On behalf of Pembina Valley Water Cooperative Inc.

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Date

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

# LICENCE

Licence No. / Licence 2849 R

Issue Date / Date de délivrance September 5, 2008

Revised November 16, 2015

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 Sections 12(1) and 14(2) / Conformément au Paragraphe 12(1) et 14(2)

**PEMBINA VALLEY WATER COOPERATIVE INC.:**  
**"the Licence"**

for the construction and operation of the Development being a regional water supply system, in accordance with the Proposal filed under *The Environment Act* and subject to the following specifications, limits, terms and conditions:

## **DEFINITIONS**

In this Licence,

**"accredited laboratory"** means an analytical facility accredited by the Standards 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;

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

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

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

**"grab sample"** means a quantity of water or wastewater taken at a given place and time; and

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

## **PROJECT SCOPE**

The Development includes water treatment plants and associated works at Letellier, Morris, and Stephenfield and a water supply system serving the rural municipalities of Dufferin, Grey, Montcalm, Morris, Roland, Stanley and Thompson, the municipalities of Emerson-Franklin and Rhineland, the towns of Altona, Carman and Morris and the cities of Morden and Winkler.

## **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 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, ambient quality, aquatic toxicity, leachate characteristics and discharge or emission rates, and for such duration and at such frequencies as may be specified;
  - b) determine the environmental impact associated with the release of any pollutant 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 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 labelled with the Licence Number and Client File Number associated with this Licence.
3. The Licencee shall construct and operate the Development in accordance with the Environment Act Proposal dated October 25, 1991 and as amended by letters of December 16, 1993, July 29, 2008 and August 25, 2015, and the applicable portions, as determined by the Director, of the following documents:
  - a) Environmental Impact Statement for the Pembina Valley Regional Potable Water Supply Proposal, prepared by M. M. Dillon Ltd. for the Licencee (December, 1992)
  - b) Environmental Impact Statement for the Pembina Valley Regional Potable Water Supply Proposal, Response to Additional Information Request, prepared by M. M. Dillon Ltd. for the Licencee (March, 1993)

- c) Pembina Valley Water Cooperative Response to Manitoba Environment's Discussion Paper of March 25, 1993, prepared by M. M. Dillon Ltd. for the Licencee (September, 1993)
  - d) Amendment to the Proposal and to the Environmental Impact Statement, prepared by the Licencee (January, 1994)
  - e) PVWC Morris WTP Upgrades Predesign Report Tech Memo #1, prepared by GENIVAR for the Licencee (July, 2008)
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, prior to the commencement of operation of the Development, receive approval pursuant to *The Drinking Water Safety Act* for final plans for the Development.
  7. The Licencee shall construct and operate the Development in accordance with Manitoba Regulations under *The Public Health Act* and *The Drinking Water Safety Act*, and all operating requirements as recommended by Manitoba Conservation and Water Stewardship.
  8. The Licencee shall not permit the interconnection of a private water supply system with the Development.
  9. The Licencee shall:
    - a) prepare "record drawings" for the Development and shall label the drawings "Record Drawings"; and
    - b) provide to the Director, within four months of the completion of construction of the Development, two electronic copies of the "record drawings".

## **SPECIFICATIONS, LIMITS, TERMS AND CONDITIONS**

### **Construction – General**

10. 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.
11. The Licencee shall notify the Central Regional Office of the Environmental Compliance and Enforcement Branch of Manitoba Conservation and Water Stewardship in Portage la Prairie 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 responsible for the construction.

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 the 24-hour environmental accident reporting line at 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.
14. 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.
15. 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.
16. 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*.
17. 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.
18. 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.
19. 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.

20. 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 - Pipelines**

21. The Licencee shall, prior to commencing construction of the Development, obtain all necessary approvals from Manitoba Infrastructure and Transportation and the Highway Traffic Board prior to undertaking construction on or adjacent to highway rights-of-way.
22. 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.
23. The Licencee shall design buried pipelines associated with the Development to minimize impacts on land adjacent to the pipelines' routes. Previously disturbed publicly owned rights-of-way shall be followed where possible.
24. 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.
25. 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.
26. 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.
27. 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.

28. 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.
29. 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.

### **Operation - Water Treatment Plants**

30. 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.
31. 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.
32. The Licencee shall operate the Development with respect to the volume and rate of water diverted in accordance with Water Rights licences issued for all water treatment plants of the Development pursuant to *The Water Rights Act*.
33. The Licencee shall ensure that water intake works at all water treatment plants of the Development are constructed and operated in accordance with the Department of Fisheries and Oceans publication "Freshwater Intake End-of-Pipe Fish Screen Guideline" (March, 1995).

### **Monitoring – Upgraded Stephenfield Water Treatment Plant**

34. The Licencee shall conduct an effluent monitoring program at the upgraded Stephenfield water treatment plant as described in Clauses 35 to 38, of this Licence, for a period of two years commencing with the operation of this component 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.
35. The Licencee shall, on a quarterly basis for the duration of the effluent monitoring program, collect grab samples at four locations approved by the Director. These locations shall be in the sludge pit at the water treatment plant, in the sludge ponds, and in the Boyne River above and below the effluent discharge point.
36. The Licencee shall transport the grab samples collected pursuant to Clause 35, 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.



37. The Licencee shall, at an accredited laboratory, have the samples collected pursuant to Clause 35, of this Licence, analysed for the following parameters:
- a) pH;
  - b) hardness;
  - c) total dissolved solids; and
  - d) total suspended solids.
38. The Licencee shall, not more than 30 days after the results of each quarterly analysis are available, submit the results to the Environment Officer.

### **REVIEW AND REVOCATION**

- A. Environment Act Licence No. 2847 is hereby rescinded.
- B. If, in the opinion of the Minister, 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 Minister 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 Minister, new evidence warrants a change in the specifications, limits, terms or conditions of this Licence, the Minister may require the filing of a new proposal pursuant to Section 12 of *The Environment Act*.

*“original signed by”*

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**Tom Nevakshonoff**  
**Minister**  
**Environment Act**

**Client File: 3269.00**

Figure 1 to Environment Act Licence No. 2847 R

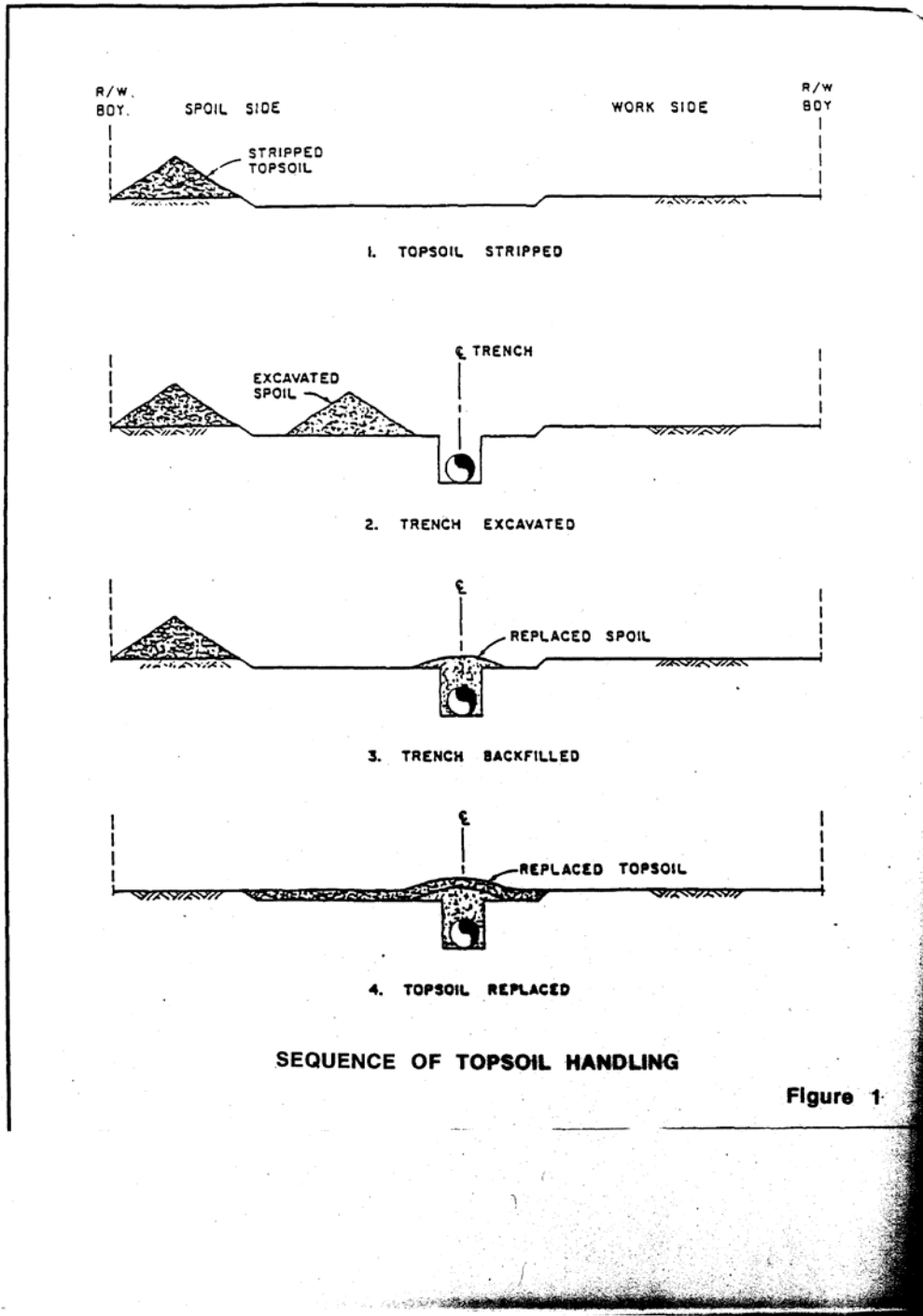
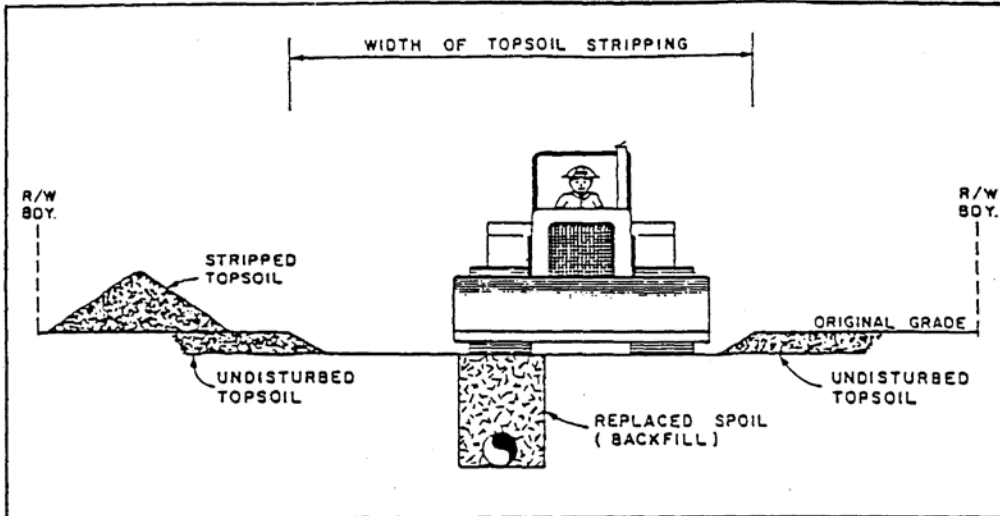
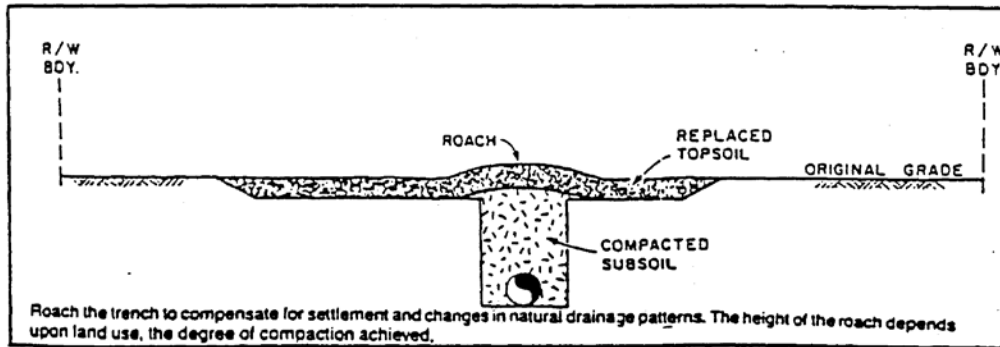


Figure 2 and 3 to Environment Act Licence No. 2847 R



COMPACTION OF BACKFILL

Figure 2



ROACHING THE TRENCH

Figure 3