

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.: 5580.00

December 3, 2012

Ms. June Greggor, C.A.O.
R.M. of Pipestone
401 - 3rd Avenue
Reston MB R0M 1X0

Enclosed is **Environment Act Licence No. 3026** dated December 3, 2012 issued in accordance with *The Environment Act* to the **R.M. of Pipestone** for the construction and operation of the Development being a wastewater treatment and disposal system located in the Section 8-9-28 WPM to serve a new 16-lot residential development in the Village of Cromer, consisting of a secondary wastewater treatment system, an effluent pumping station and an onsite disposal field, in accordance with *The Environment Act* Proposal dated April 10, 2012 and additional information provided on August 16, 2012.

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 Rafiqul Chowdhury, Environmental Engineer @ 204-945-2614.

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,

Tracey Braun, M.Sc.
Director
Environment Act

c: Don Labossiere, Director, Environmental Compliance and Enforcement
R. Mitchell, Genivar
Public Registries

NOTE: Confirmation of Receipt of this Licence No. 3026 (*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 December 17, 2012.

On behalf of the R.M. of Pipestone

Date

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

Licence No. / Licence n°

3026

Issue Date / Date de délivrance

December 3, 2012

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 11(1) / Conformément au Paragraphe 11(1)

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

RURAL MUNICIPALITY OF PIPESTONE,
"the Licencee"

for the construction and operation of the Development being a wastewater treatment and disposal system located in the Section 8-9-28 WPM in the Rural Municipality of Pipestone to serve a new 16-lot residential development in the Village of Cromer, consisting of a secondary wastewater treatment system, an effluent pumping station and an onsite disposal field, in accordance with *The Environment Act* Proposal dated April 10, 2012 and additional information provided on August 16, 2012 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;

"**affected area**" means a geographical area, excluding the property of the Development;

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

"**bioassay**" means a method of determining toxic effects of industrial wastes and other wastewaters by using viable organisms;

"**day**" means any 24-hour period;

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

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

"disposal field" means a system of wastewater effluent chambers laid in a shallow excavation or trenches and covered with top soil for the treatment and disposal of wastewater effluent;

"effluent" means treated wastewater flowing or pumped out of the wastewater treatment plant;

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

"fecal coliform" means aerobic and facultative, Gram-negative, nonspore-forming, rod-shaped bacteria capable of growth at 44.5°C, and associated with fecal matter of warm-blooded animals;

"five-day biochemical oxygen demand (BOD₅)" means that part of the oxygen demand usually associated with biochemical oxidation of organic matter within five days at a temperature of 20°C;

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

"MPN Index" means the most probable number of coliform organisms in a given volume of wastewater which, in accordance with statistical theory, would yield the observed test result with the greatest frequency;

"odour nuisance" means a continuous or repeated odour, smell or aroma, in an affected area, which is offensive, obnoxious, troublesome, annoying, unpleasant, or disagreeable to a person:

- a) residing in an affected area;
- b) working in an affected area; or
- c) present at a location in an affected area which is normally open to members of the public;

if the odour, smell or aroma

- d) is the subject of at least 5 written complaints, received by the Director in a form satisfactory to the Director and within a 90-day period, from 5 different persons falling within clauses a), b), or c), who do not live in the same household; or
- e) is the subject of at least one written complaint, received by the Director in a form satisfactory to the Director, from a person falling within clauses a), b), or c) and the Director is of the opinion that if the unwanted odour, smell or aroma had occurred in a more densely populated area there would have been at least 5 written complaints received within a 90-day period, from 5 different persons who do not live in the same household.

"piezometer" means an instrument for measuring pressure head in a conduit, tank, or soil;

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

"septage" means the sludge produced in individual on-site wastewater disposal systems such as septic tanks;

"sewage" means household and commercial wastewater that contains human waste;

"sewage treatment plant" means the component of this development which consists of the central facility, of the wastewater treatment facilities, which contains all treatment processes exclusive of the wastewater collection systems;

"sludge" means accumulated solid material containing large amounts of entrained water, which has separated from wastewater during processing;

"sludge solids" means solids in sludge;

"Standard Methods for the Examination of Water and Wastewater" means the most recent edition of Standard Methods for the Examination of Water and Wastewater published jointly by the American Public Health Association, the American Waterworks Association and the Water Environment Federation;

"total coliform" means a group of aerobic and facultative anaerobic, Gram-negative, nonspore-forming, rod-shaped bacteria, that ferment lactose with gas and acid formation within 48 hours at 35°C, and inhabit predominantly the intestines of man or animals, but are occasionally found elsewhere and include the sub-group of fecal coliform bacteria; and

"wastewater" means the spent or used water of a community or industry which contains dissolved and suspended matter.

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 following specifications, 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; 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 under this Licence, in writing, in such form (including number of copies) and of such content as may be required by the Director, and each submission shall be clearly labeled with the Licence Number and Client File Number associated with this Licence.
3. The Licencee shall not cause or permit an odour nuisance to be created as a result of the construction, operation or alteration of the Development, and shall take such steps as the Director may require to eliminate or mitigate an odour nuisance.
4. The Licensee shall, in the event of a release, spill, leak, or discharge of a pollutant or contaminant in an amount or concentration, or at a level or rate of release, that exceeds the limit that is expressly provided under this Act, another Act of the Legislature, or an Act of Parliament, or in a regulation, licence, permit, order, instruction, directive or other approval or authorization issued or made under one of those Acts, immediately report the release, spill, leak, or discharge by calling 204-944-4888. The report shall indicate the nature of the release, leak, or discharge, the time and estimated duration of the event and the reason for the release, spill, leak, or discharge.
5. The Licencee shall actively participate in any future watershed-based management study, plan and/or nutrient reduction program, approved by the Director.

SPECIFICATIONS, LIMITS, TERMS AND CONDITIONS

Respecting Construction - General

6. The Licencee shall notify the assigned Environment Officer not less than two weeks prior to beginning construction of the Development. The notification shall include the intended starting date of construction and the name of the contractor responsible for the construction.
7. The Licencee shall:
 - a) conduct all ditch related work activities during no flow or dry conditions and not during the April 1 to June 15 fish spawning and incubation period;
 - b) not construct the wastewater treatment or wastewater collection system during periods of heavy rain;

- c) place and/or isolate all dredged and construction materials where it will not erode into any watercourse;
 - d) implement long-term sediment and erosion control measures to prevent soil-laden runoff, and/or silt from entering any watercourse during construction and until vegetation is established;
 - e) routinely inspect all erosion and sediment control structures and immediately complete any necessary maintenance or repair; and
 - f) vegetate any disturbed areas by planting and seeding preferably native trees, shrubs or grasses and cover such areas with mulch to prevent soil erosion and to help seeds germinate.
8. The Licencee shall dispose of non-reusable construction debris from 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 any future amendment thereof, or a Licence issued pursuant to *The Environment Act*.
 9. The Licencee shall locate fuel storage and equipment servicing areas established for the construction and operation of the Development a minimum distance of 100 metres from any waterbody, and shall comply with the requirements of *Manitoba Regulation 188/2001* respecting *Storage and Handling of Petroleum Products and Allied Products* or any future amendment thereof.
 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 the sewage treatment plant, the discharge route, and watercourses, and have an emergency spill kit for in-water use available on site during construction.
 11. The Licencee shall arrange with the designated Environment Officer a mutually acceptable time and date for any required inspection between the 15th day of May and the 15th day of October of any year, unless otherwise approved by the Environment Officer.
 12. The Licencee shall not cover the equalization tank, the sewage treatment plant or the engineered disposal field, in a manner that obscures them from view or interferes with inspection of the tank, plant or field, without authorization from the assigned Environment Officer.
 13. The Licencee shall complete any open cut trenching across surface drainage courses only when there is no flow in the surface drainage courses.
 14. The Licencee shall install and maintain a security fence around all components of the sewage treatment plant that are not buried or enclosed within secured buildings.

15. The Licencee shall:
- a) prepare "record drawings" for the Development and shall label the drawings "record drawings"; and
 - b) provide to the Director, within six months of the completion of construction of the Development, two electronic copies of the "record drawings".

Respecting Operation

16. 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.
17. 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.
18. The Licencee shall operate the sewage treatment plant in such a manner that:
- a) all wastewater generated at the Village of Cromer Subdivision is directed toward the sewage treatment plant or other approved sewage treatment facilities;
 - b) only wastewater as defined in this Licence is discharged into the sewage treatment plant;
 - c) sludge solids are disposed in a facility operated in accordance with:
 - i) a permit issued in accordance with *Manitoba Regulation 150/91* or any future amendment thereof; or
 - ii) the authority of a Licence issued under *The Environment Act*; and
 - d) sludge solids are transported in containers in such a manner to prevent loss of solids to the satisfaction of an Environment Officer.
19. The Licencee shall install, operate and maintain an effluent discharge pipeline from the sewage treatment plant to the engineered effluent disposal field such that freezing of the effluent in the pipeline is prevented.
20. The Licencee shall install, operate and maintain the engineered effluent disposal field such that:
- a) effluent is discharged through the disposal field with no surface breakout; and
 - b) freezing of the effluent in the disposal field is prevented.
21. The Licencee shall not spill, or allow to be spilled, wastewater and/or sludge in the area around the sewage treatment plant.

22. The Licencee shall operate and maintain the sewage treatment plant in such a manner that:
 - a) the maximum daily flow rate is not in excess of 17.0 cubic metres over any 24-hour period; and
 - b) the organic loading is not in excess of 4.5 kilograms of five-day biochemical oxygen demand over any 24-hour period.
23. The Licencee shall not discharge effluent from the sewage treatment plant, as sampled at the effluent monitoring station located at the lift station located after the sewage treatment plant, where:
 - a) the organic content of the effluent, as indicated by the five-day biochemical oxygen demand (BOD₅), is in excess of 25 milligrams per litre; and
 - b) the total suspended solids content of the effluent, as indicated by the non-filterable residue is in excess of 25 milligrams per litre.
24. The Licencee shall not discharge effluent from the sewage treatment plant except to the engineered disposal field.

MONITORING AND REPORTING SPECIFICATIONS

25. The Licencee shall, unless otherwise specified in this Licence:
 - a) carry out all preservations and analyses on liquid samples in accordance with the methods prescribed in the Standard Methods for the Examination of Water and Wastewater, or in accordance with equivalent preservation and analytical methodologies approved by the Director;
 - b) have all analytical determinations undertaken by an accredited laboratory; and
 - c) report the results to the Director, in writing and in an electronic format acceptable to the Director, within 60 days of the samples being taken.
26. The Licencee shall monitor, and make the records of such monitoring available to the Director as may be requested, the sewage treatment process for the following parameters:
 - a) total flow rate(s) into and through the sewage treatment plant; and
 - b) other process parameters approved or required by the Director.
27. The Licencee shall:
 - a) take three grab samples of effluent, at the effluent monitoring station located at the lift station located after the sewage treatment plant during the discharge period, four times each year and with a minimum of 90 days between sampling events; and
 - b) have the grab samples analyzed at an accredited laboratory, using methods from the Standard Methods for the Examination of Water and Wastewater, or using other methods approved by the Director, for:

- i) the organic content as indicated by the five day biochemical oxygen demand and expressed as milligrams per litre;
 - ii) total suspended solids as indicated by the non-filterable residue and expressed as milligrams per litre;
 - iii) ammonia nitrogen content (as N) expressed as milligrams per litre; and
 - iv) nitrate-nitrite nitrogen content expressed as milligrams per litre.

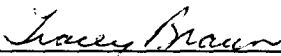
28. The Licencee shall, for a period of at least two years following the commencement of operation of the sewage treatment plant under this Licence, once every three months of any year and with a minimum separation time of 90 days between sampling events, obtain samples of treated effluent at the effluent monitoring station located at the lift station located after the sewage treatment plant. The samples shall be preserved, analyzed and reported in accordance with the requirements of Clause 25 of this Licence, and shall be analyzed for:
 - a) fecal coliform content as indicated by the MPN index and expressed as MPN per 100 millilitres per sample;
 - b) total coliform content as indicated by the MPN index and expressed as MPN per 100 millilitres per sample;
 - c) total Kjeldahl nitrogen;
 - d) total phosphorus;
 - e) pH; and
 - f) temperature.

29. The Licencee shall report the results from the sampling required by Clauses 27 and 28 of this Licence to the Director in accordance with the requirements of Clause 25 c) of this Licence.

30. The Licencee shall, within six months of the date of this Licence, submit to the Director for approval, an engineered groundwater monitoring plan relating to the engineered disposal field that:
 - a) includes the installation and maintenance of piezometers to be installed around the engineered disposal field to monitor groundwater characteristics in the soils underlying the field; and
 - b) identifies:
 - i) how often and which groundwater characteristics will be monitored;
 - ii) who will monitor and report the groundwater characteristics;
 - iii) when groundwater monitoring will commence; and
 - iv) strategies designed to allow the engineered disposal field to remain in compliance with this Licence, related regulations, and the Manitoba Water Quality Standards, Objectives, and Guidelines.

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 the Licencee has not commenced construction of the Development 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

Client File No.: 5580.00