

#### Conservation

Environmental Stewardship Division
Environmental Assessment and Licensing Branch
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**FAXED** 

**CLIENT FILE NO.: 5079.00** 

February 5, 2008

Bernadette MacKenzie President 4345569 Manitoba Ltd. 80 Southmoor Road Winnipeg MB R2J 2P4

Dear Ms. MacKenzie:

Receipt of J.R. Cousin Consultants' December 14, 2007 letter is acknowledged as a Notice of Alteration in accordance with Section 14 of The Environment Act.

The requested change to the Development as Licensed is the removal of Clause 12 of the Licence which states, "The Licencee shall install and maintain a security fence, acceptable to the Director, surrounding the wastewater treatment plant." The letter indicates that all operational components of the plant are located in a locked building with the exception of the raw sewage wet well emergency overflow post indicating valve, which is padlocked.

Removal of the requirement to install the security fence is acceptable, provided that security at the wastewater treatment plant is maintained at all times. The potential environmental effects of the requested change are considered to be a minor alteration in accordance with section 14(2) of The Environment Act. Accordingly, the request as indicated in the December 14, 2007 letter is approved subject to the limits, terms and conditions set forth in the attached revised Environment Act Licence 2679 R.

It is noted that the as-constructed drawings for the Development were to be submitted on or before December 31, 2006 as per Clause 19 of the revised Licence. To date, the as-constructed drawings have not been received. The as-constructed drawings for the Development must be submitted on or before February 29, 2008.

Should you want to discuss this matter, please contact Jennifer Winsor at 945-7012.

Yours truly.

Tracy Braun, M.Sc.

Director

**Environment Act** 

Enc.

c: B. Gillespie, Regional Director, Central Region, Conservation

Jeff Dyck, J. R. Cousin Consultants

Millennium Public Library/Manitoba Eco-Network/Selkirk-St. James Regional Library

R.M. of West St. Paul

NOTE:

Confirmation of Receipt of this Licence No. 2679 R (by the Licencee only) is required by the A/Director of Environmental Assessment and Licensing. Please acknowledge receipt by signing in the space provided below and faxing a copy back to the Department by February 8, 2008.

On behalf of 4345569 Manitoba Ltd.

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. / Licen	ce nº	2679 R
Issue Date / Date de délivrance		April 18, 2005
	REVISED:	February 5, 2008

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) and 14(2) / Conformément au Paragraphe 11(1) et 14(2)

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

### 4345569 MANITOBA LTD. "the Licencee"

for the construction and operation of the Development being a wastewater collection system and an extended aeration wastewater treatment plant to serve the River's Edge Subdivision, located in Parcel A of Plan No. 42931 WLTO in River Lots 51 to 53 in the Parish of St. Paul in the Rural Municipality of West St. Paul and in accordance with the Proposal filed pursuant to The Environment Act on November 17, 2004, and subsequent information submitted on December 24, 2004 and March 4, 2005 and the notice of alteration submitted on December 18, 2007 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 to be equivalent to the SCC, or 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;

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<sup>&</sup>quot;approved" means approved by the Director in writing;

<sup>&</sup>quot;appurtenances" means machinery, appliances, or auxiliary structures attached to a main structure to enable it to function, but not considered an integral part of it;

<sup>&</sup>quot;as constructed drawings" means engineering drawings complete with all dimensions which indicate all features of the Development as it has actually been built;

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

"composite sample" means a quantity of wastewater consisting of equal volumes of effluent, or flow proportional volumes, and may be collected manually or by means of an automatic sampling device;

"Director" 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 (BOD<sub>5</sub>)" means that part of oxygen usually associated with biochemical oxidation of organic material within 5 days at 20°C;

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

"influent" means water, wastewater, or other liquid flowing into the wastewater treatment plant;

"MPN index" means the most probable number of coliform organisms in a given volume of wastewater as determined by statistical estimation;

"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, and 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 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;

"wastewater effluent" means wastewater after it has undergone at least one form of physical, or biological treatment;

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

"wastewater treatment plant" means the central facility of wastewater treatment facilities which contains all treatment processes exclusive of the collection system;

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

"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, non-spore 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

"UV" disinfection means a disinfection process for treating wastewater using ultraviolet radiation.

#### **GENERAL SPECIFICATIONS**

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 operate the wastewater treatment plant in such a manner that:
  - a) all of the wastewater generated within the River's Edge Subdivision is directed towards the wastewater treatment plant; and
  - b) waste solids and sewage sludge shall be disposed of in a waste disposal ground operated under a permit issued in accordance with Manitoba Regulation 150/91 or at a treatment facility approved by the Director.
- 2. 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, handling, treatment and disposal systems, for such pollutants, ambient quality, aquatic toxicity, seepage characteristics and discharge rates and for such duration and frequencies as may be specified;

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- 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, bioassay data, flow rate measurements and such other information as may from time to time be requested.
- 3. The Licencee shall, unless otherwise specified in this Licence:
  - a) carry out all preservations and analyses of 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; and
  - b) ensure that all analytical determinations are undertaken by an accredited laboratory.
- 4. 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.
- 5. The Licencee shall ensure that the operation of the Development is carried out by individuals properly trained and qualified to do so.
- 6. 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.
- 7. The Licencee shall ensure that adequate instrumentation is installed to provide constant monitoring of the UV process to ensure compliance with the disinfection requirements. Such instrumentation shall include but not be limited to the following:
  - a) an UV sensor to monitor lamp intensity;
  - b) an appropriate alarm and shutdown systems;
  - c) a lamp monitoring system to identify the location of individual lamp failures;
  - d) an hour meter which cannot be reset to display actual hours of UV lamp operation; and
  - e) protective circuits for overcurrent and ground current leakage detection.
- 8. The Licencee shall in case of physical or mechanical breakdown of the Development:
  - a) notify the Director immediately;
  - b) identify the repairs required to the wastewater collection system and/or wastewater treatment plant; and
  - c) complete the repairs in accordance with the written instructions of the Director.

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9. The Licencee shall actively participate in any future watershed based management study, plan or nutrient program, approved by the Director, for the Red River and associated waterways and watersheds.

#### SPECIFICATIONS, LIMITS, TERMS AND CONDITIONS

- 10. The Licencee shall notify the assigned Environment Officer prior to beginning construction of the wastewater collection system and wastewater treatment plant. The notification shall include the intended starting date of construction and the name of the Licencee's contact person at the construction site.
- 11. The Licencee shall ensure that fuel storage and equipment servicing areas established for the construction of the Development are located 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 Gasoline and Associated Products.
- 12. The Licencee shall:
  - a) install and maintain a flow measuring device at a location acceptable to the Director which is capable of measuring the volume of influent with an accuracy of  $\pm$  2 percent; and
  - b) have the flow measuring device re-calibrated biannually or on the request of an Environment Officer.
- 13. The Licencee shall:
  - a) construct and make available for use by an Environment Officer, a secured and heated effluent monitoring station, allowing direct access to the discharge pipeline following the UV disinfection and prior to the effluent lift station:
  - b) ensure that the monitoring station is accessible to an Environment Officer at all times;
  - c) install and maintain a flow measuring device at the monitoring station or at a location acceptable to the Director which is capable of measuring the volume of effluent with an accuracy of  $\pm 2$  percent;
  - d) have the flow measuring device re-calibrated biannually or on the request of an Environment Officer;
  - e) ensure that the monitoring station is equipped with a flow-proportional sampling device equipped to function with the flow measuring device and have the sampling device available on request for use by an Environment Officer; and
  - f) ensure that the monitoring station is equipped with an electrical power source of 15 amperes at 110 volts.

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- 14. The Licencee shall ensure that the wastewater load on the wastewater treatment plant does not exceed the design capacities as follows:
  - a) hydraulic loading not to exceed 305 m<sup>3</sup> for any 24-hour period; and
  - b) organic loading not to exceed 76 kilograms of five-day biochemical oxygen demand (BOD<sub>5</sub>) per day.
- 15. The Licencee shall not discharge wastewater effluent from the wastewater treatment plant as sampled at the monitoring station located after UV disinfection and before the lift station where:
  - a) the organic content of the wastewater effluent, as indicated by the five-day biochemical oxygen demand (BOD<sub>5</sub>), is in excess of 30 milligrams per litre;
  - b) the fecal coliform content of the wastewater effluent, as indicated by the MPN index, is in excess of 200 per 100 millilitres of sample as determined by the monthly geometric mean of 1 grab sample collected at equal time intervals on each of a minimum of 3 consecutive days per week;
  - c) the total coliform content of the wastewater effluent, as indicated by the MPN index, is in excess of 1500 per 100 millilitres of sample as determined by the monthly geometric mean of 1 grab sample collected at equal time intervals on each of a minimum of 3 consecutive days per week;
  - d) the total suspended solids content of the wastewater effluent, as indicated by the non-filterable residue is in excess of 30 milligrams per litre; and
  - e) the total ammonia concentration of the wastewater effluent is in excess of 1 milligram per litre during the calendar months of May, June, July, and August.

#### MONITORING AND REPORTING SPECIFICATIONS

- 16. The Licencee shall:
  - a) take one composite sample of effluent, from the effluent monitoring station during the discharge period once each month;
  - b) have the composite effluent sample analyzed for five-day biochemical oxygen demand, temperature, pH, total ammonia and total suspended solids;
  - c) ensure that all analytical determinations are undertaken by an accredited laboratory.
- 17. The Licencee shall:
  - a) take grab samples of the effluent from the effluent monitoring station during the discharge period once each week;
  - b) have the grab samples analyzed for fecal coliform content and total coliform content; and
  - c) ensure that all analytical determinations are undertaken by an accredited laboratory.

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- 18. The Licencee shall report all the information requested through the provisions of this Licence to the Director, within 60 days of the samples being taken.
- 19. The Licencee shall:
  - a) prepare "as constructed drawings" for the Development, including the effluent discharge pipeline, complete with final elevations, and shall label the drawings "As Constructed"; and
  - b) provide to the Director, on or before December 31, 2006, two sets of "As Constructed Drawings" of the Development.

#### **REVIEW OR REVOCATION**

- A. This Licence replaces Licence No. 2679 which is hereby rescinded.
- 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 the Licencee has not commenced construction of the Development within two 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.

Tracey Braun, M.Sc.

Director

**Environment Act** 

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