

Licence No.: 2589

Licence Issued: February 4, 2003

IN ACCORDANCE WITH THE ENVIRONMENT ACT (C.C.S.M. c. E125)

THIS LICENCE IS ISSUED PURSUANT TO SECTIONS 11(1) AND 14(2) TO:

CITY OF THOMPSON; "the Licencee"

for the alteration and operation of the Development being a primary wastewater treatment plant located at the northerly end of Nelson Road between Yale Avenue and the Burntwood River in the City of Thompson and in accordance with the Notice of Alteration filed under The Environment Act on January 15, 2003 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;

"approved" means approved by the Director in writing;

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

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

"effluent" means treated or untreated wastewater flowing or pumped out of the wastewater treatment facility or any component of the facility;

"effluent disinfection" means the killing of waterborne fecal and pathogenic bacteria and viruses in wastewater effluent with a disinfectant to achieve an effluent with no more than 200 fecal coliform organisms per 100 millilitres;

"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" means that part of the oxygen demand usually associated with biochemical oxidation of organic matter within 5 days at a temperature of 20° C;

"grab sample" means a quantity of undiluted effluent collected at any given time;

"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;

"primary wastewater treatment" means wastewater treatment with physical and/or chemical unit processes, including sedimentation, but not biological oxidation;

"secondary wastewater treatment" means wastewater treatment with primary wastewater treatment plus biological oxidation that is capable of producing effluent with a concentration of less than 30 mg/L of both five-day biochemical oxygen demand and total suspended solids;

"three month arithmetic mean concentration" means the average value of the concentrations in flow-proportional or grab samples collected over any period of 12 consecutive weeks;

"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;

"waste disposal ground" means an area of land designated by a person, municipality, provincial government agency, or crown corporation for the disposal of waste and approved for use in accordance with *Manitoba Regulation 150/91*, or subsequent revision thereof, or a Licence issued pursuant to The Environment Act; 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, 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;
 - 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.
2. 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.
3. 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.
 4. The Licencee shall operate the wastewater treatment plant in such a manner that:
 - a. all the wastewater generated within the City of Thompson is directed to the wastewater treatment plant or other approved facility;
 - b. only wastewater as defined in this Licence is discharged into the wastewater treatment plant; and
 - c. waste solids and sludge solids are treated and disposed at a waste disposal ground or other facility approved by the Director.
 5. 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 to mitigate an odour nuisance.
 6. The Licencee shall, at a location approved by the Director near the effluent outfall from the wastewater treatment plant into the Burntwood River, erect and maintain not fewer than two warning signs having letters not less than five centimetres in height stating "Sewage Plant Outfall, Not Suitable for Swimming or Body Contact Water Sports" or other signage approved by the Director.

SPECIFICATIONS, LIMITS, TERMS AND CONDITIONS

7. The Licencee shall provide a temporary bypass line during construction at each lift station such that all wastewater is directed to the wastewater treatment plant at all times during construction.
8. The Licencee shall comply with all applicable requirements of *The Dangerous Goods Handling and Transportation Act* and regulations issued thereunder respecting the handling, transport, storage and disposal of any dangerous goods brought onto or generated at the Development, including but not limited to the following:
 - a. *Manitoba Regulation 188/2001*, or any future amendment thereof, respecting the storage and handling of petroleum products and allied products; and
 - b. *Manitoba Regulation 439/87*, or any future amendment thereof, respecting the reporting of environmental accidents.
9. 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.
10. The Licencee shall not discharge effluent from the wastewater treatment plant:
 - a. where, as determined by a three month arithmetic mean concentration:
 - i. the organic content of the effluent, as indicated by the five-day biochemical oxygen demand, is in excess of 80 mg/L; or
 - ii. the total suspended solids content of the effluent is in excess of 80 mg/L; or
 - b. where, as determined by a grab sample or single flow-proportional sample concentration:
 - i. the organic content of the effluent, as indicated by the five-day biochemical oxygen demand, is in excess of 125 mg/L; or
 - ii. the total suspended solids content of the effluent is in excess of 125 mg/L.

MONITORING AND REPORTING SPECIFICATIONS

11. The Licencee shall:

- a. install and maintain a remote monitoring system to monitor each lift station in the collection system; and
- b. prior to operation of the remote monitoring system, submit to the Director for approval an Operation Plan which includes but is not limited to the following:
 - i. a list of the information transmitted to the central station from each lift station;
 - ii. the actions to be taken in case of alarm; and
 - iii. maintenance and inspection procedures.

12. The Licencee shall:

- a. construct and make available for use by an Environment Officer, a secured and heated effluent monitoring station on all discharge pipelines or channels and shall provide direct access to the effluent pipelines or channels;
- b. make the monitoring stations 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 ± 2 percent;
- d. have the flow measuring device re-calibrated biannually or on the request of an Environment Officer; and
- e. equip each monitoring station 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.

13. The Licencee shall:

- a. take one flow proportional sample of effluent from the wastewater treatment plant over a 24 hour period during each week;
- b. have the flow proportional sample analyzed for five-day biochemical oxygen demand and total suspended solids; and
- c. report the results to the Director within 30 days of the end of the month during which the samples were taken.

14. The Licencee shall determine and record the total daily volume of wastewater treated in the wastewater treatment plant by a method of measurement approved by the Director.

15. The Licencee shall, during each month:

- a. prepare a report on:
 - i. the daily volume of wastewater treated in the wastewater treatment plant;
 - ii. the weekly flow-proportional sample concentrations of five-day biochemical oxygen demand and total suspended solids; and
 - iii. the three month arithmetic mean concentration of five-day biochemical oxygen demand and total suspended solids; and
- b. submit the report to the Director within 30 days of the end of each month.

16. The Licencee shall, within one year of the date of this Licence, file a Proposal pursuant to Section 11 of The Environment Act to upgrade the primary wastewater treatment plant to a secondary wastewater treatment plant with effluent disinfection, consistent with the *Manitoba Water Quality Standards, Objectives and Guidelines*.

17. The Licencee shall:

- a. prepare "as constructed drawings" for the Development, and shall label the drawings "As Constructed"; and
- b. provide to the Director, on or before July 1, 2004, "as constructed drawings" of the Development.

18. The Licencee shall in case of physical or mechanical breakdown of the wastewater collection and/or treatment system, including the remote monitoring system:

- a. notify the Director immediately;
- b. identify the repairs required to the waste collection and/or treatment system; and
- c. complete the repairs in accordance with the written instructions of the Director.

REVIEW AND REVOCATION

- A. This Licence replaces Licence No. 1107 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, 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.

"original signed by"
Larry Strachan, P. Eng.
Director
Environment Act

Client File No.: 45.30

Rescinded