

**Licence No.: 2367 S1**

**Licence Issued: October 16, 1998**

**IN ACCORDANCE WITH THE MANITOBA ENVIRONMENT ACT (C.C.S.M. c. E125)  
THIS STAGE 1 LICENCE IS ISSUED PURSUANT TO SECTIONS 11(1) AND 13(1) TO:**

**THE CITY OF BRANDON; "the Licencee"**

to construct a Development, being a wastewater treatment facility, on parts of Section 16, Township 10, Range 18 WPM, within the City of Brandon, in accordance with the Proposal dated July 29, 1998 and submitted under The Environment Act on August 5, 1998, to treat the design liquid wastes stemming from a 1-shift per day, 6-day per week operation of the adjacent Maple Leaf Meats hog processing facility, 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 Environment 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 Canadian Standard Can/CSA-Z753, extension of the international standard ISO 9000, Guide 25, or otherwise approved by the Director;

**"approved"** means approved by the Director in writing;

**"Director"** means an employee of the department appointed as such by the Minister;

**"HDPE"** means high density polyethylene;

**"hog processing"** means the slaughtering, the bleeding, the scalding, the de-hairing, the pasteurization, the splitting, the eviscerating, the cutting and the packaging of hogs, or any one of these activities;

**"hog processing facility"** means the adjacent Maple Leaf Meats hog processing facility and includes: the hog processing plant; hog holding pens; a utility building to house the process water pretreatment facility; a guard house; an office building; paved and gravel parking areas; and two access roads;

**"hog processing plant"** means the adjacent Maple Leaf Meats main processing plant structure;

**"hydraulic conductivity"** means the quantity of water that will flow through a unit cross-sectional area of a porous material per unit of time under a hydraulic gradient of 1.0;

**"pollutant"** means a pollutant as defined in The Environment Act;

**"process wastewater"** means pre-treated wastewater from the adjacent Maple Leaf Meats hog processing facility;

**"wastewater"** means any liquid waste containing a pollutant which is designated for release into the environment; and

**"wastewater treatment facility"** means an engineered facility dedicated to the Maple Leaf Meats hog process facility and designed to accept and to treat the 1-shift design process wastewater and sanitary sewage using anaerobic treatment, aerobic treatment, clarification and ultraviolet light disinfection processes, with provisions made for the future inclusion of phosphorus removal.

**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 and/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 or ambient quality, aquatic toxicity, leachate characteristics and discharge or emission rates, for such duration and at such frequencies as may be specified;
  - b. determine the environmental impact associated with the release of any pollutant(s) 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, unless otherwise specified in this Licence:
  - a. carry out all preservations and analyses on liquid samples in accordance with the methods prescribed in the most current 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 Pollution Control Federation, or in accordance with an equivalent analytical methodology approved by the Director; and
  - b. ensure that all analytical determinations are undertaken by an accredited laboratory.
3. The Licencee shall report all the information requested through the provisions of this Licence in a manner and form acceptable to the Director.

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

### **Respecting Heritage Resources**

4. The Licencee shall stop construction, until authorized by the Director to resume, and inform the Historic Resources Branch if any heritage resources or human remains are uncovered, and shall contact the Brandon City Police in the event that human remains are uncovered.

### **Respecting Solid Wastes**

5. The Licencee shall not undertake any on-site burning of solid waste.
6. The Licencee shall maximize, wherever possible, the collection and recycling of recyclable wastes generated throughout the construction activities.
7. The Licencee shall not deposit solid waste into the environment except into a waste disposal ground operating under the authority of an Environment Act Licence, or a permit issued pursuant to Manitoba Regulation 150/91 or any future amendment thereof, where the operator of that facility has agreed to accept the solid waste.

### **Respecting Dangerous Goods or Hazardous Wastes**

8. The Licencee shall comply with all the applicable requirements of:
  - a. Manitoba Regulation 97/88R, or any future amendment thereof, respecting the storage and handling of gasoline and associated products;

- b. the Manitoba 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; and
- c. Manitoba Regulation 439/87, or any future amendment thereof, respecting the reporting of environmental accidents.

9. The Licencee shall:

- a. not store any construction equipment fuel on the property of the Development, other than as authorized within a central refueling area;
- b. keep refueling activities confined to a central refueling area in the vicinity of bore hole No. 8 identified on Figure R2148-01 which was included with the Maple Leaf Meats Inc. Preliminary Steps Proposal dated February 25, 1998;
- c. construct and maintain clay or lined berms on three sides of the central refueling area keyed into a clay base;
- d. use only the central refueling area for the storage of contained lubricants and other petroleum products;
- e. ensure that used oil or hydraulic fluids removed from on-site machinery are collected, transported and stored in secure, properly labeled, non-leaking containers and regularly sent to a recycling facility or a facility approved to accept hazardous wastes; and
- f. ensure that refueling trucks leave the property of the Development when construction equipment is not working, unless otherwise authorized under Manitoba Regulation 97/88R, or any future amendment thereof, respecting the storage and handling of gasoline and associated products.

10. The Licencee shall ensure that spill recovery equipment is available on-site at all times.

**Respecting Sanitary Wastes**

11. The Licencee shall comply with Manitoba Regulation 95/88R, or any future amendment thereto, in regards to any sewage generated at the site of the Development during the construction phase.

**Respecting Surface Runoff**

12. The Licencee shall construct silt fences in the drainage routes transporting surface runoff off the property of the Development, and keep the silt fences maintained in a functioning manner until vegetation has been re-established on the disturbed areas.
13. The Licencee shall not permit any pollutants to be directed into or transported by any surface drainage route leading to the Maple Leaf Meats on-site retention pond or off the property of the Development.

**Respecting Groundwater Protection**

14. The Licencee shall, by December 30, 1998, submit to the Director a strategy, within the context of the overall property groundwater monitoring strategy being developed by Maple Leaf Meats, as to how any potential losses of pollutants from the Development into the underlying groundwater during the construction phase and the future operating phase could be differentiated from similar pollutants that might originate or have originated from the hog processing facility so that the source of the pollutant(s) detected in the groundwater can be readily identified.
15. The Licencee shall, by no later than March 1, 1999, submit to the Director:
  - a. detailed drawings of the double liner and the leakage detection and collection provisions proposed for the anaerobic basin of the Development; and
  - b. a detailed description, prepared by a qualified professional, of the anaerobic basin leakage detection and response strategy, describing:

- i. details on the proposed type and location of monitoring provisions and instrumentation to be used;
  - ii. how the impervious integrity of the primary liner and the secondary liners will be assessed on an ongoing basis;
  - iii. how detected leakage losses will be handled;
  - iv. how detected leakage losses will be evaluated as to their environmental risk; and
  - v. a contingency plan for correcting any leakage losses deemed, by the Director, to pose an unacceptable environmental risk.
16. The Licencee shall not commence the installation of the double liner in the anaerobic basin of the Development until the Director has approved the leakage detection and response strategy.
17. The Licencee shall, subject to Clause 16 of this Licence, install and maintain a continuous HDPE double liner on the interior surface of the anaerobic basin, and ensure that:
  - a. a copy of the liner type, installation and testing specifications for the project contract is submitted to the Director upon the project contract being awarded, unless the final specifications do not differ from the specifications filed with the Director on October 6, 1998;
  - b. the HDPE double liner is installed in accordance with the specifications outlined in the project contract or in accordance with the ASAE Standard EP340.2 for the installation of Flexible Membrane Linings, whichever is the most stringent;
  - c. the inner primary liner has a minimum thickness of 1.5 mm (60 mil), and the outer secondary liner has a minimum thickness of 1.0 mm (40 mil);
  - d. all seams on the primary and secondary liner are welded in accordance with the specifications outlined in the project contract;
  - e. each liner is free of holes and has a hydraulic conductivity not exceeding  $1.0 \times 10^{-9}$  centimetres per second over the entire surface area of each liner;
  - f. the primary and secondary liner are separated by a porous geonet membrane in accordance with the specifications outlined in the project contract;
  - g. a gas relief system is installed under the primary liner as well as under the secondary liner in accordance with the specifications outlined in the project contract; and
  - h. each liner is tested for the integrity of all field seams in accordance with the specifications outlined in the project contract, and that a testing report, or any progressive testing report, is prepared and submitted to the Director for each liner, with:
    - i. the testing report or any progressive testing reports, on the secondary liner seams, submitted to the Director no less than one week before the secondary liner, or any tested portion thereof in the case of progressive testing, is overlain with the geonet material and the primary liner; and
    - ii. the testing report or any progressive testing reports on the primary liner, submitted to the Director no later than two weeks after the seam testing on the primary liner, or any portion thereof in the case of progressive testing, has been completed.
18. The Licencee shall pressure test the integrity of the connections of any underground piping, which is intended to transport wastewater under pressure, before such pipe connections are backfilled with earth.

### **Respecting Wastewater Monitoring Capabilities**

19. The Licencee shall construct and equip the process wastewater influent and effluent lines associated with the Development with in-line continuous flow metering devices capable of measuring flow rates to within a  $\pm 2\%$  accuracy and possessing interface devices to actuate pumps or samplers for collecting flow proportionate volumes of influent and effluent samples.

20. The Licencee shall;

- a. with respect to the process wastewater influent line, provide an enclosed and heated wastewater monitoring station sized and equipped to accommodate the simultaneous collection of up to two flow proportionate 24-hour composite samples; and
- b. with respect to the final effluent line, provide an enclosed and heated wastewater monitoring station sized to accommodate the simultaneous set-up and operation of up to two flow proportionate 24-hour composite wastewater samplers, equipped with interfaces to the effluent flow metering device whereby at least one of the interfaces is compatible with the departmentally owned ISCO sampler.

### **Respecting Additional Information Requirements**

21. The Licencee shall submit to the Director:

- a. one copy of the construction drawings for each project contract associated with the Development, as soon as the drawings are completed; and
- b. two sets of as constructed drawings for each project contract associated with the Development, with each drawing stamped 'As Constructed' or 'As Built', within three months following the completed construction of each contracted project.

22. The Licencee shall:

- a. in consultation with the Director, the City of Portage la Prairie, the Long Plain First Nation and the Dakota Tipi First Nation, develop a detailed study plan of the additional monitoring program to be undertaken on the Assiniboine River for the purposes of gathering additional water quality data and calibrating the computer model used in the Assiniboine River water quality modelling study (Appendix 10 of the Proposal);
- b. within two months of the date of issuance of this Licence, submit for the approval of the Director a copy of the detailed study plan of the additional monitoring program;
- c. undertake the approved additional monitoring program of the Assiniboine River, subject to such modifications as may from time to time be requested by the Director;
- d. make provisions for the river modelling computer program to include and assess the cumulative impacts of the combined storm sewer overflows as well as the projected periodic releases of effluent (Ayerst's treated liquid waste and treated excess wet weather wastewater) from the Brandon wastewater treatment lagoon facility; and
- e. submit, once every six months following the date of issuance of this Licence, a progress and data summary report on the ongoing additional river water quality monitoring program and the impact of any calibration refinements made to the river modelling computer program to:
  - i. the Director;
  - ii. the City of Portage la Prairie;
  - iii. the Long Plain and the Dakota Tipi First Nations;
  - iv. the Rural Municipality of MacDonald; and
  - v. the Whitehorse Plains Community Futures Development Corporation.

23. The Licencee shall, by April 30, 1999, submit to the Director a Sludge Management Plan to supplement the Proposal filed with the Department on August 5, 1998, for approval or revision by the Director.

### **Respecting Monitoring and Reporting**

24. The Licencee shall:

- a. ensure to have the activities associated with the construction of the Development inspected on a regular basis by a person qualified to:

- i. inspect and report upon the degree of success to which the proposed environmental management practices are being carried out to minimize any adverse environmental impacts during the construction phase of the Development; and
  - ii. identify evident or potential problems which need to be corrected;
- b. submit a summary report to the Director once every month until the construction phase of the Development is completed; and
- c. inform the Director as soon as possible of any fuel spilled on the site of the Development.

### **Respecting Operations at the Development**

25. The Licencee shall not deposit any wastewater into the Development, nor commence any start-up, commissioning or operation of this Development until so authorized through a Licence issued pursuant to the Environment Act.

### **REVIEW OR REVOCATION**

- A. If, in the opinion of the Director, the Licencee has failed or is failing to comply with any of the specifications, limits, terms or conditions set out herein, 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, this 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.

"original signed by"

**Larry Strachan**  
**Director**  
**Environment Act**

**Client File No.: 4307.0**