

**Licence No.: 2241**

**Licence Issued: February 13, 1997**

In accordance with the Manitoba Environment Act (C.C.S.M. c. E125)

THIS LICENCE IS ISSUED TO:

**RURAL MUNICIPALITY OF ST. CLEMENTS; "the Licencee"**

for the construction and operation of the Development being a sewage collection system and a sewage treatment plant located on a portion of the Winnipeg Floodway, S. P. 13006, North and East of the junction of Provincial Trunk Highway 44 and Henderson Highway and in accordance with the Proposal filed under The Environment Act on February 28, 1996, and subject to the following specifications, limits, terms and conditions:

**DEFINITIONS**

In this Licence,

**"affected area"** means a geographical area beyond the property line of the Development;

**"approved facility"** means a facility operating in accordance with the requirements of The Environment Act and the Regulations thereunder;

**"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;

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

**"composite sample"** means a quantity of wastewater consisting of a minimum of 10 equal volumes of effluent collected at approximately equal time intervals;

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

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

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

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

**"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 the affected area;
- b. working in the affected area; or
- c. present at a location in the affected area which is normally open to the members of the public;

if the odour, smell or aroma

- d. is the subject of at least 5 written complaints in a form satisfactory to the Director and from 5 different persons falling within clauses (a), (b) or (c), who do not live in the same household, received by the Director within a 90 day period; or
- e. is the subject of at least one written complaint 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 from 5 different persons who do not

live in the same household within a 90 day period;

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

**"sludge solids"** means solids in sludge;

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

**"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;

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

**"sewage"** means household and commercial wastewater that contains human waste.

### **GENERAL REQUIREMENTS**

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. Notwithstanding 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; or
  - b. determine the environmental impact associated with the release of any pollutants from the Development; and
  - 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 carry out all preservations and analyses of liquid samples in accordance with the methods prescribed in 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 Pollution Control Federation, or in accordance with equivalent preservation and analytical methodologies approved by the Director.
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 to the Director.
4. The Licencee shall direct all wastewater generated within the area serviced by the sewage collection system toward the sewage treatment plant or other approved sewage treatment facilities.
5. The Licencee shall limit the sewage load on the sewage treatment plant to the design capacities as follows:
  - a. hydraulic loading not to exceed:
    - i. a 7-day arithmetic average of 190 cubic metres per day; or
    - ii. 475 cubic metres over any 24 hour period;
  - b. organic loading, in terms of biochemical oxygen demand (BOD5), not to exceed:
    - i. a 7-day arithmetic average of 66.50 kilograms per day; or
    - ii. 166.25 kilograms over any 24 hour period;
  - c. total suspended solids loading not to exceed;

- i. a 7-day arithmetic average of 66.50 kilograms per day; or
    - ii. 166.25 kilograms over any 24 hour period;
  - d. total Kjeldahl nitrogen (TKN) loading not to exceed:
    - i. a 7-day arithmetic average of 6.65 kilograms per day; or
    - ii. 16.63 kilograms over any 24 hour period; or
  - e. ammonia (NH<sub>3</sub>) loading not to exceed:
    - i. a 7-day arithmetic average of 3.8 kilograms per day; or
    - ii. 9.5 kilograms over any 24 hour period.
6. The Licencee shall, in case of physical or mechanical breakdown of the wastewater collection or the sewage treatment plant:
  - a. notify the Director immediately;
  - b. identify the repairs required to the wastewater collection or the sewage treatment plant; and
  - c. complete the repairs in accordance with any written instructions of the Director.
7. The Licencee shall install, operate and maintain an effluent discharge pipeline from the sewage treatment plant into the Red River so that all the effluent is discharged a minimum of 20 metres from the nearest shoreline. The Licencee shall ensure that the effluent pipeline is equipped with a functioning heat trace tape or adequate soil cover to prevent freezing of the effluent in the pipeline.
8. The Licencee shall ensure that the sewage treatment plant is not located within a distance of 100 metres from the nearest residence.
9. The Licencee shall ensure that neither wastewater nor sludge are spilled in the area around the sewage treatment plant.
10. The Licencee shall construct an all-weather access road and dumping facility for truck hauled wastewater. The dump station shall be equipped with an influent pipe fitted with a quick-coupler. All trucks used to deliver wastewater to the treatment plant shall be equipped with a flexible hose and matching adapters for the quick-coupler. All wastewater delivered to the sewage treatment plant shall be discharged through the hose and influent pipe into the trash tank below the liquid surface.
11. The Licencee shall not cause or permit an odour nuisance to be created as a result of the construction or the operation of the Development, and shall take steps as the Director may require to eliminate or mitigate an odour nuisance.

### **DISCHARGE LIMITS, TERMS AND CONDITIONS**

12. The Licencee shall not discharge effluent from the sewage treatment plant, as sampled in the UV disinfection chamber near the point of discharge from the chamber, where:
  - a. the organic content of the effluent, as indicated by the five day biochemical oxygen demand, is in excess of 30 milligrams per litre;
  - b. the total suspended solids content of the sewage effluent is in excess of 30 milligrams per litre;
  - c. the fecal coliform content of the effluent, as indicated by the MPN index, is in excess of 200 per 100 millilitres of sample;
  - d. the total coliform content of the effluent, as indicated by the MPN index, is in excess of 1500 per 100 millilitres of sample; or
  - e. the ammonia concentration of the effluent is in excess of 1.0 milligrams per litre.
13. The Licencee shall not operate the Development without first making an agreement, with the owner of an approved facility, for the disposal of sludge solids.
14. The Licencee shall ensure that the screenings and grit, are disposed at a waste disposal ground operated under a permit issued in accordance with Manitoba Regulation 150/91 and in accordance with that permit.

## MONITORING AND REPORTING SPECIFICATIONS

15. The Licencee shall provide a means of accessing the programmable logic controller from the sewage treatment plant to obtain the process time information and elapsed process time information.
16. The Licencee shall provide a heated and secured effluent monitoring station acceptable to the Director and equipped with:
  - a. a direct access way for an effluent sampling line to a location near the discharge from the UV disinfection chamber;
  - b. an electrical power source of 15 amperes at 110 volts; and
  - c. a connection cable and plug to link an ISCO portable automated sampler with an isolated contact closure type output of at least 25 millisecond duration from the programmable logic controller which signals the effluent discharge cycle.
17. The Licencee shall:
  - a. take one composite sample of effluent from the sewage treatment plant during the discharge period once each month;
  - b. take one grab sample of effluent from the sewage treatment plant during the discharge period once each month;
  - c. have the composite effluent samples analyzed for five day biochemical oxygen demand, field temperature, field pH, ammonia and total suspended solids content using methods from the latest edition of *Standard Methods for the Examination of Water and Wastewater* or using other methods approved by the Director;
  - d. have the grab sample analyzed for fecal coliform content and total coliform content using methods from the latest edition of *Standard Methods for the Examination of Water and Wastewater* or using other methods approved by the Director; and
  - e. report the results to the Director within 60 days of the samples being taken.
18. The Licencee shall, during the three month period following the commissioning of the UV disinfection system:
  - a. take grab samples of effluent from the sewage treatment plant during the discharge period once each week; and
  - b. have the grab samples analyzed for five day biochemical oxygen demand, total suspended solids content, fecal coliform content and total coliform content using methods from the latest edition of *Standard Methods for the Examination of Water and Wastewater* or using other methods approved by the Director; and
  - c. report the results 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 sewage treatment facility and the effluent discharge pipeline complete with final elevations, and shall label the drawings "As Constructed Drawings"; and
  - b. provide to the Director, on or before November 1, 1997, two sets of "as constructed drawings" of the Development.

## 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 development has not commenced construction 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.

"original signed by"

**Larry Strachan, P. Eng.**  
**Director**  
**Environment Act**

**Client File No.: 4137.00**