



Conservation

Environmental Stewardship Division
Environmental Assessment and Licensing Branch
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FAXED

CLIENT FILE NO.: 5347.00

November 17, 2008

W. A. Brown
Environmental Licensing & Protection
Manitoba Hydro
PO Box 815
Winnipeg MB R3C 2P4

Dear Mr. Brown:

Enclosed is Environment Act Licence No. 2855 dated November 17, 2008 issued in accordance with The Environment Act to **Manitoba Hydro** for the operation of the Development being a wastewater collection system and rotating biological contactor sewage treatment plant located in the Northwest quarter of Section 36-14-14 EPM in Whiteshell Provincial Park and with continuously discharge of treated effluent into Winnipeg River, in accordance with the Proposal filed pursuant to The Environment Act on May 28, 2008, and subsequent information submitted on September 5, 2008 and September 24, 2008.

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.

For further information on the administration and application of the Licence, please feel free to contact Rafiqul Chowdhury at (204) 945-2614.

Pursuant to Section 27 of The Environment Act this licencing decision may be appealed by any person who is affected by the issuance of this Licence to the Minister of Conservation within 30 days of the date of the Licence.

Yours truly,

Tracey Braun, M. Sc.
Director
Environment Act

Enc.

- c: J. Lewin, Regional Director, Eastern Region
- Millennium Public Library/Manitoba Eco-Network
- Brokenhead River Regional Library (Beausejour)
- R.M. of La Ronge (As Registry)

NOTE: Confirmation of Receipt of this Licence No. 2855 (by the Licensee only) is required by the Director of Environmental Assessment and Licensing. Please acknowledge receipt by signing in the space provided below and faxing a copy (letter only) to the Department by November 21, 2008.

On behalf of Manitoba Hydro

Date

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



LICENCE

Licence No. / Licence n° 285

Issue Date / Date de délivrance November 17, 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 Sections 11(1) / Conformément au Paragraphe 11(1)

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

MANITOBA HYDRO; "Licencee"

for the operation of the Development being a wastewater collection system and rotating biological contactor sewage treatment plant located in the Northwest quarter of Section 36-14-14 EPM in Whiteshell Provincial Park and with continuous discharge of treated effluent into Winnipeg River, in accordance with the Proposal filed pursuant to The Environment Act on May 28, 2008, and subsequent information submitted on September 5, 2008 and September 24, 2008 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;

"**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 a minimum of 10 equal volumes of effluent, or flow proportional volumes collected over a 24-hour period, and may be collected manually or by means of an automatic sampling device;

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"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 (BOD₅)" 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 sewage 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;

"sewage" means human body, toilet, liquid, waterborne culinary, sink or laundry waste;

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

"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;

"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;

"UV germicidal dose" means the units of intensity of ultra violet light that is required to kill bacteria and viruses present in the sewage effluent.

"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 a Licence pursuant to The Environment Act;

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

"wastewater collection system" means the sewer and pumping system used for the collection and conveyance of domestic, commercial and industrial wastewater.

GENERAL SPECIFICATIONS

This Section of 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;
 - b) have analytical determinations undertaken by an accredited laboratory; and
 - c) report the results to the Director, in writing, within 60 days of the samples being taken.
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 collection system and sewage treatment plant in such a manner that:
 - a) all wastewater generated within the Slave Falls Generating Station is directed toward the Slave Falls Generating Station sewage treatment plant or other approved wastewater treatment system;
 - b) only wastewater as defined in this Licence is discharged into the sewage treatment plant;
 - d) waste solids and sewage sludge are treated and disposed at a wastewater treatment lagoon licenced under the Environment Act.
 - e) Sludge solids are transported in containers in such a manner to prevent loss of solids to the satisfaction of an Environment officer.
5. The Licencee shall install, operate and maintain an effluent discharge pipeline from the sewage treatment plant into the Winnipeg River, and shall take necessary steps to prevent freezing of the effluent in the pipeline.
6. The Licencee shall not spill, or allow to be spilled, wastewater and/or sludge in the area around the sewage treatment plant.
7. The Licencee shall have the operation of the Development carried out by individuals properly trained and qualified to do so.
8. 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 for eliminating or mitigating an odour nuisance.
9. 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 sewage treatment plant; and
 - c) complete the repairs in accordance with the written instructions of the Director.

10. The Licencee shall install and maintain a security fence around all components of the sewage treatment plant that are not enclosed within secured buildings.

SPECIFICATIONS, LIMITS, TERMS AND CONDITIONS

11. 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 2.27 cubic metres over any 24-hour period;
 - b) the organic loading is not in excess of 0.04 kilograms of five-day biochemical oxygen demand over any 24-hour period; and
 - c) the release of offensive odours is minimized.
12. The Licencee shall operate and maintain the sewage treatment plant in such a manner that there is no contamination of groundwater.
13. The Licencee shall not discharge effluent from the sewage treatment plant, as sampled at the monitoring station located after UV disinfection, when:
 - a) the organic content of the effluent, as indicated by the five-day biochemical oxygen demand (BOD₅), is in excess of 30 milligrams per litre;
 - b) the fecal coliform content of the effluent, as indicated by the MPN index, is in excess of 200 per 100 millilitres of sample;
 - c) the total coliform content of the effluent, as indicated by the MPN index, is in excess of 1500 per 100 millilitres of sample;
 - d) the total suspended solids content of the effluent, as indicated by the non-filterable residue is in excess of 20 milligrams per litre; and

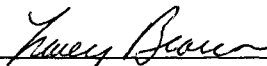
MONITORING AND REPORTING SPECIFICATIONS

14. 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) flow rate(s) into the plant;
 - b) flow rate(s) into and through the UV disinfection system; and
 - c) other process parameters approved or required by the Director.
15. 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 final discharge point; and
 - b) an electrical power source of 15 amperes at 110 volts.
16. The Licencee shall arrange for the taking of samples of treated sewage effluent at the final discharge point.

17. The Licencee shall:
- a) take one composite sample of effluent from the sewage treatment plant during the discharge period once each month;
 - b) have the composite effluent sample analyzed at an accredited laboratory for five day biochemical oxygen demand, total suspended solids and total phosphorus content, using methods from the Standard Methods for the Examination of Water and Wastewater, or using other methods approved by the Director;
 - c) have the grab samples analyzed at an accredited laboratory for fecal coliform content and total coliform content using methods from the Standard Methods for the Examination of Water and Wastewater, or using other methods approved by the Director, and
 - d) report the results to the Director within 60 days of the samples being taken.
18. The Licencee shall actively participate in any future watershed based management study, plan or nutrient reduction program, approved by the Director, for the Winnipeg River and associated waterways and watersheds.
19. The Licencee shall meet a phosphorus limit of 1 mg/L by December 31, 2010.

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, 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