

Conservation

Environmental Stewardship Division
Environmental Assessment and Licensing Branch
123 Main Street, Suite 160, Winnipeg, Manitoba R3C 1A5
T 204 945-7100 F 204 945-5229
www.gov.mb.ca/conservation/envapprovals

Faxed

File: 589.30

November 14, 2007

Bob Schmalenberg Conservation Programs Parks and Natural Areas Manitoba Conservation 200 Saulteaux Crescent Winnipeg, MB R3J 3W3 FAX: 945-0012

Dear Mr. Schmalenberg:

Re: Environment Act Licence No. 2733 RRR - Hecla Provincial Park Sewage Treatment Plant

We recently discovered that Schedule "B" of Environment Act Licence No. 2733 RRR regarding the Hecla Provincial Park sewage treatment plant contains an erroneous description for one of the listed constituents.

Please accept our apologies and replace the existing, previously circulated Schedule "B" with the attached corrected Schedule "B" for this Licence.

If you require any clarification of this letter or have any questions, please contact Robert Boswick of the Environmental Assessment and Licensing Branch at (204) 945-6030.

Yours truly,

Tracey Braun, M.Sc.

Traces Brann

Director

Environment Act

Attachment

c. Fred Binne, C.E.T., Project Manager, MWSB

Larry Cleven, P. Eng., Wardrop Engineering Ltd.

Brian Gillespie, Regional Director, Central Region – Manitoba Conservation:

Att'n; Derek Clarke, Environment Officer

Millennium Public Library/Mb Eco-Network/Selkirk and St. Andrews Regional Library

NOTE:

Confirmation of Receipt of this Correction respecting Licence No. 2733 RRR (by the Licencee 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 back to the Department by November 19, 2007.

On behalf of Parks & Natural Areas

Date

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



Schedule B
To Environment Act Licence No. 2733 RRR

Alkalinity
Ca
Mg
Na
K
Cl
SO ₄
Trace metals
Nutrients
DOC

THE ENVIRONMENT ACT LOI SUR L'ENVIRONNEMENT



LICENCE

Licence No. / Licence n° 2733 RRR

Issue Date / Date de délivrance August 23, 2006

Revised:

November 1, 2006

Revised: Revised:

December 11, 2006

January 22, 2007

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

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

MANITOBA CONSERVATION, PARKS AND NATURAL AREAS; "the Licencee"

for the upgrading and operation of the Development being a wastewater collection system and a sewage treatment plant, including a truck dumping station, located on the southwest quarter of Section 25, Township 25, Range 6 EPM and with discharge of treated effluent into Lake Winnipeg via a closed conduit, in accordance with the proposal filed under The Environment Act on February 14, 2006 and the additional information supplied in letters dated March 22, 2006, June 12, 2006, August 14, 2006 and August 17, 2006 and the Notice of Alteration dated October 30, 2006, the Notice of Alteration dated December 4, 2006 and the Notice of Alteration dated December 19, 2006 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 be able to demonstrate, upon request, that it has the quality assurance/quality control (QA/QC) procedures in place equivalent to

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

Manitoba Conservation, Parks and Natural Areas Hecla Provincial Park Sewage Treatment Plant Licence No. 2733 RRR Page 2 of 14

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;
- "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 alterations to the Development as it has actually been built and record drawings from previous construction;
- "bioassay" means a method of determining toxic effects of industrial wastes and other wastewaters by using viable organisms;
- "calibrate" means to determine, check or rectify the graduation of any instrument giving quantitative measurement;
- "Director" means an employee so designated pursuant to The Environment Act;
- "effluent" means treated wastewater flowing or pumped out of the wastewater treatment facility;
- "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 wastewater taken at a given place and time;
- "HDPE" means high density polyethylene;
- "influent" means water, wastewater, or other liquid flowing into a wastewater treatment facility;
- "MPN Index" means the most probable number of coliform organisms in a given volume of wastewater which, in accordance with statistical theory, would yield the observed test result with the greatest frequency;

Manitoba Conservation, Parks and Natural Areas Hecla Provincial Park Sewage Treatment Plant Licence No. 2733 RRR Page 3 of 14

"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:

"septage" means the sludge produced in individual on-site wastewater disposal systems such as septic tanks;

"sewage" means human body, toilet, liquid, waterbourne 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;

"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;

Manitoba Conservation, Parks and Natural Areas Hecla Provincial Park Sewage Treatment Plant Licence No. 2733 RRR Page 4 of 14

"supernatant" means the liquid remaining above the dewatered sludge solids after sedimentation;

"total coliform" means a group of aerobic and facultative anaerobic, Gram-negative, nonspore-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;

"truck dumping station" means a facility used to receive, store and meter wastewater, including septage, which has been hauled to the sewage treatment plant with a truck;

"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; and

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

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. 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.

Manitoba Conservation, Parks and Natural Areas Hecla Provincial Park Sewage Treatment Plant Licence No. 2733 RRR Page 5 of 14

- 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 operate the wastewater collection system and the sewage treatment plant in such a manner that:
 - a) all wastewater generated within Hecla Provincial Park is directed towards the sewage treatment plant or other approved wastewater treatment system;
 - b) only wastewater as defined in this Licence is discharged into the sewage treatment plant; and
 - c) sludge from the cells of the sewage treatment plant is dewatered and disposed at a waste disposal ground operated under:
 - i) a permit issued in accordance with *Manitoba Regulation 150/91* or any future amendment thereof; or
 - ii) the authority of a Licence issued under The Environment Act.
 - d) sludge solids are transported in containers in such a manner to prevent loss of solids to the satisfaction of an Environment Officer.
- 4. The Licencee shall, in case of physical or mechanical breakdown of the wastewater collection and/or the sewage treatment plant:
 - a) notify the Director immediately;
 - b) identify the repairs required to the wastewater collection and/or the sewage treatment plant; and
 - c) complete the repairs in accordance with any written instructions of the Director.
- 5. The Licencee shall install and maintain a security fence around all components of the sewage treatment plant that are not enclosed within secured buildings.
- 6. The Licencee transport all truck hauled wastewater and septage in enclosed containers in such a manner to prevent loss of wastewater or septage to the satisfaction of an Environment Officer.
- 7. The Licencee shall install, operate, and maintain an effluent discharge pipeline from the sewage treatment plant into Lake Winnipeg, and shall take the necessary steps to prevent freezing of the effluent in the pipeline.

Manitoba Conservation, Parks and Natural Areas Hecla Provincial Park Sewage Treatment Plant Licence No. 2733 RRR Page 6 of 14

- 8. The Licencee shall operate and maintain the wastewater collection system, sewage treatment plant and effluent discharge pipe in such a manner that there is no contamination of groundwater.
- 9. 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.
- 10. The Licencee shall, during construction and operation of the Development, report spills of fuels or other contaminants to an Environment Officer in accordance with the requirements of *Manitoba Regulation 439/87* respecting *Environmental Accident Reporting* or any future amendment thereof.
- 11. The Licencee shall comply with the provisions of the Department of Fisheries and Oceans Canada/Manitoba Natural Resources publication, "Manitoba Stream Crossing Guidelines for the Protection of Fish and Fish Habitat" (May, 1996).

SPECIFICATIONS, LIMITS, TERMS AND CONDITIONS

- 12. The Licencee shall notify the assigned Environment Officer not less than two weeks prior to beginning construction of the Development. The notification shall include the intended starting date of construction and the name of the contractor responsible for the construction.
- 13. The Licencee shall notify the Department of Fisheries and Oceans Canada Winnipeg District Office a minimum of ten days prior to the commencement of construction, citing file number: WI-06-0902.
- 14. The Licencee shall:
 - unless otherwise approved by the Director, not conduct in-water construction activities between April 1 to June 15 of any year as well as between September 15 of any year to April 30 of the following year.
 - b) not construct the discharge pipeline system during periods of heavy rain;
 - c) place and/or isolate all dredged, construction and spoil material above the high water mark where it will not erode or enter into any surface body of water, watercourse or groundwater;
 - d) before, during and after construction until all areas affected by the work are permanently stabilized, implement temporary and permanent erosion and sediment control measures to prevent the introduction of sediment to any fish habitat from any aspect of the work by planning sewer pipe ditching, below water line excavations and other drainage construction to include measures to isolate and filter or otherwise treat, as required,

Manitoba Conservation, Parks and Natural Areas Hecla Provincial Park Sewage Treatment Plant Licence No. 2733 RRR Page 7 of 14

- sediment-laden water to isolate fine sediments that may not settle out quickly or may be re-suspended following removal of isolation;
- e) routinely inspect all erosion and sediment control structures and immediately complete any necessary maintenance or repair; and
- f) stabilize all excavations to pre-project or better conditions.
- 15. The Licencee shall not remove, but may relocate to a similar depth or position near the work site, rocks, cobbles, boulders or natural woody debris from the lakebed or shoreline during construction.
- 16. The Licencee shall, for open cut trenching,:
 - a) minimize the length and width of trenching below the ordinary high water mark;
 - b) monitor turbidity to determine when the turbidity of level of the work area is the same as the turbidity level outside of the isolation measures and when banks are effectively stabilized, at which time silt fences, silt curtains or other isolation measures can be removed; and
 - c) restore the lakebed to its original elevation and appropriately dispose of any spoil material off site.
- 17. The Licencee shall, during construction of the Development, operate, maintain and store all materials and equipment in a manner that prevents any deleterious substances (fuel, oil, grease, hydraulic fluids, coolant, paint, uncured concrete and concrete wash water, etc.) from entering the sewage treatment plant, the discharge pipeline and associated surface bodies of water and watercourses.
- 18. The Licencee shall re-vegetate the bank and all disturbed areas and access points to pre-existing or better conditions, including planting of indigenous trees and native grasses.
- 19. The Licencee shall limit the wastewater load, including septage, on the sewage treatment plant such that:
 - a) the hydraulic loading does not exceed 377.2 cubic metres over any 24-hour period;
 - b) the organic loading does not exceed 156 kilograms of five-day biochemical oxygen demand over any 24-hour period; and
 - c) the release of offensive odours is minimized.
- 20. The Licencee shall operate and maintain the basin of the sewage treatment plant in such a manner that a minimum of 2 milligrams of dissolved oxygen per litre is detectable at all times in the liquid in all cells.
- 21. The Licencee shall construct and maintain a continuous liner underlying the basin of the sewage treatment plant in which the cells are located, such that:

Manitoba Conservation, Parks and Natural Areas Hecla Provincial Park Sewage Treatment Plant Licence No. 2733 RRR Page 8 of 14

- a) the liner is constructed from HDPE geomembrane;
- b) the liner has a minimum thickness of 60 mils;
- c) all sections of the liner are joined by double channel fusion seaming;
- d) all interior surfaces of the basin in which the cells are located are lined with the liner;
- e) in accordance with ASTM Standard D-4437, the integrity of all field seams are tested by non-destructive test methods and a testing report is prepared and submitted to the Director within 30 days of commencing the installation of the liner; and
- f) the liner is covered with sand or other granular cover material to a minimum depth of 0.30 metre measured perpendicular to the surface of the liner.
- 22. The Licencee shall provide to the Director, for approval, the name and qualifications of an independent third party inspector that will be responsible for quality control of the continuous liner underlying the basin of the sewage treatment plant in which the cells are located.
- 23. The Licencee shall, during construction of the continuous liner underlying the basin of the sewage treatment plant in which the cells are located, employ an independent third party inspector responsible for:
 - a) determining if appropriate conditions exist to proceed with liner installation;
 - b) quality control and testing of materials and all work associated with the installation of the HDPE geomembrane liner and related components; and
 - c) preparing and submitting all testing reports and a final testing report to the Director in a timely manner so as not to cause undue delays in the liner installation and construction of the sewage treatment plant.
- 24. The Licencee shall construct and maintain an effective gas relief system under the liner for all cells of the basin of the sewage treatment plant.
- 25. The Licencee shall notify the Director one week prior to commencing the installation of the liner and the gas relief system.
- 26. The Licencee shall not cover the liner or use the cells of the basin of the sewage treatment plant until receiving the approval of the Director of the report submitted pursuant to sub-Clause 21 e) of this Licence.
- 27. The Licencee shall not discharge effluent from the sewage treatment plant 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 fecal coliform content of the effluent, as indicated by the MPN index, is in excess of 200 per 100 millilitres of sample;

Manitoba Conservation, Parks and Natural Areas Hecla Provincial Park Sewage Treatment Plant Licence No. 2733 RRR Page 9 of 14

- 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 is in excess of 30 milligrams per litre;
- e) the total phosphorus is in excess of 1.0 milligrams per litre;
- f) the total residual chlorine is greater than 0.02 milligrams per litre; or
- g) the total ammonia is in excess of the concentration specified in Schedule "A" attached to this Licence, as determined by the pH of the effluent.
- 28. The Licencee shall discharge effluent by means of a continuous discharge pipe that;
 - a) will prevent the effluent being discharged from freezing in the discharge pipe;
 - b) is buried from the sewage treatment plant to the lakeshore;
 - c) extends into Lake Winnipeg such that the depth of water is at least 2.4 metres at the outlet;
 - d) is secured to the bed of Lake Winnipeg by concrete pipe weights to prevent movement; and
 - e) is provided with a diffuser at the outlet.

DECOMMISSIONING OF BASIN OF EXISTING SEWAGE TREATMENT PLANT

- 29. The Licencee shall, prior to removing sludge from the basin of the existing sewage treatment plant:
 - a) divert all incoming sewage from all sources to temporary containment facilities or other disposal facilities acceptable to an Environment Officer until such time as authorization to operate the upgraded sewage treatment plant is provided by the Director;
 - b) divert all incoming septage from all sources to other disposal facilities acceptable to an Environment Officer until such time as authorization to operate the upgraded sewage treatment plant is provided by the Director;
 - c) discharge the liquid contents of the basin of the existing sewage treatment plant in accordance with the requirements of Environment Act Licence No. 890 R:
 - d) prepare an engineered synthetically lined drying bed that will:
 - i) effectively dry sludge from the basin of the existing sewage treatment plant that is to be temporarily placed within it;
 - ii) provide a sump for liquid recovery within the bed;
 - iii) provide a means of placing all sludge that is to be dried in the bed, removing dried sludge from the bed for disposal, and removing accumulated liquid from the bed without affecting the integrity of the engineered synthetic liner.

Manitoba Conservation, Parks and Natural Areas Hecla Provincial Park Sewage Treatment Plant Licence No. 2733 RRR Page 10 of 14

- 30. The Licencee shall remove all accumulated sludge from the basin of the existing sewage treatment plant.
- 31. The Licencee shall, during the final stage of the process of removing sludge from the basin of the existing sewage treatment plant;
 - a) contain supernatant within berm confined areas within the basin;
 - b) prepare an engineered synthetically lined temporary supernatant storage area outside of the existing sewage treatment plant that will:
 - i) provide a means of placing and removing the supernatant in to and out from the temporary supernatant storage area without affecting the integrity of the engineered synthetic liner; and
 - ii) provide a sump for final liquid recovery from the temporary supernatant storage area;
 - c) transfer the supernatant to the engineered synthetically lined temporary supernatant storage area;
 - d) transport the supernatant to a wastewater treatment facility operated under the authority of a Licence issued under The Environment Act using registered sewage haulers;
 - e) once all the supernatant is removed from the engineered synthetically lined temporary supernatant storage area, decommission the synthetically lined supernatant storage area by removing the synthetic liner and all related components and leveling the site to the original grade to the satisfaction of an Environment Officer;
 - f) obtain samples of the water contained in all other remaining areas of the basin and have the samples analyzed for:
 - i) biochemical oxygen demand;
 - ii) fecal coliform content;
 - iii) total coliform content;
 - iv) total suspended solids; and
 - v) ammonia;
 - g) report the results to the Director; and
 - h) discharge the water by means acceptable to an Environment Officer.
- 32. The Licencee shall, within one year of initiating the sludge removal process, dry the sludge from the existing sewage treatment plant and dispose of it in accordance with Clauses 3. c) and 3. d) of this Licence.
- 33. The Licencee shall, during drying and storage of the sludge;
 - a) continually remove and temporarily store accumulated liquid and supernatant from the engineered synthetically lined drying bed; and
 - b) transfer the liquid and supernatant to alternate wastewater treatment facilities operated under the authority of a Licence issued under The Environment Act using registered sewage haulers.

Manitoba Conservation, Parks and Natural Areas Hecla Provincial Park Sewage Treatment Plant Licence No. 2733 RRR Page 11 of 14

34. The Licencee shall, once all sludge that was dried in the synthetically lined drying bed is removed, decommission the synthetically lined drying bed by removing the synthetic liner and all related components and leveling the site to the original grade to the satisfaction of an Environment Officer.

MONITORING AND REPORTING

- 35. 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) total flow rate(s) into the plant;
 - b) flow rate(s) into and through the chlorination/dechlorination system; and
 - c) other process parameters approved or required by the Director.
- 36. The Licencee shall maintain a record of all septage, sewage and wastewater hauled to the sewage treatment plant, including the number of loads on a daily and weekly basis, the volume of each load, the name of the hauler, and the source of the contents of each load according to the type of waste and the name and location of each property serviced. The Licencee shall submit an annual report of all the waste hauling information to the Director by the 31st of January of the following year.
- 37. The Licencee shall:
 - a) construct and make available for use by an Environment Officer, a secured and heated effluent monitoring station with direct access to the effluent discharge pipe;
 - b) have the monitoring station 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) have each monitoring station equipped with a flow-proportional sampling device equipped with the flow measuring device and have the sampling device available on request for use by an Environment Officer.
- 38. The Licencee shall:
 - a) take one flow proportional sample of effluent from the sewage treatment plant over a 24 hour period during each week;

Manitoba Conservation, Parks and Natural Areas Hecla Provincial Park Sewage Treatment Plant Licence No. 2733 RRR Page 12 of 14

- b) have the flow proportional sample analyzed for five day biochemical oxygen demand, total suspended solids, total phosphorus, total chlorine residual content, ammonia, pH and temperature;
- c) take 3 grab samples of the effluent from the sewage treatment plant with a minimum separation time of 2 hours between taking each sample, during the day on which the flow proportional sample is collected pursuant to sub-section (a) of this Clause;
- d) have each of the samples collected pursuant to sub-section (c) of this Clause analyzed for fecal coliform content and total coliform content;
- e) determine and record the weekly geometric mean for each of the fecal coliform and total coliform counts based on all the data collected each week; and
- f) report the results to the Director within 30 days of the end of the month during which the samples were taken.
- 39. The Licencee shall, for a two year period commencing with the operation of the Development:
 - a) take one flow proportional sample of effluent from the sewage treatment plant over a 24 hour period during each month and with a minimum separation time of 27 days between samples;
 - b) have the samples analyzed for acute lethality in accordance with the protocol outlined in Environment Canada's "Biological Test Method: Reference Method for Determining Acute Lethality of Effluents to Rainbow Trout: EPS 1/RM/13 Second Edition December 2000", or any future amendment thereof; and
 - c) report the results to the Director within 30 days of the end of the month during which the samples were taken.
- 40. The Licencee shall, for a period of at least two years following the commencement of operation of the sewage treatment plant under this Licence, once every three months, obtain samples of treated effluent from the final discharge point of the sewage treatment plant. The samples shall be preserved, analyzed and reported in accordance with the requirements of Clause 2 of this Licence, and shall be analyzed for:
 - a) conductivity;
 - b) total dissolved phosphorus;
 - c) total inorganic phosphorus;
 - d) nitrate-nitrite; and
 - e) total Kjeldahl nitrogen.
- 41. The Licencee shall install and maintain at least four monitoring wells along the perimeter of the sewage treatment plant in a manner that will allow sampling of groundwater from the saturated portion of the carbonate aquifer overlying the upper shales of the Winnipeg Formation. Each monitoring well shall:

Manitoba Conservation, Parks and Natural Areas Hecla Provincial Park Sewage Treatment Plant Licence No. 2733 RRR Page 13 of 14

- a) be drilled to the base of the carbonate rock bedrock;
- b) be screened for the saturated portion;
- c) have the annulus around the casing above the screened portion of the well properly grouted so as to prevent surface water or soil water from entering the well; and
- d) have the casing extending above ground protected with a steel lockable cover.
- 42. The Licencee shall, for each monitoring well sampling campaign,:
 - a) measure and record the static water level in each monitoring well prior to purging;
 - b) purge each monitoring well prior to sampling; and
 - c) field filter all samples.
- 43. The Licencee shall;
 - a) sample the monitoring wells twice annually, once in the spring and once in the fall;
 - b) analyze the samples for the constituents listed in Schedule "B" of this Licence for the two initial sampling events;
 - c) analyze the samples for the constituents listed in Schedule "C" of this Licence for subsequent sampling events; and
 - d) provide to the Director within eight weeks of the results being received following each sampling event a report that provides:
 - i) tabulated results for all sampling events to the date of the report; and
 - ii) an interpretation of the analytical results with regard to whether any significant change in the groundwater quality has occurred and, if so, whether this change in water quality may reflect seepage from the sewage treatment plant.
- 44. The Licencee shall submit to the Director for approval, within six months of the date of this Licence, an emergency response plan for the site of the Development in accordance with Clause 29 of *Manitoba Regulation* 77/2003.
- 45. The Licencee shall:
 - a) prepare "as constructed drawings" for the truck dumping station, sewage treatment plant and discharge pipeline and shall label the drawings "As Constructed Drawings"; and
 - b) provide to the Director, on or before June 29th, 2007, two sets of "as constructed drawings" of the Development.

Manitoba Conservation, Parks and Natural Areas Hecla Provincial Park Sewage Treatment Plant Licence No. 2733 RRR Page 14 of 14

REVIEW AND REVOCATION

- A. This Licence replaces Licence No. 890 R, which will be rescinded effective the date the Development is successfully placed into operation.
- B. Licence No. 2733 RR is hereby rescinded.
- C. 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.
- 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

FILE: 589.30

Schedule A
To Environment Act Licence No. 2733 RRR

Effluent	Total Ammonia
pН	(mg/L)
6.50	48.83
6.60	46.84
6.70	44.57
6.80	42.00
6.90	39.16
7.00	36.09
7.10	32.86
7.20	29.54
7.30	26.21
7.40	22.97
7.50	19.89
7.60	17.03
7.70	14.44
7.80	12.14
7.90	10.13
8.00	8.41
8.10	6.95
8.20	5.73
8.30	4.71
8.40	3.88
8.50	3.20
8.60	2.65
8.70	2.20
8.80	1.84
8.90	1.56
9.00	1.32

Schedule B
To Environment Act Licence No. 2733 RRR

Alkalinity
Ca
Mg
Na
K
Ch
SO ₄
Trace metals
Nutrients
DOC

Schedule C To Environment Act Licence No. 2733 RRR

Chloride
Nitrate+nitrite-N
Ammonia
Conductivity
Fecal Coliforms
Total Coliforms