



Conservation

Climate Change and Environmental Protection Division
Environmental Assessment and Licensing Branch
123 Main Street, Suite 160, Winnipeg, Manitoba R3C 1A5
T 204 945-8321 F 204 945-5229
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CLIENT FILE NO.: 5471.00

January 6, 2012

Ryan Kustra
Manitoba Hydro
PO Box 815 Stn. Main
Winnipeg MB R3C 2P4

Dear Mr. Kustra:

Enclosed is **Environment Act Licence No. 2988** dated January 6, 2012 issued in accordance with *The Environment Act* to **Manitoba Hydro** for the Development being the Pointe du Bois Spillway Replacement Project located on the Winnipeg River adjacent to the Pointe du Bois Generating Station. The Development involves the construction, operation and maintenance of dam and spillway facilities and related infrastructure associated with the Pointe du Bois Generating Station, in accordance with the Proposal dated June 18, 2010 and the Environmental Impact Statement (EIS) dated June, 2011.

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. A Notice of Alteration must be filed with the Director for approval prior to any alteration to the Development as licensed.

For further information on the administration and application of the Licence, please feel free to contact Bruce Webb, Environmental Engineer at 204-945-7021.

Pursuant to Section 27 of The Environment Act, this licensing 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: Don Labossiere, Director, Environmental Operations
Public Registries

NOTE: Confirmation of Receipt of this Licence No. 2988 (*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 January 20, 2012.

On behalf of Manitoba Hydro

Date

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

Licence No. / Licence n° 2988

Issue Date / Date de délivrance January 6, 2012

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 Section 11(1) / Conformément au Paragraphe 11(1)

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

MANITOBA HYDRO
"the Licencee"

for the Development being the Pointe du Bois Spillway Replacement Project located on the Winnipeg River adjacent to the Pointe du Bois Generating Station. The Development involves the construction, operation and maintenance of dam and spillway facilities and related infrastructure associated with the Pointe du Bois Generating Station, in accordance with the Proposal dated June 18, 2010 and the Environmental Impact Statement (EIS) dated June, 2011, both filed under The Environment Act, and subject to the following specifications, limits, terms and conditions:

DEFINITIONS

In this Licence:

"**affected area**" means a geographical area, excluding the property of the Development;

"**aggregate**" means any crushed stone or slag, crushed or uncrushed gravel, sand or mineral filler;

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

"**dangerous goods**" means any product, substance or organism designated in the regulations or conforming with the criteria set out in the regulations under *The Dangerous Goods Handling and Transportation Act*, and includes hazardous wastes;

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

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

"**opacity**" means the degree to which emissions reduce the transmission of light and obscure the view of an object in the background;

"**particulate matter**" means any finely divided liquid or solid matter other than water droplets;

"particulate residue" means that part or portion of an atmospheric emission which is deposited onto a surface;

"point source" means any point of emission from a Development where pollutants are ducted into the atmosphere;

"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; 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. The Licencee shall, upon the request of the Director and in addition to any of the limits, terms and conditions specified in this Licence:
 - a) sample, monitor, analyze 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, ambient quality, aquatic toxicity, leachate characteristics and discharge or emission rates, and for such duration and at such 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, 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 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, and each submission shall be clearly labelled with the Licence Number and Client File Number associated with this Licence.
3. The Licencee shall collect and dispose of all used oil products and other regulated hazardous wastes generated by the machinery used in the construction and operation of the Development in accordance with applicable Manitoba Conservation and legislation requirements.

4. The Licencee shall revegetate soil in areas of the Development exposed by construction with a mixture of native grasses or legumes. These areas shall be revegetated as quickly as possible following construction to prevent soil erosion and the establishment of noxious weeds.

SPECIFICATIONS, LIMITS, TERMS AND CONDITIONS

Respecting Construction

5. The Licencee shall contact the Environment Officer responsible for the administration of this Licence not less than two weeks prior to undertaking construction of the Development. The notification shall include the intended starting date of construction and the name of any contractor responsible for the construction.
6. The Licencee shall, within 60 days of the date of this licence, submit to the Director an emergency response contingency plan in accordance with the Canadian Centre for Occupational Health and Safety emergency planning guidelines. (This plan may be incorporated in the Environmental Protection Program required by Clause 52 of this Licence.)
7. The Licencee shall designate an employee, within 60 days of the date of this Licence, as the Licencee's Site Environmental Officer, whose job description will include assisting the Licencee in complying with the limits, terms and conditions in this Licence and assisting the Licencee to manage environmental issues at the Development. The name of the Site Environmental Officer shall be submitted in writing to the Director within 14 days of appointment.
8. The Licencee shall, prior to construction of the Development, obtain all permits and agreements as required by Manitoba Infrastructure and Transportation.
9. The Licencee shall, during construction of the Development, comply with the requirements of *The Heritage Resources Act*.
10. The Licencee shall not undertake activities related to the construction of the Development within the Backcountry Land Use Category of Whiteshell Provincial Park.
11. The Licencee shall, prior to undertaking construction of the Development, obtain a work permit from Manitoba Conservation for the cutting of timber, the disposal of cleared material and the grubbing of work areas.
12. The Licencee shall, during construction of the Development within Whiteshell Provincial Park, comply with the requirements of the Parks and Natural Areas Branch of Manitoba Conservation and Manitoba Infrastructure and Transportation with respect to time restrictions and signage on the hauling of materials on Provincial Road 313. In particular, restrictions will be specified by the Parks and Natural Areas Branch on the hauling of bulk materials or large objects during the period May 15 – October 15 of any year from noon on the day before a weekend or long weekend until 8:00 AM on the day after a weekend or long weekend. Exceptions may be granted by the Parks and Natural Areas Branch upon request for a small number of loads of key materials due to extenuating circumstances. In applying for an exception, the circumstances and particulars of the request shall

be provided, and the Licencee shall comply with any additional signage requirements needed to provide public safety.

13. The Licencee shall not undertake clearing activities associated with the Development between May 1 and August 1 of any year.
14. The Licencee shall dispose of non-reusable construction debris and solid waste from the construction and maintenance of the Development at a waste disposal ground operating under the authority of a permit issued under *Manitoba Regulation 150/91*, or any future amendment thereof, respecting *Waste Disposal Grounds* or a licence issued pursuant to *The Environment Act*.
15. The Licencee shall, during construction of the Development, dispose of all wastewater from on-site sanitary facilities in accordance with *Manitoba Regulation 83/2003*, or any future amendment thereof, respecting *Onsite Wastewater Management Systems*.
16. The Licencee shall not divert or use water from the Winnipeg River for construction purposes unless such activities are licensed under *The Water Rights Act*.
17. The Licencee shall, during construction of the Development, maintain water intakes for construction water supplies in compliance with the "Freshwater Intake End-of-Pipe Fish Screen Guideline" published by the federal Department of Fisheries and Oceans.
18. The Licencee shall, during construction, operation and maintenance of the Development, establish fuel storage areas in compliance with the requirements of *Manitoba Regulation 188/2001*, or any future amendment thereof, respecting *Storage and Handling of Petroleum Products and Allied Products*.
19. 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 Winnipeg River, and have an emergency spill kit for in-water use available on site during construction.
20. The Licencee shall, in the event of a release, spill, leak, or discharge of a pollutant or contaminant in an amount or concentration, or at a level or rate of release, that exceeds the limit that is expressly provided under this Act, another Act of the Legislature, or an Act of Parliament, or in a regulation, licence, permit, order, instruction, directive or other approval or authorization issued or made under one of those Acts, immediately report the release, spill, leak, or discharge by calling 204-944-4888. The report shall indicate the nature of the release, leak, or discharge, the time and estimated duration of the event and the reason for the release, spill, leak, or discharge.
21. The Licencee shall not, during construction, operation and maintenance of the Development, remove, destroy or disturb species pursuant to *Manitoba Regulation 25/98*, or any future amendment thereof, respecting *Threatened, Endangered and Extirpated Species*, or species listed in the federal *Species at Risk Act*.

22. The Licencee shall not, during construction or maintenance of the Development, disturb occupied migratory bird nests.
23. The Licencee shall, during construction of the Development, clean equipment to be used in water prior to moving the equipment to the site of the Development to prevent the movement of aquatic invasive species. Equipment shall be cleaned with high pressure hot water.
24. The Licencee shall not apply nutrients within 35 metres of wetlands or waterbodies, in accordance with the requirements of *Manitoba Regulation 62/2008*, or any future amendment thereof, respecting *Nutrient Management*.
25. The Licencee shall, during construction of the Development, adhere to the general recommendations contained in the Department guidelines titled *Manitoba Stream Crossing Guidelines for the Protection of Fish and Fish Habitat, 1996*.
26. The Licencee shall, during construction of the Development, live salvage fish in dewatered areas. A Live Fish Handling Permit is required from Manitoba Water Stewardship for fish salvage operations.
27. The Licencee shall not, during construction of the Development, undertake in-water construction activities between April 1 and June 30 of any year.
28. The Licencee shall, during construction of the Development, undertake blasting associated with construction, demolition and aggregate preparation activities in accordance with guidelines prepared by the federal Department of Fisheries and Oceans.
29. The Licencee shall provide containment for all vessels containing chemicals and in each area of the Development where the chemicals are stored, loaded, transferred, used or otherwise handled, in compliance with the National Fire Code of Canada (2005), or any future amendment thereof, such that any product leakage or spillage and any contaminated liquid generated is contained within the Development and contamination of groundwater and surface water is prevented.
30. The Licencee shall, in a manner approved by the Director, remove and dispose of all spilled dangerous goods.
31. The Licencee shall obtain the approval of the Director of the Parks and Natural Areas Branch of Manitoba Conservation for any use of pesticides within Whiteshell Provincial Park. Pesticide application shall comply with the requirements of *Manitoba Regulation 94/88R*, or any future amendment thereof, respecting *Pesticides*.
32. The Licencee shall, during construction and operation of the Development, post appropriate warning signage in accordance with Transport Canada requirements to advise recreational traffic of construction activity, the presence of structures and water conditions.
33. The Licencee shall, following construction of the Development, verify that terrestrial contamination of the environment has not occurred in work areas of the Development. Any areas of contamination shall be remediated to the satisfaction of the Environment Officer.

34. The Licencee shall, following construction of the Development, revegetate areas disturbed by the construction of the Development that were vegetated prior to construction. Revegetation shall not be required for areas to be used for ongoing access such as roads and parking areas. Revegetation shall be accomplished with native species typical of the area, and revegetation species shall be approved by the Parks and Natural Areas Branch. Approved revegetation species may be included in the Environmental Protection Program required by Clause 52 of this Licence.

Respecting Concrete Batch Plant Operation During Construction

35. The Licencee shall comply with the "Manitoba Heavy Construction Association Best Environmental and Safety Management Practice Redi-Mix Concrete Facilities" manual, © 2000, or future versions thereof.
36. The Licencee shall operate the concrete batch plant only at a location approved by the Director.
37. The Licencee shall not emit particulate matter from the concrete batch plant of the Development such that:
- a) particulate matter:
 - i) exceeds 0.23 grams per dry standard cubic metre calculated at 25 degrees Celsius and 760 millimetres of mercury, corrected to 12 percent carbon dioxide for processes involving combustion, from any point source of the concrete batch plant of the Development;
 - ii) exhibits a visible plume with an opacity of greater than 5 percent at any point beyond the property line of the Development; or
 - iii) results in the deposition of visible particulate residue at any time beyond the property line of the Development; or
 - b) opacity of any point source of the concrete batch plant of the Development equals or exceeds:
 - i) 20 percent as an average of any 24 consecutive opacity observations taken within 15 second intervals;
 - ii) 20 percent for more than 16 individual opacity observations within any one hour period; or
 - iii) 40 percent for any individual opacity observation.
38. The Licencee shall direct all air streams from the concrete batch plant, which contain a pollutant(s) of concern to the Director, to a pollution control device which has been designed for and demonstrated to be capable of reducing, altering, eliminating or otherwise treating the pollutant(s).
39. The Licencee shall submit for the Director's approval, within 90 days of the issuance of this Licence, a standard operating procedural manual and a maintenance schedule for each air emission pollution control device based on the manufacturer's specifications and recommendations.
40. The Licencee, upon receiving the Director's approval as required in Clause 39 of this Licence, shall not operate any process directing an emission to an air pollution control device for the concrete batch plant of the Development unless:
- a) the operating and maintenance measures and status of the device are in full compliance with the approved procedures and timetables;
 - b) all emissions from the process are directed to the fully operational air pollution control device;
 - c) all discharges of treated emissions from the air pollution control devices are immediately directed to a stack; and

- d) the emissions do not contain concentrations of pollutants which:
 - i) are in violation of any other applicable legal instrument including an Act, Regulation or by-law; or
 - ii) otherwise create a significant negative environmental or health impact in the affected area.
41. The Licencee shall maintain a log book of the most recent 24 month period to record any downtime of an air pollution control device due to either the breakdown or maintenance of that air pollution control device. The log book shall be kept at the Development and shall be available upon request for inspection by an Environment Officer. The log book shall record, at minimum, the following information:
 - a) identification of the air pollution control device and the process(es) it serves;
 - b) time/date of log entry;
 - c) nature of event;
 - d) duration of event;
 - e) the accumulated downtime of this air pollution control device for the events for each calendar year; and
 - f) signature of the Site Environmental Officer.
42. The Licencee shall handle, store and dispose of all pollutants collected by the air pollution control equipment in a manner suitable to their characterization as type of waste or dangerous good.
43. The Licencee, upon written request from the Director, shall provide a stack or stacks including all necessary sampling facilities for the sampling of air emissions at the concrete batch plant of the Development. The stack or stacks shall be provided:
 - a) at a location(s) and within a time frame satisfactory to the Director; and
 - b) to the specifications and in accordance with the most recent version of Manitoba Conservation Guideline, *Guideline for Stack Sampling Facilities*, unless otherwise approved by the Director.
44. The Licencee, upon a written request from the Director, shall submit a detailed plan which is acceptable to and approved by the Director, for the sampling and analysis of potential air pollutants from the concrete batch plant of the Development, released as stationary point and fugitive emissions, including any compounds determined by the Director. The plan shall identify the rationale for the sampling, the ways and means by which the sampling program will be implemented including any special measures or methods which would be necessitated by influencing factors such as unfavourable weather conditions, the need for large or additional sample volumes, the need for multiple sampling runs, the methods used for the sampling and the analysis for each compound, the detection level to be attained, a comprehensive QA/QC program, and other items as may be identified by the Director.
45. The Licencee shall perform all stack sampling in accordance with the most recent version of Manitoba Conservation Report No. 96-07, *Interim Stack Sampling Performance Protocol*, unless otherwise approved by the Director.
46. The Licencee shall arrange the scheduling of the sampling program submitted pursuant to Clause 44 of this Licence such that a representative of Manitoba Conservation is available to monitor and audit the implementation of the sampling program.

47. The Licencee shall complete the sampling of emissions according to the approved plan submitted pursuant to Clause 44 of this Licence, within a timeframe to be determined by the Director.
48. The Licencee shall submit a report, for the approval of the Director, of the completed sampling and analysis plan approved pursuant to Clause 44 of this Licence, within 60 days of the receipt of the analytical results of that sampling plan. The report shall contain at minimum:
- a) the raw data collected;
 - b) a discussion of the sampling and analytical portions of the program including any anomalies of sampling and analysis; and
 - c) a discussion of the significance of the data gathered with specific attention to:
 - i) the significance for potential acute and chronic impacts to health or environment from exposure to concentrations of the compounds detected;
 - ii) the need for risk assessment of the impact of emissions;
 - iii) the need for the establishment of ambient air monitoring stations;
 - iv) the need for dispersion modeling of emissions;
 - v) results and conclusions of the QA/QC program; and
 - vi) other issues as may be determined by the Director.
49. The Licencee, upon the written request of and in a timeframe stipulated by the Director, shall comply with any air emission or ambient air quality criteria specified by the Director for any pollutant of concern to the Director which has been identified pursuant to Clause 1, 37, 38 or 48 of this Licence.
50. The Licencee shall not release wash water from settling ponds associated with the concrete batch plant of the Development that does not comply with Manitoba *Water Quality Standards, Objectives, and Guidelines* (dated November 28, 2011 or future versions thereof.)

Respecting Operation

51. The Licencee shall, during operation of the Development, regulate Pointe du Bois Generating Station outer forebay levels through the generating station and the spillways of the Development to maintain a target full supply level of 299.1 metres above sea level insofar as possible.

Respecting Monitoring and Reporting

52. The Licencee shall, prior to commencement of construction activities for the Development, submit to the Director for approval, an Environmental Protection Program (EPP). If appropriate, separate plans can be submitted for the construction and operation phases, as well as for different components of the project, if prior approval by the Director is obtained. The EPP shall describe the approach to be used by the Licencee to monitor environmental conditions during the construction and operation of the components of the Development to ensure that mitigative measures are applied systematically, and in a manner consistent with the commitments made in the Environmental Impact Statement (EIS). Specifically, the EPP shall:
- a) describe the protocol for reporting on monitoring and compliance for the construction and operational phases of the project; and
 - b) contain the project-specific environmental protection measures referenced in the EIS.

53. The Licencee shall, within six months of the date of issuance of this Licence, prepare for the approval of the Director, a report on monitoring programs to be undertaken in connection with the EPP. The report shall:
- a) provide a description of the proposed activities including the use of traditional knowledge for monitoring effects to the physical, aquatic, terrestrial, and socio-economic environments (including the evolving baseline conditions) arising from the site preparation, construction, and operation of the Development;
 - b) describe the equipment to be used, the parameters to be measured, the methodology and frequency of measurement, references to established thresholds and sustainability indicators, where appropriate, and the protocol for reporting the results of monitoring of the environmental conditions affected by the Development;
 - c) describe how and when adaptive management plans based on the outcomes of project monitoring will be developed and implemented; and
 - d) describe programs to:
 - i) protect vulnerable, threatened or endangered species or ecosystems; threatened or sensitive habitats; and protected areas;
 - ii) monitor water quality upstream and downstream of the Development during and after construction;
 - iii) monitor and report within seven days of discovery on the presence of aquatic invasive species for the duration of the water quality monitoring program; and
 - iv) assess the accuracy of predicted project related impacts within the designated study area.
54. The Licencee shall provide data collected in the course of monitoring activities pursuant to Clause 53 of this Licence, to the Director and others as requested.
55. The Licencee shall report annually to the Director on the results of monitoring programs in connection with the EPP, as approved pursuant to Clauses 52 and 53 of this Licence.

REVIEW AND REVOCATION

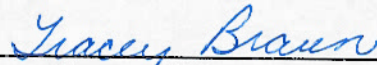
- A. If in the opinion of the Director, the Licencee has exceeded or is exceeding or has or is failing to meet the specifications, limits, terms, or conditions set out in this Licence, the Director may, temporarily or permanently, revoke this Licence.
- B. If in the opinion of the Director, new evidence warrants a change in the specifications, limits, terms, or conditions of this Licence, the Director may require the Licencee to file a new proposal pursuant to Section 11 of The Environment Act.

Manitoba Hydro - Pointe du Bois Spillway

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- C. If construction of the Development has not commenced within three years of the date of this Licence, the Licence is revoked.



Tracey Braun, M.Sc.
Director
Environment Act

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