

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/eal

FAXED

CLIENT FILE NO.: 5402.00

July 22, 2009

Barry MacBride
City of Winnipeg – Solid Waste Services Division
109-1199 Pacific Avenue
Winnipeg MB R5A 1A2

Dear Mr. MacBride:

Enclosed is **Environment Act Licence No. 2890** dated July 22, 2009 issued in accordance with The Environment Act to the **City of Winnipeg** for the operation of the Development being a landfill gas collection and flaring operation, located at the Brady Road Landfill at 1901 Brady Road in Winnipeg, in accordance with the Proposal dated March 16, 2009 and received March 18, 2009.

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 Ryan Coulter, Environmental Engineer at (204) 945-7023.

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,

Jacey Sauce
Tracey Braun, M. Sc.
Director
Environment Act

Enc.

Don Labossiere, Director, Environmental Operations
Public Registries

NOTE: Confirmation of Receipt of this Licence No. 2890 (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 (letter only) to the Department by Aug 5, 2009.

On behalf of the City of Winnipeg	Date
on behalf of the City of Winnipeg	Date

THE ENVIRONMENT ACT LOI SUR L'ENVIRONNEMENT



LICENCE

Licence No. / Licence n°	2890	_
Issue Date / Date de délivrance	July 22, 2009	

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 10(1) / Conformément au Paragraphe 10(1)

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

City of Winnipeg - Water and Waste Department; "the Licencee"

for the operation of the Development being a landfill gas collection and flaring operation, located at the Brady Road Landfill at 1901 Brady Road in Winnipeg, in accordance with the Proposal dated March 16, 2009 and received March 18, 2009, and subject to the following specifications, limits, terms and conditions:

DEFINITIONS

In this Licence,

"accredited laboratory" means facilities accredited by the Standard Council of Canada (SCC), or facilities accredited by another accrediting agency recognized by Manitoba Conservation to be equivalent to the SCC, or facilities which can demonstrate to Manitoba Conservation, upon request, that quality assurance/quality control (QA/QC) procedures are in place equivalent to accreditation based on the Canadian Standard Can/CSA-Z753, extension of the international standard ISO 9000, Guide 25:

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

"approved" means approved by the Director in writing;

"condensate" means liquid created by condensing and removing gases from landfill gas;

"contractor" means a person who provides a service such as supervising or taking part in the construction of a landfill gas collection system;

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

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

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

"landfill gas" means a mixture of gases generated by the microbial decomposition and chemical reactions between wastes in a landfill;

"noise nuisance" means a continuous or repeated noise, 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 the members of the public; if the noise:
 - i) 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, from 5 different persons falling within clauses a), b), or c), who do not live in the same household; or
 - ii) 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 unwanted sound 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; and
 - iii) is deemed by the Director, based on available information, to be valid;

"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 the members of the public; if the odour, smell or aroma:
 - i) 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, from 5 different persons falling within clauses a), b), or c), who do not live in the same household; or
 - ii) 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 unwanted 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; and
 - iii) is deemed by the Director, based on available information, to be valid;

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

[&]quot;particulate matter" means any finely divided liquid or solid matter other than water droplets;

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

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

"OA/OC" means quality assurance/quality control;

"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;

"wastewater" means any liquid containing a pollutant as defined in The Environment Act, associated with or resulting from the Development which is discharged into the environment.

GENERAL SPECIFICATIONS

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 implement a high standard of equipment maintenance and good housekeeping and operational practices with respect to the Development, at all times.
- 2. The Licencee shall reduce the production and dissemination of wastes by initiating and maintaining waste reduction and waste recycling programs.
- 3. The Licencee shall, upon the request of the Director and in addition to any of the limits, terms or conditions specified in this Licence:
 - 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 pollutants from the said 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.
- 4. 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

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- and Wastewater or in accordance with equivalent preservation and analytical methodologies approved by the Director;
- b) carry out all sampling of, and preservation and analyses on, soil and air samples in accordance with methodologies approved by the Director;
- c) ensure that all analytical determinations are undertaken by an accredited laboratory; and
- d) report the results to the Director within 60 days of the samples being taken, or within another timeframe as specified by the Director.
- 5. The Licencee shall carry out any remedial measures, modifications, or alterations, as deemed necessary by the Director, in respect to matters authorized under this Licence.
- 6. The Licencee shall provide to the Director, upon request, all information required under this Licence, in writing and in such form and content (including number of copies), as may be specified by the Director.
- 7. The Licencee shall designate an employee, within 60 days of the date of issuance of this Licence, as the Licencee's Environmental Coordinator, whose job description will include assisting the Licencee in complying with the limits, terms and conditions in this Licence and assisting Senior Management of the Licencee to manage environmental issues at the Development. The name of the Environmental Coordinator shall be submitted in writing to the Director within 14 days of appointment.
- 8. The Licencee shall notify the Director within 14 days of selecting a contactor for the Development. This notification shall include the name of the contractor, contact information, and the scheduled construction start date.

LIMITS, TERMS, AND CONDITIONS

Respecting Landfill Gas Collection System Design and Construction

- 9. The Licencee shall, at least 60 days prior to construction, provide to the Director complete design and construction details for the proposed landfill gas collection system. The design and construction details shall include at a minimum:
 - a) number and location of landfill gas extraction wells;
 - b) configuration of landfill gas extraction wells;
 - c) design and construction details of landfill gas extraction wells;
 - d) location of condensate traps;
 - e) description of pipe network; and
 - f) location, design, and construction details of blower and flare station.
- 10. The Licencee shall obtain approval from the Director prior to commencing construction of the proposed landfill gas collection system.

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- 11. The Licencee shall submit for the Director's approval, within 60 days of the selection of a contractor for this Development, a monitoring plan including a description of sampling methodology, frequency, and analysis techniques that includes, at a minimum, the following items:
 - a) landfill gas composition and temperature;
 - b) flare operating time(s);
 - c) blower operating time(s);
 - d) landfill gas flow rate;
 - e) flare emissions;
 - f) condensate composition; and
 - g) greenhouse gas emissions.
- 12. The Licencee shall report to the Director, by June 1 of each year and beginning in 2010, the results of the monitoring program required by Clause 11 of this Licence. This report shall include an evaluation of the landfill gas collection system's impact on greenhouse gas emissions at the Development.

Respecting Operating Restrictions and Prohibitions

- 13. The Licencee shall not combust landfill gas at any location other than the enclosed landfill gas flare.
- 14. The Licencee shall combust only landfill gas in the enclosed landfill gas flare.

Respecting Air Emissions – Limits

- 15. The Licencee shall not emit particulate matter from 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 from any point source 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 from any point source of the Development equals or exceeds:
 - i) 20 percent as the average of any 24 consecutive opacity observations taken at 15 second intervals;
 - ii) 20 percent for more than 16 individual opacity observations within any 1 hour period; or
 - iii) 40 percent for any individual opacity observation.
- 16. The Licencee shall not cause or permit a noise nuisance to be created as a result of the operation or alteration of the Development, and shall take such steps as the Director may require to eliminate or mitigate a noise nuisance.

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- 17. The Licencee shall not cause or permit an odour nuisance to be created as a result of the operation or alteration of the Development, and shall take such steps as the Director may require to eliminate or mitigate an odour nuisance.
- 18. 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 Clauses 3 or 15 of this Licence.

Respecting Condensate

19. The Licencee shall remove and collect condensate from the landfill gas collection system and shall dispose of the condensate as landfill leachate.

Respecting Emergency Response Planning

20. The Licencee shall, within 60 days of the selection of a contractor for this Development, submit an emergency response contingency plan in accordance with the Manitoba Industrial Accidents Council (MIAC) *Industrial Emergency Response Planning Guide*.

Respecting Brady Road Landfill

21. The Licencee shall submit, prior to October 1, 2010, an Environment Act Proposal for a Licence to continue operating the Brady Road Landfill.

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 10 of The Environment Act.

Tracey Braun M.Sc.

Director

Environment Act

File No.:5402.00