

# Environment Act Licence Loi sur l'environnement Licence

Manitoba  
Conservation  
Conservation  
Manitoba



Licence No./Licence n° 2177 E RR

Issue Date/Date de délivrance June 28, 1996

Revised: June 28, 2000  
April 24, 2002

**IN ACCORDANCE WITH THE MANITOBA ENVIRONMENT ACT (C.C.S.M. c. E125)  
THIS LICENCE IS ISSUED PURSUANT TO SECTION 11(1) TO:**

**BFI CANADA INC.; "the Licencee"**

for the construction and operation of the Development being an Integrated Waste Management Facility, to be located on Section 14 and the north half of Section 11, Township 12, Range 2 EPM, in the Rural Municipality of Rosser and in accordance with the Proposal and supporting documents filed under The Environment Act on July 24, 1994, the Environmental Impact Assessment dated June, 1995, the Environmental Impact Assessment Addendum dated October, 1995, the Revised Landfill Design Drawings submitted March 5, 1996, and subject to the following specifications, limits, terms and conditions:

**DEFINITIONS**

In this Licence;

"**access road**" means a road that leads to the Development from a Provincial Trunk Highway, Provincial Road, or a municipal road;

"**active area**" means a designated trench or berm confined area of a waste disposal ground in which solid wastes are deposited;

"**approved**" means approved in writing;

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

**"compliance boundary"** means the planer surface that circumscribes the Development, extends vertically downward from the land surface, and constitutes the place at which the parameters of the background water quality as specified in a Licence issued pursuant to The Environment Act are not to be exceeded;

**"cover material"** means inorganic soil, free of refuse, trash and vegetation, or other materials as approved by the Director, that is used to cover compacted solid waste;

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

**"environmental accident"** means a release, leakage or spillage of a contaminant into the environment otherwise than in accordance with the provisions of the Dangerous Goods Handling And Transportation Act, its Licences, Orders and Regulations or The Environment Act, its Licences, Orders and Regulations, or an incident which may or is likely to result in such a release, leakage or spillage, which, having regard to the environment in which the release, leakage or spillage takes place or may take place, and to the nature of the contaminant, creates or may create a hazard to human life or health, to other living organisms, or to the physical environment;

**"groundwater"** means that part of the subsurface water that is in the saturated zone;

**"hazardous waste"** means any substance or group of substances that meets the criteria of a hazardous waste as determined by Manitoba Regulation 282/87, as amended from time to time;

**"leachate"** means liquid that has percolated through waste or other permeable matter, and contains soluble, dissolved or suspended materials derived from the waste;

**"liquid waste"** means sewage, sewage effluent and sludge from septic tanks, holding tanks and municipal sewage treatment systems and has a slump of more than 150 mm using the slump test method (slump test, C.S.A. Standards Test Method A23.1-5C);

**"liquid industrial waste"** means waste generated by industrial processes that has a slump of more than 150 mm using the slump test method (slump test, C.S.A. Standards Test Method A23-5C);

**"piezometric surface"** means the surface of the groundwater defined by the level to which groundwater will rise in a well completed into a confined aquifer;

**"pollutant"** has the same meaning as in The Environment Act;

**"surface runoff"** means any overland flow of liquid off the Development; and

**"waste"** means solid residential, commercial and light institutional wastes such as general household waste, office waste, landscape waste, uncontaminated construction or demolition waste, uncontaminated packaging materials and food and grain wastes.

### **GENERAL TERMS AND CONDITIONS**

This Section of the Licence contains terms and conditions 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 participate on a Community Liaison Committee to be established by the Director. The Committee will include, but not be limited to, representatives from the Rural Municipality of Rosser, adjacent Municipalities, and

Manitoba Conservation. The Committee will commence operation within six months of the date of this Licence, and will meet at least biannually for the first five years of the Development operation. The Director will assign an official from Manitoba Conservation to initially act as Committee Chair.

2. The Licencee shall deposit all waste, other than material intended for recycling, in an active area within the Development.
3. The Licencee shall, within one year of the date of this Licence, submit a plan to the Director for approval for:
  - a) the construction of a Materials Recovery Facility; and
  - b) future recovery of landfill gas;at the Development.
4. The Licencee shall ensure that the Materials Recovery Facility is in full operation no later than December 31, 1999.
5. The Licencee shall take all necessary measures to preserve the native prairie grass currently present on the site of the proposed Development.
6. The Licencee shall, in accordance with Section 14 of The Environment Act, give notice to, and receive approval from the Director for any proposed alteration to the Development, including any future plan for leachate recirculation at the Development.
7. Unless otherwise required by this Licence, all sampling and analysis shall be conducted using current standards or accredited methods, and as approved by the Director.

8. The Licencee shall ensure that all information required by this Licence is made available to the public, the Rural Municipality of West St. Paul, and the Rural Municipality of Rosser.
9. The Licencee shall, in addition to the requirements of this Licence, carry out all aspects of the operation of the Development in compliance with the current Agreement between Browning-Ferris Industries Ltd. and the Rural Municipality of Rosser.
10. The Licencee shall initiate and offer an educational program to its industrial, commercial and institutional clients to identify means to reduce waste generation.
11. The Licencee shall submit the MOBIUS™ Curriculum: Understanding the Waste Cycle to Manitoba Education for review and assessment as to its appropriateness for use in conjunction with the Manitoba curriculum.

#### **SPECIFICATIONS, LIMITS, TERMS AND CONDITIONS**

12. Notwithstanding any of the Clauses of this Licence, the Licencee shall, upon the request of the Director:
  - a) sample, monitor, analyze, and/or investigate specific areas of concern regarding any segment, component or aspect of operation of the Development;
  - b) determine the environmental impact associated with the release of any pollutants from the Development; and
  - c) provide the Director, within such time as may be specified, with such reports, drawings, specifications, analytical data, bioassay data, flow rate measurements, corrective actions and such other information as may from time to time be requested.

**Construction**

13. The Licencee shall, unless otherwise required by this Licence or the Director, construct the Landfill component of the Development in accordance with the specifications outlined in the Report On "Design & Development Of Proposed Waste Management Facility R.M. Of Rosser, Manitoba" by Golder Associates dated June, 1995 and the Revised Landfill Drawings No.'s 3A, 6A, 7A dated March, 1996.
14. The Licencee shall, within 60 days of the date of this Licence, submit for the approval of the Director, an engineering construction plan for the Landfill component of the Development.
15. The Licencee shall install the 60 mil High Density Polyethelyne geomembrane and the secondary Geosynthetic Clay Liner in accordance with the current version of ASAE Standard EP 340.2 for the installation of Flexible Membrane Linings, or an alternate equivalent standard approved by the Director.
16. The Licencee shall ensure that the integrity of all field seams of the High Density Polyethelyne and Geosynthetic Clay Liner are tested by the air lance or ultrasonic pulse echo test methods in accordance with the current version of ASTM Standard D-4437, or an alternate equivalent standard approved by the Director.
17. The Licencee shall ensure that the recompacted clay liner component has a hydraulic conductivity of  $5 \times 10^{-8}$  cm/sec or less.
18. The Licencee shall, to facilitate inspection of the Development during construction, provide such access, as the Director deems necessary, to the assigned Environment Officer throughout the duration of construction of the Development.

19. The Licencee shall submit a report, for approval by the Director prior to operation of the Development, on the High Density Polyethylene, Geosynthetic Clay Liner and recompacted clay liner installation and seam testing conducted, pursuant to Clauses 15, 16 and 17 of this Licence.
20. The Licencee shall ensure that the Stormwater Retention Ponds are designed and constructed to contain runoff from the Development on the basis of a 1 in 100 year rainfall event.

#### **Operation and Maintenance**

21. The Licencee shall, unless otherwise required by this Licence or the Director, operate and maintain the Development in accordance with the information submitted in The Environment Act Proposal, dated July 29, 1994, the Environmental Impact Assessment, dated June, 1995 and the Environmental Impact Assessment Addendum, dated October, 1995.
22. The Licencee shall ensure that, as a result of the operation of the Development, the concentration values of the parameters listed in Table 1, attached to this Licence, do not exceed background levels in groundwater at the compliance boundary.
23. Subject to Clause 37 of this Licence, the Licencee shall accept any wastes generated within the Province of Manitoba for handling, treatment, or disposal at the Development.
24. The Licencee shall not accept any waste generated out of the Province of Manitoba without the approval of the Director and the Rural Municipality of Rosser in consultation with the Citizen Liaison Committee and the Rural Municipality of West St. Paul.

25. The Licencee shall ensure that appropriate signage is posted at the entrance to the Development indicating:
  - a) the hours and days of operation;
  - b) the types of waste not accepted; and
  - c) telephone numbers to call in the event of an emergency.
  
26. The Licencee shall ensure that:
  - a) an attendant is on duty at all times during hours of operation;
  - b) gates are provided for all access locations to the site; and
  - c) the gates are kept locked when an attendant is not on duty or the Development is closed.
  
27. The Licencee shall ensure that, within 24 months of berm construction, the berms are landscaped. The landscaping design shall include, but not be limited to, planting of trees and shrubbery and include input from the Community Liaison Committee.
  
28. The Licencee shall ensure that all solid waste is covered with cover material at the end of each day of operation.
  
29. The Licencee shall ensure that bulky metallic wastes are:
  - a) stored at a designated location above grade within the Development; and
  - b) stored for a period not exceeding one year.
  
30. The Licencee shall ensure that:
  - a) recycling activities are carried out in a location separate from the active area(s);
  - b) appropriate containers are provided for all materials being recycled; and

- c) appropriate signs are posted indicating which materials will be accepted for recycling.
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- 31. The Licencee shall, within sixty days of the date of this Licence, file a management plan, and receive approval of the Director, prior to operation of the Development, for the collection, storage and treatment of leachate collected from the Development.
  - 32. The Licencee shall manage leachate in accordance with the management plan approved by the Director, pursuant to Clause 31 of this Licence.
  - 33. The Licencee shall ensure that all liquids collected in drain sumps at the Development are collected and managed at the Development, in a manner approved by the Director, or at an alternate off-site licenced facility approved by the Director.
  - 34. The Licencee shall ensure that all washwater from the truck wheel wash area is collected and treated at either the Development, in a manner approved by the Director, or at an alternate off-site licenced facility approved by the Director.
  - 35. The Licencee shall ensure that all surface runoff from the Development is collected and contained in the Stormwater Retention Ponds.
  - 36. The Licencee shall test the quality of the liquid in the Stormwater Retention Ponds and receive approval of the assigned Environment Officer prior to release or use of the liquid.
  - 37. Unless otherwise approved by the Director, the Licencee shall not receive the following at the Development:
    - a) biomedical waste;

- b) hazardous waste;
  - c) liquid waste;
  - d) liquid industrial waste;
  - e) outdated drugs or cytotoxic waste;
  - f) PCB's or PCB contaminated material;
  - g) radioactive waste or materials;
  - h) unbagged asbestos; or
  - i) white goods containing chlorofluocarbons.
38. The Licencee shall ensure that any soils received at the Development which contain petroleum contamination comply with Manitoba Environment Guideline 96-05 for "Treatment and Disposal of Petroleum-Contaminated Soil (June 1996, Revised May 1998)."
39. Notwithstanding Clause 37 of this Licence, household hazardous waste collected or received by the Licencee, shall be allowed in a designated area at the Development prior to final treatment or disposal.
40. The Licencee shall ensure that:
- a) all vehicle traffic approaches to the facility can be accessed safely by all vehicles entering and exiting the facility, and that all necessary safety measures are taken to ensure the safe passage of through traffic on PTH #7;
  - b) an agreement with Manitoba Highways is put in place, respecting the development and maintenance of access and egress lanes from the Development, as well as, any traffic control signage or devices that may be required; the agreement may include arrangements respecting the use of the Development weigh scales as an alternate to the Manitoba Highways scale;
  - c) access roads from Highway #7 to the site are paved with asphalt or concrete to control dust;

- d) an on site dust control program at the Development is implemented; and
  - e) devices are installed and operated, including bumps and wheel washers, to reduce mud adherence to vehicles departing the Development.
41. The Licencee, in consultation with Transport Canada, shall review and respond to the report on bird-aircraft interaction currently being prepared by LGL Consultants Ltd. Any relevant matters, including appropriate mitigation plans, shall be incorporated as amendments to this Licence as the Director deems necessary.

#### **Monitoring and Reporting**

42. The Licencee shall develop a monitoring program, to address monitoring of air, soil, groundwater, piezometric level, surface water quality, leachate buildup and landfill gas generation. The program shall address, but not be limited to:
- a) obtaining background information on air, surface and groundwater quality prior to operation of the Development;
  - b) ongoing monitoring during Development operation;
  - c) the number of monitoring sites/wells including private wells down gradient from the Development;
  - d) the frequency of monitoring; and
  - e) the parameters to be monitored.
43. The Licencee shall submit the monitoring program developed pursuant to Clause 42 of this Licence, to the Director for approval within 60 days of the date of this Licence.
44. The Licencee shall develop an action plan to be implemented in the event that the monitoring program identifies any pollutant in air, soil, surface or groundwater, as a result of the operation of the Development, in excess of background levels. The

plan shall be submitted to the Director for approval within 60 days of the date of this Licence.

45. The Licencee shall implement and maintain the monitoring program and action plan as approved by the Director, pursuant to Clauses 43 and 44 of this Licence.
46. The Licencee shall immediately report all environmental accidents at the facility in accordance with Section 28 of The Dangerous Goods Handling And Transportation Act and regulations thereunder.
47. The Licencee shall, on or before the 15th day of March of the year following that which the report addresses, submit an annual report with respect to all monitoring activities at the Development conducted pursuant to this Licence during the previous calendar year. The format and content of the report shall be approved by the Director. The report shall be filed with Manitoba Conservation, adjacent municipal governments, and the Community Liaison Committee.

#### **Financial Assurance/Insurance**

48. The Licencee shall, within 60 days of the date of this Licence, file an irrevocable letter of credit with the Director in the sum of \$100,000. The letter of credit shall be replaced annually with the Director with a new letter of credit adding an incremental \$100,000 per year until a maximum aggregate value of \$1,000,000 is reached.
49. The Licencee shall, within 60 days of the date of this Licence, file verification with the Director, of the Licencee accruals for closure and post closure care and maintenance of the Development, in the form of an insurance policy in the amount of \$1,000,000 payable to the Director's use in case of any default by the Licencee.

50. The Licencee shall purchase and maintain:

- a) Comprehensive General Liability Insurance with a minimum limit of \$5.0 million per occurrence providing coverage for the premises and all operations of the Licencee, including completed operations. The terms and conditions of coverage shall be satisfactory to the Director, and without limitations shall include coverage for bodily injury (including death), personal injury and accidental property damage, blanket contractual broad form property damage, and non-owned automobile coverages;
- b) Automobile Liability Insurance for all owned and non-owned licenced vehicles used in connection with the operation of the Development and which provides coverage against liability arising from third party bodily injury or property damage for a minimum of \$5.0 million per occurrence with terms and conditions satisfactory to the Director. If the automobile liability policy excludes coverage for sudden and accidental pollution, this coverage shall be provided under the Environmental Impairment Liability Policy or the Comprehensive General Liability Policy; and
- c) Environmental Impairment Liability Insurance providing coverage for the Licencee's On and Off-site operations associated with the Development. The minimum limits shall be \$5.0 million per occurrence or claim and shall include, without limitation, coverage for on-site and off-site clean up, gradual pollution and sudden and accidental pollution incidents. Terms and conditions of coverage shall be satisfactory to the Director. Environmental impairment resulting from the loading and unloading of licenced vehicles shall be covered under the Environmental Impairment Liability Policy or under the Comprehensive General Liability Policy on a sudden and accidental basis; or via a specific endorsement on the automobile liability policy. The Environmental Impairment Liability Insurance shall be maintained for a minimum period of five years after Development closure.

**Contingency/Emergency Response Plan**

51. The Licencee shall, 90 days prior to commencing operation of the Development, submit for the approval of the Director, a contingency plan relating to emergency planning and response at the Development. The contingency plan shall be developed in accordance with the Guidelines attached as Appendix A to this Licence, and shall include input from relevant municipal, provincial and federal agencies.

**Closure and Post Closure**

52. The Licencee shall submit, within one year of the date of issuance of this Licence, for the approval of the Director, a Preliminary Closure and Post Closure Plan for the Development. The Plan shall include, but not be limited to, information with respect to:
- a) final cover design and maintenance;
  - b) maintenance of leachate detection, collection and treatment;
  - c) groundwater monitoring;
  - d) landfill gas monitoring, collection and treatment; and
  - e) financial assurance required to implement the Plan.
53. Within one year prior to imminent closure of the Development, the Licencee shall submit, for the approval of the Director, a formal detailed Closure and Post Closure Plan for the Development.
54. The Licencee shall implement and maintain the approved Closure and Post Closure Plan.

**REVOCATION**

- A. Licence No. 2177 E R is hereby rescinded.
- B. 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.
- C. If the Licencee has not commenced construction within three years of the date of this Licence, this Licence is revoked.
- 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.
- E. The Financial Assurance/Insurance Requirements of this Licence shall be reviewed, affirmed or amended by the Director at five year intervals.



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**Oscar Lathlin**  
**Minister**  
**Environment Act**

**Client File No.: 3851.00**

**APPENDIX A  
TO ENVIRONMENT ACT LICENCE NO. 2177 E RR**

**CONTINGENCY PLAN GUIDELINE**

**1. GENERAL POLICY STATEMENT**

Provide a general statement on the company's policy as they relate to emergency planning and the way in which the contingency plan addresses these policies.

**2. HAZARD IDENTIFICATION**

Describe the types of situations this plan will address. (Hazardous materials releases, fire, severe weather, power outages, etc.)

**3. COMPANY EMERGENCY PERSONNEL LIST**

List the company personnel who are assigned specific functions in the case of an emergency. Include job titles, home and office phone numbers, and a description of the person's emergency response duties.

**4. OUTSIDE CONTACTS**

List any agencies or individuals outside the company who may have to be contacted in the case of an emergency. Include 24 hour numbers and a description of the agency's function in an emergency. Typical listings in this section would include local fire and police departments, local ambulance and/or hospital, provincial or federal environmental agencies, contractors and suppliers and any other agency that may be of assistance in responding to and mitigating an emergency situation.

**5. EVACUATION PLAN**

Describe how employees would be evacuated from various parts of the operation, including alarm or warning procedures, assembly points, rescue operations. This section should address procedures for determining how many employees are in a work area and how those employees can be accounted for during an evacuation. Evacuation co-ordinators for each area should also be identified.

**6. EMERGENCY RESPONSE PROCEDURES**

For each of the hazard types identified in Section 2, an outline of the steps to be taken to contain, control and correct the situation should be prepared. The outline should identify who is responsible for initiating the action and some brief statements that can be used to determine what initial actions are required (eg. methods for containing and recovering a petroleum spill).

**7. EQUIPMENT LISTING**

List any equipment and supplies available on or off site which may be useful during response to an emergency. This might include spill absorbents, monitoring equipment, communication gear, patching kits, etc. For each item, identify where they are stored and how they can be mobilized.

8. **MAPS/DRAWINGS**

Provide site maps, building plans and any other material which may be required during an emergency to identify evacuation routes, hazardous material storage areas, and any other pertinent site information.

9. **HAZARDOUS MATERIALS LIST**

Provide a complete list of materials stored or used on site which may present a hazard to the environment or public health or safety, if they are involved in a release or impacted by a fire. Where possible, describe the type of containment used, usual volumes on site and where they are stored.

**GENERAL COMMENTS**

A contingency plan should be a quick reference to be used as an information source either for pre-planning or during an emergency. The sections of the plan should be written in point form in clear, concise wording with clear headings and a comprehensive table of contents. Since some of the information in the plan will change periodically, it is important that the plan be reviewed and updated on a regular basis. A current distribution list for plan copies should be kept with the original. The contingency plan should not be used as a "how-to" manual for responding to an accident. This should be addressed in the company training and pre-planning procedures.

**TABLE 1**  
**TO ENVIRONMENT ACT LICENCE NO. 2177 E RR**  
**BACKGROUND WATER QUALITY CHEMICAL**  
**AND MICROBIOLOGICAL PARAMETERS**

Parameter	Abbreviation	Notes
Alkalinity-Bicarbonate	HCO <sub>3</sub>	
Alkalinity-Carbonate	CO <sub>3</sub>	
Alkalinity-Hydroxide	OH	
Alkalinity	CACO <sub>3</sub> -T	Total
Ammonia	NH <sub>3</sub> -NN/MR	
Arsenic	AS-T	Total
Barium		Total
Beryllium		Total
Benzene	BTEX-B	
Cadmium	CD-T	Total
Calcium	CA	
Chloride	CL/HR	Total
Chromium	CR-T	Total
Copper	CU-E	Total
Cyanide	CN-T	Total
Diazinon	DIA	
Ethylbenzene	BTEX-F	Free
Hardness		As CaCO <sub>3</sub>
Iron	FE-T	Total
Lead	PB-T	Total
Magnesium	MG-T	
Manganese	MN-T	Total
Mercury		Total
Nickel	NI-T	Total
Nitrate-Nitrite-Nitrogen	NO <sub>3</sub> NO <sub>2</sub> N	
pH		Units
Phosphorous	P-T/MR	Total
Potassium	K-E	
Residue	FR	Filterable
Residue	NFR	Non-filterable
Residue	TR	Total
Selenium		Total
Silver		Total
Sodium	NA-T	Total
Specific Conductivity		
Sulphate	SO <sub>4</sub> /HR	
Toluene	BTEX-T	
Total Kjeldhal Nitrogen	TKN	
Turbidity	NTU	Nephelometric Turbidity Units
Vinyl Chloride		
Xylene	BTEX-X	Total
Zinc	ZN-T	Total
2, 4-D		
Coliforms		Fecal & Total