

**Licence No.: 2274 S2 RR**

**Licence Issued: November 4, 1998**

**Licence Revised: November 27, 2000**

**Licence Revised: April 12, 2001**

**IN ACCORDANCE WITH THE MANITOBA ENVIRONMENT ACT (C.C.S.M. c. E125)  
THIS LICENCE IS ISSUED PURSUANT TO SECTIONS 13(1) AND 14(2) TO:**

**THE RURAL MUNICIPALITY OF ST. CLEMENTS; "the Licencee"**

### **STAGE 2 LICENCE**

for the operation of the Development being a Class 1 Waste Disposal Ground located in the East half of Section 29-15-7E of the Rural Municipality of St. Clements, and bordered on the East by the East boundary of Section 29-15-7E; on the North by a line parallel to, and 50 metres South of the North boundary of Section 29-15-7E; on the West by a line parallel to, and 600 metres West of the East boundary of Section 29-15-7E and on the South by a line parallel to, and 1,050 metres South of the North boundary of Section 29-15-7E, in accordance with the Proposal filed under The Environment Act on March 21, 1996 and Notice of Alteration of Proposal filed on June 22, 1998, and subject to the following specifications, limits, terms and conditions:

### **DEFINITIONS**

In this Licence,

**"access roads"** mean the roads that are to be used by commercial vehicles transporting wastes to the St. Clements Waste Disposal Ground for disposal;

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

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

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

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

**"authorized personnel"** means persons, companies or firms authorized by the Licencee to have access to the waste disposal ground;

**"background water quality"** means the quality of water in the uppermost aquifer with regards to the chemical and microbiological parameters specified in a Licence issued pursuant to The Environment Act by the Director;

**"body of water"** means any body of flowing or standing water whether natural or artificially created;

**"bulky metallic waste"** means, but is not limited to, derelict vehicles, farm machinery, and large appliances which are capable of being salvaged for recycling or reuse;

**"cell"** means a deposit of waste that has been covered by cover material so that no waste deposited in the cell is directly exposed to the atmosphere;

**"Class 1 Waste Disposal Ground"** means a waste disposal ground serving a population in excess of 5,000 persons;

**"closure plan"** means a plan indicating the actions to be taken for the closure of the Development;

**"compliance boundary"** means the planar 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 by the Director, are not to be exceeded;

**"cover material"** means material which is free of roots, vegetation and frozen material, or other material as approved by the Director;

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

**"groundwater"** means water below the surface of the ground saturating a zone of the earth's mantle;

**"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 solid waste, and that contains dissolved and suspended materials from such matter;

**"liquid waste"** means sewage, sewage effluent and sludge from septic tanks, holding tanks and municipal sewage treatment systems and that has a slump of more than 150 mm using the slump test method (slump test, C.S.A. Standard Test Method A23.2-5C);

**"monitoring point"** means any installation or location used to determine the quality or physical characteristics of groundwater, surface water, or water in the unsaturated zone;

**"notify"** means notify in writing;

**"noise nuisance"** means an unwanted sound, in an affected area, which is annoying, troublesome, 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 unwanted sound

- 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, 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 noise 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;

**"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 the affected area;
- b. working in the affected area;
- c. present at a location in the 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, 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;

**"post-closure plan"** means a plan indicating the actions to be taken for the care, maintenance, and monitoring of the Development after closure, that will prevent, mitigate, or minimize the threat to public health and the environment;

**"site"** means the area both permanent and temporary which is required for the construction and operation of the Waste Disposal Ground;

**"uppermost aquifer"** means the geologic formation nearest the natural ground surface that is an aquifer, as well as lower aquifers that are hydraulically interconnected with this aquifer within the facility's property boundary; and

**"water table"** means the surface of the groundwater at which the pressure is atmospheric.

### **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 deposit all waste, other than material intended for recycling, in an active area within the Development.
2. The Licencee shall ensure that permanent and temporary dyke structures and surface drainage shall be constructed to divert surface runoff from active waste disposal cells under construction.
3. The Licencee shall ensure that surface drainage outside of the active area has a gradient away from the active area and leads to the adjoining extension of Road 88 N drainage system and the network of municipal ditches off the site.
4. 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.
5. 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.

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

6. 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 seepage 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, flow rate measurements corrective actions and such other information as may from time to time be requested.
7. 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 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 Pollution Control Federation, or in accordance with an equivalent analytical methodology approved by the Director; and
  - b. ensure that all analytical determinations are undertaken by an accredited laboratory.
8. 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.
9. Burning of waste materials is allowed at the Development subject to the following terms and conditions:
  - a. only separated and readily combustible materials such as boughs, leaves, straw, paper products, cardboard, non-salvageable wood and packaging materials derived from wood may be burned, and only when there is an appropriate volume of this type of waste to warrant burning;
  - b. burning of garbage, rubber tires, railway ties, bulky metallic waste, and like large metal objects, waste oil, pesticide containers is prohibited;
  - c. burning is to occur when weather conditions permit, taking into consideration wind direction and velocity being favorable such that no nuisance to any neighboring resident and/or highway occurs;
  - d. burning must take place within the confines of a trench or in a berm-confined area and not on or above the prevailing grade;
  - e. the burning operation is to be restricted to daylight hours only;
  - f. the burning operation must be under constant supervision;
  - g. residents within two kilometres of the Development and Manitoba Conservation's Regional Office in Selkirk are to be notified of the proposed controlled burning, prior to the actual time and date the burning is to occur;
  - h. appropriate signs must be posted at the Development to advise persons using the facility not to initiate any fire that would lead to an uncontrolled burn at the facility;
  - i. if burning is started as a result of vandalism or act of God, the Licencee shall ensure that the fire is extinguished as quickly as possible by the most appropriate means;
  - j. the Licencee shall keep a record of all controlled burns during a calendar year and provide to the Director a report indicating date and duration of each burn, volume of waste disposed of by burning and type of waste burned on each occasion, within thirty days following the end of that calendar year; and
  - k. open burning not in compliance with the terms and conditions above is subject to enforcement action as deemed appropriate by the Director. It is further noted that any liability that accrued from the decisions to burn would be borne by the Licencee.

### **Operation and Maintenance**

10. Unless otherwise approved by the Director, the Licencee shall ensure that the following wastes are not accepted at the Development:
  - a. liquid waste;
  - b. dead livestock;
  - c. soils contaminated with total Volatile Hydrocarbons in excess of 800 ppm; or containing:
    - i. benzene greater than 5 ppm;
    - ii. toluene greater than 30 ppm;
    - iii. ethyl benzene greater than 50 ppm;
    - iv. xylene greater than 50 ppm;
    - v. total semi-volatile hydrocarbons greater than 2000 ppm; or
    - vi. mineral oil and grease greater than 5000 ppm; and

d. hazardous wastes.

11. The Licencee shall ensure that vehicles transporting wastes to the Development are covered to prevent the spread of litter on transportation routes and the surrounding areas.
12. The Licencee shall ensure that wastes deposited in the active areas are covered daily with cover material.
13. The Licencee, upon a written request to the Director, may, during extreme cold weather conditions, utilize temporary covering of wastes deposited in an active area subject to the prior approval of the Director. Such temporary covering material shall be replaced with permanent cover material when the extreme cold weather conditions ceases.
14. The Licencee shall ensure that where an increase occurs in the slope of the final cover, or erosion of the final cover occurs during the post-closure period, remedial action shall be taken to correct the situation.
15. The Licencee shall ensure that the final side slopes of the above ground deposit of waste including final cover do not exceed one unit vertical to four units horizontal and the final top slope is not less than one unit vertical to 20 units horizontal.
16. The Licencee shall ensure that a portable litter fence approved by the Director, is positioned around the active area or such other locations where unloading and handling occurs.
17. The Licencee shall ensure that fences with a minimum height of at least 1.8 metres are constructed in accordance with Plan SC-30-514 submitted with the proposal on March 21, 1996.
18. The Licencee shall ensure that leachate collected at the site is not recirculated through the landfill cells.
19. The Licencee shall submit to the Director at least 30 days before any wastes are deposited at the Development, a proposal for the method of treating leachate.
20. The Licencee shall not implement any method of leachate treatment without receiving prior approval by the Director.
21. The Licencee shall ensure that commercial vehicles transporting wastes to the St. Clements Waste Disposal Ground, access the site from PR 59 to the East along Road 88 N.
22. The Licencee shall ensure that at least one sign is posted at the intersection of PTH 59 and Mile Road 87 N, at the intersections of PR 317 and Mile Roads 34, 35 and 36 E indicating the access roads to the site.
23. The Licencee shall ensure that adequate signage is posted at the entrance to the Development indicating, but not limited to the following:
  - a. the types of wastes not accepted at the site;
  - b. authorized personnel to the site;
  - c. the hours and days of operation; and
  - d. telephone numbers that should be called in the event of an emergency occurring at the site.
24. 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.
25. 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.

26. 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.

### **Monitoring and Reporting**

27. The Licencee shall submit to the Director at least 30 days before any wastes are deposited at the Development, a performance monitoring program for approval prior to the operation of the Development. The performance-monitoring 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; and
- c. the frequency of monitoring.

28. The Licencee shall ensure that:

- a. four monitoring wells are installed in the shallow bedrock system spaced immediately down gradient of Cell 1;
- b. one background monitoring well is installed south of Cell 1; and
- c. construction of such wells shall be undertaken in accordance with Appendix 5 - Guidelines for the Siting of a Class 1 Waste Disposal Ground in Manitoba, Guideline No. 94 - 01E supplement dated October, 1994.

29. The Licencee shall undertake the sampling and analysis of the background water quality for the chemical and microbiological parameters listed in Table 1 to this Licence. The sampling protocol is to be carried out in accordance with Appendix 7 - Guidelines for Sampling Protocol as specified in Manitoba Environment Guidelines for the Siting of a Class 1 Waste Disposal Ground in Manitoba, Guideline No. 94 - 01E supplement dated October, 1994, or other protocols as approved by the Director.

30. The Licencee shall ensure that the concentration values of the chemical and microbiological parameters listed in Table 1 to this Licence, are not exceeded over the background water quality in the uppermost aquifer at the relevant monitoring wells at the compliance boundary.

31. 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.

32. Where the Licencee fails to undertake the monitoring program approved by the director, Manitoba Conservation may undertake such monitoring and recover the cost of such monitoring from the Licencee.

33. The Licencee shall ensure that records are kept for inspection at the Development for the following information:

- a. the daily quantity of waste deposited at the site;
- b. the number of samples collected to establish groundwater quality data;
- c. details of all incidents requiring the implementation of the contingency action plan regarding groundwater or surface water pollution; and
- d. all monitoring, testing and analytical data generated.

34. The Licencee shall submit to the Director the following information:

- a. the results of the analysis of the chemical and microbiological parameters listed in Table 1 to this Licence, from the monitoring wells within 60 days from the end of the calendar year;
- b. the results of the gas monitoring within 60 days from the end of the calendar year;
- c. the annual quantity of wastes by categories deposited at the waste disposal site within 60 days from the end of the calendar year; and
- d. the details of all incidents requiring contingency action regarding groundwater or surface water pollution within 7 days from the occurrence of such incidents.

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

35. The Licencee shall within 60 days of the date of this Licence, provide to the Director confirmation of the following financial insurance coverage:

- a. Environmental Impairment Liability insurance providing coverage subject to a minimum limit of \$1.0 million per occurrence or claim, including coverage for gradual, and sudden and accidental pollution. Coverage to include on-site and off-site clean up costs, and be placed with insurers satisfactory to the Province of Manitoba. The Province of Manitoba is to be added as an Additional Insured on the policy. The policy shall contain a clause stating that the Insurer will give Manitoba 60 days prior written notice in case of significant reduction in coverage or policy cancellation; and
- b. The Insured will provide Manitoba with a certificate of insurance as written evidence of required coverage prior to commencing operations.

#### **Contingency/Emergency Response Plans**

36. The Licencee shall, 30 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.
37. The Licencee may submit, to the Director for approval, amendments to the plan. The Licencee shall implement any amendments approved by the Director in a manner and within the time frames specified by the Director.

#### **Closure and Post Closure**

38. 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;
  - c. groundwater monitoring;
  - d. landfill gas monitoring; and
  - e. financial assurance/insurance required to implement the Plan.
39. 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.
40. The Licencee shall implement and maintain the approved Closure and Post Closure Plan.

#### **Cell Development**

41. The Licencee shall ensure prior to the construction of future cells of the Development:

- a. a detailed sub-soil investigation is undertaken indicating any bedrock surface elevations; and
- b. a report on the sub-soil investigation is submitted to the director, which includes but is not limited to:
  - i. logs for all holes drilled;
  - ii. a map showing the locations of the holes; and
  - iii. till surface and bedrock surface elevations contours.

### **REVIEW AND REVOCATION**

- A. If, in the opinion of the Director, the Licencee has exceeded or is exceeding or has or is failing to meet the specifications, limits, terms, or conditions set out in this Licence, the Director may, temporarily or permanently, revoke this Licence.
- B. If, in the opinion of the Director, new evidence warrants a change in the specifications, limits, terms or conditions of this Licence, the Director may require the filing of a new proposal pursuant to Section 11 of The Environment Act.
- C. The Financial Assurance/Insurance requirements of this Licence shall be reviewed, affirmed or amended by the Director at five-year intervals.

"original signed by"

**Larry Strachan, P. Eng.**

**Director**

**Environment Act**

**Client File No.: 3967.00**

**TABLE 1 TO ENVIRONMENT ACT LICENCE NO. 2274 S2 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

## **APPENDIX A TO ENVIRONMENT ACT LICENCE NO. 2274 S2 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.