

Waste Disposal Ground Operating Permit

Permit No: 35948 P1

Client File: 18778

In accordance with the Waste Management Facilities Regulation, made under The Environment Act, the **Local Government District of Pinawa** is hereby permitted to operate a **Waste Disposal Ground** to be known as the **Pinawa Waste Disposal Facility** situated at **W 13-14-11 EPM** in the L.G.D. of Pinawa, Province of Manitoba.

THIS OPERATING PERMIT is subject to being AMENDED, SUSPENDED or REVOKED under section 7 of the Waste Management Facilities Regulation.

THIS OPERATING PERMIT is issued subject to the following TERMS AND CONDITIONS:

General Terms and Operating Conditions

1. This permit expires on April 30, 2024.
2. The Operator shall maintain and operate the Pinawa Waste Disposal Facility (the Facility) in accordance with the most current version of the Waste Management Facilities Regulation (M.R. 37/2016) and this Operating Permit.
3. The Operator shall develop an Operations Manual detailing the operation and maintenance for this Facility in accordance with M.R. 37/2016. This manual should include but not be limited to a detailed list of waste and recyclable materials accepted, emergency and safety procedures, composting materials accepted and composting practices, location where materials not accepted are diverted to, and active cell development, maintenance, cover and closure practices. The Operator shall provide the Manual to an Environment Officer upon request.
4. The Operator shall maintain a copy of the Operations Manual developed pursuant to M.R. 37/2016 and a copy of this Operating Permit at the Facility or where the Facility is managed.
5. The Operator shall obtain approval in writing from the Director for any proposed alterations to the Facility before proceeding with the alteration.

Site Access and Control

6. The Operator shall restrict access to the Facility when site supervision is not provided, with a locked gate, barrier or other system approved in writing by an Environment Officer.

Materials Acceptance and Handling

7. Materials collected for recycling or reuse must be segregated and temporarily stockpiled in clearly signed designated areas. These areas must be maintained to control weeds, vectors and quality of the materials. The Operator shall have the materials removed regularly or upon the request of an Environment Officer, within the timeframe specified.
8. The Operator shall remove any litter accumulated along the access road and around the perimeter of the site. Litter collection shall occur at minimum twice annually or as required by an Environment Officer.

9. The Operator shall only accept asbestos that is packaged in accordance with the current edition of Guidelines for an Asbestos Operations and Maintenance Program from Workplace Safety and Health Division. All asbestos shall be covered immediately with a minimum of 1 metre of material and the location for disposal shall be documented, provided to the Environment Officer and recorded in the Facility operation and maintenance plan, accessible to all operators.
10. An Environment Officer must approve receipt of more than ten tonnes of dead animals from a single source and event. Dead animal material received at the Facility which may be identified as Specified Risk Material (SRM) must be handled in accordance with Canadian Food Inspection Agency requirements.

Hazardous Wastes

11. The Operator shall collect and dispose of hazardous waste in accordance with The Dangerous Goods Handling and Transportation Act, other Provincial and Federal Regulations.

Placement and Cover

12. The Operator may use material other than soil for cover of the active area upon receiving written approval from the Director or Environment Officer.

Surface Water Management

13. The operator shall develop and maintain a surface water drainage network to minimize water from entering active cells, recycling and storage areas.

Site Construction and Upgrading

14. The Operator shall have all waste disposal cells, modifications or alterations designed by and construction overseen by a Professional Engineer.
15. The Operator shall, prior to initiating any construction at the Facility, submit two paper copies and one electronic copy of final engineering design plans, sealed by an engineer(s), to the Director. The plans will show the engineering details of each new or altered component and the location of each new or altered component with respect to other components.
16. The Operator shall construct the Facility in accordance with the design plans submitted to the Director pursuant to Condition 15 of this Permit and subject to any terms and conditions set by the Director.
17. Notwithstanding Condition 15, construction shall be subject to the following conditions:
 - a) the Operator must provide for testing of all clay liners and cut-off walls by a qualified consultant to confirm compaction is 95% Standard Proctor Density on maximum lifts of 150 mm; and
 - b) all active areas or leachate containment developed from or with clay must be constructed to achieve a hydraulic conductivity of not more than 1×10^{-7} cm/s with a minimum thickness of 1 metre perpendicular to the surface. If appropriate or sufficient

clay is not available an alternative proposal must be submitted to the Director for written approval prior to construction.

18. The Operator shall arrange with the designated Environment Officer a mutually acceptable time and date for any required soil sampling between the 15th day of May and the 15th day of October of any year, unless otherwise approved by the Environment Officer.
19. The Operator shall take and test undisturbed soil samples from the following:
 - a) the clay of new waste disposal cell(s);
 - b) leachate ponds; and
 - c) any clay component of the Facility requiring testing by the Director.
20. The number and location of samples and test methods will be specified by the designated Environment Officer up to a maximum of twenty (20) samples per cell or clay component of the Facility.
21. The Operator shall, prior to operation of any area tested in accordance with Condition 19, receive the approval of the Environment Officer for the results of the tests carried out pursuant to Condition 19 of this Permit.
22. The Operator shall, within 120 days of the completion of construction of a new waste disposal cell submit "record drawings" along with a construction report to the Director. The construction report shall comprise, without being limited to the following, the engineer's inspection dates and notes, density measurements (for clay lined facility), updated site plan showing the new cell and monitoring well installation logs, locations and background water samples (if applicable).

Composting

23. The Operator shall compost only yard and leaf waste and kitchen scraps not including meat, fish or dairy. Any other feedstock requires approval from the Environment Officer, prior to acceptance.

Burning of Specified Waste

24. The Operator shall only burn separated and readily combustible materials such as boughs, leaves, loose straw, paper products, cardboard, non-salvageable untreated wood, and packing materials derived from wood, and only when there is an appropriate volume of this material. Plywood, composite board or other materials constructed with glues, finishes or preservatives must not be burned.
25. The Operator shall not burn any other products or materials; including but not limited to plastics, composites, rubber, manures, chemically treated fabrics, mattresses, finished furniture, or man-made synthetics.

Monitoring and Reporting Requirements

26. Groundwater monitoring well samples shall be collected, stored and analyzed using approved field and laboratory techniques for dissolved analysis. The analytical results shall be retained in a format acceptable to Manitoba Sustainable Development.

27. The Operator shall have groundwater monitoring and sampling conducted by a qualified professional for those parameters identified in Appendix A once per year, or at a frequency as approved by the Director.
28. The Operator shall submit an annual report, in a format acceptable to the Director, detailing the sampling methodology, field observations and results of groundwater sampling analyses, complete with previous results and trends. The report shall be submitted to the designated Environment Officer no later than December 31 annually.

Revocation

29. This Permit replaces Permit No. 35948 which is hereby rescinded.

May 14, 2019

Original signed by

Cordella Friesen
Director
The Environment Act

Appendix A Ground Water Chemistry Parameters

| Chemical Parameters | |
|------------------------------------|---|
| Inorganics | |
| Alkalinity – Total | Magnesium – Dissolved |
| Ammonia – Total | Manganese – Dissolved |
| Arsenic – Total | Mercury – Dissolved |
| Barium – Dissolved | Nitrate - Reported as N |
| Boron – Dissolved | Nitrite - Reported as N |
| Cadmium – Dissolved | Total Kjeldahl Nitrogen – Reported as N |
| Calcium – Dissolved | Total Phosphorous |
| Calcium Carbonate | Potassium – Dissolved |
| Chloride | Silicon – Dissolved |
| Chromium – Dissolved | Sodium – Dissolved |
| Conductivity | Total Dissolved Solids (TDS) |
| Copper – Dissolved | Sulphate |
| Iron – Dissolved | Uranium – Dissolved |
| Lead – Dissolved | Zinc – Dissolved |
| Volatile Organic Compounds (VOC's) | |
| BTEX | |
| Other Organics | |
| Biological Oxygen Demand (BOD) | Chemical Oxygen Demand (COD) |
| Dissolved Organic Carbon (DOC) | |
| Field Parameters | |
| pH | Groundwater Elevation |
| Conductivity | Dissolved Oxygen |
| Temperature | |

Note: This Appendix is subject to revision at any time by the Director.
All metals (except Arsenic) are to be sampled for dissolved analysis.
Dissolved samples should be filtered in the field and preserved in the field at time of sampling. If dissolved samples are not to be filtered and preserved in the field then the Director and the Laboratory must be notified prior to sampling.