Manitoba
Environment and Climate
Environmental Approvals Branch
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Public Registry File Number: 6000.00
File Number: 11491

June 31, 2023

Sam Mirza-Agha
Municipal Superintendent
The Town of The Pas
Box 870 - 81 Edwards Ave.
The Pas MB R9A 1K8
sam@townofthepas.ca

Dear Sam Mirza-Agha:

Re: The Pas Waste Disposal Ground Permit No. 39888 P2

Please find enclosed Permit No. 39888 P2 in response to your proposal dated December 13, 2022. You wish to operate The Pas Waste Disposal Ground on portions of 11-56-26 WPM within the Town of The Pas.

The Town of The Pas must follow all permit requirements and federal, provincial, and municipal regulations and by-laws.

Anyone affected by this decision may appeal, in writing, to the Minister of Environment and Climate at minecp@leg.gov.mb.ca by August 30, 2023. The permit is available on the public registry at https://www.gov.mb.ca/sd/eal/registries/6000wmfpermits/index.html

For clauses 13, 16, and 18-20, the designated environment officer of the Environmental Approvals Branch is Edwin Yazon, who may be contacted at Edwin.Yazon@gov.mb.ca or 431-335-2554. If you have any questions about this approval, please contact Cristal Huculak, Regional Supervisor, Environmental Compliance and Enforcement Branch at EnvCENorth@gov.mb.ca or 204-620-5797.

Sincerely,

Original Signed By
Agnes Wittmann
Director
The Environment Act

Enclosure

c. Edwin Yazon
Cristal Huculak

Waste Disposal Ground Operating Permit

Manitoba
Environment and Climate

File No. : 11491

Permit No.: 39888 P2
Issue Date: June 31, 2023

Following the Waste Management Facilities Regulation under The Environment Act, The Town of The Pas is hereby permitted to run The Pas Waste Disposal Ground (facility) on portions of 11-56-26 WPM within The Town of The Pas, Manitoba. Schedule A of this permit identifies the facility.

This permit is subject to being amended, suspended, or revoked under sections 7 and 9 of the Waste Management Facilities Regulation.

General Terms and Operating Conditions

1. This permit expires on June 31, 2028.

2. The operator must maintain and operate the facility following the Waste Management Facilities Regulation and any future amendments, and this permit.

3. The operator must obtain approval in writing from the director before altering the facility.

4. The operator must identify the property boundary of the facility by means of stakes, flags, or other visual methods.

Materials Acceptance and Handling

5. The operator must segregate materials collected for recycling or reuse, and must temporarily stockpile these materials in clearly signed designated areas. The operator must maintain these areas to control weeds, vectors, and the quality of the materials.

6. The operator must remove the materials identified in clause 5 of this permit regularly or upon the request of an environment officer, within the timeframe specified.

7. The operator:
   a) may accept less than ten tonnes of dead animals from a single source or event at the facility provided that they are buried immediately with a minimum one metre cover or as approved by an environment officer;
   b) may accept more than ten tonnes of dead animals upon receiving written approval from an environment officer; and
   c) must handle dead animals when identified as specified risk material following the Canadian Food Inspection Agency requirements.

8. The operator must dispose of asbestos or asbestos containing material following the most current version of Guideline for Asbestos Disposal at a Landfill.

9. The operator must keep a record, by Global Positioning System (GPS), of the locations, the amount of deposition, and burial depth of buried asbestos.

Hazardous Wastes

10. The operator must collect and dispose of any hazardous waste following The Dangerous Goods Handling and Transportation Act, and other federal, provincial, and municipal regulations.

Placement and Cover

11. The operator may use material other than soil to cover the active area upon receiving written approval from the director or environment officer.

Surface Water Management

12. The operator must construct the facility such that all uncontaminated surface water flows to the perimeter ditch and impacted water from all material storage areas is contained within the facility boundaries.

Site Construction and Upgrading

13. The operator must have all waste disposal cells, modifications or alterations designed by and construction overseen by an engineer.

14. The operator must, before beginning any construction at the facility, submit an electronic copy of final engineering design plans, sealed by an engineer, to the designated environment officer. 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.

15. The operator must construct the facility following the design plans submitted to the designated environment officer following clause 14 of this permit and subject to any terms and conditions set by the designated environment officer.

16. Notwithstanding clause 15 of this permit, construction is 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 that compaction is 95% Standard Proctor Density on maximum lifts of 0.15 m (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 $1x10^{-7}$ cm/s with a minimum thickness of one metre perpendicular to the surface. If appropriate or sufficient clay is not available an alternative proposal must be submitted to the designated environment officer for written approval before construction.

17. The operator must, unless otherwise approved by the designated environment officer, arrange with the 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.

18. The operator must take and test undisturbed soil samples, following Schedule B of this permit, from:
    a) the clay of new waste disposal cell(s);
    b) leachate ponds; and
    c) any clay component of the facility requiring testing by the designated environment officer**.**

19. The number and location of samples and test methods will be specified by the designated environment officer up to a maximum of 20 samples per cell or clay component of the facility.

20. The operator must, before using any area tested following clause 18 of this permit, receive the approval of the designated environment officer for the results of the tests carried out following clause 18 of this permit.

21. The operator must:
    a) prepare record drawings of the facility and must label the drawings “record drawings”; and
    b) submit "record drawings" along with a construction report to the designated environment officer within 120 days of the completion of construction of the facility. The construction report must include the following:
        (i) the engineer’s inspection dates and notes;
        (ii) density measurements (for clay lined facility); and
        (iii) updated site plan showing the new cell, monitoring well installation logs, locations, and background water samples (if applicable).

Burning of Specified Waste

22. The operator must only burn:
    a) 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
    b) only when there is an appropriate volume of materials as identified in clause 22 a) of this permit.

Composting

23. The operator must, unless otherwise approved by an environment officer, compost only yard and leaf waste.

Monitoring and Reporting Requirements

24. The operator must collect, store, and analyze groundwater monitoring well samples using approved field and laboratory techniques for dissolved analysis. The operator must retain the analytical results in a format acceptable to the environment officer.

25. The operator must sample the groundwater monitoring wells for those parameters identified in Schedule C of this permit once per year, or at a frequency approved by the director.

26. The operator must 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 operator must submit the report annually to an environment officer no later than December 31 of each year.

Revocation

27. This permit replaces Permit No. 39888 P1, which is expired.

Original Signed By
Agnes Wittmann
Director
The Environment Act

Schedule A to Permit No. 39888 P2
Facility layout

Schedule B to Permit No. 39888 P2 following clause 18 of this permit

Soil Sampling

1. The licensee must provide a drilling rig, acceptable to the designated environment officer, to extract soil samples from the specified liner of the structure. This includes all liners constructed with clay. The drill rig must have the capacity to drill to the maximum depth of the clay liner plus an additional 2 metres. The drill rig must be equipped with both standard and hollow stem augers. The minimum hole diameter must be five inches.
2. For liners placed or found at the surface of the structure, the licensee must provide a machine, acceptable to the designated environment officer, capable of pressing a sampling tube into the liner in a straight line motion along the centre axis line of the sample tube and without sideways movement.
3. Soil samples must be collected and shipped following ASTM Standard D 1587 (Standard Practice for Thin-Walled Tube Sampling of Soils), D 4220 (Standard Practice for Preserving and Transporting Soil Samples), and D 3550 (Standard Practice for Ring-Lines Barrel Sampling of Soils). Thin-walled tubes must meet the stated requirements including length, inside clearance ratio and corrosion protection. An adequate venting area must be provided through the sampling head.
4. At the time of sample collection, the designated environment officer must advise the licensee as to the soil testing method that must be used on each sample. The oedometer method may be used for a sample were the environment officer determines that the soil sample is taken from undisturbed clay soil which has not been remoulded and which is homogeneous and unweathered. The triaxial test must be used for all samples taken from disturbed and remoulded soils or from non-homogenous and weathered soils.
5. The licensee must provide a report on the collection of soil samples to the designated environment officer and to the laboratory technician which includes but is not limited to: a plot plan indicating sample location, depth or elevation of sample, length of advance of the sample tube length of soil sample contained in the tube after its advancement, the soil test method specified by the environment officer for each soil sample and all necessary instructions from the site engineer to the laboratory technician.
6. All drill and sample holes must be sealed with bentonite pellets after the field drilling and sampling has been completed.

Schedule B to Permit No. 39888 P2 following clause 18 of this permit (cont'd)

SOIL TESTING METHODS

1. Triaxial Test Method

    a) The soil samples must be tested for hydraulic conductivity using ASTM D 5084 (Standard Test Method for Measurement of Hydraulic Conductivity of Saturated Porous Materials Using a Flexible Wall Permeameter).
    b) Soil specimens must have a minimum diameter of 70 mm (2.75 inches) and a minimum height of 70 mm (2.75 inches). The soil specimens must be selected from a section of the soil sample which contains the most porous material based on a visual inspection. The hydraulic gradient must not exceed 30 during sample preparation and testing. Swelling of the soil specimen should be controlled to adjust for: the amount of compaction measured during sample collection and extraction from the tube and the depth or elevation of the sample. The effective stress used during saturation or consolidation of the sample must not exceed 40 kPa (5.7 psi) or the specific stress level, that is expected in the field location were the sample was taken, whichever is greater.
    c) The complete laboratory report, as outlined in ASTM D 5084, must be supplied for each soil sample collected in the field.

2. Oedometer Test Method

    a) The soil samples must be tested for hydraulic conductivity using ASTM D 2435 (Standard Test Method for One-Dimensional Consolidation Properties of Soils).
    b) Soil specimens must have a minimum diameter of 50 mm (2 inches) and a minimum height of 20 mm (0.8 inches). The soil specimens must be selected from a section of the soil sample, which contains the most porous material based on a visual inspection. The soil specimen must be taken from an undisturbed soil sample. The soil specimen must be completely saturated.
    c) The complete laboratory report, as outlined in ASTM D 2435, must be supplied for each soil sample collected in the field.

Schedule C to Permit No. 39888 P2
Groundwater chemistry parameters following clause 25 of this permit

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: The director may revise this schedule. All dissolved samples should be filtered in the field and preserved in the field at time of sampling. The operator must notify the director and the laboratory for dissolved samples not filtered and preserved in the field.