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Public Registry File Number: 6000.00

File Number: 16713

October 02, 2025

Meghan Cuvelier Klassen
Chief Administrative Officer
Municipality of Killarney-Turtle Mountain
415 Broadway Avenue
Killarney MB R0G 1G0
Info@killarney.ca

Dear Meghan Cuvelier Klassen:

Re: Municipality of Killarney-Turtle Mountain Waste Disposal Ground Permit No. 7967 P3

Please find enclosed Permit No. 7967 P3 in response to your alteration application dated June 3, 2025, and additional information received on June 23, 2025. You wish to continue to operate Killarney-Turtle Mountain Waste Disposal Grounds situated on the portion of NE 07-03-16 WPM within the Municipality of Killarney-Turtle Mountain, Manitoba.

The Municipality of Killarney-Turtle Mountain 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 Change at <a href="minecc@manitoba.ca">minecc@manitoba.ca</a> by November 03, 2025. The permit is available on the public registry at <a href="https://www.gov.mb.ca/sd/eal/registries/6000wmfpermits/index.html">https://www.gov.mb.ca/sd/eal/registries/6000wmfpermits/index.html</a>.

For clauses 15-27, the designated environment officer of the Environmental Approvals Branch is Mehak Bajwa, who may be contacted at <a href="Mehak.Bajwa@gov.mb.ca">Mehak.Bajwa@gov.mb.ca</a> or 431-334-3667.

If you have any questions about this approval, please contact Kayla Hagenson, Acting Regional Supervisor, Environmental Compliance and Enforcement Branch at <a href="mailto:EnvCEWestern@gov.mb.ca">EnvCEWestern@gov.mb.ca</a> or 204-648-4794.

Sincerely,

Original Signed By Agnes Wittmann Director The Environment Act

c. Kayla Hagenson - Environmental Compliance and Enforcement Desalegn Edossa - Environmental Approvals

# Waste Disposal Ground Operating Permit



File No. : 16713 Permit No.: <u>7967 P3</u>

Issue Date: October 02, 2025

The Municipality of Killarney-Turtle Mountain is hereby permitted to operate the Killarney-Turtle Mountain Waste Disposal Ground (facility) on portions of NE 07-03-16 WPM in the Municipality of Killarney-Turtle Mountain, Manitoba. This authorization follows the alteration application filed on June 3, 2025, and additional information received on June 23, 2025, following the Waste Management Facilities Regulation under The Environment Act. 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.

#### **Definition**

in this permit,

"Environment Officer" means an employee so designated under The Environment Act;

"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 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;

"**operator**" means the holder of a licence or permit issued in respect of the waste management facility; and

"waste disposal ground" means an area of land designated by a person, municipality, provincial government agency, or crown corporation for the disposal of waste and approved for use under the Waste Management Facilities Regulation, or any future amendments, or a licence under The Environment Act.

#### **General Terms and Operating Conditions**

- 1. This permit expires on October 02 2030.
- 2. The operator must maintain and operate the facility following the Waste Management Facilities Regulation and any future amendments thereof, and this permit.

- 3. The operator must have legal control, by ownership or by rental, lease, or other agreement, of the lands on which the additional construction activities will take place.
- 4. The operator must:
  - a) review and update the operations manual at least every five years, or at an earlier time if required by the director; and
  - b) submit the operations manual to the director or environment officer upon request.
- 5. The operator must obtain approval in writing from the director before altering the facility.

#### **Odour Nuisance**

6. The operator must not cause or permit an odour nuisance to be created as a result of the construction, operation, or alteration of the facility, and must take such steps as the director may specify to eliminate or mitigate an odour nuisance.

#### **Site Access and Control**

7. The operator must 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**

- 8. The operator must:
  - a) segregate materials collected for recycling or reuse;
  - b) temporarily stockpile these materials in designated areas with clear signage; and
  - c) must maintain these areas to control weeds, vectors, and the quality of the materials.
- 9. The operator must remove the materials identified in clause 8 of this permit regularly or upon the request of an environment officer, within the timeframe specified.
- 10. The operator:
  - 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 not receive any material that is defined as specified risk material by the Canadian Food Inspection Agency without written approval from an environment officer.

#### **Hazardous Wastes**

11. 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**

12. 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**

13. 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**

- 14. The operator must have all waste disposal cells, modifications or alterations designed by and construction overseen by an engineer.
- 15. The operator must, before beginning any construction at the facility, submit an electronic copy of the final engineering design plans, sealed by an engineer, to the designated environment officer for approval.

The engineering drawings must address construction specifications of any new active area and include, but are not limited to, the following:

- a) engineering design for the construction of the waste disposal cell base and sides, including liner details;
- b) elevation of the seasonal water table;
- c) engineering design for the construction of the leachate collection system in each new cell, and connections, if applicable, to the overall leachate management system;
- d) gas collection system, if applicable;
- e) final design elevation;
- f) location of all access road(s);
- g) details of the location of the monitoring wells, including groundwater flow direction;
- h) setback distances to property lines, residential buildings and surface water; and
- i) details of the surface water drainage system
- 16. The operator must notify the designated environment officer at least 5 days and not more than 10 days before construction begins.
- 17. The operator must construct the facility following the design plans submitted to the designated environment officer following clause 15 of this permit and subject to any terms and conditions set by the designated environment officer.

#### For Clay-lined Landfill Components

- 18. Notwithstanding clause 17 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<sup>-7</sup> 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.

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- 19. The operator must, following Schedule B of this permit, take and test undisturbed soil samples 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.
- 20. The operator must:
  - a) arrange with the designated environment officer a mutually acceptable time and date for any required soil sampling between the 15<sup>th</sup> day of May and the 15<sup>th</sup> day of October of any year, unless otherwise approved by the designated environment officer; and
  - b) make arrangements such that the designated environment officer can safely access the clay lined development.
- 21. 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.
- 22. The operator must, not less than two weeks before using any component of the facility as referenced in clause 19 of this permit, submit for the approval of the designated environment officer the results of the tests carried out following clause 19 of this permit.

#### **For HDPE-lined Landfill Components**

- 23. Notwithstanding clause 17 of this permit, the operator must construct and maintain a continuous liner underlying the cell, such that:
  - a) the liner is constructed from HDPE geomembrane;
  - b) the liner has a minimum thickness of 60 mils;
  - c) all sections of the liner are joined by dual track seaming;
  - d) the liner is installed over the entire base of the cell, including its berms;
  - e) the liner is installed following ASAE Standard EP340.2 for the installation of Flexible Membrane Linings;
  - f) non-destructive test methods are used to test the integrity of:
    - i. all field seams joining liner sections in accordance with ASTM Standard D 5820-95 (2023) or any future amendments; and
    - ii. all other field seams in accordance with ASTM Standard D 4437-08 or any future amendments.
  - g) an installation report is prepared and submitted to the designated environment officer for approval within 30 days of commencing the installation of the liner. The installation report must include a cover letter with a declaration that the liner is continuous underlying the component. The installation report must also include the test results, a discussion of the results, and a declaration that the liner was installed following the manufacturer's requirements;
  - h) the floor of the liner is covered with sand or other granular cover material to a minimum depth of 0.3 metres measured perpendicular to the surface of the liner; and
  - i) the liner is secured to prevent lifting.

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- 24. The operator must:
  - a) arrange with the designated environment officer a mutually acceptable time and date for any required inspection of the installed HDPE liner between the 15<sup>th</sup> day of May and the 15<sup>th</sup> day of October of any year, unless otherwise approved by the designated environment officer; and
  - b) make arrangements such that the designated environment officer can safely access the development lined with HDPE geomembrane.
- 25. The operator must not cover the synthetic liner until receiving written approval from the designated environment officer on the report submitted according to sub-condition 23g) of this permit.
- 26. The operator must not operate or allow the use of the cell until the designated environment officer has issued written authorization.

#### **Record Drawing**

- 27. The operator must:
  - a) prepare record drawings of the facility and must label the drawings "record drawings";
  - 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).

#### **Heritage Resources**

28. The licensee must comply with the requirements of The Heritage Resources Act and suspend construction and immediately notify the Historic Resources Branch if heritage resources are encountered during the construction of the cell.

#### Final Design Elevation

29. The operator must not exceed the final design elevation of 11 metres above the top of the berm as identified in the email correspondences dated June 9 and 23, 2025.

#### **Final Closure Plan**

30. The operator must, within six (6) months of the date of this permit, submit to the director for approval a closure plan for the filled waste cell.

#### **Burning of Specified Waste**

- 31. The operator must 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

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b) only when there is an appropriate volume of materials as identified in clause 31 a) of this permit.

#### Composting

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

#### **Monitoring and Reporting Requirements**

- 33. The operator must:
  - a) collect, store, and analyze groundwater monitoring well samples using approved field and laboratory techniques for dissolved analysis; and
  - b) retain the analytical results in a format acceptable to the environment officer.
- 34. 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 environment officer.
- 35. The operator must submit:
  - a) an annual report, in a format acceptable to the environment officer, detailing the sampling methodology, field observations, and results of groundwater sampling analyses, complete with previous results and trends; and
  - b) the report annually to an environment officer no later than December 31st of each year.

#### Revocation

36. This permit replaces Permit No. 7967 P2, which is hereby rescinded.

Original Signed By Agnes Wittmann Director The Environment Act

### Schedule A to Permit No. 7967 P3

### **Facility layout**



## Schedule B to Permit No. 7967 P3 Soil sampling following clause 19 of this permit

#### Soil Sampling

- The operator 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 operator 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 operator as to the soil testing method that must be used on each sample. The oedometer method may be used for a sample where 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 operator 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 the 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 have been completed.

# Schedule B to Permit No. 7967 P3 Soil sampling following clause 19 of this permit (continued)

#### **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 where 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

- 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. 7967 P3 Groundwater chemistry parameters following clause 34 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	
рН	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.