

Sustainable Development

Environmental Stewardship Division Environmental Approvals Branch 1007 Century Street Winnipeg, Manitoba R3H 0W4 T 204 945-8321 F 204-945-5229 www.gov.mb.ca/conservation/eal

File: 17388

April 26, 2018

Mr. Derek Poole Superintendent of Works **Town of Swan River** Box 879 Swan River, MB R0L 1Z0

Dear Mr. Poole:

Re: Swan River Waste Disposal Ground, Permit 8702 P1

Enclosed please find the Permit for your waste disposal ground.

Please note that failure to comply with any condition of the Permit may result in prosecution pursuant to the Waste Management Facilities Regulation.

Pursuant to Section 27 of The Environment Act, this Permit may be appealed to the Minister of Sustainable Development by any person who is affected by the issuance of this permit within 30 days of the date of issue.

In addition to the enclosed Permit requirements, please be informed that all other applicable federal, provincial and municipal regulations and by-laws must be complied with.

If you have any questions concerning the Permit or procedures, please call Peter Crocker in Brandon at (204) 726-6565 or via electronic mail at peter.crocker@gov.mb.ca.

Yours sincerely,

Tracey Braun, M.Sc.

Director

Environmental Approvals Branch

c: D. Labossiere/T.Prawdzik, Environmental Compliance and Enforcement Branch

Confirmation of Receipt of this Permit No. 8702 P1 (by the Permitee only) is required by the Director of NOTE: Environmental Approvals. Please acknowledge receipt by signing in the space provided below and emailing

(solidwaste@gov.mb.ca) or faxing a copy (letter only) to the Department by May 10, 2018.

Waste Disposal Ground Operating Permit



Permit No: 8702 P1 Client File: 17388

In accordance with the Waste Management Facilities Regulation, made under The Environment Act, the **Town of Swan River** is hereby permitted to operate a **Waste Disposal Ground** to be known as the **Swan River Waste Disposal Ground** situated at **NE 15-26-27 WPM** in the Rural Municipality of Swan Valley West, 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:

Definitions

"'BTEX" means the following components of gasoline and other specific petroleum products:

B = Benzene

T = Toluene:

E = Ethylbenzene; and

X = Xylene:

"Canadian Environmental Quality Guidelines" means the Canadian Council of Ministers of the Environment documents referenced at http://ceqg-rcqe.ccme.ca;

"Canada Wide Standard for Petroleum Hydrocarbon Fraction" means the equivalent normal straight-chain hydrocarbon (nC) boiling point ranges (Fraction #1: nC6 to nC10; Fraction #2: >nC10 to nC16; Fraction #3: >nC16 to nC34; and, Fraction #4: nC35+) as discussed in Canadian Council of Ministers of the Environment, 2008, Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil;

"contaminant" means a contaminant as defined in The Dangerous Goods Handling and Transportation Act, as amended from time to time;

"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.

- "PAH" means polycyclic aromatic hydrocarbons;
- "particulate matter" means any finely divided liquid or solid matter other than water droplets;
- "particulate residue" means that part or portion of an atmospheric emission which is deposited onto a surface; and
- "Standard Methods for the Examination of Water and Wastewater" means the most recent edition of Standard Methods for the Examination of Water and Wastewater published jointly by the American Public Health Association, the American Water Works Association and the Water Environment Federation.

General Terms and Operating Conditions

- 1. This permit expires on March 31, 2023.
- The Operator shall maintain and operate the Swan River Waste Disposal Ground (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 at minimum twice annually or as required by an Environment Officer.

Hazardous Wastes

 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

- 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.
- 11. 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

12. 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

- 13. The Operator shall have all waste disposal cells, modifications or alterations designed by and construction overseen by a Professional Engineer.
- 14. 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.
- 15. The Operator shall construct the Facility in accordance with the design plans submitted to the Director pursuant to Condition 14 of this Permit and subject to any terms and conditions set by the Director.
- 16. Notwithstanding Condition 14, 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 1x10⁻⁷ 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.
- 17. 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.
- 18. 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.
- 19. 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.
- 20. The Operator shall, prior to operation of any area tested in accordance with Condition 18, receive the approval of the Environment Officer for the results of the tests carried out pursuant to Condition 18 of this Permit.
- 21. 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

22. 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

- 23. 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.
- 24. 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.

Soils Remediation Facility - Temporary Storage of Materials

25. In the event of a spill to the environment, the Operator may receive petroleum contaminated soils at the Facility and stockpile temporarily with the approval of and subject to any terms and conditions set by an Environment Officer.

Soils Remediation Facility - Incoming Soils

26. The Operator shall retain sample results from all soils received at the soil remediation facility; if results are not available from the source of the soils, the Operator shall have the soils tested upon receipt. The parameters for which the soils shall be analyzed will be determined by considering the source of the soils and by using the CCME Canadian Environmental Quality Guidelines and the Canada-Wide Standards for Petroleum Hydrocarbons (PHC) in Soil.

Soils Remediation Facility - Operation

- 27. No petroleum contaminated soils classified as hazardous waste shall be received at the Facility.
- 28. Notwithstanding Condition 27 of this permit, petroleum contaminated soils received by the Operator for remediation, shall be allowed in the designated soil treatment area of the Facility.
- 29. The Operator shall only receive petroleum contaminated soils for remediation at the Facility that comply with the Guideline (June 2016): Treatment and Disposal of Petroleum Contaminated Soil or any future amendment thereof.
- 30. Notwithstanding Condition 29 of this Permit, the Operator shall only accept for treatment at the soil remediation facility, unless otherwise approved by an Environment officer, soils in accordance with the following acceptance criteria:
 - soil contaminated with Benzene, Toluene, Ethylbenzene or Xylenes up to 30,000 mg/kg for each constituent;
 - b) soil contaminated with Canada Wide Standard for Petroleum Hydrocarbon Fraction 1,2,3 or 4 up to 30,000 mg/kg for each Fraction; and
 - soil contaminated with metals at any concentration subject to capability to treat to achieve leachate extraction criteria.
- 31. The Operator shall submit to the Director for approval 3 months after the issuance of this Permit, an Operations Manual for the soil remediation facility. The Operations Manual shall address, but not be limited to:
 - a) soil receiving and placement;
 - b) soil remediation procedures;
 - c) handling and treatment procedures;
 - d) inspection and maintenance;
 - e) surface water management;
 - f) leachate management; and
 - g) monitoring and reporting.
- 32. The Operator shall operate the soil remediation facility in accordance with the Operations Manual approved pursuant to Condition 31 of this Permit.

Soils Remediation Facility - Material Use as Landfill Cover

33. The Operator shall treat petroleum contaminated soils that will be used as cover on the landfill cells so that the treated soil complies with the requirements of Guideline (June 2016) Criteria for Acceptance of Contaminated Soil at Waste Disposal Grounds or any future amendment thereof or as approved by the Director.

Soils Remediation Facility - Surface Water Management

- 34. The Operator shall prevent, by means of dyking, or other method(s) approved by the Director, the migration of surface water onto or off of the soil remediation facility.
- 35. Prior to a request for discharge, any surface waters retained at the Facility shall be collected and analyzed for the following parameters, or others as approved by the Director:
 - a) BTEX;
 - b) Naphthalene:
 - c) Benzo(a)pyrene;
 - d) Petroleum hydrocarbons;
 - e) Total metals; and
 - f) Volatile Organic Compounds.
- 36. The Operator shall only discharge water from the Facility in accordance with Clause 35, after obtaining approval from the Environment Officer for the discharge.

Soils Remediation Facility - Records

- 37. The Operator shall maintain, at the site office, records of all soils received at the soil remediation facility. These records shall contain, but not be limited to the following:
 - a) the date soils were received at the soil remediation facility;
 - b) the original location of the soils;
 - c) the volume received, either estimated or actual;
 - d) preliminary analyses of the soils, e.g. head space results or field composite results;
 - e) results of laboratory analyses of the soils;
 - f) the frequency of sampling, area of sampling and the depth the sample was taken from within the soil remediation facility; and
 - g) the location within the soil remediation facility of the soil for treatment.
- 38. The Operator shall maintain records of all soils removed from the soil remediation facility. These records shall contain, but not be limited to the following:
 - a) the date the soils were removed:
 - b) the volume of soils removed:
 - c) the final end use destination of the soils removed:
 - d) the results of analyses to determine the concentrations of those parameters for which the soil was being remediated; and
 - e) any additional information as requested by the Director.
- 39. The Operator shall have available for inspection by an Environment Officer, upon request, the records referred to in Condition 37 and 38 of this Permit and shall provide annually to the Director a report summarizing the activities at the soil remediation facility in the annual report pursuant to Condition 42 of this permit.

Monitoring and Reporting Requirements

40. 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.

- 41. The Operator shall sample the groundwater monitoring for those parameters identified in Appendix A once per year, or at a frequency as approved by the Director.
- 42. The Operator shall submit an annual report to the designated Environment Officer, no later than December 31st annually. The report must be in a format acceptable to the Director, and include at minimum:
 - a) Details of all sampling methodologies;
 - b) field observations and results of groundwater and surface water sampling analyses;
 - c) previous results and trends; and
 - d) all activities of the soil remediation facility.

Revocation

- 43. This Permit replaces Permit No. 3011.81 which is hereby rescinded.
- 44. This Permit replaces The Dangerous Goods Handling and Transportation Act Order D1-237 which is hereby rescinded.

April 26, 2018

Tracey Braun, M.Sc.

Director

Environmental Approvals Branch

Appendix A Ground Water Chemistry Parameters

Chemical Parameters	Chemistry Parameters
	organics
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 Organi	c Compounds (VOC's)
BTEX	
Othe	er Organics
Biological Oxygen Demand (BOD)	Chemical Oxygen Demand (COD)
Dissolved Organic Carbon (DOC)	
Field	Parameters
рН	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.



Memorandum

DATE:

April 25

TO: Tracey Braun Director

FROM: Cory Graham

Environmental Approvals

PHONE: 204.250-7645 FAX: 204.945-5229

EMAIL: cory.graham@gov.mb.ca

SUBJECT: Swan River WDG

Based upon the tonnage accepted at the facility, a permit renewal application was required by regulation.

The site has a petroleum contaminated soils treatment cell, which previously had an operating order issued for it. In accordance with guidelines, if a PCS facility is to continue to operate (more than a single use site) it requires either to be included in a landfill permit or under an Environment Act Licence. This facility has been incorporated into this permit, and the old order has been cancelled.

Due to the PCS clauses, the draft was circulated through the Contaminated Soils group as well as ECE. Comments were incorporated into the draft for your consideration.

Please contact me if you have any questions.

Thank you,

Cory Graham