

Environment and Climate Change

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File Number: 3440.20

October 16, 2024

Dave Howes
Director of Regulatory Affairs
Miller Environmental Corporation
1803 Hekla Ave.
Winnipeg MB R3N 0T1
daveh@millerenvironmental.mb.ca

Dear Dave Howes:

Re: Miller Hazardous Waste Management Facility – Notice of Alteration Approval Dangerous Goods Handling and Transportation Licence No. 58 HW S2 RRRR

Thank you for your notice of alteration dated May 7, 2024, and additional information submitted on May 17, 2024, seeking design changes to the approved leachate collection pond (LP1) originally submitted on June 15, 2021. The proposed changes include altering the size, location, depth, and cover material of the leachate pond. The usage of the leachate pond will remain the same following the original submission and it will receive leachate from repository cells RC1, RC2, and RC3.

Miller is proposing to line LP1 with a 60-mil high-density polyethylene (HDPE) liner to be placed on top of a one-metre-thick compacted clay. Miller has informed the department to consider the 60-mil HDPE as the primary liner and not to test the compacted clay liner. Therefore, the one-metre-thick clay layer proposed for the leachate collection pond per the design plan submitted on May 7, 2024, will not be tested by the department. Schedule A of this approval identifies the layout of LP1.

You propose to make the following changes to the original design June 15, 2021:

- a) increasing the footprint of the leachate pond from 60 m x 58 m to 110 m x100 m;
- b) changing the depth of the leachate pond below grade from 2.1 m to 3.5 m;
- c) changing the freeboard from the top of the berm from 0.9 m to 1 m;
- d) shifting the location of the leachate pond from the original proposal slightly to the east and south of the repository cell 3;
- e) reducing the proposed berm height from 1.8 m to 1.5 m;

- f) grading of the floor of the leachate pond to a slope of 1% in both the lateral and longitudinal directions;
- g) including an integrated sump to the east side of the pond;
- h) lining the pond with a 60mil high-density polyethylene liner (HDPE);
- i) including drainage pipes to remove any accumulated liquids beneath the HDPE liner;
- j) including gas venting pipes to prevent accumulation of gas under the HDPE liner;
- k) reworking of the proposed ditch P1 and drainage pipes to direct surface run-off water to the south perimeter ditch;
- including a double-lined HDPE hopper area to facilitate easy disposal of leachate into LP1 by trucks;
- m) changing the leachate pond cover from a Linear Low Density Polyethylene cover to a floating, modular cover system which will be implemented once LP1 is operational; and
- n) adding a circulation diffuser system to enhance the leachate evaporation.

The potential environmental effects resulting from the proposed alteration are insignificant and the proposed alterations will improve the environmental performance of the development. Consequently, following Section 11(1a) of The Dangerous Goods Handling and Transportation Act, I remove condition 4(e) of Schedule A of the October 15, 2021 notice of alteration approval, replace the condition 1 of the October 15, 2021 notice of alteration approval with condition 1 of this approval, and add the following requirements for the licensee to execute:

Respecting Synthetic Liner

1. The licensee must, unless otherwise approved by the director, construct LP1 following the design change dated May 7, 2024, and additional information dated May 17, 2024.

2. The licensee must:

- a) sample and test any water collected by the proposed P1 ditch and drainage pipes (in drawing 4 of 5 of the notice of alteration request dated May 7, 2024) for the parameters mentioned in Schedule B of the licence;
- b) have all analytical determinations undertaken by an accredited laboratory;
- c) confirm, before discharging any water as referred to in condition 2(a) of this approval into the perimeter ditch, the concentrations of the parameters tested do not exceed the water use classification of the receiving waterways in accordance with the Manitoba Water Quality Standards, Objectives, and Guidelines or any future amendments; and
- d) include the results of the tests carried out per condition 2(a) of this approval in the annual report for the facility following clause 101 of the licence.

- 3. The licensee must:
 - a) replace the decommissioned well in the north-east corner of LP1's footprint with an effective monitoring well in the nearby vicinity of the decommissioned well; and
 - b) provide the location of all monitoring wells in the annual report following clause 101 of the licence;
- The licensee must, within 90 days of completion of the modular cover installation, submit to the environment officer the specifications and installation report for the modular cover system;
- 5. 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 development;
- 6. The licensee must not use leachate for dust control purposes or recirculate leachate into the repository cells;
- 7. The licensee must follow the Schedule A of the October 15, 2021 notice of alteration approval of DGHTA Licence No. 58 HW S2 RRRR for construction, installation, and approval of the synthetic liner;
- 8. The licensee must follow all other conditions of the notice of alteration approval dated October 15, 2021; and
- 9. The licensee must follow all other clauses of Dangerous Goods Handling and Transportation Act Licence No. 58 HW S2 RRRR.

Please be advised that this Notice of Alteration Approval is contingent on the acceptance of a revised Dangerous Goods Handling and Transportation Act Licence that will be issued in the near future.

Anyone affected by this decision may appeal, in writing, to the Minister of Environment and Climate Change at minecc@manitoba.ca by November XX, 2024. This approval is available on the public registry at https://www.gov.mb.ca/sd/eal/registries/index.html.

If you have any questions about this approval, please contact Tyler Kneeshaw, Regional Supervisor, Environmental Compliance and Enforcement Branch at EnvcCePortage@gov.mb.ca or 204-239-3608.

Sincerely,

Original Signed By Agnes Wittmann Director The Dangerous Goods Handling and Transportation Act

c. Tyler Kneeshaw - Environmental Compliance and Enforcement Mehak Bajwa - Environmental Approvals

Schedule A to the leachate pond design revision dated May 7, 2024

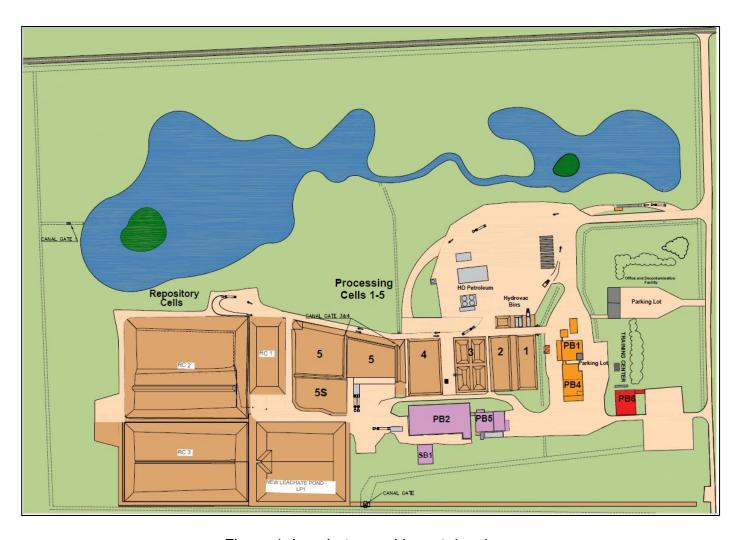


Figure 1: Leachate pond layout drawing

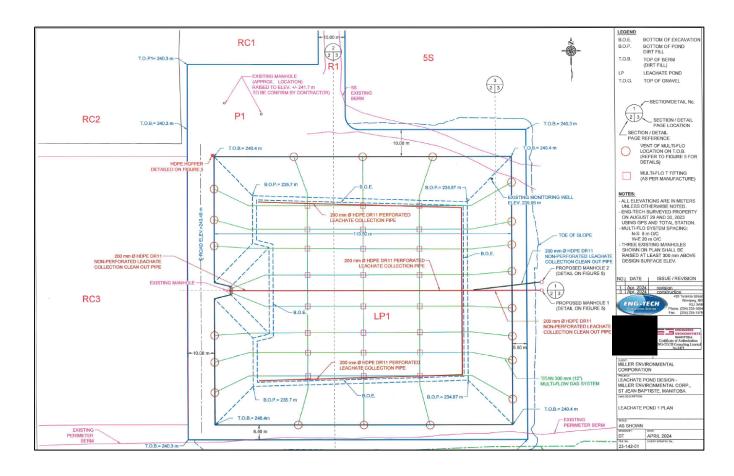


Figure 2: Leachate pond engineering design revision