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## GRRWA Sanitary Landfill, Phase 2 MSWLF Unit -56-SDP-07-80P - Permit Amendment Request, Leachate Recirculation

1 message

Ohrt, Nathan <NOhrt@scsengineers.com>

Wed, May 7, 2025 at 2:39 PM

To: DNR Project Officer <mick.leat@dnr.iowa.gov>

Cc: "abanks@grrwa.com" <abanks@grrwa.com>, "Buelow, Tim" <TBuelow@scsengineers.com>, "becky.jolly@dnr.iowa.gov" <becky.jolly@dnr.iowa.gov>

Good afternoon Mick-

SCS Engineers, on behalf of the Great River Regional Waste Authority, is requesting a permit amendment to recirculate leachate over areas constructed with a composite liner in the Phase 2 MSWLF unit, Regions 2 and 3 of the GRRWA Sanitary Landfill (Landfill). This amendment is intended to apply to both existing areas and future cells within Phase 2, Regions 2 and 3.

The Application for Permit Renewal, dated January 31, 2020, and the August 4, 2020 response letter (Doc #98194), which included design of an infiltration barrier layer and leachate collection system retrofit over the Phase 2, Region 1 area, were submitted by Barker Lemar Engineering Consultants/Evora Consulting.

Appendix 2.B of the Application for Permit Renewal (Doc #96922), as authorized in Special Provision X.3 of the permit, most recently revised on July 29, 2024 (Doc #110575), included a HELP model analysis that demonstrated leachate recirculation was feasible in accordance with 567 IAC 113.7(5)"b"(4). As stated in Appendix 2. B:

For the analysis, the HELP Model calculations were based on a 90% recirculation rate, and it was shown that less than 12 inches of fluid (10.293 inches) would build up over the liner over a period of 100 years. It should be noted that the HELP Model simulation used for recirculation included the subsurface inflow described above. The HELP Model output file BASAL WITH SIDE SLOPE — 90% RECIRCULATION is provided in this appendix [not included herein]. Actual field conditions and any variation from the assumptions used in the HELP Model would impact the conclusions and timeframe indicated by the model. Based on these results, leachate recirculation appears to be feasible and GRRWA requests approval to recirculate leachate in the 2019 North Lateral Expansion area [emphasis added].

The approval requested for Phase 2, Region 3 is to also apply to leachate recirculation in the areas of Phase 2, Region 2 constructed with a composite liner. Approval to recirculate leachate over the Phase 2, Region 1 area, including the area of the separatory liner within Phase 2, Region 1, is not included in this request.

If you have any questions or comments regarding this request, please contact me or Tim Buelow. Thank you.

Nathan Ohrt

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