

July 17, 2020

VIA ELECTRONIC DELIVERY

Rich Walton.
Westmoreland Sanitary
111 Connor Lane
Belle Vernon, PA 15012-4519

Re: Leachate Management Plan Revisions
Westmoreland Sanitary Landfill
Rostraver Township
Westmoreland County
I.D. No. 100277
APS No. 3107
Authorization No. 1281909

Dear Mr. Walton:

The Department of Environmental Protection (the Department) has reviewed the June 10, 2020 submission regarding the request for minor modification of Permit No. 100277 for Leachate Management Plan revisions at the Sanitary Landfill located in Rostraver Township, Westmoreland County. Based on that review, the Department determines that the following technical deficiencies remain:

Technical Deficiencies

1. Attachment 25-5:
 - A. The minor losses calculation for the Leachate Evaporator Pump Station contained in Attachment 25-5.3 assumes that the K-factors are equal to 2 for each component of the HRT system. Please explain how those values were determined based on manufacturer operational data.
 - B. The minor losses listed in the TDH Calculations Table in Attachment 25-5.3 for the Leachate Evaporator Pump Station and Attachment 25-5.4 for the Storage Tank Inline Booster Pump appear to be overstated based on the formula represented in the attachments. Please revisit the calculation to ensure that the calculated minor losses correspond to the formula: $H_m = \frac{16Q^2}{2g(448.3\pi)^2 D^4} \sum K_i$
 - C. The information provided with respect to the Storage Tank Inline Booster Pump does not include a description of the mechanisms that will be employed to control its operation. Please clarify if the pump's operation will activate automatically or manually and the measures by which its operation will terminate in the event of overflows from Leachate Evaporator Pump Station or bypass from the leachate management area.
2. Attachment 25-8:
 - A. 25 Pa. Code Section 299.122(b)(16) requires that aboveground storage tanks employ a method of leak detection capable of detecting a release. With respect to this requirement, the foundation detail presented in Attachment 25-8 for the proposed Process Tank depicts that the top of the foundation will be separated from the steel tank floor by a ½-inch thick cane fiber material from which the perimeter weep tubes will extend to conduct leakage to the tank perimeter for observation within the secondary containment. The Department questions the capability of the cane fiber material's to effectively transmit leakage from the

tank bottom to the perimeter of the foundation for observation. Please provide the results of laboratory testing of the in-plane hydraulic properties of the proposed cane fiber material conducted under loading conditions greater than or equal to that of the filled tank. The Department further questions whether the cane fiber material would tend to absorb leakage and potentially cause corrosion cells underneath the tank bottom contrary to 25 Pa. Code Section 299.122(b)(2). Please provide documentation to confirm that cane fiber joint filler panels placed in contact with tank bottoms will ensure that corrosion is minimized.

- B. The June 10, 2020 technical review letter response does not include the requested revision of Attachment 25-8 for a contingency plan for alternative disposal should the facility be unable to dispose on-site due to exceedance of the monthly source term allocation. The response asserts that the monthly source term allocation does not apply to residuals generated by the leachate evaporation system on the basis that those residuals result from liquids released from waste materials previously approved and accepted for disposal at site and that tracking of the residuals towards the monthly source term allocation would be “double-counting” against the allowable limits. The Department disagrees with that assertion.

The Department’s TENORM disposal protocol was developed to limit potential exposure to radiation deposited in the disposal areas based on the concentration of radioactive material in the waste. The disposal protocol requires that TENORM waste disposed in a landfill be mixed with cold waste at a 50:1 ratio and to prevent hot spots. The allocation takes into account the amount of cold waste that is received by a landfill for three prior calendar years and determines the amount of TENORM waste that can be accepted by the landfill to ensure that there is enough cold waste to mix with the TENORM waste. Allowing the concentrated leachate evaporator residue to be disposed in the landfill without accounting for its TENORM levels could create a potential for the landfill exceed the 50:1 mixing ratio in accordance with the protocol. As such, evaporator system residues are required to be managed in accordance with the TENORM disposal protocol and subject to the monthly allocation. Please provide the previously requested contingency plan for alternative disposal should the facility be unable to dispose on-site due to exceedance of the monthly source term allocation.

3. Attachment 25-9: With respect to the concern expressed in the Department’s April 14, 2020 technical review letter regarding pumping rates from the Leachate Evaporator Pump Station in excess of the 70 gpm design feed rate specified on the manufacturer’s Data Sheets appended to Attachment 25-9, the response provided refers to discussions with the system’s manufacturer claiming that the proposed equipment may operate successfully at flow rates as high as 100 gpm. Please provide a written warranty from Pentair Filtration Solutions, LLC to confirm the performance capability of the proposed HRT system at the specified pumping rates.
4. Attachment 25-10: A measure described in Attachment 25-10 to reduce leachate generation rates involves sealing of exposed protective cover at the perimeter of the disposal area with a soil wedge to allow for diversion of run-off. The Department observes that implementation of that measure would create circumstances whereby upslope leachate seeps may be conducted beyond the lined disposal area. Please describe how such circumstance will be prevented. In addition, the Department requests that the evaluation of leachate generation reduction measures be expanded to consider deployment of geomembrane covers on portions of the disposal area with intermediate soil cover.
5. Drawing No. (2019-108)-45B: The configuration of the Leachate Management Pump Station shown in Detail A on application Drawing No. (2019-108)-45B positions the pump-on float elevation for the second pump above the overflow pipe. The Department believes that the design should minimize bypassing events by initiating operation of the second pump before the level of leachate in the manhole reaches the overflow pipe. Please revise Detail A to either raise the elevation of the overflow pipe or lower the elevation of the pump-on float.

Please be advised that further comments regarding the referenced application may be forthcoming based on additional information and data provided in response to the Department’s July 2, 2020 letter.

Your response should be in the form of revisions to affected pages, forms or drawings in the application. Each revision or addition should bear the revision date and show what items have been revised or added. The Department suggests you use colored paper for page revisions to the application with additions highlighted and deletions lined out so changes are easily identified. All revised forms must have the title sheet marked with the latest revision date. A revised Page 2 of Form A – Application for Municipal or Residual Waste Permit must be re-signed by the applicant, notarized and marked with the revision date. The revisions to the application are to be inserted into the application at the Department’s regional office. Three (3) additional copies with instructions for revisions should be provided so they can be sent to county and township. The requested information should be submitted within thirty (30) days of receipt of this letter.

If you have questions, please contact Denis Strittmatter at 412.442.5800 or dstrittmat@pa.gov and refer to Application No. 100270, Authorization No. 1281909.

Sincerely,

Denis O Strittmatter

Gregory W. Holesh

Denis O. Strittmatter
Permit Reviewer
Bureau of Waste Management

Gregory W. Holesh, PE
Environmental Engineering Manager
Bureau of Waste Management

cc: Westmoreland County Department of Planning and Development
Rostraver Township
Civil Design Solutions
Region
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