

November 6, 2025

Mr. D. Scot Haan, Secretary and Operations Manager
Environmental & Recycling Services, Inc.
1100 Union Street
Taylor, PA 18517
via email: tessdutch@aol.com

Re: Technical Deficiency Letter
Major Modification Application for Phase IV Redesign
Environmental & Recycling Services, Inc. C/D Landfill
Application# 100932-A251
APS No. 1138570 Auth No. 1529352
Taylor Borough, Lackawanna County

Dear Mr. Haan:

The Department of Environmental Protection (DEP) has reviewed the major modification application for the above referenced facility and has identified the following deficiencies. The deficiencies are based on applicable laws and regulations:

Deficiencies

General Information Form

1. The Facility Information section should be checked to indicate modification of an existing facility.
2. Coordinate Information #22.0 should be checked as the major modification will include construction of two (2) 510,000-gallon leachate storage tanks.

Form L – Contingency Plan

3. Please include Leachate Storage tanks in the Preparedness, Prevention and Contingency (PPC) Plan in all applicable sections. – 25 Pa Code § 277.181
4. The PPC Plan States that Material Safety Data Sheets are held onsite. Please include a list of all materials on-site that have accompanying Safety Data Sheets within the PPC Plan. – 25 Pa Code § 277.181

Form 1 – Facility Plan

5. Please provide an explanation and/or calculation for the 48,500 cubic yards of soil for subbase construction should be provided, as well as the approximate number of trucks and delivery times for soil. – 25 Pa Code § 277.112

Form X – Radiation Protection Action Plan

6. Is there somebody on site who is responsible for implementation of the RP action plan if the CHP isn't on site? This should be addressed as per the guidance: "Persons Responsible for Implementation of the RP Action Plan Each facility or well site should designate an individual responsible for implementation of the RP Action Plan. This individual should have adequate authority to implement the Plan. If the individual(s) implementing the RP Action Plan is/are different from the individual(s) who prepared the RP Action Plan, the RP Action Plan should specify a minimum one-day training session in the fundamentals of radiation safety and detection".
7. Please add in that the RPAP must be reviewed "at least annually" per guidance.

Form 6 – Geologic Information – Phase I & Form 7 – Hydrogeologic Information – Phase I

8. The correct identification of the upgradient and downgradient monitoring wells is unclear. Per Chapter 277.282(a)(2), a C&D landfill must have at least three hydraulically downgradient and one upgradient monitoring well. When MW-1 through MW-4 were installed in 1983, MW-1 and MW-4 were upgradient to MW-2 and MW-3 in terms of water table elevation. This configuration was also consistent with a conceptual site model in which the mine pool is flowing continuously south/southwest at and around the site toward the Old Forge Mine Pool 2 miles to the southwest.

However, for the past several years, MW-1 has usually been the most downgradient, and MW-2R the most upgradient, compared to the other mine pool monitoring wells. Also, the initially upgradient well MW-4 has recently also normally been slightly further downgradient than MW-2 and MW-3. Additionally, MW-4 has consistently had higher sulfate and specific conductance than the other mine pool wells, more indicative of a downgradient well than an upgradient monitoring well. Please determine which wells, if any, could be considered upgradient, and which would be better classified as downgradient. Means of accomplishing this could include the following:

- A survey of the tops of monitoring well casings may provide more accurate elevation data than the previous surveys, as monitoring well groundwater elevations usually do not differ by more than 15'.
 - DEP previously recommended that dye tests be done to determine the velocity of mine pool flow underneath the landfill. However, the consultant at the time conducted only calculations based on generalized bedrock aquifers rather than dye tests. However, dye tests might provide answers to this question regarding monitoring well identification of upgradient/downgradient.
9. The small differences in groundwater elevation between MW's 1-4 are presented as an important piece of evidence that the groundwater flow in the mine pool is almost exclusively horizontal with little to no vertical component. However, as explained in the first recommendation, monitoring well water table depths have varied in relation to each other over the lifetimes of the wells, such that what were initially considered upgradient wells are now better described as downgradient wells, and vice versa. Other lines of evidence, such as temporary well points and others would more conclusively demonstrate whether there are shallower aquifers in former coal veins or elsewhere.

Please either provide additional lines of evidence for there not being shallower aquifers, or initiate exploration for shallower aquifers. If there are shallower aquifers, even if they are of limited extent on the site, releases to the subsurface could be more quickly detected and addressed than relying on the mine pool concentrations, which might also dilute constituents of concern from a landfill release.

10. MW-1, MW-2R, MW-3, and MW-4 lack a barrier between the overburden and bedrock, as required per Chapter 277.283(c)(2). Without an impermeable seal between the overburden and bedrock, stormwater or overburden groundwater can cross-contaminate lower aquifers and/or the mine pool. Please address this.

Form 14 – Operation Plan

11. Please update the Operation Plan to include the initial placement of an 8-foot layer of construction and demolition waste that is not capable of penetrating or puncturing the protective cover. – 25 Pa Code § 277.260
12. A proposed scale is indicated on the provided Drawings submitted with the application. Please update the Operation Plan to include a construction schedule for when the scale will be added to the facility and how it will be operated. – 25 Pa Code § 277.132
13. Leachate storage tanks are proposed to be constructed. Please update the Operation Plan to include the Leachate Storage tanks and any leachate storage tank equipment. – 25 Pa Code § 277.132
14. Please update the Nuisance Minimization Control Plan to include monitoring of hydrogen sulfide gases as well as plans for mitigation of odors from these gases. – 25 Pa Code § 277.136 and § 277.218

Form Q – Request for Equivalency Review

15. Bearing Capacity appears to show the need for increased material (2 to 3 feet of protective cover) between the liner system and overlying heavy equipment to meet required factors of safety and prevent damage. Please address this.

Form 24 – Liner System – Phase II

16. A 4-foot berm surrounding the lined disposal area should be identified or planned with construction of Stage 1 through Stage 5 where applicable. – 25 Pa Code § 277.252
17. Please provide a quality assurance plan listing testing criteria, required specifications, and installation and construction plan for all components of the liner system including subgrade, subbase and protective cover. The plan should include tables which summarize this information for each component. – 25 Pa Code § 277.161

Form 25 – Leachate Collection – Phase II

18. The leachate detection zone design is an alternate design to specifications listed under 25 Pa Code § 277.254. Please provide a Form Q – Request for Equivalency with all applicable sections completed for this design. – 25 Pa Code § 271.231

19. Please provide a description with specifications and measurements of the leachate tank concrete pad, pump-out area and equipment for leachate hauling, and any further secondary containment provided in these areas. – 25 Pa Code § 277.275
20. Please provide leachate collection piping specifications and measurements in this section and/or the drawings. – 25 Pa Code § 277.257

Form 28 – Closure/Post – Closure Land Use Plan

21. Bonding Worksheets – Please submit updated costs estimates and quotes for all applicable sections of the bonding worksheets. The cost estimates should be provided with confirmation of the date and origination of each cost.
22. Bonding Worksheet A – The leachate storage tank should be included with the bonding calculations. If all leachate will be conveyed from the leachate storage tanks to the POTW, a cost estimate for tank decontamination should be provided with calculations.
23. Bonding Worksheet B – Intermediate capping costs is assumed to \$0 due to revenue offsetting the cost of capping installation. This cost should be added as an unexpected or unplanned closure would involve Department contractors conducting closure activities. Please update this section to include cost for installation of intermediate capping.
24. Bonding Worksheet B – Based on the scheduling for staging, no capping occurs until stage 5 when filling of the landfill has reached final grades. Bonding Worksheets state that the maximum amount of open area in need of final closure will be 15 acres. This should be recalculated for final capping and other associated activities for capping of 50.65 acres.
25. Bonding Worksheet C – The provided line-item assumption sheet states that costs were calculated with an average well depth for the facility of approximately 103 feet. This should be updated to reflect the costs for the average well depth at the facility of approximately 225 feet.
26. Bonding Worksheet G – Please update the number of wells in this section to reflect the provided gas collection drawings and estimated number of wells that must be installed.
27. Bonding Worksheet K – This section should be updated to include the total volume of leachate storage tanks.

Gas Collection

28. A Gas Collection system is noted in Drawings LFG-1 and LFG-2. A construction schedule detailing when gas wells will be constructed at each stage of Phase IV should be provided with plans for gas collection at the landfill. – 25 Pa Code § 277.171
29. Please provide a plan for monitoring and recording landfill gas on and off the site. This should include monitoring of hydrogen sulfide gas. – 25 Pa Code § 277.171

Public Comments

Below is a list of public comments received by the Department regarding this major modification application. Please provide responses for each public comment and how each comment or concern will be addressed:

- 30. The Borough would like the leachate tested before discharge. It is helpful to know what is in the leachate if the sewer system were to back up or be discharged during storm overflow events.
- 31. The pump station where the landfill will connect was last rehabbed in 2003 and landfill leachate volume was not accounted for. This needs to be evaluated.
- 32. The pump station is located in a low area that has flooded in the past. The Borough would like the landfill to have enough storage that they can stop discharging during storm/flooding events.
- 33. The landfill had problems with hydrogen sulfide odors in the past and there is a concern there could be odor problems again.
- 34. Potential fires is a concern.
- 35. Will the landscape change, specifically the tree line that exists between the homes on Powell Street and the landfill?
- 36. When you go down Schultheist Lane, there are houses where the fence is right against the front, which makes it very hard for the people to get in.

You must submit a response fully addressing each of the significant technical deficiencies set forth above within 60 calendar days or the DEP may deny the application.

If you believe that any of the stated deficiencies is not significant, instead of submitting a response to the deficiency, you have the option of asking the DEP to decide based on the information regarding the subject matter of that deficiency that you have already made available. If you choose this option regarding any deficiency, you should explain and justify how your current submission satisfies that deficiency. Please keep in mind that if you fail to respond, your application may be denied.

Should you have any questions regarding the identified deficiencies, please contact Matthew Glogowski at (570) 830-3128.

Sincerely,

David F. Matcho

David F. Matcho, P.E.
Environmental Engineer Manager
Waste Management Program

cc: Kevin Bodner, Martin and Martin, Inc. (via email: knbodner@yahoo.com)
Taylor Borough (via email: cbellucci@taylorborough.com)
Lackawanna County Planning Commission (via email: donatoml@lackawannacounty.org)
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