



December 27, 2022

Mr. David Pannucci, Regional Engineer  
Bethlehem Landfill Company  
2335 Applebutter Road  
Bethlehem, PA 18015-6004

via email: [david.pannucci@wasteconnections.com](mailto:david.pannucci@wasteconnections.com)

Re: Technical Deficiency Letter  
Bethlehem Landfill  
Municipal Waste Major Permit Modification Application –  
Northern Realignment  
Application# 100020-A203  
APS ID# 1033510, AUTH ID# 1345418  
Lower Saucon Township, Northampton County

Dear Mr. Pannucci:

The Department of Environmental Protection (DEP) has reviewed the Major Modification for the above referenced site and has identified the following deficiencies. The deficiencies are based on applicable laws and regulations:

### **Deficiencies**

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#### **Form HW-C – Compliance History**

1. Section C.3 references Attachment 2 for permit denials, but no permit denials are identified in that list. This answer should be revised, or denials listed.
2. Section D – Please provide the compliance history information from the beginning of 2022 up to the present.

#### **Form 1 – Facility Plan**

3. Form 1 and all related attachments should be revised to remove mention of “IESI” where appropriate.
4. Please revise Form 1 Attachment I-1 to include the most recent approved conditions of the landfill which include the renewable natural gas (RNG) plant and Sediment Basin 1 revisions.
5. Form 1 indicates Cell NR-2 and NR-3 as 7.7 acres and 10.6 acres respectively. This area is not consistent with the major modification narrative areas of NR-2 6.1 acres and NR-3 12.2 acres. Please revise.
6. It is noted in Form 1 that Cell 4-E is proposed to be re-sequenced with this major modification. An attachment which states the resequencing plan and estimated date of resequencing should be included in the major modification narrative as well.

7. Sequencing plans for cells NR-1 through NR-3 are illustrated in Drawings LF-17 through LF-20. NR-1A through NR-3A sequencing plans are not included. Please submit the alternative sequencing plans.
8. The facility plan should include the estimated timing for disposal operation for the proposed expansion. This construction schedule should consist of a narrative or table of estimated dates when disposal will take place. This should also include areas and timespan of temporary, intermediate, and final capping for Cell NR-1 through NR-3 as well as Cell NR-1A through NR-3A. 25 Pa. Code 273§112(1)
9. The facility plan should include a detailed description of the volume of soil needed to construct and operate the facility and of the method by which the soil will be delivered. The description will include the number of trucks, the access roads they will use, delivery times and any other information relevant to assessing the impacts of the operation. 25 Pa. Code §273.112(2)

**Form F – Soil Information – Phase I**

10. Section C.7 – Please provide calculations used to determine the volumes of material for subbase, protective cover, daily cover, and final cover.

**Form 3 - Map Requirements – Phase II – Municipal Waste and Construction/Demolition Waste Landfills**

11. Drawing LF-12 ‘Proposed Final Site Grading Plan’ does not include the approved RNG plant. This map should be revised.

**Form G(A) and G(B) – Air Resources Protection**

12. These forms are incomplete. Please submit a completed Form G(A) – Air Resources Protection – Dust Emissions Estimate and Control Plan and a completed Form G(B) – Air Resources Protection NMOC Emissions Estimate and Control Plan. 25 Pa. Code §273.217

**Form I – Erosion and Sedimentation Control**

13. The proposed alterations to Sediment Basin 2 should be revised, as sediment basins cannot have slopes greater than 3:1. (Chapter 6.4.2, Page #30 of the PA BMP Manual)
14. Please include a plan for regularly scheduled maintenance and cleanouts for each sediment basin.

**Form 24 - Liner System – Phase II**

15. A modification to the protective cover depth (from 18-inches thick to 12-inches thick) has been proposed. Please provide a Form Q – Request for Equivalency for this modification. 25 Pa. Code §273.257(b)
16. Should any accumulation of liquids be detected beneath any liner system during or after construction, it should be sampled immediately and sent out for lab analysis. Please include a sampling and analysis plan for this scenario.

**Form 25 – Leachate Management – Phase II**

17. Leachate generation was based on the historic leachate generation at Bethlehem Landfill from 2006 through 2013. This should be revised to include the most recent years of leachate generation data. 25 Pa. Code §273.162(a)(1)

18. Pump System Design (Attachment 25-1 Section 5.0) – The pump system design mentions leachate pumping from Cells SE1 and SE2. This should be updated to include the pumps indicated in Cells NR-1, NR-2 and NR-3 as indicated in Drawing LF-9 Leachate Collection Plan.
19. A proposed temporary sump was indicated on Drawing LF-15A Cell Development Plan NR-3A. Drawings, details and pump calculations should be provided for this temporary sump.

#### **Form K – Gas Management**

20. Please include a construction schedule indicating the timing of installation and construction for each landfill gas collection/control component. 25 Pa. Code §273.171(a)(2)
21. Please include the RNG plant in the gas management plan. 25 Pa. Code §273.171(b)

#### **Form 28 – Closure and Revised Bonding Calculations**

22. Bonding Worksheet A – This worksheet refers to “Attachment A” for calculations. Please submit this attachment.
23. Bonding Worksheet B – Volume of fill areas and maximum areas to be capped are provided. A narrative explaining how these values are determined should be provided.
24. Unit costs quotes or a narrative explaining how values were determined should be provided for all costs relating to decontamination, disposal, monitoring, etc.

#### **Nuisance Minimization Control Plan – Enhance Surface Monitoring**

25. The NMCP should include a surface emission monitoring plan (SEM). The SEM plan should consist of a monthly monitoring plan to measure emissions across the landfill, logging the data into mapping software and producing color coded SEM data for evaluation. The monthly report should also include an accompanying memo which details actions plans to bring surface emissions to acceptable levels if necessary. Please provide a plan to meet these conditions.

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Your response should be in the form of revision 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. DEP 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.

You must submit a response fully addressing each of the significant technical deficiencies set forth about within 60 business days or 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 DEP to decide based on the information regarding the subject matter of the 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.

If you have any questions, please contact Matthew Glogowski at (570) 830-3128.

Sincerely,

*David F. Matcho*

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

cc: Kevin Bodner, Martin and Martin, Inc. (via email: [knbodner@yahoo.com](mailto:knbodner@yahoo.com))  
Lower Saucon Township (via email: [manager@lowersaucontownship.org](mailto:manager@lowersaucontownship.org))  
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