



HanoverEngineering



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June 14, 2024

Ms. Cathy Gorman
Acting Township Manager
Lower Saucon Township
3700 Old Philadelphia Pike
Bethlehem, PA 18015

RE: Inspection Conducted on June 6, 2024
Bethlehem Landfill
Hanover Project LS90-7

Dear Ms. Gorman:

The purpose of this letter is to report the results of the above-referenced inspection. The inspection was conducted by the undersigned along with Cody White, Environmental Compliance Manager, at approximately 10:00 a.m. The following items were noted during the inspection:

1. Weather conditions at the office were mostly cloudy, with no to slight wind to the east to southwest, with a temperature around seventy-six (76) degrees Fahrenheit and humid.
2. Prior to the Bethlehem Landfill (BL) inspection, no litter or mud was observed along Applebutter Road from the WWTP to Ringhoffer Road and from Ringhoffer Road east to I-78 along both sides of Applebutter Road. The area around the office, scale house and truck wash were free of litter. The street sweeper was not observed in operation at the time of this inspection. The paved area around the scale house and the driveway leaving the scale house to Applebutter Road was clean. The water truck was not observed in operation and was not necessary for dust control.
3. Prior to the BL inspection an odor patrol was conducted. No WWTP odor was detected along Applebutter Road. A slight landfill gas odor was detected along Applebutter Road from Red Barn Auto to the self-storage units. After the BL inspection an odor patrol was conducted along Skyline Drive, through Steel City and along Riverside Drive, no landfill related odors were detected. An odor along Applebutter Road between Red Barn Auto and the storage buildings was detected after the LF inspection.
4. The flare was not in operation because the LF gas was being sent to the Archaea Energy Plant. The Energy Plant started receiving gas on June 5, 2024 to test the equipment operation. During the testing operation, Archaea's candlestick flare will be burning the gas whenever the flow to the processing equipment is shut down. BL's flare will be utilized to burn excess LF gas if the Archaea Energy Plant is not able to process (see Photo 7).
5. The truck wash was in service. The mud grate located southwest of the Blue Leachate Storage Tank is being maintained and functioning as intended. BL continues to utilize the street sweeper as needed to address mud on Applebutter Road and on the paved area around the scale house and driveway. BL is planning to make improvements to the landfill entrance by installing "cattle grates" across the entrance. The cattle grates will capture more mud from the construction and waste hauling vehicles before they can reach Applebutter Road. The improvements to the entrance have not started.
6. The east to west access road across the top of the landfill was somewhat muddy but passable. The access road from the office north to the top of the landfill was also in good condition. The water truck was not needed for dust control.

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7. The working face remains in the northern most portion of cell SE2-AB Phase II along the southern slope in an area that needs additional waste to bring the waste up to the design grades (see Photos 1, 2, 3, and 4). The trailer tipper and garbage trucks are offloading waste. Temporary litter fencing is in place around portions of the working face. The permanent litter fence is clean. The permanent odor misters were in use at the southern edge of cell SE-2AB and along the western side of the permit boundary. The portable misters were not in use at the time of inspection. The new, larger portable double blower mister system was delivered and is being set up for operation. No leachate seeps were observed. BL is keeping a close watch for leachate seeps and will continue to repair them as they occur.
8. D.C. Rauscher was awarded the bid to drill the twelve (12) new gas wells in the recently capped southern portion of cell SE2-AB Phase I and II. D.C. Rauscher is anticipating having the drilling rigs on-site in 2-3 weeks. Temporary horizontal gas collection lines have been installed to help control the gas collection until the new vertical wells are installed.
9. Daily cover material well in excess of five (5) days of supply is stockpiled at the top of the landfill. Tarps and foam are being utilized as needed and as conditions permit for daily cover. The deterioration issue with the foam used for daily cover appears to have been resolved.
10. The customer convenience area is open and free of litter. No one was unloading in the convenience area.
11. The northern perimeter road was not travelled during the inspection. NAPA is repairing the erosion channel at the northeast corner of the perimeter fence.
12. The fence along the northern boundary of the BL facility continues to be repaired as dead and dying trees fall.
13. NAPA has completed construction of Northern Realignment cell NR-1. The certification document has been submitted to DEP for approval, but DEP will not issue the approval until the Archaea Energy Plant is online. The Archaea Plant started to receive gas on June 5, 2024 and DEP was notified.
14. Removal of sediment within the containment berm around the Blue Leachate Storage Tank is complete. Inspection and maintenance of the exterior piping, valves and mechanical devices are complete. The Leachate Storage Tank is now storing leachate for the first time since being constructed. The plan is to send all the stored leachate to the PFAS Treatment System for PFAS removal before the treated leachate is sent to the WWTP. If the PFAS Treatment System cannot process all the leachate being generated, the excess leachate will bypass the PFAS system and be sent to the WWTP untreated. The ground abatement water will not be processed through the PFAS system.
15. The bird population was minimal, and the Falconer was not observed onsite.
16. BL completed the repair of the northern berm of Sedimentation Trap A and is now preparing the NPDES Permit Application to obtain a discharge permit from DEP.
17. Construction of the stormwater channel north of Sedimentation Pond 4 has been completed (see Photos 5 and 6).
18. Construction Certification of the PFAS Treatment System located in the former BRE Energy Facility has been submitted. DEP has submitted comments to BL.

ACTION ITEMS:

1. Placement of twelve (12) vertical gas wells in the capped southern end of cell SE-2AB – **Contract has been awarded; installation to be completed.**
2. Construction of the stormwater drainage channel north of Sedimentation Pond 4 - **Completed.**
3. Repair the perimeter fence and remove tree along the northern landfill perimeter road – **As Needed.**
4. Installed/set up the new double blower mister for masking odors – **To Be Completed.**
5. Repairs to the erosion channel north of the perimeter fence – **To Be Completed.**
6. Sedimentation Trap A NPDES Permitting – **To be Completed.**

Ms. Cathy Gorman
Acting Township Manager

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June 14, 2024

If you have any comments or questions regarding any of the above, or find that you need additional information, please do not hesitate to call me immediately.

Respectfully,

HANOVER ENGINEERING

A handwritten signature in blue ink, appearing to read "Scott J. Brown".

Scott J. Brown, HMI
Host Municipality Inspection

sjb:sas

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cc: Ms. Stacy Werkheiser, Administrative Assistant, Lower Saucon Township (via email)
Ms. Carol Schneider, Administrative Assistant, Lower Saucon Township (via email)
Ms. Rachelle Markovic (via email)

Photo 1



Working face looking east.

Photo 2



Working face, view of the top of the south slope.

Photo 3



Working face looking east.

Photo 4



Working face on the south slope of cell SE-2AB.

Photo 5



Completed stormwater drainage channel north of Sedimentation Pond 4.

Photo 6



Inlet box and 30-inch HDPE pipe at bottom of the stormwater drainage channel north of Sedimentation Pond 4.

Photo 7



Complete Archaea Energy Plant and the plant's candlestick flare.