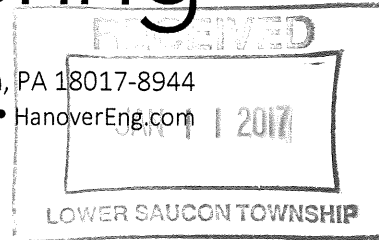


# Hanover Engineering

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January 9, 2017

Ms. Leslie Huhn, Township Manager  
Lower Saucon Township  
3700 Old Philadelphia Pike  
Bethlehem, PA 18015

RE: Inspection Conducted on January 5, 2017  
IESI Bethlehem Landfill  
Hanover Project LS90-7

Dear Ms. Huhn:

The purpose of this letter is to report the results of the above-referenced "Mid-meeting" inspection. A pre-inspection meeting was held at the landfill office between myself, Mr. Don Hallock, District General Manager, and Mr. Nick Rogers, Compliance Manager. At this time, Mr. Hallock stated as follows:

- The landfill is using direct application of odor suppressants on the garbage as needed to control odors, since the mister lines have been winterized.
- The gas collection system upgrades have been completed.
- He requested that I notify him if I detect any odors on my driving patrols, so that he can address that issue in a timely manner.

The inspection was conducted by me along with Mr. Rogers. The following items were noted during the inspection:

1. Mr. Rogers stated that the BRE plant was currently running at full capacity, and is drawing approximately 2,300 standard cubic feet per minute (scfm). The plant had recently been down, and had just restarted in the last day or so.
2. The landfill flare was running at a flow rate of 1,000 scfm and a temperature of 1,690 degrees Fahrenheit. The largest blower was in operation. The bar graph on the instrument readout indicated that the flow rate was approximately forty-two percent (42%) of the Variable Frequency Drive (VFD) capacity. The paper chart record went back to December 23 and indicated no flare shutdowns.
3. The truck wash was not in use due to frozen conditions.
4. No mud, blowing litter, or odors were observed along Applebutter Road up to Ringhoffer Road, or the entrance driveway. There was some sediment on Applebutter Road. Mr. Rogers stated that the street sweeper was scheduled for tomorrow. There was sediment in some of the parking stalls of the office parking lot. A moderate gas odor was observed in the parking lot upon arrival.
5. Both the northern and southern mister lines remain offline and winterized.
6. Wind during the inspection was from the west/northwest at an estimated ten to twenty miles per hour (10 – 20 mph).
7. Garbage was being disposed of in Cell 4D. The number of trucks dumping and waiting was not visible from my vantage point. Trucks are still approaching and departing the working

- ROUTING
- Council
  - Manager *or*
  - Asst. Mgr.
  - Zoning
  - Finance
  - Police
  - P. Works
  - P/C
  - P & R
  - EAC
  - Engineer
  - Solicitor
  - Planner
  - Landfill
  - EMC
  - Other *WB*

- face from the top of the landfill. Windscreens were in place at the working face. No odors were observed in the area of the LSA water tower.
8. New Cell 4E Stage 4 was not being used for disposal at the time of the inspection.
  9. As Mr. Hallock stated, the gas collection system improvements have been completed. This includes the installation and connection of four (4) newly-drilled wells, the re-drilling of five (5) existing wells, the installation of a horizontal collector, and the installation of a new header pipe. Mr. Rogers pointed out the new wells, and stated that the header pipe now provides a continuous loop in the collection system around the entire facility. He stated that this has served to increase the vacuum in wells on the back side of the facility from ten (10) to twenty-five (25) inches of water column, which creates a much stronger "pull" of the gas from these wells. Mr. Rogers stated that he is working to "tune" the wellfield to maintain the proper balance as the gas production increases due to these new wells coming online. He is coordinating this effort with BRE.
  10. A new riprap stormwater channel is being constructed, running from near the end of the old MSE wall, along the northern perimeter, then around the northwestern corner, and tying into the new channel along the western perimeter. This will serve to capture water that runs off of the access road on top of the MSE wall, as well as water from the north face of the landfill in this area.
  11. Cover soil is still being imported. No Alternative Daily Cover material is being used. The stockpile at the top of the slope on the eastern end of the landfill has been stabilized.
  12. The west high wall was observed. No slope failures or major movement of soil or rock since the last inspection was evident.
  13. The temporary cap on the southern face was observed. No inflation of the cap was evident.
  14. Pickers are on site working to clean up litter.
  15. I conducted a driving patrol along the intersection of Applebutter Road and Ringhoffer Road before the inspection, starting at 10:25 AM. No landfill-related odors were observed. No sounds from the landfill flare were observed. Truck traffic was present on the landfill at that time, and truck noise was observed. I conducted a driving patrol along Skyline Drive after the inspection, starting at 11:52 AM. No landfill-related odors or sounds were observed. I conducted a driving patrol through Steel City after the inspection, starting at 12:04 PM. No landfill-related odors were observed. The sound and sight of the track hoe machine working to construct the stormwater channel along the northern perimeter (see Item 10 above) were observed from the entrance to the hill climb.

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



Christopher A. Taylor, PG, FMI  
Host Municipality Inspector

cat:llb