

# Hanover Engineering

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May 5, 2017



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

RE: Inspection Conducted on May 4, 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. The inspection was conducted by me along with Priscilla deLeon, Township Council liaison to the Landfill Committee; Donna Louder, Citizen Representative; Don Hallock, District General Manager; and Mike Shelden, Operations Manager. The following items were noted during the inspection:

1. The BRE plant was running. Mr. Hallock stated that the plant was running at half capacity, with one (1) of two (2) compressors on line.
2. The landfill flare was running at a flow rate of 1,790 scfm and a temperature of 1,563 degrees Fahrenheit. The bar graph on the instrument readout indicated that the flow rate was approximately fifty-six percent (56%) of the Variable Frequency Drive (VFD) capacity. The largest blower was in operation. The blower was still making a buzzing sound, about as loudly as observed during the previous inspection. Sound-blocking measures were still in place. The paper chart indicated multiple decreases in gas flow (possible shutdowns) on the following dates: April 24, April 26, April 27, April 30, May 2, and May 3. A definitive explanation for these events was not provided. During the inspection, it was observed that the flare was intermittently discharging black smoke, and that open flames were visible above the top of the flare enclosure. Inspection of the flare unit revealed that the automatic louvers were intermittently closing almost entirely, which was starving the flare of oxygen and causing the occurrence of the black smoke and visible flames. The louvers would then re-open, and the flare would return to normal-looking operation. The closing and re-opening of the louvers was directly observed twice while inspecting within the flare enclosure. A gas smell was also observed at this time. This was originally attributed to the presence of methane. The discharge of black smoke and visible flame was observed while on site approximately half a dozen times. Mr. Hallock had SCS investigate. They reported back to him before the end of the inspection that the louver control system must be "autotuned" and that a gasket needed to be replaced because it was allowing propane to leak. Propane is stored in the flare enclosure, as it is used to ignite the flare. Mr. Hallock stated that, based on that finding, the smell experienced in the flare enclosure during the inspection was propane, not methane. Mr. Hallock stated that he would issue a report of this incident.

ROUTING

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

3. The truck wash was not in use due to dry conditions.
4. No mud, blowing litter, or odors were observed along Applebutter Road up to Ringhoffer Road, the entrance driveway, or the office parking lot.
5. The northern mister line was observed to be in operation, but several spray nozzles were still not functional. Mr. Shelden will have these cleaned or replaced. The southern mister line is not yet in operation.
6. Wind during the inspection was blowing from the east/southeast at an estimated fifteen to twenty-five miles per hour (15 – 25 mph). The weather was clear.
7. Garbage was being disposed of in new Cell 4E Stage 4, outside of the fluff layer. One (1) truck was dumping and zero (0) were waiting. Trucks are still approaching the working face from the top of the landfill, and are still departing along the top also. Temporary windscreens were in place at the working face and were being moved to account for the wind direction being different from yesterday. A slight working face (garbage) odor was observed to the west of the working face (downwind). One (1) compactor machine was running. Ms. Louder reported hearing the compactor travel alarm at her property. At least five (5) rubber vehicle tires were observed in the garbage at the working face. Mr. Hallock acknowledged that disposal of tires was not permitted and stated that he would have them removed. Litter was observed caught by the box wire litter control fence.
8. Cover soil is still being imported. No Alternative Daily Cover material is being used.
9. The west high wall was observed. No slope failures or major movement of soil or rock since the last inspection was evident.
10. The temporary cap on the southern face was observed. No inflation of the cap was evident.
11. Stockpiling and placement of topsoil at and near the top of the southern face was continuing. Mr. Shelden stated that approximately seven (7) acres in total will be topsoiled and seeded. A crew was observed hydro-seeding part of this area during the inspection.
12. Pickers were on site to remove litter.
13. Evidence of spraying for dust suppression (wet road) was observed.
14. The eastern stockpile area was investigated. Mr. Shelden stated that the material here is structural fill that will be used in the construction of the MSE wall that is proposed as part of the Southeast Realignment (SER). Ms. Louder voiced concerns over the stability of the stockpile and requested that I review the SER plans to determine if the stockpile conforms with plan requirements. I have reviewed the plans, and find no requirements for the stockpile other than the installation of super silt fence along the downslope side. The presence of the silt fence was observed previously. During the inspection, I asked Mr. Shelden to re-check the silt fence and confirm that it is still in good working order. He stated that he will do that this week.
15. I conducted a driving patrol along the intersection of Applebutter Road and Ringhoffer Road before the inspection, starting at 10:20 a.m. No landfill-related odors or sounds were observed. No truck traffic was present on the landfill at this time. The buzzing sound coming from the largest blower was not audible. I conducted a driving patrol along Skyline Drive after the inspection, starting at 11:57 a.m. No landfill-related odors or sounds were observed. No truck traffic was present on the landfill at this time. I conducted a driving patrol through Steel City after the inspection, starting at 12:20 p.m. No landfill-related odors were observed. The sound of equipment was audible from the hill climb entrance.

Ms. Leslie Huhn  
Township Manager

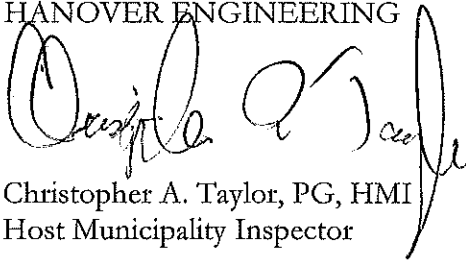
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May 5, 2017

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 black ink, appearing to read "Chris Taylor". The signature is written in a cursive style with large, sweeping loops.

Christopher A. Taylor, PG, HMI  
Host Municipality Inspector

cat: llb

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