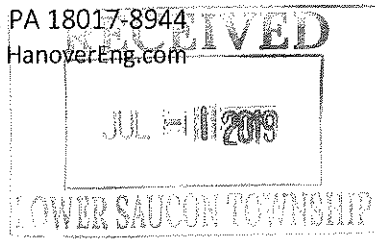


# Hanover Engineering

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June 28, 2019

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

RE: Inspection Conducted on June 27, 2019  
IESI Bethlehem Landfill  
Hanover Project LS90-7

Dear Ms. Huhn:

The purpose of this letter is to report the results of the above-referenced "pre-meeting" inspection. The inspection was conducted by me along with David Pannucci, Regional Engineer, and Astor Lawson, District Manager. This inspection and the meeting that followed were rescheduled from the usual third Thursday of the month due to scheduling conflicts. The following items were noted during the inspection:

1. The BRE plant has passed its scheduled permanent shut-down date of June 1, 2019 and was not running. However, the plant owner, Exelon, has issued a letter to Lower Saucon Township Council dated June 7, 2019 stating that they have entered into a Sale and Purchase Agreement with another company. The status of the plant will be monitored.
2. The landfill flare was running at a flow rate of 2,875 scfm and a temperature of 1,668 degrees Fahrenheit and appeared to be operating normally. There were no visible emissions from the flare at the time of the inspection. Mr. Pannucci reported that no visible emissions have occurred since the last inspection. The bar graph on the instrument panel indicated that the flare was running at eighty-nine percent (89%) of the Variable Frequency Drive (VFD) capacity. During the last inspection the bar graph had been reading one-hundred percent (100%). I had asked Mr. Lawson to advise Cody White, the landfill gas technician, of this and obtain an explanation for this higher-than-normal reading. Mr. Pannucci stated that the two instrument panels had been re-calibrated to measure gas flow in the same units of standard cubic feet per minute (scfm) rather than cubic feet per minute (cfm). He stated that he suspects that this work may explain anomalously high readings for the VFD. The largest blower was in operation. The paper chart went back to June 20 and showed steady gas flow. The truck wash has been is functioning normally and was in use.
3. No blowing litter, mud, or odors were observed along Applebutter Road up to Ringhoffer Road, the entrance driveway, or the office parking lot. Upon arriving at the landfill, it appeared the street sweeper had cleaned the roadway earlier in the day. Mr. Pannucci confirmed this.
4. Weather conditions were sunny, temperature in the 80s, and calm wind.
5. Garbage was being disposed of at one (1) working face on the top of the landfill and pushed down the south slope for disposal in areas of Cell III that were below approved elevations.

### ROUTING

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

10006-27-19

The approach to the working face was dry and stable. Zero (0) trucks were unloading on the tipper, with none waiting for the tipper. Zero (0) trucks were unloading conventionally (dump body or walking floor), with zero (0) waiting. Two (2) dozers were spreading and placing garbage. One (1) compactor was in use. Trucks were observed hauling soil from an on-site stockpile to the working face for use as daily cover. Tarps had been in use as alternative daily cover on previously-filled areas but were pulled back for the day. Wind screens were being used near the working face. A slight garbage odor was observed in the vicinity of the working face. No odors were observed anywhere else on site.

7. Additional cover soil was being added to the south face to dress it up.
8. Garbage is showing through the cover over Cell SE-1A. Mr. Lawson stated that additional cover will be placed here also, after addressing the cover on the south face.
9. No windblown litter was observed in the trees or on the ground to the east of Cell SE-1A.
10. The north slope road was driven. The road bed, rip-rap swale, and rock check dams were in good shape with little or no erosion observed.
11. It was observed that the water truck had just sprayed the internal roads for dust suppression (roads were wet).
12. It was observed that Cody White, Landfill Gas Technician, was going around to the wellheads. Mr. Pannucci stated that he was tuning the well field.
13. The temporary cap on the south face was observed. No ballooning of the cap was occurring.
14. The west high wall was observed. No slope failures or major movement of soil or rock since the last inspection was evident.
15. The customer convenience area is in use for small vehicles.
16. Erosion rills are still present on the slope below the south face haul road. Mr. Lawson stated that rills were previously repaired, but that the heavy rain storm last Tuesday created new ones. He stated that the swale on the upslope side of the haul road was still being enhanced to better control the flow of stormwater. It was observed during the inspection that the work to widen and deepen the swale and add large stones to it to make a channel to carry stormwater flows was still progressing.
17. Construction work on the main gabion down channel on the south face has not yet resumed.
18. We entered the scale house to inspect trucking slips from Waste Connections' transfer stations. One (1) out of nine (9) trucks was overweight, by 1,320 pounds.
19. I conducted a driving patrol along the intersection of Applebutter Road and Ringhoffer Road before the inspection, starting at 9:50 a.m. No landfill-related odors were observed. The sight and sound (engines, vehicle tracks, and travel alarms) of trucks, dozers, and compactor working on the landfill was observed. The sight of garbage disposal taking place on the south slope was observed. The culvert under Applebutter Road was observed to be carrying the streamflow with no backups. I conducted a driving patrol along Skyline Drive after the inspection, starting at 11:10 a.m. No landfill-related odors were observed. The sight and sound of trucks on the landfill (south face haul road) were observed from the end of Skyline Drive. I conducted a driving patrol through Steel City after the inspection, starting at 11:23 a.m. No landfill-related odors were observed. From the entrance to the Hill Climb no trucks were observed on the landfill road on top of the MSE wall, since this is no longer the route taken by trucks which have already unloaded and are heading toward the landfill exit. On the driving patrol through the Narrows it was observed that the road immediately downslope of the runoff point from the landfill was clean.

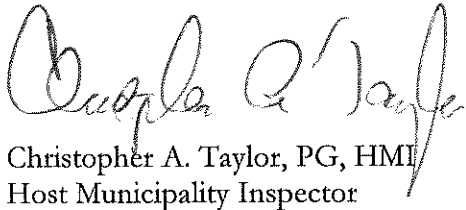
Activity Related to the Southeast Realignment Expansion

20. Construction in future Cell SE-1B is nearly complete. The primary liner has been installed. Protective cover stone over the liner has been installed. The leachate collection pipe network has been installed. Rob Tyler of Martin and Martin was onsite and has supervised this work.

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, HMI  
Host Municipality Inspector

cat: llb

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