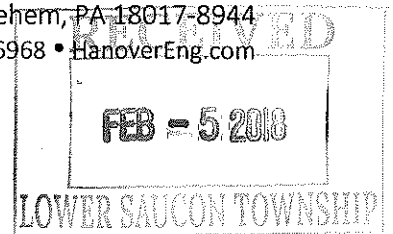


# Hanover Engineering

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February 1, 2018

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

RE: Inspection Conducted on February 1, 2018  
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 Nick Rogers, Environmental Compliance Manager. The following items were noted during the inspection:

1. The BRE plant was running. Mr. Rogers stated that they were running at full capacity.
2. The landfill flare was running at a flow rate of 1,105 scfm and a temperature of 1,668 degrees Fahrenheit, and appeared to be operating normally. The bar graph on the instrument readout indicated that the flow rate was approximately forty-three percent (43%) of the Variable Frequency Drive (VFD). The largest blower was in operation. The record of gas flow to the flare recorded on the paper chart went back to January 23, 2018. The chart showed an increase in gas flow on January 29, 2018 to approximately 2,900 scfm. Mr. Rogers stated that this was due to a planned maintenance outage at the BRE plant which lasted the entire eight (8) hour work day. Mr. Rogers stated that, since this shutdown, the BRE plant has been back on line and running steadily at full capacity.
3. The truck wash was not in use. Mr. Rogers stated that the pump, which was pulled on December 28, 2017 for maintenance, was still out for maintenance. He stated that the landfill now intends to buy a new pump, but will still have the old one fixed to keep as a backup. Mr. Rogers stated that, to compensate for the loss of the truck wash, the landfill has been hosing trucks off using the water truck and has increased the use of the street sweeper to clean internal roads and Applebutter Road. During this inspection, it was observed that the street sweeper was cleaning, or had just cleaned, all of the paved internal roads and the westbound lane of Applebutter Road down to the last driveway for the power plant on the south side of the road.
4. No mud, blowing litter, or odors were observed along Applebutter Road up to Ringhoffer Road, the entrance driveway, or the office parking lot. A picker was observed to be removing roadside trash along Applebutter Road west of the landfill all the way to Shimersville Road. Some blown litter was observed at the top of the south slope. A picker was observed working to remove this litter.
5. Wind during the inspection was calm to five (0 - 5) mph from the south. The weather was clear and cold.

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

6. Garbage was being disposed of at the top of the landfill in Cell 4B. One (1) compactor and one (1) dozer were running at the working face. The truck tipper is still staged at the working face. It was not being used during the inspection of the working face. Two (2) trucks were dumping conventionally and zero (0) were waiting to dump conventionally. Trucks are still approaching and departing the working face utilizing the south face haul road. No odors were observed at the working face, or anywhere on site.
7. It was observed that the daily soil cover in some areas of recent disposal at the top of the landfill was inadequate, and that pieces of garbage were showing through the cover. I advised Mr. Rogers that this was unacceptable and needed to be corrected. He replied that he was aware of the problem, and that it was currently being addressed. While at the top of the landfill, I observed three (3) dump truck loads of soil being dumped in one of the problem areas, with a dozer spreading it out to achieve proper daily cover. Subsequently, I observed the dump trucks running down to the soil stockpile in the expansion area and heading back toward the working face full. The soil stockpile consisted of the excess cover in the "piggyback" area that had been stripped off. It was apparent that resources were being committed to the task of correcting this problem. I asked Mr. Rogers to provide updates via e-mail messages and photographs as the work to correct inadequate daily cover continued.
8. Cover soil is still being imported. No Alternative Daily Cover material is being used.
9. The temporary cap on the south face was observed. No ballooning of the cap was occurring. On January 24, this cap was observed to be ballooned by a motorist on Applebutter Road, who took a photograph and forwarded it to me. At that time, I e-mailed Mr. Rogers, who said he was aware of the situation and was working to correct it. As a follow-up to that, I asked for an explanation of the cause. Mr. Rogers stated that routine maintenance was being conducted on the air compressor that works the pneumatic pumps that keep the condensate sump pumped out. The maintenance took longer than expected, and rain and snow melt caused the sump to fill faster than usual. All of this caused a loss of gas extraction on the bottom three (3) benches on the south slope, which in turn caused the cap to inflate. He stated that he will be cognizant of this issue next time the compressor is taken off line for maintenance.
10. The west high wall was observed. No slope failures or major movement of soil or rock since the last inspection was evident.
11. The recycling and customer drop-off area (for small, non-commercial vehicles with garbage) is still relocated to the southern access road. The new area for these services is now being constructed as part of the Southeast Realignment. However, work on this area is temporarily suspended due to weather and site conditions.
12. I conducted a driving patrol along the intersection of Applebutter Road and Ringhoffer Road before the inspection, starting at 10:23 a.m. No landfill-related odors were observed. No sounds of trucks or equipment on the landfill were observed. I conducted a driving patrol along Skyline Drive after the inspection, starting at 11:37 a.m. However, I could not drive to the end of the road as usual due to the presence of work crews clearing brush just beyond Hader Lane. The landfill was not visible or audible from this vantage point. No landfill-related odors were observed from here. I conducted a driving patrol through Steel City after the inspection, starting at 11:45 a.m. No landfill-related odors or sounds were observed. No landfill-related issues were observed on the driving patrol through the Narrows.

Ms. Leslie Huhn  
Township Manager

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February 1, 2018

Activity Related to the Southeast Realignment Expansion

13. Mr. Rogers stated that all construction activity related to the expansion has been suspended pending suitable weather and site conditions. The only activity observed in this area was the loading of the soil stockpile onto trucks to take it to the working face for use as daily cover (as discussed in Item 7 above).

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

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