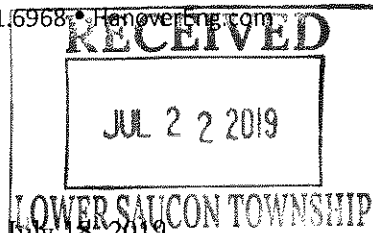


HanoverEngineering

252 Brodhead Road • Suite 100 • Bethlehem, PA 18017-8944
Phone: 610.691.5644 • Fax: 610.691.6968 • HanoverEng.com



July 18, 2019

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

RE: Inspection Conducted on July 18, 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. 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 2,630 scfm and a temperature of 1,655 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 one-hundred percent (100%) of the Variable Frequency Drive (VFD) capacity. Mr. Pannucci stated that he has looked into the cause for these anomalously high readings, which have persisted for several months. He stated that the installation of a new motor for the largest blower was the cause, and that he has been talking to the manufacturer to obtain a reason and to find a remedy. Being unsuccessful, he has decided to have the old motor rebuilt and reinstalled in the blower, probably by the end of the month. The largest blower was in operation. The paper chart was new and provided no history of gas flow.
3. The truck wash has been is functioning normally and was in use due to muddy conditions.
4. No blowing litter, mud, or odors were observed along Applebutter Road up to Ringhoffer Road, the entrance driveway, or the office parking lot.
5. Weather conditions were cloudy with spotty light showers, temperature in the 70s, and wind from the north/northeast at zero to five (0 - 5) miles per hour.
6. The customer convenience area is in use for small vehicles.
7. Mr. Lawson stated that waste acceptance rates have been running about 1,200 to 1,400 tons per day.
8. Garbage was being disposed of at one (1) working face on the top of the landfill and pushed eastward down the slope for disposal in Cell SE-1A. The approach to and departure from

ROUTING

- Council
- Manager Org.
- Asst. Mgr.
- Zoning
- Finance
- Police
- P. Works
- P/C
- P & R
- EAC
- Engineer
- Solicitor
- Planner
- Landfill
- CNC

Envisioning and Engineering sustainable, cost-effective, and environmentally responsible projects since 1971

Other - web
hea.07-18-19

- the working face were muddy but stable. One (1) truck was unloading on the tipper, with none waiting for the tipper. One (1) truck was unloading conventionally (dump body or walking floor), with two (2) 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. Mr. Lawson stated that a combination of soil and tarps will be used to for daily cover. Wind screens were being used near the working face. A moderate garbage odor was observed in the vicinity of the working face. No odors were observed anywhere else on site.
9. The south face has flagging garbage in areas where disposal has just ended. I asked Mr. Lawson how this will be addressed. He stated that he will use pickers to remove the garbage that can be removed by hand and will dress other areas with soil as necessary. During the inspection he made a phone call to redirect two (2) workers to begin picking the south face.
 10. No windblown litter was observed in the trees or on the ground to the east of Cell SE-1A.
 11. The north slope road was driven. The road bed, riprap swale, and rock check dams were in good shape with little or no erosion observed.
 12. The temporary cap on the south face was observed. No ballooning of the cap was occurring.
 13. The west high wall was observed. No slope failures or major movement of soil or rock since the last inspection was evident.
 14. Sedimentation Basin 6 contained some water, well below the overflow level.
 15. It was observed that a street sweeper was cleaning the internal roads during the inspection. Upon leaving the facility, evidence was observed that the street sweeper had cleaned Applebutter Road (water streaks visible on pavement).
 16. Erosion rills previously observed on the slope below the south face haul road have been repaired. However, new rills have formed. Mr. Lawson stated that rills were previously repaired, but that the heavy rain storm last night 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 had progressed. It was observed that water crosses the haul road in an area where it slants downward toward the outside, and that erosion is caused here. Mr. Lawson stated that the road must be pitched to the inside where the swale is being constructed.
 17. Construction work on the main gabion down channel on the south face has not yet resumed. Mr. Pannucci stated that he is attempting to get a crew scheduled to complete this work.
 18. Mr. Pannucci stated that the compressor is still being used to run pneumatic pumps in approximately eleven (11) gas wells on the south face to dewater them.
 19. We entered the scale house to inspect trucking slips from Waste Connections' transfer stations. Four (4) out of ten (10) trucks were overweight, by amounts ranging from 240 to 1,480 pounds.
 20. I conducted a driving patrol along the intersection of Applebutter Road and Ringhoffer Road before the inspection, starting at 9:55 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 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 11:26 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 11:38

a.m. No landfill-related sounds or 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.

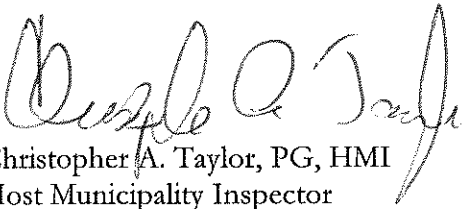
Activity Related to the Southeast Realignment Expansion

21. Construction in future Cell SE-1B is now complete. Mr. Pannucci stated that they are awaiting certification from PA DEP before they can begin placing garbage here.

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

S:\Projects\Municipal\LSaucon\Twp\LS90-07-BethLandfill\Docs\IESI landfill report of July 18, 2019 insp.doc