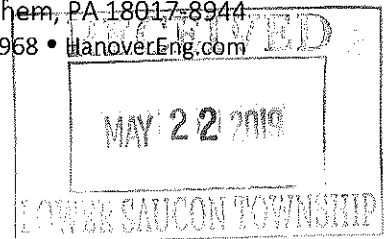


HanoverEngineering

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May 20, 2019

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

RE: Inspection Conducted on May 16, 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. The following items were noted during the inspection:

1. The BRE plant was not running. Mr. Pannucci stated that the plant continues to be down since January 31, 2019 due to equipment problems. He is operating under the assumption that the plant will not be repaired, since it has a scheduled permanent shut-down date of June 1, 2019. This permanent shutdown is the result of a business decision by Exelon, the plant's owner.
 2. Upon my arrival Mr. Pannucci stated that PA DEP Waste Management and Air Quality Programs were present at the office for an inspection, but he was able to provide a tour while they reviewed paperwork.
 3. The landfill flare was running at a flow rate of 3,343 scfm (4,040 cfm) and a temperature of 1,633 degrees Fahrenheit and appeared to be operating normally. Mr. Pannucci stated that a gas wellhead had been struck by a machine in the working face area and was shut down for repairs. The well has been brought back on line, and the buildup of gas in this well has caused the spike in gas flow. He expects that the flow will tail off. There were no visible emissions from the flare at the time of the inspection. The bar graph on the instrument panel indicated that the flare was running at eighty-seven percent (87%) of the Variable Frequency Drive (VFD) capacity. The largest blower was in operation. Mr. Pannucci stated that the two (2) smaller blowers were ready on standby if needed. The paper chart was operational and provided a record back to May 8, 2019 indicating steady gas flow since then except on May 1, 2019 when the flare underwent a scheduled maintenance shutdown. Mr. Pannucci stated that Waste Connections has received pricing from vendors for the second flare. He stated that the second flare will not be constructed until there is a need for it, based on gas flow rates, since having it sit unused would be bad for the flare equipment.
- Mr. Pannucci stated that the truck wash has been functioning normally.
- 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, the street sweeper was observed cleaning the westbound lane of Applebutter Road, heading toward

ROUTING

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

- Shimersville Road. It was also observed that the street sweeper had already made a round trip and cleaned the eastbound lane near the driveway as well. Later during the inspection, the sweeper was observed at the top of the landfill, where the collected material is disposed.
7. Weather conditions were clear, temperature in the 50s, and wind from the north/northwest at five to ten (5 – 10) miles per hour.
 8. 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. Mr. Pannucci stated that survey control stakes had been set to guide the placement of garbage. These stakes were observed during the inspection. The approach to the working face was dry and stable. One (1) truck was unloading on the tipper, with none waiting. One (1) truck was unloading conventionally (dump body or walking floor), with three (3) waiting. Two (2) dozers were spreading and placing garbage. One (1) compactor was in use. Cover soil was staged at the working face. Tarps were in use as alternative daily cover on previously-filled areas. Wind screens were being used near the working face. Garbage odors were observed downwind of the working face.
 9. As addressed in the report of the previous inspections, the area at the bottom of Cell SE-1A remains free of garbage. This is the “covenant area”, which has now been lined and filled with clean soil fill to meet with the grade in the adjoining disposal area of the cell.
 10. Very little windblown litter was observed in the trees or on the ground to the east of Cell SE-1A. It was observed that two (2) pickers were working on site to remove the small amount of litter on the ground.
 11. 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.
 12. A moderate gas odor was detected while driving along the top of the MSE wall road. Mr. Pannucci stated that landfill personnel would investigate to find and remediate the source of the odor.
 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. The work to repair the large erosion rills observed on the slope below the south face haul road was previously completed. However, two (2) new erosion rills have developed. Mr. Pannucci stated that these would be repaired and that the swale on the upslope side of the haul road would be enhanced to better control the flow of stormwater.
 17. Construction work on the main gabion down channel on the south face has been postponed. Mr. Pannucci stated that the company which started the work is the same company that is constructing new Cell SE-1B, and that the gabion down channel work will wait until cell construction is complete.
 18. The new compressor equipment installed by SCS, the landfill’s gas consultant, continues in use to dewater the eleven (11) wells in the area. Mr. Pannucci stated that gas production from those wells still has not increased significantly.
 19. Mr. Pannucci stated that the stormwater corrective actions required by PA DEP at two (2) outfall locations has not yet been completed. Silt socks have been ordered and received but have not yet been placed. This work is planned in the next few weeks. The clean out of the sediment basins must wait for dry weather and site conditions.
 20. We entered the scale house to inspect trucking slips from Waste Connections’ transfer stations. Zero (0) out of four (4) trucks were overweight.

21. 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 11:20 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 11:35 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. However, the sound of machinery or trucks on the landfill was audible from here. On the driving patrol through the Narrows it was observed that the road immediately downslope of the runoff point from the landfill was clean.

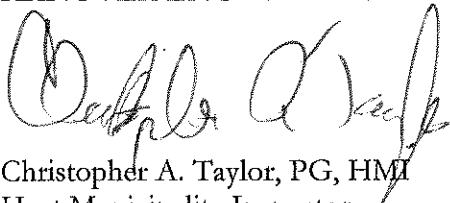
Activity Related to the Southeast Realignment Expansion

22. Construction in future Cell SE-1B continues to take place. The Geonet reinforcing layer is constructed. The clay liner has been constructed. The drainage layer of the secondary liner is now under construction.

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:jljg

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