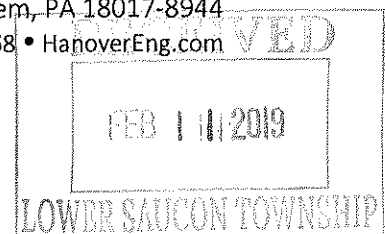


HanoverEngineering

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February 8, 2019

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

RE: Inspection Conducted on February 7, 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 "mid-meeting" inspection. The inspection was conducted by me along with David Pannucci, Regional Engineer, and Casey White, Landfill Gas Technician. The following items were noted during the inspection:

1. The BRE plant was not running. Mr. White stated that the plant had been down since January 31, 2019 due to an "engine issue."
2. We entered the scale house to inspect trucking slips from Waste Connections' transfer stations. For both transfer stations combined, two (2) out of seven (7) trucks were overweight, by three hundred (300) pounds and sixty (60) pounds.
3. The landfill flare was running at a flow rate of 2,792 scfm and a temperature of 1,670 degrees Fahrenheit and appeared to be operating normally. There were no visible emissions from the flare at the time of the inspection. Mr. Pannucci stated that there have been no visible emissions since the incident on November 28, 2018 (see report of December 6, 2018 inspection). The bar graph on the instrument panel indicated that the flare was running at seventy-seven percent (77%) of the Variable Frequency Drive (VFD) capacity. The largest blower was in operation. The paper chart was now operational, but a new paper had just been installed and therefore no history was recorded.
4. The truck wash was open. Mr. Pannucci stated that it had been out of operation early in the week when a pipe burst, but this has since been repaired. Mr. Pannucci acknowledged that sediment was tracked onto Applebutter Road as a result of the truck wash being down. In response, he had the street sweeper clean the road on Tuesday.
5. No blowing litter or odors were observed along Applebutter Road up to Ringhoffer Road, the entrance driveway, or the office parking lot, except that a garbage odor was observed briefly while pulling into the landfill driveway. A heavy layer of sediment was observed on the westbound lane of Applebutter Road, starting at the landfill driveway. Mr. Pannucci stated that the street sweeper was scheduled to clean Applebutter Road today. At the end of the driving patrol following the inspection, I observed the street sweeper pulling out of the landfill driveway and starting to clean the westbound lane of Applebutter Road.
6. Weather conditions were cloudy, 40 degrees, and calm wind.

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7. Garbage was being disposed of at one (1) working face in the northwest corner of Cell SE-1A. From here garbage is being pushed southward and eastward. The working face is being kept small to keep it manageable (easy to cover). The approach to the working face was very muddy, and a dozer was working to smooth it out. Some trucks had to be towed from the working face when they were done dumping. The first eight foot (8") "fluff lift" has been installed in the cell area being utilized for disposal. Therefore, disposal today is taking place above the fluff lift, no spotters are required at the working face, and all types of permitted waste are allowed for disposal (not just Municipal Solid Waste). One (1) truck was unloading on the tipper and two (2) were unloading conventionally (dump body). Because of slow operations due to the muddy site conditions, about a dozen trucks were waiting to unload. A worker was stationed at the working face to direct traffic and keep order. Garbage odors were observed north of the working face. One (1) dozer was spreading and placing garbage, one (1) dozer was standing by to pull trucks away from the working face, and one (1) dozer was standing by to pull trucks up the internal access road, which is paved but is so muddy that trucks were having a hard time climbing the road. A broom truck was observed cleaning the access road between truck traffic. One (1) compactor was in use. Soil for daily cover is stockpiled near the working face. Wind screens are not being used near the working face, since it sits higher than the bottom side of the cell and wind would just carry litter over them. Instead they are utilizing pickers to remove windblown litter.
8. The area at the bottom of Cell SE-1A remains free of garbage and is marked off with painted pipes and tires. Mr. Pannucci stated that this is the "covenant area" and that the site surveyor marked the limits of it. He stated that their permit requires them to keep this area free of garbage, which they will do.
9. The east end of the south face is showing erosion rills and some flagging garbage. Mr. Pannucci acknowledged that it needs to be dressed up and stated that the issue will be discussed by landfill staff today. He stated that the newly-hired machine operator quit, and they don't have the manpower to have someone working in that area. He stated that they are considering hiring an outside contractor to conduct this work.
10. Two (2) pickers were working on site to remove blown litter south of Cell SE-1A.
11. The north slope road was driven. No additional erosion since the last inspection was observed. The rock-lined drainage swale and rock check dams in front of the runoff points are still in good shape.
12. No disposal is taking place at top of the landfill. Mr. Pannucci stated previously that they are at maximum elevation at the top.
13. Mr. Pannucci stated that there are still seeps on the south face that need to be addressed and that this issue will be discussed by landfill staff today.
14. The temporary cap on the south face was observed. No ballooning of the cap was occurring.
15. The west high wall was observed. No slope failures or major movement of soil or rock since the last inspection was evident.
16. The customer convenience area is in use for small vehicles. Recycling containers are still located along the old south slope access road.
17. Several large erosion rills were observed on the slope below the south face haul road. I told Mr. Pannucci that I was concerned that these would eventually destabilize the road bed and directed him to begin working to repair these. He replied that he would. He stated that stormwater flows across the road and runs down the slope, causing erosion. He would like to construct a swale along the upslope side of the road to collect this water and direct it to the benches, which will carry it to the stormwater collection system.

18. Construction work on the main gabion down channel on the south face has been postponed. Mr. Pannucci stated that the crew had to pull off to go to an emergency job. The new channel now extends up to just beyond the third bench.
19. As reported previously, new compressor equipment has been installed by SCS, the landfill's gas consultant. It is housed in Compressor Shed 2. Air lines from the compressor will be routed to about fifteen (15) gas wells in this area and used to run pumps in those wells that operate pneumatically rather than electrically. The wells are all "watered in" (contain leachate which inhibits the flow of gas from the wells). Pumping the wells will allow for more efficient removal of larger volumes of gas. The compressor equipment has been inspected but failed the inspection. It is awaiting corrective measures by the installer.
20. Mr. Pannucci stated that PennDOT visited the site yesterday to clean out the culvert under Applebutter Road. Landfill personnel unlocked the gate at this location to provide access for this work. Again, the culvert is just inside the perimeter fence.
21. Mr. Pannucci stated that the Lower Saucon Police Department (LSPD) visited the site on February 1, 2019 in response to a report of a garbage truck driving recklessly and dropping garbage after leaving the site. Mr. Pannucci stated that they were able to identify the truck operator and spoke to him about this incident. He stated that they provided the identity of the truck operator to the LSPD when they followed up on the incident this week.
22. 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 of trucks (including a tailgate slap) and equipment (dozers, compactor) working on the landfill was observed. The culvert under Applebutter Road was observed to be carrying the streamflow with no backups. It was observed that the inlet side of the culvert had been cleaned by removing sediment and organic debris. Upon leaving the landfill to begin the last driving patrol, I observed that an eastbound dump truck had pulled to the side of Applebutter Road directly across from the entrance. This caused a temporary backup, where three (3) eastbound trucks had to stop while waiting to get around the parked truck. As I pulled out, I observed the traffic begin to move and the first eastbound truck in line enter the landfill. The other trucks had their left-hand turn signals on and appeared to be heading to the landfill also. I conducted a driving patrol along Skyline Drive after the inspection, starting at 11:15 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 11:30 a.m. No landfill-related odors were observed. From the entrance to the Hill Climb the sight and sound of trucks on the landfill road on top of the MSE wall was observed. This is the route taken by trucks after leaving the working face and returning to the scale. On the driving patrol through the Narrows it was observed that the road downslope of the runoff point from the landfill was clean. No water was running at the time of the inspection, despite rain during the overnight hours.

Activity Related to the Southeast Realignment Expansion

23. No work was taking place in future Cell SE-1B.

Ms. Leslie Huhn
Township Manager

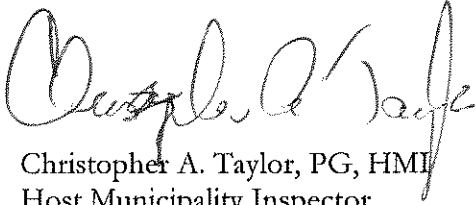
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February 8, 2019

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 "Christopher A. Taylor". The signature is written in a cursive style with a large initial "C".

Christopher A. Taylor, PG, HMI
Host Municipality Inspector

cat: llb

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