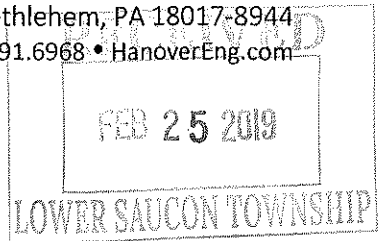


Hanover Engineering

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February 21, 2019

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

RE: Inspection Conducted on February 21, 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 Robert McReynolds, Vice President for the Northeast Division, and Cody 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 continues to be down since January 31, 2019 due to equipment problems.
2. We entered the scale house to inspect trucking slips from Waste Connections' transfer stations. For both transfer stations combined, three (3) out of eleven (11) trucks were overweight, by between 480 pounds and 1,940 pounds.
3. The landfill flare was running at a flow rate of 2,783 scfm (3330 cfm) and a temperature of 1,650 degrees Fahrenheit and appeared to be operating normally. There were no visible emissions from the flare at the time of the inspection. Mr. White 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-six percent (76%) of the Variable Frequency Drive (VFD) capacity. The largest blower was in operation. The paper chart was operational, but a new paper had just been installed and therefore no history was recorded.
4. The truck wash was open.
5. No blowing litter, mud, or odors were observed along Applebutter Road up to Ringhoffer Road, the entrance driveway, or the office parking lot.
6. Weather conditions were sunny, 35 degrees, and calm wind at first, increasing to five to ten (5 - 10) miles per hour from the west/southwest during the inspection.
7. Mr. McReynolds stated that the landfill began shutting down operations about noon yesterday due to the winter storm.
8. Garbage was being disposed of at one (1) working face in the northwest corner of Cell SE-1A. From here garbage was 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, but passable, and no trucks had to be towed from the working face during my observations. The first eight foot (8') "fluff lift" has been installed in the cell area being

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 - Landfill
 - EMC
 - Other

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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 or walking floor). Two (2) trucks were waiting to unload. Garbage odors were observed north of the working face when the wind blew in that direction. One (1) dozer was spreading and placing garbage, and one (1) dozer was spreading daily cover. One (1) compactor was in use. It was observed that soil for daily cover was being hauled to 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. No windblown litter was observed.

9. As addressed in the report of the previous inspection, the area at the bottom of Cell SE-1A remains free of garbage and is marked off with painted pipes and tires. This is the "covenant area," which the site surveyor marked the limits of it.
10. No pickers were working on site due to slippery conditions from yesterday's winter storm. No wind-blown litter was observed.
11. The north slope road was not driven due to slippery conditions. Mr. McReynolds reported that 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.
13. Mr. White stated that seeps on the east end of the south face have been repaired. He stated that there are still seeps on the west end of the south face that need to be addressed when site conditions are conducive.
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. The work to repair the large erosion rills observed on the slope below the south face haul road has not yet begun, awaiting suitable weather and site conditions.
18. Construction work on the main gabion down channel on the south face has been postponed, awaiting suitable weather and site conditions.
19. The new compressor equipment installed by SCS, the landfill's gas consultant, is now operational. Mr. White reported that nine (9) gas wells are currently online and being dewatered by pneumatic pumps. 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. He stated that more wells will be brought on line in the future.
20. Mr. White stated that the work on LMC-7 is now planned for late March. This work is in response to Detection Zone leachate flow readings of zero (0) over the last several months. Mr. White stated that leachate is exiting the cell and entering the chamber to be pumped into the leachate collection system, so no backup into the cell is occurring. The reason for readings of zero (0) may be due to a problem with the meter.
21. I conducted a driving patrol along the intersection of Applebutter Road and Ringhoffer Road before the inspection, starting at 10:10 a.m. No landfill-related odors were observed. No truck traffic or machine work on the landfill was observed at the time of the inspection. 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

11:28 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 11:42 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 down from the landfill at the time of the inspection, despite ongoing snow melt.

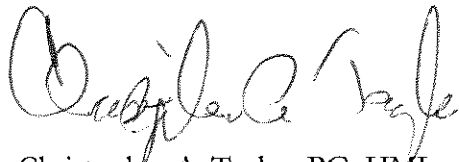
Activity Related to the Southeast Realignment Expansion

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

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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