



Hanover Engineering

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October 19, 2018

OCT 22 2018
LOWER SAUCON TOWNSHIP

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

RE: Inspection Conducted on October 18, 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 inspection. This was originally scheduled as the usual "pre-meeting" inspection, but the meeting was moved back to the following Thursday October 25 based on the availability of landfill personnel.

The inspection was conducted by me along with Jayme Steigerwalt, Operations Manager. Upon arriving at the landfill, I was informed by the receptionist that Mr. Steigerwalt was providing a tour to inspectors from the Pennsylvania Department of Environmental Protection (PA DEP). I therefore decided to conduct my driving patrols first, while waiting for him to become available. The following items were noted during the inspection:

1. The BRE plant was not running. Mr. Steigerwalt stated that they went off-line this morning for maintenance.
2. The landfill flare was running at a flow rate of 3,570 scfm and a temperature of 1,650 degrees Fahrenheit and appeared to be operating normally. There were no visible emissions from the flare. The bar graph on the instrument panel indicated that the flare was running at seventy-eight percent (78%) of the Variable Frequency Drive (VFD) capacity. The largest blower was in operation. The paper chart was new and provided no history on the flare operation. Mr. Steigerwalt stated that he and Cody (the landfill's gas technician) had both attended training in observing and evaluating visible emissions from the flare.

The truck wash was in use due to somewhat muddy conditions.

No blowing litter, mud, or odors were observed along Applebutter Road up to Ringhoffer Road, the entrance driveway, or the office parking lot.

I observed upon entry that a street sweeper was cleaning Applebutter Road. Later, I observed that it was cleaning internal roads.

Some wind-blown litter was observed on the north slope. One (1) picker was observed removing litter.

Wind during the inspection was from the north and west at ten to twenty (10 - 20) miles per hour. Weather conditions were sunny and chilly.

Garbage was being disposed of at the west end of the landfill in Phase IV. Long haul tractor trailers were being unloaded using the truck tipper. One (1) truck was unloading on the

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- tipper and one (1) was waiting to unload. Local collection trucks were unloading conventionally. One (1) truck was unloading and one (1) was waiting to unload. One (1) compactor was running at the working face. All trucks are using the south face haul road to approach and leave the working face. The portable mister was not in operation. The approach road to the working face was stable and passable. It was observed that soil was being added to the slopes at the east end of the landfill. Mr. Steigerwalt stated that this work was intended to dress up erosion rills and ensure adequate cover.
9. The north mister line was not in use. The south mister line had previously been removed. It was previously reported that it will be installed closer to the new cell.
 10. Areas of daily and intermediate cover are adequate to cover garbage, with no flagging garbage or seeps observed.
 11. The temporary cap on the south face was observed. No ballooning of the cap was occurring.
 12. The west high wall was observed. No slope failures or major movement of soil or rock since the last inspection was evident.
 13. 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 has been constructed as part of the Southeast Realignment but cannot be utilized until other construction in the area has been completed.
 14. The north slope road was driven. As reported previously, the entire length of the road running downhill from the maintenance shop to the western end had been compacted, and the swale along the south side of the road had been cleaned out and relined with large stones. Also, large stones had been piled in front of the two (2) locations where stormwater runs off the road northward before leaving the site. This includes the area of the concrete spillway. During the current inspection, it was observed that the roadbed is still in good shape, with no erosion rills except between the upper and lower runoff points. As previously reported, the section still needs to be covered with compacted stone. No additional erosion since the last inspection was observed.
 15. The internal roads were very dusty. Mr. Steigerwalt stated that they are unable to spray them for dust suppression because the landfill's water truck was being repaired and also a water truck previously supplied by a contractor was also being repaired.
 16. Mr. Steigerwalt stated that the PA DEP inspection that took place earlier today was conducted by the Air Quality program as a follow up to a full inspection that was conducted by the Air Quality program on or about September 27, which included Surface Emissions Monitoring. At that time, he stated that nine (9) methane exceedances were documented. At today's inspection, those nine (9) areas were re-tested by PA DEP. He reported that eight (8) passed, and the ninth had a lower methane reading but was still an exceedance. He stated that the PA DEP report of the late September inspection was just received by the landfill and had not yet been provided to the Township.
 17. During the previous inspection, the issue of the height of the landfill was discussed in response to a citizen concern relayed to the Township. Since then, the landfill provided a stakeout plan of grade stake locations showing existing elevations which demonstrated that the elevation of garbage was below the maximum approved elevation in all stake locations except one (1). The landfill was advised to lower the elevation of the garbage at this spot. During this inspection, it was observed that garbage was being placed in the area of the grade stakes previously inspected along the top of slope of the southern face. The stakes were being used as a guide for the top of garbage elevation, which was being kept at the height indicated on the stakes across the entire width of the working face. Mr. Steigerwalt

- stated that additional stakes will be set as needed to guide the elevation of garbage as placement continues, since elevations are designed to peak in this area.
18. Mr. Steigerwalt stated that grade stakes have also been set in the southwest corner of the facility, where some capacity still exists. We observed the location of these stakes. The southern-most stake indicated a fill to top of garbage of twenty-two feet (22'). Upon observing the existing elevations in this area, I stated that this did not seem right, and directed Mr. Steigerwalt not to place any garbage in this area until this could be confirmed.
19. I conducted a driving patrol along the intersection of Applebutter Road and Ringhoffer Road before the inspection, starting at 10:04 a.m. No landfill-related odors were observed. The landfill is now visible through the thinning leaves on the trees. The sounds of travel alarms and equipment working were observed coming from the landfill. I conducted a driving patrol along Skyline Drive before the inspection, starting at 10:26 a.m. No landfill-related odors were observed. The sight and sound of garbage trucks and dump trucks on the landfill (south face haul road) were observed from the end of Skyline Drive. The sight of trucks, a compactor, and the truck tipper was also observed on top of the landfill. I conducted a driving patrol through Steel City before the inspection, starting at 10:41 a.m. No landfill-related odors were observed from the entrance to the Hill Climb. The sounds of travel alarms and equipment working on the landfill were faintly audible above the background noise (wind through the trees). 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.

Activity Related to the Southeast Realignment Expansion

20. Mr. Steigerwalt reported that construction of new Cell SE-1A was completed last week, although work on stormwater facilities along the access road below the cell is still taking place. He stated that Martin and Martin submitted certification documents on the new cell to PA DEP on Friday, October 5, and that he is expecting to receive approval to start disposing of garbage in the new cell any day.
21. In the area of future Cell SE1-B, soil is still being stripped in preparation for construction of that new cell.

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