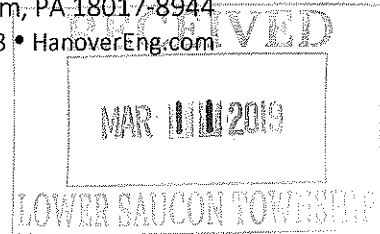


Hanover Engineering

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March 7, 2019

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

RE: Inspection Conducted on March 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, Jon Baughman, Operations Manager for Blue Ridge Landfill, and Cody White, Landfill Gas Technician. 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 stated that BRE personnel participated in the regular "gas meeting" this week and advised him that they have not received authorization to purchase the replacement part needed to get the plant back up and running. This authorization may yet be obtained, but Mr. Pannucci considers this unlikely, since the plant 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. As a result of the BRE situation, Mr. Pannucci and Mr. White stated that Waste Connections will be re-tuning the entire landfill gas wellfield. This will set all of the wells for draws appropriate to the flare alone, instead of both the flare and the BRE plant. They explained that the flare is somewhat less sensitive to oxygen level than the BRE plant was, so this will allow them to set a stronger draw on the wells. Mr. Pannucci stated that Mr. White and a technician from SCS Field Services will start this work when the weather and site conditions are more conducive, since all wells must be accessed to perform the work. Mr. White stated that while this work may result in slightly higher gas flows, the object is to draw richer, higher quality gas, to limit methane surface emissions, and thus help control odors. The landfill flare was running at a flow rate of 2,700 scfm (3,240 cfm) and a temperature of 1,660 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-five percent (75%) 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 stand-by if needed. The paper chart was operational, with a few days of history recorded. The chart indicated steady gas flow over the period shown.

S

ROUTING

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- Manager *my*
- Asst. Mgr.
- Zoning
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- P & R
- EAC
- Engineer
- Solicitor
- Planner
- Landfill
- EMC
- Other

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4. Mr. Pannucci stated that Waste Connections is working with SCS on the details for the new proposed flare. He acknowledged that PA DEP had just given administrative approval of the application for the new flare, and were now beginning the technical review of the application, for which they have approximately one-hundred thirty (130) days.
5. The truck wash was closed due to below-freezing conditions.
6. No blowing litter, mud, or odors were observed along Applebutter Road up to Ringhoffer Road, the entrance driveway, or the office parking lot on the drive into the landfill. Upon leaving the landfill, some mud tracking onto Applebutter Road was observed. The street sweeper was observed queuing up along Applebutter Road west of the landfill, preparing to clean the road.
7. Weather conditions were sunny, 25 degrees, and wind from the west at ten to twenty (10 – 20) miles per hour.
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 eastward. The working face is being kept small to keep it manageable (easy to cover). The approach to the working face was frozen and very stable. Zero (0) trucks were unloading on the tipper and one (1) truck was unloading conventionally (dump body). Zero (0) trucks were waiting to unload. One (1) dozer was spreading and placing garbage. One (1) compactor was in use. It was observed that soil for daily cover was staged at 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.
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.
10. Wind-blown litter was observed below the working face and in the trees along the eastern perimeter of the facility. Mr. Pannucci stated that no pickers were working on site due to slippery conditions from this week’s winter storm. He stated that tree climbers had been onsite yesterday working to remove litter from the trees, but that they were not onsite today due to the higher winds.
11. The north slope road was not driven due to slippery conditions.
12. No disposal is taking place at top of the landfill.
13. Mr. Pannucci stated that there are still seeps on 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.
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, continues to be operational. Mr. White reported that eleven (11) 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 richer, higher quality gas.

20. We entered the scale house to inspect trucking slips from Waste Connections' transfer stations. For both transfer stations combined, zero (0) out of seven (7) 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 of trucks and equipment working on the landfill 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 11:32 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 11:45 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 not observed at the time. 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, due to frozen conditions.

Activity Related to the Southeast Realignment Expansion

22. Excavation work has resumed in future Cell SE-1B. Mr. Pannucci stated that they are peeling the remainder of the soil off of the geosynthetic cap in preparation for construction of this 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

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