



Hanover Engineering

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RECEIVED
MAR 25 2019
LOWER SAUCON TOWNSHIP

March 21, 2019

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

RE: Inspection Conducted on March 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 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 previously stated that BRE personnel advised him that they have not received authorization to purchase the replacement part needed to get the plant back up and running. During this inspection Mr. Pannucci stated that he has received no updates from BRE personnel on the status of this situation. 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 previously 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. Mr. Pannucci stated during this inspection that Mr. White and a technician from SCS Field Services will start this work in April.
3. The landfill flare was running at a flow rate of 2,915 scfm (3,525 cfm) and a temperature of 1,652 degrees Fahrenheit and appeared to be operating normally. 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 seventy-nine percent (79%) 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 and provided a record back to March 5, 2019 indicating steady gas flow since then.
4. Mr. Pannucci stated that Waste Connections has issued a bid package for the construction of the second flare and is soliciting pricing from vendors.
5. The truck wash was closed due to a malfunction. Mr. Pannucci stated that repairs are in progress, and that the street sweeper is scheduled for today.

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ROUTING

- Council
- Manager *oy*
- Asst. Mgr.
- Zoning
- Finance
- Police
- P. Works
- P/C
- P & R
- EAC
- Engineer
- Solicitor
- Planner
- Landfill
- EMC
- Other *Webster*

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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, the street sweeper was observed cleaning the eastbound lane of Applebutter Road, heading toward the landfill.
7. Weather conditions were cloudy with light rain, 40 degrees, and wind from the east at five to ten (5 – 10) 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 southward. The working face is being kept small to keep it manageable (easy to cover). The approach to the working face was muddy but passable. One (1) truck was unloading on the tipper and two (2) trucks were unloading conventionally (dump body or walking floor). Three (3) trucks were waiting to unload. One (1) dozer was spreading and placing garbage. One (1) compactor was in use. 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. Mr. Pannucci stated that acceptance rates are currently around 1,100 tons per day now, and that the landfill is targeting rates in the range of 1,000 to 1,100 tons per day in an effort to throttle back due to limited room for disposal. No odors were observed near the working face, or anywhere else onsite.
9. As addressed in the report of the previous inspections, 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. It was observed that four (4) pickers were working on site to remove litter from the southern slope below the working face. Mr. Pannucci stated that they had started at the southern perimeter in this area near adjoining properties and worked their way into the site. Mr. Pannucci stated that a tree company had worked onsite for five (5) days to remove litter from the trees along Applebutter Road and the eastern perimeter. The trees along Applebutter Road were clean, but some litter was still observed in the trees along the eastern perimeter.
11. The north slope road was driven. The road bed, rip-rap swale, and rock check dams were in good shape with erosion. No water was flowing in this area, despite the rain falling.
12. No disposal is taking place on top of the landfill. However, an access road is under construction here. Mr. Pannucci stated that this will replace the eastern access road to the working face, which will be removed to make room for the construction of Cell SE-1B and for placement of garbage.
13. Mr. Pannucci stated that they worked on repairing a couple of seeps earlier in the week when the weather was clear. However, this work had to be suspended due to today’s rain, and 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. 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).
20. We entered the scale house to inspect trucking slips from Waste Connections' transfer stations. For one transfer station, zero (0) out of four (4) trucks were overweight. No trucks were received from the second transfer station.
 21. Mr. Pannucci stated that they just hired one (1) machine operator.
 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 (engines and travel alarms) of trucks and equipment working on the landfill, including the tipper, 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 11:23 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 11:36 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 at the time. This is the route taken by trucks which have already unloaded and are heading toward the landfill exit. 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, in spite of rainy conditions.

Activity Related to the Southeast Realignment Expansion

23. Excavation work has been completed in future Cell SE-1B. Mr. Pannucci stated that they have peeled the remainder of the soil off of the geosynthetic cap, removed the cap, and placed soil to level the subgrade in preparation for construction of this new cell. He stated that a field topographic survey of the subgrade was conducted and submitted to the engineer. Once the subgrade elevations are approved, construction of the subbase will begin with the placement of clay-rich soil, which was observed to be stockpiled on site. Mr. Pannucci stressed that old garbage was not exposed during the removal of the soil and geosynthetic cap.

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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