

HanoverEngineering

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June 11, 2018

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

RE: Inspection Conducted on June 7, 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 "Mid-meeting" inspection. The inspection was conducted by me along with Don Hallock, District General Manager. The following items were noted during the inspection:

1. The BRE plant was not running. Mr. Hallock stated that they had been down since yesterday as part of the work to place the second compressor back in service.
 2. The landfill flare was also not running at the beginning of the inspection. Mr. Hallock stated that technicians from SCS had just shut the flare down a few minutes earlier in order to replace one of the thermocouples. This work was observed taking place and was completed quickly. The flare was revisited at the end of the inspection and was observed to be running at a flow rate of 3,560 scfm and a temperature of 1,655 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 eighty-five percent (85%) of the Variable Frequency Drive (VFD) capacity. The largest blower was in operation. The record of gas flow to the flare recorded on the paper chart went back to June 4. The chart showed erratic gas flow to the flare starting on June 5, corresponding with the BRE shutdown. Mr. Hallock stated that the replacement of the major collector pipe that runs under the south face haul road has resulted in increased gas flow to the flare.
 3. Mr. Hallock stated that there have been no issues with visible emissions from the flare since the incident on April 1, 2018 documented the Pennsylvania Department of Environmental Protection. Mr. Hallock stated that their consultant (EarthRes Group) has performed trouble-shooting on the flare operation, concentrating on the functioning of the louvers, and that he is waiting for the results of that work. He believes the louvers are not operating perfectly in sync, and that this caused the visible emissions incidents. He also reiterated that they are going to send staff to a training session in September to get them certified as trained observers so that staff members can assess visible emissions.
4. Mr. Hallock stated that the newly installed gas wells are being connected to the collection system, and that SCS technicians were on site checking the operation of the wells. This work was observed taking place during the inspection.
5. The truck wash was not in use due to dry conditions.
6. No mud, blowing litter or odors were observed along Applebutter Road up to Ringhoffer Road, the entrance driveway, or the office parking lot. I observed the street sweeper cleaning the eastbound lane of Applebutter Road and turning into the entrance drive as I drove past

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- to Ringhoffer Road. I observed evidence that the westbound lane had just been cleaned (was still wet). A water truck was observed spraying the internal roads for dust suppression.
7. No wind-blown litter was observed on the site. A picker was observed cleaning spilled garbage around the customer convenience drop-off area.
 8. Wind during the inspection was calm to south at 5 mph.
 9. Garbage was being disposed of toward the eastern end of the top of the landfill in an area previously approved as part of the expansion. One (1) compactor and one (1) bulldozer were running at the working face to spread and compact garbage. The truck tipper was being used to unload one (1) truck during the inspection, with one (1) truck waiting to use the tipper. Two (2) trucks were unloading conventionally and one (1) was waiting to unload conventionally at the time. The portable mister was in operation at the working face. Portable wind screens were not in use at the working face due to calm conditions. Mr. Hallock previously stated that he had ordered new portable wind screens to increase the number he has to use. These have not yet arrived. The approach road to the working face is very stable. Crushed rock was previously added to stabilize it.
 10. Neither the north or south fixed mister lines were in use. Mr. Hallock previously stated that he is planning to move both of them to place them closer to the working face.
 11. It was observed during the February 1, 2018 inspection that the daily soil cover in some areas of recent disposal at the top of the landfill was inadequate, and that pieces of garbage were showing through the cover. At the time I advised Mr. Rogers that this was unacceptable and needed to be corrected. On April 18, 2018, the PA DEP conducted an inspection and noted this condition as a violation. In response, Mr. Hallock reported at the Township Council meeting on May 2 that they were aggressively addressing the situation. During this inspection, I again conducted a walking tour of the areas called out by PA DEP to observe the continuing progress of this work. I observed that all areas of flagging garbage on the north slope have now been covered, and that the entire area has been hydroseeded. Mr. Hallock stated that this encompasses 6.7 acres. I observed areas on the north slope that had been identified by PA DEP as having multiple seeps. These areas have since been repaired, and no seeps were observed. The depth of new intermediate cover on a portion of the north slope was checked with a soil probe and found to be greater than twelve inches (12") in all locations checked. I observed that all areas of flagging garbage on the top of the landfill have now been covered. I observed that the top benches on the south slope, where flagging garbage, seeps, and erosion were previously documented, were having additional topsoil placed and graded. Mr. Hallock stated that PA DEP conducted a follow up inspection yesterday and noted seeps near Well EW-53. He will schedule remediation work.
 12. From the Surface Emission Monitoring (SEM) that was conducted during the April 18 PA DEP inspection, nineteen (19) exceedance locations were documented. Mr. Hallock reported that eighteen (18) of those were remediated and passed their rechecks. One (1) failed both the first and second ten (10) day rechecks, and has had corrective action completed as part of the gas system expansion in conjunction with the new gas wells. Mr. Hallock stated that the new gas wells are being tied into the collection system. He stated that PA DEP conducted SEM as part of their follow up inspection yesterday and found exceedances at two (2) of the gas wells that are not yet hooked to the collection system. A third exceedance was documented at a well where the weld between the boot and liner has separated again.
 13. The temporary cap on the south face was observed. No ballooning of the cap was occurring.
 14. The west high wall was observed. No slope failures or major movement of soil or rock since the last inspection was evident.
 15. 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 is still being

- constructed as part of the Southeast Realignment, and Mr. Hallock stated that it is ready for paving.
16. Mr. Hallock discussed the issue of trucks staging in Shimersville Road in the morning before the landfill is open to receive garbage. He showed me photographs of trucks along the road that he took that morning, which he identified as three (3) East Penn Sanitation long haul trucks. He stated that, when the trucks entered the landfill, the drivers were advised that they were not allowed to stage along the road, and that he had all three (3) trucks placed in the "penalty box", meaning they were made to wait one (1) hour before they could unload. I advised him that it was reported to me that garbage trucks were also parking along the off-ramp of Route 78 in the morning. He stated that he has checked for this before, and would start re-checking again and take appropriate action.
 17. Mr. Hallock took me to the scale house and showed me manifests from inbound trucks that had come from the two (2) Waste Connections transfer stations that morning. The manifests indicated that all trucks weighed out substantially below the Gross Vehicle Weight Rating (GVWR) of 80,000, in the range of 77,000 to 78,000 pounds. Mr. Hallock stated that "bucket scales" are used to weigh the material as trucks are being loaded.
 18. I conducted a driving patrol along the intersection of Applebutter Road and Ringhoffer Road before the inspection, starting at 9:48 a.m. No landfill-related odors were observed. The sight of the landfill is mostly screened out by leaves on the trees now. The sound of tracked equipment, travel alarms, and trucks driving on the landfill roads was observed. I conducted a driving patrol along Skyline Drive after the inspection, starting at 11:17 a.m. No landfill-related odors were observed. The sight and sound of garbage 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 11:27 a.m. No landfill-related odors or sounds were observed. No landfill-related issues were observed on the driving patrol through the Narrows.

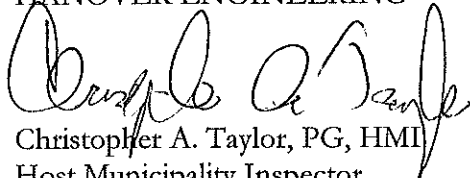
Activity Related to the Southeast Realignment Expansion

19. Construction activity related to the expansion has resumed. As previously reported, the new MSE wall has been completed. The survey consultant has checked and approved the elevation of the subgrade throughout new Cell SE-1A. The construction of the subbase is now taking occurring, with placement of reinforcing fabric covered with screened soil. Rob Tyler of Martin and Martin is onsite overseeing the construction work.

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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