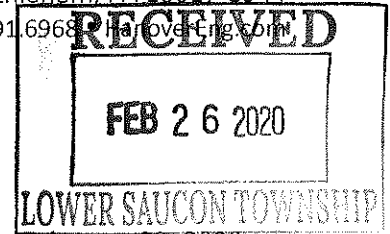


Hanover Engineering

252 Brodhead Road • Suite 100 • Bethlehem, PA 18017-8944

Phone: 610.691.5644 • Fax: 610.691.6968



February 24, 2020

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

RE: Inspection Conducted on February 20, 2020
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, and Astor Lawson, District Manager. The following items were noted during the inspection:

1. The BRE plant continues to be off-line, with no activity observed.
2. The landfill flare was running at a flow rate of 2,890 standard cubic feet per minute (scfm), a temperature of 1,657 degrees Fahrenheit, and fifty-four inches (54") of vacuum vs a set point of sixty inches (60"). The flow rate was reading as one hundred percent (100%) of the variable frequency drive. Cody White, Landfill Gas Technician, previously explained that this reading indicates that the VFD is running at the maximum speed for which it is set. He stated that it does not indicate that the flare capacity is being maxed out. The largest blower was in operation and seemed to be running a little louder than usual. The flare appeared to be running normally with no visible emissions or flames observed during this inspection. Mr. Pannucci stated that there have been no visible emissions from the flare since the last inspection. The paper chart went back to February 14, 2020 and showed steady gas flow since then. Mr. Pannucci stated that the landfill had two (2) consultants come in to look over the PLC (control panel) and blower and that everything checked out as working fine. Landfill personnel are still working to figure out why they are not achieving the full set point vacuum on the well field.
3. The truck wash was closed due to below-freezing temperatures.
4. No mud or odors were observed along Applebutter Road up to Ringhoffer Road, but a few pieces of litter were observed. No blowing litter, mud, or odors were observed along the entrance driveway or the office parking lot.
5. Weather conditions were cloudy, no precipitation, temperature of 30 degrees, and wind from the north/northwest at five to ten miles per hour (5 – 10 mph).
6. A street sweeper was observed cleaning internal roads at various times during the inspection.
7. The customer convenience area was in use for small vehicles.
8. Five (5) pickers were observed working on site to remove blown litter.
9. Garbage was being disposed of at one (1) working face in the middle of Cell SE-1B with two (2) different approaches. Smaller local collection trucks approached over the top of the

- 5
- ROUTING**
- Council
 - Manager *dry*
 - Asst. Mgr.
 - Zoning
 - Finance
 - Police
 - P. Works
 - P/C
 - P & R
 - EAC
 - Engineer
 - Solicitor
 - Planner
 - Landfill
 - EMC
 - Other *webster*

landfill, drove down the eastern face, and unloaded at the southern end of the working face. Larger trucks with walking floors or needing the tipper unloaded at the northern end of the working face. The approaches to and departures from the working face were stable and passable. Piles of brick were staged at the entrance to the working face for use as road-bed material as needed. One (1) truck was unloading on the tipper, with one (1) waiting for the tipper. Three (3) trucks were unloading conventionally, with zero (0) trucks waiting. One (1) dozer and one (1) compactor were working in the garbage. A dump truck was observed returning from dumping soil near the working face to use as daily cover, and soil was observed staged near the working face. Wind screens were in place at the working face. A slight persistent odor, possibly from a seep, was observed while at the top of the landfill. With the wind blowing from the northwest at the time, this would put the source on the north face. Mr. Lawson stated that he would have landfill personnel investigate to find the source. It was observed that soil cover had been spread near the east end of the working face to cover flagging garbage. Piles of soil were observed staged on the bench for use in covering additional areas of flagging garbage.

10. Mr. Lawson pointed out an area on the north face where a seep had been repaired last week.
11. The north slope road was driven. The riprap swale and rock check dams were in good shape with no erosion observed. Minor erosion was observed in the roadbed.
12. An area of the south face has yet to be dressed with additional cover soil. This is awaiting suitable site conditions.
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. Grading near the flare needed to direct stormwater runoff to the sump has not yet been completed.
16. Mr. Lawson stated that he has authorized a contractor to begin work that will eventually put the southern mister line back in working order. As a first step, the motor that delivers the odor neutralizer to the spray lines has been pulled to be checked and repaired as needed.
17. We entered the scale house to inspect trucking slips from Waste Connections' transfer stations. Three (3) out of thirteen (13) trucks were overweight, by 300 pounds, 1,020 pounds, and 1,240 pounds.
18. Mr. Lawson stated that flyers entitled "Bethlehem Landfill Traffic Regulations" are being distributed to all landfill clients to make them aware of the regulations and the penalties for non-compliance. Mr. Lawson stated that he recently barred one (1) driver from ever entering the landfill again based on multiple complaints of unsafe vehicle operation.
19. No gas odors were observed anywhere on site during the inspection.
20. I conducted a driving patrol along the intersection of Applebutter Road and Ringhoffer Road before the inspection, starting at 9:52 a.m. No landfill-related odors were observed. The sight and sound of garbage trucks and equipment on the landfill were observed. A faint buzz or hum was observed that seemed to be coming from the direction of the flare. I conducted a driving patrol along Skyline Drive after the inspection, starting at 11:22 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 11:34 a.m. No landfill-related sounds or odors were observed. On the driving patrol through the Narrows it was observed that the road immediately downslope of the runoff point from the landfill was clean. No landfill-related issues were observed.

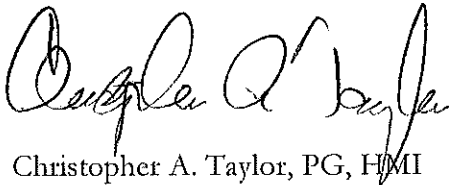
Activity Related to the Southeast Realignment Expansion

21. Mr. Pannucci stated that work to construct the next cells is now ramping up. The contractor has been selected and is starting to martial equipment on the site. Mr. Pannucci stated that Cells 2A and 2B will be constructed concurrently such that the western half of both will be constructed together and filled together and will be known of Cells SE-2AB Phase I. This is intended to resolve logistical problems that were encountered in the filling of Cells SE-1A and 1B. Later, the eastern half of both cells will be constructed together and be known as SE-2AB Phase II. Mr. Pannucci stated that each cell will be built exactly as designed and approved under the Southeast Realignment Plan, it's only the sequence of construction that is changing. He stated that this proposal was reviewed and approved by Roger Bellas of PA DEP, who advised them that a minor permit modification would not be needed.

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

S:\Projects\Municipal\L.SauconTwp\LS90-07-Bethl.Landfill\Docs\HESI landfill report of Feb 20, 2020 insp.doc