

# 50 YEARS Hanover Engineering

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August 28, 2020

Ms. Leslie Huhn, Township Manager  
Lower Saucon Township  
3700 Old Philadelphia Pike  
Bethlehem, PA 18015-5426

RE: Bethlehem Landfill Company  
Technical Consultant Committee Meeting  
Notes for the August 18, 2020 Meeting  
Hanover Project LS04-78

Dear Ms. Huhn:

We would like to provide you with our notes from the August 18, 2020 Technical Consultant Committee meeting. The meeting took place via a Zoom and began at 1:00 p.m. Attending the meeting were:

- Ms. Priscilla deLeon
- Mr. Tom Carocci
- Ms. Laouessa McNemar, PE
- Mr. Rich Sichler, PG
- Mr. Scott Brown, HMI
- Ms. Carol Schneider

## MEETING NOTES

### A. Committee

1. Review of Notes from previous meeting.

The notes from the May 19, 2020 meeting, as reported in the Hanover letter dated May 22, 2020, were reviewed and accepted without comment except the title of the document should be amended to read 2<sup>nd</sup> Quarter 2020 August 18, 2020, not 1<sup>st</sup> Quarter 2020 May 19, 2020.

2. Review of Standard Report Calendar

Mr. Brown stated that he had reviewed the status of all standard reporting that Bethlehem Landfill Company (BL) is responsible to provide. He confirmed that all reporting had been received on time except as follows:

- Groundwater Monitoring Report – 1Q20 Report was not received, 2Q20 received August 3, 2020.
- Collection/Capture Efficiency Report – 1Q20 and 2Q20 not received.

B. Scott J. Brown, PG, HMI – HOST MUNICIPALITY INSPECTOR

1. General Overview of Landfill Activities During the Second Quarter of 2020 or Other Appropriate Timeframe

a. Waste Acceptance and Management

- Waste disposal took place in Cell SE-1B during the First Quarter.
- Waste acceptance tonnage for the Second Quarter reported in IESI meeting notes (April - June 2020) was 105,529.91 tons, versus 16,151 tons for the First Quarter. Laressa noted that the Joint Committee Meeting Minutes prepared by Lower Saucon Township should delete the “90/10” after “Sewage Sludge” in the Monthly Tonnage Section because sewage sludge being accepted is no longer a 90% soil/10% sludge mix.
- Use of approved Alternative Daily Cover tarp has been utilized when six-inch (6”) soil cover has not been able to be placed at the end of the working day.
- The Form U review process is still being followed.
- Supplemental Waste Tracking forms submitted by BL indicated that no loads of waste were rejected during the Second Quarter.
- Recycling (newspaper, commingle, and scrap metal) continues to be received and processed at the landfill. A total of thirty-one (31) Township residents brought recycling to the landfill in the Second Quarter.
- Residual Waste Reports being provided to the Township show that in the Second Quarter a total residual waste tonnage of 6,298.83.
- The Host Municipality Benefit Fee Report and fee check for the Second Quarter have been received by the Township. A.2 of the report indicates First Quarter 2020 should be 2Q20.
- The Pennsylvania Department of Environmental Protection (PA DEP) Waste Management Program conducted two (2) inspections during the Second Quarter, on April 24, 2020 and June 24, 2020.

I have no concerns to recommend reporting to Council.

b. Landfill Gas Management

- The BRE plant has remained off-line.
- The landfill flare was online and burning landfill gas solely during the Second Quarter.
- BL had 104 vertical gas wells and 34 horizontal wells (collectors) in operation as of the end of the Second Quarter.

- BL provided a copy of the odor complaint log from PA DEP which indicated that six (6) odor complaints were reported to PA DEP during the Second Quarter. Laressa noted that in mid-June BL started taking in sludge (not a 90/10 mix) and was curious if there was any increase of odor complaints?
- The gas royalty payment for the First Quarter 2020 has been received by the Township.
- The temporary cap on the south face was observed during the Second Quarter to check for landfill gas accumulating under this cap, which had caused it to “balloon up” previously. Ballooning of the temporary cap was **not** observed during the Second Quarter.
- Recent Development: During the August 5, 2020 landfill inspection I was advised that the flare was not functioning due to a mechanical failure resulting in odors along Applebutter Road east of Ringhoffer and Ballooning of the temporary cap. BL had already contacted a company to replace the failed part. BL also notified PA DEP. Priscilla questioned if the Township was notified of the flare outage. Scott did not believe the Township was, PA DEP was notified the morning of the outage which was prior to the flare being out for 24 hours which requires notification. Laressa suggested checking BL’s PPC Plan for Township notification requirements.
- Aria Energy East, LLC has been issued a general permit to construct a Renewable Natural Gas (RNG) Facility on the landfill property and BL was issued a Minor Permit Modification.
- The PA DEP Air Quality Program conducted zero (0) inspections during the Second Quarter.
- Laressa noted that BL has 14 gas probes just outside of the waste pack which are utilized for measuring the percentage of gas in the soil. LPG-3A has been recently been showing gas levels on the increase and recently had the gas level reach 16.7% which is approaching the safe upper limit of 17% Safe Limit Standards are between 5% and 17%. Rich noted that atmosphere conditions can play a role in the measurements, i.e., if there is high atmospheric pressure and high humidity that could lead to a higher % measurements.

The Committee will continue to report the odor complaints to Council. The odor incidents documented via complaints lodged with PA DEP. The Committee is also recommending that Council voice the concern of the elevated gas being detected in LFG-3A to BL and the lack of PA DEP inspections to PA DEP air quality.

c. Leachate Management

- Secondary leachate flows in LMC-6 varied between 3 and 7 g/a/d during the Second Quarter.

- Secondary leachate flows in LMC-7 were recorded as 0 g/a/d for all weeks during the Second Quarter.
- Secondary leachate flows in LMC-8 varied between 0 and 1,880 g/a/d (April 20, 2020) and exceeded 100 g/a/d for 5 of 13 weeks during the Second Quarter.
- Secondary flows in PS-1, PS-2, PS-3, and PS-4 were between 0 and 4 g/a/d.
- Approximately 1 ½ years ago Council notified PA DEP in writing about their concern with the elevated detection zone flows that have been occurring since 2000.

Same Concern and Previous Quarter:

The Committee is reporting to Council that there are concerns with the continuous flow of leachate and/or stormwater within the leachate Detection Zone of the landfill as identified at several monitoring points. This ongoing condition should continue be reviewed to identify significant developments that may warrant sealing off the suspect anchor trench sooner than currently scheduled which is prior to the anticipated capping in 2023.

d. Groundwater Management

- The 2Q20 groundwater sampling event was completed May 26, 2020 to May 28, 2020. Rich reported that the PA DEP has a new Hydrogeologist that is instituting new sampling protocols. Now if a monitoring well is dry BL must expand the sampling parameters for the closest abatement well to the yearly parameters for that sampling event.
- The 2019 Annual Review of Groundwater Monitoring System Including Trend Analysis was submitted July 1, 2020.
- The Groundwater Abatement System continued to function, with pumpage amounts reported monthly.
- Abatement well maintenance issues are now included in the monthly reports, as requested. Well AB-1R has replaced AB-1 and the flow meter in AB-10 was replaced. Rich suggested that if no maintenance is necessary for any given month that should also be noted.

The Committee has no concerns to recommend reporting to Council.

e. Traffic Management

	<u>April</u>	<u>May</u>	<u>June</u>
Total Trucks	2,687	2,219	3,070
Overweight	78	68	71
Warnings	62	64	58
Suspensions	16	4	13

- BL issued a Daily Operational Record of Overweight Vehicles, detailing vehicle and hauling company information, for the months of May, June, and July. The records indicate that for the first Quarter, fourteen (14) trucks were more than 2,000 pounds over the 80,000-pound weight limit and fourteen (14) trucks were more than 2,000 pounds over the 73,280-pound weight limit.
- At the last Joint Landfill Committee Meeting Andy Krasnawski noted that several trucks are driving past his home on Applebutter Road to get to the landfill and that route is in violation of the Traffic Plan.

f. Stormwater Management

Stormwater flows off the landfills south face, west of cells 1A and 1B and east of the flare was overflowing the collection system and flowing onto Applebutter Road during the Tropical Storm on August 4, 2020. The rain event was recorded at 8 ½". BL was notified and was able to observe the site conditions during the rain event during a scheduled landfill inspection the next day I was able to observe two (2) erosion channels down the south face and the location where the collection system was overtopped and began to flow toward Applebutter Road and discharged to the roadside as reported by a Township Resident.. Similar stormwater flow was reported in January 2020 in the same general location.

I am recommending reporting to Council that BL have the effected collection system evaluated to ensure that it meets the minimum design standards of the Township and PA DEP.

g. Status of Permit Applications to PA DEP

- PA DEP approved a general permit to Aria Energy East, LLC and a minor permit modification to BL issued in May 19, 2020 for the construction of a Renewable Natural Gas (RNG) Plant.
- BL submitted a Land Development Plan "Northern Realignment Land Development Plan," August 2020. Priscilla questioned if PA DEP was provided a copy of the Land Development Plan?

h. Operational Changes

- No significant changes during the Second Quarter.
- Construction of the MSE highwall continues along the south side of cells 1A and 1B. There have been some delays in completion of the MSE wall due to wet soil conditions that prevented placement of soil needed to construct the wall. Construction is anticipated to be completed by the end of August.

The Committee has concerns regarding the infrequency of the PA DEP inspections occurring.

i. Regulatory Oversight

The PA DEP Waste Management Program conducted two (2) inspections on April 24, 2020 and June 24, 2020. During the June 24, 2020 inspection DEP noted very light to moderate odors were detected along Applebutter Rod west of Sherry Hill Road and along Applebutter Road near Skyline Drive. The report also noted it was garbage collection day along Sherry Hill Road. No violations were noted for odors and no other violations were found. The April 29, 2020 NOV for final cover is ongoing.

The Committee has concerns regarding the infrequency of the PA DEP inspections occurring.

j. Miscellaneous

- Update on condition of west high wall: no major slope failures, and no obvious movement of soil or rock, were observed during the Second Quarter, or since.

I have no concerns to recommend reporting to Council.

2. Review of Inspection Reports

a. PA DEP Waste Management Program (WMP) Inspection Reports.

PA DEP conducted inspections as follows:

April – April 24, 2020 – Zero (0) violations reported and two (2) previous October violations were addressed.

May – No inspection reported.

June – June 24, 2020 – Zero (0) violations and the April 29, 2020 NOV ongoing.

**RECENT DEVELOPMENT:**

b. PA DEP Air Quality Program Inspection Reports

PA DEP conducted inspections as follows:

April – No inspection reported.

May – No inspection reported.

June – No inspection reported.

c. PA DEP Engineer's Monthly Status Reports

PA DEP conducted inspections as follows:

April – No inspection reported.

May – No inspection reported.

June – No inspection reported.

d. HMI Inspections

HEA conducted inspections during the Second Quarter on the following dates:

04/24/20

05/07/20

05/21/20

06/04/20

06/18/20

Results are as previously reported.

3. Review of Citizen Complaint Log Maintained by PA DEP

APRIL: One (1) odor complaint reported

MAY: Four (4) odor complaints reported

JUNE: One (1) odor complaint reported.