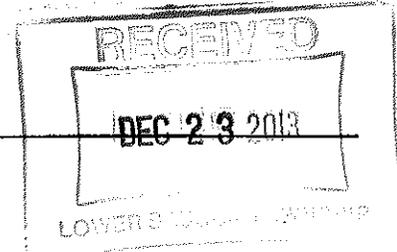


Hanover

Engineering Associates Inc

December 18, 2013



Mr. Jack Cahalan, Manager
Lower Saucon Township
3700 Old Philadelphia Pike
Bethlehem, PA 18015

RE: Joint Municipal Landfill Committee
Minutes of December 17, 2013 Meeting
Hanover Project LS90-07

Dear Mr. Cahalan:

The Joint Municipal Committee between IESI Bethlehem Landfill and Lower Saucon Township met at the Landfill Office on December 17, 2013. The meeting began at 12:45PM. Attending the meeting were:

- Ms. Priscilla deLeon
- Ms. Donna Louder
- Mr. Hazem Hijazi, PE
- Mr. Allen Schleyer
- Mr. Christopher Taylor, PG, HMI

AGENDA ITEMS

I. Status of Waste Activities

Monthly Tonnages:

	<u>September</u>	<u>October</u>	<u>November</u>
Municipal Solid Waste (total)	25,295.30	25,608.10	19,874.70
Construction and Demo (total)	6,621.50	8,668.50	3,872.70
Residual Waste (total)	762.90	1,035.00	1,307.00
Asbestos	[76.60]	[235.90]	[485.90]
Out of state-total (percentage)	[20,993.20](64%)	[23,063.90](65%)	[14,265.50](56.9%)
TOTAL	32,679.70	35,311.60	25,054.40
Recycled Tonnage (percent from Lower Saucon Twp.)	4.70 (76%)	0.00 (83%)	2.80 (74%)

- NOTES:
1. The tonnage for 'Asbestos' is included in the tonnage for 'Residual Waste (total)' and is therefore shown in brackets.
 2. The 'Out of state - total' tonnage figure has now been consolidated to include total tonnage from all waste categories, and is shown in brackets because it is included in the tonnage for the other categories.

Mr. Taylor noted that the tonnage of municipal solid waste was down in November. Mr. Schleyer responded that there were a couple of days when they didn't take in as much tonnage.

ROUTING

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

Form U Submittals

Waste

Approval Date

Webster

jml 12-17-13

Hatfield TMA	Mun. incinerator WWTP sludge ash	11/04/13
Central Steel Drum	Non-petroleum soil/debris	11/09/13
Bio-Med	ACM	11/12/13
St. Patrick's Cathedral	ACM	11/12/13
UGI Utilities	RR ties/soil	11/16/13
Drew University	ACM	12/02/13
PQ Corp.	ACM	12/02/13
Pequannock Senior Center	ACM	12/02/13
Exelon Schuylkill Station	ACM	12/06/13
PA American Water Company	Spent blasting media	12/06/13
GW Bridge Bus Terminal	ACM	submit 12/09/13

II. Annual Groundwater Trend Analysis

- The Annual Groundwater Trend Report submitted before June 30, 2013.

III. Correspondence and Reports

- Form U Submittals to PADEP and Lower Saucon Township
- Abatement System Report
- LFG Well Construction Drawing 2013
- Third Quarter 2013 groundwater report

IV. Landfill Operations

- Department of Environmental Protection Inspections
 - November 7, 2013 – S. French: site meeting
 - November 14, 2013 – S. French, D. Evans: engineer's meeting
 - November 21, 2013 – W. Govern: site inspection
 - December 12, 2013 – S. French – engineer's meeting
- Host Municipal Inspection
 - November 6, 2013 – Chris Taylor
 - November 21, 2013 – Chris Taylor
 - December 6, 2013 – Chris Taylor

Ms. deLeon asked if the inspection list reflects inspectors from the PADEP's air quality program. Mr. Schleyer replied yes, they would be listed, but that they were not here last month.

Ms. deLeon asked about the leachate seep that was reported by the PADEP and the HMI from their November 21, 2013 inspections. Mr. Taylor distributed photographs of the area of the seeps taken during his inspection. Mr. Schleyer provided a detailed explanation of why seeps form, and how they are repaired. Mr. Hijazi asked isn't there a liner to prevent the leachate from surfacing. Mr. Schleyer replied no, the seeps occurred in an intermediate cover area that will receive more garbage. Ms. Louder asked how often seeps occur.

Mr. Schleyer responded that it depends on rainfall. He added that seeps are something they constantly inspect for and are a maintenance issue.

Ms. deLeon asked if there were any other issues in the PADEP reports. Mr. Schleyer gave a summary of the findings of the inspection reports. Ms. deLeon stated her displeasure on the tracking and follow-through of PADEP inspection reports and the issues they raise, and stated that report issues should be discussed at the meetings so that they can be reported in the meeting minutes. Mr. Taylor stated that, in the future, he would make sure to bring a copy of any inspection reporting distributed during the previous month, and stated that all committee members should review all inspection reports and note any issues of concern that they want to discuss at the monthly committee meeting.

- Bethlehem Renewable Energy (BRE) and Flare Operations

The following is an update to the Bethlehem LFG Flare activity. We had the following LFG flare and BRE turbine shutdowns at Bethlehem Landfill. The auto-valve closed as designed at each location. No odors were noted or odor complaints received by Bethlehem Landfill during the outage events for this reporting period. The BRE power plant is operating as the primary control system. The flare is currently the back-up control system.

Nov 1, 2013	Flare shutdown	06:00	Low avg. temp – checked louver adjustment
	Flare startup	08:55	Duration 2 hr 55 min
Nov 25, 2013	Flare shutdown	09:25	PPL line maintenance, flare maintenance
	Turbine startup	16:06	Duration 6 hr 41 min
Nov 26, 2013	Turbine shutdown	13:55	Protective shutdown
	Turbine startup	14:35	Duration 40 min
Nov 27, 2013	Turbine shutdown	20:54	Protective shutdown
	Turbine startup	21:27	Duration 33 min
Nov 28, 2013	Turbine shutdown	07:58	Protective shutdown
	Flare startup	14:43	Duration 6 hr 45 min
Nov 29, 2013	Flare shutdown	09:12	Starting turbine
	Turbine startup	11:01	Duration 1 hr 49 min
Nov 30, 2013	Turbine shutdown	14:16	Protective shutdown
	Turbine startup	17:44	Duration 3 hr 28 min

All shutdown information is provided to the PADEP.

- Gas Collection

- The Bethlehem Renewable Energy Plant is currently operating as the primary gas control system. The flare is now the back up to the BRE facility. Additional landfill gas collection wells are installed in the Phase 4-D/C area. An additional blower is installed at the flare station.

Ms. deLeon stated that she spoke to Mr. Govern (PADEP) about the odor complaints attributable to the BRE plant. She said that Mr. Govern told her that PADEP was watching the odor complaints and that they will now be able to monitor the waste produced by the BRE plant because of a new regulation that was just approved.

During the inspection following the meeting, it was confirmed that the BRE plant was running. Mr. Taylor observed that the landfill flare was not running, and asked Mr. Schleyer if it was still down due to the work related to the hook-in of the new blower. Mr. Schleyer responded no, the flare was operational, but was shut down intentionally because BRE was taking enough gas (to provide adequate gas management). Mr. Taylor commented that it was not a good idea to have the flare out of operation during a time when numerous odor complaints were being received.

- Well Sampling

- Mr. Schleyer stated that groundwater sampling was taking place today.

- North Slope

- The North Slope sedimentation traps are functional.
- The North Slope perimeter road is accessible.

- Abatement System Operations

- The abatement system continues to operate and discharge to the Bethlehem Waste Water Treatment Plant. Intermittent malfunctions of the well pumps and controls are repaired or replaced as needed.

- Leachate Collection

Flow rates continue to be monitored and reported.

Following is a summary of the work history and developments:

- IESI submitted the report from Meiser and Earl, Inc. on December 23, 2008, to DEP and Lower Saucon Township evaluating the various tests that were performed to locate the source of the elevated detection zone flows as outlined in their May 7, 2008 Work Plan. Lower Saucon Township has forwarded their comments on the December 23, 2008 report to DEP.
- IESI has completed welding of approximately 1,200 L.F. of the secondary line to the primary liner along the northern end of Cell 3-D while the anchor trench was open and prior to completing the weld, a 2½-inch rain event occurred. A spike in the leachate collection/detection flow may be observed.
- IESI will retest the gabion stormwater channel over Cell 3-C and discharging into sedimentation Pond 4 for possible infiltration into the detection zone by flooding the channel on September 24, 2009.
- The capping of the remaining five (5) acres of Phase III has been completed.
- IESI provided an updated report on their LMC investigation to DEP and Lower Saucon Township November 2009. The reports in part indicated that:
 1. LMC 7 does not appear to be affected by rainfall since the northern Cell 3 anchor trench cap/liner welding occurred.
 2. LMC 8 still spiking from rainfall events.
- The next investigation will be to the integrity of the liner under gabion channel in Cell 3-C which will occur in the 1st Quarter 2010. IESI is looking for a seven to ten (7-10) day window with no rain for a meaningful evaluation. IESI received authorization for the Gabion Channel Work Plan from DEP on December 22, 2009.
- The investigation of the integrity of the liner under the gabion downchannel located

- in Cell 3C began April 10, 2010. The southern-most end of the gabion channel was excavated down to the anchor trench as well as to the east and west of the channel along the anchor trench. Toe drains above the primary liner were replaced and the primary and secondary liners were welded together in the excavated areas. The gabion channel and piping leading to Basin 4 were reconstructed. IESI will continue to monitor the LMC flows and prepare a report on the latest work performed.
- To date the flows into LMC-8 appear to have been substantially reduced since the repair in the first week of April 2010.
- As of this date the data appears to indicate that the repairs to the southern end of the gabion downchannel leading to Sedimentation Pond 4 and the toe drains running east/west at the southern most end of the gabion channel have caused a substantial reduction in the detection zone of LMC-8.
- The LMC-8 Detection Zone flow rate continues to be monitored. Existing data continues to show a substantial reduction in the flow rate.
- September/October 2010 – the recent rain events have shown influence on LMC-8. The committee is recommending that IESI investigate and consider extending the toe-drain, which was replaced in April along the toe of the southern slope and above Sedimentation Pond 4, to the east and west. Mr. Schleyer provided a summary of the remedial work completed to date to alleviate the high leachate flows being recorded in LMC-8. He reviewed the recent flow data, and stated his opinion that the remedial work has helped to reduce the overall flows. He stated his opinion that the flow data for 2010 indicates that the “response time” between a storm event and high flows observed in LMC-8 is less, and that the flows are of a shorter duration, since the work has been completed. He stated that he is monitoring the flow data and planning out the next step in the process, but is currently concentrating his efforts on the methane gas problem experienced at the residence at 2293 Applebutter Road. Ms. deLeon stated that Lower Saucon Township is very concerned about the high leachate flows, since these could indicate a tear in the landfill liner or other serious problem.
- February 2011: Discussion regarding monitoring results, as provided in the Third Quarter 2010 Quarterly Facility Report, revealed that samples taken from the leachate detection zone provided very similar chemical analyses to samples taken from the leachate collection zone. Mr. Schleyer indicated that IESI had recognized this correlation, and noted it in their cover letter for the report. Mr. Schleyer provided further explanation with regard to how the report is prepared, and noted that the drainage area for LMC-8 is Phase 3, Cell C, which was completed prior to IESI’s ownership of the facility.
- March 2011: Mr. Schleyer stated that rainy weather is necessitating working on erosion control, but that the toe-drain work is still at the forefront of his work plan. Ms. deLeon asked “What’s going on there” in reference to the high leachate flows documented in the leachate demand report. Mr. Schleyer stated that “stormwater is still getting in” and that they have an “open cell; rainwater is going directly in there”. Ms. deLeon stated that leachate flows jumped up starting February 11, 2011. Mr. Schleyer attributed this to a neighboring cell “filling up and overtopping” the short barrier between cells. He stated that LMC-8 serves Phase 3 Cell C, and that when this cell “fills up” with leachate, it causes the high flows documented in LMC-8, but also causes leachate to overspill to the adjacent Phase IV, causing high flows there also.
- April 2011: Mr. Schleyer noted that flows recorded in LMC 6 increased starting March 18, 2011, but that he is not sure exactly why other than to say it is stormwater-related. Mr. Schleyer stated that it is “the same scenario” as last month, with heavy rains every week that has his crews busy repairing leachate seeps and erosion rills.

- May 2011: Additional toe-drain drainage piping was constructed during the beginning of May. A final report will be completed and submitted to the PADEP and Township.
- June 2011: Mr. Taylor asked if the toe drains have been carrying water to daylight (i.e. – has water been flowing out of the new outlets installed in May). Mr. Schleyer responded that there have been a few flowing out.
- July 2011: Ms. deLeon asked what the PADEP says about the LMC 8 work that was completed. Mr. Schleyer stated that they're okay with it, and that it's "everything we said we'd do". Mr. Taylor commented that we'll probably need up to one (1) year of data to evaluate the effectiveness of the work.
- August 2011: Mr. Schleyer confirmed that that he is still collecting leachate flow data. He stated that he is taking LMC 8 detection zone readings every other day to see if the recent heavy rain causes a "bump" in the data. He indicated that the flow data during rain events should be a good tell-tale sign of whether the toe drains are working. He stated that he wants to collect more data, through the wet season.
- September 2011: Mr. Schleyer acknowledged higher detection zone flows during the monitoring period reported herein. He stated that the toe drains are functioning, because he has seen water flowing from them; and noted the extreme rainfall conditions that occurred during this monitoring period.
- October 2011: Mr. Schleyer stated that the flows in LMC 8 still bounce up when it rains. Ms. deLeon asked if anyone has any other ideas (to remediate this problem). Mr. Schleyer responded no. During the inspection following the meeting, I observed water flowing from each of the toe drain outlets. It had just rained in the last twenty-four (24) hours preceding the inspection.
- November 2011: Mr. Taylor asked what specific steps IESI is taking to identify the source of the inflow creating high flows in LMC 8. Mr. Schleyer responded that they are monitoring flow rates versus rainfall.
- December 2011: Mr. Schleyer stated that, as part of the construction of new cell 4F, the anchor trench along the north side of adjacent Cell 4B was exposed in order to "attach" the old cell to the new cell. He stated that this exposure allowed water from rain events at that time to run right into the collection and detection zones, which caused a spike in the flow numbers for those zones in both LMC 7 and LMC 8. He stated that he expects the numbers to come down. Mr. Taylor asked if everything was buttoned up now (i.e. – no continuing exposure to stormwater). Mr. Schleyer responded that, yes, it was.
- January 2012: Mr. Taylor noted that secondary leachate flows continue to exceed 100 gallons per acre per day (G/A/D) through LMC-8, and are also elevated above normal levels for LMC-6 and LMC-7. Mr. Taylor asked Mr. Schleyer if he is still attributing these higher leachate flows to Cell F being open. Mr. Schleyer stated that, yes, he was.
- February 2012: Mr. Schleyer stated that the high leachate flow numbers are, in his opinion, still due to Cell F being open.
- March 2012: Mr. Schleyer stated that there was a misunderstanding between himself and Mr. Taylor, and that what he meant to say was that there was only one (1) week where the connection between Cell 4F and the adjacent cells were open, in order to fuse the liners together, and that there was a large rain event that week. He stated that in no way did he mean this condition was the continuous cause of high flows in LMC-8 (over many weeks).
- April 2012: Mr. Taylor noted that leachate flows are down overall, including secondary flows in LMC-8. Ms. deLeon asked if, regarding the leachate totals, did it

help that it didn't rain much lately. Mr. Schleyer responded yes, and noted that LMC-8 is now down to 15 gallons per acre per day (secondary flows).

May 2012: Mr. Taylor addressed the issue of secondary leachate flows in LMC-8 as one of the issues that is being tracked by him at the monthly landfill committee meetings, and reminded Mr. Schleyer that this is still an issue of concern with the Township. Mr. Taylor noted that flows were up in the last two (2) weeks due to increased rainfall, but still just under one-hundred gallons per acre per day in the last week of reporting.

July 2012: Mr. Schleyer provided a description, using landfill plans, of which areas LMC 6, 7, and 8 drain. Mr. Schleyer stated that, in regard to LMC 8, that they've significantly reduced the infiltration into it, but it's not one-hundred percent. He stated that they've determined that stormwater is getting into the system, but that it still all gets collected and sent to the Wastewater Treatment Plant. Mr. Schleyer provided an explanation of work completed to date, including the toe drain work, re-sealing the liner and cap system, and installing clay as a sealer. He stated that a quick rain will give a little bump in the flow numbers, and that a soaking rain will cause a broad increase. Mr. Taylor stated that elevated secondary leachate flows in LMC-8 is an issue that is being tracked by him, and is still an issue of concern with the Township.

August 2012: In accordance with direction received at the technical committee meeting on August 21, 2012, Mr. Taylor advised Mr. Schleyer that the Township Council had authorized the issuance of a letter to the PADEP documenting the Township's concerns with elevated flows in the leachate detection zone.

September 2012: The recent secondary flow readings in LMC-8 were reviewed and found to be generally higher than for the previous month.

October 2012: The recent secondary flow readings in LMC-8 were reviewed and the last two (2) weeks reported were found to be significantly higher, apparently due to higher rainfall amounts.

November 2012: The recent secondary flow readings in LMC-8 were reviewed and the last four (4) weeks were found to be very high, apparently due to high rainfall amounts. Mr. Schleyer stated that there were still spikes in the LMC-8 detection zone, which drop off after a rain.

December 2012: The recent secondary flow readings in LMC-8 were reviewed and the last four (4) weeks were found to be high, apparently due to high rainfall amounts.

January 2013: The recent secondary flow readings in LMC-8 were reviewed and the last four (4) readings were found to be very high, apparently due to high rainfall amounts. Mr. Schleyer noted that the reported flow rates jumped up for several weeks. Ms. deLeon asked were there storms? Mr. Schleyer responded yes, several rain events.

February 2013: The recent secondary flow readings in LMC-8 were reviewed and found to be very high. Mr. Taylor noted that there currently was a very long stretch of readings well in excess of 100 gallons per acre per day, dating back to October 5, 2012, and stated that the Township was not happy about this situation.

March 2013: The recent secondary flow readings in LMC-8 were reviewed and found to be very high, continuing the unbroken stretch of readings well in excess of 100 gallons per acre per day (g/a/d) which began October 5, 2012.

April 2013: The latest secondary flow readings in LMC-8 were reviewed and found to still be in excess of 100 g/a/d. Mr. Schleyer commented that the weather's been drier, that LMC-8 is showing a downward trend in flow.

- May 2013: The latest secondary flow readings in LMC-8 were reviewed and found to still be in excess of 100 g/a/d, which began October 5, 2012. Mr. Schleyer noted that the reading for the last week was lower.
- June 2013: The most recent secondary flow readings in LMC-8 were reviewed and found to be below 100 g/a/d for the last five (5) weeks. Mr. Schleyer noted that the recent weather has been fairly dry and predicted that the flows will fluctuate with the weather (precipitation).
- July 2013: The most recent secondary flow readings in LMC-8 were reviewed and found to be significantly above 100 g/a/d for three (3) of the last four (4) weeks.
- August 2013: The most recent secondary flow readings in LMC-8 were reviewed and found to be below 100 g/a/d for three (3) of the last four (4) weeks. Mr. Schleyer noted that these flows had slowed down somewhat. Mr. Schleyer stated that, in Pump Station 3, the elevated flows were due to heavy rain during the liner tie-in.
- September 2013: The most recent secondary flow readings in LMC-8 were reviewed and found to be above 100 g/a/d for three (3) of the last five (5) weeks.
- October 2013: The most recent secondary flow readings in LMC-8 were reviewed and found to be below 100 g/a/d for three (3) of the last four (4) weeks.
- Mr. Schleyer noted that the flows are slowing down, but so is the rain.
- November 2013: The most recent secondary flow readings in LMC-8 were reviewed and found to be below 100 g/a/d for the last eight (8) weeks.

The most recent secondary flow readings in LMC-8 were reviewed and found to be below 100 g/a/d for the last twelve (12) weeks. Mr. Schleyer commented that just means there has not been a lot of precipitation.

- Radiation Monitoring

- November 18, 2013: I-131
- November 19, 2013: I-131
- December 16, 2013: I-131

All are Level 1 isotopes and disposed of on site.

- Phase IV Construction Activities

Cell 4E-Stage 2 construction requires the tie-in for the leachate collection and removal of stormwater diversion berms prior to final certification. Cell 4-A/3-D is the current active disposal area. Approximately one (1) acre of landfill area is currently being capped on the south slope of Cell 4-D/C.

During the inspection following the meeting, Mr. Taylor observed that the active disposal area is Cell 4A/3D. However, no trucks were dumping or waiting at the time of the observation. Mr. Schleyer stated that the weather (snowing) was probably keeping trucks off the road. Wind screens were observed in place at the working face. Mr. Taylor confirmed that no work was taking place in newly constructed Cell 4E Stage 2.

- Complaints

- December 1, 2013 – A steel city resident complained of gas odors along Applebutter Road and reported the complaint at 2:41 Sunday and stated no need to return a call.

- December 2, 2013 – A resident on Skyline Drive reported that hunters were on IESI property and riding 4 wheelers. IESI called the police and Officer Werkheiser responded to inform hunters there is no hunting on IESI property. The hunter left.
- December 5, 2013 – IESI was contacted by Becky Easley, PADEP Air Quality Program, regarding an odor complaint from Fitz Street, Steel City earlier in the week. IESI conducted an odor survey of the Steel City area and perimeter check and did not detect any landfill related odors.
- December 6, 2013 – Lower Saucon Township Police stopped in at Bethlehem Landfill to investigate an odor complaint. The source of the odor was determined to be from the BRE facility due to a valve leak.
- December 11, 2013 – Priscilla deLeon sent an e-mail that a friend detected “rotten egg” odors while driving along Applebutter Road at approximately 10:00 AM. IESI personnel were in the landfill parking lot at 09:30AM and driving on Applebutter Road to the landfill at 09:45AM and did not detect any odors. In addition another odor check was conducted along Applebutter Road and the landfill perimeter after receiving the e-mail complaint. No odors were detected. BRE also conducted an odor survey and did not detect odors. Steel City Fire Company personnel conducted an odor survey at the BRE site and confirmed no odors at that time. PADEP investigated the complaint and attributed the odor to the sewage treatment plant (STP).
- December 12, 2013 – A resident along Applebutter Road called in a complaint to the emergency service dispatch and PADEP of gas odors inside their home. IESI received a call from D Fisher, PADEP, regarding the complaint and IESI responded to the residence. At the residence, police and fire company personnel investigated for odors inside the house and IESI personnel conducted an odor survey outside the house. No odors were detected. Fire company personnel then conducted an odor check using their gas meter on each level of the home; no gas was detected by the meter.

Ms. Louder stated that she experienced a very strong smell at 10:30PM last night. Ms. deLeon asked if it was more like leachate or gas. Ms. Louder stated that it was not like before, that it was hard to describe, that it wasn't a gas smell, it was more sweet. Mr. Hijazi asked if there is anything the landfill can do with adding gas wells, laterals, etc. Mr. Schleyer replied that they do a lot of gas collection system work, and that they just put in more gas wells. He added that they are always evaluating if there are other areas need gas wells. Mr. Taylor asked if the gas collection system covers Cell 4F. Mr. Schleyer responded yes, and described the system in this area. Ms. deLeon asked how it was determined that the sewage treatment plant was the source of the odor on the December 11 complaint. Mr. Schleyer responded he wasn't sure, that he was just reporting what the PADEP had determined. Ms. deLeon stated that she will follow up with the PADEP official. She asked if the odor was traced to the plant, or to the pipeline or manholes leading down to the plant. Mr. Schleyer responded that he did not know, that it may have been their pump station.

- **Miscellaneous**

Ms. deLeon asked that, with the snow today, will that slow you down? Mr. Schleyer responded yes, and that trucking companies will reroute trucks to another facility if the wait at IESI is too long.

Ms. deLeon asked that, at the end of this year, will you be at the same point as last year (in tonnage accepted)? Mr. Schleyer responded yes, I think we'll be close.

During inspections after the meeting, the following was noted in addition to the items mentioned above:

- No mud, odors, or litter were observed along Applebutter Road or along the entrance driveway to the landfill. No mud or litter were observed at the office, but a slight garbage odor was detected at this location.
- The truck wash was not open due to freezing conditions.
- Numerous seagulls were present at the landfill. No dispersal method was being employed at the time of the inspection.
- The west high wall was observed. No new slope failures were evident.
- No active seeps were observed in the area of the west face where they were previously observed during the last monthly inspection.
- The adjoining parcel to the west (commonly called the "Fox property") was observed from the landfill site. No earthmoving activity was evident on this property.
- The wind was out of the north at 10 to 20 mph. A patrol of Steel City was conducted following the meeting. No landfill-related odors or noises were observed.

V. Commercial Waste Vehicles

	<u>Sept 2013</u>	<u>Oct 2013</u>	<u>Nov 2013</u>
Total Trucks	2,620	2,892	2,269
Overweight	33	40	37
Warnings	23	29	19
Suspensions	10 (1>3%)	11 (4>3%)	18 (4>3%)
	1-TT	4-TT	3-TT, 1-RL

FL = front loader, RO = roll off, TT = tractor trailer, RL = rear loader,
DT = triaxle dump truck

VI. Correspondence

- Correspondence from Department of Environmental Protection
 - No discussion
- Correspondence to Department of Environmental Protection
 - No discussion.
- Other Correspondences

- No discussion.

VII. Township Activities/Township Staff Meeting Update

- Township correspondence to the Department of Environmental Protection
 - No discussion.
- Council Meeting IESI Issues
 - No discussion.
- Miscellaneous
 - No discussion.

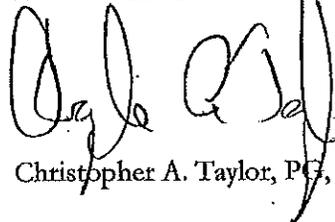
VIII. Establish Time for Next Meeting

1:00PM Thursday January 16, 2014 at the Landfill Facility Office.

END OF MINUTES

Respectfully,

HANOVER ENGINEERING ASSOCIATES, INC.



Christopher A. Taylor, PG, HMI

cat:cat/dad

S:\Projects\Municipal\LowerSaucon\Twp\Le90-07-BethLandfill\Docs\IESI landfill report of Dec 17, 2013 mtg.doc

Enclosure(s)

cc: Ms. Priscilla deLeon (via e-mail)
Mr. Hazem Hijazi, PE (via e-mail)
Ms. Donna Louder (via e-mail)
Mr. Allen Schleyer (via e-mail)
Ms. Laressa J. McNemar, PE (via e-mail)
Mr. James B. Birdsall, PE (via e-mail)
Mr. Scott J. Brown, HMI (via e-mail)
Mr. Jacob A. Schray, HMI (via e-mail)
Mr. Rich Sichler, PG (via e-mail)
Ms. Leslie Huhn (via e-mail)
Ms. Diane Palik (via e-mail)
Ms. Susan French (via e-mail)
Mr. Walter Govern (via e-mail)

BETHLEHEM LANDFILL
LEACHATE DEMAND REPORT

November 2013

<u>Location</u>	<u>Total gallons</u>
LMC-6	7,534
LMC-7	9,129
LMC-8	44,686
LMC-10	1,082,000
PS-1	267,843
PS-2	199,303
PS-3	105,285
Phase-IV	572,431

Total LMC-10 Flow = LMC-6, 7, 8, Abatement Well System, Phase I and II, and LFG condensate. Phase-IV total from PS-1, PS-2 and PS-3.

Total Discharge

LMC-10	1,082,000
<u>Phase IV</u>	<u>572,431</u>
TOTAL	1,654,431 gallons

Total Leachate

Leachate	126,963
<u>Phase IV</u>	<u>572,431</u>
TOTAL	699,394 gallons

LMC-10 Flow - Abatement System Flow = Leachate System Flow (gallons).
Abatement System Flow = 955,037 gallons (Neptune Flow meters)

