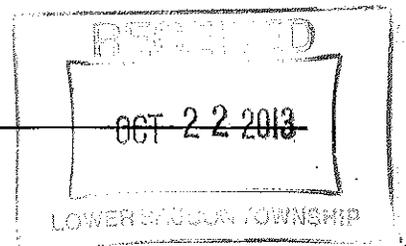


Hanover

Engineering Associates Inc

October 22, 2013



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

RE: Joint Municipal Landfill Committee
Minutes of October 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 October 17, 2013. The meeting began at 1:00PM. Attending the meeting were:

Ms. Donna Louder
Mr. Hazem Hijazi, PE
Mr. Gene Medei (resident of Steel City)
Mr. Allen Schleyer
Mr. Christopher Taylor, PG, HMI

AGENDA ITEMS

I. Status of Waste Activities

Monthly Tonnages:

	<u>July</u>	<u>August</u>	<u>September</u>
Municipal Solid Waste (total)	26,485.30	27,592.50	25,295.30
Construction and Demo (total)	10,094.50	9,023.90	6,621.50
Residual Waste (total)	1,428.30	1,204.60	762.90
Asbestos	[613.90]	[241.70]	[76.60]
Out of state-total (percentage)	[25,144.00](66%)	[26,038.70](69%)	[20,993.20](64%)
TOTAL	38,008.10	37,821.00	32,679.70

Recycled Tonnage (percent from Lower Saucon Twp.) 4.80(60.5%) 21.80 (76%) 4.70 (76%)

- 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.

ROUTING

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

Landfill 252 Brodhead Road, Suite 100 • Bethlehem, PA 18017-8944 • 610.691.5644 • Fax 610.691.6968 • www.hanovereng.com

EMC

Other Website

<u>Form U Submittals</u>	<u>Waste</u>	<u>Approval Date</u>
Exelon – Cromby Station	ACM	09/24/13
IMTT – Bayonne	ACM	09/24/13
Kimberly Clark	ACM	09/24/13
Exelon – Eddystone Station	ACM	09/24/13
NJ Transit Corp	PCB soil/debris	10/11/13
Central Steel Drum	Non-petroleum soil/debris	submit 10/9/13

II. Annual Groundwater Trend Analysis

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

III. Correspondence and Reports

- Form U Submittals to PA DEP and Lower Saucon Township
- Abatement System Report
- LFG well construction notification.
- Second Quarter 2013 Lower Saucon Township Facility Report
- Minor Permit Modification for Alternative Daily Cover

IV. Landfill Operations

- Department of Environmental Protection Inspections
 - September 12, 2013 – S. French, J. Spaide, D. Evans: engineer's meeting and inspection
 - September 18, 2013 – W. Govern: site inspection
 - September 23, 2013 – B. Bham: groundwater monitoring
 - September 24, 2013 – B. Bham: groundwater monitoring
- Host Municipal Inspection
 - August 30, 2013 – Chris Taylor
 - September 19, 2013 – Chris Taylor
- Bethlehem Renewable Energy (BRE) and Flare Operations

Mr. Schleyer stated that the September flare report was not yet completed. Mr. Taylor asked when it would be ready. Mr. Schleyer responded by Monday. Mr. Taylor stated that he would delay issuing the meeting report until the flare report was available, in order to issue the most current information. The current flare report was issued to Mr. Taylor by Mr. Schleyer via e-mail the afternoon of Friday October 18, 2013. Mr. Taylor distributed the report to the remaining committee members via e-mail on Monday October 21, 2013. The data for the current report is provided below.

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. The BRE power plant began a startup July 13, 2013 and is the primary gas control system with the flare as a backup.

Sept 2, 2013	Turbine shutdown	08:40	Maintenance
	Turbine startup	10:50	Flare running
Sept 4, 2013	Flare shutdown	06:38	Low temperature shutdown
	Flare startup	06:49	Turbine running
Sept 5, 2013	Flare shutdown	02:04	High temperature
	Turbine shutdown	08:45	Maintenance
	Flare startup	09:19	Duration 33 min
	Turbine startup	14:47	Duration 33 min flare running
	Turbine shutdown	15:01	Maintenance
	Turbine startup	15:35	Flare running
Sept 6, 2013	Flare shutdown	06:57	Low temperature shutdown
	Flare startup	12:15	Turbine running
Sept 8, 2013	Turbine shutdown	20:06	Protective shutdown
	Flare shutdown	20:07	High temperature
	Turbine shutdown	23:20	Duration 3 hr 13 min
Sept 9, 2013	Flare startup	00:07	Duration 3 hr 13 min flare running
Sept 10, 2013	Flare shutdown	07:36	High temperature
	Flare startup	08:27	Turbine running
	Turbine shutdown	13:35	Protective shutdown
	Turbine startup	14:22	Flare running
	Turbine shutdown	18:46	Protective shutdown
	Turbine startup	19:16	Flare running
Sept 13, 2013	Turbine shutdown	05:45	Protective shutdown
	Flare shutdown	05:46	High temperature
	Flare startup	08:54	Duration 3 hr 8 min
	Turbine startup	13:34	Duration 3hr 8 min then flare running
Sept 15, 2013	Flare shutdown	08:13	Low average temperature
	Flare startup	11:52	Turbine running
Sept 16, 2013	Flare shutdown	02:35	High temperature
	Flare startup	07:39	Turbine running
	Turbine shutdown	09:06	Maintenance
	Flare shutdown	11:39	Low temperature
	Flare startup	11:49	Duration 10 min
	Turbine startup	15:08	Duration 10 min then flare running
Sept 22, 2013	Flare shutdown	22:01	Low temperature
	Flare startup	22:41	Turbine running
Sept 24, 2013	Turbine shutdown	08:14	Protective shutdown
	Flare shutdown	08:15	High temperature
	Flare startup	08:43	Duration 28 min
Sept 25, 2013	Flare shutdown	09:09	Manual shutdown to start turbine
	Turbine startup	09:24	Duration 43 min flare running
	Flare startup	11:11	Duration 15 min
Sept 16, 2013	Flare shutdown	19:26	Low average temperature
	Flare startup	20:59	Turbine running
	Flare shutdown	23:26	Low average temperature
Sept 27, 2013	Flare startup	11:13	Turbine running

Turbine shutdown	12:33	Maintenance
Turbine startup	13:42	Flare running
Flare shutdown	15:12	Turbine in full operation

All shutdown information is provided to the PA DEP.

Mr. Medei asked questions about the flare operation. Mr. Schleyer provided a detailed explanation. Mr. Hijazi asked if the flare restart was a manual operation. Mr. Schleyer stated that it is manual, and added that he prefers it that way, so that there is someone on site to make sure everything is okay.

Mr. Taylor asked Mr. Schleyer if he had diagnosed the cause of the "no flame" alarms that occurred the previous month. Mr. Schleyer responded that they investigated, took apart portions of the flare and cleaned/rebuilt them, but that they didn't find a definitive cause. He stated that it could be a maintenance issue. Mr. Taylor asked if a no flame alarm had been recorded since these initial occurrences. Mr. Schleyer responded no. Mr. Hijazi asked what would cause it. Mr. Schleyer responded that he had spoken to a flare unit manufacturer about the issue, who provided several possible reasons. A general discussion on the topic followed.

Mr. Taylor asked if the new blower was installed yet. Mr. Schleyer responded that it was set in place, but not fully hooked up yet. He stated that it would probably be done by next month.

- Gas Collection

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

Mr. Taylor asked for confirmation that all of the additional wells were installed. Mr. Schleyer stated yes, and added that they just went online today. He stated that two (2) horizontal collectors are in, and that they are constructing a third one.

During the inspection following the meeting, it was observed that the BRE plant was running. Mr. Taylor confirmed that the landfill flare was operating at 1068 scfm at 1,657 degrees F.

- Well Sampling

- Mr. Schleyer previously stated that groundwater sampling took place the week of September 23, 2013 as scheduled.

- 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 overflowing" 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 PA DEP 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 PA DEP 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 IBSI 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 PA DEP 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.

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.

- Radiation Monitoring

- September 20, 2013: TC-99M
- September 23, 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/B is the current active disposal area. Also, working on the area designated in the Minor Permit Modification approved July 17, 2013. Approximately one (1) acre of landfill area is currently being capped on the south slope of Cell 4-D/C.

Mr. Schleyer stated that they haven't connected the leachate collection lines of Cell 4E-Stage 2 yet, since they're not ready to move into the cell (to dispose of garbage).

Mr. Schleyer stated that they have started pulling the cap off of the area designated in the Minor Permit modification approved July 17, 2013 in order to dispose of more garbage in that area.

During the inspection following the meeting, Mr. Taylor observed garbage being disposed of at the Cell 4-A/B interface. One (1) truck was dumping, one (1) truck was waiting. 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. Mr. Taylor observed that IESI was installing a horizontal gas collection line at the base of the western face. Mr. Taylor observed the final capping activity taking place on the southern face.

- Complaints

- September 28, 2013 – A neighbor on Ringhoffer Road called to report that a pickup truck spilled garbage onto the road. IESI personnel went to the residence and cleaned up the refuse. The pickup truck was not identified.

- October 12 and 13, 2013 -- Al Schleyer met with a resident from Skyline Drive Monday morning to discuss an odor complaint IESI received over the past weekend. The resident stated she detected landfill odors on Saturday afternoon approximately 2:00 PM through 4:00 PM and also on Sunday morning. IESI noted that on Saturday the IESI contractors were installing new landfill gas header piping that required trenching into sections of the landfill. The odor was attributed to that operation. All trenching was backfilled and covered prior to leaving the site that day. Contractors were instructed to use additional odor control spray if needed

during trenching operations. In addition the Sunday odor is attributed to a mechanical seal leak at the BRE power plant. When BRE personnel arrived on site they immediately shut down the plant and started the IESI flare. BRE corrected the problems before restarting the turbine.

Mr. Medei stated that he experienced a strong garbage odor on the evening of October 13, 2013 and the morning of October 14, 2013, and also on October 15, 2013.

Ms. Louder stated that there was a strong odor along Applebutter Road on Sunday.

Mr. Medei asked if the incidences of odor complaints are above normal or below normal. Mr. Schleyer responded that they were recently constructing new gas wells and lines, where they have to dig into old garbage, that they open and close the excavations in the same day, but that the garbage is exposed in the interim. Mr. Medei asked if the recent activity was typical of what the landfill does and needs to do. Mr. Schleyer responded that gas well installation is typically once per year, for short time periods. Mr. Medei asked that as IESI moves along and adds to the landfill, will the things occurring now continue to occur? Mr. Schleyer responded yes, and the landfill grows, operations continue. Mr. Medei asked if the landfill expanded, will things continue as they occur now? Mr. Schleyer responded yes, and provided a detailed explanation of the development of the landfill to date. Mr. Hijazi asked why there should be any smell, when the garbage is covered at the end of the day and the gas extraction system is running. An expanded discussion on this topic followed. Ms. Louder stated that we're doing this to document what is happening. Mr. Hijazi asked how can the landfill ensure there will be no smell. Mr. Schleyer responded that we can't ever say there will be no smell. Mr. Hijazi stated he wondered if there's something the landfill could do. Mr. Medei stated that rarely does he drive by when he doesn't smell something, probably ninety-five percent (95%) of the time. He stated that the conclusion he has is that as the landfill expands, we'll have more odor. Mr. Hijazi asked when the flare is down, does that have an impact on odor. Mr. Schleyer responded that he has not seen a correlation between flare outages and odor occurrences. Mr. Schleyer stated that this time of year, temperature inversions can cause the air to sink and bring odors to the ground rather than dispersing them upward. Ms. Louder stated that the odor problem has been worse in the last couple of weeks than it's been for a while. Mr. Hijazi asked if there is any technology available to mask the smell. Mr. Schleyer responded that he's looked in to different technologies, and that there are different options. Mr. Medei stated that as long as a problem (such as odor) exists, there will always be a conflict between the parties. Mr. Schleyer stated that they don't take wastewater treatment plant sludges and things that other landfills take, to minimize waste that will produce odors. He stated that IESI will continue to research the issue and see if something can be done.

- **Miscellaneous**

Mr. Taylor asked permission to move the December meeting to Tuesday December 17. Mr. Hijazi stated that it was okay. Mr. Schleyer stated that it was probably okay, but that he needed to check his schedule. Ms. Louder said that it probably would not work for her, but she was okay with it anyway. Mr. Taylor stated that he would check with Ms. deLeon on the matter.

Ms. Louder stated that she observed the front gate to be open after dark on Sunday, and asked Mr. Schleyer what time he locked the gate. Mr. Schleyer responded that there is a three (3) minute delay on the gate, and theorized that someone left the landfill just prior to Ms. Louder's observation and the gate had not yet closed.

Ms. Louder asked why an HVAC contractor's truck was on the landfill property. Mr. Schleyer responded that they were checking out the heaters in the well houses and other outbuildings that are outfitted with heaters.

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

- No mud, odors, or litter were observed along Applebutter Road, along the entrance driveway to the landfill, or at the trailer.
- The truck wash was not open due to dry conditions.
- No litter was observed in the trees within the landfill perimeter.
- The silt fence along the northern perimeter was in good condition.
- The west high wall was observed. No new slope failures were evident.
- 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 west/southwest at 0 to 5 mph. A patrol of Steel City was performed following the meeting. No landfill-related odors or noises were observed.

V. Commercial Waste Vehicles

	<u>July 2013</u>	<u>August 2013</u>	<u>Sept 2013</u>
Total Trucks	2,954	2,971	2,620
Overweight	59	55	33
Warnings	41	30	23
Suspensions	18 (2>3%) 2-TT	25 (11>3%) 10-TT, 1-DT	10 (1>3%) 1-TT

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.

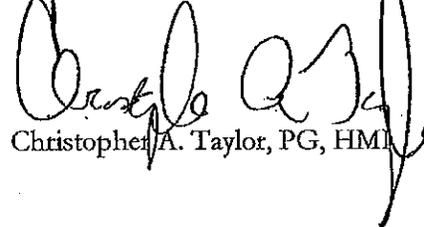
VIII. Establish Time for Next Meeting

1:00PM November 21, 2013 at the Landfill Facility Office.

END OF MINUTES

Respectfully,

HANOVER ENGINEERING ASSOCIATES, INC.



Christopher A. Taylor, PG, HMI

cat:cat/dad

S:\Projects\Municipal\Lower Saucon\wp\1298-07-19tblLandfill\Docs\IESI landfill report of Oct 17, 2013 mtg.doc

Enclosure(s)

cc: Ms. Priscilla deLeon (via e-mail)
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BETHLEHEM LANDFILL
LEACHATE DEMAND REPORT

September 2013

<u>Location</u>	<u>Total gallons</u>
LMC-6	9,215
LMC-7	13,145
LMC-8	75,456
LMC-10	1,689,000
PS-1	284,032
PS-2	184,422
PS-3	344,913
Phase-IV	813,367

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	1,689,000
Phase IV	813,367
TOTAL	2,502,367 gallons

Total Leachate

Leachate	199,423
Phase IV	813,367
TOTAL	1,012,790 gallons

LMC-10 Flow -- Abatement System Flow = Leachate System Flow (gallons).
Abatement System Flow = 1,489,577 gallons (Neptune Flow meters)