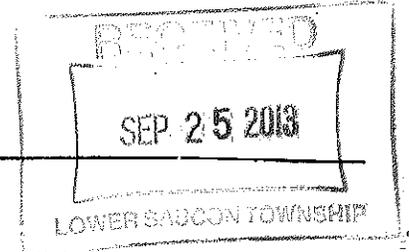


Hanover

Engineering Associates Inc

September 25, 2013



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

RE: Joint Municipal Landfill Committee
Minutes of September 19, 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 September 19, 2013. The meeting began at 1:00PM. Attending the meeting were:

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

*Ms. deLeon had to leave this meeting at 1:40PM to attend another previously-scheduled meeting.

AGENDA ITEMS

I. Status of Waste Activities

Monthly Tonnages:

	<u>June</u>	<u>July</u>	<u>August</u>
Municipal Solid Waste (total)	23,137.30	26,485.30	27,592.50
Construction and Demo (total)	10,238.30	10,094.50	9,023.90
Residual Waste (total)	976.10	1,428.30	1,204.60
Asbestos	[24.90]	[613.90]	[241.70]
Out of state-total (percentage)	22,424.30(65%)	25,144.00(66%)	26,038.70(69%)
TOTAL	34,351.70	38,008.10	37,821.00
Recycled Tonnage (percent from Lower Saucon Twp.)	0.00 (80%)	4.80(60.5%)	21.80 (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
- EMC
- Other

<u>Form U Submittals</u>	<u>Waste</u>	<u>Approval Date</u>
South Orange Maplewood BOE	ACM	08/14/13
Ramapo Regional BOE	ACM	08/14/13
US Army Installation – Picatinny	ACM	09/05/13
Montclair State University	ACM	09/05/13
Pyramid Contracting	ACM	09/05/13
Exelon – Cromby Station	ACM	submit 09/12/13
IMTT – Bayonne	ACM	submit 09/12/13

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
- Minor Permit Modification – re-grade contours 2013 - correspondence
- Second Quarter 2013 PA DEP Groundwater Report
- Air Quality Site Inspection Report
- LFG well construction notification.

IV. Landfill Operations

- Department of Environmental Protection Inspections
 - August 12, 2013 – S. French, D. Evans: cell construction inspection
 - August 12, 2013 – W. Govern: site inspection
 - August 27, 2013 – B. Easley: Air Quality site inspection
 - August 27, 2013 – D. Evans: leachate sampling
 - September 12, 2013 – S. French, J. Spaide, D. Evans: engineer's meeting and inspection
 - September 18, 2013 – W. Govern: site inspection

Mr. Taylor asked why leachate sampling was conducted, noting that he had not seen that before. Mr. Schleyer responded that this was part of a statewide sampling plan undertaken by DEP, and that they are testing all of the landfills in Pennsylvania. He stated that they are now testing for TENORM (Technically-Enhanced, Naturally-Occurring, Radioactive Materials). Mr. Hijazi asked Mr. Schleyer if he received the report of this sampling yet. Mr. Schleyer responded no, and that he may not get a report, but if he does he will pass it along.

- Host Municipal Inspection
 - August 5, 2013 – Chris Taylor
 - August 15, 2013 – Chris Taylor
 - August 30, 2013 – Chris Taylor

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

July 30, 2013	Turbine shutdown	23:16	Protective shutdown
July 31, 2013	Turbine startup	09:35	Duration 22 min flare running
	Turbine shutdown	09:51	Protective shutdown
Aug 1, 2013	Turbine startup	13:22	Flare running
	Flare shutdown	13:35	Low temperature
	Turbine shutdown	15:05	Protective shutdown well field pipe damage
	Turbine startup	15:26	Duration 21 min
	Flare startup	16:01	Duration 21 min turbine running
Aug 2, 2013	Turbine shutdown	15:21	Protective shutdown
	Flare shutdown	15:22	High temperature
	Flare startup	20:31	Duration 5 hr 9 min
	Turbine startup	22:23	Duration 5 hr 9 min flare running
Aug 7, 2013	Turbine shutdown	06:53	Manual shutdown header pipe construction
	Flare shutdown	08:40	Manual shutdown
	Flare startup	11:23	Duration 2 hr 43 min
	Turbine startup	13:12	Duration 2 hr 43 min flare running
Aug 9, 2013	Flare shutdown	10:27	Low temperature
	Flare startup	14:13	Duration 2 hr 45 min then turbine running
	Turbine shutdown	18:56	Protective shutdown
	Flare shutdown	18:58	High temperature
Aug 10, 2013	Turbine startup	00:33	Duration 2 hr 31 min
	Flare startup	21:29	Duration 2 hr 31 min turbine running
	Turbine shutdown	01:40	Protective shutdown
	Flare shutdown	01:40	High temperature
	Turbine startup	03:48	Duration 2 hr 8 min
	Flare startup	04:30	Duration 2 hr 8 min turbine running
Aug 14, 2013	Turbine shutdown	09:47	Maintenance
	Turbine startup	14:29	Flare running
	Turbine shutdown	15:21	Protective shutdown
	Turbine startup	16:36	Flare running
	Flare shutdown	18:01	High temperature
	Flare startup	20:54	Turbine running
	Turbine shutdown	21:14	Protective shutdown
Aug 15, 2013	Turbine startup	02:52	Flare running
	Turbine shutdown	10:27	Protective shutdown
	Flare shutdown	10:28	High temperature
	Flare startup	13:03	Duration 2 hr 35 min
	Turbine startup	13:39	Duration 2 hr 35 min flare running
Aug 17, 2013	Turbine shutdown	18:21	Equipment shutdown
	Flare shutdown	18:23	High temperature
	Flare startup	22:55	Duration 2 hr 33 min

Aug 18, 2013	Turbine startup	10:22	Duration 4 hr 33 min flare running
	Flare shutdown	12:38	Flame outage during blower adjustment
	Flare startup	13:12	Turbine running
Aug 20, 2013	Turbine shutdown	16:34	Protective shutdown
	Flare shutdown	16:35	High temperature
	Turbine startup	16:54	Duration 19 min
	Flare startup	17:26	Duration 19 min turbine running
Aug 21, 2013	Flare shutdown	04:00	High temperature
	Flare startup	07:30	Turbine running
Aug 22, 2013	Turbine shutdown	15:43	Protective shutdown
	Flare shutdown	15:44	High temperature
	Flare startup	16:14	Duration 30 min
	Turbine startup	22:35	Duration 30 min flare running
Aug 28, 2013	Turbine shutdown	01:58	Protective shutdown
	Flare shutdown	01:59	High temperature
	Turbine startup	05:46	Duration 3 hr 47 min
	Flare startup	12:38	Duration 3 hr 47 min turbine running
Aug 29, 2013	Flare shutdown	03:22	No flame alarm
	Turbine shutdown	08:44	Maintenance
	Flare startup	09:59	Duration 1 hr 15 min
	Turbine startup	13:47	Duration 1 hr 15 min flare running
Aug 30, 2013	Flare shutdown	03:13	No flame alarm
	Flare startup	05:53	Turbine running

All shutdown information is provided to the PA DEP.

Ms. deLeon asked Mr. Schleyer if he had any communication with BRE. Mr. Schleyer responded that he communicates with Ken (at BRE) regarding gas management. He stated that "we're all on call" for plant and flare outages. He then provided a detailed explanation about who is responsible to restart the flare and when, depending on what caused the outage.

Ms. Louder asked where was the wellfield pipe damage (relative to the shutdown referenced above on August 1). Mr. Schleyer stated that it occurred at the top of the landfill when a bulldozer "hooked" a well. He stated that they capped the well and made repairs.

Mr. Hijazi asked why so many shutdowns. Mr. Schleyer provided an explanation of the different shutdown scenarios and their causes.

Ms. Louder asked Mr. Schleyer if he had seen any trucks hauling from BRE. Mr. Schleyer responded that he hadn't noticed. Ms. Louder asked if the Township has gotten documentation of shipments of condensate off the site. Ms. deLeon stated that a requirement for such documentation was not written into the PPC Plan for BRE. An expanded discussion on this topic followed.

Mr. Taylor asked about the shutdown for header pipe construction. Mr. Schleyer responded that this was for the condensate knockout project that he showed Mr. Taylor during the last inspection. Mr. Taylor acknowledged remembering that.

Mr. Taylor asked about the "no flame alarm" shutdowns, noting that he did not recall seeing that before. Mr. Schleyer stated that the shutdown is triggered when there is no flame to ignite the gas coming into the flare. He acknowledged that it is somewhat odd to have such a shutdown, and that they are looking into the cause of it.

- 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 scheduled to be installed in the Phase 4-D/C area.

Ms. deLeon asked if the planned gas well construction was part of the overall plan, or was in response to a problem. Mr. Schleyer responded that it was per the requirements, and explained that they have thirty (30) months after filling an area with garbage to construct wells to withdraw gas from that area.

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 820 scfm at 1,658 degrees F.

- Well Sampling

- Mr. Schleyer stated that groundwater sampling is scheduled to take place the week of September 23, 2013.

Mr. Taylor asked if this sampling would include the two (2) neighboring residential wells. Mr. Schleyer explained that the sampling of the residential wells is independent of the sampling of the landfill wells. The landfill wells are sampled by ERG, while the residential wells are sampled by Benchmark Analytics, who contacts the residents and makes the sampling arrangements themselves without involving the landfill.

- North Slope

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

During the inspection following the meeting, Mr. Taylor confirmed that the north slope road was open and passable, except for one (1) area affected by a downed branch. Mr. Schleyer stated that he would have his workers remove it tomorrow.

- 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. Flow rates in PS-3 were elevated during the week of July 5, 2013 due to the liner construction between Cell 4E Stage 1 and Stage 2. The increased flow was due to a direct inflow of rainwater during the liner tie-in.

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 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 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 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.

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.

Ms. Louder asked for confirmation that the norm is 100 g/a/d. Mr. Schleyer responded that 100 g/a/d is the trigger for DEP action.

- Radiation Monitoring
 - August 5, 2013: TC-99M
 - August 12, 2013: TC-99M
 - August 13, 2013: I-131
 - August 20, 2013: I-131

All are Level 1 isotopes and disposed of on site.

- Phase IV Construction Activities
 - Constructing Cell 4E – Stage 2.
 - Cell 4-C/B is the current active disposal area.

Mr. Schleyer stated that the construction of Cell 4E Stage 2 is under review.

Mr. Taylor observed garbage being disposed of at the Cell 4C/B interface. Three (3) trucks were 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.

- Complaints.

- August 13, 2013 – Steel City resident called to report a methane smell at the time of the call (10:45 AM) and also at 09:15 AM. IESI representatives responded to the residence by 11:00 AM. No odor was detected by IESI or the resident at that time. A survey of the area was conducted and one (1) burn barrel was in use east of the residence and one (1) front load container was observed to be overfilled with refuse NE of the residence. No odors were detected during the survey of the area.

Ms. deLeon stated that she received a telephone call on or about August 19, 2013 from a local resident who reported that they are still having issues with trucks flying past their house, but was unable to provide specific information on the offending trucks. Ms. deLeon advised the resident to document whatever information they can when this occurs, such as time of day, color of the truck, etc. and to call the landfill to log a formal complaint. Ms. deLeon requested that Mr. Schleyer add this complaint to the Complaint Log. Mr. Schleyer responded that the Complaint Log is meant for complaints that are called in to the landfill office, not relayed by a third party. It was agreed that inclusion of the complaint here in the meeting minutes was an acceptable way to have it formally recognized and put on the record.

Ms. Louder stated that at 4:00AM on the morning of September 9, 2013 she noted a bad smell that woke her from her sleep and continued into the later morning. She also stated that she experienced excessive noise during the day of September 9, 2013.

Mr. Hijazi asked what the working hours are. Mr. Schleyer responded generally 6:00AM to 6:00PM, but that the hours may be extended if circumstances dictate. Mr. Schleyer clarified that the scale shuts at 4:00PM, but that any trucks already weighed in have to be directed to the working face and unloaded, and that the garbage has to be compacted and covered. He stated that if this work is still unfinished at 6:00PM, they don't just stop for the day, but continue until the work is done.

- Miscellaneous

At the direction of the consultant's technical committee during the last quarterly meeting, Mr. Taylor stated that the landfill should be proactively taking steps to ensure that trucks involved with landfill business are following the Traffic Control Plan, and to identify those that aren't, rather than waiting for infractions to be identified through citizen complaints. Mr. Schleyer responded that the landfill has a Safety Manager, Keith, who is their "traffic cop" who monitors truck traffic and will put drivers in a "time out" for one to three (1-3) hours to punish them for infractions. The Safety Manager starts first thing in the morning at the exit ramps of Route 78 to observe garbage trucks coming off the highway. Mr. Taylor asked what he is looking for. Mr. Schleyer responded he's looking for things like convoying, slowing on the highway, and any other violations. Mr. Schleyer explained that trucks can start staging within the landfill at 6:30AM, but that the scale does not open until 7:00AM. Drivers will sometimes drive slowly to try to time their arrival at the landfill, since they are not allowed to line up on Applebutter Road. Mr. Taylor asked for clarifications on "time outs". Mr. Schleyer explained that they will send a truck to the top of the landfill and tell the driver that he can't weigh out for the prescribed amount of time. Mr. Taylor asked where else the safety manager will sit. Mr. Schleyer responded on Applebutter Road. Mr. Taylor asked if he was looking for infractions while there. Mr. Schleyer responded yes. Mr. Taylor asked if that included trucks coming the wrong way. Mr. Schleyer responded yes. Mr. Taylor asked, if the safety manager sees an infraction while out on the road, does he call it in to the scale house so that it can be immediately addressed with the driver? Mr. Schleyer responded yes. Mr. Schleyer stated that the landfill performs their own internal "trash net" enforcement exercises, and that they've always done them.

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.
- It appeared that grass was continuing to grow sparsely on the lower part of the south face (the lower bench) that had been regraded and re-topsoiled to address erosion in an area of intermediate cover.
- 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/northwest at 5 to 10 mph. A patrol of Steel City was performed following the meeting. No landfill-related odors or noises were observed.

V. Commercial Waste Vehicles

	<u>June 2013</u>	<u>July 2013</u>	<u>August 2013</u>
Total Trucks	2,701	2,954	2,971
Overweight	53	59	55
Warnings	26	41	30
Suspensions	27 (8>3%)	18 (2>3%)	25 (11>3%)
	6-TT, 2-RO	2-TT	10-TT, 1-DT

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

Mr. Schleyer stated that most of the overweight trucks were C & D disposal. Mr. Hijazi noted that the numbers (of overweight trucks) are creeping up again. Mr. Schleyer stated that this is directly related to New Jersey demolition jobs, notably the continuing debris removal efforts from Hurricane Sandy. Ms. deLeon asked if the three percent (3%) overs are always the same people repeatedly. Mr. Schleyer responded generally not, since it is sometimes months between visits to the landfill for a particular trucking company hauling C & D waste. But he did state that in August there were four (4) or five (5) trucks from the same company that were overweight.

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.

Mr. Jack Cahalan, Manager
Lower Saucon Township

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September 25, 2013

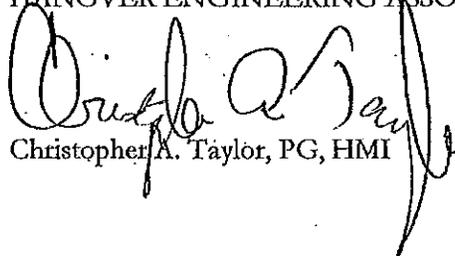
VIII. Establish Time for Next Meeting

1:00PM October 17, 2013 at the Landfill Facility Office.

END OF MINUTES

Respectfully,

HANOVER ENGINEERING ASSOCIATES, INC.



Christopher A. Taylor, PG, HMI

cat:cat/dad

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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. Lauressa 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)

BETHLEHEM LANDFILL
LEACHATE DEMAND REPORT

August 2013

<u>Location</u>	<u>Total gallons</u>
LMC-6	8,110
LMC-7	15,933
LMC-8	42,581
LMC-10	1,606,000
PS-1	255,723
PS-2	195,650
PS-3	411,577
Phase-IV	862,950

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	1,606,000
Phase IV	862,950
TOTAL	2,468,950 gallons

Total Leachate

Leachate	181,860
Phase IV	862,950
TOTAL	1,044,810 gallons

LMC-10 Flow – Abatement System Flow = Leachate System Flow (gallons).
Abatement System Flow = 1,424,140 gallons (Neptune flow meters)

IESI BETHLEHEM LANDFILL

	Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC
541		TIME	Phase IV PS-2 (Secondary Flows)				Phase IV PS-2 Primary Flow						
542		(days)	TOTALIZER	GALLONS	FLOW (gpd)	g/ac/day		TIME	TOTALIZER	Gallons	FLOW (gpd)	g/ac/day	
543													
544	12/28/2012	41271	5595	5595	0	0.0			10573007	10573007	256	24	28.2*
546	1/4/2013	7	5595	0	0	0.0			10823461	50454	7208	880	32.7*
546	1/11/2013	7	5595	0	0	0.0			10848572	25111	3687	338	23.4*
547	1/18/2013	7	5595	0	0	0.0			10668955	20383	2912	275	32.0*
548	1/25/2013	7	5595	0	0	0.0			10689573	20818	2945	278	26.7*
549	1/31/2013	6	5595	0	0	0.0			10701797	12224	2037	192	33.3*
550	2/8/2013	8	5595	0	0	0.0			10728538	24741	3093	292	33.5*
551	2/15/2013	7	5595	0	0	0.0			10748423	21885	3126	295	32.2*
552	2/22/2013	7	5595	0	0	0.0			10776700	28277	4040	381	35.0*
553	3/1/2013	7	5598	3	0	0.0			10790467	13767	1967	188	34.8*
554	3/8/2013	7	5603	5	1	0.1			10822950	32483	4640	438	24.4*
555	3/15/2013	7	5603	0	0	0.0			10848802	25852	3693	348	23.8*
556	3/21/2013	6	5637	34	6	0.8			10849029	17227	2871	271	25.6*
557	3/29/2013	8	5637	0	0	0.0			10849029	18575	2322	219	26.1*
558	4/5/2013	7	5637	0	0	0.0			10856317	7288	1041	98	24.8*
559	4/12/2013	7	5637	0	0	0.0			10918172	61855	8836	834	42.3*
560	4/19/2013	7	5638	1	0	0.0			10986110	87938	9705	916	28.2*
561	4/26/2013	7	5638	0	0	0.0			11039037	52927	7561	713	35.6*
562	5/2/2013	6	5638	0	0	0.0			11083935	44898	7483	706	32.2*
563	5/10/2013	8	5638	0	0	0.0			11142648	58713	7339	692	34.3*
564	5/17/2013	7	5638	0	0	0.0			11155615	12967	1852	175	34.6*
565	5/24/2013	7	5638	0	0	0.0			11201308	45891	6527	616	31.2*
566	5/31/2013	7	5638	0	0	0.0			11240032	38726	5532	522	32.4*
567	6/7/2013	7	5638	0	0	0.0			11284388	44354	6336	598	38.2*
568	6/13/2013	6	5872	234	39	5.7			11330280	45894	7649	722	26.9*
569	6/21/2013	8	5958	86	11	1.6			11387998	57716	7215	681	28.9*
570	6/28/2013	7	5958	0	0	0.0			11432475	44479	6354	599	33.9*
571	7/5/2013	7	6216	268	37	5.4			11477417	44942	6420	608	29.1*
572	7/12/2013	7	6216	0	0	0.0			11521324	43907	8272	692	30.1*
573	7/19/2013	7	6230	14	2	0.3			11565713	44389	6341	598	28.8*
574	7/26/2013	7	6469	239	34	5.0			11613510	47797	6828	644	34.6*
575	8/2/2013	7	6470	1	0	0.0			11665004	61494	7356	694	28.6*
576	8/9/2013	7	6470	0	0	0.0			11693475	28471	4067	384	29.3*
577	8/16/2013	7	6470	0	0	0.0			11735521	42048	6007	567	28.9*
578	8/23/2013	7	6472	2	0	0.0			11792635	67117	8160	770	27.8*
579	8/30/2013	7	6473	1	0	0.0			11845373	52735	7534	711	28.5*
580	9/8/2013	7	6616	143	20	3.0			11900824	55251	7893	745	31.8*
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* = estimated flow rate due to flow meter malfunction.

