

JAN -2 2014

Hanover

Engineering Associates Inc

July 26, 2013

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

RE: Joint Municipal Landfill Committee
Minutes of July 18, 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 at 1:00 PM on July 18, 2013. Attending the meeting were:

Ms. Priscilla deLeon
Ms. Donna Louder
Mr. Allen Schleyer
Mr. Christopher Taylor, PG, HMI

AGENDA ITEMS

I. Status of Waste Activities

Monthly Tonnages:

	<u>April</u>	<u>May</u>	<u>June</u>
Municipal Solid Waste (total)	25,499.40	24,957.00	23,137.30
Construction and Demo (total)	10,334.80	6,482.40	10,238.30
Residual Waste (total)	1,255.40	1,062.90	976.10
Asbestos	[47.20]	[80.80]	[24.90]
Out of state-total (percentage)	[24,325.90](66%)	[19,382.70](59.6%)	22,424.30(65%)
TOTAL	37,089.60	32,502.30	34,351.70
Recycled Tonnage (percent from Lower Saucon Twp.)	40.80 (81%)	1.10 (78%)	0.00 (65%)

- 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.

Ms. deLeon asked if any Hellertown people recycle. Mr. Schleyer responded that he didn't know since they only ask recyclers if they're from Lower Saucon Township.

ATTENDANCE

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

webster 07-18-13

<u>Form U Submittals</u>	<u>Waste</u>	<u>Approval Date</u>
Hudson Eagle	ACM	06/04/13
Newark Ave Realty	ACM	06/04/13
Prism Capital – Bloomfield	ACM	07/03/13
DelGuericco's	Surface Coatings	07/03/13
Airtite	Sand blast grit	07/16/13

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
- Minor Permit Modification – re-grade contours 2013 - correspondence
- First Quarter 2013 Lower Saucon Township Facility Report
- Second Quarter 2013 PADEP Facility Report
- Annual Groundwater Report

IV. Landfill Operations

- Department of Environmental Protection Inspections
 - June 4, 2013 – B. Easley: air quality inspection
 - June 10, 2013 – W. Govern, A. Faulch, R. Laczi, M. Lucsky: WHIP Trashnet
 - June 17, 2013 – S. French, J. Spaide, D. Evans: Engineer's meeting
 - June 19, 2013 – B. Bham: groundwater monitoring
 - June 20, 2013 – B. Bham: groundwater monitoring
 - June 26, 2013 – S. French, D. Evans: cell construction inspection
 - July 15, 2013 – W. Govern: site inspection

- Host Municipal Inspection
 - June 6, 2013 – Chris Taylor
 - June 17, 2013 – Scott Brown
 - June 20, 2013 – Chris Taylor
 - July 5, 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 shutdowns at Bethlehem Landfill. The auto-valve closed as designed for each shutdown of the flare. 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.

June 17, 2013	Flare shutdown	12:35	Manual shutdown – maintenance
	Flare startup	12:40	Duration 5 min

All shutdown information is provided to the PA DEP.

Mr. Schleyer confirmed that the BRE plant has been up and running since July 13. Mr. Taylor asked how that has affected gas management at the landfill. Mr. Schleyer responded that they are taking (gas) well readings today and will adjust as needed. Ms. Louder observed that it's in their (BRE's) plan that they have to empty their waste tanks every so many days, about six (6) perhaps, so they're due soon to be emptied.

- Gas Collection

- The Bethlehem Renewable Energy Plant is currently operating using the temporary holding tanks to contain condensate. The flare is now the backup to the BRE facility.

Ms. deLeon asked if there weren't recent issues with some of the gas wells. Mr. Schleyer responded yes, and that they performed remediation and completed the standard ten (10) day and thirty (30) day rechecks. Mr. Taylor recalled that the ten (10) day rechecks were all below five hundred (500) parts per million (ppm), and asked how the thirty (30) day rechecks went. Mr. Schleyer responded that they had four (4) hits at that time, that they re-compacted around the wells and re-did the ten (10) day rechecks, which all four (4) wells passed, and they are awaiting the second thirty (30) day recheck on these four (4) wells. Mr. Taylor asked if these issues could have led to the odor issues documented by Steel City residents for July 5 and 6 (see "Complaints" section). Mr. Schleyer explained that that was not necessarily the case, as there is sometimes not a correlation between the presence of landfill gas and odors, owing to the fact that methane is odorless. Mr. Taylor asked if it was possible to have an elevated gas concentration in the air with no odor, or conversely have an odor issue when gas concentrations are low. Mr. Schleyer responded yes, since the amount of odor in methane depends on the amount of other (odor-causing) constituents entrained with it as it escapes.

During the inspection following the meeting, Mr. Taylor confirmed that the BRE plant was running and that the landfill flare was operating at 2,047 scfm at 1643 degrees F. Mr. Taylor noted that this is a lower flow rate than in previous months owing to the fact that the BRE plant is now running and drawing landfill gas.

- Well Sampling

- No activity reported.

- 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. 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. A significant rain event occurred during the connection of secondary and primary liners between Cell 4E Stages 1 and 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 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 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 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).

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.

- Radiation Monitoring

- July 3, 2013: I-131

All are Level 1 isotopes and disposed of on site.

- Phase IV Construction Activities

- Constructing Cell 4E – Stage 2.
- Cell 4-D Stage 1/Stage 2 is the current active disposal area.
- Perimeter fencing is being repaired.

Mr. Schleyer stated that cell construction is progressing and that the leachate collection lines will be installed next. Mr. Schleyer stated that the fence repairs have been made.

During the inspection following the meeting, Mr. Taylor confirmed that the fencing along Applebutter Road had been repaired. Mr. Taylor observed garbage being disposed of in Cell 4D Stage 1/Stage 2. Wind screens were observed in place at the working face. The placement of protective stone material was observed in Cell 4E Stage 2.

- Complaints

- June 17, 2013 – A neighbor called and stated that a tractor trailer crossed the yellow line at the curve in Applebutter Road. The truck driver and company were warned.
- June 19, 2013 – Neighbor saw roll-off truck coming to landfill from Ringhoffer Road. Driver was given a warning.
- June 27, 2013 – Neighbor saw Gary Grey tractor trailer speeding and crossing yellow line on Applebutter Road. Dispatch was notified.
- July 12, 2013 – Neighbor had a Russell Reid truck pull out in front of him without stopping at the stop sign at Applebutter Road exiting the landfill. Driver was written up.

Ms. Louder reported an odor complaint given to her from a Steel City resident for an odor issue that he observed on the evening of July 5 into the morning of July 6. Mr. Schleyer took down the information. Ms. Louder added herself as a second complainant in confirming that she observed a very strong odor at that same time. Ms. Louder also stated that she experienced a lot of noise that she likened to big equipment running on Saturday. Mr. Taylor asked if heavy equipment was working at the landfill Saturday. Mr. Schleyer responded that it was. Mr. Taylor asked if these complaints related at the meeting become official complaints on the complaint log. Mr. Schleyer responded that they can, but it's better to have a complainant call when it happens.

- Miscellaneous

Ms. deLeon asked a follow-up question to an earlier e-mail regarding the amount of host fees paid by the landfill to Northampton County. She asked Mr. Schleyer if he would get her that figure. Mr. Schleyer responded yes he would look in to it.

At 1:52P, the secretary came in and stated that a local resident was at the front desk and was requesting to sit in on the meeting, and asked if that was alright. The committee agreed that it was alright, and the secretary showed in the resident, Mr. Ron Feist. However, upon taking a seat at the table, Mr. Feist immediately launched into a loud, profanity-laced tirade, hurling a slew of complaints and insults against Ms. deLeon and other Township officials, many of which were not directly landfill-related. Repeated attempts to get Mr. Feist to calm down and participate in the meeting in a constructive manner were unsuccessful, and his tirade continued until he left the meeting at 2:12P. Prior to this, Ms. Louder had exited the meeting and called the Lower Saucon Township Police Department to report the disturbance being

caused by Mr. Feist. A Township Police Officer arrived at 2:30P, took statements from the committee members, and left at 2:40P stating that he would speak to Mr. Feist about the incident.

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

- No trash, odors, or litter were observed along Applebutter Road, along the entrance driveway to the landfill, or at the trailer.
- No litter was observed in the trees within the landfill perimeter.
- It appeared that grass was starting to germinate 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.
- A patrol of Steel City was performed. No landfill-related odors or noises were observed.

V. Commercial Waste Vehicles

	<u>April 2013</u>	<u>May 2013</u>	<u>June 2013</u>
Total Trucks	2,942	2,776	2,701
Overweight	55	38	53
Warnings	34	23	26
Suspensions	21 (5>3%)	15 (7>3%)	27 (8>3%)
	5-TT	6-TT, 1-RO	6-TT, 2-RO

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

VI. Correspondence

- Correspondence from Department of Environmental Protection
 - A general discussion on the overweight truck notification letters from the DEP took place. Ms. Louder noted that one truck was overloaded by around 38,000 pounds. Mr. Taylor noted how dangerously high that was, amounting to almost an extra one-half load on the truck. Ms. deLeon asked where the overweight trucks were caught. Mr. Schleyer responded that the DEP reviews the landfill's weight records. Mr. Taylor asked what is the upshot of a DEP overweight notification to a hauler? Mr. Schleyer responded that he believes the DEP can levy a fine against the hauler. A lengthy discussion on the topic of overweight trucks entering the landfill followed. Mr. Taylor stated he wished there was a way to make the DEP aware of the

Township's concerns with overweight trucks and to ask them to be strict in their enforcement actions against offenders.

- 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.

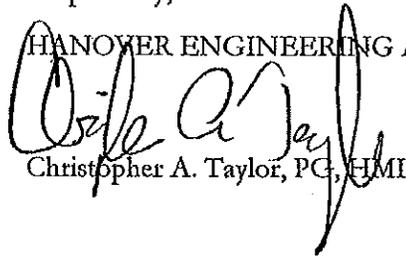
VIII. Establish Time for Next Meeting

1:00PM August 15, 2013 at the Landfill Facility Office.

END OF MINUTES

Respectfully,

HANOVER ENGINEERING ASSOCIATES, INC.



Christopher A. Taylor, PG, HMI

cat:cat/llb

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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. Laouessa 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)

Date	Time (Days)	LMC-6 (Secondary Flows)		LMC-7 (Secondary Flows)		LMC-8 (Secondary Flows)		LMC-9 (Secondary Flows)						
		TOTAL DZER SALLON FLOW (gpd)	GIAD	GALLONS FLOW (gpd)	GIAD	TOTAL DZER SALLON FLOW (gpd)	GIAD	TOTAL DZER SALLON FLOW (gpd)	GIAD					
593	12/28/2012	7.00	1002142	1721	246	16	1515673	911	130	11	3,450,100	21245	8,158	841
594	1/2/2013	7.00	1004385	2223	318	20	1516448	815	115	10	3,478,757	18857	2,670	480
595	1/1/2013	7.00	1006487	1222	303	19	1517271	783	112	9	3,469,476	10889	1,571	265
596	1/1/2013	7.00	1008461	1974	282	18	1518183	912	135	11	3,495,362	15886	2,258	391
597	1/25/2013	7.00	1010312	1561	264	17	1519000	718	117	10	3,520,041	14879	2,097	362
598	1/25/2013	5.00	1011916	1603	267	17	1519728	728	121	10	3,528,193	8112	1,852	233
599	2/8/2013	8.00	1014356	2441	305	19	1521730	1001	125	10	3,547,775	19522	2,453	423
600	2/15/2013	7.00	1016726	2370	330	22	1523700	970	139	11	3,564,540	16765	2,395	413
601	2/22/2013	7.00	1019178	2452	330	22	1525735	1085	143	12	3,580,765	16225	2,318	400
602	3/1/2013	7.00	1021503	2335	330	21	1527852	1127	161	13	3,596,172	15405	2,201	379
603	3/8/2013	7.00	1023740	2237	320	20	1529959	837	120	10	3,610,593	14411	2,059	350
604	3/15/2013	7.00	1026036	2298	328	21	1532069	1040	149	12	3,626,908	15326	2,332	402
605	3/22/2013	5.00	1028173	2139	357	23	1534169	857	143	12	3,640,924	14015	2,336	403
606	3/29/2013	5.00	1031543	3363	421	27	1536279	906	115	10	3,656,959	15435	1,929	333
607	4/5/2013	7.00	1034507	2964	423	27	1538382	650	99	8	3,665,676	9317	1,331	228
608	4/12/2013	7.00	1037083	2576	368	23	1540489	650	99	8	3,674,097	8421	1,203	207
609	4/19/2013	7.00	1039548	2465	352	22	1542599	811	116	9	3,681,851	17754	2,538	438
610	4/26/2013	7.00	1041880	2332	333	21	1544699	688	98	8	3,708,437	14576	2,082	339
611	5/2/2013	6.00	1044055	2185	384	23	1546799	601	100	8	3,711,571	3198	856	148
612	5/10/2013	8.00	1046674	2609	326	21	1548900	781	98	8	3,714,148	2373	322	56
613	5/17/2013	7.00	1048775	2101	300	19	1551000	750	107	9	3,718,229	2447	350	60
614	5/24/2013	7.00	1050522	1747	280	16	1553099	634	91	7	3,718,229	1636	234	40
615	5/31/2013	7.00	1052083	1561	223	14	1555144	610	116	9	3,721,113	2884	412	71
616	6/7/2013	7.00	1053436	1345	173	11	1557189	772	110	9	3,723,203	2090	286	51
617	6/14/2013	6.00	1054936	1056	163	12	1559279	1959	227	19	3,742,816	19613	3,269	584
618	6/21/2013	8.00	1056508	1372	172	11	1561369	1120	140	11	3,763,248	20432	2,584	440
619	6/28/2013	7.00	1057953	1247	178	11	1563460	895	95	8	3,765,686	3338	477	92
620	7/5/2013	7.00	1058252	1177	188	11	1565548	756	108	9	3,778,435	12833	1,836	317

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"
545	1/4/2013	7	5595	0	0	0.0			10823461	50454	7208	680	32.7"
546	1/11/2013	7	5595	0	0	0.0			10646572	25111	3587	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	20618	2945	278	26.7"
549	1/31/2013	8	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			10778700	28277	4040	381	35.0"
553	3/1/2013	7	5598	3	0	0.0			10790467	13767	1987	186	34.8"
554	3/8/2013	7	5603	5	1	0.1			10822950	32483	4640	438	24.4"
555	3/16/2013	7	5603	0	0	0.0			10848802	25852	3693	348	23.8"
556	3/21/2013	6	5637	34	6	0.8			10849029	17227	2671	271	25.5"
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	24.6"
559	4/12/2013	7	5637	0	0	0.0			10918172	81855	8836	834	42.3"
560	4/19/2013	7	5638	1	0	0.0			10988110	67938	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			11142848	58713	7339	682	34.3"
564	5/17/2013	7	5638	0	0	0.0			11155615	12987	1852	175	34.6"
565	5/24/2013	7	5638	0	0	0.0			11201306	45691	5527	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			11284386	44354	6336	598	36.2"
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	26.9"
570	6/28/2013	7	5958	0	0	0.0			11432475	44479	6354	599	33.9"
571	7/5/2013	7	6217	259	37	5.4			11477417	44942	6420	608	29.1"
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608 * = estimated flow rate due to flow meter malfunction.

