

IESI Bethlehem Landfill Committee Meeting Minutes

Date: Thursday, April 19, 2018
Time: 1:00 p.m.
Location: Lower Saucon Township Council Meeting Room
Attendance: Hanover Engineering: Chris Taylor; Exelon: Lane Bradley; IESI: Don Hallock & Nick Rogers, Council Liaison: Priscilla deLeon (speaker phone); Members: Hazem Hijazi & Neil Ortwein; Staff: Leslie Huhn & Diane Palik.

Mr. Rogers reviewed the monthly tonnages for March.

	<u>January</u>	<u>February</u>	<u>March</u>
MSW	27,874.92	25,611.34	28,224.52
C&D	4,223.81	3,921.65	3,102.75
Residual (Total)	1,149.42	1,632.12	2,100.62
Asbestos	113.91	230.40	0.0
Sewage Sludge-New Category as of 02-15-18	59.53	91.06	78.40
Out of State (Total)	21,661.86 (65%)	21,948.69 (67%)	20,24.18 (62%)
Recycle	8 (57%)	8 (75%)	7 (70%)
No. Trucks	2,875	2,532	2,753

Mr. Rogers said they had three Form U Submittals from March 1 through April 16, 2018. Mr. Taylor asked where are they placing the asbestos from Martin Towers. Mr. Hallock said they aren't getting much and they are placing it at the top of the landfill; they are digging a hole and burying it.

Mr. Rogers said the Groundwater Sampling was completed by Earth Res Group the week of March 19, 2018. Mr. Taylor asked if there were any results yet. Mr. Rogers said no. Mr. Taylor asked if there were any problems with the dry wells or sampling. Mr. Rogers said no.

Mr. Rogers said regarding Correspondence/Reports, there was the abatement system report and the Q1 quarterly fees report. They replaced a flow meter on AB-6, as they noticed the pump wasn't registering.

Mr. Rogers said there were three landfill inspections by DEP on March 27th, April 5th and April 18th. Mr. Taylor asked IESI to explain the results from yesterday's inspection. Mr. Rogers said DEP came out for the quarterly air quality inspection and they did surface emissions on the front top of the landfill and the rear side. They had 19 surface emission exceedances and also noted flagging and seeps that IESI is currently fixing now.

Mr. Taylor asked what were the highest exceedances. Mr. Rogers said two of them were 10,000. Mr. Taylor said any idea what happened to cause that much emissions? Mr. Rogers said a contributing factor is they have a sag in one of the pipes, which is the main header going around the landfill. They had a pump in it and the pump failed. They are replacing the pump and with the water being in the header, their flow is down a couple cfm. The pump is back on line again. Mr. Hallock said they bought a couple extra pumps and are monitoring it all the time.

Mrs. deLeon asked if there was an alarm that would trigger in advance if the pump wasn't working so you could fix it. Mr. Hallock said the pipe is out in the field next to the temporary access road and it does have an alarm. They could look into putting a light on the alarm. They will definitely look into that. Mr. Taylor said the flow that was getting cut off was from the SW part where the blockage was, is that where the exceedances were? Mr. Rogers said correct. On the exceedances, DEP will come back and do a recheck within 30 days and then SCS comes back onsite and checks the areas also. Mr. Taylor asked when can you remediate the exceedance locations. Mr. Rogers said as soon as they get the report from DEP. They are hoping in the middle of next week they can remediate the exceedances and get it taken care of.

Mr. Taylor said were the leachate seeps at the same locations. Mr. Rogers said three were brought up in the previous inspection and they are on side slopes. They are hard to get to. Mr. Hallock said on a couple of nice days, they did try to get out there and scrape it with an excavator, but the pop back up again quickly. Mr. Hijazi said

IESI Bethlehem Landfill Committee Minutes
April 19, 2018

there were some side seeps? Mr. Hallock said it's a leachate seep and it could have maybe been a mattress stuck in there and started to bleed. They put dirt back in and built a French drain as they couldn't get a truck out there because of the rain and snow. They just have to go deeper. Mr. Hijazi said is that normal? Mr. Hallock said it's not normal for them as they always scrape the cover off. They had this planned last week before this happened.

Mrs. deLeon said at the next meeting she'd like to talk about the inspections and the exceedances. Mr. Hallock said it's just part of landfill operations, which deal with things like this every day. They've had small leachate seepages, which they take care of right away and a lot had to do with the weather and they will be taking care of everything.

Mr. Rogers said the flare was doing about 2675 today with BRE offline. There were no odors. Mr. Hallock said they haven't had any odor complaints. Mr. Rogers said there were three host municipal inspections by Chris Taylor.

Mr. Rogers said there were 2,753 commercial waste vehicles with 50 overweight's, 39 warnings and 11 suspensions. There was no overweight vehicle enforcement from the LST PD in March. Mr. Hallock said they took in an additional 200 trucks from February to March and 25 less overweight's. They are working on it every day.

Mr. Rogers said BRE has been running at full capacity in conjunction with the flare as the main GCCS. Currently, the BRE plant is down for the week for annual maintenance. BRE and IESI continue to communicate along the SCSFS with any routine or non-routine maintenance to maximize LFG production and minimize odors between plant and flares. AEG Environmental is expected to be mobilized April 23rd for the installation of 4 new vertical wells and 10 re-drills along with the replacement of old header and installation of a new header. Air and drain liners will be installed with the wells for the installation of dewatering pumps.

Mr. Bradley said they have their spring outage and will be back online tomorrow. They did receive their new compressor and installed it and they have motor problems, so the motor will be sent out for refurbishment. They have two outages per year. Most of this is turbine work. They will be online tomorrow about noon.

Mrs. Huhn asked if they were aware of any of the times it shut down for a short period of times as last month one evening, the flare had a flame coming out of the top. Mr. Hallock said they had no report of this. Mr. Bradley said they were not aware of this.

Mr. Taylor asked where the four new vertical wells were going. Mr. Rogers said Cell 4B. Mr. Taylor asked what a re-drill was. Mr. Roger said it's a well that was pinched off or watered in and has been raised so much they lost gas production out of it. Now they have 60' of trash on top of an older well so they want to get rid of the well, and drill a new well to maximize gas production. They are using PVC pipe. There are so many wells not working they can put one well in that vicinity. With three weeks, the wells should all be hooked up.

Mr. Rogers said the North Slope sedimentation traps are functional and the perimeter road is in good condition. The abatement system continues to operate and discharge to the Bethlehem WWTP. Intermittent malfunctions of the well pumps and controls are repaired or replaced as needed. Upgrading of controls and motors is taking place for preventative maintenance. Mr. Taylor said you were going to change the monthly reporting on that to include issues that were ending up in the quarterly reports. Mr. Rogers said yes, it has started.

Mr. Rogers said the flow rates for the leachate collection continue to be monitored and reported. Intermittent malfunctions of the well pumps and controls are repaired or replaced as needed. Mr. Taylor said is there a follow-up from that notice of non-compliance received from the City regarding the WWTP. There was an exceedance of arsenic. Mrs. deLeon asked how much was the surcharge? Mr. Hallock said about \$40,000. Mr. Rogers said they resampled and it was ongoing and then IESI sampled and it was compliant. This gets done monthly.

Mr. Rogers said there was one radioactive load for March, which was Iodine 131. The waste stream met Level 1 requirements and was disposed of onsite. Currently the active disposal area is cell 3D.

IESI Bethlehem Landfill Committee Minutes
April 19, 2018

Mr. Rogers said for the SE Realignment construction activities, construction of the MSE wall and drop off center has started with warmer weather. Installations of new horizontal collectors are being placed in SE-1 along with exposing of existing header to tie in.

Mr. Taylor said he didn't see the portable mister today. Mr. Hallock said it was down below. They were running it for a couple of hours. Mr. Taylor asked when they would get the other mister lines going. Mr. Hallock said they are taking a hard look at the portable mixer, which may work. When it's about 35 or 36 degrees, it still gets slushy, and it works better at 40 degrees.

Mr. Taylor reviewed all the primary and secondary flows at the pump stations. He asked if the metering and plumbing in the leachate chambers are giving accurate readings on leachate flows? Mr. Rogers said he has someone coming out to flush all the lines again as now it's spring, inside and outside. Mr. Taylor saw the street sweeper today. The truck wash is working. The access road and Applebutter Road are pretty clean even though it's muddy out.

Mr. Taylor reviewed his inspection report, which will be sent to the Township. Mr. Hijazi asked if the recycling center was still being used. Mr. Hallock said yes.

The next mid-inspection will be May 3rd and then the regular inspection on May 17th. The committee meeting will be May 17th at 1:00 p.m. The meeting adjourned at 2:00 p.m.

**IESI Bethlehem Landfill
LST Committee Meeting Notes
April 19, 2018**

Agenda Items

I. Waste Activities

Monthly Tonnages

	January	February	March
MSW	27,874.92	25,611.34	28,224.52
C&D	4,223.81	3,921.65	3,102.75
Residual (total)	1,149.42	1,632.12	2,100.62
Asbestos	113.91	230.40	
Sewage Sludge	59.53	91.06	78.40
Out of state (total)	21,661.86(65%)	21,948.69(67%)	20,724.18(62%)
Recycle	8(57%)	8(75%)	7(70%)

<u>Form U Submittals</u>	<u>Waste</u>	<u>Approval Date</u>
Pinnacle Environmental	ACM	3/1/2018
WeCare Organics LLC	Pb Contaminated Soil	4/11/2018
Nestle Purina Pet Care Co.	Petro. Contaminated Soil	4/16/2018

II. Annual Groundwater Trend Analysis

Groundwater sampling was completed by Earth Res Group the week of March 19th.

III. Correspondence / Reports

Abatement System Report
Q1 Quarterly Fees Report

IV. Landfill Operations

Department of Environmental Protection Inspections

3/27/18 S. French- Engineers Meeting
4/18/18 J. Wagoner, A. Faulch, T. Sirnic- DEP AQ and SW Inspection

Host Municipal Inspection

3/1/18 C. Taylor
3/15/18 C. Taylor
4/5/18 C. Taylor

<u>Commercial Waste Vehicles</u>	January	February	March
Total #Trucks	2875	2532	2753

Overweight	January	February	March
62	75	50	
Warnings	47	59	39
Suspensions	15	16	11

1-DT 61-61TT 9-DT, 66-TT 4-DT, 1-FL, 45- TT

FL = front loader, RO = roll off, TT=tractor trailer RL = rear loader, DT = Triaxel Dump Truck

Lower Saucon Township Police Report:

Below is the overweight vehicle enforcement the PD conducted at IESI during the month of March 2018:

None for the month of March

Bethlehem Renewable Energy and Flare Operations and Gas Collection

BRE has been running at half capacity in conjunction with the flare as the main GCCS. Currently the BRE plant is down for the week for annual maintenance. IESI and BRE continue to communicate along with SCSFS with any routine or non-routine maintenance to maximize LFG production and minimize odors between plant and flare. AEG Environmental is expected to mobilized April 23rd for the installation of 4 new vertical wells and 10 re-drills along with the replacement of old header and installation of new header. Air and drain lines will be installed with the wells for the installation of de-watering pumps.

See times for flare and plant shutdowns

Beginning of event shutdown Flare Date: 3/2/18 Time: 14:07
End of event startup Date: 3/2/18 Time: 14:14 Duration: :07min

Beginning of event shutdown Plant Date: 3/2/18 Time: 14:05
End of event startup Date: 3/2/18 Time: 14:41 Duration: :36min

Beginning of event shutdown Plant Date: 3/4/18 Time: 16:13
End of event startup Date: 3/4/18 Time: 20:37 Duration: 4:24min

Beginning of event shutdown Plant Date: 3/11/18 Time: 21:41
End of event startup Date: 3/11/18 Time: 23:13 Duration: 1:34min

Beginning of event shutdown Plant Date: 3/12/18 Time: 07:49
End of event startup Date: 3/12/18 Time: 15:57 Duration: 8:08min

North Slope

Sedimentation Traps functional, perimeter road is in good condition.

Abatement System

Abatement system continues to operate and discharge to the Bethlehem WWTP. Intermittent malfunctions of the well pumps and controls are repaired or replaced as needed. Upgrading of controls and motors is taking place for preventive maintenance.

Leachate collection

Flow rates continue to be monitored and reported. Intermittent malfunctions of the well pumps and controls are repaired or replaced as needed.

Radiation Monitoring

There was 1 radioactive load for March which was Iodine 131. The waste streams met level 1 requirement and were disposed of onsite.

Phase IV Construction Activities

Currently the active disposal area is cell 3D.

SE Realignment Construction Activities

Construction of the MSE wall and drop off center has started with the warmer weather. Installations of new horizontal collectors are being placed in SE-1 along with exposing of existing header to tie in.

Complaints received by IESI

No known complaints for March or to date.

BETHLEHEM LANDFILL

LEACHATE DEMAND REPORT March 2018

<u>Location</u>	<u>Total gallons</u>
LMC-6	15,018
LMC-7	51,756
LMC-8	40,641
LMC-10	2,374,000
PS-1	125,954
PS-2	175,416
PS-3	170,738
Phase-IV	472,108

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	2,374,000
Phase IV	472,108
TOTAL	2,846,108 gallons

Total Leachate

Leachate	442,653
Phase IV	427,108
TOTAL	869,761 gallons

LMC-10 Flow – Abatement System Flow = Leachate System Flow (gallons).
Abatement System Flow = 1,931,347 gallons (Neptune Flow meters)

BETHLEHEM LANDFILL
GROUNDWATER DEMAND REPORT
March 2018

Well No.	Water Level (avg. ft SWL*)	Flow (avg. GPM)	(Total gal)
AB-1	72.1	7.3	315519
AB-2R	69.1	5.2	224580
AB-3	37.5	0.6	27942
AB-4	38.2	4.4	190355
AB-5	54.5	1.5	66137
AB-6	45.9	2.6	111278
AB-7	54.5	4.5	195078
AB-8	27.6	1.5	63763
AB-9	26.4	4.3	186448
AB-10	50.0	12.7	550247
TW-1	42.8	<0.1	0
Total Flow			1,931,347 gallons

*SWL above transducer set point

* Per DEP approval well TW-1 was shut down September 14, 2009.

TIME (days)	LMC-6 (Secondary Flows)						LMC-7 (Secondary Flows)						LMC-8 (Secondary Flows)					
	TOTALIZER GALLONS FLOW (gpd)			TOTALIZER GALLONS FLOW (gpd)			TOTALIZER GALLONS FLOW (gpd)			TOTALIZER GALLONS FLOW (gpd)			TOTALIZER GALLONS FLOW (gpd)			TOTALIZER GALLONS FLOW (gpd)		
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	Q	R	S	T
10/29/19																		
10/30/19																		
10/31/19																		
11/1/20/18	5.00	1602721	338	68	4	2116804	6534	1310										
11/2/20/18	5.00	1801441	720	144	9	2116804	4334	879										
11/3/20/18	11.00	1602712	1,271	116	7	2121695	5001	455										
11/4/20/18	4.00	1603209	497	124	8	2123942	1737	434										
11/5/20/18	7.00	1605518	2,307	330	21	2123728	346	55										
11/6/20/18	10.00	1612457	6,941	694	44	2124776	1048	105										
11/7/20/18	5.00	1617774	5,317	1,053	68	2130919	6143	1229	101	5,707,541	19954	2,844	493	3,991	688			
11/8/20/18	5.00	1623895	6,111	1,222	78	2138372	7453	1491	122	5,726,804	19363	3,873	663					
11/9/20/18	7.00	1656847	12,762	1,833	116	2153435	15053	2152	116	5,735,377	31473	4,496	775					
11/10/20/18	7.00	1649130	12,453	1,753	114	2164612	11177	1,597	111	5,788,748	31371	4,339	748					
11/11/20/18	7.00	1658357	9,227	1,318	84	2173800	9288	1,327	109	5,814,027	21279	3,611	623					
11/12/20/18	7.00	1657576	9,219	1,317	84	2180451	6551	936	77	5,832,265	16238	2,605	449					
11/13/20/18	7.00	1677149	9,573	87	87	2185587	5116	731	60	5,849,561	17296	2,471	426					
11/14/20/18	7.00	1687802	10,453	1,433	95	2192644	6847	984	81	5,865,843	15982	2,283	394					
11/15/20/18	10.00	1719242	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
11/16/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
11/17/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
11/18/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
11/19/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
11/20/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
11/21/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
11/22/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
11/23/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
11/24/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
11/25/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
11/26/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
11/27/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
11/28/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
11/29/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
11/30/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
11/31/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/1/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/2/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/3/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/4/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/5/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/6/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/7/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/8/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/9/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/10/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/11/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/12/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/13/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/14/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/15/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/16/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/17/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/18/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/19/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/20/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/21/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/22/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/23/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/24/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/25/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/26/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/27/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/28/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/29/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/30/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
12/31/20/18	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
1/1/20/19	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
1/2/20/19	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
1/3/20/19	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
1/4/20/19	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
1/5/20/19	10.00	1744742	14,540	1,454	93	2194402	5948	595	49	5,881,237	23634	2,569	443					
1/6/20/19	10.00																	

IESI BETHLEHEM LANDFILL

IESI BETHLEHEM LANDFILL

IESI BETHLEHEM LANDFILL