

## Bethlehem Landfill Committee Meeting Minutes

Date: Thursday, April 18, 2019  
Time: 1:00 p.m.  
Location: Lower Saucon Township Council Meeting Room  
Attendance: **Hanover Engineering:** Chris Taylor; Bethlehem **Landfill:** Dave Pannucci & Astor Lawson;  
Staff: Leslie Huhn & Diane Palik; **Members:** Neil Ortwein & Hazem Hijazi; **Council Liaison:**  
Priscilla deLeon (by speaker phone)

Mr. Pannucci reviewed the monthly tonnages for March:

	<u>January</u>	<u>February</u>	<u>March</u>
MSW	25,878.48	23,887.16	20,422.10
C&D	1,844.80	1,830.91	1,626.50
Residual (Total)	2,084.66	4,883.87	3,811.30
Asbestos	375.23	0.00	0.00
Sewage Sludge (90/10)	90.92	73.65	109.00
Out of State (Total)	19,777.74 (65%)	18,969.23 (62%)	13,361.40 (51%)
Recycle	11 (82%)	5 (83%)	7 (86%)

Mr. Pannucci said there was one Form U Submittal from Bostik, Inc. with contaminated soil on April 16, 2019.

Mr. Pannucci said the Annual Groundwater Trend Analysis is scheduled for May 28<sup>th</sup> through the 30<sup>th</sup> by EarthRes Group. There was no correspondence or reports.

Mr. Pannucci said DEP inspections were on April 17<sup>th</sup> with a clean water inspection from Chris Harding, and there is an engineering meeting scheduled for April 23<sup>rd</sup> with the Solid Waste Team. Mr. Pannucci said Chris Harding came to BL and reviewed Bethlehem Landfill's EMR sampling submittals and all their files on their stormwater permits that they need to have in place. They drove around the site and checked the basins to make sure there weren't any issues. Two of their basins have had high solids for the last two sampling events so that triggered them to have an action plan which they did, and stated they put filter socks to help alleviate the sediments from leaving the site. When they are able to get in the ponds, they'll take the sediment out of the ponds.

Mrs. deLeon asked if the basins were near where they were having issues with water running over Applebutter Road to Ringhoffer Road. Mr. Pannucci said all of their basins are along that road, but the water running over the road was from the tributary that flows along the stream, and he's not sure how it relates to that issue. Mrs. deLeon said you dump into that stream. Mr. Pannucci said he doesn't think it's enough to the extent that was causing the overflow. Mrs. deLeon said we'll see when we have the next heavy rain. Mr. Pannucci said there was a clog in the pipe so there shouldn't be any issues. That's up to PennDOT to monitor and maintain that as it's not Bethlehem Landfill's (BL) responsibility. Mr. Taylor said that's been checked since it's been cleaned out and it's been flowing freely with the rains they had.

Mr. Pannucci said the Host Municipal Inspections for the month were on April 4<sup>th</sup> and April 18<sup>th</sup> by Chris Taylor. The Commercial Waste Vehicles, total number of trucks should be 2,455 with overweight at 55, warnings 49 and 6 suspensions. Mr. Taylor said a combination truck is like a tractor trailer and is 80,000 lbs. Anything other than a combination truck is 73,280 lbs., so everything from the garbage trucks to a roll-off. NJ allows them to register at 80,000 lbs., but PA doesn't recognize that, they say it has to be 73,280 lbs. It's kind of a gray area between 73,280 and 80,000 lbs. for trucks registered outside of PA. There were emails back and forth and Roger Bellas from DEP said you have to follow this regulation which he cited it and attached it to the email and it says record vehicles if a vehicle has a weight over 80,000 lbs. and same thing for 73,280 lbs. Mr. Pannucci said the way Bethlehem Landfill has been doing it is the correct way to do it. If they have a situation where they deem the truck overweight and they don't have a DEP sticker, they will allow the police to make that call if the vehicle can go back on the road as BL isn't going to make that decision for a liability standpoint. They will continue to do it as they have done it all along.

Mr. Taylor said in the scale house today there were five tickets and only one was overweight and it was by 80 lbs. The regulations say the weight of the truck is inclusive of the driver's weight and when the trucks weigh out, they

have the driver sitting in the driver's seat. He'd think the driver would weigh more than 80 lbs. So that truck wasn't overweight, and even if the driver got out, he's still standing on the scales. There's wiggle room right there. Mr. Pannucci said they've talked about things like that. Mr. Taylor said the monthly vehicle overweight laws are great, but if he gets a vehicle that's 77,000 lbs., is that an 80,000 lb. vehicle that's underweight or is it a 73,280 lb. vehicle overweight. Mr. Pannucci said he thought they indicated that. If it's listed overweight at 77,000, it means that it must be a vehicle that should weigh 73,280 lbs. If he's on the log that you get every month, then he's overweight. The scale is calibrated twice a year.

Mr. Pannucci said BRE is shut down for the foreseeable future. The LFG flare is the main GCCS. Bethlehem Landfill continues to communicate with SCS Field Services with any routine or non-routine in maintenance to maximize LFG production and minimize odors between the plant and flare. The March average flare flow rate was 2,769 SCFM. They didn't have any flare shutdowns in the month of March. Mr. Taylor said BRE is out of the picture and you are accommodating the gas going to the flare.

Mrs. deLeon said when you report to the Township on the flare, there are some reports that go to the end of the month and we talk about them, but what we need on the 3<sup>rd</sup> Thursday of the month, we are going backwards 30 days from the meeting date, so if anything happened between then and now, it should be reported so we don't get delayed on information. Mr. Pannucci said they didn't have any shutdowns, and he's gathering that from the monthly report, but he can update and report it. For flare shutdowns, you want to know up-to-date information. Mrs. deLeon said yes, she wants to know what's going on and not wait a month to find something out. Mr. Taylor said that's a good idea and BL will get the most current data for us.

Mr. Pannucci said Mr. Taylor brought up if they have the 1Q SEM report and he just got it and they initially had five exceedances, which were all corrected in the 10-day re-check and still passed on the 30-day re-check.

Mr. Taylor said you mentioned something in the field today about the Aria Energy plant proposal. That plant would even be more sensitive to oxygen intake than BRE was, which he doesn't take as good news as he wouldn't mind if we pulled a little bit harder and send the gas someplace where oxygen didn't bother it. His concern is you aren't going to be able to pull hard enough. Mr. Astor said you need to keep the oxygen as low as possible as it's a fire hazard if you don't. Mr. Pannucci said odor control is their number one priority so they want to draw hard enough so that they don't have gas escape.

Mrs. deLeon said Aria was on our agenda last night and we try to be very informative to our residents. There is a new section on the website for Aria with the Power Point they presented. They are going through a Special Exception process and are working on getting the Township copied on submitting their application ASAP and want to be on the June 17<sup>th</sup> ZHB agenda. They want to move the process along. They talked about Basin 1 that they are going to be using and they have to make it lower. Mr. Pannucci said what type basically need to do is refigure Basin 1 in order to fit the plan over there. Basin 1 will have the same capacity; it will just have to be shaped a little differently to accommodate their facility. The gas will all be flowing in one direction and they won't be fighting and pulling into their plant different locations at the site if they do need to utilize the flare, so it makes it much easier to operate the flare and plant if need be. Mrs. deLeon said it would always be their plant pulling the gas and BL would be on the backup. Mr. Pannucci said his understanding is they are going to pull the gas in through their blower system and then feed Aria. He will reach out to them and will have a conversation to make sure they are on the same page. They are going to be the primary source of utilizing the gas, but flaring the gas makes no sense when you can utilize it as a renewable energy. They will be the first priority to feed Aria as much gas as possible and the flare would be a backup at that point.

Mrs. deLeon said she heard BL is putting up a second flare. Mr. Pannucci said they have bids out for a second flare and the reason is to have capacity if they ever do go over the 4000 SCFM of the current flare. Right now they are under 3000 SCFM. They are trying to be proactive if their gas does creep up and honestly putting a flare that just sits there is the worst thing you can do to a flare, it's just going to deteriorate, so they are waiting to see how their gas flows reacts, but they are still pursuing that.

Mrs. deLeon said when Aria showed them the map; they didn't show the connection on how they are going to connect to your flare, which she thought was strange. Mr. Pannucci said they won't connect to BL's flare; BL will feed them the gas. They would process the gas. There would be a gas line that fed their plant and they would feed their flare if need be. BL's flare and their flare won't be connected in any way. Mrs. deLeon said Aria didn't show where they were getting it from. Mr. Pannucci said it will just be a header pipe under the road crossing that feeds term the gas from BL's blower station. Mrs. deLeon said it should be depicted somewhere. Mr. Lawson said the plans are submitted and they are their own entity and they don't include any of BL's things. He would assume that's why they aren't showing the equipment. Mrs. deLeon said she's been looking at plans for 32 years and they always show a road that dead ends at their boundary line or a pipe or something. Mr. Pannucci said they can throw a pipe on a map and solve that problem and Aria can show how the hookup happens.

Mr. Pannucci said the North Slope Road and swale have not needed repairs. Sedimentation traps and ponds need to be cleaned out. 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. Control Systems 21 is scheduled for April for maintenance on the transducers.

The flow rates continue to be monitored and reported. Intermittent malfunctions of the well pumps and controls are repaired and replaced as needed. The cleaning out of LMC-7 is scheduled for May. General maintenance on PS-2 is scheduled for April. There were 7 radioactive loads for March and they met level 1 requirements and were disposed of onsite. Waste operations for Phase IV construction activities have moved off of this area. The SE Realignment activities continue in Cell SE-1A. Construction of Cell SE-1B is underway.

Mr. Pannucci said they received 9 complaints from November 24, 2018. The last complaints received were on April 12<sup>th</sup> and April 13, 2019 and it was Mrs. deLeon who called. Mrs. deLeon said why did you pick November 24, 2018? Mr. Pannucci said that's the last one he put on the list, he can go back further if you want him to. Mrs. deLeon said why don't we start with the beginning of 2018. She asked has DEP discussed the odor complaints? Mr. Pannucci said as they get them, he reaches out to DEP.

Mr. Taylor said reviewed his report which he will send to the Township.

Mr. Taylor said the next meeting is on May 16, 2019 starting at 1:00 p.m. The meeting adjourned at 1:45 p.m.

**Bethlehem Landfill Company  
LST Committee Meeting Notes April 2019  
April 18, 2019**

**Agenda Items**

**I. Waste Activities**

Monthly Tonnages

	January	February	March
MSW	25,878.48	23,887.16	20,422.10
C&D	1,844.80	1,830.91	1,626.50
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Form U Submittals

Waste

Approval Date

Bostik, Inc.

Contaminated Soil (506)

4/16/19

**II. Annual Groundwater Trend Analysis**

Second quarter sampling event is scheduled for May 28<sup>th</sup> through the 30<sup>th</sup> by Earthres Group.

**III. Correspondence / Reports**

None

**IV. Landfill Operations**

Department of Environmental Protection Inspections

4/17/19

Scheduled for 4/23/19

C. Harding (Clean Water)

M. Glogowski (Solid Waste)

Host Municipal Inspection

4/4/19 C. Taylor  
4/18/19 C. Taylor

Commercial Waste Vehicles

	January	February	March
Total #Trucks	2788	2394	2455
	January	February	March
Overweight	86	79	55
Warnings	75	68	49
Suspensions	11	11	6

January – TT=49, RL=5, DT=32 February – TT=44, RL=3, DT=32 March – TT=28, RL=3, FL=1, RO=3, DT=20

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

Bethlehem Renewable Energy and Flare Operations and Gas Collection

**BRE is shut down for the foreseeable future. The LFG flare is the main GCCS. Bethlehem Landfill continues to communicate with SCS Field Services with any routine or non-routine maintenance to maximize LFG production and minimize odors between plant and flare.**

**March Average Flare Flow = 2,768 SCFM**

See times for flare shutdowns.

None

Documentation is on file.

North Slope Road and swale have not needed repairs. Sedimentation traps and ponds need to be cleaned out.

#### 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. Control Systems 21 is scheduled for April for maintenance on the transducers.

#### Leachate collection

Flow rates continue to be monitored and reported. Intermittent malfunctions of the well pumps and controls are repaired or replaced as needed. The cleaning out of LMC-7 is scheduled for May. General maintenance on PS-2 is scheduled for April.

#### Radiation Monitoring

There were 7 radioactive loads for March (Tc-99m(2), I-131(4), and Ga-67(1)). The waste streams met level 1 requirement and were disposed of onsite.

#### Phase IV Construction Activities

Waste operations have moved off of this area.

#### SE Realignment Construction Activities

Waste operations continue in Cell SE-1A. Construction of Cell SE-1B is underway.

#### Complaints received by Waste Connections

9 complaints received since 11/24/18:  
11/24/18 (Odor Complaint)  
12/28/18 (Water on Applebutter Road)  
1/8/19 (Odor Complaint)  
2/1/19 (Odor Complaint)  
2/26/19 (Odor Complaint)  
3/1/19 (Odor Complaint)  
3/7/19 (Odor Complaint)  
3/12/19 (Odor Complaint)  
3/13/19 (Odor Complaint)

**BETHLEHEM LANDFILL**  
**LEACHATE DEMAND REPORT**  
**March 2019**

<u>Location</u>	<u>Total gallons</u>
LMC-6	97,204
LMC-7	32,103
LMC-8	142,431
PS-4	368,444
 LMC-10	 1,586,700
 PS-1	 275,171
PS-2	210,640
PS-3	299,646
 Phase-IV	 785,457

Total LMC-10 Flow = LMC-6, 7, 8, Abatement Well System, Phase I and II, SE Realignment (PS-4), and LFG condensate. Phase-IV total from PS-1, PS-2 and PS-3 and LFG condensate.

**Total Discharge**

LMC-10	1,683,061
<u>Phase IV</u>	<u>785,457</u>
<b>TOTAL</b>	<b>2,468,518 gallons</b>

**Total Leachate**

Leachate	736,543
<u>Phase IV</u>	<u>785,457</u>
<b>TOTAL</b>	<b>1,522,000 gallons</b>

LMC-10 Flow – Abatement System Flow = Leachate System Flow (gallons).  
 Abatement System Flow = 946,518 gallons (Neptune Flow meters)

# BETHLEHEM LANDFILL

## GROUNDWATER DEMAND REPORT March 2019

<b>Well No.</b>	<b>Water Level (avg. ft SWL*)</b>	<b>Flow (avg. GPM)</b>	<b>(Total gal)</b>
AB-1	84.1	6.9	287,868
AB-2	46.5	4.7	195,008
AB-3	31.0	0.3	12,760
AB-4	42.3	3.1	129,897
AB-5	41.0	0.7	27,623
AB-6	41.7	2.7	112,852
AB-7	42.0	3.6	148,899
AB-8	42.9	0.1	2,260
AB-9	74.1	0.7	28,652
AB-10	71.0	<0.1	0.0
TW-1	54.4	<0.1	0.0
<b>Total Flow</b>		<b>946,518 gallons</b>	

\*SWL above transducer set point

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

	TIME (days)	LMC-6 (Primary Flows)				LMC-7 (Primary Flows)				LMC-8 (Primary Flows)			
		TOTALIZER	GALLONS	LOW (gp)	G/A/D	TOTALIZER	GALLONS	LOW (gp)	G/A/D	TOTALIZER	GALLONS	LOW (gp)	G/A/D
3/12/2018	7.00	1896675	3,925	561	36	4093937	17637	2,520	207	7,263,202	12056	1,722	297
3/19/2018	7.00	1900129	3,454	493	31	4113947	20010	2,859	234	7,269,797	6595	942	162
3/26/2018	7.00	1903092	2,963	423	27	4121738	7791	1,113	91	7,275,931	6134	876	151
4/2/2018	7.00	1905763	2,671	382	24	4127863	6125	875	72	7,282,438	6507	930	160
4/12/2018	10.00	1908965	3,202	320	20	4135735	7872	787	65	7,291,172	8734	873	151
4/17/2018	5.00	1913740	4,775	955	61	4139567	3832	766	63	7,295,629	4457	891	154
4/25/2018	8.00	1923985	10,245	1,281	82	4145883	6316	790	65	7,302,357	6728	841	145
5/1/2018	6.00	1927224	3,239	540	34	4150402	4519	753	62	7,307,719	5362	894	154
5/7/2018	6.00	1929415	2,191	365	23	4153984	3582	597	49	7,312,372	4653	776	134
5/14/2018	7.00	1931714	2,299	328	21	4157899	3915	559	46	7,317,861	5489	784	135
5/22/2018	8.00	1941451	9,737	1,217	78	4162642	4743	593	49	7,324,158	6297	787	136
5/30/2018	8.00	1957150	15,699	1,962	125	4168640	5998	750	61	7,330,876	6718	840	145
6/7/2018	8.00	1962087	4,937	617	39	4173975	5335	667	55	7,337,432	6556	820	141
6/11/2018	4.00	1963994	1,907	477	30	4176297	2322	581	48	7,340,758	3326	832	143
6/20/2018	9.00	1968645	4,651	517	33	4181070	4773	530	43	7,347,903	7145	794	137
6/29/2018	9.00	1972093	3,448	383	24	4185888	4818	535	44	7,354,995	7092	788	136
7/5/2018	6.00	1975571	3,478	580	37	4188922	3034	506	41	7,359,559	4564	761	131
7/9/2018	4.00	1977247	1,676	419	27	4190621	1699	425	35	7,362,407	2848	712	123
7/16/2018	7.00	1980957	3,710	530	34	4193793	3172	453	37	7,367,648	5241	749	129
7/23/2018	7.00	1987902	6,945	992	63	4197413	3620	517	42	7,373,190	5542	792	137
8/1/2018	9.00	2002364	14,462	1,607	102	4203043	5630	626	51	7,380,786	7596	844	146
8/6/2018	5.00	2009784	7,420	1,484	95	4206558	3515	703	58	7,387,834	7048	1,410	243
8/13/2018	7.00	2016356	6,572	939	60	4211550	4992	713	58	7,397,325	9491	1,356	234
8/20/2018	7.00	2031303	14,947	2,135	136	4216001	4451	636	52	7,406,036	8711	1,244	215
8/31/2018	11.00	2041040	9,737	885	56	4222779	6778	616	51	7,417,472	11436	1,040	179
9/7/2018	7.00	2048903	7,863	1,123	72	4226212	3433	490	40	7,423,929	6457	922	159
9/12/2018	5.00	2062345	13,442	2,688	171	4229341	3129	626	51	7,429,272	5343	1,069	184
9/18/2018	6.00	2075788	13,443	2,241	143	4232471	3130	522	43	7,434,616	5344	891	154
10/1/2018	13.00	2126610	50,822	3,909	249	4240280	7809	601	49	7,448,700	14084	1,083	187
10/11/2018	10.00	2144225	17,615	1,762	112	4248664	8384	838	69	7,459,592	10892	1,089	188
10/19/2018	8.00	2162440	18,215	2,277	145	4254418	5754	719	59	7,468,523	8931	1,116	192
10/26/2018	7.00	2168193	5,753	822	52	4259031	4613	659	54	7,476,178	7655	1,094	189
11/8/2018	13.00	2218469	50,276	3,867	246	4267917	8886	684	56	7,494,605	18427	1,417	244
11/12/2018	4.00	2235017	16,548	4,137	264	4270862	2945	736	60	7,503,285	8680	2,170	374
11/20/2018	8.00	2281915	46,898	5,862	373	4277348	6486	811	66	7,519,184	15899	1,987	343
11/26/2018	6.00	2323727	41,812	6,969	444	4282847	5499	917	75	7,536,060	16876	2,813	485
12/3/2018	7.00	2362413	38,686	5,527	352	4288737	5890	841	69	7,549,897	13837	1,977	341
12/12/2018	9.00	2378987	16,574	1,842	117	4295542	6805	756	62	7,562,467	12570	1,397	241
12/17/2018	5.00	2385229	6,242	1,248	80	4298911	3369	674	55	7,569,124	6657	1,331	230
12/27/2018	10.00	2410111	24,882	2,488	158	4308355	9444	944	77	7,588,337	19213	1,921	331
1/3/2019	7.00	2421998	11,887	1,698	108	4313118	4763	680	56	7,596,652	8315	1,188	205
1/8/2019	5.00	2432734	10,736	2,147	137	4318265	5147	1,029	84	7,604,683	8031	1,606	277
1/14/2019	6.00	2440995	8,261	1,377	88	4323231	4966	828	68	7,612,768	8085	1,348	232
1/21/2019	7.00	2448933	7,938	1,134	72	4328080	4849	693	57	7,622,157	9389	1,341	231
1/31/2019	10.00	2478187	29,254	2,925	186	4335657	7577	758	62	7,636,997	14840	1,484	256
2/5/2019	5.00	2485497	7,310	1,462	93	4338934	3277	655	54	7,643,370	6373	1,275	220
2/14/2019	9.00	2512578	27,081	3,009	192	4344859	5925	658	54	7,655,197	11827	1,314	227
2/19/2019	5.00	2524553	11,975	2,395	153	4348515	3656	731	60	7,662,695	7498	1,500	259
2/28/2019	9.00	2544435	19,882	2,209	141	4355882	7367	819	67	7,674,910	12215	1,357	234
3/11/2019	11.00	2559281	14,846	1,350	86	4363719	7837	712	58	7,689,920	15010	1,365	235
3/18/2019	7.00	2568635	9,354	1,336	85	4367689	3970	567	46	7,695,592	5672	810	140
3/29/2019	11.00	2589246	20,611	1,874	119	4380618	12929	1,175	96	7,716,139	20547	1,868	322

ID	A	B	C	D	E		F		J	K		L		M	O	R		S	T	
					TIME (days)	TOTALIZER GALLONS	FLOW (gpd)	G/A/D		TOTALIZER GALLONS	FLOW (gpd)	G/A/D	TOTALIZER GALLONS			LOW (gpd)	G/A/D			
1024																				
1025																				
1036	3/12/2018	7.00	165357	9,227	1,318	84	2173900	9288	1,327	109	5,814,027	25279	3,615	623						
1037	3/19/2018	7.00	1667576	9,219	1,317	84	2180451	936	936	77	5,832,265	18238	2,605	449						
1038	3/26/2018	7.00	1671149	9,573	1,366	87	2185587	5116	731	61	5,849,581	17296	2,471	426						
1039	4/2/2018	7.00	1687602	10,453	1,493	95	2182454	6887	984	81	5,885,543	15982	2,283	394						
1040	4/7/2018	10.00	1702142	14,540	1,454	93	2198402	5948	595	49	5,891,237	25694	2,569	443						
1041	4/7/2018	5.00	1706144	4,002	800	51	2201662	3160	632	52	5,900,344	9107	1,821	314						
1042	4/25/2018	8.00	1714981	6,787	1,098	70	2203966	3604	476	39	5,921,495	21151	2,644	456						
1043	5/1/2018	6.00	1722278	7,347	1,225	78	2207790	2424	404	33	5,928,129	6634	1,106	191						
1044	5/7/2018	5.00	1725886	3,608	601	38	2209485	1695	283	23	5,929,579	1450	242	42						
1045	5/14/2018	7.00	1728830	2,744	392	25	2212845	3160	451	37	5,931,093	1514	216	37						
1046	5/22/2018	8.00	1746300	7,380	923	59	2223681	11036	1,380	113	5,940,569	9476	1,185	204						
1047	5/30/2018	8.00	1746300	8,620	1,078	69	2228853	5172	647	53	5,959,846	19377	2,422	418						
1048	6/7/2018	8.00	1748135	3,505	436	26	2231875	3022	378	31	5,961,248	1302	163	28						
1049	6/12/2018	4.00	1749281	1,126	282	18	2232209	334	84	7	5,962,208	357	94	17						
1050	6/20/2018	5.00	1751968	2,705	301	19	2232305	96	11	1	5,962,208	573	67	11						
1051	6/29/2018	9.00	1754068	2,102	234	15	2232575	270	30	2	5,962,809	600	67	11						
1052	7/5/2018	6.00	1755473	1,405	234	15	2232654	79	13	1	5,963,268	458	76	13						
1053	7/19/2018	4.00	1759345	872	218	14	2232654	0	0	0	5,963,666	340	85	15						
1054	7/16/2018	7.00	1759035	2,690	384	24	2232707	53	8	0	5,964,987	761	109	19						
1055	7/23/2018	7.00	1765849	6,814	973	62	2232819	112	16	1	5,970,316	5949	850	147						
1056	8/1/2018	9.00	1791023	25,174	2,797	178	2232883	64	7	1	6,008,724	36406	4,268	736						
1057	8/6/2018	5.00	1814255	23,232	4,646	296	2233978	95	19	2	6,031,285	22561	4,512	778						
1058	8/13/2018	7.00	1828115	13,860	1,980	126	2232978	0	0	0	6,051,372	20087	2,870	495						
1059	8/20/2018	7.00	1841523	13,410	1,916	122	2233031	53	8	1	6,094,975	43903	6,229	1,074						
1060	8/31/2018	11.00	1853573	12,048	1,095	70	2234364	1303	118	10	6,128,175	33200	3,018	520						
1061	9/12/2018	5.00	1857973	4,400	629	40	2234394	0	0	0	6,136,651	8476	1,211	209						
1062	9/12/2018	7.00	1862522	4,549	910	58	2234394	0	0	0	6,140,059	3408	682	118						
1063	9/18/2018	6.00	1867071	4,549	758	48	2234394	0	0	0	6,177,029	3339	567	98						
1064	10/1/2018	13.00	1870004	2,933	226	14	2234394	0	0	0	6,143,458	33571	2,582	445						
1065	10/11/2018	10.00	1870004	0	0	0	2234394	0	0	0	6,178,945	1916	192	33						
1066	10/19/2018	8.00	1870004	0	0	0	2234353	0	0	0	6,217,640	36695	4,837	834						
1067	10/26/2018	7.00	1870004	0	0	0	2234364	0	0	0	6,222,826	5286	755	130						
1068	11/6/2018	13.00	1870004	0	0	0	2234364	0	0	0	6,271,294	15278	3,820	659						
1069	11/12/2018	4.00	1870004	0	0	0	2234364	0	0	0	6,305,991	34097	4,262	735						
1070	11/20/2018	8.00	1870004	0	0	0	2234364	0	0	0	6,330,951	24960	4,160	717						
1071	11/26/2018	6.00	1870004	0	0	0	2234364	0	0	0	6,355,909	25558	3,651	630						
1072	12/3/2018	7.00	1870070	66	9	1	2234364	0	0	0	6,375,901	19992	2,221	383						
1073	12/12/2018	9.00	1870075	5	1	0	2234364	0	0	0	6,386,162	10261	2,052	354						
1074	12/17/2018	5.00	1870075	0	0	0	2234364	0	0	0	6,415,039	28877	2,888	498						
1075	12/27/2018	10.00	1878681	8,606	861	55	2234364	0	0	0	6,433,524	18465	2,641	455						
1076	1/8/2019	7.00	1884940	6,259	894	57	2234364	0	0	0	6,450,342	18818	3,364	580						
1077	1/8/2019	5.00	1881124	6,184	1,237	79	2234364	0	0	0	6,462,673	12331	2,055	354						
1078	1/14/2019	6.00	1886692	5,588	928	59	2234364	0	0	0	6,476,106	13433	1,819	331						
1079	1/21/2019	7.00	1901853	5,201	743	47	2234419	55	8	1	6,502,999	25292	2,629	453						
1080	1/31/2019	10.00	1910172	6,279	828	53	2234419	0	0	0	6,508,143	5745	1,149	198						
1081	2/5/2019	5.00	1914165	3,933	799	51	2234419	0	0	0	6,526,208	18065	2,007	346						
1082	2/14/2019	9.00	1922540	8,375	931	59	2234419	0	0	0	6,539,884	13676	2,735	472						
1083	2/19/2019	5.00	1926775	4,235	847	54	2234419	0	0	0	6,554,906	25022	2,780	479						
1084	2/28/2019	9.00	1935312	8,537	949	60	2234419	0	0	0	6,589,354	24448	2,223	383						
1085	3/11/2019	11.00	1943481	8,179	744	47	2234420	1	0	0	6,599,117	9763	1,395	240						
1086	3/18/2019	7.00	1947359	3,868	553	35	2234420	0	0	0	6,628,871	29754	2,705	456						
1087	3/28/2019	11.00	1959286	11,927	1,084	69	2234420	0	0	0										

IESI BETHLEHEM LANDFILL

	A	B	C	D	E	F	H	I	J	K	M	N	O
866		TIME	Phase IV PS-1 (Secondary Flows)				Phase IV PS-1 (Primary flow)						sump
867		(days)	TOTALIZER	GALLONS	FLOW (gpd)	g/ac/day			Totalizer	gallons	flow(gpd)	g/ac/day	Inches
878	3/12/2018	7	310109	870	124	5			48421021	26728	3818	147	21.2'
879	3/19/2018	7	310874	765	109	4			48450104	29083	4155	160	11.3'
880	3/26/2018	7	310907	33	5	0			48481784	31680	4526	174	14.7'
881	4/2/2018	7	310926	19	3	0			48515391	33607	4801	185	17.7'
882	4/12/2018	10	312355	1429	143	5			48563817	48426	4843	186	15.9'
883	4/17/2018	5	312358	3	1	0			48589965	26148	5230	201	14.4'
884	4/25/2018	8	313666	1308	164	6			48632494	42529	5316	204	22.9'
885	5/1/2018	6	313670	4	1	0			48668382	35888	5981	230	21.9'
886	5/7/2018	6	314364	694	116	4			48699782	31400	5233	201	20.4'
887	5/14/2018	7	314639	275	39	2			48737142	37360	5337	205	18.7'
888	5/22/2018	8	315273	634	79	3			48785701	48559	6070	233	18.9'
889	5/30/2018	8	316171	898	112	4			48840699	54998	6875	264	19.8'
890	6/7/2018	8	316474	303	38	1			48890927	50228	6279	241	18.1'
891	6/11/2018	4	316480	6	2	0			48915631	24704	6176	238	22.9'
892	6/20/2018	13	316484	10	1	0			48971353	80426	6187	238	16.1'
893	6/29/2018	9	316495	11	1	0			49025903	54550	6061	233	13.6'
894	7/5/2018	6	316498	3	1	0			49059729	33826	5638	217	20.2'
895	7/9/2018	4	316502	4	1	0			49082662	22933	5733	221	14.0'
896	7/16/2018	7	316504	2	0	0			49120934	38272	5467	210	18.4'
897	7/23/2018	7	316507	3	0	0			49161305	40371	5767	222	15.4'
898	8/1/2018	9	316545	38	4	0			49205956	44651	4961	191	23.6'
899	8/6/2018	5	316633	88	18	1			49231931	25975	5195	200	18.9'
900	8/13/2018	7	316776	143	20	1			49268430	36499	5214	201	21.5'
901	8/20/2018	7	316944	168	24	1			49305805	37375	5339	205	18.9'
902	8/31/2018	11	317122	178	16	1			49369414	63609	5783	222	23.4'
903	9/7/2018	7	317301	179	26	1			49415154	45740	6534	251	18.7'
904	9/12/2018	5	317403	102	20	1			49455555	40501	8100	312	22.1'
905	9/18/2018	6	317557	154	26	1			49496755	41100	6850	263	21.2'
906	10/1/2018	13	317871	314	24	1			49555289	68534	5272	203	22.1'
907	10/11/2018	10	318122	251	25	1			49623186	57897	5790	223	21.2'
908	10/19/2018	8	318345	223	28	1			49664658	41472	5184	199	23.4'
909	10/26/2018	7	318500	155	22	1			49706343	41685	5955	229	17.4'
910	11/8/2018	13	318736	236	18	1			49784960	78617	6047	233	14.0'
911	11/12/2018	4	318746	10	3	0			49805391	20431	5108	196	17.4'
912	11/20/2018	8	319503	757	95	4			49860144	54753	6844	263	17.4'
913	11/28/2018	6	319996	493	82	3			51031479	1171335	195223	7509	20.4'
914	12/3/2018	7	325089	5093	728	28			51105543	74064	10581	407	20.6'
915	12/12/2018	9	329426	4337	482	19			51747262	641719	71302	2742	17.6'
916	12/17/2018	5	331435	2009	402	15			51802483	55201	11040	425	21.9'
917	12/27/2018	10	339877	8442	844	32			54197652	2395189	239519	9212	23.6'
918	1/3/2019	7	343848	3971	567	22			54208523	10871	1553	60	14.9'
919	1/8/2019	5	347137	3289	658	25			54208523	0	0	0	18.9'
920	1/14/2019	6	349233	2096	349	13			54233557	25034	4172	160	20.4'
921	1/21/2019	7	352210	2977	425	16			54270683	37126	5304	204	20.8'
922	1/31/2019	10	357979	5769	577	22			54324279	53596	5360	206	15.3'
923	2/5/2019	5	360083	2104	421	16			54334479	10200	2040	78	20.2'
924	2/14/2019	9	367044	6961	773	30			54387599	53120	5902	227	14.7'
925	2/19/2019	5	374215	7171	1434	55			54424895	37296	7459	287	20.2'
926	2/28/2019	9	383870	9655	1073	41			54555066	130171	14463	556	16.4'
927	3/11/2019	11	398975	15105	1373	53			56523918	1968852	178987	6884	22.3'
928	3/18/2019	7	403499	4524	646	25			56524849	931	133	5	22.7'
929	3/29/2019	11	414058	10559	960	37			57361365	836516	76047	2925	23.4'

IESI BETHLEHEM LANDFILL

Q	R	S	T	U	V	W	X	Y	Z	AA	AB	AC
866	TIME	Phase IV PS-2 (Secondary Flows)				Phase IV PS-2 (Primary )						
867	(days)	TOTALIZER	GALLONS	FLOW (gpd)	g/ac/day			Totalizer	gallons	flow(gpd)	g/ac/day	sump inches
878	3/12/2018	7	7138	0	0	0.0		19243472	43597	6228	588	28.6"
879	3/19/2018	7	7138	0	0	0.0		19282813	39341	5620	530	32.2"
880	3/26/2018	7	7138	0	0	0.0		19317905	35092	5013	473	31.4"
881	4/2/2018	7	7138	0	0	0.0		19354133	36228	5175	488	33.9"
882	4/12/2018	10	7138	0	0	0.0		19408065	53932	5393	509	32.9"
883	4/17/2018	5	7138	0	0	0.0		19433177	25112	5022	474	29.9"
884	4/25/2018	8	7138	0	0	0.0		19475666	42489	5311	501	31.4"
885	5/1/2018	6	7138	0	0	0.0		19505950	30284	5047	476	30.7"
886	5/7/2018	6	7138	0	0	0.0		19532651	26701	4450	420	30.2"
887	5/14/2018	7	7138	0	0	0.0		19563115	30464	4352	411	31.6"
888	5/22/2018	8	7138	0	0	0.0		19600835	37720	4715	445	29.7"
889	5/30/2018	8	7138	0	0	0.0		19642231	41396	5175	488	28.8"
890	6/7/2018	8	7138	0	0	0.0		19678291	36060	4508	425	33.7"
891	6/11/2018	4	7138	0	0	0.0		19695505	17214	4304	406	30.5"
892	6/20/2018	13	7138	0	0	0.0		19733233	54942	4226	399	33.9"
893	6/29/2018	9	7138	0	0	0.0		19770463	37230	4137	390	31.4"
894	7/5/2018	6	7138	0	0	0.0		19794854	24391	4065	384	33.1"
895	7/9/2018	4	7138	0	0	0.0		19810534	15680	3920	370	34.6"
896	7/16/2018	7	7138	0	0	0.0		19829442	18908	2701	255	32.0"
897	7/23/2018	7	7138	0	0	0.0		19849101	19659	2808	265	33.1"
898	8/1/2018	9	7138	0	0	0.0		19867442	18341	2038	192	29.3"
899	8/6/2018	5	7138	0	0	0.0		19871321	3879	776	73	28.0"
900	8/13/2018	7	7138	0	0	0.0		19878945	7624	1089	103	32.9"
901	8/20/2018	7	7138	0	0	0.0		19880023	1078	154	15	32.2"
902	8/31/2018	11	7138	0	0	0.0		19891899	11876	1080	102	33.5"
903	9/7/2018	7	7138	0	0	0.0		19927242	35343	5049	476	34.5"
904	9/12/2018	5	7138	0	0	0.0		19957019	29777	5955	562	30.7"
905	9/18/2018	6	7138	0	0	0.0		19986895	29876	4979	470	31.8"
906	10/1/2018	13	7138	0	0	0.0		20061731	74836	5757	543	31.2"
907	10/11/2018	10	7138	0	0	0.0		20121467	59736	5974	564	33.3"
908	10/19/2018	8	7138	0	0	0.0		20167014	45547	5693	537	28.2"
909	10/26/2018	7	7138	0	0	0.0		20204646	37632	5376	507	34.1"
910	11/8/2018	13	7138	0	0	0.0		20279418	74772	5752	543	33.3"
911	11/12/2018	4	7138	0	0	0.0		20304457	25039	6260	591	28.2"
912	11/20/2018	8	7138	0	0	0.0		20358630	54173	6772	639	28.4"
913	11/26/2018	6	7138	0	0	0.0		20405933	47303	7884	744	29.3"
914	12/3/2018	7	7138	0	0	0.0		20461258	55325	7904	746	31.4"
915	12/12/2018	9	7138	0	0	0.0		20522082	60824	6758	638	33.7"
916	12/17/2018	5	7138	0	0	0.0		20550035	27953	5591	527	30.3"
917	12/27/2018	10	7138	0	0	0.0		20620324	70289	7029	663	32.9"
918	1/3/2019	7	7138	0	0	0.0		20660606	40282	5755	543	29.5"
919	1/8/2019	5	7138	0	0	0.0		20700486	39880	7976	752	33.3"
920	1/14/2019	6	7138	0	0	0.0		20740910	40424	6737	636	30.3"
921	1/21/2019	7	7138	0	0	0.0		20780286	39375	5625	531	34.1"
922	1/31/2019	10	7138	0	0	0.0		20842598	62313	6231	588	28.5"
923	2/5/2019	5	7138	0	0	0.0		20871208	28610	5722	540	30.2"
924	2/14/2019	9	7138	0	0	0.0		20923558	52350	5817	549	31.4"
925	2/19/2019	5	7138	0	0	0.0		20952717	29159	5832	550	27.8"
926	2/28/2019	9	7138	0	0	0.0		21007697	54980	6109	576	26.9"
927	3/11/2019	11	7138	0	0	0.0		21067002	59305	5391	509	31.4"
928	3/18/2019	7	7138	0	0	0.0		21091793	24791	3542	334	30.7"
929	3/29/2019	11	7138	0	0	0.0		21163357	71564	6506	614	34.6"

IESI BETHLEHEM LANDFILL

	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ
866	Phase IV PS-3 (Secondary)						Phase IV PS-3 (Primary)						sump
867	Date	days	totalizer	gallon	flow(gpd)	g/ac/day			totalizer	gallons	flow(gpd)	g/ac/day	inches
878	3/12/2018	7	42583	1	0	0			8789495	46304	6615	1594	22.3"
879	3/19/2018	7	42583	0	0	0			8823534	34039	4863	1172	23.6"
880	3/26/2018	7	42629	46	7	1			8850029	26495	3785	912	27.4"
881	4/2/2018	7	42631	2	0	0			8877792	27763	3966	956	26.8"
882	4/12/2018	10	42631	0	0	0			8918259	40467	4047	975	24.7"
883	4/17/2018	5	42631	0	0	0			8935021	16762	3352	808	25.7"
884	4/25/2018	8	42632	1	0	0			8967304	32283	4035	972	25.7"
885	5/1/2018	6	42632	0	0	0			8986273	18969	3162	762	25.5"
886	5/7/2018	6	42632	0	0	0			9002559	16286	2714	654	26.8"
887	5/14/2018	7	42632	0	0	0			9020498	17939	2563	618	24.9"
888	5/22/2018	8	42632	0	0	0			9047728	27230	3404	820	25.9"
889	5/30/2018	8	42665	33	4	0			9086032	38304	4788	1154	27.4"
890	6/7/2018	8	42665	0	0	0			9110208	24176	3022	728	25.5"
891	6/11/2018	4	42665	0	0	0			9120377	10189	2542	613	26.2"
892	6/20/2018	13	42665	0	0	0			9142393	32185	2476	597	26.8"
893	6/29/2018	9	42665	0	0	0			9162659	20266	2252	543	23.6"
894	7/5/2018	6	42665	0	0	0			9176312	13653	2276	548	23.6"
895	7/9/2018	4	42665	0	0	0			9185141	8829	2207	532	27.9"
896	7/16/2018	7	42665	0	0	0			9199913	14772	2110	509	26.8"
897	7/23/2018	7	42666	1	0	0			9216822	16909	2416	582	25.1"
898	8/1/2018	9	42666	0	0	0			9259666	42844	4760	1147	21.1"
899	8/6/2018	5	42666	0	0	0			9284508	24842	4968	1197	24.9"
900	8/13/2018	7	42666	0	0	0			9322417	37909	5416	1305	24.9"
901	8/20/2018	7	42666	0	0	0			9354156	31739	4534	1093	25.7"
902	8/31/2018	11	42689	23	2	0			9396489	42333	3848	927	25.3"
903	9/7/2018	7	42689	0	0	0			9416454	19965	2852	687	26.8"
904	9/12/2018	5	42689	0	0	0			9434353	17899	3580	863	24.8"
905	9/18/2018	6	42689	0	0	0			9452352	17999	3000	723	25.7"
906	10/1/2018	13	42689	0	0	0			9488864	36512	2809	677	66.9"
907	10/11/2018	10	42689	0	0	0			9490856	1992	199	48	67.8"
908	10/19/2018	8	42781	92	12	1			9494868	4012	502	121	63.1"
909	10/26/2018	7	42817	36	5	0			9500655	5787	827	199	60.5"
910	11/6/2018	13	42817	0	0	0			9596127	95472	7344	1770	24.5"
911	11/12/2018	4	43246	429	107	10			9627326	31199	7800	1879	15.3"
912	11/20/2018	8	43246	0	0	0			9692363	65037	8130	1959	17.7"
913	11/26/2018	6	43246	0	0	0			9747387	55024	9171	2210	21.5"
914	12/3/2018	7	43266	20	3	0			9811123	63736	9105	2194	18.5"
915	12/12/2018	9	43266	0	0	0			9869983	58860	6540	1576	26.6"
916	12/17/2018	5	43266	0	0	0			9893769	23786	4757	1146	27.6"
917	12/27/2018	10	43266	0	0	0			9968493	74724	7472	1801	23.2"
918	1/3/2019	7	43266	0	0	0			10015193	46700	6671	1608	20.2"
919	1/8/2019	5	43266	0	0	0			10063124	47931	9586	2310	18.5"
920	1/14/2019	6	43266	0	0	0			10105956	42832	7139	1720	26.2"
921	1/21/2019	7	43266	0	0	0			10142879	36923	5275	1271	21.5"
922	1/31/2019	10	43266	0	0	0			10216913	74034	7403	1784	20.0"
923	2/5/2019	5	43266	0	0	0			10250043	33130	6626	1597	18.7"
924	2/14/2019	9	43266	0	0	0			10303601	53558	5951	1434	23.2"
925	2/19/2019	5	43266	0	0	0			10344671	41070	8214	1979	16.4"
926	2/28/2019	9	43549	283	31	3			10429876	85205	9467	2281	22.3"
927	3/11/2019	11	43549	0	0	0			10502158	72282	6571	1583	16.4"
928	3/18/2019	7	43549	0	0	0			10530183	28025	4004	965	21.5"
929	3/29/2019	11	43718	169	15	1			10643865	113682	10335	2490	27.4"

IESI BETHLEHEM LANDFILL

	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD
885	Phase IV PS-4 (Secondary)												
886	Date	days	totalizer	gallon	flow(gpd)	g/ac/day	Phase IV PS-4 (Primary)						sump
887									totalizer	gallons	flow(gpd)	g/ac/day	inches
879													
880													
881													
882													
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903													
904													
905													
906													
907													
908													
909									0	0	#DIV/0!	#DIV/0!	0"
910			0	0	0	0			0	0	#DIV/0!	#DIV/0!	0"
911	11/12/2018	0	147	147	0	0			207023	207023	#DIV/0!	#DIV/0!	28.3"
912	11/20/2018	8	147	0	0	0			575433	368410	46051	11097	31.4"
913	11/26/2018	6	147	0	0	0			880527	305094	50849	12253	21.5"
914	12/3/2018	7	147	0	0	0			1158031	277504	39643	9553	18.5"
915	12/12/2018	9	147	0	0	0			1158032	1	0	0	18.5"
916	12/17/2018	5	147	0	0	0			1158033	1	0	0	18.5"
917	12/27/2018	10	404	257	26	2			1560142	402109	40211	9689	19.3"
918	1/3/2019	7	404	0	0	0			1560143	1	0	0	19.3"
919	1/8/2019	5	483	79	16	1			1856842	296699	59340	14299	22.1"
920	1/14/2019	6	586	103	17	2			1875514	18672	3112	750	15"
921	1/21/2019	7	586	0	0	0			2019879	144365	20624	4970	14.1"
922	1/31/2019	10	941	355	36	3			2269621	249742	24974	6018	22.5"
923	2/5/2019	5	941	0	0	0			2286229	16608	3322	800	21.0"
924	2/14/2019	9	941	0	0	0			2352286	66057	7340	1769	28.4"
925	2/19/2019	5	941	0	0	0			2413009	60723	12145	2926	20.4"
926	2/28/2019	9	941	0	0	0			2515543	102634	11404	2748	21.8"
927	3/11/2019	11	941	0	0	0			2598596	82953	7541	1817	23.6"
928	3/18/2019	7	941	0	0	0			2638297	39701	5672	1367	27.2"
929	3/29/2019	11	941	0	0	0			2781453	143156	13014	3136	28.4"