Smith, George

From: Pelley, Cindy <PelleyCA@HillsboroughCounty.ORG>
Sent: Tuesday, August 15, 2017 2:38 PM
To: Madden, Melissa; SWD_Waste
Cc: Morgan, Steve; Ruiz, Larry; Byer, Kimberly; 'Clark, Bruce'; 'Curtis, Bob'; Adams, David; O'Neill, Joseph
Subject: WACS ID 41193 - July 2017 Water Balance for Southeast County Landfill
Attachments: July 2017.pdf

Good afternoon Melissa:

Please see the attached July 2017 Water Balance for Southeast County Landfill.

Please let me know if you have any questions or concerns.

Thank you, Cindy

Cindy A. Pelley
General Manager II
Solid Waste Management Division
Public Works Department

M: (813) 455-2193
P: (813) 671-7707
E: pelleyca@HCFLGov.net
W: HCFLGov.net

Hillsborough County
601 E. Kennedy Blvd., Tampa, FL 33602

Facebook | Twitter | YouTube | LinkedIn

Hillsborough County Florida

PUBLIC WORKS
PO Box 1110 Tampa, FL 33601-1110
(813) 272-5912 | Fax: (813) 272-5811

MEMORANDUM

DATE: August 14, 2017

TO: Larry E. Ruiz, Manager Landfill Operations, Solid Waste Management Division

FROM: Cindy A. Pelley, Landfill Supervisor, Solid Waste Management Division

SUBJECT: Leachate Water Balance Report Forms for July 2017
Southeast County Landfill, Hillsborough County, Florida

The Solid Waste Management Division (SWMD) staff has compiled and reviewed the leachate management operational data from the Southeast County Landfill Phases I-VI, Sections 7-8, and Section 9. Attached are the Leachate Water Balance Report Form (Table 1), the Leachate Field Data Entry Form (Table 2), and the 2017 Summary (Table 3). Also, attached find Figure 1 showing leachate levels in Pump Station B sump of Phases I-VI and rainfall for the month.

TABLE 1

Day (Column I)

Column I presents the calendar days for the month.

Rainfall (Column II)

Column II presents the average rainfall, in inches, as measured in the field from rainfall stations at the site. This month there was 12.59 inches of rainfall recorded at the Southeast County Landfill (SCLF).

Depth in Pond A (Column III)

Column III presents the daily depth, in feet, of effluent stored in effluent pond (Pond A). The daily depth in Pond A varies as a function of the spray irrigation frequency/duration and effluent hauled from the pond. This month the daily average depth of effluent stored in Pond A was 2.9 feet.

Depth in Pond B (Column IV)

Column IV presents the daily depth, in feet, of effluent or leachate that is stored in the effluent/leachate storage pond (Pond B). The depth in Pond B varies as a function of the evaporation frequency/duration and effluent or leachate hauled from the pond. This month the daily average depth of effluent stored in Pond B was 2.7 feet.

Estimated Depth at Pump Station B Sump (PS-B) (Column V)

Column V presents the depth of leachate, in inches, in the PS-B sump. Leachate from Phases I-VI flows to the PS-B sump for removal from the landfill. PS-B then pumps the leachate to Pump Station A (PS-A). Daily depth readings from the PS-B sump are included in this column. This month PS-B was below the normal operation level except for July 3rd due to power failure and July 16-17 due to high level in the leachate storage tank. The average recorded depth of leachate in the PS-B sump was 16.7 inches.

Leachate Pumped to Pump Station A Sump from Phases I-VI Condensate Line (Column VI)

Column VI presents the daily amount of leachate, in gallons, collected from the Phases I-VI condensate line and pumped to Pump Station A (PS-A). The average daily amount of leachate pumped from the Phases I-VI condensate line was 777 gallons. A total of 24,094 gallons of leachate was pumped this month.

Leachate Pumped to MLPS from Phase II Temporary Pump Station 2 – TPS-2 (Column VII)

Column VII presents the daily amount of leachate, in gallons, collected from the Phase II Temporary Pump Station 2 (TPS-2), and includes total gallons collected from the recently installed dewatering wells. The leachate removed from TPS-2 is pumped to the MLPS. The average daily amount of leachate pumped from TPS-2 was 7,372 gallons. A total of 228,538 gallons of leachate was pumped this month.

Leachate Pumped to MLPS from Phases I-VI (Column VIII)

Column VIII presents the daily amount of leachate, in gallons, collected from PS-A and pumped through the MLPS to the 575,000-gallon storage tank at the Leachate Treatment and Reclamation Facility (LTRF) for treatment or disposal. The average daily amount of leachate pumped from PS-A was 76,515 gallons. A total of 2,371,971 gallons of leachate was pumped this month.

Leachate Pumped from Sections 7-8 LDS (Column IX)

Column IX presents the quantity of leachate removed from the leak detection system (LDS) of Sections 7-8. The quantity is measured by a flow meter before being pumped for removal with Sections 7-8 leachate. The removal rate did not exceed 1,930 gallons per day. This month a total of 2,155 gallons of leachate was removed from the leak detection system of Sections 7-8.

Leachate Pumped to MLPS from Sections 7-8 (Column X)

Column X presents the quantity of leachate collected at Sections 7-8 and pumped to the MLPS. The quantity is measured by a flow meter and includes any leachate removed from the leak detection system of Sections 7-8 (Column IX). This month a total of 374,905 gallons was removed.

Leachate Pumped to LTRF from the MLPS (Column XI)

Column XI presents the total quantity of leachate pumped to the LTRF from Phases I-VI, Sections 7-8, and TPS-2. This month a total of 2,746,876 gallons of leachate was pumped to the LTRF.

Leachate Pumped to LTRF from Section 9 (Column XII)

Column XII presents the daily amount of leachate, in gallons, collected from Section 9 and pumped to the 575,000-gallon storage tank at the Leachate Treatment and Reclamation Facility (LTRF) for treatment or disposal. A total of 219,281 gallons of leachate was pumped this month.

Leachate Pumped from Section 9 LDS (Column XIII)

Column XIII presents the daily amount of leachate, in gallons, collected from the LDS of Section 9 and pumped to the 575,000-gallon storage tank at the LTRF for treatment or disposal. The removal rate did not exceed 2,651 gallons per day. This month a total 7 gallons of leachate was removed from the leak detection system.

Leachate Pumped from Compost Area Sump (Column XIV)

Column XIV presents the total quantity of leachate pumped to the LTRF from the Compost Project Area Sump. This month a total of 203,100 gallons of leachate from the compost area was pumped to the LTRF.

Leachate in 575,000-Gallon Tank (Column XV)

Column XV presents the daily amount of leachate, in gallons, stored in the 575,000-gallon leachate holding tank T1 at the LTRF. The amount of leachate stored in T1 is calculated based on the circumference of the tank and the daily level reading. This month an average of 373,300 gallons of leachate was stored in the tank.

Effluent in 575,000-Gallon Tank (Column XVI)

Column XVI presents the daily amount of effluent, in gallons, stored in the 575,000-gallon effluent holding tank T6 at the LTRF. The amount of effluent stored in T6 is calculated based on the circumference of the tank and the daily level reading. This month an average of 348,200 gallons of effluent was stored in the tank.

Leachate Treated at LTRF (Column XVII)

Column XIIV presents the daily amount of leachate, in gallons, treated at the LTRF. This month a total of 1,230,100 gallons of leachate was treated at the plant.

Total Leachate Hauled (Column XVIII)

Column XVIII presents the daily amount of leachate, in gallons, hauled off site. This month a total of 2,430,780 gallons of leachate was hauled off site.

Leachate Dust Control Sprayed (Column XIX)

Column XIX presents the daily amount of leachate, in gallons, measured from the flow meter at the bypass-loading arm at the leachate storage tank. The leachate is used for dust control in the active area of the landfill. This month a total of 1,555 gallons of leachate was used for dust control.

Pond A Storage (Column XX)

Column XX presents the daily amount of effluent, in gallons, stored in Pond A. The daily amount stored in the pond is calculated by using the daily depth of effluent in the Pond A (Column III). Under normal operating conditions, the daily amount of effluent stored in the pond varies depending upon the daily amount of leachate treated at the LTRF, the daily rainfall, daily effluent hauling operations, daily spray irrigation operations, and the daily amount of effluent used for dust control/evaporation. This month a daily average of 103,300 gallons of effluent was stored in Pond A.

Pond B Storage (Column XXI)

Column XXI presents the daily amount of effluent, in gallons, stored in Pond B. The daily amount stored in the pond is calculated by using the daily depth of effluent in Pond B (Column IV). Under normal operating conditions, the amount stored in the pond will vary depending upon the daily amount of effluent removed from the pond by the evaporation system, hauled from the pond, used for dust control or evaporated. This month a daily average of 144,100 gallons of effluent was stored in Pond B.

Effluent Sprayed at Pond B (Column XXII)

Column XXII presents the daily amount of effluent, in gallons, sprayed for evaporation at Pond B. The amount evaporated is calculated by using 5 percent of the daily flow meter quantity sprayed at Pond B and it is included in Column XXVI. This month 301,068 gallons of effluent was sprayed in Pond B.

Effluent Irrigation (Column XXIII)

Column XXIII presents the daily amount of effluent, in gallons, used for spray irrigation on top of Phases IV-VI. The daily amount of effluent irrigation on Phases IV-VI is measured from the flow meter at the irrigation pump station. This month a total of 180,558 gallons of effluent was used for spray irrigation.

Effluent Dust Control Sprayed (Column XXIV)

Column XXIV presents the daily amount of effluent, in gallons, sprayed for dust control in the active areas of the SCLF. The daily amount of effluent used for dust control, is measured from the flow meter at the bypass-loading arm. This month effluent was not sprayed as dust control.

Total Effluent Hauled (Column XXV)

Column XXV presents the daily amount of effluent, in gallons, hauled off site, as measured from the flow meter at the bypass-loading arm. This month 1,083,579 gallons of effluent was hauled off site.

Total Evaporation (Column XXVI)

Column XXVI presents the daily amount of leachate and effluent, in gallons, that evaporates and therefore will not be returned to the SCLF and/or requires treatment. Evaporation rates of 80 percent and 5 percent evaporation rate for spray in Pond B are assumed. Total evaporation estimated for this month was 160,800 gallons.

TABLE 2

Table 2 presents data assembled from daily logs compiled by the SWMD staff.

TABLE 3

Leachate Balance Summary

The Leachate Balance Summary (see Table 3) presents a review of inflow and outflow quantities for the LTRF, as well as rainfall and effluent disposal quantities at the landfill. Total inflow quantity to the LTRF was 3,401,701 gallons. Total outflow quantity from the LTRF was 3,662,435 gallons. The change in storage for the month decreased by 260,734 gallons.

Please advise should you have any questions concerning the information provided.

TABLE 1. LEACHATE WATER BALANCE REPORT FORM
JULY 2017
SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	XVIII	XIX	XX	XXI	XXII	XXIII	XXIV	XXV	XXVI
Day	Rainfall (in.)	Depth in Pond A (ft.)	Depth in Pond B (ft.)	Estimated Depth at PS-B (in.)	Phases I - VI Condensate Meter (gal.)	Phase II TPS-2 (gal.)	Leachate Pumped to MLPS from Phases I-VI (gal.)	Leachate Pumped from Sections 7-8 LDS (gal.)	Leachate Pumped to MLPS from Sections 7-8 (gal.)	Leachate Pumped to LTRF from MPLS (gal.)	Leachate Pumped to LTRF from Section 9 (gal.)	Leachate Pumped from Section 9 LDS (gal.)	Compost Leachate (gal.)	Leachate in 575K Tank (gal.)	Effluent in 575K Tank (gal.)	Leachate Treated at LTRF (gal.)	Total Leachate Hauled (gal.)	Leachate Dust Control (Sprayed) (gal.)	Pond A Storage (gal.)	Pond B Storage (gal)	Effluent Sprayed Pond B (gal)	Effluent Irrigation (gal.)	Effluent Dust Control (Sprayed) (gal.)	Total Effluent Hauled (gal.)	Total Evaporation (gal.)
1	0.00	3.4	2.6	8.9	226	3,877	55,447	0	7,080	62,527	4,228	0	15,600	394,000	408,000	33,700	80,858	0	129,000	133,000	0	0	0	0	0
2	0.00	*3.4*	*2.7*	*19.9*	*267*	*4,187*	*43,496*	*31*	*4,956*	*48,451*	*6,157*	N/A	*0*	*384,000*	*422,000*	*33,700*	0	0	*129,000*	*143,000*	0	0	0	0	0
3	0.43	3.4	2.8	30.9	267	4,187	43,496	31	4,956	48,451	6,157	N/A	0	374,000	437,000	33,700	87,213	0	129,000	152,000	86,432	42,815	0	0	38,600
4	0.00	*3.3*	*2.9*	*24.0*	*462*	*9,528*	*74,400*	*22*	*12,856*	*87,256*	*4,213*	N/A	0	*403,000*	*449,000*	*34,700*	0	0	*123,000*	*152,000*	0	0	0	0	0
5	0.15	3.2	2.9	17.0	462	9,528	74,400	22	12,856	87,256	4,213	N/A	0	432,000	461,000	34,700	86,964	0	118,000	162,000	84,881	26,677	0	0	25,600
6	0.00	3.3	2.9	11.3	667	7,114	63,077	23	10,007	73,084	3,790	N/A	2,200	396,000	453,000	30,800	58,042	0	123,000	162,000	44,635	38,473	0	47,571	33,000
7	0.22	2.7	2.9	17.9	678	4,446	62,236	0	7,502	69,738	5,482	N/A	0	381,000	417,000	25,700	93,406	0	93,000	162,000	0	11,299	0	77,893	9,000
8	0.00	2.5	2.9	9.5	715	5,248	62,872	48	7,519	70,391	2,350	N/A	0	345,000	377,000	32,200	42,708	0	83,000	162,000	0	42,710	0	42,484	34,200
9	0.87	*2.1*	*2.9*	*15.1*	*715*	*6,551*	*61,585*	*0*	*7,726*	*69,311*	*5,473*	*N/A*	*50*	*375,000*	*384,000*	*32,200*	0	0	*65,000*	*162,000*	0	0	0	0	0
10	0.01	1.7	2.9	20.6	715	6,551	61,585	0	7,726	69,311	5,473	N/A	50	405,000	391,000	32,200	58,432	0	48,000	162,000	85,120	0	0	64,558	4,300
11	1.32	1.7	2.9	19.1	711	7,174	59,214	41	7,850	67,064	5,132	N/A	1,400	422,000	358,000	36,800	86,797	0	48,000	162,000	0	18,584	0	36,106	14,900
12	1.38	1.4	3.0	13.7	694	6,553	58,083	44	5,215	63,298	620	N/A	3,700	381,000	350,000	30,900	72,035	0	36,000	172,000	0	0	0	71,799	0
13	0.00	3.4	2.3	14.9	620	6,635	66,155	31	3,876	70,031	2,213	0	69,300	422,000	324,000	49,100	99,220	0	129,000	106,000	0	0	0	50,675	0
14	1.87	3.4	2.3	9.2	823	6,881	70,537	20	20,057	90,594	16,424	0	100	408,000	302,000	35,300	99,647	0	129,000	106,000	0	0	0	71,397	0
15	0.00	3.4	2.6	14.3	568	11,375	94,452	27	2,694	97,146	7,557	0	66,800	453,000	278,000	46,500	71,615	0	129,000	133,000	0	0	0	14,249	0
16	0.00	*3.4*	*2.6*	*27.8*	*1,030*	*10,662*	*61,634*	*8*	*22,136*	*83,769*	*10,182*	*0*	*100*	*476,000*	*311,000*	*46,500*	0	0	*129,000*	*133,000*	0	0	0	0	0
17	1.18	3.3	2.6	41.3	1,030	10,662	61,634	8	22,136	83,769	10,182	0	100	499,000	343,000	46,500	136,649	0	123,000	133,000	0	0	0	50,068	0
18	0.00	*3.2*	*2.7*	*10.7*	*828*	*6,014*	*121,569*	*75*	*12,408*	*133,977*	*15,730*	*2*	*15,300*	*477,000*	*344,000*	*47,200*	170,878	0	*118,000*	*133,000*	0	0	0	36,193	0
19	0.50	*3.0*	*2.7*	*7.7*	*828*	*6,014*	*121,569*	*75*	*12,408*	*133,977*	*15,730*	*2*	*15,300*	*456,000*	*345,000*	*42,100*	164,853	0	*108,000*	*143,000*	0	0	0	22,251	0
20	0.04	3.0	2.7	10.0	1,057	8,895	99,300	0	27,794	127,094	10,522	0	0	403,000	345,000	37,100	85,974	0	108,000	143,000	0	0	0	80,592	0
21	0.00	3.0	2.7	13.7	1,101	9,432	94,483	86	18,354	112,837	11,356	0	0	405,000	314,000	49,200	163,649	1,555	108,000	143,000	0	0	0	24,103	1,200
22	0.00	2.9	2.7	11.6	1,112	2,148	91,985	214	15,577	107,562	8,869	3	0	302,000	326,000	42,000	141,697	0	103,000	143,000	0	0	0	24,430	0
23	0.18	*2.9*	*2.8*	*13.7*	*1,052*	*1,047*	*86,767*	*66*	*13,797*	*100,564*	*7,720*	0	*0*	*319,000*	*348,000*	*42,000*	0	0	*103,000*	*143,000*	0	0	0	0	0
24	0.00	2.8	2.8	15.8	1,052	1,047	86,767	66	13,797	100,564	7,720	0	0	336,000	369,000	42,000	63,965	0	98,000	152,000	0	0	0	87,198	0
25	0.00	2.8	2.8	20.7	889	1,061	82,889	270	13,816	96,705	6,655	0	0	329,000	329,000	44,600	85,289	0	98,000	152,000	0	0	0	79,860	0
26	0.02	2.8	2.8	17.3	878	22,864	83,205	331	15,902	99,107	8,274	0	0	329,000	286,000	42,800	78,191	0	98,000	152,000	0	0	0	87,608	0
27	0.40	2.7	2.7	16.1	922	11,650	86,712	54	13,468	100,180	4,199	0	0	312,000	247,000	46,200	129,157	0	93,000	143,000	0	0	0	43,020	0
28	0.00	3.4	2.5	16.6	922	4,252	86,200	297	12,764	98,964	7,092	0	12,500	261,000	238,000	38,400	86,514	0	129,000	124,000	0	0	0	42,743	0
29	0.00	3.1	2.5	14.5	918	11,660	84,454	0	12,997	97,451	5,783	0	0	261,000	240,000	47,100	91,076	0	113,000	124,000	0	0	0	0	0
30	0.75	*2.7*	*2.6*	*15.8*	*944*	*10,649*	*85,886*	*134*	*12,339*	*98,225*	*4,895*	0	*300*	*231,000*	*279,000*	*47,100*	*44,288*	0	*93,000*	*133,000*	0	0	0	0	0
31	3.27	2.2	2.7	17.1	944	10,649	85,886	134	12,339	98,225	4,895	0	300	202,000	319,000	47,100	51,663	0	70,000	143,000	0	0	0	28,781	0
Total	12.59				24,094	228,538	2,371,971	2,155	374,905	2,746,876	219,281	7	203,100			1,230,100	2,430,780	1,555			301,068	180,558	0	1,083,579	160,800
Daily Average		2.9	2.7	16.7	777	7,372	76,515	70	12,094	88,609	7,074	0	6,552	373,300	348,200				103,300	144,100					
Mo. Average																		100				5,800	0	35,000	5,190

projects\balance\2009\01-09bal.xls (Ds 8/5/17)

Notes:
1. NR = No Records, NA = Not Available.
2. Values in bold are estimated; values in italic are substitute for missing data and are based on averaged values.
3. Daily average is calculated by dividing the total by the actual days measured in the month.
4. Monthly average calculated by dividing the total by the number of days of the month.
5. Column II, Trace is less than 0.01 inches and is not included in total.
6. Columns III and IV, field measured at staff gauges.
7. Columns IX & X, Section 7-8 leak detection pumped into Section 7 leachate sump riser.
8. Column XV and XVI, calculated from depth in 575,000 gal. tanks.
9. Columns VI-XIV, XVII-XIX, and XXII-XXV, quantities from flow meters.
10. Column XXVI includes 80% of the daily values from Columns XIX, XXIII, and XXIV plus 5% of the daily values from column XXII.

TABLE 2. FIELD DATA ENTRY FORM
JULY 2017
SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y
																			Leachate Hauled			Effluent Hauled		
Day	Rainfall (in.)	Phases I - VI Condensate Meter (gal.)	Phase II TPS-2 (gal.)	Flow Meter Pump Sta. A (gal.)	Reading PS-B (in.)	Section 9 Pump 1 (gal.)	Section 9 Pump 2 (gal.)	Section 9 LDS (gal.)	Compost Leachate (gal.)	Sections 7-8 Pump (gal.)	Sections 7-8 LDS (gal.)	Pond B Depth (ft.)	Pond B Effluent Sprayed (gal)	Pond A Depth (ft.)	Effluent Spray Irrigation (gal.)	Depth in 575K Tank Leachate (ft.)	Depth in 575K Tank Effluent (ft.)	Leachate Treated at LTRF (gal.)	Contractor (gal.)	County (gal.)	Leachate Dust Control (Sprayed) (gal.)	Contractor (gal.)	County (gal.)	Effluent Dust Control (Sprayed) (gal)
1	0.00	194,637	682,762	1,635,109	8.9	3,587,942	1,957,159	5,846,185	214,300	3,164,179	14,102	2.6	0	3.4	0	13.67	14.17	33,684	0	80,858	0	0	0	0
2	0.00	194,904	*686,949*	***1,678,605***	***19.9***	***3,588,410***	***1,962,848***	0	***214,300***	***3,169,135***	***14,133***	***2.7***	0	***3.4***	0	***13.34***	***14.67***	***33,684***	0	0	0	0	0	0
3	0.43	195,171	691,135	1,722,100	30.9	3,588,877	1,968,537	NA	214,300	3,174,090	14,164	2.8	86,432	3.4	42,815	13.00	15.17	33,683	0	87,213	0	0	0	0
4	0.00	***195,633***	***700,663***	***1,796,500***	***24.0***	***3,589,084***	***1,972,543***	0	***214,300***	***3,186,946***	***14,186***	***2.9***	0	***3.3***	0	***14.00***	***15.59***	***34,686***	0	0	0	0	0	0
5	0.15	196,095	710,191	1,870,900	17.0	3,589,291	1,976,549	NA	214,300	3,199,801	14,207	2.9	84,881	3.2	26,677	15.00	16.00	34,685	0	86,964	0	0	0	0
6	0.00	196,762	717,305	1,933,977	11.3	3,590,006	1,979,624	NA	216,500	3,209,808	14,230	2.9	44,635	3.3	38,473	13.75	15.75	30,789	0	58,042	0	26,141	21,430	0
7	0.22	197,440	721,751	1,996,213	17.9	3,590,914	1,984,198	NA	216,500	3,217,310	14,230	2.9	0	2.7	11,299	13.25	14.50	25,739	0	93,406	0	77,893	0	0
8	0.00	198,155	726,999	2,059,085	9.5	3,591,043	1,986,419	NA	216,500	3,224,829	14,278	2.9	0	2.5	42,710	12.00	13.08	32,239	0	42,708	0	42,484	0	0
9	0.87	***198,870***	***733,550***	***2,120,670***	***15.1***	***3,591,699***	***1,991,236***	0	***216,550***	***3,232,555***	***14,278***	***2.9***	0	***2.1***	0	***13.04***	***13.33***	***32,239***	0	0	0	0	0	0
10	0.01	199,584	740,101	2,182,254	20.6	3,592,354	1,996,053	NA	216,600	3,240,281	14,278	2.9	85,120	1.7	0	14.08	13.58	32,240	14,242	44,190	0	64,558	0	0
11	1.32	200,295	747,275	2,241,468	19.1	3,592,357	2,001,182	NA	218,000	3,248,131	14,319	2.9	0	1.7	18,584	14.67	12.42	36,805	42,764	44,033	0	36,106	0	0
12	1.38	200,989	753,828	2,299,551	13.7	3,592,974	2,001,185	5,846,185	221,700	3,253,346	14,363	3.0	0	1.4	0	13.25	12.17	30,898	0	72,035	0	71,799	0	0
13	0.00	201,609	760,463	2,365,706	14.9	3,593,157	2,003,215	5,846,185	291,000	3,257,222	14,394	2.3	0	3.4	0	14.67	11.25	49,149	28,517	70,703	0	50,675	0	0
14	1.87	202,432	767,344	2,436,243	9.2	3,593,779	2,019,017	5,846,185	291,100	3,277,279	14,414	2.3	0	3.4	0	14.17	10.50	35,265	7,125	92,522	0	71,397	0	0
15	0.00	203,000	778,719	2,530,695	14.3	3,594,515	2,025,838	5,846,185	357,900	3,279,973	14,441	2.6	0	3.4	0	15.75	9.67	46,488	28,601	43,014	0	14,249	0	0
16	0.00	***204,030***	*789,381*	***2,592,329***	***27.8***	***3,594,752***	***2,035,783***	***5,846,185***	***358,000***	***3,302,109***	***14,449***	***2.6***	0	***3.4***	0	***16.54***	***10.80***	***46,488***	0	0	0	0	0	0
17	1.18	205,059	800,042	2,653,962	41.3	3,594,989	2,045,728	5,846,185	358,100	3,324,244	14,456	2.6	0	3.3	0	17.33	11.92	46,488	35,915	100,734	0	50,068	0	0
18	0.00	***205,887***	***806,056***	***2,775,531***	*10.7*	***3,595,426***	***2,061,021***	***5,846,187***	***373,400***	***3,336,652***	***14,531***	***2.7***	0	***3.2***	0	***16.58***	***11.96***	***47,241***	85,101	85,777	0	36,193	0	0
19	0.50	206,715	812,069	2,897,100	7.7	3,595,863	2,076,313	5,846,189	388,700	3,349,060	14,606	2.7	0	3.0	0	15.83	12.00	42,138	72,145	92,708	0	22,251	0	0
20	0.04	207,772	820,964	2,996,400	10.0	3,596,939	2,085,759	5,846,189	388,700	3,376,854	14,606	2.7	0	3.0	0	14.00	12.00	37,078	43,196	42,778	0	80,592	0	0
21	0.00	208,873	830,396	3,090,883	13.7	3,597,668	2,096,386	5,846,189	388,700	3,395,208	14,692	2.7	0	3.0	0	14.08	10.92	49,161	113,811	49,838	1,555	24,103	0	0
22	0.00	209,985	832,544	3,182,868	11.6	3,598,516	2,104,407	5,846,192	388,700	3,410,785	14,906	2.7	0	2.9	0	10.50	11.33	41,968	99,101	42,596	0	24,430	0	0
23	0.18	***211,037***	*833,591*	***3,269,635***	***13.7***	***3,598,833***	***2,111,810***	***5,846,192***	***388,700***	***3,424,582***	***14,972***	***2.8***	0	***2.9***	0	***11.09***	***12.08***	***41,968***	0	0	0	0	0	0
24	0.00	212,089	834,638	3,356,401	15.8	3,599,150	2,119,212	5,846,192	388,700	3,438,379	15,037	2.8	0	2.8	0	11.67	12.83	41,968	0	63,965	0	87,198	0	0
25	0.00	212,978	835,699	3,439,290	20.7	3,599,611	2,125,406	5,846,192	388,700	3,452,195	15,307	2.8	0	2.8	0	11.42	11.42	44,562	0	85,289	0	79,860	0	0
26	0.02	213,856	858,563	3,522,495	17.3	3,600,395	2,132,896	5,846,192	388,700	3,468,097	15,638	2.8	0	2.8	0	11.42	9.92	42,769	0	78,191	0	87,608	0	0
27	0.40	214,778	870,213	3,609,207	16.1	3,600,840	2,136,650	5,846,192	388,700	3,481,565	15,692	2.7	0	2.7	0	10.83	8.58	46,207	43,898	85,259	0	43,020	0	0
28	0.00	215,700	874,465	3,695,407	16.6	3,602,216	2,142,366	5,846,192	401,200	3,494,329	15,989	2.5	0	3.4	0	9.08	8.25	38,394	43,929	42,585	0	42,743	0	0
29	0.00	216,618	886,125	3,779,861	14.5	3,602,470	2,147,895	5,846,192	401,200	3,507,326	15,989	2.5	0	3.1	0	9.08	8.33	47,083	43,367	47,709	0	0	0	0
30	0.75	***217,562***	*896,774*	***3,865,747***	***15.8***	***3,602,721***	***2,152,539***	***5,846,192***	***401,500***	***3,519,665***	***16,123***	***2.6***	0	***2.7***	0	***8.04***	***9.71***	***47,083***	44,288	0	0	0	0	0
31	3.27	218,505	907,423	3,951,633	17.1	3,602,971	2,157,183	5,846,192	401,800	3,532,004	16,257	2.7	0	2.2	0	7.00	11.08	47,083	44,587	7,076	0	28,781	0	0
Totals	12.59												301,068		180,558			1,229,952	790,587	1,640,193	1,555	1,062,149	21,430	0

projects\balance\2009\01-09bal.xls (Ds 8/5/17)

Notes:

1. NR = No Records, NA = Not Available.
2. Values in bold are estimated; values in italic are substitute for missing data and are based on averaged values
3. Columns I and L include quantities from leak detection system.
4. Column B, trace is less than 0.01 inches.
5. Columns C, D, E, G, H, I, J, K, L, N, P, S-X and Y are quantities from flow meters.
6. Columns M and O measured from staff gages in each pond.

Type of Cover	Phases I-VI acres	Sections 7-8 acres	Section 9 acres
Open	0	0	5
Intermediate	139.4	19.3	10
Final	23	0	0
Not Opened	0	0	0

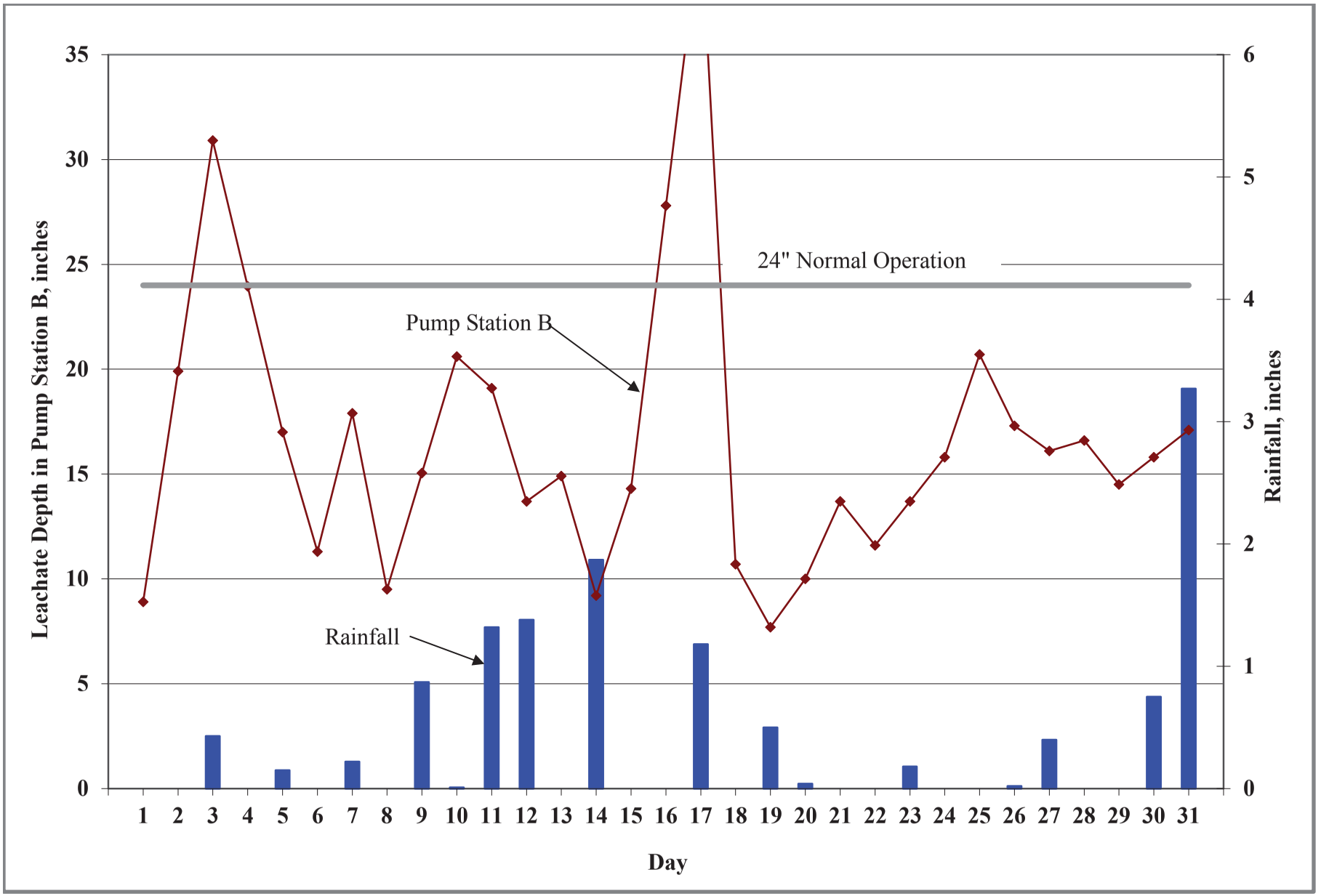

Figure 1. Leachate Levels in Pump Station B and Rainfall for July 2017.

TABLE 3. LEACHATE BALANCE SUMMARY
SOUTHEAST COUNTY LANDFILL
HILLSBOROUGH COUNTY, FLORIDA
YEAR-2017

		Leachate Arriving at LTRF						Leachate Leaving LTRF			Effluent Disposal			Inflow / Outflow For LTRF		
Month	Rainfall (in.)	Condensate from LFG System (gal.)	Leachate from Section 9 Pumped to LTRF (gal.)	Leachate from Section 7-8 Pumped to LTRF (gal.)	Leachate from Phases I-VI Pumped to LTRF (gal.)	Phase II TPS-2 (gal.)	Compost Leachate (gal.)	Total Leachate Hauled from LTRF (gal.)	Leachate Dust Control (Sprayed) (gal.)	Leachate Treated at LTRF (gal.)	Total Effluent Hauled (gal.)	Effluent Dust Control (Sprayed) (gal.)	Effluent Irrigation (gal.)	Total Inflow to LTRF (gal.)	Total Outflow from LTRF (gal.)	Change in Storage[3] (gal.)
January	1.26	15,559	63,901	107,208	2,220,588	0	0	1,465,900	0	928,400	7,108	0	612,840	2,407,256	2,394,300	12,956
February	1.96	12,809	56,814	96,390	1,796,165	0	0	1,253,632	0	700,600	78,895	0	526,386	1,962,178	1,954,232	7,946
March	0.67	11,418	49,816	83,733	2,101,893	232,499	0	1,473,627	0	907,200	168,009	0	707,976	2,479,359	2,380,827	98,532
April	2.58	21,470	49,032	81,696	1,849,005	175,666	0	1,165,386	0	951,500	7,425	0	829,485	2,176,868	2,116,886	59,982
May	1.97	5,365	46,880	84,635	1,672,229	142,264	0	1,158,105	1,618	841,400	135,383	0	819,657	1,951,373	2,001,123	-49,750
June	12.31	8,499	88,631	147,375	1,624,622	120,889	191,200	1,508,449	0	715,000	71,078	0	235,093	2,181,216	2,223,449	-42,233
July	12.59	3,899	219,288	374,905	2,371,971	228,538	203,100	2,430,780	1,555	1,230,100	1,083,579	0	180,558	3,401,701	3,662,435	-260,734
August																
September																
October																
November																
December																
YTD Total	33.34	79,019	574,362	975,942	13,636,473	899,856	394,300	10,455,879	3,173	6,274,200	1,551,477	0	3,911,995	16,559,951	16,733,252	-173,301

Note:
1. If the bypass at the effluent pond is ever used to pump effluent back to the LTRF, this table must be modified.
2. Change in storage represents total inflow to LTRF minus total outflow from LTRF.