

Hsu, Benjamin

From: Madden, Melissa
Sent: Thursday, August 24, 2017 12:44 PM
To: Hsu, Benjamin
Subject: FW: Monthly Submittal
Attachments: August 2016.pdf; July 2016.pdf

Please feel free to contact me with any questions or concerns.

Thanks, Melissa



Melissa Madden

Environmental Consultant – Solid Waste
Florida Department of Environmental Protection, Southwest District
13051 N Telecom Parkway, Suite 101, Temple Terrace, FL 33637 **NEW!**
(813) 470-5795 Phone | (813) 470-5995 Fax
melissa.madden@dep.state.fl.us

From: Pelley, Cindy [<mailto:PelleyCA@HillsboroughCounty.ORG>]
Sent: Friday, September 16, 2016 9:05 AM
To: Madden, Melissa <Melissa.Madden@dep.state.fl.us>
Subject: RE: Monthly Submittal

Good morning,
I scanned quick copy in case you want to review before the meeting.
Thank you, Cindy

From: Madden, Melissa [<mailto:Melissa.Madden@dep.state.fl.us>]
Sent: Thursday, September 15, 2016 4:23 PM
To: Pelley, Cindy <PelleyCA@HillsboroughCounty.ORG>
Cc: Ruiz, Larry <RuizLE@HillsboroughCounty.ORG>
Subject: RE: Monthly Submittal

Tomorrow is fine. If you want to shoot them over electronically before you head out that would work.

Please feel free to contact me with any questions or concerns.

Thanks, Melissa



Melissa Madden

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From: Pelley, Cindy [<mailto:PelleyCA@HillsboroughCounty.ORG>]
Sent: Thursday, September 15, 2016 3:01 PM
To: Madden, Melissa <Melissa.Madden@dep.state.fl.us>
Cc: Ruiz, Larry <RuizLE@HillsboroughCounty.ORG>
Subject: Monthly Submittal

Hello Melissa,

Would it be ok to submit the monthly leachate balance reports at the meeting tomorrow or do you need them today?

Thank you, Cindy

Cindy A. Pelley

General Manager II

Solid Waste Management Division

Public Works Department

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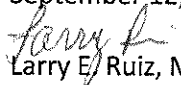
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Public Works
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DATE: September 12, 2016

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 August 2016
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 2016 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 11.0 inches of rainfall 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 2.8 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 2.8.

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 of 24-inches except for August 1 as the pump was down in preparation to install a new 6-inch diameter suction line. The average recorded depth of leachate in the PS-B sump was 18.0 inches.

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

Column VI 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 108,150 gallons. A total of 3,352,655 gallons of leachate was pumped this month.

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

Column VII 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 7,962 gallons of leachate was removed from the leak detection system of Sections 7-8.

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

Column VIII 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 VIII). This month a total of 340,167 gallons of leachate was pumped from Sections 7-8. It has been determined that the flow meter for Sections 7/8 will need to be replaced due to water intrusion. Staff has assumed that the pump at this pump station has in fact been working throughout the month because the telemetry system indicates that normal operating levels have been maintained. However, the meter readings are suspect at this time and the County will repair or replace the flow meter.

Leachate Pumped to LTRF from the MLPS (Column IX)

Column IX presents the total quantity of leachate pumped to the LTRF from Phases I-VI and Sections 7-8. This month a total of 3,692,822 gallons of leachate was pumped to the LTRF.

Leachate Pumped to LTRF from Section 9 (Column X)

Column X 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 458,958 gallons of leachate was pumped this month. The differential pressure transducers were replaced for all pumps at Pump Station 9 on August 12, 2016. All pumps are functioning as designed.

Leachate Pumped from Section 9 LDS (Column XI)

Column XI 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 4,651 gallons per day. This month leachate was not removed from the leak detection system. The differential pressure transducers were replaced for all pumps at Pump Station 9 on August 12, 2016. All pumps are functioning as designed.

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

Column XII presents the daily amount of leachate, in gallons, stored in the 575,000-gallon leachate holding tank at the LTRF. The amount of leachate stored in the tank is calculated based on the circumference of the tank and the daily level reading. This month an average of 372,100 gallons of leachate was stored in the tank.

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

Column XIII presents the daily amount of effluent, in gallons, stored in the 575,000-gallon effluent holding tank at the LTRF. The amount of effluent stored in the tank is calculated based on the circumference of the tank and the daily level reading. This month an average of 407,500 gallons of effluent was stored in the tank.

Leachate Treated at LTRF (Column XIV)

Column XIV presents the daily amount of leachate, in gallons, treated at the LTRF. This month a total of 1,184,800 gallons of leachate was treated at the plant.

Total Leachate Hauled (Column XV)

Column XV presents the daily amount of leachate, in gallons, hauled off site. This month a total of 2,804,839 gallons of leachate was hauled off site.

Leachate Dust Control Sprayed (Column XVI)

Column XVI 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 33,420 gallons of leachate was used for dust control.

Pond A Storage (Column XVII)

Column XVII 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 IV). 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 99,300 gallons of effluent was stored in Pond A.

Pond B Storage (Column XVIII)

Column XVIII 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 160,200 gallons of effluent was stored in Pond B.

Effluent Sprayed at Pond B (Column XIX)

Column XIX 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 XXIV. This month 64,843 gallons of effluent was sprayed in Pond B.

Effluent Irrigation (Column XX)

Column XX presents the daily amount of effluent, in gallons, used for spray irrigation on top of Phases I-VI. The daily amount of effluent irrigation on Phases I-VI is measured from the flow meter at the irrigation pump station. This month a total of 708,321 gallons of effluent was used for spray irrigation.

Effluent Dust Control Sprayed (Column XXI)

Column XXI 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 XXII)

Column XXII presents the daily amount of effluent, in gallons, hauled off site, as measured from the flow meter at the bypass-loading arm. This month 22,005 gallons of effluent was hauled off site.

Total Evaporation (Column XXIII)

Column XXIII 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 596,600 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 4,162,938 gallons. Total outflow quantity from the LTRF was 4,023,059 gallons. The change in storage for the month increased by 139,879 gallons.

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

TABLE 1. LEACHATE WATER BALANCE REPORT FORM
AUGUST 2016
SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA

Day	Rainfall (in.)	Depth in Pond A (ft.)	Depth in Pond B (ft.)	Estimated Depth at PS-B (in.)	Leachate Pumped to MLPS from Phases I-VI (gal.)	Leachate Pumped from Sections 7 & 8 LIDS (gal.)	Leachate Pumped to LTRF from MLPS (gal.)	Leachate Pumped to LTRF from Section 9 (gal.)	Leachate Pumped from Section 9 LIDS (gal.)	Leachate in 575K Tank (gal.)	Leachate in 575K Tank (gal.)	Leachate Treated at LTRF (gal.)	Total Leachate Hauled (gal.)	Leachate (Sprayed) (gal.)	Pond A Storage (gal.)	Pond B Storage (gal.)	Effluent Sprayed Pond B (gal.)	Effluent Irrigation (gal.)	Effluent (Sprayed) (gal.)	Total Effluent Hauled (gal.)	Total Evaporation (gal.)
1	0.00	0.9	2.6	25.1	183,360	0	183,360	0	0	295,000	312,000	47,100	71,697	3,327	21,000	133,000	0	0	0	0	2,700
2	0.45	0.9	3.8	21.7	815	0	815	0	0	194,000	331,000	45,000	57,309	3,274	21,000	256,000	0	0	0	0	2,600
3	0.57	1.9	3.6	24.2	196,145	0	196,145	0	0	283,000	350,000	45,000	85,294	0	57,000	234,000	0	0	0	0	0
4	0.22	2.7	1.9	24.3	103,487	0	103,487	0	0	261,000	376,000	48,900	70,651	0	93,000	283,000	0	0	0	0	0
5	0.00	2.9	1.2	20.4	163,747	0	163,747	0	0	302,000	381,000	43,300	71,134	5,056	103,000	28,000	0	0	0	0	4,000
6	0.35	3.1	1.2	21.0	105,429	0	105,429	0	0	290,000	404,000	41,200	99,150	2,369	113,000	28,000	0	0	0	0	1,900
7	0.73	3.2	2.3	22.2	108,938	0	108,938	0	0	316,000	482,000	41,200	79,186	0	118,000	26,000	0	0	0	0	0
8	1.07	3.2	1.4	23.4	108,938	0	108,938	0	0	336,000	482,000	41,200	79,186	0	118,000	39,000	0	0	0	0	0
9	0.60	3.5	1.6	12.3	138,682	0	138,682	0	0	338,000	492,000	40,600	78,747	0	140,000	51,000	0	0	0	0	0
10	0.40	3.4	2.1	10.6	117,440	0	117,440	2,652	0	358,000	477,000	38,000	86,290	0	120,000	88,000	0	0	0	0	0
11	0.90	3.4	2.6	9.6	108,829	0	108,829	2,175	0	350,000	456,000	32,200	93,576	0	129,000	133,000	0	10,279	0	0	8,200
12	0.47	3.3	3.1	22.1	88,426	0	88,426	722	0	453,000	427,000	26,800	76,859	0	123,000	182,000	0	0	0	0	0
13	0.00	3.3	3.5	20.6	123,355	0	123,355	35,161	0	485,000	432,000	45,600	92,513	0	123,000	223,000	0	0	0	0	0
14	0.00	3.4	3.6	21.4	85,444	0	85,444	17,637	0	470,000	456,000	45,600	49,927	0	123,000	241,000	0	0	0	0	0
15	0.00	3.3	3.7	22.2	85,444	0	85,444	17,637	0	456,000	485,000	45,600	79,337	0	123,000	245,000	0	52,764	0	0	42,200
16	0.00	2.3	3.9	9.6	139,140	0	139,140	8,662	0	489,000	489,000	42,200	124,039	0	74,000	267,000	0	59,892	0	0	47,900
17	0.01	3.2	3.2	14.9	111,533	0	111,533	8,662	0	437,000	502,000	40,900	99,854	0	118,000	193,000	0	59,891	0	0	47,900
18	0.01	3.2	3.2	19.1	103,563	0	103,563	96,817	0	497,000	482,000	40,600	141,108	11,239	118,000	192,000	0	31,608	0	0	34,300
19	0.00	3.1	3.2	11.9	106,279	0	106,279	40,388	0	461,000	489,000	47,400	123,070	0	113,000	192,000	0	78,590	0	0	62,900
20	0.08	2.5	3.2	9.6	105,883	0	105,883	22,752	0	425,000	473,000	27,600	144,728	0	83,000	192,000	0	55,168	0	0	44,100
21	0.00	2.0	3.2	12.7	102,072	0	102,072	13,577	0	477,000	493,000	27,600	37,631	0	61,000	192,000	0	45,134	0	0	36,100
22	0.00	1.5	3.2	15.7	102,072	0	102,072	13,577	0	410,000	513,000	27,600	109,081	8,155	40,000	192,000	0	35,100	0	22,005	34,600
23	0.01	3.2	3.0	19.1	94,562	0	94,562	9,206	0	374,000	389,000	29,100	123,873	0	118,000	172,000	0	88,449	0	0	70,800
24	0.00	3.4	2.7	16.9	97,207	0	97,207	8,706	0	317,000	358,000	27,800	128,712	0	120,000	143,000	0	86,634	0	0	69,300
25	0.02	2.7	2.7	15.8	99,081	0	99,081	10,162	0	261,000	311,000	32,600	121,320	0	93,000	143,000	0	64,813	0	0	17,100
26	0.01	3.2	3.8	19.8	101,558	0	101,558	8,632	0	214,000	307,000	33,000	91,769	0	118,000	256,000	0	0	0	0	0
27	0.68	2.0	3.2	10.8	98,667	0	98,667	7,340	0	257,000	288,000	35,900	49,719	0	61,000	192,000	0	0	0	0	0
28	0.00	2.5	3.0	16.4	94,009	0	94,009	5,918	0	374,000	302,000	35,800	79,532	0	81,000	172,000	0	16,291	0	0	13,000
29	0.01	3.0	2.8	21.9	91,000	0	91,000	5,938	0	492,000	317,000	35,300	79,532	0	108,000	133,000	0	32,582	0	0	26,100
30	0.00	3.4	2.7	22.5	55,223	0	55,223	3,000	0	466,000	302,000	37,900	174,916	0	129,000	143,000	0	38,586	0	0	30,900
31	4.38	2.8	3.3	17.3	129,306	0	129,306	8,444	0	437,000	293,000	38,700	160,019	0	98,000	202,000	0	0	0	0	0
Total	11.00			180	3,352,655	7,962	3,401,165	458,938	0	1,184,800	2,804,839	33,420	1,100	0	99,300	160,200	64,843	768,321	0	22,005	596,600
Mo. Average		2.8	2.8	18.0	108,150	257	119,123	14,805	0	372,106	407,500	0	0	0	0	160,200	0	22,800	0	0	19,250

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 VIII & IX. Section 7-8 leak detection pumped into Section 7 leachate sump tier.
8. Column XIII and XIV. Calculated from depth in 575,000 gal. tanks.
9. Columns XV-XII, XV-XVII and XX-XXIII. Quantities from flow meters.
10. Column XXIV includes 80% of the daily values from Columns XVII, XXI, and XXII plus 3% of the daily values from column XX.

TABLE 2. FIELD DATA ENTRY FORM
AUGUST 2016
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	
Day	Rainfall (in.)	Flow Meter Pump Sta. A (gal.)	Reading PS-B (in.)	Section 9 Pump 1 (gal.)	Section 9 Pump 2 (gal.)	Section 9 LDS (gal.)	Section 7-8 Pump (gal.)	Section 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.)	Leachate Fined Contractor (gal.)	Leachate Fined County (gal.)	Leachate Dust Control (Sprayed) (gal.)	Effluent Hauled Contractor (gal.)	Effluent Hauled County (gal.)	Dust Control (Sprayed) (gal.)	
1	0.00	5,450,511	25.3	2,960,802	724,833	5,814,554	995,999	147,911	2.6	0.0	0.9	0	10.25	10.83	47,067	35,223	36,474	3,327	0	0	0	
2	0.45	5,451,356	24.7	2,960,805	724,837	5,814,554	995,979	147,912	3.8	0.0	0.9	0	6.75	11.50	45,023	27,994	29,315	3,274	0	0	0	
3	0.57	5,647,501	24.2	2,960,808	724,843	5,814,554	996,019	147,912	3.6	0.0	1.9	0	9.83	12.17	45,024	49,260	36,534	0	0	0	0	
4	0.22	5,750,988	24.3	2,960,809	724,843	5,814,554	996,019	147,912	1.9	0.0	2.7	0	9.17	13.00	48,885	70,651	0	0	0	0	0	
5	0.00	5,914,735	20.4	2,960,812	724,846	5,814,554	996,019	147,912	1.2	0.0	2.9	0	10.50	13.25	43,267	42,308	29,126	5,056	0	0	0	
6	0.35	6,020,164	21.0	2,960,815	724,851	5,814,554	996,019	147,912	1.2	0.0	3.1	0	10.08	14.08	41,221	56,536	42,614	2,369	0	0	0	
7	0.73	6,129,102	22.2	2,960,818	724,855	5,814,554	996,011	147,912	1.3	0.0	3.2	0	10.88	15.42	41,222	0	0	0	0	0	0	
8	1.07	6,238,040	23.4	2,960,821	724,859	5,814,554	996,003	147,912	1.4	0.0	3.2	0	11.67	16.75	41,222	35,165	44,021	0	0	0	0	
9	0.60	6,376,722	12.3	2,960,827	724,862	5,814,554	995,993	147,912	1.6	0.0	3.5	0	12.42	17.08	40,631	42,185	36,582	0	0	0	0	
10	0.40	6,494,162	10.0	2,961,033	727,288	5,814,554	1,001,217	147,912	2.1	0.0	3.4	0	12.42	16.58	38,999	42,185	44,105	0	0	0	0	
11	0.90	6,602,991	9.6	2,961,036	729,460	5,814,554	1,004,683	147,912	2.6	0.0	3.4	10,279	15.83	32,155	42,161	51,415	0	0	0	0	0	
12	0.47	6,691,417	22.4	2,961,375	849,500	5,814,563	1,005,405	147,912	3.1	0.0	3.3	0	15.75	14.83	26,781	35,421	41,438	0	0	0	0	
13	0.00	6,814,772	20.6	2,971,670	874,366	5,814,648	1,007,732	147,912	3.5	0.0	3.3	0	16.83	15.00	45,627	42,537	49,976	0	0	0	0	
14	0.00	6,900,216	21.4	2,971,767	891,906	5,814,649	1,007,732	147,912	3.6	0.0	3.3	0	16.33	15.92	45,628	0	49,927	0	0	0	0	
15	0.00	6,985,660	22.2	2,971,863	909,446	5,814,649	1,007,732	147,912	3.7	0.0	3.3	52,764	15.83	45,628	35,402	43,935	0	0	0	0	0	
16	0.00	7,124,800	9.6	2,973,067	916,904	5,814,653	1,007,732	147,913	3.9	0.0	3.2	59,892	17.00	42,197	72,615	51,424	0	0	0	0	0	
17	0.01	7,236,333	14.9	2,973,596	1,009,192	5,814,671	1,007,774	149,713	3.2	0.0	3.2	31,608	17.25	40,506	49,890	49,964	0	0	0	0	0	
18	0.04	7,339,896	19.1	2,977,596	1,049,777	5,814,671	1,007,774	147,913	3.2	0.0	3.1	78,590	16.00	47,352	72,553	71,553	11,239	0	0	0	0	
19	0.00	7,446,175	11.9	2,977,599	1,049,777	5,814,671	1,007,774	147,913	3.2	0.0	3.1	78,590	16.00	47,352	72,553	71,553	11,239	0	0	0	0	
20	0.08	7,552,058	9.6	2,977,601	1,072,527	5,814,671	1,007,774	147,913	3.2	0.0	2.5	55,168	14.75	42,537	94,849	49,879	0	0	0	0	0	
21	0.00	7,654,130	12.7	2,977,606	1,066,999	5,814,671	1,007,774	147,914	3.2	0.0	2.0	45,134	14.50	27,559	37,631	0	0	0	0	0	0	
22	0.00	7,756,202	15.7	2,977,610	1,099,671	5,814,671	1,007,774	147,914	3.2	0.0	1.5	35,100	14.25	27,559	65,074	44,007	8,155	14,692	7,313	0	0	0
23	0.01	7,850,764	19.1	2,977,614	1,108,873	5,814,671	1,007,774	148,620	3.0	0.0	3.2	88,449	13.00	29,109	79,955	43,918	0	0	0	0	0	
24	0.00	7,947,971	16.9	2,977,618	1,117,575	5,814,671	1,007,774	150,009	2.7	0.0	3.4	86,634	11.00	27,015	35,206	93,506	0	0	0	0	0	
25	0.02	8,047,932	15.8	2,987,292	1,118,063	5,814,671	1,007,774	151,112	2.7	0.0	2.7	17,353	9.08	32,570	42,206	79,114	0	0	0	0	0	
26	0.01	8,148,610	19.8	2,995,320	1,118,067	5,814,671	1,007,774	152,220	3.8	0.0	3.2	0	7.42	10,67	33,033	42,166	49,603	0	0	0	0	
27	0.68	8,247,277	10.8	3,002,654	1,118,073	5,814,671	1,070,175	153,159	3.2	0.0	2.0	0	8.92	10.00	35,336	0	49,719	0	0	0	0	
28	0.00	8,347,277	16.4	3,008,587	1,118,078	5,814,671	1,155,988	153,750	3.0	0.0	2.5	16,291	13.00	35,337	0	0	0	0	0	0	0	
29	0.01	8,453,277	21.9	3,014,520	1,118,083	5,814,671	1,241,800	154,341	2.8	0.0	3.0	32,582	17.08	35,337	35,393	44,139	0	0	0	0	0	
30	0.00	8,590,500	22.5	3,016,783	1,119,420	5,814,671	1,289,200	155,876	2.7	0.0	3.4	38,586	16.17	10,50	37,940	100,551	65,365	0	0	0	0	0
31	4.38	8,619,806	17.3	3,023,971	1,120,676	5,814,671	1,335,260	155,876	3.3	0.0	2.8	0	15.17	10.17	38,695	73,334	86,685	0	0	0	0	0
Totals	11.00									0		708,321			1,184,876	1,455,320	1,349,519	33,420	14,692	7,313	0	

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- NR = No Records, NA = Not Available.
- Values in bold are estimated, values in italic are substitute for missing data and are based on averaged values.
- Column IV includes quantities from leak detection system.

Type of Cover	Phases I-VI acres	Sections 7-9 acres	Section 9 acres
Open	5	0	0
Intermediate	134.4	19.3	15
Final	23	0	0
Not Opened	0	0	0

- NR = No Records, NA = Not Available.
- Values in bold are estimated, values in italic are substitute for missing data and are based on averaged values.
- Column IV includes quantities from leak detection system.

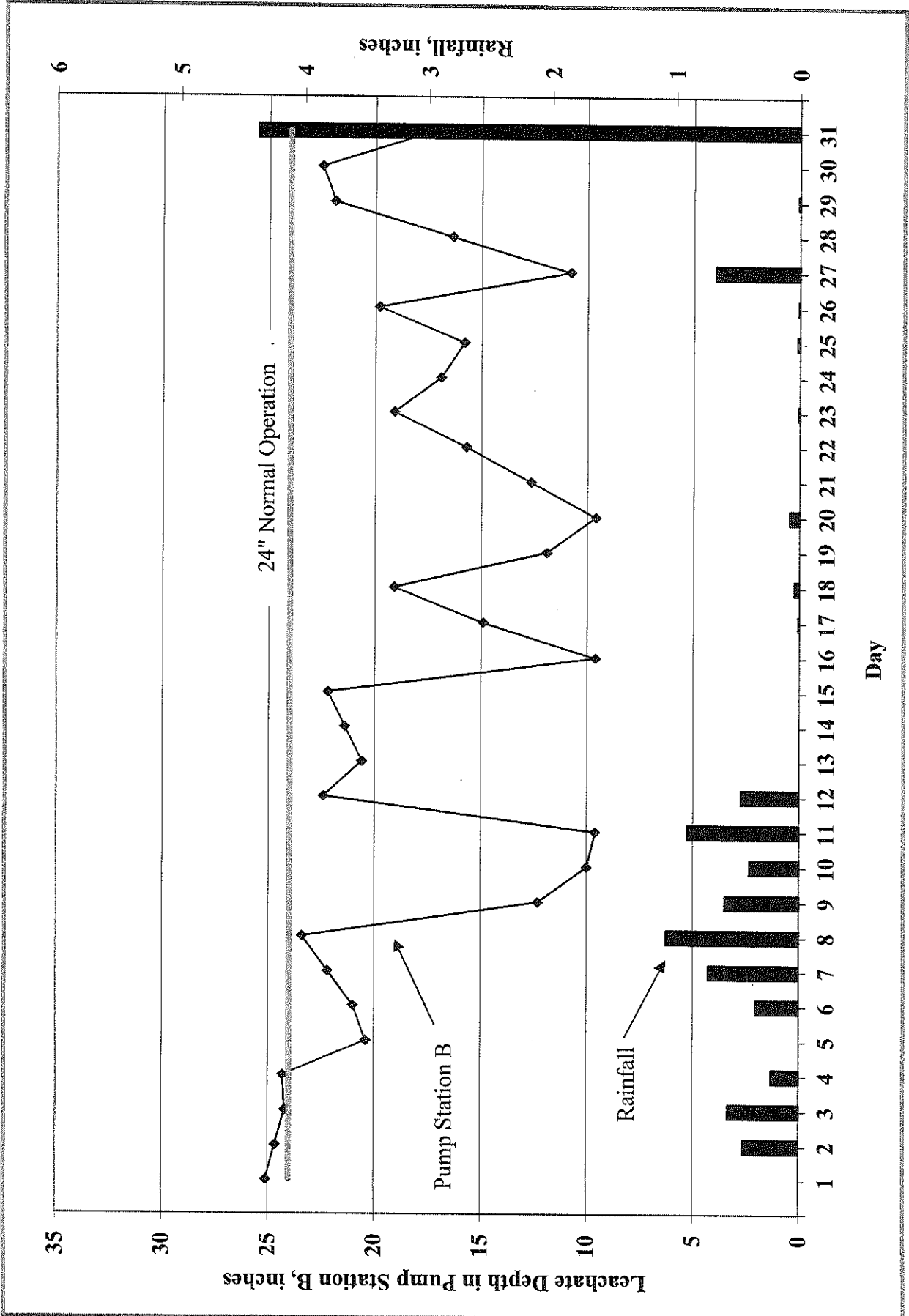


Figure 1. Leachate Levels in Pump Station B and Rainfall for August 2016.

TABLE 3. LEACHATE BALANCE SUMMARY
SOUTHEAST COUNTY LANDFILL
HILLSBOROUGH COUNTY, FLORIDA
YEAR-2016

Month	Rainfall (in.)	Leachate Arriving at LTRF				Leachate Leaving LTRF			Effluent Disposal				Inflow / Outflow For LTRF		
		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.)	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	7.36	13,493	720	155,274	2,520,135	2,382,887	0	183,500	0	36,630	2,689,622	2,566,387	123,235		
February	1.61	9,430	511	218,755	2,493,661	1,353,187	0	1,061,000	0	353,350	2,722,357	2,414,187	308,170		
March	2.31	8,864	410	120,310	2,157,400	1,738,430	27,118	360,800	0	443,343	2,286,984	2,126,348	160,636		
April	2.50	5,771	195	102,931	2,268,165	1,607,452	0	743,800	0	649,650	2,377,062	2,351,252	25,810		
May	8.03	12,092	228	53,694	2,719,435	1,652,011	0	948,800	0	771,435	2,785,449	2,600,811	184,638		
June	11.46	13,747	236	1	2,472,400	1,650,372	5,293	853,400	21,936	1,097,101	2,486,384	2,509,065	-22,681		
July	5.55	9,860	0	0	2,930,831	1,956,329	10,698	1,020,000	0	1,045,869	2,940,691	2,987,027	-46,336		
August	11.00	11,158	458,958	340,165	3,352,655	2,804,839	33,420	1,184,800	22,005	708,321	4,162,936	4,023,059	139,877		
September															
October															
November															
December															
YTD Total	49.82	84,415	461,258	991,130	20,914,682	15,145,507	76,529	6,356,100	43,941	5,105,699	22,451,485	21,578,136	873,349		

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. Leachate from the Hillsborough Heights and Taylor Road landfills is being hauled to the Faulkenburg Road Wastewater Treatment Facility.
3. Change in storage represents total inflow to LTRF minus total outflow from LTRF.