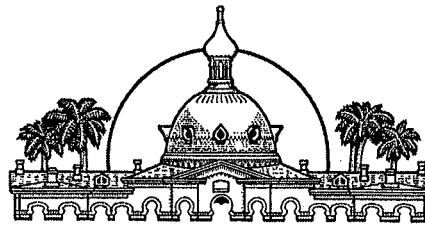


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Hillsborough County
Florida

Office of the Interim County Administrator
Michael S. Merrill

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Lucia E. Garsys
Carl S. Harness
Eric R. Johnson
Manus J. O'Donnell
Edith M. Stewart

October 11, 2010

Ms. Susan J. Pelz, P.E.
Solid Waste Permitting
Florida Department of Environmental Protection
Southwest District
13051 N. Telecom Pkwy
Temple Terrace, Florida 33637

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
OCT 13 2010
SOUTHWEST DISTRICT
TAMPA

RE: Southeast County Landfill – Leachate Data Quarterly Report

Dear Ms. Pelz:

In accordance with Specific Condition No. 8 of Permit No. 35435-014-SO, the Solid Waste Management Department (SWMD) is submitting the quarterly Leachate Water Balance summary for the Southeast County Landfill for the quarter ending October 15, 2010.

The data is being submitted as separate monthly reports for July, August, and September 2010. The information includes the leachate level in Pump Station B (PS-B). PS-B was below the 24-inch normal operation level during this quarter except for July 29, and August 18 due to a bubbler malfunction and a power outage. These malfunctions were immediately corrected.

Also attached is the top of the phosphatic clay liner elevation at the Pump Station B Sump.

Please advise should you have any questions concerning the attached submittal.

Sincerely,

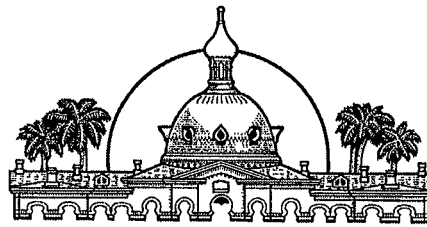
Patricia V. Berry
Landfill Services Section Manager
Solid Waste Management Department

Attachment

xc: Larry Ruiz, SWMD
Cindy Pelley, SWMD
Rich Siemering, HDR
Ron Cope, EPC
Paul Schipfer, EPC

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September 24, 2010

Ms. Susan J. Pelz, P.E.
Solid Waste Permitting
Florida Department of Environmental Protection
Southwest District
13051 N. Telecom Pkwy
Temple Terrace, Florida 33637

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
OCT 13 2010
SOUTHWEST DISTRICT
TAMPA

RE: Southeast County Landfill – July 2010 Leachate Data

Dear Ms. Pelz:

In accordance with the Hillsborough County Solid Waste Management Department's (SWMD) Leachate Management Plan (LMP) for the Southeast County Landfill (Landfill), the SWMD is providing the Landfill's Water Balance Report for the month of July 2010. In addition, the SWMD is providing the July 2010 field data forms for the Landfill, the daily leachate and collection system evaluation reports and the Year-to-Date Leachate Balance Summary.

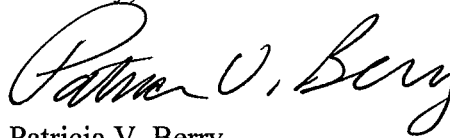
This information is being provided to the Florida Department of Environmental Protection (FDEP) and the Hillsborough County Environmental Protection Commission as part of the quarterly Leachate Water Balance report on the Landfill leachate management efforts in accordance with Permit No. 35435-014-SO, Specific Condition No. 8.

As initiated with the April 1996 report, the Landfill leachate information for July 2010 includes an evaluation by SWMD staff of the monthly data. The report includes a figure depicting the leachate levels in Pump Station B (PS-B) and rainfall. PS-B was below the normal operation level of 24 inches except for July 29 due to a bubbler malfunction. The average depth of leachate in the PS-B sump for the recorded days in July 2010 was 23.3 inches.

Ms. Susan J. Pelz
September 24, 2010
Page Two

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

Sincerely,

A handwritten signature in black ink, appearing to read "Patricia V. Berry". The signature is fluid and cursive, with the first name "Patricia" being more prominent and the last name "Berry" following in a similar style.

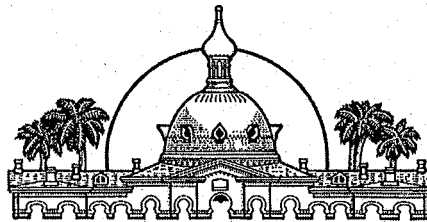
Patricia V. Berry
Landfill Services Section Manager
Solid Waste Management Department

Attachments

glfs/lea0710.dep

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Hillsborough County
Florida

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Lucia E. Garsys
Carl S. Harness
Eric R. Johnson
Manus J. O'Donnell
Edith M. Stewart

MEMORANDUM

DATE: August 31, 2010

TO: Patricia Berry, Section Manager, Solid Waste Management Division

FROM:  Larry Ruiz, General Manager III, Solid Waste Management Division
Raymond Graves, Sr. Eng. Tech., Solid Waste Management Division

SUBJECT: Leachate Water Balance Report Forms for July
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 2010 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 8.8 inches of rainfall at the Southeast County Landfill (SCLF).

MEMORANDUM

August 31, 2010

Page 2 of 6

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 2.1 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 1.5 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 of 24-inches except for July 29 due to a bubbler malfunction. The average recorded depth of leachate in the PS-B sump was 23.3 inches.

Leachate Pumped to PS-B from TPS-6 (Column VI)

Column VI presents the quantity of leachate from Phase IV pumped to PS-B by Temporary Pump Station-6 (TPS-6). The quantity of leachate removed by TPS-6 is measured in gallons by an in-line flow meter and is included in the quantity of leachate pumped to the Main Leachate Pump Station (MLPS) from Phases I-VI (Column VII). The average daily amount of leachate pumped from TPS-6 was 17,762 gallons. A total of 550,610 gallons of leachate was pumped this month.

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

Column VII 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 quantity in column VII also includes the daily amount of leachate, in gallons, pumped from TPS-6. The average daily amount of leachate pumped from PS-A was 28,300 gallons. A total of 877,301 gallons of leachate was pumped this month.

MEMORANDUM

August 31, 2010

Page 3 of 6

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

Column VIII 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 1,209 gallons of leachate was removed from the leak detection system of Sections 7-8.

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

Column IX 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 128,891 gallons of leachate was pumped from Sections 7-8.

Leachate Pumped to LTRF from the MLPS (Column X)

Column X presents the total quantity of leachate pumped to the LTRF from Phases I-VI and Sections 7-8. This month a total of 1,015,012 gallons of leachate was pumped to the LTRF.

Leachate Pumped to LTRF from Section 9 (Column XI)

Column XI 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 45,373 gallons of leachate was pumped this month.

Leachate Pumped from Section 9 LDS (Column XII)

Column XII 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 a total of 8,820 gallons of leachate were removed from the leak detection system. On May 9, the flow meter began malfunctioning and currently we are awaiting a replacement meter. Until then, for missing data, we are using the pump hour meter to estimate the LDS flow.

MEMORANDUM

August 31, 2010

Page 4 of 6

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

Column XIII 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 257,700 gallons of leachate was stored in the tank.

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

Column XIV 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 264,700 gallons of effluent was stored in the tank.

Leachate Treated at LTRF (Column XV)

Column XV presents the daily amount of leachate, in gallons, treated at the LTRF. This month a total of 622,000 gallons of leachate was treated.

Total Leachate Hauled (Column XVI)

Column XVI presents the daily amount of leachate, in gallons, hauled off site. This month a total of 428,135 gallons of leachate was hauled off site.

Leachate Dust Control Sprayed (Column XVII)

Column XVII 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 leachate was not used for dust control.

Pond A Storage (Column XVIII)

Column XVIII 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 64,700 gallons of effluent was stored in Pond A.

MEMORANDUM

August 31, 2010

Page 5 of 6

Pond B Storage (Column XIX)

Column XIX 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 54,300 gallons of effluent was stored in Pond B.

Effluent Sprayed at Pond B (Column XX)

Column XX 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 effluent was not sprayed in Pond B.

Effluent Irrigation (Column XXI)

Column XXI 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 278,792 gallons of effluent was used for spray irrigation.

Effluent Dust Control Sprayed (Column XXII)

Column XXII 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 a total of 78,063 gallons of effluent was sprayed as dust control.

Total Effluent Hauled (Column XXIII)

Column XXIII presents the daily amount of effluent, in gallons, hauled off site, as measured from the flow meter at the bypass-loading arm. This month a total of 473,967 gallons of effluent was hauled off site.

Total Evaporation (Column XXIV)

Column XXIV 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. The total evaporation estimated for this month was 285,500 gallons.

MEMORANDUM

August 31, 2010

Page 6 of 6

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 1,060,385 gallons. Total outflow quantity from the LTRF was 1,050,135 gallons. The change in storage for the month increased by 10,250 gallons.

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

TABLE 1. LEACHATE WATER BALANCE REPORT FORM
JULY 2010
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
Day	Rainfall (in.)	Depth in Pond A (ft.)	Depth in Pond B (ft.)	Estimated Depth at PS-B (in.)	Leachate Pumped to PS-B from TPS-6 (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 MLPS (gal.)	Leachate Pumped to LTRF from Section 9 (gal.)	Leachate Pumped from Section 9 LDS (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	0.74	2.4	1.7	22.7	23,510	21,287	24	50	21,337	650	0	187,000	283,000	21,500	0	0	79,000	57,000	0	0	0	44,472	0
2	0.10	2.4	1.7	22.3	21,740	18,080	49	7,802	25,882	6,176	0	199,000	261,000	21,300	0	0	79,000	57,000	0	0	0	38,076	0
3	0.10	2.4	1.7	23.4	22,860	36,980	21	0	38,156	71	1,176	216,000	250,000	20,800	0	0	79,000	57,000	0	0	0	0	0
4	1.85	2.5	1.8	23.3	8,345	25,088	28	5,011	30,098	1,703	0	230,000	269,000	20,900	0	0	83,600	57,000	0	0	0	0	0
5	0.97	2.6	1.9	23.2	8,345	25,088	28	5,011	31,862	1,703	1,764	245,000	288,000	20,700	0	0	88,000	72,000	0	0	0	26,106	0
6	1.23	2.7	2.1	22.2	22,480	32,350	32	12,597	46,123	140	1,176	276,000	278,000	21,300	6,019	0	93,000	88,000	0	0	0	38,121	0
7	0.00	2.8	2.2	23.6	18,520	32,537	33	8,555	41,680	1,764	588	295,000	266,000	22,500	12,037	0	98,000	97,000	0	0	0	13,071	0
8	0.00	2.8	2.2	23.4	21,585	33,024	41	8,302	43,090	207	1,764	305,000	274,000	19,500	12,035	0	98,000	97,000	0	0	0	32,158	0
9	0.00	2.8	2.2	23.0	19,765	32,391	44	4,109	37,676	4,782	1,176	312,000	261,000	20,000	18,061	0	98,000	97,000	0	0	0	26,221	0
10	0.00	2.8	2.2	23.0	20,870	31,635	51	0	31,635	2,124	0	317,000	261,000	20,400	0	0	98,000	97,000	0	24,282	0	0	19,400
11	0.00	2.5	2.2	23.3	9,335	27,488	29	0	27,488	357	0	319,000	281,000	20,400	0	0	83,000	97,000	0	0	0	0	0
12	0.00	2.1	2.2	23.6	9,335	27,488	29	0	27,488	357	0	322,000	300,000	20,400	24,088	0	65,000	97,000	0	15,246	9,000	19,171	19,400
13	0.00	1.7	2.2	23.9	21,290	35,311	16	0	35,311	732	0	309,000	290,000	20,700	24,141	0	48,000	97,000	0	25,136	9,010	19,772	27,300
14	0.00	2.0	1.8	23.2	20,960	26,335	20	0	26,335	1,637	0	293,000	281,000	18,500	24,340	0	61,000	64,000	0	23,636	9,002	19,831	26,100
15	1.37	1.8	1.6	23.4	18,270	26,350	34	23,035	49,385	2,149	0	302,000	274,000	20,800	24,082	0	52,000	51,000	0	27,454	9,003	19,532	29,200
16	0.00	1.8	1.6	22.6	14,650	23,546	36	3,579	27,125	4,164	0	295,000	261,000	17,400	24,149	0	52,000	51,000	0	0	0	20,191	0
17	0.00	1.8	1.6	23.2	15,560	23,603	39	4,150	28,929	0	1,176	290,000	257,000	21,100	0	0	52,000	51,000	0	0	0	0	0
18	0.15	1.8	1.6	21.1	19,775	27,859	52	4,019	31,868	2,566	0	299,000	276,000	21,100	0	0	52,000	51,000	0	0	0	0	0
19	0.00	1.7	1.6	19.0	19,775	27,850	52	4,019	31,868	2,566	0	307,000	295,000	18,800	42,452	0	48,000	51,000	0	21,796	0	0	17,400
20	0.00	2.1	1.6	23.9	14,140	21,106	51	3,989	25,095	0	0	274,000	266,000	18,800	42,249	0	65,000	51,000	0	16,000	9,010	0	20,000
21	0.00	1.7	1.6	23.2	17,070	22,825	49	4,082	26,907	16	0	235,000	257,000	20,000	42,110	0	48,000	51,000	0	20,868	9,004	0	23,900
22	0.00	1.2	1.6	22.7	18,772	26,664	57	3,956	30,620	634	0	204,000	264,000	18,500	18,050	0	32,000	51,000	0	0	9,016	20,147	7,200
23	1.16	1.5	1.2	23.8	18,158	26,991	43	2	26,993	1,315	0	204,000	247,000	19,300	18,053	0	40,000	28,000	0	18,450	0	27,035	14,800
24	0.77	1.2	1.3	23.8	25,770	34,727	51	4,229	38,956	1,199	0	214,000	247,000	19,900	0	0	32,000	33,000	0	0	0	0	0
25	0.05	1.4	1.4	22.9	160	16,792	41	3,724	20,516	1,445	0	215,000	254,000	19,900	0	0	36,000	38,000	0	0	0	0	0
26	0.00	1.6	1.5	21.9	160	16,792	41	3,724	20,516	1,445	0	216,000	261,000	19,900	18,082	0	44,000	44,000	0	0	0	27,140	0
27	0.00	2.8	0.0	23.0	30,200	45,615	43	1	45,616	1,123	0	221,000	250,000	20,900	18,045	0	98,000	0	0	19,630	0	27,590	15,700
28	0.00	2.3	0.0	23.7	14,430	26,258	55	3,720	29,978	1,330	0	225,000	245,000	19,500	18,044	0	74,000	0	0	24,072	0	27,323	19,300
29	0.30	1.8	0.0	34.0	21,550	33,860	57	3,809	37,669	1,531	0	221,000	233,000	18,200	24,056	0	52,000	0	0	25,000	6,007	13,622	24,800
30	0.00	1.4	0.0	23.0	25,380	34,251	56	3,673	37,924	0	0	221,000	233,000	18,800	18,042	0	36,000	0	0	0	0	13,842	0
31	0.00	1.6	0.0	22.8	27,850	37,141	11	3,745	40,886	1,487	0	221,000	242,000	20,200	0	0	44,000	0	0	17,222	9,011	0	21,000
Total	8.79				550,610	877,301	1,209	128,891	1,015,012	45,373	8,820			622,000	428,135	0			0	278,792	78,063	473,967	285,500
Daily Average		2.1	1.5	23.3	17,762	28,300	39	4,158	32,742	1,464	285	257,700	264,700				64,700	54,300					
Mo. Average																0				9,000	3,000	15,300	9,210

projects\balance\2010\07-10\bal.xls (rdw 08/03/10)

- Notes:
1. NR = No Records, NA = Not Available.
 2. Values in bold are estimated; values in *italics* 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. Column V, PPS-B sensor reading plus 9 inches.
 8. Columns VIII & IX, Section 7-8 leak detection pumped into Section 7 leachate sump riser.
 9. Column XIII and XIV, calculated from depth in 575,000 gal. tanks.
 10. Columns VI-XII, XV-XVII, and XX-XXIII, quantities from flow meters.
 11. Column XXIV includes 80% of the daily values from Columns XVII, XXI, and XXII plus 5% of the daily values from column XX.

TABLE 2. FIELD DATA ENTRY FORM
JULY 2010
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
Day	Rainfall (in.)	Flow Meter TPS-6 (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.)	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.)	Leachate Hauled Contractor (gal.)	Leachate Hauled County (gal.)	Leachate Dust Control (Sprayed) (gal.)	Effluent Hauled Contractor (gal.)	Effluent Hauled County (gal.)	Effluent Dust Control (Sprayed) (gal.)
1	0.74	19,379,200	2,325,530	13.7	1,700,927	1,267,808	NR	2,090,479	38,627	1.7	0.0	2.4	0	6.50	9.83	21,460	0	0	0	26,455	18,017	0
2	0.10	19,400,940	2,343,610	13.3	1,705,515	1,269,396	NR	2,098,281	38,676	1.7	0.0	2.4	0	6.92	9.08	21,333	0	0	0	26,058	12,018	0
3	0.10	19,423,800	2,380,590	14.4	1,705,586	1,269,396	NR	2,098,281	38,697	1.7	0.0	2.4	0	7.50	8.67	20,804	0	0	0	0	0	0
4	1.85	19,432,145	2,405,678	14.3	1,707,289	1,269,396	NR	2,103,292	38,725	1.8	0.0	2.5	0	8.0	9.3	20,870	0	0	0	0	0	0
5	0.97	19,440,490	2,430,765	14.2	1,708,992	1,269,396	NR	2,108,302	38,752	1.9	0.0	2.6	0	8.50	10.00	20,740	0	0	0	26,106	0	0
6	1.23	19,462,970	2,463,115	13.2	1,708,992	1,269,536	NR	2,120,899	38,784	2.1	0.0	2.7	0	9.58	9.67	21,276	0	6,019	0	26,100	12,021	0
7	0.00	19,481,490	2,495,652	14.6	1,709,024	1,271,268	NR	2,129,454	38,817	2.2	0.0	2.8	0	10.25	9.25	22,501	0	12,037	0	13,071	0	0
8	0.00	19,503,075	2,528,676	14.4	1,709,231	1,271,268	NR	2,137,756	38,858	2.2	0.0	2.8	0	10.58	9.50	19,463	0	12,035	0	32,158	0	0
9	0.00	19,522,840	2,561,067	14.0	1,714,013	1,271,268	NR	2,141,865	38,902	2.2	0.0	2.8	0	10.83	9.08	19,970	0	18,061	0	26,221	0	0
10	0.00	19,543,710	2,592,702	14.0	1,714,202	1,273,203	NR	2,141,865	38,953	2.2	0.0	2.8	24,282	11.00	9.08	20,381	0	0	0	0	0	0
11	0.00	19,553,045	2,620,190	14.3	1,714,202	1,273,560	NR	2,141,865	38,982	2.2	0.0	2.5	0	11.1	9.8	20,382	0	0	0	0	0	0
12	0.00	19,562,380	2,647,678	14.6	1,714,202	1,273,917	NR	2,141,865	39,010	2.2	0.0	2.1	15,246	11.17	10.42	20,382	6,023	18,065	0	19,717	0	9,000
13	0.00	19,583,670	2,682,989	14.9	1,714,934	1,273,917	NR	2,141,865	39,026	2.2	0.0	1.7	25,136	10.75	10.08	20,688	6,081	18,060	0	19,772	0	9,010
14	0.00	19,604,630	2,709,324	14.2	1,716,571	1,273,917	NR	2,141,865	39,046	1.8	0.0	2.0	23,636	10.17	9.75	18,481	6,281	18,059	0	19,831	0	9,002
15	1.37	19,622,900	2,735,674	14.4	1,718,720	1,273,917	NR	2,164,900	39,080	1.6	0.0	1.8	27,454	10.50	9.50	20,771	6,029	18,053	0	19,532	0	9,003
16	0.00	19,637,550	2,759,220	13.6	1,722,884	1,273,917	NR	2,168,479	39,116	1.6	0.0	1.8	0	10.25	9.08	17,412	6,095	18,054	0	20,191	0	0
17	0.00	19,653,110	2,782,823	14.2	1,722,884	1,273,917	NR	2,172,629	39,155	1.6	0.0	1.8	0	10.08	8.92	21,065	0	0	0	0	0	0
18	0.15	19,672,885	2,810,673	12.1	1,725,450	1,273,917	NR	2,176,648	39,207	1.6	0.0	1.8	0	10.4	9.6	21,110	0	0	0	0	0	0
19	0.00	19,692,660	2,838,522	10.0	1,728,016	1,273,917	NR	2,180,666	39,258	1.6	0.0	1.7	21,796	10.67	10.25	18,762	24,391	18,061	0	0	0	0
20	0.00	19,706,800	2,859,628	14.9	1,728,016	1,273,917	NR	2,184,655	39,309	1.6	0.0	2.1	16,000	9.50	9.25	18,763	24,195	18,054	0	0	0	9,010
21	0.00	19,723,870	2,882,453	14.2	1,728,032	1,273,917	NR	2,188,737	39,358	1.6	0.0	1.7	20,868	8.17	8.92	19,978	24,062	18,048	0	0	0	9,004
22	0.00	19,742,642	2,909,117	13.7	1,728,666	1,273,917	NR	2,192,693	39,415	1.6	0.0	1.2	0	7.08	9.17	18,492	6,014	12,036	0	20,147	0	9,016
23	1.16	19,760,800	2,936,108	14.8	1,729,981	1,273,917	NR	2,192,695	39,458	1.2	0.0	1.5	18,450	7.08	8.58	19,338	0	18,053	0	27,035	0	0
24	0.77	19,786,570	2,970,835	14.8	1,731,180	1,273,917	NR	2,196,924	39,509	1.3	0.0	1.2	0	7.42	8.58	19,934	0	0	0	0	0	0
25	0.05	19,786,730	2,987,627	13.9	1,732,625	1,273,917	NR	2,200,648	39,550	1.4	0.0	1.4	0	7.5	8.8	19,934	0	0	0	0	0	0
26	0.00	19,786,890	3,004,419	12.9	1,734,070	1,273,917	NR	2,204,372	39,590	1.5	0.0	1.6	0	7.50	9.08	19,934	0	18,082	0	27,140	0	0
27	0.00	19,817,090	3,050,034	14.0	1,735,193	1,273,917	NR	2,204,373	39,633	0.0	0.0	2.8	19,630	7.67	8.67	20,881	0	18,045	0	27,590	0	0
28	0.00	19,831,520	3,076,292	14.7	1,736,523	1,273,917	NR	2,208,093	39,688	0.0	0.0	2.3	24,072	7.83	8.50	19,541	0	18,044	0	27,323	0	0
29	0.30	19,853,070	3,110,152	25.0	1,738,054	1,273,917	NR	2,211,902	39,745	0.0	0.0	1.8	25,000	7.67	8.17	18,212	6,014	18,042	0	13,622	0	6,007
30	0.00	19,878,450	3,144,403	14.0	1,739,402	1,273,917	NR	2,215,575	39,801	0.0	0.0	1.4	0	7.67	8.08	18,782	18,042	0	0	13,842	0	0
31	0.00	19,906,300	3,181,544	13.8	1,740,889	1,273,917	NR	2,219,320	39,812	0.0	0.0	1.6	17,222	7.67	8.42	20,204	0	0	0	0	0	9,011
Totals	8.79										0		278,792			621,844	133,227	294,908	0	431,911	42,056	78063

projects\balance\2010\07-10bal.xls (jdw 08/03/10)

Notes:

- 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.
- Column B, trace is less than 0.01 inches.
- Columns C, D, F, G, H, I, J, L, N, Q, R-V and W are quantities from flow meters.
- Columns K and M measured from staff gages in each pond.

Type of Cover	Phases I-VI acres	Sections 7-8 acres	Section 9 acres
Open	5	0	0
Intermediate	134.4	19.3	15
Final	23	0	0
Not Opened	0	0	0

**TABLE 3. LEACHATE BALANCE SUMMARY
SOUTHEAST COUNTY LANDFILL
HILLSBOROUGH COUNTY, FLORIDA
YEAR-2010**

Month	Rainfall (in.)	Leachate Arriving at LTRF				Leachate Leaving LTRF			Effluent Disposal			Inflow / Outflow For LTRF		
		Leachate Hauled to LTRF from HHLF/TRLF (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	3.50	0	31,114	73,231	794,265	223,008	1,500	625,400	24,397	44,971	463,698	898,610	849,908	48,702
February	2.61	0	47,150	109,806	771,075	337,419	0	560,600	6,489	45,071	483,052	928,031	898,019	30,012
March	7.66	0	56,034	86,576	813,346	372,562	0	608,600	0	137,050	455,821	955,956	981,162	-25,207
April	3.04	0	57,944	71,442	812,598	337,294	0	643,200	6,011	65,856	719,336	941,984	980,494	-38,510
May	1.66	0	43,699	37,397	779,316	234,292	0	644,000	0	266,910	338,759	860,413	878,292	-17,879
June	7.43	0	60,719	20,449	740,158	318,992	0	602,600	242,614	120,108	184,585	821,326	921,592	-100,266
July	8.79	0	54,193	128,891	877,301	428,135	0	622,000	473,967	78,063	278,792	1,060,385	1,050,135	10,250
August														
September														
October														
November														
December														
YTD Total	34.69	0	350,852	527,792	5,588,059	2,251,702	1,500	4,306,400	753,478	758,029	2,924,043	6,466,703	6,559,602	-92,899

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.

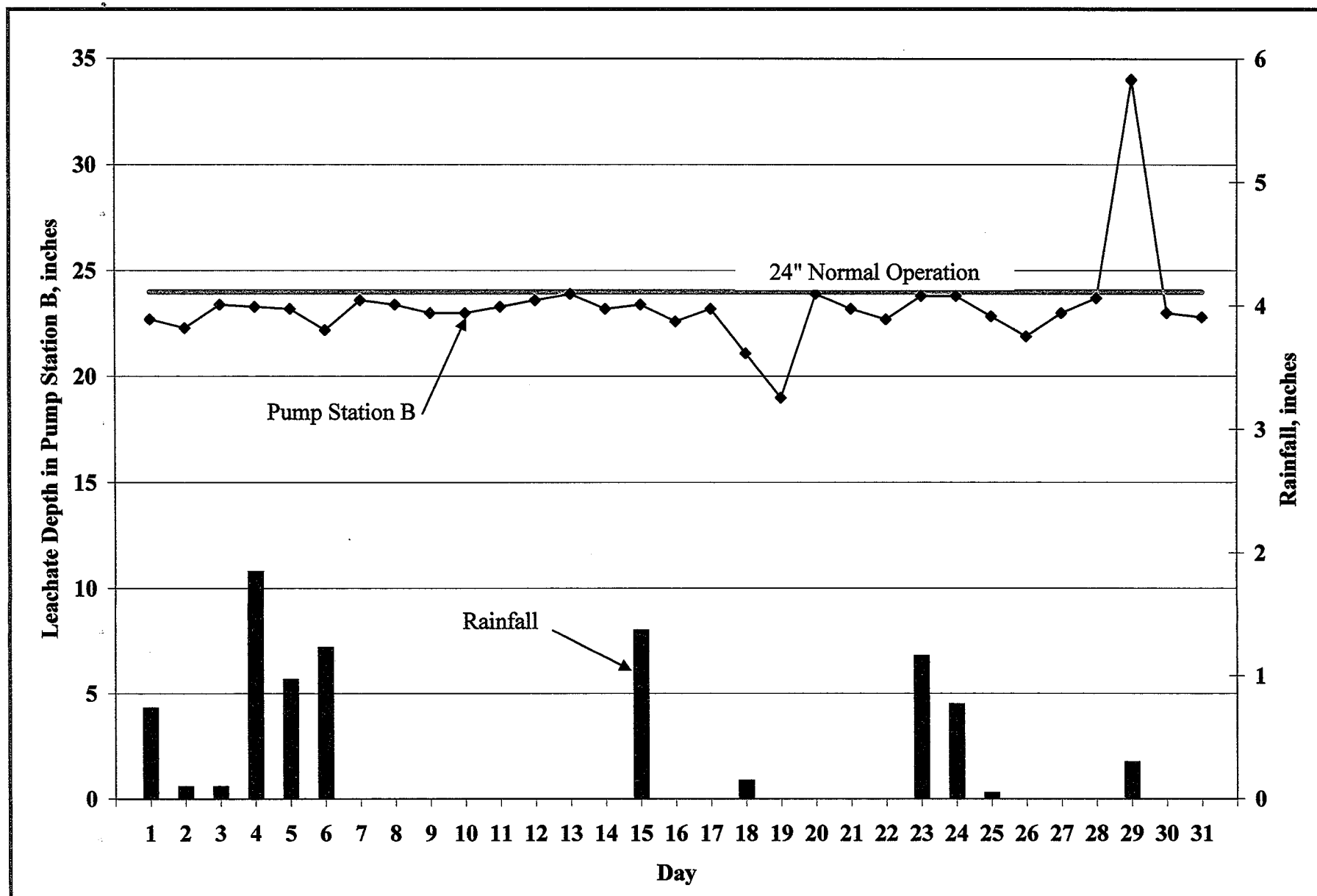
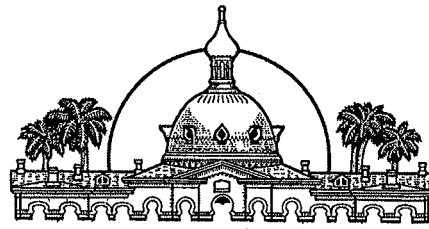


Figure 1. Leachate Levels in Pump Station B and Rainfall for July 2010.

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October 11, 2010

Ms. Susan J. Pelz, P.E.
Solid Waste Permitting
Florida Department of Environmental Protection
Southwest District
13051 N. Telecom Pkwy
Temple Terrace, Florida 33637

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
OCT 13 2010
SOUTHWEST DISTRICT
TAMPA

RE: Southeast County Landfill – August 2010 Leachate Data

Dear Ms. Pelz:

In accordance with the Hillsborough County Solid Waste Management Department's (SWMD) Leachate Management Plan (LMP) for the Southeast County Landfill (Landfill), the SWMD is providing the Landfill's Water Balance Report for the month of August 2010. In addition, the SWMD is providing the August 2010 field data forms for the Landfill, the daily leachate and collection system evaluation reports and the Year-to-Date Leachate Balance Summary.

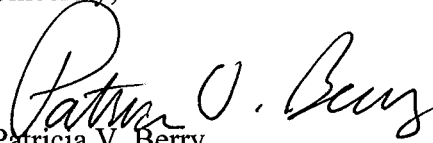
This information is being provided to the Florida Department of Environmental Protection (FDEP) and the Hillsborough County Environmental Protection Commission as part of the quarterly Leachate Water Balance report on the Landfill leachate management efforts in accordance with Permit No. 35435-014-SO, Specific Condition No. 8.

As initiated with the April 1996 report, the Landfill leachate information for August 2010 includes an evaluation by SWMD staff of the monthly data. The report includes a figure depicting the leachate levels in Pump Station B (PS-B) and rainfall. PS-B was below the normal operation level of 24 inches except for August 18 due to a power outage. The average depth of leachate in the PS-B sump for the recorded days in August 2010 was 22.5 inches.

Ms. Susan J. Pelz
October 11, 2010
Page Two

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

Sincerely,

A handwritten signature in black ink, appearing to read "Patricia V. Berry". The signature is fluid and cursive, with the first name "Patricia" being more prominent and the last name "Berry" following in a similar style.

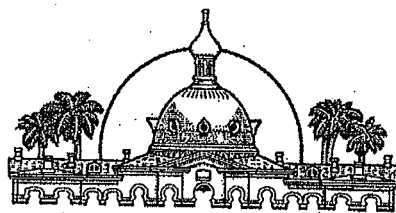
Patricia V. Berry
Landfill Services Section Manager
Solid Waste Management Department

Attachments

glfs/lea0810.dep

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MEMORANDUM

DATE: October 7, 2010

TO: Patricia Berry, Section Manager, Solid Waste Management Division

FROM:  Larry Ruiz, General Manager III, Solid Waste Management Division
Raymond Graves, Sr. Eng. Tech., Solid Waste Management Division

SUBJECT: Leachate Water Balance Report Forms for August
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 2010 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 12.1 inches of rainfall at the Southeast County Landfill (SCLF).

MEMORANDUM

October 7, 2010

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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 2.7 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 1.7 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 of 24-inches except for August 18 due to a power outage. The average recorded depth of leachate in the PS-B sump was 22.5 inches.

Leachate Pumped to PS-B from TPS-6 (Column VI)

Column VI presents the quantity of leachate from Phase IV pumped to PS-B by Temporary Pump Station-6 (TPS-6). The quantity of leachate removed by TPS-6 is measured in gallons by an in-line flow meter and is included in the quantity of leachate pumped to the Main Leachate Pump Station (MLPS) from Phases I-VI (Column VII). The average daily amount of leachate pumped from TPS-6 was 18,923 gallons. A total of 586,620 gallons of leachate was pumped this month.

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

Column VII 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 quantity in column VII also includes the daily amount of leachate, in gallons, pumped from TPS-6. The average daily amount of leachate pumped from PS-A was 30,139 gallons. A total of 934,303 gallons of leachate was pumped this month.

MEMORANDUM

October 7, 2010

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

Column VIII 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 1,609 gallons of leachate was removed from the leak detection system of Sections 7-8.

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

Column IX 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 168,177 gallons of leachate was pumped from Sections 7-8.

Leachate Pumped to LTRF from the MLPS (Column X)

Column X presents the total quantity of leachate pumped to the LTRF from Phases I-VI and Sections 7-8. This month a total of 1,103,679 gallons of leachate was pumped to the LTRF.

Leachate Pumped to LTRF from Section 9 (Column XI)

Column XI 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 46,150 gallons of leachate was pumped this month.

Leachate Pumped from Section 9 LDS (Column XII)

Column XII 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 a total of 1,199 gallons of leachate were removed from the leak detection system. On May 9, the flow meter began malfunctioning. A new flow meter was installed on August 10, 2010. The pump hour meter was used to estimate the LDS flow prior to the installation of the new flow meter.

MEMORANDUM

October 7, 2010

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

Column XIII 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 274,400 gallons of leachate was stored in the tank.

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

Column XIV 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 274,200 gallons of effluent was stored in the tank.

Leachate Treated at LTRF (Column XV)

Column XV presents the daily amount of leachate, in gallons, treated at the LTRF. This month a total of 779,500 gallons of leachate was treated.

Total Leachate Hauled (Column XVI)

Column XVI presents the daily amount of leachate, in gallons, hauled off site. This month a total of 283,236 gallons of leachate was hauled off site.

Leachate Dust Control Sprayed (Column XVII)

Column XVII 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 leachate was not used for dust control.

Pond A Storage (Column XVIII)

Column XVIII 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 94,300 gallons of effluent was stored in Pond A.

MEMORANDUM

October 7, 2010

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Pond B Storage (Column XIX)

Column XIX 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 86,800 gallons of effluent was stored in Pond B.

Effluent Sprayed at Pond B (Column XX)

Column XX 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 effluent was not sprayed in Pond B.

Effluent Irrigation (Column XXI)

Column XXI 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 215,125 gallons of effluent was used for spray irrigation.

Effluent Dust Control Sprayed (Column XXII)

Column XXII 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 a total of 93,055 gallons of effluent was sprayed as dust control.

Total Effluent Hauled (Column XXIII)

Column XXIII presents the daily amount of effluent, in gallons, hauled off site, as measured from the flow meter at the bypass-loading arm. This month a total of 211,111 gallons of effluent was hauled off site.

Total Evaporation (Column XXIV)

Column XXIV 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. The total evaporation estimated for this month was 246,600 gallons.

MEMORANDUM

October 7, 2010

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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 1,149,829 gallons. Total outflow quantity from the LTRF was 1,062,736 gallons. The change in storage for the month increased by 87,093 gallons.

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

TABLE 1. LEACHATE WATER BALANCE REPORT FORM
AUGUST 2010
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
Day	Rainfall (in.)	Depth in Pond A (ft.)	Depth in Pond B (ft.)	Estimated Depth at P8-B (in.)	Leachate Pumped from P8-B (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 MLPS (gal.)	Leachate Pumped to LTRF from Section 9 (gal.)	Leachate Pumped from Section 9 LDS (gal.)	Leachate in 575K Tank (gal.)	Effluent in 575K Tank (gal.)	Leachate Treated at LTRF (gal.)	Total Leachate Handled (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 Handled (gal.)	Total Evaporation (gal.)
1	0.00	1.6	0.0	22.7	21,900	30,849	0.0	1,900	32,748	1,594	0	222,000	235,000	20,200	0	0	44,000	0	0	0	0	0	0
2	0.23	1.5	0.0	22.5	21,900	30,849	4	1,900	32,748	1,594	0	245,000	250,000	20,200	18,045	0	40,000	0	0	21,366	18,001	0	31,400
3	0.00	1.0	0.0	22.4	19,990	29,639	0.0	4,180	33,819	4,943	0	245,000	259,000	22,800	6,012	0	24,000	0	0	0	11,987	6,003	9,600
4	0.00	1.0	0.0	18.8	24,665	36,920	0	0	36,920	0	0	252,000	264,000	26,000	0	0	24,000	0	0	0	15,000	0	12,000
5	0.87	1.4	0.0	22.9	11,395	18,025	0	0	18,025	131	0	252,000	257,000	23,800	6,014	0	36,000	0	0	18,012	18,007	0	28,800
6	0.03	1.1	0.0	20.4	21,060	32,679	0	5,094	37,773	269	0	259,000	264,000	24,800	18,045	0	28,000	0	0	0	0	0	0
7	0.00	1.7	0.0	23.7	17,560	26,543	0	3,601	30,144	1,018	0	245,000	269,000	23,600	0	0	48,000	0	0	14,825	0	0	11,900
8	2.88	2.3	0.0	21.2	19,405	31,073	0.0	1,878	32,951	2,013	0	268,000	267,000	26,100	0	0	74,000	0	0	0	0	0	0
9	0.00	2.8	0.0	18.6	19,405	31,073	0	1,878	32,951	2,013	0	276,000	266,000	33,700	12,103	0	98,000	0	0	0	0	0	0
10	0.15	3.2	0.0	23.0	400	19,893	145	7,254	27,147	207	0	266,000	269,000	26,400	12,078	0	118,000	0	0	0	0	0	0
11	0.28	3.4	1.3	21.8	22,015	34,058	255	5,640	39,705	1,103	7	269,000	266,000	23,300	0	0	129,000	33,000	0	0	0	0	0
12	0.00	3.4	1.8	23.5	19,205	28,621	132	5,248	33,873	1,387	4	276,000	261,000	28,100	6,015	0	129,000	64,000	0	0	0	0	0
13	0.00	3.4	2.0	23.3	16,070	27,866	55	4,972	32,961	1,102	123	278,000	264,000	26,200	34,063	0	129,000	80,000	0	22,300	0	0	17,800
14	0.00	3.3	2.0	23.3	22,860	32,086	46	5,032	37,125	2,339	7	269,000	264,000	26,200	0	0	123,000	80,000	0	40,326	9,009	0	39,500
15	0.00	3.4	2.0	23.1	16,430	27,107	60	4,384	31,496	837	6	274,000	260,000	26,200	0	0	129,000	80,000	0	0	0	0	0
16	2.27	3.4	2.0	22.8	16,430	27,107	60	4,384	31,496	837	6	278,000	257,000	26,200	18,048	0	129,000	80,000	0	51,057	12,007	0	50,500
17	0.00	2.6	2.3	22.7	9,550	14,044	58	3,774	17,826	2,080	8	264,000	264,000	19,400	12,029	0	88,000	106,000	0	0	0	0	0
18	0.80	3.0	2.3	25.1	1,400	2,113	51	8,468	10,583	2,938	2	245,000	266,000	26,500	18,046	0	108,000	106,000	0	0	0	0	0
19	0.00	3.4	2.5	24.0	17,070	28,196	56	8	28,205	1,137	1	230,000	259,000	25,400	18,044	0	129,000	124,000	0	0	0	0	0
20	0.00	3.4	2.7	23.3	29,610	49,717	55	10,202	59,917	0	68	247,000	250,000	24,700	18,048	0	129,000	143,000	0	0	0	0	27,699
21	0.23	3.3	2.7	22.6	24,360	37,611	76	3,835	41,468	1,274	22	250,000	259,000	27,100	6,016	0	123,000	143,000	0	33,783	0	21,167	27,000
22	1.60	3.4	2.8	22.5	16,335	27,939	52	6,744	35,085	1,422	391	262,000	259,000	27,100	0	0	129,000	143,000	0	0	0	0	0
23	0.23	3.4	2.8	22.9	16,355	27,950	52	6,744	35,085	1,422	391	274,000	259,000	27,100	18,048	0	129,000	152,000	0	0	0	0	0
24	1.23	3.4	2.9	23.2	0	21,960	52	4,219	26,195	3,708	16	259,000	257,000	26,600	18,048	0	129,000	162,000	0	0	0	0	27,741
25	0.28	3.2	2.9	22.8	17,140	32,837	51	6,867	39,697	0	3	276,000	264,000	8,500	18,051	0	118,000	162,000	0	0	0	0	19,159
26	0.10	2.9	2.9	22.8	36,520	35,561	65	14,692	49,657	1,527	4	276,000	290,000	27,000	12,035	0	103,000	162,000	0	0	0	0	24,316
27	0.90	2.5	3.0	22.8	22,700	36,187	42	14,934	51,125	2,130	4	302,000	317,000	26,800	0	0	83,000	172,000	0	0	0	0	6,049
28	0.00	2.6	3.0	23.1	31,430	43,903	64	3,551	47,839	2,631	5	329,000	329,000	26,200	0	0	88,000	172,000	0	0	0	0	24,329
29	0.00	2.6	3.1	22.9	25,335	38,286	60	9,488	47,840	4,695	66	354,000	341,000	26,200	0	0	88,000	172,000	0	0	0	0	0
30	0.00	2.6	3.1	22.7	25,335	38,286	60	9,488	47,840	0	66	379,000	353,000	26,200	12,238	0	88,000	182,000	0	0	0	0	18,274
31	0.00	2.6	3.0	22.8	23,970	35,299	59	8,020	43,319	0	0	381,000	360,000	26,900	12,210	0	88,000	172,000	0	13,616	9,044	18,243	18,100
Total	12.08				586,620	954,303	1,609	168,177	1,103,639	46,150	1,199			779,500	283,236	0			0	215,125	93,055	211,111	246,600
Daily Average		2.7	1.7	22.5	18,923	30,139	52	5,425	35,603	1,489	39	274,400	274,200			0	94,300	86,800					
Mo. Average																0				6,900	3,000	6,800	7,950

Notes:

- NR = No Records, NA = Not Available.
- Values in bold are estimated; values in *italics* are substitute for missing data and are based on averaged values.
- Daily average is calculated by dividing the total by the actual days measured in the month.
- Monthly average calculated by dividing the total by the number of days of the month.
- Column II, Trace is less than 0.01 inches and is not included in total.
- Columns III and IV, field measured at staff gauges.
- Column V, P8-B sensor reading plus 9 inches.
- Columns VIII & IX, Section 7-8 leak detection pumped into Section 7 leachate sump riser.
- Column XIII and XIV, calculated from depth to 575,000 gal. tanks.
- Columns VI-XII, XV-XVII, and XX-XXII, quantities from flow meters.
- Column XXIV includes 80% of the daily values from Columns XVII, XXI, and XXII plus 5% of the daily values from column XX.

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TABLE 2. FIELD DATA ENTRY FORM
AUGUST 2010
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
Day	Rainfall (in.)	Flow Meter IFS-6 (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.)	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.)	Leachate Hauled Contractor (gal.)	Leachate Hauled County (gal.)	Leachate Dust Control (Sprayed) (gal.)	Effluent Hauled Contractor (gal.)	Effluent Hauled County (gal.)	Effluent Dust Control (Sprayed) (gal.)
1	0.00	19,927,600	3,212,393	13.7	1,742,483	1,273,917	NR	2,221,220	39,816	0.0	0.0	1.6	0	8.1	8.2	20,204	0	0	0	0	0	0
2	0.23	19,948,900	3,243,241	13.5	1,744,077	1,273,917	NR	2,223,119	39,820	0.0	0.0	1.5	21,306	8.50	8.67	20,204	0	18,045	0	0	0	18,001
3	0.00	19,968,890	3,272,880	13.4	1,744,953	1,277,984	NR	2,227,299	39,810	0.0	0.0	1.0	0	8.50	9.00	22,775	0	6,012	0	0	6,005	11,987
4	0.00	19,993,555	3,309,830	9.8	1,744,953	1,277,984	NR	2,227,299	39,810	0.0	0.0	1.0	0	8.75	9.17	25,987	0	0	0	0	0	15,000
5	0.87	20,004,950	3,327,855	13.9	1,745,012	1,278,056	NR	2,227,299	39,810	0.0	0.0	1.4	18,012	8.75	8.92	25,823	0	6,014	0	0	0	18,007
6	0.03	20,026,010	3,360,534	11.4	1,745,281	1,278,056	NR	2,232,393	39,810	0.0	0.0	1.1	0	9.00	9.17	24,832	0	18,045	0	0	0	0
7	0.00	20,043,570	3,387,077	14.7	1,746,299	1,278,056	NR	2,235,994	39,810	0.0	0.0	1.7	14,825	8.50	9.33	25,622	0	0	0	0	0	0
8	2.88	20,062,973	3,418,150	12.2	1,748,312	1,278,056	NR	2,237,872	39,810	0.0	0.0	2.3	0	9.0	9.3	26,093	0	0	0	0	0	0
9	0.00	20,082,380	3,449,222	9.6	1,750,324	1,278,056	NR	2,239,750	39,810	0.0	0.0	2.8	0	9.58	9.25	33,720	0	12,103	0	0	0	0
10	0.15	20,082,780	3,469,115	14.0	1,750,531	1,278,056	74	2,247,004	39,955	0.0	0.0	3.2	0	9.25	9.33	26,389	0	12,078	0	0	0	0
11	0.28	20,104,795	3,503,173	12.8	1,751,634	1,278,056	81	2,252,644	40,210	1.3	0.0	3.4	0	9.33	9.25	23,258	0	0	0	0	0	0
12	0.00	20,124,000	3,531,794	14.5	1,753,021	1,278,056	85	2,257,892	40,342	1.8	0.0	3.4	0	9.58	9.08	28,130	0	6,015	0	0	0	0
13	0.00	20,140,070	3,559,660	14.3	1,754,123	1,278,056	208	2,262,864	40,397	2.0	0.0	3.4	22,200	9.67	9.17	26,221	0	24,063	0	0	0	0
14	0.00	20,162,930	3,591,746	14.3	1,756,462	1,278,056	215	2,267,896	40,443	2.0	0.0	3.3	40,326	9.53	9.17	26,179	0	0	0	0	0	9,009
15	0.00	20,179,360	3,618,853	14.1	1,757,299	1,278,056	221	2,272,280	40,503	2.0	0.0	3.4	0	9.5	9.0	26,179	0	0	0	0	0	0
16	2.27	20,195,790	3,645,959	13.8	1,758,136	1,278,056	226	2,276,663	40,563	2.0	0.0	3.4	51,057	9.67	8.92	26,180	0	18,048	0	0	0	12,007
17	0.00	20,205,340	3,660,003	13.2	1,760,216	1,278,056	234	2,280,437	40,621	2.3	0.0	2.6	0	9.17	9.17	19,380	0	12,029	0	0	0	0
18	0.80	20,206,740	3,662,116	16.1	1,763,154	1,278,056	236	2,288,905	40,672	2.3	0.0	3.0	0	8.50	9.25	26,521	0	18,046	0	0	0	0
19	0.00	20,223,810	3,690,312	15.0	1,764,291	1,278,056	237	2,288,913	40,728	2.5	0.0	3.4	0	8.00	9.00	25,401	0	18,044	0	0	0	0
20	0.00	20,253,420	3,740,029	14.3	1,764,291	1,278,056	305	2,299,115	40,783	2.7	0.0	3.4	0	8.58	8.67	24,696	0	18,048	0	27,699	0	0
21	0.23	20,277,780	3,777,640	13.0	1,765,565	1,278,056	327	2,302,950	40,859	2.7	0.0	3.3	33,783	8.67	9.00	27,129	6,016	0	0	21,167	0	0
22	1.60	20,294,135	3,805,590	13.5	1,766,987	1,278,056	718	2,309,694	40,911	2.8	0.0	3.4	0	9.1	9.0	27,130	0	0	0	0	0	0
23	0.23	20,310,490	3,835,539	13.9	1,768,409	1,278,056	1,109	2,316,438	40,963	2.8	0.0	3.4	0	9.50	9.00	27,130	0	18,048	0	27,741	0	0
24	1.23	20,310,490	3,855,499	14.2	1,772,117	1,278,056	1,125	2,320,657	41,015	2.9	0.0	3.4	0	9.00	8.92	26,601	0	18,048	0	19,159	0	0
25	0.28	20,327,630	3,888,326	13.8	1,772,117	1,278,056	1,128	2,327,524	41,066	2.9	0.0	3.2	0	9.58	9.17	8,454	0	18,051	0	18,129	0	0
26	0.10	20,364,150	3,923,887	13.8	1,772,117	1,279,383	1,132	2,341,616	41,131	2.9	0.0	2.9	0	9.58	10.08	26,983	0	12,035	0	24,316	0	0
27	0.90	20,386,850	3,960,074	13.8	1,773,001	1,280,629	1,136	2,356,550	41,173	3.0	0.0	2.5	0	10.50	11.00	26,812	0	0	0	6,049	0	0
28	0.00	20,418,280	4,003,977	14.1	1,773,259	1,283,002	1,141	2,360,501	41,237	3.0	0.0	2.6	0	11.42	11.42	26,194	0	0	0	24,329	0	0
29	0.00	20,443,615	4,042,263	13.9	1,774,471	1,286,485	1,207	2,369,989	41,297	3.1	0.0	2.6	0	12.3	11.8	26,194	0	0	0	0	0	0
30	0.00	20,468,950	4,080,548	13.7	1,775,682	1,289,968	1,273	2,379,477	41,356	3.1	0.0	2.6	0	13.17	12.25	26,195	0	12,238	0	18,274	0	0
31	0.00	20,492,920	4,115,847	13.8	1,775,682	1,289,968	1,273	2,387,497	41,415	3.0	0.0	2.6	13,616	13.25	12.50	26,941	0	12,210	0	18,243	0	9,044
Totals	12.08										0		215,125			779,537	6,016	277,220	0	205,106	6,005	93,055

projects\balance\200901-09ba.xls (JDW 9/14/10)

Notes:

- 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.
- Column B, trace is less than 0.01 inches.
- Columns C, D, F, G, H, I, J, L, N, Q, R-V and W are quantities from flow meters.
- Columns K and M 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

TABLE 3. LEACHATE BALANCE SUMMARY
SOUTHEAST COUNTY LANDFILL
HILLSBOROUGH COUNTY, FLORIDA
YEAR-2010

Month	Rainfall (in.)	Leachate Arriving at LTRF				Leachate Leaving LTRF			Effluent Disposal			Inflow / Outflow For LTRF		
		Leachate Hauled to LTRF from HHLF/TRLF (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	3.50	0	31,114	73,231	794,265	223,008	1,500	625,400	24,397	44,971	463,698	898,610	849,908	48,702
February	2.61	0	47,150	109,806	771,075	337,419	0	560,600	6,489	45,071	483,052	928,031	898,019	30,012
March	7.66	0	56,034	86,576	813,346	372,562	0	608,600	0	137,050	455,821	955,956	981,162	-25,207
April	3.04	0	57,944	71,442	812,598	337,294	0	643,200	6,011	65,856	719,336	941,984	980,494	-38,510
May	1.66	0	43,699	37,397	779,316	234,292	0	644,000	0	266,910	338,759	860,413	878,292	-17,879
June	7.43	0	60,719	20,449	740,158	318,992	0	602,600	242,614	120,108	184,585	821,326	921,592	-100,266
July	8.79	0	54,193	128,891	877,301	428,135	0	622,000	473,967	78,063	278,792	1,060,385	1,050,135	10,250
August	12.08	0	47,349	168,177	934,303	283,236	0	779,500	211,111	93,055	215,125	1,149,829	1,062,736	87,093
September														
October														
November														
December														
YTD Total	46.77	0	398,201	695,969	6,522,362	2,534,938	1,500	5,085,900	964,589	851,084	3,139,168	7,616,532	7,622,338	-5,806

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.

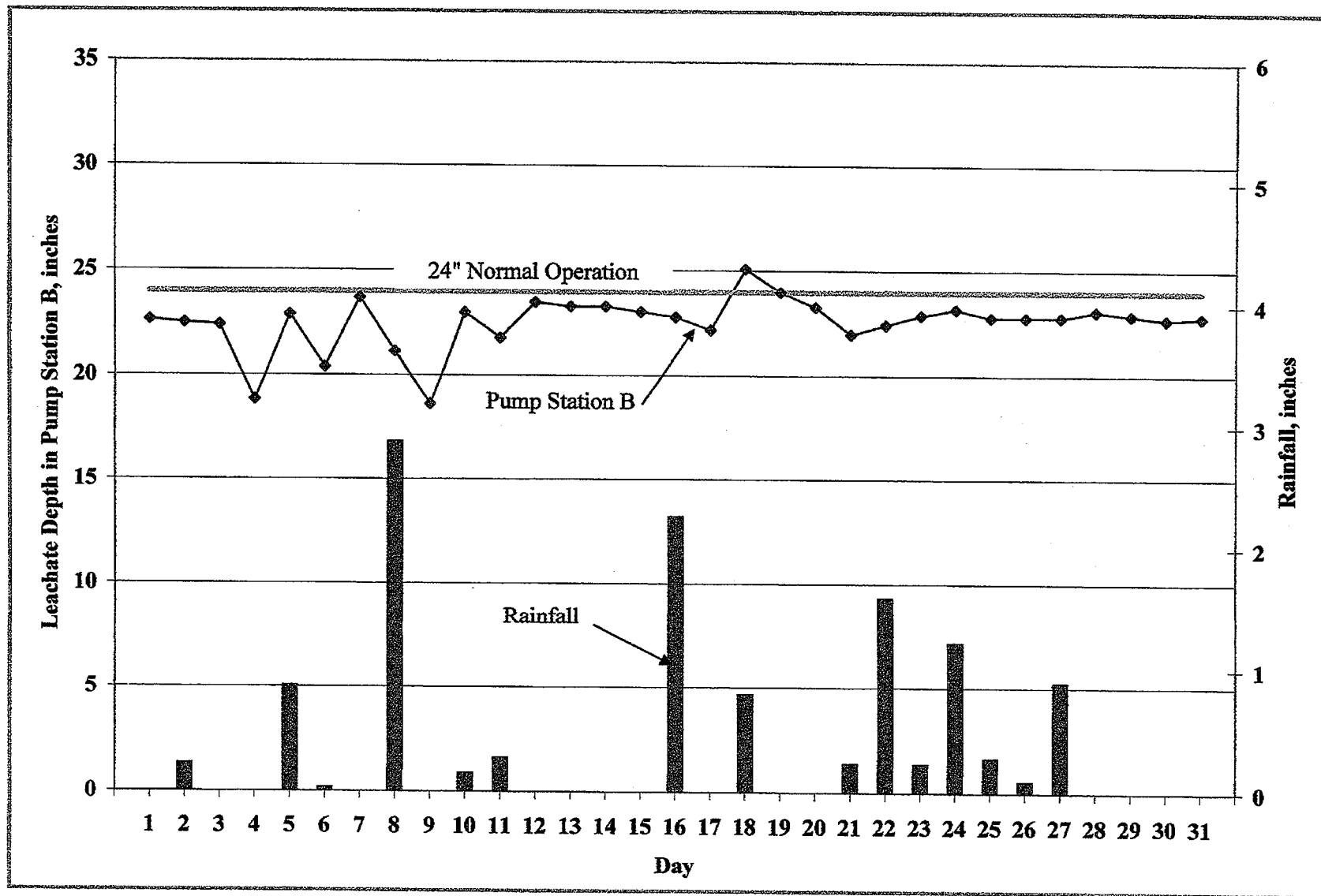
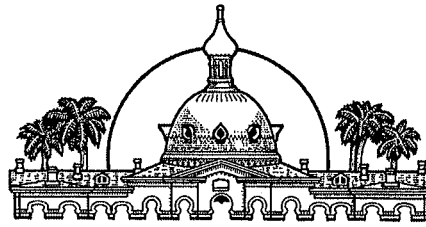


Figure 1. Leachate Levels in Pump Station B and Rainfall for August 2010.

BOARD OF COUNTY COMMISSIONERS

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Rose V. Ferlita
Ken Hagan
Al Higginbotham
Jim Norman
Mark Sharpe
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Hillsborough County
Florida

Office of the Interim County Administrator
Michael S. Merrill

ADMINISTRATORS

Lucia E. Garsys
Carl S. Harness
Eric R. Johnson
Manus J. O'Donnell
Edith M. Stewart

October 11, 2010

Ms. Susan J. Pelz, P.E.
Solid Waste Permitting
Florida Department of Environmental Protection
Southwest District
13051 N. Telecom Pkwy
Temple Terrace, Florida 33637

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
OCT 13 2010
SOUTHWEST DISTRICT
TAMPA

RE: Southeast County Landfill – September 2010 Leachate Data

Dear Ms. Pelz:

In accordance with the Hillsborough County Solid Waste Management Department's (SWMD) Leachate Management Plan (LMP) for the Southeast County Landfill (Landfill), the SWMD is providing the Landfill's Water Balance Report for the month of September 2010. In addition, the SWMD is providing the September 2010 field data forms for the Landfill, the daily leachate and collection system evaluation reports and the Year-to-Date Leachate Balance Summary.

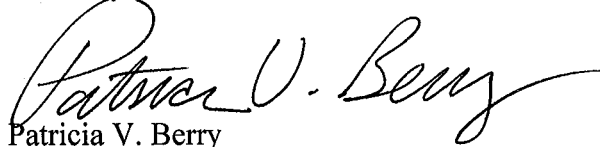
This information is being provided to the Florida Department of Environmental Protection (FDEP) and the Hillsborough County Environmental Protection Commission as part of the quarterly Leachate Water Balance report on the Landfill leachate management efforts in accordance with Permit No. 35435-014-SO, Specific Condition No. 8.

As initiated with the April 1996 report, the Landfill leachate information for September 2010 includes an evaluation by SWMD staff of the monthly data. The report includes a figure depicting the leachate levels in Pump Station B (PS-B) and rainfall. PS-B was below the normal operation level of 24 inches during the month of September. The average depth of leachate in the PS-B sump for the recorded days in September 2010 was 22.8 inches.

Ms. Susan J. Pelz
October 11, 2010
Page Two

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

Sincerely,

A handwritten signature in black ink, reading "Patricia V. Berry". The signature is fluid and cursive, with the first name "Patricia" being more prominent and the last name "Berry" following in a similar style.

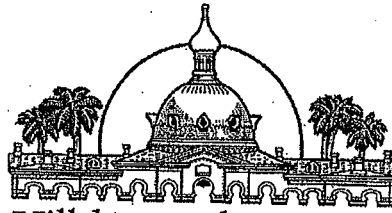
Patricia V. Berry
Landfill Services Section Manager
Solid Waste Management Department

Attachments

glfs/lea0910.dep

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Eric R. Johnson
Marius J. O'Donnell
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MEMORANDUM

DATE: October 8, 2010

TO: Patricia Berry, Section Manager, Solid Waste Management Division

FROM: *JSR* Larry Ruiz, General Manager III, Solid Waste Management Division
Raymond Graves, Sr. Eng. Tech., Solid Waste Management Division

SUBJECT: Leachate Water Balance Report Forms for September
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 2010 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 4.1 inches of rainfall at the Southeast County Landfill (SCLF).

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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 2.5 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 2.1 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 of 24-inches. The average recorded depth of leachate in the PS-B sump was 22.8 inches.

Leachate Pumped to PS-B from TPS-6 (Column VI)

Column VI presents the quantity of leachate from Phase IV pumped to PS-B by Temporary Pump Station-6 (TPS-6). The quantity of leachate removed by TPS-6 is measured in gallons by an in-line flow meter and is included in the quantity of leachate pumped to the Main Leachate Pump Station (MLPS) from Phases I-VI (Column VII). The average daily amount of leachate pumped from TPS-6 was 25,925 gallons. A total of 777,760 gallons of leachate was pumped this month.

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

Column VII 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 quantity in column VII also includes the daily amount of leachate, in gallons, pumped from TPS-6. The average daily amount of leachate pumped from PS-A was 36,140 gallons. A total of 1,084,207 gallons of leachate was pumped this month.

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

Column VIII 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 427 gallons of leachate was removed from the leak detection system of Sections 7-8.

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

Column IX 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 129,137 gallons of leachate was pumped from Sections 7-8.

Leachate Pumped to LTRF from the MLPS (Column X)

Column X presents the total quantity of leachate pumped to the LTRF from Phases I-VI and Sections 7-8. This month a total of 1,213,411 gallons of leachate was pumped to the LTRF.

Leachate Pumped to LTRF from Section 9 (Column XI)

Column XI 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 51,348 gallons of leachate was pumped this month.

Leachate Pumped from Section 9 LDS (Column XII)

Column XII 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 a total of 67 gallons of leachate were removed from the leak detection system.

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

Column XIII 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 322,500 gallons of leachate was stored in the tank.

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

Column XIV 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 306,800 gallons of effluent was stored in the tank.

Leachate Treated at LTRF (Column XV)

Column XV presents the daily amount of leachate, in gallons, treated at the LTRF. This month a total of 741,400 gallons of leachate was treated.

Total Leachate Hauled (Column XVI)

Column XVI presents the daily amount of leachate, in gallons, hauled off site. This month a total of 624,322 gallons of leachate was hauled off site.

Leachate Dust Control Sprayed (Column XVII)

Column XVII 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 leachate was not used for dust control.

Pond A Storage (Column XVIII)

Column XVIII 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 82,200 gallons of effluent was stored in Pond A.

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Pond B Storage (Column XIX)

Column XIX 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 112,600 gallons of effluent was stored in Pond B.

Effluent Sprayed at Pond B (Column XX)

Column XX 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 effluent was not sprayed in Pond B.

Effluent Irrigation (Column XXI)

Column XXI 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 836,304 gallons of effluent was used for spray irrigation.

Effluent Dust Control Sprayed (Column XXII)

Column XXII 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 a total of 246,211 gallons of effluent were sprayed as dust control.

Total Effluent Hauled (Column XXIII)

Column XXIII presents the daily amount of effluent, in gallons, hauled off site, as measured from the flow meter at the bypass-loading arm. This month a total of 48,503 gallons of effluent were hauled off site.

Total Evaporation (Column XXIV)

Column XXIV 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. The total evaporation estimated for this month was 866,100 gallons.

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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 1,264,759 gallons. Total outflow quantity from the LTRF was 1,365,722 gallons. The change in storage for the month decreased by 100,963 gallons.

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

TABLE 1. LEACHATE WATER BALANCE REPORT FORM
SEPTEMBER 2010
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
Day	Rainfall (in.)	Depth in Pond A (ft.)	Depth in Pond B (ft.)	Estimated Depth at PS-B (in.)	Leachate Pumped to PS-B from TFS-6 (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 MLPS (gal.)	Leachate Pumped to LTRF from Section 9 (gal.)	Leachate Pumped from Section 9 LDS (gal.)	Leachate in 575K Tank (gal.)	Effluent in 575K Tank (gal.)	Leachate Treated at LTRF (gal.)	Total Leachate Heated (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 Heated (gal.)	Total Evaporation (gal.)
1	0.00	2.3	3.0	22.7	31,810	46,635	51	4,002	50,537	259	0	386,000	365,000	25,900	24,437	0	74,000	172,000	0	22,778	0	6,003	18,200
2	0.00	2.5	3.0	23.1	35,560	49,910	43	5,379	55,293	2,043	4	391,000	350,000	24,300	30,411	0	83,000	172,000	0	12,256	18,023	6,008	24,200
3	0.00	2.2	3.0	23.3	20,870	29,004	43	5,660	34,674	1,961	10	381,000	343,000	24,000	30,442	0	70,000	172,000	0	0	26,997	6,005	21,600
4	0.00	2.6	3.0	23.6	22,210	32,702	52	5,165	37,870	2,065	2	360,000	307,000	26,200	30,500	0	88,000	172,000	0	51,034	24,024	0	60,000
5	0.12	2.2	3.0	23.6	13,925	27,623	54	4,648	32,273	4,576	3	360,000	322,000	26,200	0	0	70,000	172,000	0	0	0	0	0
6	2.83	1.8	3.0	23.5	13,925	27,623	54	4,648	32,273	4,576	3	360,000	336,000	26,200	0	0	52,000	172,000	0	0	0	0	0
7	0.10	2.2	3.3	23.6	20,385	30,028	62	4,453	34,481	1,959	0	379,000	369,000	26,600	36,942	0	70,000	202,000	0	0	0	0	0
8	0.00	2.2	3.3	23.9	33,460	46,852	6	0	46,852	0	0	358,000	389,000	26,600	24,285	0	70,000	202,000	0	0	0	0	0
9	0.00	2.2	3.3	22.4	33,365	50,221	6	0	50,221	0	0	396,000	396,000	24,500	12,230	0	70,000	202,000	0	41,196	12,003	6,093	42,600
10	0.10	2.3	2.9	22.4	29,990	40,254	0	16,367	56,621	516	0	365,000	362,000	24,900	30,318	0	74,000	162,000	0	55,414	2,999	0	46,700
11	0.00	2.6	2.9	22.0	29,870	39,655	0	6,605	46,260	1,696	0	362,000	350,000	24,700	0	0	88,000	162,000	0	49,723	0	0	39,800
12	0.00	2.7	2.9	22.5	25,655	34,846	0	4,834	39,680	1,477	0	372,000	352,000	24,200	0	0	93,000	162,000	0	0	0	0	0
13	0.17	2.7	2.9	23.0	25,655	34,846	0	4,834	39,680	1,477	0	381,000	353,000	24,700	30,488	0	93,000	162,000	0	53,559	9,008	0	50,400
14	0.00	2.7	2.9	22.0	30,990	39,397	0	6,419	45,824	1,890	8	377,000	324,000	24,200	36,359	0	93,000	162,000	0	0	9,067	0	7,300
15	0.00	3.0	2.9	23.2	27,600	36,129	0	3,272	39,403	1,538	2	360,000	322,000	24,500	18,500	0	108,000	162,000	0	52,314	9,010	0	49,100
16	0.00	2.7	2.9	23.2	14,560	20,487	0	3,157	23,645	1,756	1	336,000	300,000	24,500	42,383	0	93,000	162,000	0	36,905	12,004	0	39,100
17	0.00	2.5	2.8	23.0	29,000	41,169	0	3,220	44,390	1,662	1	319,000	290,000	25,000	30,295	0	83,000	152,000	0	56,781	30,034	0	69,500
18	0.00	3.0	2.3	23.4	26,640	31,767	0	6,430	40,198	1,731	1	309,000	252,000	25,300	24,072	0	108,000	106,000	0	45,131	9,003	0	43,300
19	0.00	2.9	2.3	22.2	28,380	39,074	0	3,268	42,344	2,332	3	314,000	259,000	23,800	0	0	163,000	106,000	0	0	0	0	0
20	0.00	2.8	2.3	23.8	28,380	39,074	0	3,268	42,344	2,332	3	319,000	266,000	23,700	30,207	0	98,000	106,000	0	41,838	24,013	0	52,700
21	0.00	2.7	1.9	22.6	26,480	34,208	0	3,199	37,407	3,196	0	307,000	266,000	24,200	42,267	0	93,000	72,000	0	44,729	27,012	0	57,400
22	0.23	2.7	1.3	22.9	21,610	29,956	0	3,209	33,165	0	0	271,000	264,000	23,200	42,117	0	93,000	44,000	0	49,035	21,003	0	36,000
23	0.04	2.9	0.8	22.6	21,080	24,716	0	3,205	27,922	246	1	245,000	266,000	25,300	24,057	0	103,000	12,000	0	25,599	12,011	12,171	30,100
24	0.00	2.5	0.3	22.3	20,830	27,924	20	3,213	31,155	1,290	18	225,000	264,000	23,800	36,090	0	83,000	1,600	0	47,168	0	0	37,700
25	0.00	2.3	0.0	22.3	16,500	25,234	15	3,210	28,469	3,743	5	206,000	250,000	24,100	0	0	74,000	0	0	46,597	0	0	37,300
26	0.13	2.3	0.0	22.3	28,025	37,836	5	3,244	41,780	798	1	222,000	254,000	24,100	0	0	74,000	0	0	0	0	0	0
27	0.00	2.3	0.0	22.2	28,035	37,836	5	3,244	41,780	798	1	238,000	259,000	24,100	18,045	0	74,000	0	0	30,955	0	0	24,800
28	0.40	2.0	0.0	22.5	28,530	40,025	5	3,292	43,320	5,234	3	245,000	261,000	24,700	18,047	0	61,000	0	0	36,799	0	0	29,400
29	0.00	1.9	0.6	22.4	40,040	55,063	3	4,011	59,074	0	0	261,000	257,000	23,800	0	0	57,000	7,000	0	0	0	0	0
30	0.00	2.3	0.0	21.9	22,390	31,296	4	3,680	35,576	0	0	269,000	257,000	24,100	12,030	0	74,000	0	0	36,093	0	0	28,900
Total	4.12				777,760	1,084,207	427	129,137	1,213,411	51,348	67			741,400	624,322	0			0	836,304	246,211	48,503	866,100
Daily Average	2.5	2.1	22.8	25,925	36,140	14	4,305	40,447	1,712	2	322,500	306,800					82,200	112,600					
Mo. Average																							

Notes:

1. NR = No Records, NA = Not Available.
2. Values in bold are estimated; values in *italics* 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. Column III and IV, field measured at staff gauges.

7. Column V, FPS-B sensor reading plus 9 inches.
8. Columns VIII & IX, Section 7-8 leak detection pumped into Section 7 leachate sump riser.
9. Column XIII and XIV, calculated from depth in 575,000 gal. tanks.
10. Columns VI-XII, XV-XVII, and XX-XXIII, quantities from flow meters.
11. Column XXIV includes 80% of the daily values from Columns XVII, XXI, and XXII plus 5% of the daily values from column XX.

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TABLE 2. FIELD DATA ENTRY FORM
SEPTEMBER 2010
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
Day	Rainfall (in.)	Flow Meter TPS-6 (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.)	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.)	Leachate Hauled		Leachate Dust Control (Sprayed) (gal.)	Effluent Hauled		Effluent Dust Control (Sprayed) (gal.)
																	Contractor (gal.)	County (gal.)		Contractor (gal.)	County (gal.)	
1	0.00	20,524,730	4,162,482	13.7	1,775,682	1,290,227	1,273	2,391,499	41,466	3.0	0.0	2.3	22,778	13.42	12.67	25,889	18,368	6,069	0	0	6,005	0
2	0.00	20,560,290	4,212,392	14.1	1,777,086	1,290,866	1,277	2,396,878	41,509	3.0	0.0	2.5	12,256	13.58	12.17	24,342	24,368	6,043	0	0	6,008	18,023
3	0.00	20,581,160	4,241,396	14.3	1,778,266	1,291,647	1,287	2,402,538	41,552	3.0	0.0	2.2	0	13.25	11.92	24,005	24,421	6,021	0	0	6,005	26,997
4	0.00	20,603,370	4,274,098	14.6	1,779,237	1,292,741	1,289	2,407,704	41,604	3.0	0.0	2.6	51,034	12.50	10.67	26,195	30,500	0	0	0	0	24,024
5	0.12	20,617,295	4,301,721	14.6	1,782,225	1,294,329	1,292	2,412,352	41,658	3.0	0.0	2.2	0	12.50	11.17	26,189	0	0	0	0	0	0
6	2.83	20,631,220	4,329,343	14.5	1,785,212	1,295,917	1,294	2,417,000	41,712	3.0	0.0	1.8	0	12.50	11.67	26,189	0	0	0	0	0	0
7	0.10	20,651,605	4,359,371	14.6	1,785,212	1,297,876	1,294	2,421,453	41,774	3.3	0.0	2.2	0	13.17	12.83	26,565	18,961	17,981	0	0	0	0
8	0.00	20,685,065	4,406,223	14.9	1,785,212	1,297,876	1,294	2,421,453	41,780	3.3	0.0	2.2	0	12.42	13.50	26,565	6,083	18,202	0	0	0	0
9	0.00	20,720,430	4,456,444	13.4	1,785,212	1,297,876	1,294	2,421,453	41,786	3.3	0.0	2.2	41,196	13.75	13.75	24,488	12,230	0	0	6,093	0	12,003
10	0.10	20,750,420	4,496,698	13.4	1,785,468	1,298,136	1,294	2,437,820	41,786	2.9	0.0	2.3	55,414	12.67	12.58	24,852	18,268	12,950	0	0	0	2,999
11	0.00	20,780,290	4,536,353	13.0	1,786,610	1,298,690	1,294	2,444,425	41,786	2.9	0.0	2.6	49,723	12.38	12.17	24,715	0	0	0	0	0	0
12	0.00	20,805,945	4,571,199	13.5	1,787,363	1,299,414	1,294	2,449,259	41,786	2.9	0.0	2.7	0	12.92	12.21	24,176	0	0	0	0	0	0
13	0.17	20,831,600	4,606,045	14.0	1,788,116	1,300,138	1,294	2,454,093	41,786	2.9	0.0	2.7	53,959	13.25	12.25	24,716	18,372	12,116	0	0	0	9,008
14	0.00	20,862,590	4,645,442	13.0	1,789,018	1,301,126	1,302	2,460,512	41,786	2.9	0.0	2.7	0	13.08	11.25	24,230	18,275	18,084	0	0	0	9,057
15	0.00	20,890,190	4,681,571	14.2	1,789,898	1,301,784	1,304	2,463,784	41,786	2.9	0.0	3.0	52,314	12.50	11.17	24,501	18,300	0	0	0	0	9,010
16	0.00	20,904,750	4,702,058	14.2	1,790,501	1,302,597	1,305	2,466,941	41,786	2.9	0.0	2.7	36,905	11.67	10.42	24,504	24,322	18,061	0	0	0	12,004
17	0.00	20,933,750	4,743,227	14.0	1,791,156	1,303,944	1,306	2,470,161	41,786	2.8	0.0	2.5	56,781	11.08	10.08	24,986	18,257	12,038	0	0	0	30,034
18	0.00	20,960,390	4,776,594	14.4	1,791,156	1,305,675	1,307	2,476,591	41,786	2.3	0.0	3.0	45,131	10.75	8.75	25,322	0	24,072	0	0	0	9,003
19	0.00	20,988,770	4,816,068	14.2	1,791,457	1,307,706	1,310	2,479,859	41,786	2.3	0.0	2.9	0	10.91	9.60	23,802	0	0	0	0	0	0
20	0.00	21,017,150	4,855,141	14.0	1,791,757	1,309,737	1,312	2,483,127	41,786	2.3	0.0	2.8	41,838	11.07	9.25	23,748	24,186	6,021	0	0	0	24,013
21	0.00	21,043,630	4,889,349	13.6	1,791,757	1,313,133	1,312	2,486,326	41,786	1.9	0.0	2.7	44,729	10.67	9.25	24,202	18,195	24,072	0	0	0	27,012
22	0.23	21,065,240	4,919,305	13.9	1,791,757	1,313,133	1,312	2,489,535	41,786	1.5	0.0	2.7	49,035	9.42	9.17	23,156	18,052	24,065	0	0	0	21,003
23	0.04	21,086,320	4,944,021	13.6	1,791,757	1,313,379	1,313	2,492,740	132	0.8	0.0	2.9	25,599	8.50	9.25	25,274	6,014	18,043	0	12,171	0	12,011
24	0.00	21,107,150	4,971,945	13.3	1,792,268	1,314,158	1,331	2,495,953	152	0.3	0.0	2.5	47,168	7.83	9.17	23,324	18,047	18,043	0	0	0	0
25	0.00	21,123,650	4,997,199	13.3	1,795,484	1,314,685	1,336	2,499,163	167	0.0	0.0	2.3	46,597	7.17	8.67	24,115	0	0	0	0	0	0
26	0.13	21,151,685	5,035,135	13.3	1,796,067	1,314,900	1,337	2,502,407	172	0.0	0.0	2.3	0	7.71	8.64	24,115	0	0	0	0	0	0
27	0.00	21,179,720	5,073,070	13.2	1,796,649	1,315,115	1,337	2,505,651	176	0.0	0.0	2.3	30,955	8.25	9.00	24,115	0	18,045	0	0	0	0
28	0.40	21,208,250	5,113,093	13.5	1,796,649	1,320,349	1,340	2,508,943	181	0.0	0.0	2.0	36,799	8.50	9.08	24,709	0	18,047	0	0	0	0
29	0.00	21,248,290	5,168,158	13.4	1,796,649	1,320,349	1,340	2,512,954	184	0.6	0.0	1.9	0	9.07	8.92	23,828	0	0	0	0	0	0
30	0.00	21,270,680	5,200,054	12.9	1,796,649	1,322,258	1,341	2,516,634	188	0.0	0.0	2.3	36,093	9.33	8.92	24,090	0	12,030	0	0	0	0
Totals	4.12										0		836,304			741,407	335,219	289,103	0	30,485	18,018	24,621

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. Column IV includes quantities from leak detection system.
4. Column B, trace is less than 0.01 inches.
5. Columns C, D, F, G, H, I, J, L, N, Q, R-V and W are quantities from flow meters.
6. Columns K and M measured from staff gages in each pond.

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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

**TABLE 3. LEACHATE BALANCE SUMMARY
SOUTHEAST COUNTY LANDFILL
HILLSBOROUGH COUNTY, FLORIDA
YEAR-2010**

Month	Rainfall (in.)	Leachate Arriving at LTRF				Leachate Leaving LTRF			Effluent Disposal			Inflow / Outflow For LTRF		
		Leachate Hauled to LTRF from HHLF/TRLF (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	3.50	0	31,114	73,231	794,265	223,008	1,500	625,400	24,397	44,971	463,698	898,610	849,908	48,702
February	2.61	0	47,150	109,806	771,075	337,419	0	560,600	6,489	45,071	483,052	928,031	898,019	30,012
March	7.66	0	56,034	86,576	813,346	372,562	0	608,600	0	137,050	455,821	955,956	981,162	-25,207
April	3.04	0	57,944	71,442	812,598	337,294	0	643,200	6,011	65,856	719,336	941,984	980,494	-38,510
May	1.66	0	43,699	37,397	779,316	234,292	0	644,000	0	266,910	338,759	860,413	878,292	-17,879
June	7.43	0	60,719	20,449	740,158	318,992	0	602,600	242,614	120,108	184,585	821,326	921,592	-100,266
July	8.79	0	54,193	128,891	877,301	428,135	0	622,000	473,967	78,063	278,792	1,060,385	1,050,135	10,250
August	12.08	0	47,349	168,177	934,303	283,236	0	779,500	211,111	93,055	215,125	1,149,829	1,062,736	87,093
September	4.12	0	51,415	129,137	1,084,207	624,322	0	741,400	48,503	246,211	836,304	1,264,759	1,365,722	-100,963
October														
November														
December														
YTD Total	50.89	0	449,616	825,106	7,606,569	3,159,260	1,500	5,827,300	1,013,092	1,097,295	3,975,472	8,881,291	8,988,060	-106,769

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.

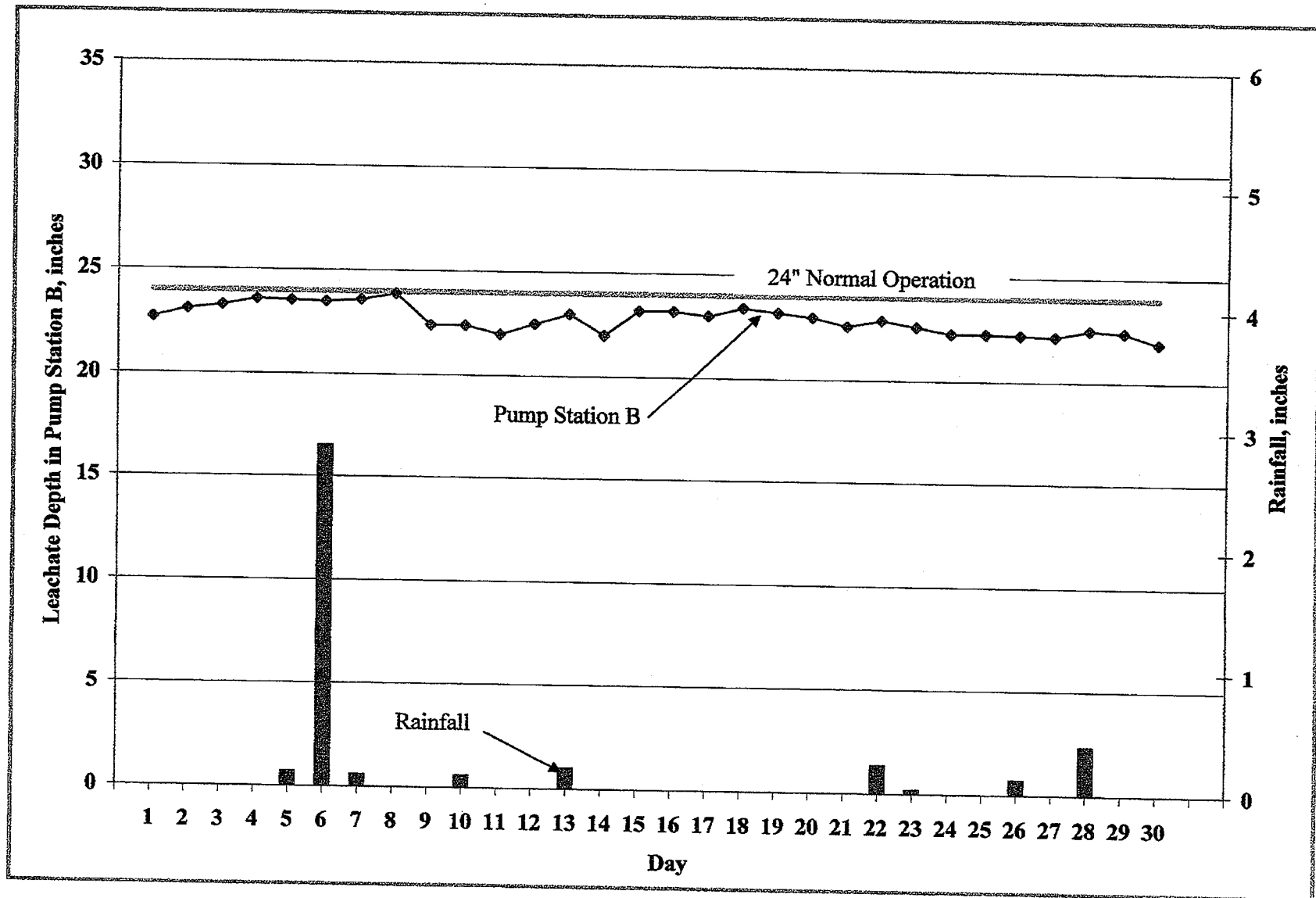


Figure 1. Leachate Levels in Pump Station B and Rainfall for September 2010.