



Hillsborough County  
Florida

Office of the County Administrator  
Patricia G. Bean

July 10, 2007

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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  
JUL 12 2007  
SOUTHWEST DISTRICT  
TAMPA

RE: Southeast County Landfill – Leachate Data Quarterly Report

Dear Ms. Pelz:

In accordance with Specific Conditions No. 16 of Permit No. 35435-006-SO, the Solid Waste Management Department (SWMD) is submitting the quarterly Leachate Water Balance submittal for the Southeast County Landfill for the quarter ending July 15, 2007.

The data is being submitted as separate monthly reports for April, May, and June 2007. 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.

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  
Walter Gray, SWMD  
Joe O'Neill, JEA  
Paul Schipfer, EPC

**TABLE 1. APPROXIMATE TOP OF CLAY ELEVATIONS**  
**PUMP STATION B SUMP**  
**SOUTHEAST COUNTY LANDFILL**

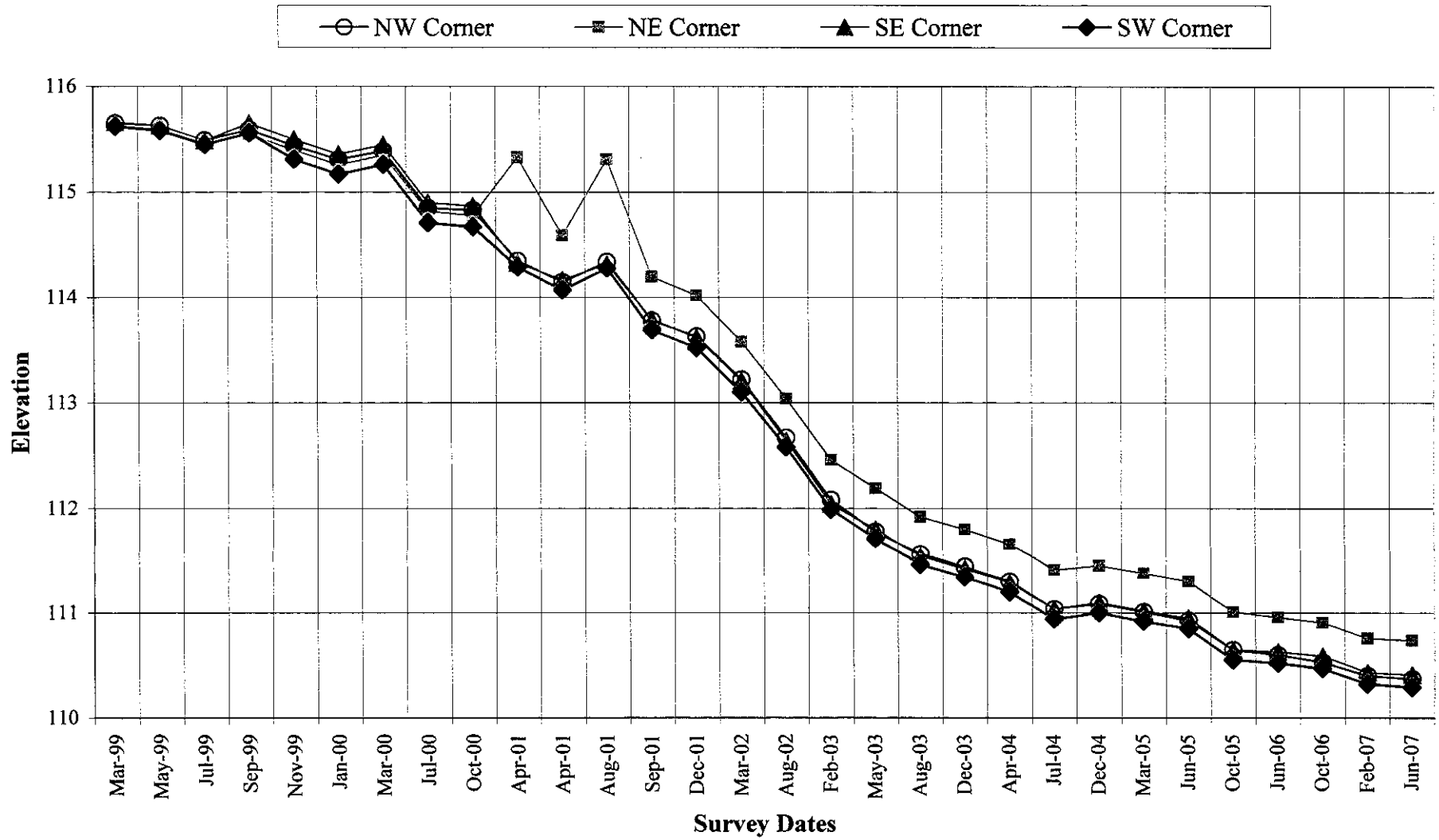
DATE	NW	NE	SE	SW
March 3, 1999	115.65	115.63	115.66	115.62
May 4, 1999	115.63	115.59	115.63	115.58
July 28, 1999	115.49	115.46	115.49	115.45
September 17, 1999 <sup>2</sup>	115.59	115.55	115.65	115.56
November 11, 1999	115.44	115.40	115.50	115.31
January 3, 2000	115.31	115.26	115.36	115.17
March 30, 2000	115.39	115.35	115.45	115.26
July 5, 2000 <sup>3</sup>	114.85	114.82	114.90	114.71
October 5, 2000	114.83	114.78	114.87	114.67
April 6, 2001	114.35	115.33	114.33	114.29
April 18, 2001 <sup>2</sup>	114.15	114.59	114.17	114.07
August 8, 2001	114.34	115.31	114.32	114.28
September 19, 2001 <sup>2</sup>	113.78	114.20	113.79	113.69
December 18, 2001	113.63	114.02	113.62	113.52
March 29, 2002	113.22	113.58	113.21	113.10
August 15, 2002 <sup>2</sup>	112.67	113.04	112.64	112.58
February 1, 2003	112.08	112.46	112.04	111.99
May 1, 2003	111.78	112.19	111.80	111.71
September 2, 2003	111.56	111.92	111.54	111.46
December 1, 2003	111.44	111.80	111.42	111.34
April 1, 2004	111.30	111.66	111.29	111.20
July 31, 2004	111.04	111.41	111.04	110.94
December 1, 2004	111.09	111.45	111.10	111.00
March 1, 2005	111.01	111.38	111.02	110.92
June 2, 2005	110.93	111.30	110.95	110.85
October 1, 2005	110.65	111.01	110.65	110.55
February 1, 2006	110.67	111.03	110.69	110.58
June 6, 2006	110.60	110.96	110.63	110.52
October 2, 2006	110.53	110.91	110.59	110.47
February 1, 2007	110.40	110.76	110.43	110.32
June 1, 2007	110.37	110.74	110.41	110.29

leachate/calcs/ClayTop.xls; updated 6/22/07 ter

Notes:

1. Vertical Datum based on feet NGVD 1929.
2. WMI extended the rods of the settling plates.
3. Benchmarks used in March 30, 2000 survey were found to have settled; elevations shown for July 5, 2000 were tied into new benchmarks.

## Settlement of Pump Station B Sump





## REPORT OF SURVEY

**NOTE: THIS REPORT IS NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL  
RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.**

***PICKETT & ASSOCIATES, PROJECT NO.: 12131-1***

***DRAWING NO: N/A***

***TITLE/TYPE OF SURVEY: SPECIFIC PURPOSE SURVEY***

***DATE OF SURVEY: 06/01/07***

***SUBJECT: SOUTHEAST HILLSBOROUGH COUNTY LANDFILL SITE***

***CLIENT: WASTE MANAGEMENT, INC. OF FLORIDA***

PIPE	NORTHING	EASTING	ELEVATION	DESCRIPTION
SW	1251010.3	596333.8	172.81	Top of 4" pipe
			172.52	Top of 1" pipe
SE	1251004.7	596339.5	172.94	Top of 4" pipe
			172.72	Top of 1" pipe
NE	1251014.2	596344.4	173.07	Top of 4" pipe
			172.65	Top of 1" pipe
NW	1251014.5	596336.5	172.47	Top of 4" pipe
			172.54	Top of 1" pipe

### **METHODOLOGY AND ACCURACY STATEMENT:**

The top of the 4" pipe located at the northwest corner of the vault was used as a benchmark and surveyed with RTK GPS and was observed at least twice with a new initialization between each observation. Observation time at that point did not exceed 10 minutes. This point has an estimated horizontal positional accuracy of 0.08' or less and a vertical positional accuracy of 0.10' or less.

### **DATUM:**

**HORIZONTAL:** North and the Coordinates are based on the West Zone of the Florida State Plane Coordinate System, NAD 83 1990 adjustment and are based upon provided control referenced to Hillsborough County Horizontal Control Monument LW-E (PID AG8960) and LW-D (PID AG8959).

**VERTICAL:** Elevations are to National Geodetic Vertical Datum of 1929 and are based upon provided control referenced to Hillsborough County Horizontal Control Monument LW-D (PID AG8959), elevation is 118.68' from Hillsborough County's Vertical Control Network.

# Pickett & Associates, Inc.

## NOTES:

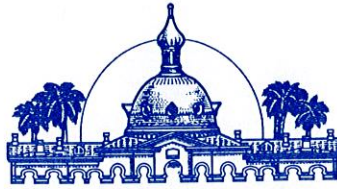
The quarterly Specific Purpose Survey was prepared to show the existing conditions of the above ground pipes coming from the vault located at the above referenced landfill.

Eric M. Presnell

Eric M. Presnell, PSM  
Florida Registration No. 5568  
Pickett & Associates, Inc.  
Florida Registration No. 364

6/1/07  
Survey Date





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Florida

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FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION  
JUL 12 2007  
SOUTHWEST DISTRICT  
TAMPA

RE: Southeast County Landfill –June 2007 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 Form for the month of June 2007. In addition, the SWMD is providing the June 2007 field data forms for the Landfill, the daily leachate and collection system evaluation reports and the Year-to-Date Leachate Balance Summary.

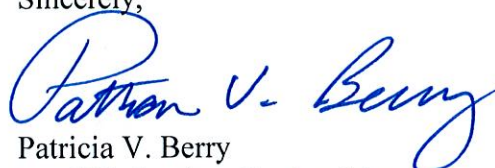
This information is being provided to the Florida Department of Environmental Protection (DEP) and the Hillsborough County Environmental Protection Commission as part of the quarterly Leachate Water Balance report on the Landfill leachate management efforts in accordance with Permit No. 35435-006-SO, Specific Condition No. 16.

As initiated with the April 1996 report, the Landfill leachate information for June 2007 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. The average depth of leachate in the PS-B sump for the recorded days in June 2007 was 18.8 inches.

Ms. Susan J. Pelz  
July 10, 2007  
Page Two

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

Sincerely,

A handwritten signature in blue 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. The initials "V." are clearly visible between the first and last names.

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

Attachments

glfs/lea0607.dep





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**M E M O R A N D U M**

**DATE:** July 3, 2007

**TO:** Patricia Berry, Section Manager, Solid Waste Management Department

**FROM:**  Larry Ruiz, General Manager III, Solid Waste Management Department  
 Raymond Graves, Eng. Tech. II, Solid Waste Management Department

**SUBJECT:** Leachate Water Balance Report Forms for June 2007  
Southeast County Landfill, Hillsborough County, Florida

The Solid Waste Management Department (SWMD) staff has compiled and reviewed the leachate management operational data from the Southeast County Landfill Phases I-VI and Sections 7-8 of the Capacity Expansion for June 2007. Attached are the Leachate Water Balance Report Form (Table 1), the Leachate Field Data Entry Form (Table 2), and the 2007 Summary (Table 3). Also, attached find Figure 1 showing leachate levels in the Pump Station B sump 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 4.9 inches of rainfall at the Southeast County Landfill (SCLF).



## MEMORANDUM

July 3, 2007

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### **Depth in Pond A (Column III)**

Column III presents the daily depth, in feet, of effluent stored in the existing 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 effluent was not stored in Pond A.

### **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. On June 7, 2007 the SWMD began placing leachate in Pond B in order to re-inspect the bottom of the leachate storage tank. This month the daily average depth in Pond B was 1.9 inches.

### **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. PS-B was below the normal operation level of 24 inches. The average depth of leachate in the PS-B sump was 18.8 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 173 gallons. A total of 5,200 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 30,539 gallons. A total of 916,160 gallons of leachate was pumped this month.

MEMORANDUM

July 3, 2007

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**Leachate Pumped from Sections 7-8 Leak Detection System (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 439 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. Normally 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 an estimated 47,470 gallons of leachate was pumped from Sections 7-8.

**Total Leachate Pumped to LTRF (Column X)**

Column X presents the total quantity of leachate pumped to the LTRF through the MLPS from Phases I-VI and from Sections 7-8. This month a total of 963,630 gallons of leachate was pumped from Phases I-VI and Sections 7-8.

**Leachate in 575,000-Gallon Tank (Column XI)**

Column XI 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 212,100 gallons of leachate was stored in the tank. On June 7, 2007, the SWMD began to empty the storage tank for re-inspection.

**Leachate Treated at LTRF (Column XII)**

Column XII presents the daily amount of leachate, in gallons, treated at the LTRF. On November 27, 2006, the SWMD began shut-down procedures in preparation for tankage inspection. At this time the SWMD is awaiting to complete the recommended repairs to the process tank. This month leachate was not treated at the LTRF.

**Total Leachate Hauled (Column XIII)**

Column XIII presents the daily amount of leachate, in gallons, hauled off site. This month a total of 1,170,278 gallons of leachate was hauled off site.

## MEMORANDUM

July 3, 2007

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### **Leachate Dust Control (Sprayed) (Column XIV)**

Column XIV 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 XV)**

Column XV 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 effluent was not stored in Pond A.

### **Pond B Storage (Column XVI)**

Column XVI 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). The volume of the pond at varying depths is estimated using AutoCAD software and calculations based on the conic method for reservoir volumes. 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 121,100 gallons of leachate was stored in Pond B.

### **Effluent Sprayed at Pond B (Column XVII)**

Column XVII 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. Effluent was not sprayed at Pond B this month.

### **Effluent Irrigation (Column XVIII)**

Column XVIII 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 effluent was not used as spray irrigation.

MEMORANDUM

July 3, 2007

Page 5 of 5

**Effluent Dust Control (Sprayed) (Column XIX)**

Column XIX 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 XX)**

Column XX presents the daily amount of effluent, in gallons, hauled off site, as measured from the flow meter at the bypass-loading arm. This month effluent was not hauled off site.

**Total Evaporation (Column XXI)**

Column XXI presents the daily amount of leachate and effluent, in gallons, that evaporates and therefore will not be returned to the SCLF and/or require treatment. The landfill evaporation rate includes 80 percent of the daily values from Columns XIV, XVIII, and XIX plus 5 percent of the daily values from Column XVII. Evaporation rates of 80 percent (based on the HELP model water balance analysis for the site) and 5 percent evaporation rate for spray in Pond B are assumed. The total evaporation estimated for this month was zero 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 963,630 gallons. Total outflow quantity from the LTRF was 1,170,278 gallons. The change in storage for the month of June decreased by 206,648 gallons.

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

**TABLE 1. LEACHATE WATER BALANCE REPORT FORM**  
**JUNE 2007**  
**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
Day	Rainfall (in.)	Depth in Pond A (ft.)	Depth in Pond B (in.)	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 Leak Det. (gal.)	Leachate Pumped to MLPS from Sections 7-8 (gal.)	Total Leachate Pumped to LTRF (gal.)	Leachate 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	1.55	0.0	0.0	19.8	190	30,964	15	585	31,549	420,000	0	50,360	0	0	0	0	0	0	0	0
2	0.40	0.0	0.0	19.9	155	36,584	14	3,350	39,934	410,000	0	32,362	0	0	0	0	0	0	0	0
3	0.00	0.0	0.0	9.9	260	33,976	18	0	33,976	415,000	0	32,178	0	0	0	0	0	0	0	0
4	0.00	0.0	0.0	9.2	0	31,060	15	3,295	34,355	415,000	0	25,038	0	0	0	0	0	0	0	0
5	0.00	0.0	0.0	9.6	155	32,378	25	0	32,378	420,000	0	18,616	0	0	0	0	0	0	0	0
6	0.73	0.0	0.0	18.3	40	28,510	5	3,310	31,820	432,000	0	12,662	0	0	0	0	0	0	0	0
7	0.40	0.0	0.0	22.1	160	28,222	13	0	28,222	441,000	0	50,918	0	0	0	0	0	0	0	0
8	0.27	0.0	1.1	21.4	10	26,410	15	3,410	29,820	394,000	0	45,168	0	0	23,000	0	0	0	0	0
9	0.00	0.0	1.5	20.2	210	29,434	15	0	29,434	353,000	0	32,118	0	0	44,000	0	0	0	0	0
10	0.00	0.0	1.8	17.7	225	35,330	14	3,488	38,818	331,000	0	0	0	0	64,000	0	0	0	0	0
11	0.00	0.0	2.1	22.6	0	33,270	15	3,322	36,592	331,000	0	12,062	0	0	88,000	0	0	0	0	0
12	0.10	0.0	2.4	17.4	105	31,906	24	0	31,906	317,000	0	44,170	0	0	115,000	0	0	0	0	0
13	0.30	0.0	2.7	19.1	220	34,260	5	3,180	37,440	274,000	0	44,374	0	0	143,000	0	0	0	0	0
14	0.00	0.0	3.0	20.9	30	34,258	25	10	34,268	233,000	0	38,737	0	0	172,000	0	0	0	0	0
15	0.24	0.0	3.0	20.6	220	32,344	5	3,260	35,604	192,000	0	46,092	0	0	172,000	0	0	0	0	0
16	0.00	0.0	3.0	21.7	380	31,134	25	3,130	34,264	185,000	0	65,178	0	0	172,000	0	0	0	0	0
17	0.00	0.0	3.2	18.3	230	30,198	5	0	30,198	158,000	0	0	0	0	192,000	0	0	0	0	0
18	0.25	0.0	3.3	19.4	0	24,498	14	0	24,498	158,000	0	62,969	0	0	202,000	0	0	0	0	0
19	0.00	0.0	3.4	19.8	70	28,048	14	3,260	31,308	120,000	0	75,824	0	0	213,000	0	0	0	0	0
20	0.00	0.0	3.4	19.3	320	28,756	13	0	28,756	70,000	0	70,022	0	0	213,000	0	0	0	0	0
21	0.00	0.0	3.0	17.4	130	24,342	15	2,810	27,152	60,000	0	79,129	0	0	172,000	0	0	0	0	0
22	0.00	0.0	2.5	18.7	270	31,604	15	0	31,604	60,000	0	87,833	0	0	124,000	0	0	0	0	0
23	0.00	0.0	2.0	17.4	220	14,042	24	2,995	17,037	58,000	0	30,417	0	0	80,000	0	0	0	0	0
24	0.00	0.0	1.7	17.2	170	548	5	0	548	58,000	0	0	0	0	57,000	0	0	0	0	0
25	0.00	0.0	2.2	21.8	0	57,704	10	2,955	60,659	58,000	0	63,447	0	0	97,000	0	0	0	0	0
26	0.00	0.0	2.3	19.0	300	32,734	13	0	32,734	0	0	43,129	0	0	106,000	0	0	0	0	0
27	0.48	0.0	2.0	22.2	0	32,074	13	0	32,074	0	0	41,493	0	0	80,000	0	0	0	0	0
28	0.18	0.0	2.0	20.9	270	32,372	14	2,050	34,422	0	0	30,722	0	0	80,000	0	0	0	0	0
29	0.00	0.0	2.1	22.9	260	34,220	24	3,060	37,280	0	0	35,260	0	0	88,000	0	0	0	0	0
30	0.00	0.0	2.1	20.4	600	34,980	4	0	34,980	0	0	0	0	0	88,000	0	0	0	0	0
Total	4.90				5,200	916,160	431	47,470	963,630		0	1,170,278	0					0	0	0
Daily Average		0.0	1.9	18.8	173	30,539	14	1,582	32,121	212,100				0	121,100	0		0	0	0
Mo. Average														0			0	0	0	0

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 Column V, PPS-B sensor reading plus 9 inches  
8 Columns VIII & IX, Sections 7-8 leak detection pumped into leachate sump riser  
9 Column XI, calculated from depth in 575,000 gal. leachate tank  
10 Columns VI, VII, VIII, IX, XII, XIII, XIV, XVIII, and XIX, quantities from flow meters.  
11 Column XXI includes 80% of the daily values from Columns XIV, XVIII, and XIX plus 5% of the daily values from column XVII

**TABLE 2. FIELD DATA ENTRY FORM**  
**JUNE 2007**  
**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
Day	Reading PS-B (in.)	Sections 7-8 Leak Det. (gal.)	Sections 7-8 Flow Meter (gal.)	Flow Meter TPS-6 (gal.)	Flow Meter Pump Sta. A (gal.)	Depth in 575K Tank (ft.)	Leachate Hauled		Leachate Dust Control (Sprayed) (gal.)	Rainfall (in.)	Depth in Pond A (ft.)	Depth in Pond B (ft.)	Effluent Sprayed (Pond B) (gal.)	Leachate Treated at LTRF (gal.)	Effluent Irrigation (gal.)	Effluent Hauled		Effluent Dust Control (Sprayed) (gal.)
							Contractor (gal.)	County (gal.)								Contractor (gal.)	County (gal.)	
1	10.8	7,046	12,842,265	5,850,020	8,665,368	14.58	0	50,360	0	1.55	0.0	0.0	0.0	0	0	0	0	0
2	10.9	7,060	12,845,615	5,850,175	8,701,952	14.25	0	32,362	0	0.40	0.0	0.0	0.0	0	0	0	0	0
3	0.9	7,078	12,845,615	5,850,435	8,735,928	14.42	0	32,178	0	0.00	0.0	0.0	0.0	0	0	0	0	0
4	0.2	7,093	12,848,910	5,850,435	8,766,988	14.42	0	25,038	0	0.00	0.0	0.0	0.0	0	0	0	0	0
5	0.6	7,118	12,848,910	5,850,590	8,799,366	14.58	0	18,616	0	0.00	0.0	0.0	0.0	0	0	0	0	0
6	9.3	7,123	12,852,220	5,850,630	8,827,876	15.00	0	12,662	0	0.73	0.0	0.0	0.0	0	0	0	0	0
7	13.1	7,136	12,852,220	5,850,790	8,856,098	15.33	0	50,918	0	0.40	0.0	0.0	0.0	0	0	0	0	0
8	12.4	7,151	12,855,630	5,850,800	8,882,508	13.67	0	45,168	0	0.27	0.0	1.1	0.0	0	0	0	0	0
9	11.2	7,166	12,855,630	5,851,010	8,911,942	12.25	0	32,118	0	0.00	0.0	1.5	0.0	0	0	0	0	0
10	8.7	7,180	12,859,118	5,851,235	8,947,272	11.50	0	0	0	0.00	0.0	1.8	0.0	0	0	0	0	0
11	13.6	7,195	12,862,440	5,851,235	8,980,542	11.50	0	12,062	0	0.00	0.0	2.1	0.0	0	0	0	0	0
12	8.4	7,219	12,862,440	5,851,340	9,012,448	11.00	0	44,170	0	0.10	0.0	2.4	0.0	0	0	0	0	0
13	10.1	7,224	12,865,620	5,851,560	9,046,708	9.50	0	44,374	0	0.30	0.0	2.7	0.0	0	0	0	0	0
14	11.9	7,249	12,865,630	5,851,590	9,080,966	8.08	13,871	24,866	0	0.00	0.0	3.0	0.0	0	0	0	0	0
15	11.6	7,254	12,868,890	5,851,810	9,113,310	6.67	28,042	18,050	0	0.24	0.0	3.0	0.0	0	0	0	0	0
16	12.7	7,279	12,872,020	5,852,190	9,144,444	6.42	35,070	30,108	0	0.00	0.0	3.0	0.0	0	0	0	0	0
17	9.3	7,284	12,872,020	5,852,420	9,174,642	5.50	0	0	0	0.00	0.0	3.2	0.0	0	0	0	0	0
18	10.4	7,298	12,872,020	5,852,420	9,199,140	5.50	20,851	42,118	0	0.25	0.0	3.3	0.0	0	0	0	0	0
19	10.8	7,312	12,875,280	5,852,490	9,227,188	4.17	27,680	48,144	0	0.00	0.0	3.4	0.0	0	0	0	0	0
20	10.3	7,325	12,875,280	5,852,810	9,255,944	2.42	27,916	42,106	0	0.00	0.0	3.4	0.0	0	0	0	0	0
21	8.4	7,340	12,878,090	5,852,940	9,280,286	2.08	37,044	42,085	0	0.00	0.0	3.0	0.0	0	0	0	0	0
22	9.7	7,355	12,878,090	5,853,210	9,311,890	2.08	51,695	36,138	0	0.00	0.0	2.5	0.0	0	0	0	0	0
23	8.4	7,379	12,881,085	5,853,430	9,325,932	2.00	0	30,417	0	0.00	0.0	2.0	0.0	0	0	0	0	0
24	8.2	7,384	12,881,085	5,853,600	9,326,480	2.00	0	0	0	0.00	0.0	1.7	0.0	0	0	0	0	0
25	12.8	7,394	12,884,040	5,853,600	9,384,184	2.00	51,435	12,012	0	0.00	0.0	2.2	0.0	0	0	0	0	0
26	10.0	7,407	12,884,040	5,853,900	9,416,918	0.00	36,133	6,996	0	0.00	0.0	2.3	0.0	0	0	0	0	0
27	13.2	7,420	12,884,040	5,853,900	9,448,992	0.00	29,470	12,023	0	0.48	0.0	2.0	0.0	0	0	0	0	0
28	11.9	7,434	12,886,090	5,854,170	9,481,364	0.00	30,722	0	0	0.18	0.0	2.0	0.0	0	0	0	0	0
29	13.9	7,458	12,889,150	5,854,430	9,515,584	0.00	35,260	0	0	0.00	0.0	2.1	0.0	0	0	0	0	0
30	11.4	7,462	12,889,150	5,855,030	9,550,564	0.00	0	0	0	0.00	0.0	2.1	0.0	0	0	0	0	0

projects\balance\2007\06-07bal.xls (Revised by ler 7/03/07)

**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 XI, trace is less than 0.01 inches.
5. Columns III, IV, V, VI, VIII, IX, X, XIV, XV, XVI, XVII and XVIII are quantities from flow meters.
6. Columns XII and XIII measured from staff gages in each pond.

Type of Cover	Phases I-VI acres	Sections 7-8 acres
Open	6	0
Intermediate	133.4	19.3
Final	23	0
Not Opened	0	0



**TABLE 3. 2007 MONTHLY LEACHATE BALANCE SUMMARY  
SOUTHEAST COUNTY LANDFILL  
HILLSBOROUGH COUNTY, FLORIDA**

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 Sections 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 <sup>3</sup> (gal.)
January	3.02	0	82,740	1,042,128	1,161,110	0	0	0	0	0	1,124,868	1,161,110	-36,242
February	2.50	0	80,265	931,149	1,205,428	0	0	0	0	0	1,011,414	1,205,428	-194,014
March	0.77	0	42,020	967,447	875,037	0	0	0	0	0	1,009,467	875,037	134,430
April	3.95	0	80,340	935,221	933,917	0	0	0	0	0	1,015,561	933,917	81,644
May	0.54	0	37,270	947,356	932,067	3,992	0	0	0	0	984,626	936,059	48,567
June	4.90	0	47,470	916,160	1,170,278	0	0	0	0	0	963,630	1,170,278	-206,648
July	0.00	0	0	0	0	0	0	0	0	0	0	0	0
August	0.00	0	0	0	0	0	0	0	0	0	0	0	0
September	0.00	0	0	0	0	0	0	0	0	0	0	0	0
October	0.00	0	0	0	0	0	0	0	0	0	0	0	0
November	0.00	0	0	0	0	0	0	0	0	0	0	0	0
December	0.00	0	0	0	0	0	0	0	0	0	0	0	0
YTD Total	15.68	0	370,105	5,739,461	6,277,837	3,992	0	0	0	0	6,109,566	6,281,829	-172,263

projects\balance\2007\2007-summary.xls (Revised by ler 7/3/07)

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.

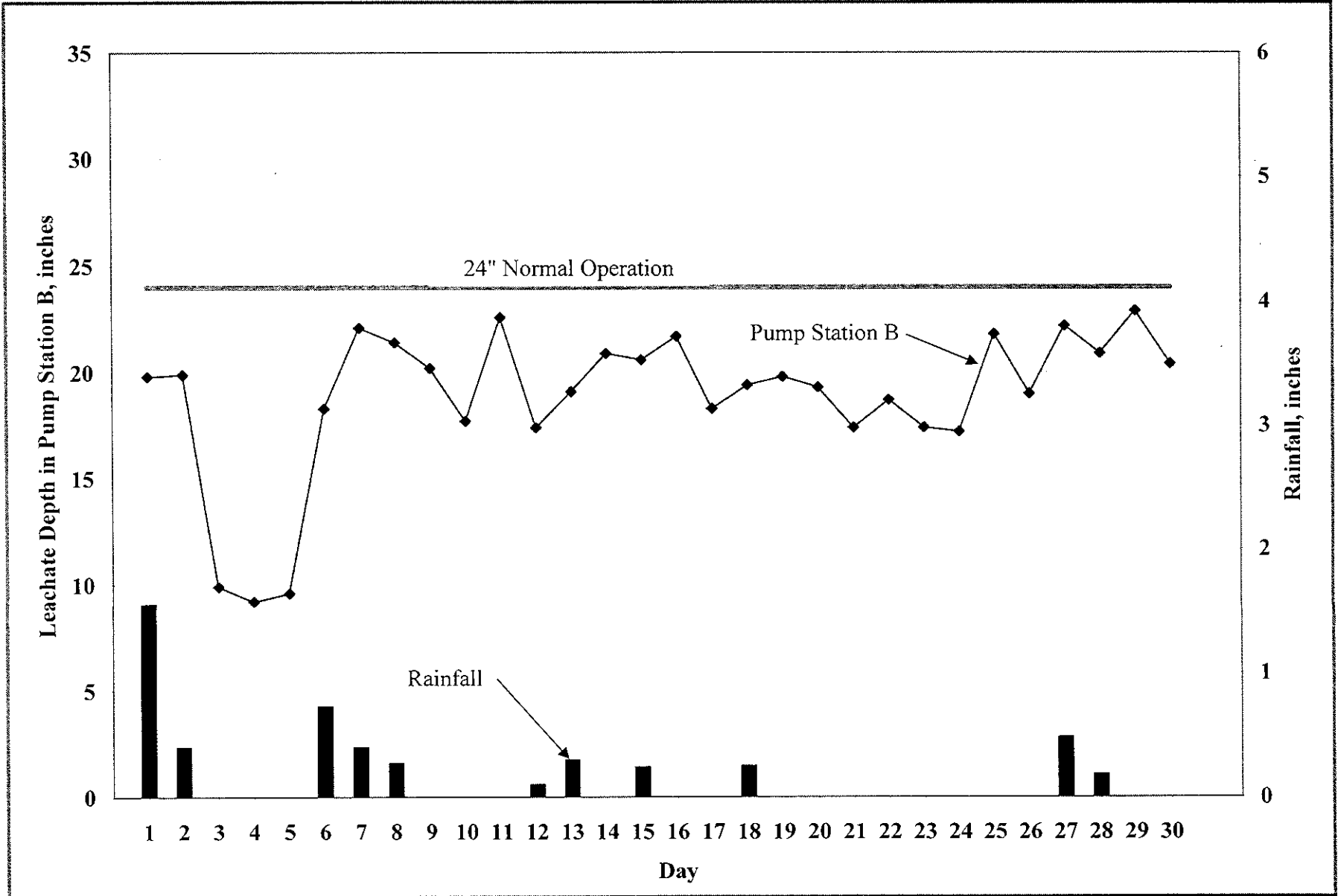


Figure 1. Leachate Levels in Pump Station B and Rainfall for June 2007.

**LEACHATE DEPTH/SUMMARY DATA FORM  
SOUTHEAST COUNTY LANDFILL**

(Month/Year) June, 2007

Date	TPS-6		Depth <sup>1</sup> in Pond B (feet)	Pump <sup>2</sup> Station B (inches)	PS-A Flow Meter (gallons)	Sections 7-8		Depth in 575k Tank (feet)	Leachate Hauled		Leachate Dust Control/ Evap. (gallons)	Rainfall (inches)
	Depth (inches)	Flowmeter (gallons)				Flowmeter (gallons)	Leak Detection (gallons)		Contractor (gallons)	County (gallons)		
1	0.0	190	0.00	10.8	30,964	585	15	14'7"	0	50,360	0	1.55
2	0.0	155	0.00	10.9	36,584	3,350	14	14'3"	0	32,362	0	0.40
3	0.0	260	0.00	0.9	33,976	0	18	14'5"	0	32,178	0	0.00
4	0.0	0	0.00	0.2	31,060	3,295	15	14'5"	0	25,038	0	0.00
5	0.0	155	0.00	0.6	32,378	0	25	14'7"	0	18,616	0	0.00
6	0.0	40	0.00	9.3	28,510	3,310	5	15'0"	0	12,662	0	0.73
7	0.0	160	0.00	13.1	28,222	0	13	15'4"	0	50,918	0	0.40
8	0.0	10	1.10	12.4	26,410	3,410	15	13'8"	0	45,168	0	0.27
9	0.0	210	1.50	11.2	29,434	0	15	12'3"	0	32,118	0	0.00
10	0.0	225	1.80	8.7	35,330	3,488	14	11'6"	0	0	0	0.00
11	0.0	0	2.10	13.6	33,270	3,322	15	11'6"	0	12,062	0	0.00
12	0.0	105	2.40	8.4	31,906	0	24	11'0"	0	44,170	0	0.10
13	0.0	220	2.70	10.1	34,260	3,180	5	9'6"	0	44,374	0	0.30
14	0.0	30	3.00	11.9	34,258	10	25	8'1"	13,871	24,866	0	0.00
15	0.0	220	3.00	11.6	32,344	3,260	5	6'8"	28,042	18,050	0	0.24
16	0.0	380	3.00	12.7	31,134	3,130	25	6'5"	35,070	30,108	0	0.00

Note: (1) If depth is 3.6 feet or greater, contact Supervisor immediately.

(2) If depth is greater than 24 inches (2.0 feet), contact Supervisor immediately. Complete Evaluation Report Form.

Comments: \_\_\_\_\_

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Prepared by: Raymond C. Shaw

**Revised Jan. 16, 2004**

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**LEACHATE DEPTH/SUMMARY DATA FORM  
SOUTHEAST COUNTY LANDFILL**

(Month/Year) June, 2007

Date	TPS-6		Depth <sup>1</sup> in Pond B (feet)	Pump <sup>2</sup> Station B (inches)	PS-A Flow Meter (gallons)	Sections 7-8		Depth in 575k Tank (feet)	Leachate	Hauled	Leachate	Rainfall (inches)
	Depth (inches)	Flowmeter (gallons)				Flowmeter (gallons)	Leak Detection (gallons)		Contractor (gallons)	County (gallons)	Dust Control/ Evap. (gallons)	
17	0.0	230	3.20	9.3	30,198	0	5	5'6"	0	0	0	0.00
18	0.0	0	3.30	10.4	24,498	0	14	5'6"	20,851	42,118	0	0.25
19	0.0	70	3.40	10.8	27,768	3,260	14	4'2"	27,680	48,144	0	0.00
20	0.0	320	3.40	10.3	28,756	0	13	2'5"	27,916	42,106	0	0.00
21	0.0	130	3.00	8.4	24,342	2,710	15	2'1"	37,044	42,085	0	0.00
22	0.0	270	2.50	9.7	31,604	0	15	2'1"	51,695	36,138	0	0.00
23	0.0	220	2.00	8.4	14,042	2,995	24	2'0"	0	30,417	0	0.00
24	0.0	170	1.70	8.2	548	0	5	2'0"	0	0	0	0.00
25	0.0	0	2.20	12.8	57,704	2,955	10	2'0"	51,435	12,012	0	0.00
26	0.0	300	2.30	10.0	32,734	0	13	0.00	36,133	6,996	0	0.00
27	0.0	0	2.00	13.2	32,074	0	13	0.00	29,470	12,023	0	0.48
28	0.0	270	2.00	11.9	32,372	2,050	14	0.00	30,722	0	0	0.18
29	0.0	260	2.10	13.9	34,220	3,060	24	0.00	35,260	0	0	0.00
30	0.0	600	2.10	11.4	34,980	0	4	0.00	0	0	0	0.00

Note: (1) If depth is 3.6 feet or greater, contact Supervisor immediately.

(2) If depth is greater than 24 inches (2.0 feet), contact Supervisor immediately. Complete Evaluation Report Form.

Comments: \_\_\_\_\_

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Prepared by: Raymond S. Laver

**Revised Jan. 16, 2004**

09200020.24\Leachate Balance\LeachateData\_\LeachateData\_June,2007.xls

**EFFLUENT DEPTH/QUANTITIES DATA FORM  
SOUTHEAST COUNTY LANDFILL**

(Month/Year) June, 2007

Date	Depth in Pond A <sup>1</sup>  (feet)	Depth in Pond B <sup>2</sup>  (feet)	Pond B Leak Detection <sup>3</sup>  (gallons)	Leachate Treated (gallons)	Treated Effluent					Time at End of Rainfall	Effluent <sup>4</sup> Runoff to Retention Area (Y/N)	
					Spray Irrigated (gallons)	Evaporated at Pond B (gallons)	Hauled		Dust Control/ Evap. (gallons)			Effluent Stored (gallons)
							Contractor (gallons)	County (gallons)				
1	0.00	0.00	0	0	0	0	0	0				
2	0.00	0.00	0	0	0	0	0	0				
3	0.00	0.00	0	0	0	0	0	0				
4	0.00	0.00	0	0	0	0	0	0				
5	0.00	0.00	0	0	0	0	0	0				
6	0.00	0.00	0	0	0	0	0	0				
7	0.00	0.00	0	0	0	0	0	0				
8	0.00	0.00	0	0	0	0	0	0				
9	0.00	0.00	0	0	0	0	0	0				
10	0.00	0.00	0	0	0	0	0	0				
11	0.00	0.00	0	0	0	0	0	0				
12	0.00	0.00	0	0	0	0	0	0				
13	0.00	0.00	0	0	0	0	0	0				
14	0.00	0.00	0	0	0	0	0	0				
15	0.00	0.00	0	0	0	0	0	0				
16	0.00	0.00	0	0	0	0	0	0				

- Note (1) If depth is 4.5 feet or greater, contact Supervisor immediately.  
 (2) If depth is 3.6 feet or greater, contact Supervisor immediately.  
 (3) If rate is higher than 1,500 gallons per day, contact Supervisor immediately.  
 (4) If yes, contact Supervisor immediately. Complete Evaluation Report Form.

Comments: \_\_\_\_\_

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Prepared by: Raymond C. Jones

**EFFLUENT DEPTH/QUANTITIES DATA FORM  
SOUTHEAST COUNTY LANDFILL**

(Month/Year) June, 2007

Date	Depth in Pond A <sup>1</sup>  (feet)	Depth in Pond B <sup>2</sup>  (feet)	Pond B Leak Detection <sup>3</sup> (gallons)	Leachate Treated (gallons)	Treated Effluent						Time at End of Rainfall	Effluent <sup>4</sup> Runoff to Retention Area (Y/N)
					Spray Irrigated (gallons)	Evaporated at Pond B (gallons)	Hauled		Dust Control/ Evap. (gallons)	Effluent Stored (gallons)		
							Contractor (gallons)	County (gallons)				
17	0.00	0.00	0	0	0		0	0				
18	0.00	0.00	0	0	0		0	0				
19	0.00	0.00	0	0	0		0	0				
20	0.00	0.00	0	0	0		0	0				
21	0.00	0.00	0	0	0		0	0				
22	0.00	0.00	0	0	0		0	0				
23	0.00	0.00	0	0	0		0	0				
24	0.00	0.00	0	0	0		0	0				
25	0.00	0.00	0	0	0		0	0				
26	0.00	0.00	0	0	0		0	0				
27	0.00	0.00	0	0	0		0	0				
28	0.00	0.00	0	0	0		0	0				
29	0.00	0.00	0	0	0		0	0				
30	0.00	0.00	0	0	0		0	0				

Note (1) If depth is 4.5 feet or greater, contact Supervisor immediately.

(2) If depth is 3.6 feet or greater, contact Supervisor immediately.

(3) If rate is higher than 1,500 gallons per day, contact Supervisor immediately.

(4) If yes, contact Supervisor immediately. Complete Evaluation Report Form.

Comments: \_\_\_\_\_

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Prepared by: Raymond C. Brown





Hillsborough County  
Florida

Office of the County Administrator  
Patricia G. Bean

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Manus J. O' Donnell

June 22, 2007

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  
JUL 12 2007  
SOUTHWEST DISTRICT  
TAMPA

RE: Southeast County Landfill –May 2007 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 Form for the month of May 2007. In addition, the SWMD is providing the May 2007 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 (DEP) 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. 35435-006-SO, Specific Condition No. 16.

As initiated with the April 1996 report, the Landfill leachate information for May 2007 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. The average depth of leachate in the PS-B sump for the recorded days in May 2007 was 20 inches.

Ms. Susan J. Pelz  
June 22, 2007  
Page Two

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

Sincerely,



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

Attachments

glfs/lea0507.dep



Hillsborough County  
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Patricia G. Bean

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Manus J. O' Donnell

MEMORANDUM

**DATE:** June 20, 2007

**TO:** Patricia Berry, Section Manager, Solid Waste Management Department

**FROM:** *fel* Larry Ruiz, General Manager III, Solid Waste Management Department  
Raymond Graves, Eng. Tech. II, Solid Waste Management Department

**SUBJECT:** Leachate Water Balance Report Forms for May 2007  
Southeast County Landfill, Hillsborough County, Florida

The Solid Waste Management Department (SWMD) staff has compiled and reviewed the leachate management operational data from the Southeast County Landfill Phases I-VI and Sections 7-8 of the Capacity Expansion for May 2007. Attached are the Leachate Water Balance Report Form (Table 1), the Leachate Field Data Entry Form (Table 2), and the 2007 Summary (Table 3). Also, attached find Figure 1 showing leachate levels in the Pump Station B sump 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 0.54 inches of rainfall at the Southeast County Landfill (SCLF).

## MEMORANDUM

June 20, 2007

Page 2 of 5

### **Depth in Pond A (Column III)**

Column III presents the daily depth, in feet, of effluent stored in the existing 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 effluent was not stored in Pond A.

### **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 effluent/leachate was not stored in Pond B.

### **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. PS-B was below the normal operation level of 24 inches. The average depth of leachate in the PS-B sump was 20 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 207 gallons. A total of 6,410 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 30,560 gallons. A total of 947,356 gallons of leachate was pumped this month.

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**Leachate Pumped from Sections 7-8 Leak Detection System (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 1,332 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. Normally 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 an estimated 32,270 gallons of leachate was pumped from Sections 7-8.

**Total Leachate Pumped to LTRF (Column X)**

Column X presents the total quantity of leachate pumped to the LTRF through the MLPS from Phases I-VI and from Sections 7-8. This month a total of 984,626 gallons of leachate was pumped from Phases I-VI and Sections 7-8.

**Leachate in 575,000-Gallon Tank (Column XI)**

Column XI 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 428,400 gallons of leachate was stored in the tank.

**Leachate Treated at LTRF (Column XII)**

Column XII presents the daily amount of leachate, in gallons, treated at the LTRF. On November 27, 2006, the SWMD began shut-down procedures in preparation for tankage inspection. At this time the SWMD is awaiting to complete the recommended repairs to the process tank. This month leachate was not treated at the LTRF.

**Total Leachate Hauled (Column XIII)**

Column XIII presents the daily amount of leachate, in gallons, hauled off site. This month a total of 932,067 gallons of leachate was hauled off site.

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### **Leachate Dust Control (Sprayed) (Column XIV)**

Column XIV 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 3,992 gallons of leachate was used for dust control.

### **Pond A Storage (Column XV)**

Column XV 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 effluent was not stored in Pond A.

### **Pond B Storage (Column XVI)**

Column XVI 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). The volume of the pond at varying depths is estimated using AutoCAD software and calculations based on the conic method for reservoir volumes. 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 effluent/leachate was not stored in Pond B.

### **Effluent Sprayed at Pond B (Column XVII)**

Column XVII 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. Effluent was not sprayed at Pond B this month.

### **Effluent Irrigation (Column XVIII)**

Column XVIII 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 effluent was not used as spray irrigation.



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### **Effluent Dust Control (Sprayed) (Column XIX)**

Column XIX 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 XX)**

Column XX presents the daily amount of effluent, in gallons, hauled off site, as measured from the flow meter at the bypass-loading arm. This month effluent was not hauled off site.

### **Total Evaporation (Column XXI)**

Column XXI presents the daily amount of leachate and effluent, in gallons, that evaporates and therefore will not be returned to the SCLF and/or require treatment. The landfill evaporation rate includes 80 percent of the daily values from Columns XIV, XVIII, and XIX plus 5 percent of the daily values from Column XVII. Evaporation rates of 80 percent (based on the HELP model water balance analysis for the site) and 5 percent evaporation rate for spray in Pond B are assumed. The total evaporation estimated for this month was 3,200 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 984,626 gallons. Total outflow quantity from the LTRF was 936,059 gallons. The change in storage for the month of May increased by 48,567 gallons.

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

**TABLE 1. LEACHATE WATER BALANCE REPORT FORM**  
**MAY 2007**  
**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
Day	Rainfall (in.)	Depth in Pond A (ft.)	Depth in Pond B (in.)	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 Leak Det (gal.)	Leachate Pumped to MLPS from Sections 7-8 (gal.)	Total Leachate Pumped to LTRF (gal.)	Leachate in 575K Tank (gal.)	Leachate Treated at LTRF (gal.)	Total Leachate Hauled (gal.)	Leachate Dust Control (Sprayed) (gal.)	Pond A Storage (gal.)	Pond B Storage (gal.)	Effluent Sprayed Pond B (gal.)	Effluent Irrigation (gal.)	Effluent Dust Control (Sprayed) (gal.)	Total Effluent Hauled (gal.)	Total Evaporation (gal.)
1	0.00	0.0	0.0	20.9	350	31,340	34	0	31,340	374,000	0	37,561	0	0	0	0	0	0	0	0
2	0.00	0.0	0.0	17.0	340	30,662	65	3,110	33,772	367,000	0	24,949	0	0	0	0	0	0	0	0
3	0.00	0.0	0.0	21.6	300	33,260	24	10	33,270	379,000	0	24,946	0	0	0	0	0	0	0	0
4	0.00	0.0	0.0	18.1	300	32,669	68	3,090	35,759	384,000	0	31,586	0	0	0	0	0	0	0	0
5	0.42	0.0	0.0	17.3	280	31,703	72	0	31,703	379,000	0	25,695	0	0	0	0	0	0	0	0
6	0.00	0.0	0.0	22.4	225	30,591	88	2,920	33,511	401,000	0	0	0	0	0	0	0	0	0	0
7	0.00	0.0	0.0	22.0	0	31,470	101	0	31,470	434,000	0	18,508	0	0	0	0	0	0	0	0
8	0.00	0.0	0.0	18.3	235	29,677	56	2,690	32,367	446,000	0	38,610	0	0	0	0	0	0	0	0
9	0.00	0.0	0.0	19.0	230	35,696	50	0	35,696	441,000	0	18,138	0	0	0	0	0	0	0	0
10	0.00	0.0	0.0	19.4	280	34,965	23	2,760	37,725	461,000	0	49,934	0	0	0	0	0	0	0	0
11	0.00	0.0	0.0	19.3	300	32,803	21	0	32,803	437,000	0	43,931	0	0	0	0	0	0	0	0
12	0.00	0.0	0.0	20.0	310	33,470	19	0	33,470	427,000	0	25,810	0	0	0	0	0	0	0	0
13	0.00	0.0	0.0	21.5	160	30,351	29	3,220	33,571	439,000	0	0	0	0	0	0	0	0	0	0
14	0.00	0.0	0.0	19.4	0	29,188	13	0	29,188	468,000	0	37,634	0	0	0	0	0	0	0	0
15	0.00	0.0	0.0	21.0	520	27,181	37	0	27,181	446,000	0	50,000	0	0	0	0	0	0	0	0
16	0.12	0.0	0.0	22.1	0	27,572	13	3,260	30,832	432,000	0	38,747	0	0	0	0	0	0	0	0
17	0.00	0.0	0.0	23.3	320	32,721	29	0	32,721	427,000	0	38,083	0	0	0	0	0	0	0	0
18	0.00	0.0	0.0	23.9	30	33,088	19	3,130	36,218	439,000	0	38,094	0	0	0	0	0	0	0	0
19	0.00	0.0	0.0	23.5	110	31,611	30	0	31,611	415,000	0	25,734	0	0	0	0	0	0	0	0
20	0.00	0.0	0.0	18.8	195	27,823	35	0	27,823	422,000	0	0	0	0	0	0	0	0	0	0
21	0.00	0.0	0.0	18.6	0	28,774	39	3,180	31,954	449,000	0	38,452	0	0	0	0	0	0	0	0
22	0.00	0.0	0.0	19.9	115	29,744	50	100	29,844	439,000	0	6,453	0	0	0	0	0	0	0	0
23	0.00	0.0	0.0	17.9	90	27,737	40	0	27,737	461,000	0	38,057	0	0	0	0	0	0	0	0
24	0.00	0.0	0.0	19.1	310	26,990	30	3,180	30,170	441,000	0	44,072	0	0	0	0	0	0	0	0
25	0.00	0.0	0.0	22.1	135	29,140	36	0	29,140	422,000	0	44,307	0	0	0	0	0	0	0	0
26	0.00	0.0	0.0	19.6	340	26,556	72	0	26,556	437,000	0	32,348	0	0	0	0	0	0	0	0
27	0.00	0.0	0.0	19.0	85	30,936	13	3,230	34,166	430,000	0	0	0	0	0	0	0	0	0	0
28	0.00	0.0	0.0	16.9	0	30,456	55	100	30,556	449,000	0	32,408	0	0	0	0	0	0	0	0
29	0.00	0.0	0.0	20.7	560	29,300	18	0	29,300	441,000	0	45,022	0	0	0	0	0	0	0	0
30	0.00	0.0	0.0	19.3	0	29,538	135	3,290	32,828	453,000	0	44,650	3,992	0	0	0	0	0	0	0
31	0.00	0.0	0.0	19.0	290	30,344	18	0	30,344	439,000	0	38,338	0	0	0	0	0	0	0	3,200
Total	0.54				6,410	947,356	1,332	37,270	984,626		0	932,067	3,992							
Daily Average		0.0	0.0	20.0	207	30,560	43	1,202	31,762	428,400				0	0	0	0	0	0	3,200
Mo. Average													100				0	0	0	100

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. 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 XI, calculated from depth in 575,000 gal. leachate tank.
10. Columns VI, VII, VIII, IX, XII, XIII, XIV, XVII, and XIX, quantities from flow meters.
11. Column XXI includes 80% of the daily values from Columns XIV, XVII, and XIX plus 5% of the daily values from column XVII.

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**TABLE 2. FIELD DATA ENTRY FORM**  
**MAY 2007**  
**SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA**

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVI	XVIII	XIX
Day	Reading PS-B (in.)	Sections 7-8 Leak Det. (gal.)	Sections 7-8 Flow Meter (gal.)	Flow Meter TPS-6 (gal.)	Flow Meter Pump Sta. A (gal.)	Depth in 575K Tank (ft.)	Leachate Hauled		Leachate Dust Control (Sprayed) (gal.)	Rainfall (in.)	Depth in Pond A (ft.)	Depth in Pond B (ft.)	Effluent Sprayed (Pond B) (gal.)	Leachate Treated at LTRF (gal.)	Effluent Irrigation (gal.)	Effluent Hauled		Effluent Dust Control (Sprayed) (gal.)
							Contractor (gal.)	County (gal.)								Contractor (gal.)	County (gal.)	
1	11.9	5,733	12,804,410	5,843,770	7,718,388	13.00	0	37,561	0	0.00	0.0	0.0	0.0	0	0	0	0	0
2	8.0	5,798	12,807,520	5,844,110	7,749,050	12.75	0	24,949	0	0.00	0.0	0.0	0.0	0	0	0	0	0
3	12.6	5,822	12,807,530	5,844,410	7,782,310	13.17	0	24,946	0	0.00	0.0	0.0	0.0	0	0	0	0	0
4	9.1	5,890	12,810,620	5,844,710	7,814,979	13.33	0	31,586	0	0.00	0.0	0.0	0.0	0	0	0	0	0
5	8.3	5,962	12,810,620	5,844,990	7,846,682	13.17	0	25,695	0	0.42	0.0	0.0	0.0	0	0	0	0	0
6	13.4	6,050	12,813,540	5,845,215	7,877,273	13.92	0	0	0	0.00	0.0	0.0	0.0	0	0	0	0	0
7	13.0	6,151	12,813,540	5,845,215	7,908,743	15.08	0	18,508	0	0.00	0.0	0.0	0.0	0	0	0	0	0
8	9.3	6,207	12,816,230	5,845,450	7,938,420	15.50	0	38,610	0	0.00	0.0	0.0	0.0	0	0	0	0	0
9	10.0	6,257	12,816,230	5,845,680	7,974,116	15.33	0	18,138	0	0.00	0.0	0.0	0.0	0	0	0	0	0
10	10.4	6,280	12,818,990	5,845,960	8,009,081	16.00	0	49,934	0	0.00	0.0	0.0	0.0	0	0	0	0	0
11	10.3	6,301	12,818,990	5,846,260	8,041,884	15.17	0	43,931	0	0.00	0.0	0.0	0.0	0	0	0	0	0
12	11.0	6,320	12,818,990	5,846,570	8,075,354	14.83	0	25,810	0	0.00	0.0	0.0	0.0	0	0	0	0	0
13	12.5	6,349	12,822,210	5,846,730	8,105,705	15.25	0	0	0	0.00	0.0	0.0	0.0	0	0	0	0	0
14	10.4	6,362	12,822,210	5,846,730	8,134,893	16.25	0	37,634	0	0.00	0.0	0.0	0.0	0	0	0	0	0
15	12.0	6,399	12,822,210	5,847,250	8,162,074	15.50	0	50,000	0	0.00	0.0	0.0	0.0	0	0	0	0	0
16	13.1	6,412	12,825,470	5,847,250	8,189,646	15.00	0	38,747	0	0.12	0.0	0.0	0.0	0	0	0	0	0
17	14.3	6,441	12,825,470	5,847,570	8,222,367	14.83	0	38,083	0	0.00	0.0	0.0	0.0	0	0	0	0	0
18	14.9	6,460	12,828,600	5,847,600	8,255,455	15.25	0	38,094	0	0.00	0.0	0.0	0.0	0	0	0	0	0
19	14.5	6,490	12,828,600	5,847,710	8,287,066	14.42	0	25,734	0	0.00	0.0	0.0	0.0	0	0	0	0	0
20	9.8	6,525	12,828,600	5,847,905	8,314,889	14.67	0	0	0	0.00	0.0	0.0	0.0	0	0	0	0	0
21	9.6	6,564	12,831,780	5,847,905	8,343,663	15.58	0	38,452	0	0.00	0.0	0.0	0.0	0	0	0	0	0
22	10.9	6,614	12,831,880	5,848,020	8,373,407	15.25	0	6,453	0	0.00	0.0	0.0	0.0	0	0	0	0	0
23	8.9	6,654	12,831,880	5,848,110	8,401,144	16.00	0	38,057	0	0.00	0.0	0.0	0.0	0	0	0	0	0
24	10.1	6,684	12,835,060	5,848,420	8,428,134	15.33	0	44,072	0	0.00	0.0	0.0	0.0	0	0	0	0	0
25	13.1	6,720	12,835,060	5,848,555	8,457,274	14.67	0	44,307	0	0.00	0.0	0.0	0.0	0	0	0	0	0
26	10.6	6,792	12,835,060	5,848,895	8,483,830	15.17	0	32,348	0	0.00	0.0	0.0	0.0	0	0	0	0	0
27	10.0	6,805	12,838,290	5,848,980	8,514,766	14.92	0	0	0	0.00	0.0	0.0	0.0	0	0	0	0	0
28	7.9	6,860	12,838,390	5,848,980	8,545,222	15.58	0	32,408	0	0.00	0.0	0.0	0.0	0	0	0	0	0
29	11.7	6,878	12,838,390	5,849,540	8,574,522	15.33	0	45,022	0	0.00	0.0	0.0	0.0	0	0	0	0	0
30	10.3	7,013	12,841,680	5,849,540	8,604,060	15.75	0	44,650	3,992	0.00	0.0	0.0	0.0	0	0	0	0	0
31	10.0	7,031	12,841,680	5,849,830	8,634,404	15.25	0	38,338	0	0.00	0.0	0.0	0.0	0	0	0	0	0

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**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 XI, trace is less than 0.01 inches.
5. Columns III, IV, V, VI, VIII, IX, X, XIV, XV, XVI, XVII and XVIII are quantities from flow meters.
6. Columns XII and XIII measured from staff gages in each pond.

Type of Cover	Phases I-VI acres	Sections 7-8 acres
Open	6	0
Intermediate	133.4	19.3
Final	23	0
Not Opened	0	0

**TABLE 3. 2007 MONTHLY LEACHATE BALANCE SUMMARY  
SOUTHEAST COUNTY LANDFILL  
HILLSBOROUGH COUNTY, FLORIDA**

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 Sections 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 <sup>3</sup> (gal.)
January	3.02	0	82,740	1,042,128	1,161,110	0	0	0	0	0	1,124,868	1,161,110	-36,242
February	2.50	0	80,265	931,149	1,205,428	0	0	0	0	0	1,011,414	1,205,428	-194,014
March	0.77	0	42,020	967,447	875,037	0	0	0	0	0	1,009,467	875,037	134,430
April	3.95	0	80,340	935,221	933,917	0	0	0	0	0	1,015,561	933,917	81,644
May	0.54	0	37,270	947,356	932,067	3,992	0	0	0	0	984,626	936,059	48,567
June	0.00	0	0	0	0	0	0	0	0	0	0	0	0
July	0.00	0	0	0	0	0	0	0	0	0	0	0	0
August	0.00	0	0	0	0	0	0	0	0	0	0	0	0
September	0.00	0	0	0	0	0	0	0	0	0	0	0	0
October	0.00	0	0	0	0	0	0	0	0	0	0	0	0
November	0.00	0	0	0	0	0	0	0	0	0	0	0	0
December	0.00	0	0	0	0	0	0	0	0	0	0	0	0
YTD Total	10.78	0	322,635	4,823,301	5,107,559	3,992	0	0	0	0	5,145,936	5,111,551	34,385

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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.

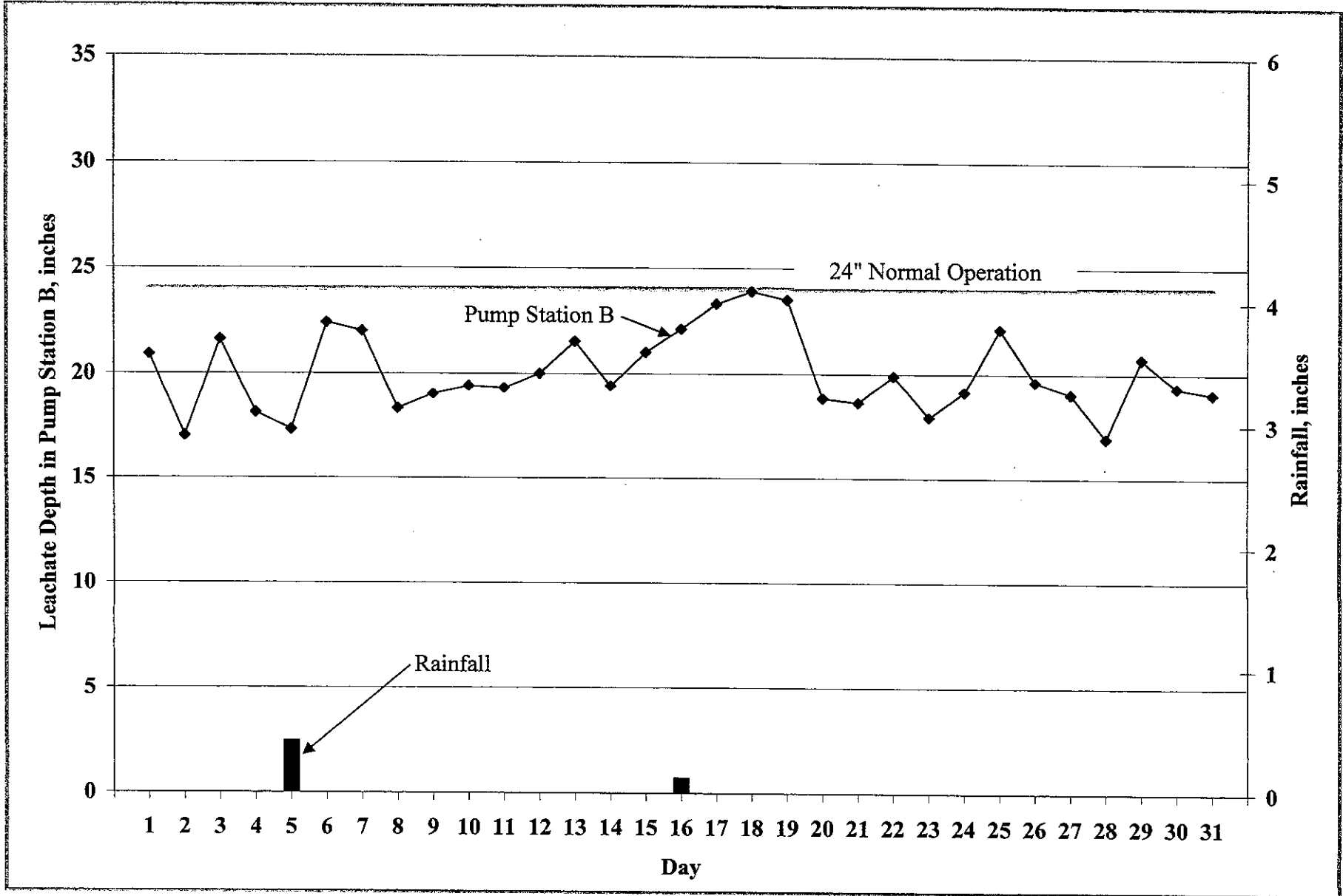


Figure 1. Leachate Levels in Pump Station B and Rainfall for May 2007.

**LEACHATE DEPTH/SUMMARY DATA FORM  
SOUTHEAST COUNTY LANDFILL**

(Month/Year) May,2007

Date	TPS-6		Depth <sup>1</sup> in Pond B (feet)	Pump <sup>2</sup> Station B (inches)	PS-A Flow Meter (gallons)	Sections 7-8		Depth in 575k Tank (feet)	Leachate Hauled		Leachate Dust Control/ Evap. (gallons)	Rainfall (inches)
	Depth (inches)	Flowmeter (gallons)				Flowmeter (gallons)	Leak Detection (gallons)		Contractor (gallons)	County (gallons)		
1	0.0	350	0.00	11.9	31,340	0	34	13'0"	0	37,561	0	0.00
2	0.0	340	0.00	8.0	30,662	3,110	65	12'9"	0	24,949	0	0.00
3	0.0	300	0.00	12.6	33,260	10	24	13'2"	0	24,946	0	0.00
4	0.0	300	0.00	9.1	32,669	3,090	68	13'4"	0	32,126	0	0.00
5	0.0	280	0.00	8.3	31,703	0	72	13'2"	0	25,695	0	0.42
6	0.0	225	0.00	13.4	30,591	2,920	88	13'11"	0	0	0	0.00
7	0.0	0	0.00	13.0	31,470	0	100	15'1"	0	18,508	0	0.00
8	0.0	235	0.00	9.3	29,677	2,690	56	15'6"	0	38,610	0	0.00
9	0.0	230	0.00	10.0	35,696	0	50	15'4"	0	18,138	0	0.00
10	0.0	280	0.00	10.4	34,965	2,760	23	16'0"	0	49,934	0	0.00
11	0.0	300	0.00	10.3	32,803	0	21	15'2"	0	43,931	0	0.00
12	0.0	310	0.00	11.0	33,470	0	19	14'10"	0	25,810	0	0.00
13	0.0	160	0.00	12.5	30,351	3,220	29	15'3"	0	0	0	0.00
14	0.0	0	0.00	10.4	29,188	0	13	16'3"	0	37,634	0	0.00
15	0.0	520	0.00	12.0	27,181	0	37	15'6"	0	50,000	0	0.00
16	0.0	0	0.00	13.1	27,572	3,260	13	15'0"	0	38,747	0	0.12

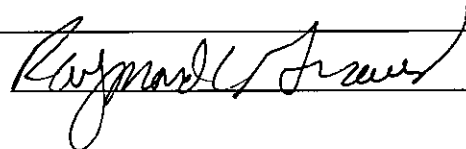
Note: (1) If depth is 3.6 feet or greater, contact Supervisor immediately.

(2) If depth is greater than 24 inches (2.0 feet), contact Supervisor immediately. Complete Evaluation Report Form.

Comments: \_\_\_\_\_

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\_\_\_\_\_

Prepared by: 

**Revised Jan. 16, 2004**

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**LEACHATE DEPTH/SUMMARY DATA FORM  
SOUTHEAST COUNTY LANDFILL**

(Month/Year) May,2007

Date	TPS-6		Depth <sup>1</sup> in Pond B (feet)	Pump <sup>2</sup> Station B (inches)	PS-A Flow Meter (gallons)	Sections 7-8		Depth in 575k Tank (feet)	Leachate Hauled		Leachate Dust Control/ Evap. (gallons)	Rainfall (inches)
	Depth (inches)	Flowmeter (gallons)				Flowmeter (gallons)	Leak Detection (gallons)		Contractor (gallons)	County (gallons)		
17	0.0	320	0.00	14.3	32,721	0	29	14'10"	0	38,083	0	0.00
18	0.0	30	0.00	14.9	33,088	3,130	19	15'3"	0	38,094	0	0.00
19	0.0	110	0.00	14.5	31,611	0	30	14'5"	0	25,734	0	0.00
20	0.0	195	0.00	9.8	27,823	0	35	14'8"	0	0	0	0.00
21	0.0	0	0.00	9.6	28,774	3,180	39	15'7"	0	38,452	0	0.00
22	0.0	100	0.00	10.9	29,744	160	50	15'3"	0	6,453	0	0.00
23	0.0	90	0.00	0.0	27,737	0	40	16'0"	0	38,057	0	0.00
24	0.0	310	0.00	0.0	26,990	3,180	30	15'4"	0	44,072	0	0.00
25	0.0	135	0.00	13.1	29,140	0	36	14'8"	0	44,307	0	0.00
26	0.0	345	0.00	10.6	26,556	0	72	15'2"	0	32,348	0	0.00
27	0.0	85	0.00	10.0	30,936	3,230	13	14'11"	0	0	0	0.00
28	0.0	0	0.00	7.9	30,456	100	55	15'7"	0	32,408	0	0.00
29	0.0	570	0.00	11.7	29,300	0	18	15'4"	0	45,022	0	0.00
30	0.0	0	0.00	10.3	29,538	3,290	135	15'9"	0	44,650	3,992	0.00
31	0.0	290	0.00	10.0	30,344	0	18	15'3"	0	38,338	0	0.00

Note: (1) If depth is 3.6 feet or greater, contact Supervisor immediately.

(2) If depth is greater than 24 inches (2.0 feet), contact Supervisor immediately. Complete Evaluation Report Form.

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Prepared by: Raymond C. Graves

**Revised Jan. 16, 2004**

09200020.24\Leachate Balance\LeachateData\_\LeachateData\_May,2007.xls

**EFFLUENT DEPTH/QUANTITIES DATA FORM  
SOUTHEAST COUNTY LANDFILL**

(Month/Year) May,2007

Date	Depth in Pond A <sup>1</sup>  (feet)	Depth in Pond B <sup>2</sup>  (feet)	Pond B Leak Detection <sup>3</sup>  (gallons)	Leachate Treated (gallons)	Treated Effluent					Time at End of Rainfall	Effluent <sup>4</sup> Runoff to Retention Area (Y/N)	
					Spray Irrigated (gallons)	Evaporated at Pond B (gallons)	Hauled		Dust Control/ Evap. (gallons)			Effluent Stored (gallons)
							Contractor (gallons)	County (gallons)				
1	0.00	0.00	0	0	0	0	0	0				
2	0.00	0.00	0	0	0	0	0	0				
3	0.00	0.00	0	0	0	0	0	0				
4	0.00	0.00	0	0	0	0	0	0				
5	0.00	0.00	0	0	0	0	0	0				
6	0.00	0.00	0	0	0	0	0	0				
7	0.00	0.00	0	0	0	0	0	0				
8	0.00	0.00	0	0	0	0	0	0				
9	0.00	0.00	0	0	0	0	0	0				
10	0.00	0.00	0	0	0	0	0	0				
11	0.00	0.00	0	0	0	0	0	0				
12	0.00	0.00	0	0	0	0	0	0				
13	0.00	0.00	0	0	0	0	0	0				
14	0.00	0.00	0	0	0	0	0	0				
15	0.00	0.00	0	0	0	0	0	0				
16	0.00	0.00	0	0	0	0	0	0				

Note (1) If depth is 4.5 feet or greater, contact Supervisor immediately.

(2) If depth is 3.6 feet or greater, contact Supervisor immediately.

(3) If rate is higher than 1,500 gallons per day, contact Supervisor immediately.

(4) If yes, contact Supervisor immediately. Complete Evaluation Report Form.

Comments: \_\_\_\_\_

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Prepared by: Raymond C. Strawn

**EFFLUENT DEPTH/QUANTITIES DATA FORM  
SOUTHEAST COUNTY LANDFILL**

(Month/Year) May, 2007

Date	Depth in Pond A <sup>1</sup>  (feet)	Depth in Pond B <sup>2</sup>  (feet)	Pond B Leak Detection <sup>3</sup>  (gallons)	Leachate Treated (gallons)	Treated Effluent						Time at End of Rainfall	Effluent <sup>4</sup> Runoff to Retention Area (Y/N)
					Spray Irrigated (gallons)	Evaporated at Pond B (gallons)	Hauled		Dust Control/ Evap. (gallons)	Effluent Stored (gallons)		
							Contractor (gallons)	County (gallons)				
17	0.00	0.00	0	0	0		0	0				
18	0.00	0.00	0	0	0		0	0				
19	0.00	0.00	0	0	0		0	0				
20	0.00	0.00	0	0	0		0	0				
21	0.00	0.00	0	0	0		0	0				
22	0.00	0.00	0	0	0		0	0				
23	0.00	0.00	0	0	0		0	0				
24	0.00	0.00	0	0	0		0	0				
25	0.00	0.00	0	0	0		0	0				
26	0.00	0.00	0	0	0		0	0				
27	0.00	0.00	0	0	0		0	0				
28	0.00	0.00	0	0	0		0	0				
29	0.00	0.00	0	0	0		0	0				
30	0.00	0.00	0	0	0		0	0				
31	0.00	0.00	0	0	0		0	0				

Note (1) If depth is 4.5 feet or greater, contact Supervisor immediately.

(2) If depth is 3.6 feet or greater, contact Supervisor immediately.

(3) If rate is higher than 1,500 gallons per day, contact Supervisor immediately.

(4) If yes, contact Supervisor immediately. Complete Evaluation Report Form.

Comments: \_\_\_\_\_

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\_\_\_\_\_

Prepared by: Raymond C. Arnes

100494



Hillsborough County  
Florida

Office of the County Administrator  
Patricia G. Bean

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Carl S. Harness  
Manus J. O' Donnell

June 5, 2007

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION  
JUL 12 2007  
SOUTHWEST DISTRICT  
TAMPA

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

RE: Southeast County Landfill –April 2007 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 Form for the month of April 2007. In addition, the SWMD is providing the April 2007 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 (DEP) 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. 35435-006-SO, Specific Condition No. 16.

As initiated with the April 1996 report, the Landfill leachate information for April 2007 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. The average depth of leachate in the PS-B sump for the recorded days in April 2007 was 19.6 inches.

Ms. Susan J. Pelz  
June 5, 2007  
Page Two

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

Sincerely,



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

Attachments

glfs/lea0407.dep



Hillsborough County  
Florida

Office of the County Administrator  
Patricia G. Bean

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Kenneth C. Griffin  
Carl S. Harness  
Manus J. O'Donnell

MEMORANDUM

**DATE:** May 17, 2007

**TO:** Patricia Berry, Section Manager, Solid Waste Management Department

**FROM:** *fel* Larry Ruiz, General Manager II, Solid Waste Management Department  
Raymond Graves, Eng. Tech. II, Solid Waste Management Department

**SUBJECT:** Leachate Water Balance Report Forms for April 2007  
Southeast County Landfill, Hillsborough County, Florida

The Solid Waste Management Department (SWMD) staff has compiled and reviewed the leachate management operational data from the Southeast County Landfill Phases I-VI and Sections 7-8 of the Capacity Expansion for April 2007. Attached are the Leachate Water Balance Report Form (Table 1), the Leachate Field Data Entry Form (Table 2), and the 2007 Summary (Table 3). Also, attached find Figure 1 showing leachate levels in the Pump Station B sump 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 3.9 inches of rainfall at the Southeast County Landfill (SCLF).

## MEMORANDUM

May 17, 2007

Page 2 of 6

### **Depth in Pond A (Column III)**

Column III presents the daily depth, in feet, of effluent stored in the existing 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 effluent was not stored in Pond A.

### **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. On April 11, 2007, the SWMD began storing leachate in the storage tank after completing the inspection and repairs. Pond B was empty by April 25 and it was cleaned and inspected on April 27. This month the average depth of leachate stored in Pond B was 2.3 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. PS-B was below the normal operation level of 24 inches. The average depth of leachate in the PS-B sump was 19.6 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 138 gallons. A total of 4,140 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. On April 11, 2007, the SWMD began storing leachate in the storage tank after completing the inspection and repairs. 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 31,174 gallons. A total of 935,221 gallons of leachate was pumped this month.

**Leachate Pumped from Sections 7-8 Leak Detection System (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 635 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. Normally the quantity is measured by a flow meter and includes any leachate removed from the leak detection system of Sections 7-8 (Column VIII). On April 11, 2007, the SWMD began storing leachate in the storage tank after completing the inspection and repairs. This month an estimated 80,340 gallons of leachate was pumped from Sections 7-8.

**Total Leachate Pumped to LTRF (Column X)**

Column X presents the total quantity of leachate pumped to the LTRF through the MLPS from Phases I-VI and from Sections 7-8. This month a total of 1,015,561 gallons of leachate was pumped from Phases I-VI and Sections 7-8.

**Leachate in 575,000-Gallon Tank (Column XI)**

Column XI 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. On April 11, 2007, the SWMD began storing leachate in the storage tank after completing the inspection and repairs. This month an average of 165,200 gallons of leachate was stored in the tank.

**Leachate Treated at LTRF (Column XII)**

Column XII presents the daily amount of leachate, in gallons, treated at the LTRF. On November 27, 2006, the SWMD began shut-down procedures in preparation for tankage inspection. At this time the SWMD is awaiting to complete the recommended repairs to the process tank. This month leachate was not treated at the LTRF.



MEMORANDUM

May 17, 2007

Page 4 of 6

**Total Leachate Hauled (Column XIII)**

Column XIII presents the daily amount of leachate, in gallons, hauled off site. This month a total of 933,917 gallons of leachate was hauled off site.

**Leachate Dust Control (Sprayed) (Column XIV)**

Column XIV 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 XV)**

Column XV 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. On April 27 Pond A was cleaned and inspected. This month effluent was not stored in Pond A.

**Pond B Storage (Column XVI)**

Column XVI 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). The volume of the pond at varying depths is estimated using AutoCAD software and calculations based on the conic method for reservoir volumes. 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. On April 11, 2007, the SWMD began storing leachate in the storage tank after completing the inspection and repairs. On April 27, Pond B was cleaned and inspected. This month a daily average of 165,900 gallons of leachate was stored in Pond B.

**Effluent Sprayed at Pond B (Column XVII)**

Column XVII 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. Effluent was not sprayed at Pond B this month.

**Effluent Irrigation (Column XVIII)**

Column XVIII 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 effluent was not used as spray irrigation.

**Effluent Dust Control (Sprayed) (Column XIX)**

Column XIX 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 XX)**

Column XX presents the daily amount of effluent, in gallons, hauled off site, as measured from the flow meter at the bypass-loading arm. This month effluent was not hauled off site.

**Total Evaporation (Column XXI)**

Column XXI presents the daily amount of leachate and effluent, in gallons, that evaporates and therefore will not be returned to the SCLF and/or require treatment. The landfill evaporation rate includes 80 percent of the daily values from Columns XIV, XVIII, and XIX plus 5 percent of the daily values from Column XVII. Evaporation rates of 80 percent (based on the HELP model water balance analysis for the site) and 5 percent evaporation rate for spray in Pond B are assumed. The total evaporation estimated for this month was zero gallons.

**TABLE 2**

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

MEMORANDUM

May 17, 2007

Page 6 of 6

**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 1,015,561 gallons. Total outflow quantity from the LTRF was 933,917 gallons. The change in storage for the month of April increased by 81,644 gallons.

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

**TABLE 1. LEACHATE WATER BALANCE REPORT FORM**  
**APRIL 2007**  
**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
Day	Rainfall (in.)	Depth in Pond A (ft.)	Depth in Pond B (in.)	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 Leak Det (gal.)	Leachate Pumped to MLPS from Sections 7-8 (gal.)	Total Leachate Pumped to LTRF (gal.)	Leachate in 575K Tank (gal.)	Leachate Treated at LTRF (gal.)	Total Leachate Hauled (gal.)	Leachate Dust Control (Sprayed) (gal.)	Pond A Storage (gal.)	Pond B Storage (gal)	Effluent Sprayed Pond B (gal)	Effluent Irrigation (gal.)	Effluent Dust Control (Sprayed) (gal.)	Total Effluent Hauled (gal.)	Total Evaporation (gal.)
1	0.00	0.0	3.2	21.9	70	32,007	22	0	32,007	0	0	0	0	0	192,000	0	0	0	0	0
2	0.00	0.0	3.5	18.3	0	29,701	16	3,160	32,861	0	0	18,813	0	0	223,000	0	0	0	0	0
3	0.00	0.0	3.6	21.4	260	30,915	22	0	30,915	0	0	37,290	0	0	234,000	0	0	0	0	0
4	0.00	0.0	3.5	19.3	320	32,726	16	0	32,726	0	0	37,449	0	0	223,000	0	0	0	0	0
5	0.00	0.0	3.6	18.9	280	36,502	20	3,360	39,862	0	0	37,259	0	0	234,000	0	0	0	0	0
6	0.00	0.0	3.5	19.3	290	38,666	20	0	38,666	0	0	25,237	0	0	223,000	0	0	0	0	0
7	0.00	0.0	3.6	21.4	240	33,037	21	2,390	35,427	0	0	0	0	0	234,000	0	0	0	0	0
8	0.00	0.0	3.8	20.4	130	26,589	16	190	26,779	0	0	0	0	0	256,000	0	0	0	0	0
9	0.50	0.0	4.1	18.7	0	26,915	23	10	26,925	0	0	56,277	0	0	267,000	0	0	0	0	0
10	1.78	0.0	3.9	19.3	220	31,953	16	3,070	35,023	0	0	56,164	0	0	267,000	0	0	0	0	0
11	0.67	0.0	4.0	17.1	0	36,336	32	6,570	42,906	0	0	30,185	0	0	267,000	0	0	0	0	0
12	0.00	0.0	3.8	13.2	0	35,250	7	4,330	39,580	45,000	0	62,343	0	0	256,000	0	0	0	0	0
13	0.00	0.0	3.3	21.5	0	29,003	24	6,690	35,693	79,000	0	50,206	0	0	202,000	0	0	0	0	0
14	0.00	0.0	2.9	21.6	0	29,922	17	6,390	36,312	120,000	0	32,039	0	0	162,000	0	0	0	0	0
15	1.00	0.0	2.6	21.9	30	35,120	33	3,310	38,430	158,000	0	0	0	0	133,000	0	0	0	0	0
16	0.00	0.0	2.6	18.0	0	32,151	8	6,630	38,781	194,000	0	30,578	0	0	133,000	0	0	0	0	0
17	0.00	0.0	2.5	20.3	270	28,326	24	3,170	31,496	230,000	0	56,410	0	0	124,000	0	0	0	0	0
18	0.00	0.0	1.9	19.7	170	35,525	17	6,110	41,635	269,000	0	43,715	0	0	72,000	0	0	0	0	0
19	0.00	0.0	1.7	20.4	330	38,721	23	3,070	41,791	290,000	0	50,141	0	0	57,000	0	0	0	0	0
20	0.00	0.0	1.6	21.4	130	32,732	17	3,070	35,802	276,000	0	44,118	0	0	51,000	0	0	0	0	0
21	0.00	0.0	1.4	18.5	140	27,717	24	3,080	30,797	290,000	0	19,259	0	0	38,000	0	0	0	0	0
22	0.00	0.0	1.4	21.1	30	23,878	19	0	23,878	295,000	0	0	0	0	38,000	0	0	0	0	0
23	0.00	0.0	1.9	17.6	0	23,523	25	3,190	26,713	324,000	0	37,587	0	0	72,000	0	0	0	0	0
24	0.00	0.0	1.1	20.9	200	25,230	25	0	25,230	336,000	0	31,570	0	0	23,000	0	0	0	0	0
25	0.00	0.0	0.0	21.2	200	29,965	20	3,110	33,075	341,000	0	44,140	0	0	0	0	0	0	0	0
26	0.00	0.0	0.0	20.6	110	31,453	26	3,270	34,723	341,000	0	31,344	0	0	0	0	0	0	0	0
27	0.00	0.0	0.0	18.0	200	31,952	20	0	31,952	333,000	0	50,196	0	0	0	0	0	0	0	0
28	0.00	0.0	0.0	18.6	220	31,939	23	3,180	35,119	329,000	0	25,714	0	0	0	0	0	0	0	0
29	0.00	0.0	0.0	18.1	300	28,913	23	0	28,913	338,000	0	0	0	0	0	0	0	0	0	0
30	0.00	0.0	0.0	18.1	0	28,554	36	3,080	31,634	367,000	0	25,883	0	0	0	0	0	0	0	0
Total	3.95				4,140	935,221	635	80,340	1,015,561		0	933,917	0				0	0	0	0
Daily Average		0.0	2.3	19.6	138	31,174	21	2,678	33,852	165,200				0	165,900		0	0	0	0
Mo. Average													0				0	0	0	0

## 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 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 XI, calculated from depth in 575,000 gal. leachate tank.

10 Columns VI, VII, VIII, IX, XII, XIII, XIV, XVIII, and XIX, quantities from flow meters

11. Column XXI includes 80% of the daily values from Columns XIV, XVIII, and XIX plus 5% of the daily values from column XVII

**TABLE 2. FIELD DATA ENTRY FORM**  
**APRIL 2007**  
**SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA**

I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVI	XVIII	XIX
Day	Reading PS-B (in.)	Sections 7-8 Leak Det. (gal.)	Sections 7-8 Flow Meter (gal.)	Flow Meter TPS-6 (gal.)	Flow Meter Pump Sta. A (gal.)	Depth in 575K Tank (ft.)	Leachate Hauled		Leachate Dust Control (Sprayed) (gal.)	Rainfall (in.)	Depth in Pond A (ft.)	Depth in Pond B (ft.)	Effluent Sprayed (Pond B) (gal.)	Leachate Treated at LTRF (gal.)	Effluent Irrigation (gal.)	Effluent Hauled		Effluent Dust Control (Sprayed) (gal.)
							Contractor (gal.)	County (gal.)								Contractor (gal.)	County (gal.)	
1	12.9	5,086	12,724,070	5,839,350	6,783,834	0.00	0	0	0	0.00	0.0	3.2	0	0	0	0	0	0
2	9.3	5,102	12,727,230	5,839,350	6,813,535	0.00	0	18,813	0	0.00	0.0	3.5	0	0	0	0	0	0
3	12.4	5,124	12,727,230	5,839,610	6,844,450	0.00	0	37,290	0	0.00	0.0	3.6	0	0	0	0	0	0
4	10.3	5,140	12,727,230	5,839,930	6,877,176	0.00	0	37,449	0	0.00	0.0	3.5	0	0	0	0	0	0
5	9.9	5,160	12,730,590	5,840,210	6,913,678	0.00	0	37,259	0	0.00	0.0	3.6	0	0	0	0	0	0
6	10.3	5,180	12,730,590	5,840,500	6,952,344	0.00	0	25,237	0	0.00	0.0	3.5	0	0	0	0	0	0
7	12.4	5,201	12,732,980	5,840,740	6,985,381	0.00	0	0	0	0.00	0.0	3.6	0	0	0	0	0	0
8	11.4	5,217	12,733,170	5,840,870	7,011,970	0.00	0	0	0	0.00	0.0	3.8	0	0	0	0	0	0
9	9.7	5,240	12,733,180	5,840,870	7,038,885	0.00	0	56,277	0	0.50	0.0	4.1	0	0	0	0	0	0
10	10.3	5,256	12,736,250	5,841,090	7,070,838	0.00	0	56,164	0	1.78	0.0	3.9	0	0	0	0	0	0
11	8.1	5,288	12,742,820	5,841,090	7,107,174	0.00	0	30,185	0	0.67	0.0	4.0	0	0	0	0	0	0
12	4.2	5,295	12,747,150	5,841,090	7,142,424	1.58	0	62,343	0	0.00	0.0	3.8	0	0	0	0	0	0
13	12.5	5,319	12,753,750	5,841,090	7,171,427	2.75	0	50,206	0	0.00	0.0	3.3	0	0	0	0	0	0
14	12.6	5,336	12,760,140	5,841,090	7,201,349	4.17	0	32,039	0	0.00	0.0	2.9	0	0	0	0	0	0
15	12.9	5,369	12,763,450	5,841,120	7,236,469	5.50	0	0	0	1.00	0.0	2.6	0	0	0	0	0	0
16	9.0	5,377	12,770,080	5,841,120	7,268,620	6.75	0	30,578	0	0.00	0.0	2.6	0	0	0	0	0	0
17	11.3	5,401	12,773,250	5,841,390	7,296,946	8.00	0	56,410	0	0.00	0.0	2.5	0	0	0	0	0	0
18	10.7	5,418	12,779,360	5,841,560	7,332,471	9.33	0	43,715	0	0.00	0.0	1.9	0	0	0	0	0	0
19	11.4	5,441	12,782,430	5,841,890	7,371,192	10.08	0	50,141	0	0.00	0.0	1.7	0	0	0	0	0	0
20	12.4	5,458	12,785,500	5,842,020	7,403,924	9.58	0	44,118	0	0.00	0.0	1.6	0	0	0	0	0	0
21	9.5	5,482	12,788,580	5,842,160	7,431,641	10.08	0	19,259	0	0.00	0.0	1.4	0	0	0	0	0	0
22	12.1	5,501	12,788,580	5,842,190	7,455,519	10.25	0	0	0	0.00	0.0	1.4	0	0	0	0	0	0
23	8.6	5,526	12,791,770	5,842,190	7,479,042	11.25	0	37,587	0	0.00	0.0	1.9	0	0	0	0	0	0
24	11.9	5,551	12,791,770	5,842,390	7,504,272	11.67	0	31,570	0	0.00	0.0	1.1	0	0	0	0	0	0
25	12.2	5,571	12,794,880	5,842,590	7,534,237	11.83	0	44,140	0	0.00	0.0	0.0	0	0	0	0	0	0
26	11.6	5,597	12,798,150	5,842,700	7,565,690	11.83	0	31,344	0	0.00	0.0	0.0	0	0	0	0	0	0
27	9.0	5,617	12,798,150	5,842,900	7,597,642	11.58	0	50,196	0	0.00	0.0	0.0	0	0	0	0	0	0
28	9.6	5,640	12,801,330	5,843,120	7,629,581	11.42	0	25,714	0	0.00	0.0	0.0	0	0	0	0	0	0
29	9.1	5,663	12,801,330	5,843,420	7,658,494	11.75	0	0	0	0.00	0.0	0.0	0	0	0	0	0	0
30	9.1	5,699	12,804,410	5,843,420	7,687,048	12.75	0	25,883	0	0.00	0.0	0.0	0	0	0	0	0	0

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**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 XI, trace is less than 0.01 inches.
5. Columns III, IV, V, VI, VIII, IX, X, XIV, XV, XVI, XVII and XVIII are quantities from flow meters.
6. Columns XII and XIII measured from staff gages in each pond.

Type of Cover	Phases I-VI acres	Sections 7-8 acres
Open	0	6
Intermediate	139.4	13.3
Final	23	0
Not Opened	0	0

**TABLE 3. 2007 MONTHLY LEACHATE BALANCE SUMMARY  
SOUTHEAST COUNTY LANDFILL  
HILLSBOROUGH COUNTY, FLORIDA**

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 Sections 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 <sup>3</sup> (gal.)
January	3.02	0	82,740	1,042,128	1,161,110	0	0	0	0	0	1,124,868	1,161,110	-36,242
February	2.50	0	80,265	931,149	1,205,428	0	0	0	0	0	1,011,414	1,205,428	-194,014
March	0.77	0	42,020	967,447	875,037	0	0	0	0	0	1,009,467	875,037	134,430
April	3.95	0	80,340	935,221	933,917	0	0	0	0	0	1,015,561	933,917	81,644
May	0.00	0	0	0	0	0	0	0	0	0	0	0	0
June	0.00	0	0	0	0	0	0	0	0	0	0	0	0
July	0.00	0	0	0	0	0	0	0	0	0	0	0	0
August	0.00	0	0	0	0	0	0	0	0	0	0	0	0
September	0.00	0	0	0	0	0	0	0	0	0	0	0	0
October	0.00	0	0	0	0	0	0	0	0	0	0	0	0
November	0.00	0	0	0	0	0	0	0	0	0	0	0	0
December	0.00	0	0	0	0	0	0	0	0	0	0	0	0
YTD Total	10.24	0	285,365	3,875,945	4,175,492	0	0	0	0	0	4,161,310	4,175,492	-14,182

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**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.

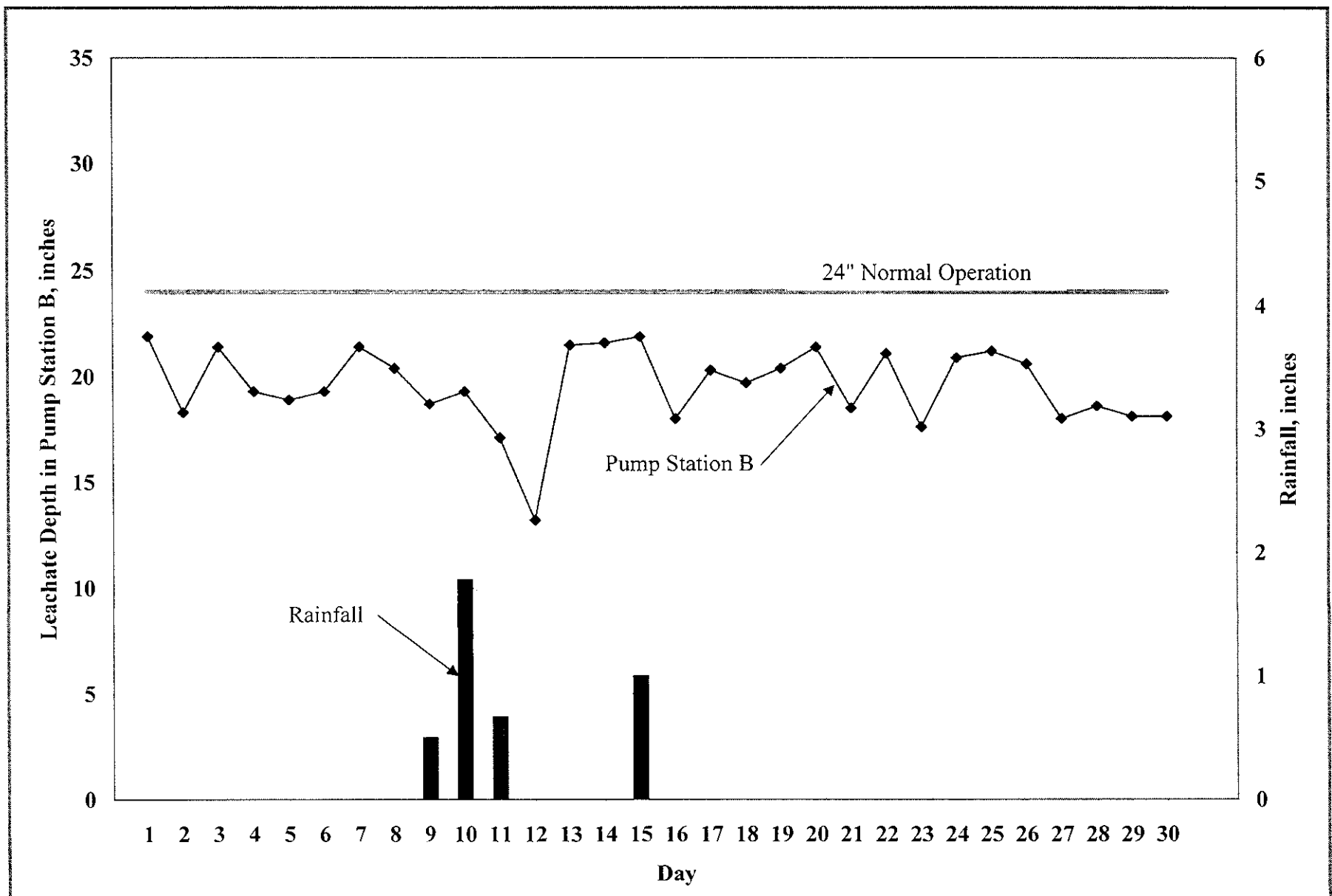


Figure 1. Leachate Levels in Pump Station B and Rainfall for April 2007.

**LEACHATE DEPTH/SUMMARY DATA FORM  
SOUTHEAST COUNTY LANDFILL**

(Month/Year) April, 2007

Date	TPS-6		Depth <sup>1</sup> in Pond B (feet)	Pump <sup>2</sup> Station B (inches)	PS-A Flow Meter (gallons)	Sections 7-8		Depth in 575k Tank (feet)	Leachate	Hauled	Leachate	Rainfall (inches)
	Depth (inches)	Flowmeter (gallons)				Flowmeter (gallons)	Leak Detection (gallons)		Contractor (gallons)	County (gallons)	Dust Control/ Evap. (gallons)	
1	0.0	70	3.20	12.9	32,007	0	22	0.00	0	0	0	0.00
2	0.0	0	3.50	9.3	29,701	3,160	16	0.00	0	18,813	0	0.00
3	0.0	260	3.60	12.4	30,915	0	22	0.00	0	37,290	0	0.00
4	0.0	320	3.50	10.3	32,726	0	16	0.00	0	37,449	0	0.00
5	0.0	280	3.60	9.9	36,502	3,360	20	0.00	0	37,259	0	0.00
6	0.0	290	3.50	10.3	38,666	0	20	0.00	0	25,237	0	0.00
7	0.0	240	3.60	12.4	33,037	2,390	21	0.00	0	0	0	0.00
8	0.0	130	3.80	11.4	26,589	190	16	0.00	0	0	0	0.00
9	0.0	0	4.10	9.7	26,915	10	23	0.00	0	56,277	0	0.50
10	0.0	220	3.90	10.3	31,953	3,070	16	0.00	0	56,164	0	1.78
11	0.0	0	4.00	8.1	36,336	1,970	32	0.00	0	30,185	0	0.67
12	0.0	0	3.80	4.2	34,240	4,330	7	1'7"	0	62,343	0	0.00
13	0.0	0	3.30	12.5	29,003	6,600	24	2'9"	0	50,206	0	0.00
14	0.0	0	2.90	12.6	29,922	6,390	17	4'2"	0	32,039	0	0.00
15	0.0	30	2.60	12.9	35,120	3,310	33	5'6"	0	0	0	1.00
16	0.0	0	2.60	9.0	32,151	6,630	8	6'9"	0	30,578	0	0.00

Note: (1) If depth is 3.6 feet or greater, contact Supervisor immediately.

(2) If depth is greater than 24 inches (2.0 feet), contact Supervisor immediately. Complete Evaluation Report Form.

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Prepared by: Raymond C. Draves

**Revised Jan. 16, 2004**

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**LEACHATE DEPTH/SUMMARY DATA FORM  
SOUTHEAST COUNTY LANDFILL**

(Month/Year) April, 2007

Date	TPS-6		Depth <sup>1</sup> in Pond B (feet)	Pump <sup>2</sup> Station B (inches)	PS-A Flow Meter (gallons)	Sections 7-8		Depth in 575k Tank (feet)	Leachate		Leachate Dust Control/ Evap. (gallons)	Rainfall (inches)
	Depth (inches)	Flowmeter (gallons)				Flowmeter (gallons)	Leak Detection (gallons)		Contractor (gallons)	Hauled County (gallons)		
17	0.0	270	2.50	11.3	28,326	3,170	24	8'0"	0	56,410		0.00
18	0.0	170	1.90	10.7	35,525	6,110	17	9'4"	0	43,715		0.00
19	0.0	330	1.70	11.4	38,721	3,070	23	10'1"	0	50,141		0.00
20	0.0	130	1.60	12.4	32,732	3,070	17	9'7"	0	44,118		0.00
21	0.0	140	1.40	9.5	27,717	3,080	24	10'1"	0	19,259		0.00
22	0.0	30	1.40	12.1	23,878	0	19	10'3"	0	0		0.00
23	0.0	0	1.90	8.6	23,523	3,190	25	11'3"	0	37,587		0.00
24	0.0	200	1.10	11.9	25,230	0	49	11'8"	0	31,570		0.00
25	0.0	200	0.00	12.2	29,965	3,110	20	11'10'	0	44,140		0.00
26	0.0	110	0.00	11.6	31,453	3,270	26	11'10"	0	31,344		0.00
27	0.0	200	0.00	9.0	32,002	0	20	11'7"	0	50,196		0.00
28	0.0	220	0.00	9.6	31,889	3,180	23	11'5"	0	25,714		0.00
29	0.0	300	0.00	9.1	28,913	0	23	11'9"	0	0		0.00
30	0.0	0	0.00	9.1	28,554	3,080	36	12'9"	0	25,883		0.00

Note: (1) If depth is 3.6 feet or greater, contact Supervisor immediately.

(2) If depth is greater than 24 inches (2.0 feet), contact Supervisor immediately. Complete Evaluation Report Form.

Comments: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Prepared by: \_\_\_\_\_

*Raymond C. Arave*

**Revised Jan. 16, 2004**

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**EFFLUENT DEPTH/QUANTITIES DATA FORM  
SOUTHEAST COUNTY LANDFILL**

(Month/Year) April, 2007

Date	Depth in Pond A <sup>1</sup> (feet)	Depth in Pond B <sup>2</sup> (feet)	Pond B Leak Detection <sup>3</sup> (gallons)	Leachate Treated (gallons)	Treated Effluent					Time at End of Rainfall	Effluent <sup>4</sup> Runoff to Retention Area (Y/N)	
					Spray Irrigated (gallons)	Evaporated at Pond B (gallons)	Hauled		Dust Control/ Evap. (gallons)			Effluent Stored (gallons)
							Contractor (gallons)	County (gallons)				
1	0.00	0.00	0	0	0	0	0	0				
2	0.00	0.00	0	0	0	0	0	0				
3	0.00	0.00	0	0	0	0	0	0				
4	0.00	0.00	0	0	0	0	0	0				
5	0.00	0.00	0	0	0	0	0	0				
6	0.00	0.00	0	0	0	0	0	0				
7	0.00	0.00	0	0	0	0	0	0				
8	0.00	0.00	0	0	0	0	0	0				
9	0.00	0.00	0	0	0	0	0	0				
10	0.00	0.00	0	0	0	0	0	0				
11	0.00	0.00	0	0	0	0	0	0				
12	0.00	0.00	0	0	0	0	0	0				
13	0.00	0.00	0	0	0	0	0	0				
14	0.00	0.00	0	0	0	0	0	0				
15	0.00	0.00	0	0	0	0	0	0				
16	0.00	0.00	0	0	0	0	0	0				

- Note (1) If depth is 4.5 feet or greater, contact Supervisor immediately.  
 (2) If depth is 3.6 feet or greater, contact Supervisor immediately.  
 (3) If rate is higher than 1,500 gallons per day, contact Supervisor immediately.  
 (4) If yes, contact Supervisor immediately. Complete Evaluation Report Form.

Comments: \_\_\_\_\_

Prepared by: 

**EFFLUENT DEPTH/QUANTITIES DATA FORM  
SOUTHEAST COUNTY LANDFILL**

(Month/Year)

April, 2006

Date	Depth in Pond A <sup>1</sup>  (feet)	Depth in Pond B <sup>2</sup>  (feet)	Pond B Leak Detection <sup>3</sup>  (gallons)	Leachate Treated (gallons)	Treated Effluent						Time at End of Rainfall	Effluent <sup>4</sup> Runoff to Retention Area (Y/N)
					Spray Irrigated (gallons)	Evaporated at Pond B (gallons)	Hauled		Dust Control/ Evap. (gallons)	Effluent Stored (gallons)		
							Contractor (gallons)	County (gallons)				
17	0.00	0.00	0	0	0		0	0				
18	0.00	0.00	0	0	0		0	0				
19	0.00	0.00	0	0	0		0	0				
20	0.00	0.00	0	0	0		0	0				
21	0.00	0.00	0	0	0		0	0				
22	0.00	0.00	0	0	0		0	0				
23	0.00	0.00	0	0	0		0	0				
24	0.00	0.00	0	0	0		0	0				
25	0.00	0.00	0	0	0		0	0				
26	0.00	0.00	0	0	0		0	0				
27	0.00	0.00	0	0	0		0	0				
28	0.00	0.00	0	0	0		0	0				
29	0.00	0.00	0	0	0		0	0				
30	0.00	0.00	0	0	0		0	0				
31	0.00	0.00	0	0	0		0	0				

Note (1) If depth is 4.5 feet or greater, contact Supervisor immediately.

(2) If depth is 3.6 feet or greater, contact Supervisor immediately.

(3) If rate is higher than 1,500 gallons per day, contact Supervisor immediately.

(4) If yes, contact Supervisor immediately. Complete Evaluation Report Form.

Comments:

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Prepared by:

*Raymond L. Jones*