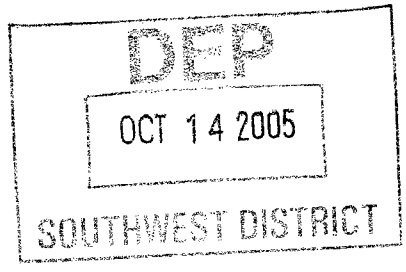
LR 106494
Leachate Quantity

Hillsborough County
Florida

Office of the County Administrator
Patricia G. Bean



October 14, 2005

Ms. Susan J. Pelz, P.E.
Solid Waste Permitting
Florida Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, Florida 33619

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 October 15, 2005.

The data is being submitted as separate monthly reports for July, August and September 2005. 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 2-7, 2005 due to pump malfunction.

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
Rich Siemering, JEA
Paul Schipfer, EPC

TABLE 1. APPROXIMATE TOP OF CLAY ELEVATIONS

PUMP STATION B SUMP

SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FL

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[2]	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[3]	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[2]	114.15	114.59	114.17	114.07
August 8, 2001	114.34	115.31	114.32	114.28
September 19, 2001[2]	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 [2]	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

leachate\calcs\ClayTop.xls; updated 10/14/05 ler

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.

PICKETT
SURVEYING & PHOTOGRAMMETRY

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:10/1/05
SUBJECT: SOUTHEAST HILLSBOROUGH COUNTY LANDFILL SITE
CLIENT: WASTE MANAGEMENT, INC. OF FLORIDA

PIPE	NORTHING	EASTING	ELEVATION	DESCRIPTION
SW	1251010.3	596333.8	173.06	Top of 4" pipe
			172.78	Top of 1" pipe
SE	1251004.7	596339.5	173.17	Top of 4" pipe
			172.96	Top of 1" pipe
NE	1251014.2	596344.4	173.37	Top of 4" pipe
			172.92	Top of 1" pipe
NW	1251014.5	596336.5	172.79	Top of 4" pipe
			172.82	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.

Deborah L. Peavey, PSM
Florida Registration No. 6345
Pickett & Associates, Inc.
Florida Registration No. 364

10/1/05
Survey Date

Hillsborough County
Florida

Office of the County Administrator
Patricia G. Bean

October 14, 2005

Ms. Susan J. Pelz, P.E.
Solid Waste Permitting
Florida Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, Florida 33619

RE: Southeast County Landfill –September 2005 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 September 2005. In addition, the SWMD is providing the September 2005 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 September 2005 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 September 2005 was 17.8 inches.

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/lea0905.dep

Hillsborough County
Florida

Office of the County Administrator
Patricia G. Bean

MEMORANDUM

DATE: October 13, 2005

TO: Patricia Berry, Solid Waste Management Department

FROM: Larry Ruiz, General Manager, SWMD
Raymond Graves, Engineering Tech. II, SWMD

SUBJECT: Leachate Water Balance Report Forms for September 2005
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 Section 7 of the Capacity Expansion for September 2005. Attached are the Leachate Water Balance Report Form (Table 1), the Leachate Field Data Entry Form (Table 2), and the 2005 Summary (Table 3). Also attached is a graph showing leachate levels in the Pump Station B sump and rainfall for the month (Figure 1).

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 4.6 inches of rainfall at the Southeast County Landfill (SCLF).

Depth in Pond A (Column III)

Column III presents the daily depth, in feet, of effluent stored in 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 the average depth of effluent stored in Pond A was 3.3 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. Effluent Pond B was emptied for cleaning of sediment and inspection. This month the average depth of effluent stored in Pond B was 3.0 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 for the recorded days was 17.8 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 MLPS from Phases I-VI (Column VII). The average daily amount of leachate pumped from TPS-6 was 7,892 gallons. A total of 236,770 gallons was pumped from TPS-6 to PS-B 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 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 43,174 gallons. A total of 1,295,205 gallons of leachate was pumped to the storage tank this month.

Leachate Pumped from Section 7 Leak Detection System (Column VIII)

Column VIII presents the quantity of leachate removed from the leak detection system (LDS) of Section 7. The quantity is measured by a flow meter before being pumped back into the Section 7 sump for removal with Section 7 leachate. The removal rate did not exceed 1,250 gallons per day through September 26, 2005. Due to liner installation of Section 8, on September 26, the LDS was cut open on the northern perimeter of Section 7 to begin connecting both LDS. Since stormwater can enter the LDS system, until the LDS is resealed, the amount removed will not be representative of leakage rate for

Sections 7 and 8. This month a total of 9,743 gallons of leachate was removed from the leak detection system of Sections 7 and 8.

Leachate Pumped to MLPS from Section 7 (Column IX)

Column IX presents the quantity of leachate collected at Section 7 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 Section 7 (Column VIII). This month 28,571 gallons of leachate was pumped to the MLPS from Section 7.

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 Section 7. This month a total of 1,323,776 gallons of leachate was pumped from Phases I-VI and Section 7.

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. The average daily amount of leachate stored in the tank this month was estimated at 193,200 gallons.

Leachate Treated at LTRF (Column XII)

Column XII presents the daily amount of leachate, in gallons, treated at the LTRF. This month a total of 1,177,700 gallons of leachate was 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 300,775 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 Phases I-VI. This month a total of 25,099 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). The volume is estimated using AutoCAD software and is based on the cross-sectional area of the pond at varying depths. 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 122,600 gallons of effluent was 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 daily amount of effluent 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 174,100 gallons of effluent 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. No effluent was 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 a total of 285,904 gallons of effluent was 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 no effluent was 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 a total of 658,478 gallons of leachate was 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 248,800 gallons.

TABLE 2

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

TABLE 3

Leachate Balance Summary

The Leachate Balance Summary (see Table 3) presents a review of inflow and outflow quantities for the LTRF, as well as rainfall and effluent disposal quantities at the landfill. Total inflow quantity to the LTRF was 1,323,776 gallons. Total outflow quantity from the LTRF (hauled and evaporated) was 1,503,574 gallons. The change in storage for the month of September decreased by 179,798 gallons.

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

TABLE 1. LEACHATE WATER BALANCE REPORT FORM
SEPTEMBER 2005
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 Sec 7 Leak Det (gal.)	Leachate Pumped to MLPS from Section 7 (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	0.20	3.0	2.8	19.5	7,770	43,411	0	0	43,411	269,000	38,700	54,082	0	108,000	152,000	0	0	0	0	0
2	0.30	3.1	2.8	15.4	8,170	43,217	3	0	43,217	189,000	38,400	48,062	0	113,000	152,000	0	50,040	0	0	40,000
3	0.00	2.8	2.8	16.7	7,740	43,828	0	2,631	46,459	180,000	40,800	0	0	98,000	152,000	0	49,378	0	0	39,500
4	0.00	2.8	2.8	17.0	9,780	46,767	1	0	46,767	185,000	37,500	0	0	98,000	152,000	0	0	0	0	0
5	0.37	3.2	2.8	15.7	53	39,818	2	0	39,818	189,000	43,300	36,000	0	118,000	152,000	0	0	0	0	0
6	0.00	3.6	2.9	17.5	9,537	43,264	7	2,635	45,899	156,000	35,800	24,125	3,985	145,000	162,000	0	0	0	18,433	3,200
7	0.27	3.4	3.0	17.7	9,280	45,350	0	0	45,350	151,000	35,800	6,097	0	129,000	172,000	0	0	0	36,232	0
8	0.00	3.2	3.0	16.0	3,590	46,374	0	0	46,374	163,000	37,200	0	0	118,000	172,000	0	0	0	42,231	0
9	0.14	3.2	3.0	16.7	9,800	45,281	0	0	45,281	178,000	38,700	0	0	118,000	172,000	0	0	0	42,284	0
10	0.00	3.4	3.0	17.3	9,750	43,625	0	3,039	46,664	187,000	39,300	0	0	129,000	172,000	0	64,021	0	0	51,200
11	0.00	2.7	3.0	17.8	8,930	41,075	5	0	41,075	161,000	38,100	0	0	93,000	172,000	0	0	0	0	0
12	0.00	3.2	3.0	17.5	9,030	40,060	0	0	40,060	194,000	39,800	12,030	0	118,000	172,000	0	0	0	24,174	0
13	0.00	3.3	3.0	20.7	8,500	40,397	12	2,600	42,997	189,000	40,400	12,036	0	123,000	172,000	0	0	0	36,220	0
14	0.00	3.3	3.0	20.9	0	44,171	0	0	44,171	189,000	38,700	0	0	123,000	172,000	0	0	0	36,243	0
15	0.00	3.4	3.0	16.2	9,130	41,072	0	0	41,072	194,000	37,400	12,037	0	129,000	172,000	0	0	0	36,249	0
16	0.00	3.3	3.0	17.1	9,095	41,840	0	0	41,840	187,000	50,000	6,014	8,029	123,000	172,000	0	0	0	36,313	6,400
17	0.00	3.5	3.0	16.0	8,935	54,611	0	0	54,611	187,000	37,600	0	0	140,000	172,000	0	60,377	0	0	48,300
18	0.00	3.5	3.0	16.9	3,670	42,522	0	3,808	46,330	194,000	38,500	0	0	140,000	172,000	0	0	0	0	0
19	0.00	3.4	3.0	18.9	6,500	41,763	0	0	41,763	209,000	44,700	12,053	0	129,000	172,000	0	0	0	36,226	0
20	0.27	3.4	3.0	21.2	8,990	41,550	0	0	41,550	202,000	38,000	12,040	0	129,000	172,000	0	0	0	36,221	0
21	0.47	3.4	3.0	21.1	9,500	44,865	66	0	44,865	194,000	43,500	18,048	0	129,000	172,000	0	0	0	36,215	0
22	0.10	3.4	3.1	16.2	10,970	45,305	0	3,077	48,382	192,000	35,500	12,034	0	129,000	182,000	0	0	0	36,224	0
23	0.00	3.3	3.1	16.3	10,070	44,299	2	0	44,299	189,000	39,100	6,027	0	123,000	182,000	0	0	0	36,227	0
24	0.00	3.3	3.1	16.2	8,590	41,599	0	0	41,599	192,000	38,400	0	4,008	123,000	182,000	0	62,088	0	0	52,900
25	0.00	3.0	3.1	15.6	7,920	38,974	0	2,669	41,643	209,000	39,100	0	0	108,000	182,000	0	0	0	0	0
26	0.00	3.3	3.1	19.4	9,630	41,379	0	0	41,379	209,000	39,900	12,044	3,004	123,000	182,000	0	0	0	36,226	2,400
27	0.87	3.3	3.1	15.9	9,500	43,650	0	0	43,650	199,000	35,800	6,014	6,073	123,000	182,000	0	0	0	36,214	4,900
28	0.82	3.4	3.3	22.2	5,050	42,750	0	2,472	45,222	209,000	40,800	6,016	0	129,000	202,000	0	0	0	36,208	0
29	0.67	3.5	3.4	18.2	8,880	40,493	646	2,920	43,413	214,000	37,300	0	0	140,000	213,000	0	0	0	36,200	0
30	0.13	3.4	3.4	20.6	8,410	41,895	8,999	2,720	44,615	235,000	39,600	6,016	0	129,000	213,000	0	0	0	24,138	0
Total	4.61				236,770	1,295,205	9,743	28,571	1,323,776		1,177,700	300,775	25,099				285,904	0	658,478	248,800
Daily Average		3.3	3.0	17.8	7,892	43,174	325	952	44,126	193,200				122,600	174,100	0				
Mo. Average													800				9,500	0	21,900	8,290

projects\balance\2005\sep-05.xls (Revised by ler 10/11/05)

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 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
SEPTEMBER 2005
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
							Leachate Hauled		Leachate							Effluent Hauled		
Day	Reading PS-B (in.)	Section 7 Leak Det. (gal.)	Section 7 Flow Meter (gal.)	Flow Meter TPS-6 (gal.)	Flow Meter Pump Sta. A (gal.)	Depth in 575K Tank (ft.)	Contractor *(gal.)*	County *(gal.)*	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.)	Contractor (gal.)	County (gal.)	Effluent Dust Control (Sprayed) (gal)
1	10.5	92,122	1,577,864	4,818,060	4,945,648	9.33	36,023	18,059	0	0.20	3.0	2.8	0.0	38,722	0	0	0	0
2	6.4	92,125	1,577,864	4,826,230	4,988,865	6.58	36,025	12,037	0	0.30	3.1	2.8	0.0	38,429	50,040	0	0	0
3	7.7	92,125	1,580,495	4,833,970	5,032,693	6.25	0	0	0	0.00	2.8	2.8	0.0	40,762	49,378	0	0	0
4	8.0	92,126	1,580,495	4,843,750	5,079,460	6.42	0	0	0	0.00	2.8	2.8	0.0	37,498	0	0	0	0
5	6.7	92,128	1,580,495	4,843,803	5,119,278	6.6	36,000	0	0	0.37	3.2	2.8	0.0	43,293	0	0	0	0
6	8.5	92,135	1,583,130	4,853,340	5,162,542	5.4	18,018	6,107	3,985	0.00	3.6	2.9	0.0	35,835	0	12,405	6,028	0
7	8.7	92,135	1,583,130	4,862,620	5,207,892	5.25	0	6,097	0	0.27	3.4	3.0	0.0	35,835	0	36,232	0	0
8	7.0	92,135	1,583,130	4,866,210	5,254,266	5.67	0	0	0	0.00	3.2	3.0	0.0	37,238	0	36,194	6,037	0
9	7.7	92,135	1,583,130	4,876,010	5,299,547	6.17	0	0	0	0.14	3.2	3.0	0.0	38,729	0	36,254	6,030	0
10	8.3	92,135	1,586,169	4,885,760	5,343,172	6.50	0	0	0	0.00	3.4	3.0	0.0	39,292	64,021	0	0	0
11	8.8	92,140	1,586,169	4,894,690	5,384,247	5.58	0	0	0	0.00	2.7	3.0	0.0	38,086	0	0	0	0
12	8.5	92,140	1,586,169	4,903,720	5,424,307	6.75	0	12,030	0	0.00	3.2	3.0	0.0	39,813	0	24,174	0	0
13	11.7	92,152	1,588,769	4,912,220	5,464,704	6.58	0	12,036	0	0.00	3.3	3.0	0.0	40,436	0	36,220	0	0
14	11.9	92,152	1,588,769	4,912,220	5,508,875	6.58	0	0	0	0.00	3.3	3.0	0.0	38,702	0	36,243	0	0
15	7.2	92,152	1,588,769	4,921,350	5,549,947	6.75	0	12,037	0	0.00	3.4	3.0	0.0	37,369	0	36,249	0	0
16	8.1	92,152	1,588,769	4,930,445	5,591,787	6.50	0	6,014	8,029	0.00	3.3	3.0	0.0	50,041	0	36,313	0	0
17	7.0	92,152	1,588,769	4,939,380	5,646,398	6.50	0	0	0	0.00	3.5	3.0	0.0	37,569	60,377	0	0	0
18	7.9	92,152	1,592,577	4,943,050	5,688,920	6.75	0	0	0	0.00	3.5	3.0	0.0	38,498	0	0	0	0
19	9.9	92,152	1,592,577	4,949,550	5,730,683	7.3	0	12,053	0	0.00	3.4	3.0	0.0	44,690	0	36,226	0	0
20	12.2	92,152	1,592,577	4,958,540	5,772,233	7.00	0	12,040	0	0.27	3.4	3.0	0.0	38,027	0	36,221	0	0
21	12.1	92,218	1,592,577	4,968,040	5,817,098	6.75	0	18,048	0	0.47	3.4	3.0	0.0	43,460	0	36,215	0	0
22	7.2	92,218	1,595,654	4,979,010	5,862,403	6.67	0	12,034	0	0.10	3.4	3.1	0.0	35,469	0	36,224	0	0
23	7.3	92,220	1,595,654	4,989,080	5,906,702	6.58	0	6,027	0	0.00	3.3	3.1	0.0	39,139	0	36,227	0	0
24	7.2	92,220	1,595,654	4,997,670	5,948,301	6.67	0	0	4,008	0.00	3.3	3.1	0.0	38,441	62,088	0	0	0
25	6.6	92,220	1,598,323	5,005,590	5,987,275	7.25	0	0	0	0.00	3.0	3.1	0.0	39,125	0	0	0	0
26	10.4	92,220	1,598,323	5,015,220	6,028,654	7.25	0	12,044	3,004	0.00	3.3	3.1	0.0	39,926	0	36,226	0	0
27	6.9	92,220	1,598,323	5,024,720	6,072,304	6.92	0	6,014	6,073	0.87	3.3	3.1	0.0	35,835	0	36,214	0	0
28	13.2	92,220	1,600,795	5,029,770	6,115,054	7.25	0	6,016	0	0.82	3.4	3.3	0.0	40,773	0	36,208	0	0
29	9.2	92,866	1,603,715	5,038,650	6,155,547	7.42	0	0	0	0.67	3.5	3.4	0.0	37,266	0	36,200	0	0
30	11.6	101,865	1,606,435	5,047,060	6,197,442	8.17	0	6,016	0	0.13	3.4	3.4	0.0	39,582	0	24,138	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	Section 7 acres
Open	6	0
Intermediate	133.4	12.5
Final	23	0
Not Opened	0	0

TABLE 3. 2005 MONTHLY LEACHATE BALANCE SUMMARY
SOUTHEAST COUNTY LANDFILL
HILLSBOROUGH COUNTY, FLORIDA

		Leachate Arriving at LTRF			Leachate Leaving LTRF			Effluent Disposal			Inflow / Outflow For LTRF		
Month	Rainfall (in.)	Leachate Hauled to LTRF from HHLF/TRLF (gal.)	Leachate from Section 7 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	3.12	0	26,407	1,170,350	114,332	26,213	1,165,300	0	0	1,025,621	1,196,757	1,305,845	-109,088
February	2.78	0	24,928	1,015,209	114,369	94,365	1,085,800	0	0	959,407	1,040,137	1,294,534	-254,397
March	6.32	0	24,262	1,125,629	246,830	82,172	975,500	0	0	921,043	1,149,891	1,304,502	-154,611
April	3.23	0	20,469	1,241,219	331,471	224,232	913,400	0	0	973,733	1,261,688	1,469,103	-207,415
May	6.07	0	23,126	1,242,278	271,030	14,069	1,123,900	0	0	827,998	1,265,404	1,408,999	-143,595
June	12.28	0	31,659	1,277,668	840,324	12,793	437,100	29,977	0	491,117	1,309,327	1,290,217	19,110
July	7.34	0	29,238	1,393,566	920,060	76,183	593,000	90,431	0	555,210	1,422,804	1,589,243	-166,439
August	7.90	0	28,229	1,393,583	553,165	97,492	972,500	78,578	0	886,950	1,421,812	1,623,157	-201,345
September	4.61	0	28,571	1,295,205	300,775	25,099	1,177,700	658,478	0	285,904	1,323,776	1,503,574	-179,798
October													
November													
December													
YTD Total	53.65	0	236,889	11,154,707	3,692,356	652,618	8,444,200	857,464	0	6,926,983	11,391,596	12,789,174	-1,397,578

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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.

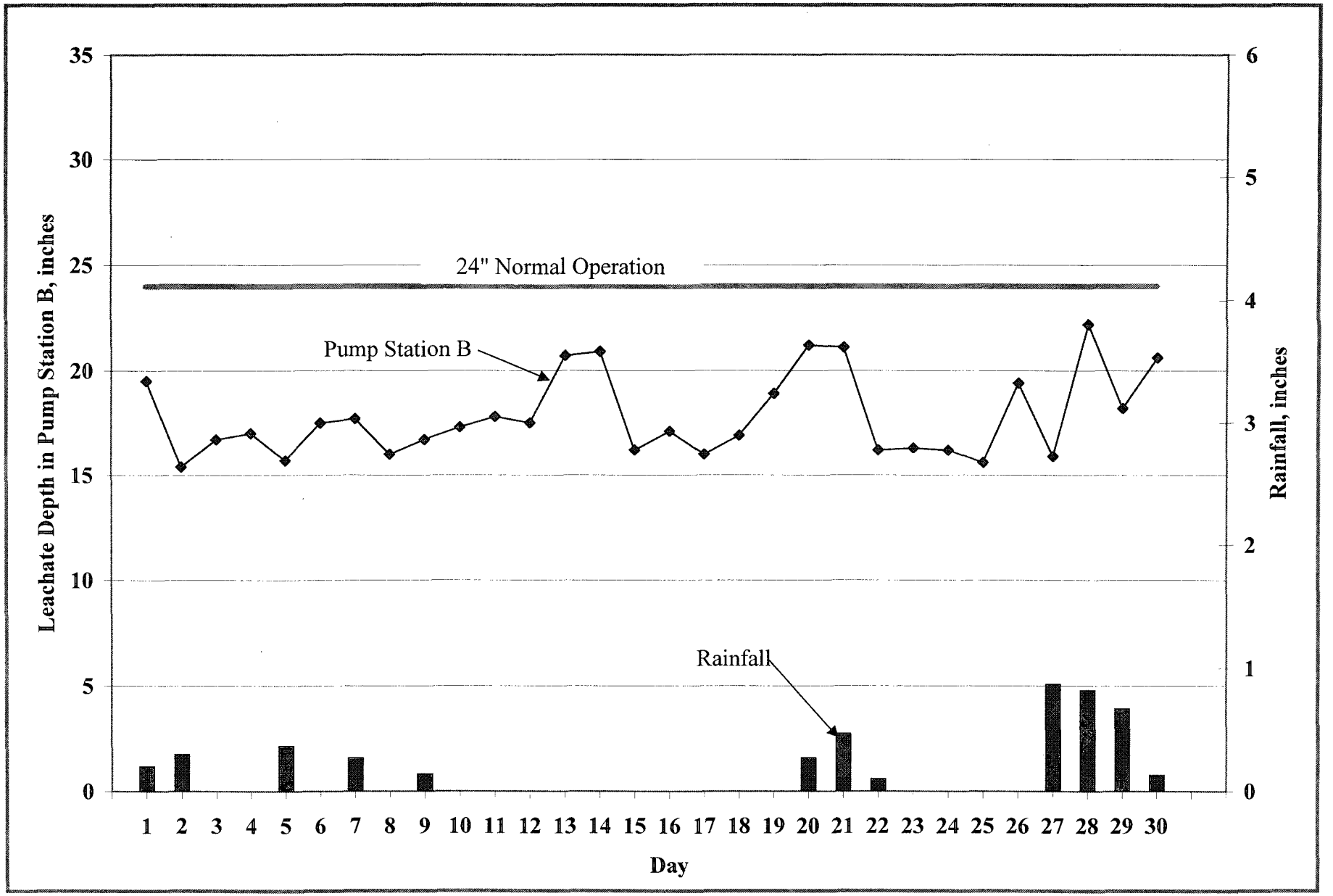

Figure 1. Leachate Levels in Pump Station B and Rainfall for September 2005.

LEACHATE DEPTH/SUMMARY DATA FORM
SOUTHEAST COUNTY LANDFILL

(Month/Year) September,2005

Date	TPS-6		Depth[1] in Pond B (feet)	Pump[2] Station B (inches)	PS-A Flow Meter (gallons)	Section 7		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	7,770	0.00	10.5	43,411	0	0	9'4"	36,023	18,059	0	0.20
2	0.0	8,170	0.00	6.4	43,217	0	3	6'7"	36,025	12,037	0	0.30
3	0.0	7,740	0.00	7.7	43,828	2,631	0	6'3"	0	0	0	0.00
4	0.0	9,780	0.00	8.0	46,767	0	1	6'5"	0	0	0	0.00
5	0.0	53	0.00	6.7	39,818	0	2	6'7"	36,000	0	0	0.37
6	0.0	9,537	0.00	8.5	43,264	2,635	7	5'5"	18,018	6,107	3,985	0.00
7	0.0	9,280	0.00	8.7	45,350	0	0	5'3"	0	6,097	0	0.27
8	0.0	3,590	0.00	7.0	46,374	0	0	5'8"	0	0	0	0.00
9	0.0	9,800	0.00	7.7	45,281	0	0	6'2"	0	0	0	0.14
10	0.0	9,750	0.00	8.3	43,625	3,039	0	6'6"	0	0	0	0.00
11	0.0	9,430	0.00	8.8	41,075	0	5	5'7"	0	0	0	0.00
12	0.0	9,030	0.00	8.5	40,060	0	0	6'9"	0	12,030	0	0.00
13	0.0	8,500	0.00	11.7	40,397	2,600	12	6'7"	0	12,036	0	0.00
14	0.0	0	0.00	11.9	44,171	0	0	6'7"	0	0	0	0.00
15	0.0	9,130	0.00	7.2	41,072	0	0	6'9"	0	12,037	0	0.00
16	0.0	9,095	0.00	8.1	41,840	0	0	6'9"	0	6,014	8,029	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

LEACHATE DEPTH/SUMMARY DATA FORM
SOUTHEAST COUNTY LANDFILL

(Month/Year) September,2005

Date	TPS-6		Depth[1] in Pond B (feet)	Pump[2] Station B (inches)	PS-A Flow Meter (gallons)	Section 7		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	8,935	0.00	7.0	54,611	0	0	6'6"	0	0	0	0.00
18	0.0	3,670	0.00	7.9	42,522	3,808	0	6'9"	0	0	0	0.00
19	0.0	6,500	0.00	9.9	41,763	0	0	7'3"	0	12,053	0	0.00
20	0.0	8,990	0.00	12.2	41,550	0	0	7'0"	0	12,040	0	0.27
21	0.0	9,500	0.00	12.1	44,865	0	66	6'9"	0	18,048	0	0.47
22	0.0	10,970	0.00	7.2	45,305	3,077	0	6'8"	0	12,034	0	0.10
23	0.0	10,070	0.00	7.3	44,299	0	2	6'7"	0	6,027	0	0.00
24	0.0	8,590	0.00	7.2	41,599	0	0	6'8"	0	0	4,008	0.00
25	0.0	7,920	0.00	6.6	38,974	2,669	0	7'3"	0	0	0	0.00
26	0.0	9,630	0.00	10.4	41,379	0	0	7'3"	0	12,044	3,004	0.00
27	0.0	9,500	0.00	6.9	43,650	0	0	6'11"	0	6,014	6,073	0.87
28	0.0	5,050	0.00	13.2	42,750	2,472	0	7'3"	0	6,016	0	0.82
29	0.0	8,880	0.00	9.2	40,493	2,920	646	7'5"	0	0	0	0.67
30	0.0	8,410	0.00	11.6	41,895	2,720	8,999	8'2"	0	6,016	0	0.13

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

EFFLUENT DEPTH/QUANTITIES DATA FORM
SOUTHEAST COUNTY LANDFILL

(Month/Year) September,2005

Date	Depth in Pond A[1] (feet)	Depth in Pond B[2] (feet)	Pond B Leak Detection[3] (gallons)	Leachate Treated (gallons)	Treated Effluent						Time at End of Rainfall	Effluent[4] 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	3.00	2.80	0	38,722	28,534		0	0				N
2	3.10	2.80	0	38,429	50,040		0	0				N
3	2.80	2.80	0	40,762	49,378		0	0				N
4	2.80	2.80	0	37,498	0		0	0				
5	3.20	2.80	0	43,293	0		0	0				
6	3.60	2.90	0	35,835	0		12,405	6,028				
7	3.40	6.00	0	35,835	0		36,232	0				
8	3.20	3.00	0	37,238	0		36,194	6,037				
9	3.20	3.00	0	38,729	0		36,254	6,030				
10	3.40	3.00	0	39,292	64,021		0	0				N
11	2.70	3.00	0	38,086	0		0	0				
12	3.20	3.00	0	39,813	0		24,174	0				
13	3.30	3.00	0	40,436	0		36,220	0				
14	3.30	3.00	0	38,702	0		36,243	0				
15	3.40	3.00	0	37,369	0		36,249	0				
16	3.30	3.00	0	50,041	0		36,313	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: Raymond C Graves

EFFLUENT DEPTH/QUANTITIES DATA FORM
SOUTHEAST COUNTY LANDFILL

(Month/Year) September,2005

Date	Depth in Pond A[1] (feet)	Depth in Pond B[2] (feet)	Pond B Leak Detection[3] (gallons)	Leachate Treated (gallons)	Treated Effluent						Time at End of Rainfall	Effluent[4] 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	3.50	3.00	0	37,569	60,377		0	0				N
18	3.50	3.00	0	38,498	0		0	0				
19	3.40	3.00	0	44,690	0		36,226	0				
20	3.40	3.00	0	38,027	0		36,221	0				
21	3.40	3.00	0	43,460	0		36,215	0				
22	3.40	3.10	0	35,469	0		36,224	0				
23	3.30	3.10	0	39,139	0		36,227	0				
24	3.30	3.10	0	38,441	62,088		0	0				N
25	3.00	3.10	0	39,125	0		0	0				
26	3.30	3.10	0	39,926	0		36,226	0				
27	3.30	3.10	0	35,835	0		36,214	0				
28	3.40	3.30	0	4,773	0		36,208	0				
29	3.50	3.40	0	37,266	0		36,200	0				
30	3.40	3.40	0	39,582	0		24,138	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: Raymond C Rawls