LR 100494
Unbill
Binding

Hillsborough County
Florida

Office of the County Administrator
Patricia G. Bean

Deputy County Administrator
Wally Hill

Assistant County Administrators
Bernardo Garcia
Carl S. Harness
Manus J. O' Donnell

September 16, 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 –August 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 August 2005. In addition, the SWMD is providing the August 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 August 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 August 2005 was 17.5 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/lea0805.dep

Hillsborough County
Florida

Office of the County Administrator
Patricia G. Bean

MEMORANDUM

DATE: September 13, 2005

TO: Patricia Berry, Solid Waste Management Department

FROM: Larry Ruiz, Sr. Engineering Specialist, SWMD
Raymond Graves, Engineering Tech. II, SWMD

SUBJECT: Leachate Water Balance Report Forms for August 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 August 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 7.9 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 2.6 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 1.1 feet.

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

Column V presents the depth of leachate, in inches, in the PS-B sump. Leachate from Phases I-VI flows to the PS-B sump for removal from the landfill. PS-B then pumps the leachate to Pump Station A (PS-A). Daily depth readings from the PS-B sump are included in this column. 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 17.5 inches.

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

Column VI presents the quantity of leachate from Phase IV pumped to PS-B by Temporary Pump Station-6 (TPS-6). The quantity of leachate removed by TPS-6 is measured in gallons by an in-line flow meter and is included in the quantity of leachate pumped to the MLPS from Phases I-VI (Column VII). The average daily amount of leachate pumped from TPS-6 was 6,887 gallons. A total of 213,510 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 44,954 gallons. A total of 1,393,583 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 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. This month a total of 58 gallons of leachate was removed from the leak detection system of Section 7.

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 28,229 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 1,421,812 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 245,900 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 972,500 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 553,165 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 97,492 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 90,200 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 69,900 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 886,950 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 78,578 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 787,600 gallons.

TABLE 2

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

TABLE 3

Leachate Balance Summary

The Leachate Balance Summary (see Table 3) presents a review of inflow and outflow quantities for the LTRF, as well as rainfall and effluent disposal quantities at the landfill. Total inflow quantity to the LTRF was 1,421,812 gallons. Total outflow quantity from the LTRF (hauled and evaporated) was 1,623,197 gallons. The change in storage for the month of August decreased by 201,385 gallons.

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

TABLE 1. LEACHATE WATER BALANCE REPORT FORM
AUGUST 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	0.00	2.6	2.3	19.6	3,730	44,940	5	1,271	46,211	317,000	22,800	48,144	12,171	88,000	106,000	0	42,310	0	0	43,600
2	0.20	2.2	2.3	19.6	10,560	46,838	2	0	46,838	297,000	24,600	12,057	12,378	70,000	106,000	0	44,522	0	0	45,500
3	0.00	2.2	2.0	21.3	10,180	48,704	0	2,598	51,302	290,000	22,900	42,037	8,287	70,000	80,000	0	48,344	0	0	45,300
4	0.00	2.4	1.7	15.9	10,570	48,070	0	0	48,070	266,000	10,000	42,082	8,246	79,000	57,000	0	49,699	0	0	46,400
5	0.00	2.5	1.1	15.7	9,440	44,703	4	0	44,703	240,000	26,400	48,054	0	83,000	23,000	0	60,961	0	0	48,800
6	0.00	2.0	0.4	17.0	9,520	44,607	0	2,841	47,448	245,000	19,800	0	0	61,000	3,000	0	56,032	0	0	44,800
7	0.20	*1.9*	*0.4*	*16.6*	*8,755*	*45,042*	*5*	*0*	*45,042*	*263,000*	23,000	0	0	*57,000*	*3,000*	0	0	0	0	0
8	0.30	1.7	0.4	16.1	8,755	45,042	5	0	45,042	281,000	23,900	48,063	8,026	48,000	3,000	0	9,189	0	0	13,800
9	0.00	2.0	0.7	18.0	7,650	45,925	0	0	45,925	259,000	25,200	48,041	0	61,000	9,000	0	42,543	0	0	34,000
10	0.00	1.6	0.0	16.6	10,510	45,925	2	2,756	48,681	230,000	20,200	42,070	8,894	44,000	0	0	35,859	0	0	35,800
11	0.00	1.2	0.0	16.6	7,360	43,739	0	0	43,739	209,000	21,600	36,039	4,721	32,000	0	0	22,123	0	0	21,500
12	0.60	1.1	0.0	16.7	6,970	44,320	4	0	44,320	194,000	19,400	36,068	0	28,000	0	*0*	0	0	0	0
13	0.00	1.9	0.0	16.1	7,190	43,268	0	2,655	45,923	187,000	33,800	0	0	57,000	0	0	35,637	0	0	28,500
14	0.92	*2.3*	*0.0*	*16.6*	*4,800*	*43,215*	*0*	*0*	*43,215*	*200,000*	34,800	0	0	*74,000*	*0*	0	0	0	0	0
15	0.00	2.6	0.0	17.0	4,800	43,215	0	1,091	44,306	214,000	36,500	6,013	9,010	88,000	0	0	0	0	0	7,200
16	0.00	3.2	0.0	18.9	8,180	42,736	0	0	42,736	218,000	34,300	12,048	7,986	118,000	0	0	46,859	0	0	43,900
17	0.00	3.0	0.0	19.8	8,280	45,251	1	2,740	47,991	209,000	41,600	6,012	0	108,000	0	0	40,247	0	0	32,200
18	0.00	2.6	0.0	17.7	5,540	45,692	0	0	45,692	223,000	17,900	12,030	3,228	88,000	0	0	43,565	0	0	37,400
19	0.06	2.4	0.0	17.5	2,680	42,555	0	0	42,555	223,000	33,600	0	8,022	79,000	0	0	60,688	0	0	55,000
20	0.00	1.9	0.0	16.3	3,360	42,982	6	998	43,980	218,000	41,500	18,054	3,412	57,000	0	0	48,605	0	0	41,600
21	2.77	*2.4*	*0.5*	*16.4*	*7,605*	*43,207*	*2*	*0*	*43,207*	*225,000*	40,800	0	0	*79,000*	*3,000*	0	0	0	0	0
22	1.67	2.9	0.9	16.5	7,605	43,207	2	2,522	45,729	233,000	38,800	12,031	0	103,000	15,000	0	0	0	0	0
23	0.00	3.6	1.7	18.1	3,590	44,310	2	0	44,310	238,000	38,700	6,106	0	145,000	57,000	0	0	0	12,104	0
24	0.50	3.4	2.0	15.4	3,100	45,420	4	1,079	46,499	245,000	38,500	6,020	0	129,000	80,000	0	44,041	0	6,031	35,200
25	0.13	3.5	2.1	16.1	7,115	42,906	0	0	42,906	257,000	44,400	0	0	140,000	88,000	0	0	0	6,034	0
26	0.00	3.6	2.3	19.8	9,265	44,914	2	2,211	47,125	264,000	36,700	0	0	145,000	106,000	0	50,003	0	0	40,000
27	0.23	3.3	2.4	19.6	8,980	51,126	0	0	51,126	278,000	40,000	18,048	0	123,000	115,000	0	50,976	0	0	40,800
28	0.32	*3.5*	*2.5*	*18.3*	*1.135*	*45,892*	*0*	*0*	*45,892*	*278,000*	38,600	0	0	*140,000*	*115,000*	0	0	0	0	0
29	0.00	3.6	2.5	16.9	1,135	45,892	0	2,821	48,713	278,000	43,000	18,051	0	145,000	124,000	0	0	0	0	0
30	0.00	3.4	2.8	18.2	6,830	44,160	0	0	44,160	269,000	39,600	6,015	0	129,000	152,000	0	0	0	36,306	0
31	0.00	3.4	2.8	19.1	8,320	45,783	12	2,646	48,429	276,000	39,600	30,082	3,111	129,000	152,000	0	54,747	0	18,103	46,300
Total	7.90				213,510	1,393,583	58	28,229	1,421,812		972,500	553,165	97,492				886,950	0	78,578	787,600
Daily Average		2.6	1.1	17.5	6,887	44,954	2	911	45,865	245,900				90,200	69,900	0				
Mo. Average													3,100				28,600	0	2,500	25,410

projects\balance\2005\Aug-05.xls (Revised by ler 9/12/05)

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
AUGUST 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		Effluent
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.)	Dust Control (Sprayed) (gal)
1	10.6	92,069	1,550,906	4,600,510	3,553,594	11.00	36,033	12,111	12,171	0.00	2.6	2.3	0	22,780	42,310	0	0	0
2	10.6	92,071	1,550,906	4,611,070	3,600,432	10.33	0	12,057	12,378	0.20	2.2	2.3	0.0	24,632	44,522	0	0	0
3	12.3	92,071	1,553,504	4,621,250	3,649,136	10.08	36,019	6,018	8,287	0.00	2.2	2.0	0.0	22,854	48,344	0	0	0
4	6.9	92,071	1,553,504	4,631,820	3,697,206	9.25	36,009	6,073	8,246	0.00	2.4	1.7	0.0	10,000	49,699	0	0	0
5	6.7	92,075	1,553,504	4,641,260	3,741,909	8.33	36,019	12,035	0	0.00	2.5	1.1	0.0	26,398	60,961	0	0	0
6	8.0	92,075	1,556,345	4,650,780	3,786,516	8.50	0	0	0	0.00	2.0	0.4	0.0	19,843	56,032	0	0	0
7	*7.6*	*92,080*	*1,556,345*	*4,659,535*	*3,831,558*	*9.13*	0	0	0	0.20	*1.9*	*0.4*	0.0	23,043	0	0	0	0
8	7.1	92085	1556345	4668290	3876600	9.75	36,024	12,039	8,026	0.30	1.7	0.4	0.0	23,949	9,189	0	0	0
9	9.0	92,085	1,556,345	4,675,940	3,922,525	9.00	36,007	12,034	0	0.00	2.0	0.7	0.0	25,179	42,543	0	0	0
10	7.6	92,087	1,559,101	4,686,450	3,968,450	8.00	30,035	12,035	8,894	0.00	1.6	0.0	0.0	20,178	35,859	0	0	0
11	7.6	92,087	1,559,101	4,693,810	4,012,189	7.25	30,024	6,015	4,721	0.00	1.2	0.0	0.0	21,618	22,123	0	0	0
12	7.7	92,091	1,559,101	4,700,780	4,056,509	6.75	24,011	12,057	0	0.60	1.1	0.0	0.0	19,390	0	0	0	0
13	7.1	92,091	1,561,756	4,707,970	4,099,777	6.50	0	0	0	0.00	1.9	0.0	0.0	33,780	35,637	0	0	0
14	*7.6*	*92,091*	*1,561,756*	*4,712,770*	*4,142,992*	*6.96*	0	0	0	0.92	*2.3*	*0.0*	0.0	34,836	0	0	0	0
15	8.0	92091	1,562,847	4717570	4186206	7.42	0	6,013	9,010	0.00	2.6	0.0	0.0	36,485	0	0	0	0
16	9.9	92,091	1,562,847	4,725,750	4,228,942	7.58	0	12,048	7,986	0.00	3.2	0.0	0.0	34,264	46,859	0	0	0
17	10.8	92,092	1,565,587	4,734,030	4,274,193	7.25	0	6,012	0	0.00	3.0	0.0	0.0	41,642	40,247	0	0	0
18	8.7	92,092	1,565,587	4,739,570	4,319,885	7.75	0	12,030	3,228	0.00	2.6	0.0	0.0	17,923	43,565	0	0	0
19	8.5	92,092	1,565,587	4,742,250	4,362,440	7.75	0	0	8,022	0.06	2.4	0.0	0.0	33,622	60,688	0	0	0
20	7.3	92,098	1,566,585	4,745,610	4,405,422	7.58	0	18,054	3,412	0.00	1.9	0.0	0.0	41,484	48,605	0	0	0
21	*7.4*	*92,100*	*1,566,585*	*4,753,215*	*4,448,629*	*7.83*	0	0	0	2.77	*2.4*	*0.5*	0.0	40,817	0	0	0	0
22	7.5	92102	1,569,107	4760820	4491835	8.08	0	12,031	0	1.67	2.9	0.9	0.0	38,761	0	0	0	0
23	9.1	92,104	1,569,107	4,764,410	4,536,145	8.25	0	6,106	0	0.00	3.6	1.7	0.0	38,697	0	0	12,104	0
24	6.4	92,108	1,570,186	4,767,510	4,581,565	8.50	0	6,020	0	0.50	3.4	2.0	0.0	38,549	44,041	0	6,031	0
25	7.1	92,108	1,570,186	4,774,625	4,624,471	8.92	0	0	0	0.13	3.5	2.1	0.0	44,365	0	0	6,034	0
26	10.8	92,110	1,572,397	4,783,890	4,669,385	9.17	0	0	0	0.00	3.6	2.3	0.0	36,718	50,003	0	0	0
27	10.6	92,110	1,572,397	4,792,870	4,720,511	9.67	0	18,048	0	0.23	3.3	2.4	0.0	40,044	50,976	0	0	0
28	*9.3*	*92,110*	*1,572,397*	*4,794,005*	*4,766,403*	*9.67*	0	0	0	0.32	*3.5*	*2.5*	0.0	38,608	0	0	0	0
29	7.9	92110	1,575,218	4795140	4812294	9.67	0	18,051	0	0	3.6	2.5	0.0	43,002	0	0	0	0
30	9.2	92,110	1,575,218	4,801,970	4,856,454	9.33	0	6,015	0	0.00	3.4	2.8	0.0	39,584	0	30,274	6,032	0
31	10.1	92,122	1,577,864	4,810,290	4,902,237	9.58	18,043	12,039	3,111	0.00	3.4	2.8	0.0	39,583	54,747	18,103	0	0

projects\balance\2005\Aug-05.xls (Revised by ler 9/12/05)

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 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													
October													
November													
December													
YTD Total	49.04	0	208,318	9,859,502	3,391,581	627,519	7,266,500	198,986	0	6,641,079	10,067,820	11,285,600	-1,217,780

projects\balance\2005\2005-summary.xls (Revised by ler 9/12/05)

Note:

1. If the bypass at the effluent pond is ever used to pump effluent back to the LTRF, this table must be modified.
2. Leachate from the Hillsborough Heights and Taylor Road landfills is being hauled to the Faulkenburg Road Wastewater Treatment Facility.
3. Change in storage represents total inflow to LTRF minus total outflow from LTRF.

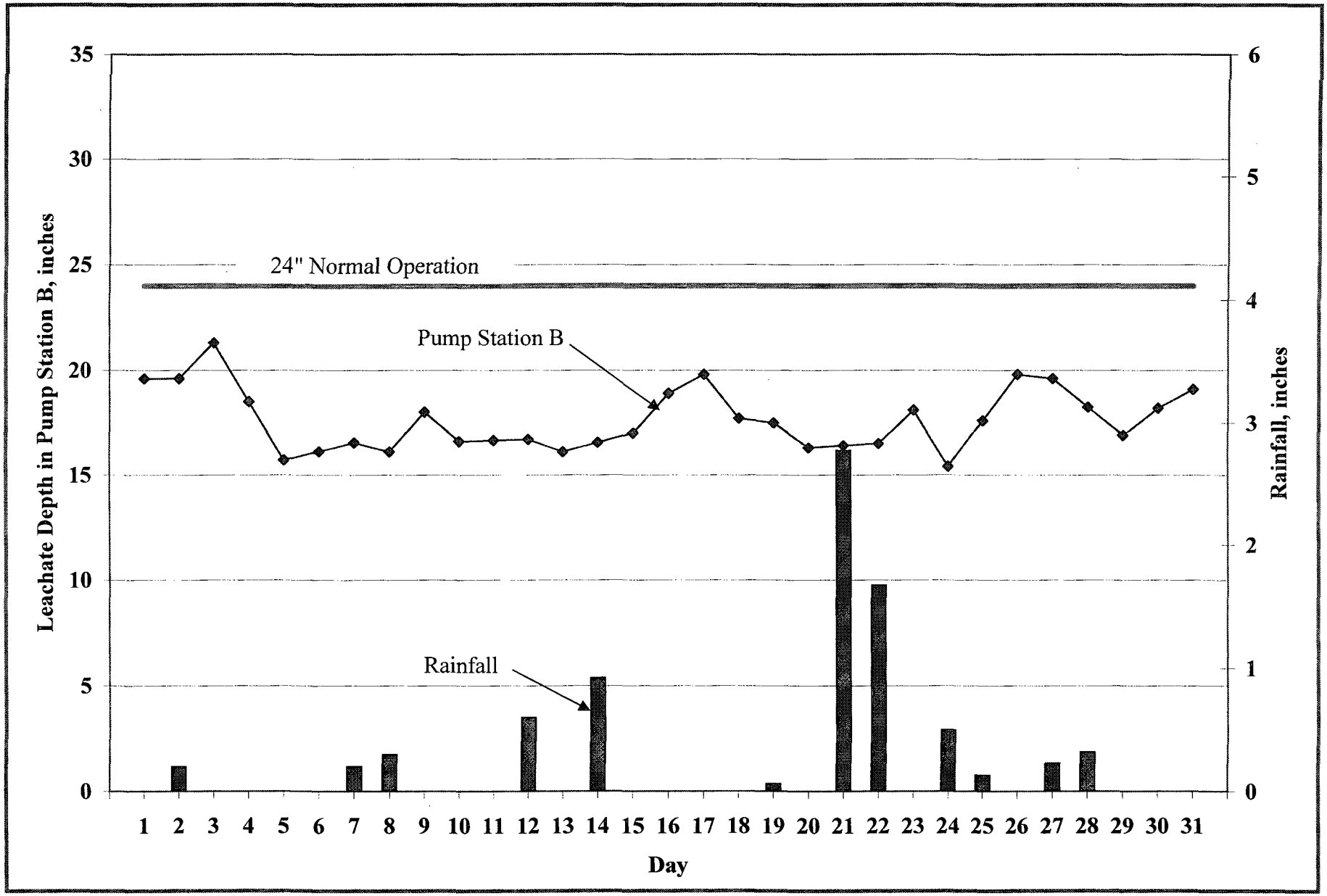

Figure 1. Leachate Levels in Pump Station B and Rainfall for August 2005.

EFFLUENT DEPTH/QUANTITIES DATA FORM
SOUTHEAST COUNTY LANDFILL

(Month/Year) August,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	3.00	0.00	0	41,642	40,247		0	0				N
18	2.60	0.00	0	17,923	43,565		0	0				N
19	2.40	0.00	0	33,622	60,688		0	0				N
20	1.90	0.00	0	41,484	48,605		0	0				N
21	NR	NR	0	40,817	0		0	0				
22	2.90	0.90	0	38,761	0		0	0				
23	3.60	1.90	0	38,697	0		0	12,104				
24	3.40	2.00	0	38,549	44,041		0	6,031				N
25	3.50	2.10	0	44,365	0		0	6,034				
26	3.60	2.30	0	36,718	50,003		0	0				N
27	3.30	2.40	0	40,044	50,976		0	0				N
28	NR	NR	0	38,608	0		0	0				
29	3.60	2.50	0	43,002	0		0	0				
30	3.40	2.80	0	39,584	0		30,274	6,032				
31	3.40	2.80	0	39,583	54,747		18,103	0				N

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 Travis

EFFLUENT DEPTH/QUANTITIES DATA FORM
SOUTHEAST COUNTY LANDFILL

(Month/Year) August,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	2.60	2.30	0	22,780	42,310		0	0				N
2	2.20	2.30	0	24,632	44,522		0	0				N
3	2.20	2.00	0	22,854	48,344		0	0				N
4	2.40	1.70	0	10,000	49,699		0	0				N
5	2.50	1.10	0	26,398	60,961		0	0				N
6	2.00	0.40	0	19,834	56,032		0	0				N
7	NR	NR	0	23,043	0		0	0				
8	1.70	0.40	0	23,949	9,189		0	0				N
9	2.00	0.70	0	25,179	42,543		0	0				N
10	1.60	0.00	0	20,178	35,859		0	0				N
11	1.20	0.00	0	21,618	22,123		0	0				N
12	1.10	0.00	0	19,390	0		0	0				
13	1.90	0.00	0	33,780	35,637		0	0				N
14	NR	NR	0	34,836	0		0	0				
15	2.60	0.00	0	36,485	0		0	0				
16	3.20	0.00	0	34,264	46,859		0	0				N

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 Traver

LEACHATE DEPTH/SUMMARY DATA FORM
SOUTHEAST COUNTY LANDFILL

(Month/Year) August,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	3,730	0.00	10.6	89,880	2,542	5	11'0"	36,033	12,111	12,171	0.00
2	0.0	10,560	0.00	10.6	46,838	0	2	10'4"	0	12,057	12,378	0.20
3	0.0	10,180	0.00	12.3	48,704	2,598	0	10'1"	36,019	6,018	8,287	0.00
4	0.0	10,570	0.00	6.9	48,070	0	0	9'3"	36,009	6,073	8,246	0.00
5	0.0	9,440	0.00	6.7	44,703	0	4	8'4'	36,019	12,035	0	0.00
6	0.0	9,520	0.00	8.0	44,607	2,841	0	8'6'	0	0	0	0.00
7	0.0	NR	0.00	NR	NR	NR	NR	NR	0	0	0	0.22
8	0.0	17,510	0.00	7.1	90,084	0	10	9'9'	36,024	12,039	8,026	0.30
9	0.0	7,650	0.00	9.0	45,925	0	0	9'0"	36,007	12,034	0	0.00
10	0.0	10,510	0.00	7.6	45,925	2,836	2	8'0"	30,035	12,035	8,894	0.00
11	0.0	7,360	0.00	7.6	43,739	0	0	7'3"	30,024	6,055	4,721	0.00
12	0.0	6,970	0.00	7.7	44,320	0	4	6'9"	24,011	12,057	0	0.60
13	0.0	7,190	0.00	7.1	43,268	2,655	0	6'6'	0	0	0	0.00
14	0.0	NR	NR	NR	NR	NR	NR	NR	0	0	0	0.92
15	0.0	9,600	0.00	8.0	86,429	1,091	0	7'5"	0	6,013	9,010	0.00
16	0.0	8,180	0.00	9.9	42,736	0	0	7'7"	0	12,048	7,986	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 Traver

Revised Jan. 16, 2004

LEACHATE DEPTH/SUMMARY DATA FORM
SOUTHEAST COUNTY LANDFILL

(Month/Year) August,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	8,280	0.00	10.8	45,251	2,740	1	7'3"	0	6,012	0	0.00
18	0.0	5,540	0.00	8.7	45,692	0	0	7'9'	0	12,030	3,228	0.00
19	0.0	2,680	0.00	8.5	42,555	0	0	7'9"	0	0	8,022	0.06
20	0.0	3,360	0.00	7.3	42,982	998	6	7'7"	0	18,054	3,412	0.00
21	0.0	NR	0.00	NR	NR	NR	NR	NR	0	0	0	2.77
22	0.0	15,210	0.00	7.5	86,413	2,522	4	8'1"	0	12,031	0	1.67
23	0.0	3,590	0.00	9.1	44,310	0	2	8'3"	0	6,106	0	0.00
24	0.0	3,100	0.00	6.4	45,420	1,079	4	8'6"	0	6,020	0	0.50
25	0.0	7,115	0.00	7.1	42,906	0	0	8'11"	0	0	0	0.13
26	0.0	9,265	0.00	10.8	44,914	2,211	2	9'2"	0	0	0	0.00
27	0.0	8,980	0.00	10.6	51,126	0	0	9'8"	0	18,048	0	0.23
28	0.0	NR	0.00	NR	NR	NR	NR	NR	0	0	0	0.32
29	0.0	2,270	0.00	7.9	91,783	2,821	0	9'8"	0	18,051	0	0.00
30	0.0	4,830	0.00	9.2	44,160	0	0	9'4"	0	6,015	0	0.00
31	0.0	8,320	0.00	10.1	45,783	2,646	12	9'7"	18,043	12,039	3,111	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