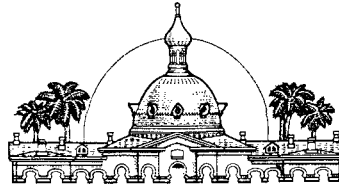


LR 100494
leachate
study



Hillsborough County
Florida

Office of the County Administrator
Patricia G. Bean

BOARD OF COUNTY COMMISSIONERS

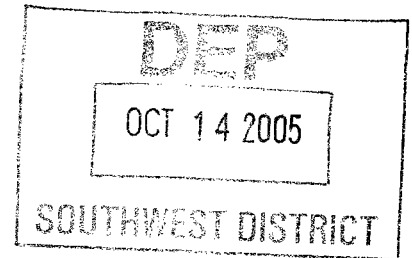
Brian Blair
Kathy Castor
Ken Hagan
Jim Norman
Thomas Scott
Mark Sharpe
Ronda Storms

Deputy County Administrator
Wally Hill

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

August 19, 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 –July 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 July 2005. In addition, the SWMD is providing the July 2005 field data forms for the Landfill, the daily leachate and collection system evaluation reports and the Year-to-Date Leachate Balance Summary.

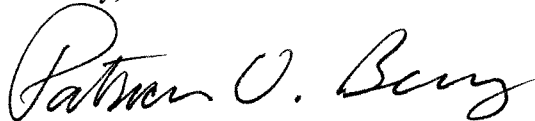
This information is being provided to the Florida Department of Environmental Protection (DEP) and the Hillsborough County Environmental Protection Commission as part of the quarterly Leachate Water Balance report on the Landfill leachate management efforts in accordance with Permit No. 35435-006-SO,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

As initiated with the April 1996 report, the Landfill leachate information for July 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 in July except for July 2 through 7 due to pump malfunction. The average depth of leachate in the PS-B sump for the recorded days in July 2005 was 21.2 inches.

Ms. Susan J. Pelz
August 19, 2005
Page Two

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

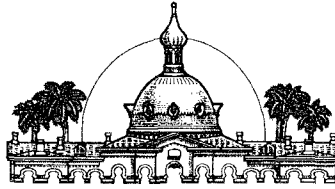
Sincerely,

A handwritten signature in black ink, reading "Patricia V. Berry". The signature is written in a cursive style with a large, looping initial "P".

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

Attachments

glfs/lea0705.dep



Hillsborough County
Florida

Office of the County Administrator
Patricia G. Bean

MEMORANDUM

BOARD OF COUNTY COMMISSIONERS

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DATE: August 17, 2005

TO: Patricia Berry, Solid Waste Management Department

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

SUBJECT: Leachate Water Balance Report Forms for July 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 July 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 of July.

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 7.34 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 3.0 feet.

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August 17, 2005

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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 1.9 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 except for July 2 through 7 due to pump malfunction. The average depth of leachate in the PS-B sump for the recorded days was 21.2 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 8,904 gallons. A total of 276,035 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 1,393,566 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 50 gallons of leachate was removed from the leak detection system of Section 7.

MEMORANDUM

August 17, 2005

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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 29,238 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 1,422,804 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 325,100 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 593,000 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 920,060 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 76,183 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

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August 17, 2005

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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 107,900 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 75,600 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 555,210 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 90,431 gallons of leachate was hauled off site.

MEMORANDUM

August 17, 2005

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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 505,200 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 1,422,804 gallons. Total outflow quantity from the LTRF (hailed and evaporated) was 1,589,243 gallons. The change in storage for the month of July decreased by 166,439 gallons.

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

TABLE 1. LEACHATE WATER BALANCE REPORT FORM
JULY 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	3.1	2.4	21.8	10,090	40,024	3	0	40,024	355,000	17,500	36,097	0	113,000	115,000	0	0	0	30,122	0
2	0.00	3.0	2.4	33.1	13,920	39,610	0	0	39,610	365,000	18,300	0	0	108,000	115,000	0	0	0	0	0
3	0.61	3.0	2.4	33.1	19,560	22,366	0	1,346	23,712	352,000	19,100	0	0	108,000	115,000	0	0	0	0	0
4	0.00	2.9	2.4	33.1	19,560	22,366	0	1,346	23,712	339,000	18,600	36,007	0	108,000	115,000	0	0	0	36,181	0
5	0.00	2.9	2.4	33.1	19,560	22,366	0	0	22,366	326,000	18,100	48,133	12,017	103,000	115,000	0	46,381	0	24,128	46,700
6	0.00	3.0	1.9	33.4	29,630	34,383	2	1,929	36,312	307,000	17,800	36,095	12,042	108,000	72,000	0	52,561	0	0	51,700
7	0.00	3.0	1.5	33.2	2,100	60,436	0	0	60,436	302,000	16,200	42,066	0	108,000	44,000	0	49,363	0	0	39,500
8	0.38	2.3	1.5	17.6	9,490	67,287	0	3,398	70,685	288,000	17,000	54,087	0	74,000	44,000	0	55,265	0	0	44,200
9	1.72	2.1	1.2	13.6	10,790	58,653	0	0	58,653	309,000	20,000	0	0	65,000	28,000	0	0	0	0	0
10	0.16	2.5	1.4	15.2	1,290	49,099	0	1,278	50,377	329,000	18,600	0	0	83,000	33,000	0	0	0	0	0
11	0.32	2.9	1.5	16.8	1,290	49,099	0	1,278	50,377	348,000	19,200	47,800	0	103,000	44,000	0	0	0	0	0
12	0.00	3.2	1.5	16.5	9,960	44,567	0	0	44,567	331,000	19,500	54,692	0	118,000	44,000	0	0	0	0	0
13	0.84	3.5	1.5	21.0	11,325	44,896	0	0	44,896	302,000	20,600	42,041	4,012	140,000	44,000	0	58,951	0	0	50,400
14	0.36	2.9	1.6	18.7	10,135	47,925	0	2,829	50,754	295,000	18,600	36,018	0	103,000	51,000	0	0	0	0	0
15	0.00	3.2	1.6	19.5	8,900	46,961	19	0	46,961	295,000	19,100	36,012	0	118,000	51,000	0	61,337	0	0	49,100
16	0.20	2.3	1.6	18.7	9,130	46,338	0	0	46,338	324,000	19,300	0	0	74,000	51,000	0	0	0	0	0
17	0.48	2.7	1.7	17.4	1,900	42,767	1	1,294	44,061	338,000	18,400	0	0	93,000	51,000	0	0	0	0	0
18	0.10	3.1	1.7	16.1	1,900	42,767	1	1,294	44,061	353,000	18,300	48,067	0	113,000	57,000	0	0	0	0	0
19	0.33	3.4	1.7	16.6	8,540	45,573	0	0	45,573	355,000	17,400	42,613	0	129,000	57,000	0	0	0	0	0
20	0.21	3.6	1.8	16.6	6,850	46,063	8	2,638	48,701	322,000	8,300	42,069	11,982	145,000	64,000	0	0	0	0	9,600
21	0.00	3.6	1.9	18.2	4,950	46,178	4	0	46,178	317,000	22,400	42,040	7,012	145,000	72,000	0	0	0	0	5,600
22	0.32	3.6	2.0	18.4	7,990	48,151	0	2,768	50,919	307,000	13,500	42,043	0	145,000	80,000	0	52,951	0	0	42,400
23	0.00	2.8	2.1	22.1	4,090	48,043	2	0	48,043	324,000	20,100	0	0	98,000	88,000	0	0	0	0	0
24	0.47	3.2	2.1	18.5	4,925	47,826	2	1,166	48,992	345,000	21,600	0	0	118,000	88,000	0	0	0	0	0
25	0.00	3.6	2.1	14.8	4,925	47,826	2	1,166	48,992	367,000	21,700	42,059	0	145,000	88,000	0	0	0	0	0
26	0.00	3.6	2.2	20.2	9,300	48,072	0	0	48,072	355,000	21,300	47,959	8,095	145,000	97,000	0	42,464	0	0	40,400
27	0.00	3.2	2.3	21.2	11,235	49,573	0	2,586	52,159	343,000	22,100	48,064	6,610	118,000	106,000	0	42,427	0	0	39,200
28	0.63	2.7	2.3	16.7	10,565	47,872	5	0	47,872	322,000	22,600	54,052	5,957	93,000	106,000	0	58,175	0	0	51,300
29	0.00	2.0	2.3	21.7	4,565	45,821	0	1,653	47,474	283,000	23,200	42,046	8,456	61,000	106,000	0	0	0	0	6,800
30	0.01	2.4	2.3	20.7	5,705	45,718	0	0	45,718	281,000	21,800	0	0	79,000	106,000	0	35,335	0	0	28,300
31	0.20	2.5	2.3	20.2	1,865	44,940	3	1,271	46,211	299,000	22,800	0	0	83,000	97,000	0	0	0	0	0
Total	7.34				276,035	1,393,566	50	29,238	1,422,804		593,000	920,060	76,183				555,210	0	90,431	505,200
Daily Average		3.0	1.9	21.2	8,904	44,954	2	943	45,897	325,100				107,900	75,600					
Mo. Average													2,500				17,900	0	2,900	16,300

projects\balance\2005\Jul-05\bal.xls (Revised by ler 8/17/05)

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
JULY 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
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.)	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	12.8	92,020	1,520,397	4,332,700	2,155,112	12.33	18,032	18,065	0	0.00	3.1	2.4	0.0	17,512	0	30,122	0	0
2	24.1	92,020	1,520,397	4,346,620	2,194,722	12.67	0	0	0	0.00	3.0	2.4	0.0	18,346	0	0	0	0
3	24.1	92,020	1,521,743	4,366,180	2,217,088	12.22	0	0	0	0.61	3.0	2.4	0.0	19,074	0	0	0	0
4	24.1	92,020	1,523,088	4,385,740	2,239,455	11.78	36,007	0	0	0.00	2.9	2.4	0.0	18,590	0	36,181	0	0
5	24.1	92,020	1,523,088	4,405,300	2,261,821	11.33	36,023	12,110	12,017	0.00	2.9	2.4	0.0	18,082	46,381	24,128	0	0
6	24.4	92,022	1,525,017	4,434,930	2,296,204	10.67	18,037	18,058	12,042	0.00	3.0	1.9	0.0	17,814	52,561	0	0	0
7	24.2	92,022	1,525,017	4,437,030	2,356,640	10.50	30,034	12,032	0	0.00	3.0	1.5	0.0	16,180	49,363	0	0	0
8	8.6	92,022	1,528,415	4,446,520	2,423,927	10.00	36,031	18,056	0	0.38	2.3	1.5	0.0	17,044	55,265	0	0	0
9	4.6	92,022	1,528,415	4,457,310	2,482,580	10.75	0	0	0	1.72	2.1	1.2	0.0	19,950	0	0	0	0
10	6.2	92,022	1,529,693	4,458,600	2,531,679	11.42	0	0	0	0.16	2.5	1.4	0.0	18,644	0	0	0	0
11	7.8	92,022	1,530,970	4,459,890	2,580,778	12.08	36,034	11,766	0	0.32	2.9	1.5	0.0	19,218	0	0	0	0
12	7.5	92,022	1,530,970	4,469,850	2,625,345	11.50	36,027	18,665	0	0.00	3.2	1.5	0.0	19,496	0	0	0	0
13	12.0	92,022	1,530,970	4,481,175	2,670,241	10.50	36,021	6,020	4,012	0.84	3.5	1.5	0.0	20,622	58,951	0	0	0
14	9.7	92,022	1,533,799	4,491,310	2,718,166	10.25	36,018	0	0	0.36	2.9	1.6	0.0	18,640	0	0	0	0
15	10.5	92,041	1,533,799	4,500,210	2,765,127	10.25	36,012	0	0	0.00	3.2	1.6	0.0	19,138	61,337	0	0	0
16	9.7	92,041	1,533,799	4,509,340	2,811,465	11.25	0	0	0	0.20	2.3	1.6	0.0	19,264	0	0	0	0
17	8.4	92,042	1,535,093	4,511,240	2,854,232	11.75	0	0	0	0.48	2.7	1.7	0.0	18,438	0	0	0	0
18	7.1	92,042	1,536,387	4,513,140	2,896,998	12.25	36,024	12,043	0	0.10	3.1	1.7	0.0	18,324	0	0	0	0
19	7.6	92,042	1,536,387	4,521,680	2,942,571	12.33	30,571	12,042	0	0.33	3.4	1.7	0.0	17,408	0	0	0	0
20	7.6	92,050	1,539,025	4,528,530	2,988,634	11.17	36,049	6,020	11,982	0.21	3.6	1.8	0.0	8,332	0	0	0	0
21	9.2	92,054	1,539,025	4,533,480	3,034,812	11.00	30,001	12,039	7,012	0.00	3.6	1.9	0.0	22,390	0	0	0	0
22	9.4	92,054	1,541,793	4,541,470	3,082,963	10.67	30,004	12,039	0	0.32	3.6	2.0	0.0	13,461	52,951	0	0	0
23	13.1	92,056	1,541,793	4,545,560	3,131,006	11.25	0	0	0	0.00	2.8	2.1	0.0	20,087	0	0	0	0
24	9.5	92,058	1,542,959	4,550,485	3,178,832	12.00	0	0	0	0.47	3.2	2.1	0.0	21,646	0	0	0	0
25	5.8	92,059	1,544,125	4,555,410	3,226,658	12.75	30,004	12,055	0	0.00	3.6	2.1	0.0	21,654	0	0	0	0
26	11.2	92,059	1,544,125	4,564,710	3,274,730	12.33	30,003	17,956	8,095	0.00	3.6	2.2	0.0	21,328	42,464	0	0	0
27	12.2	92,059	1,546,711	4,575,945	3,324,303	11.92	36,015	12,049	6,610	0.00	3.2	2.3	0.0	22,060	42,427	0	0	0
28	7.7	92,064	1,546,711	4,586,510	3,372,175	11.17	36,008	18,044	5,957	0.63	2.7	2.3	0.0	22,578	58,175	0	0	0
29	12.7	92,064	1,548,364	4,591,075	3,417,996	9.83	36,029	6,017	8,456	0.00	2.0	2.3	0.0	23,244	0	0	0	0
30	11.7	92,064	1,548,364	4,596,780	3,463,714	9.75	0	0	0	0.01	2.4	2.3	0.0	21,794	35,335	0	0	0
31	11.2	92,067	1,549,635	4,598,645	3,508,654	10.38	0	0	0	0.20	2.5	2.3	0.0	22,780	0	0	0	0

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Notes:

- NR = No Records, NA = Not Available.
- Values in bold are estimated; values in italic are substitute for missing data and are based on averaged values
- Column IV includes quantities from leak detection system.
- Column XI, trace is less than 0.01 inches.
- Columns III, IV, V, VI, VIII, IX, X, XIV, XV, XVI, XVII and XVIII are quantities from flow meters.
- 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**

Month	Rainfall (in.)	Leachate Arriving at LTRF			Leachate Leaving LTRF			Effluent Disposal			Inflow / Outflow For LTRF		
		Leachate Hauled to LTRF from HHLF/TRLF (gal.)	Leachate from Section 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													
September													
October													
November													
December													
YTD Total	41.14	0	180,089	8,465,919	2,838,416	530,027	6,294,000	120,408	0	5,754,129	8,646,008	9,662,443	-1,016,435

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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.

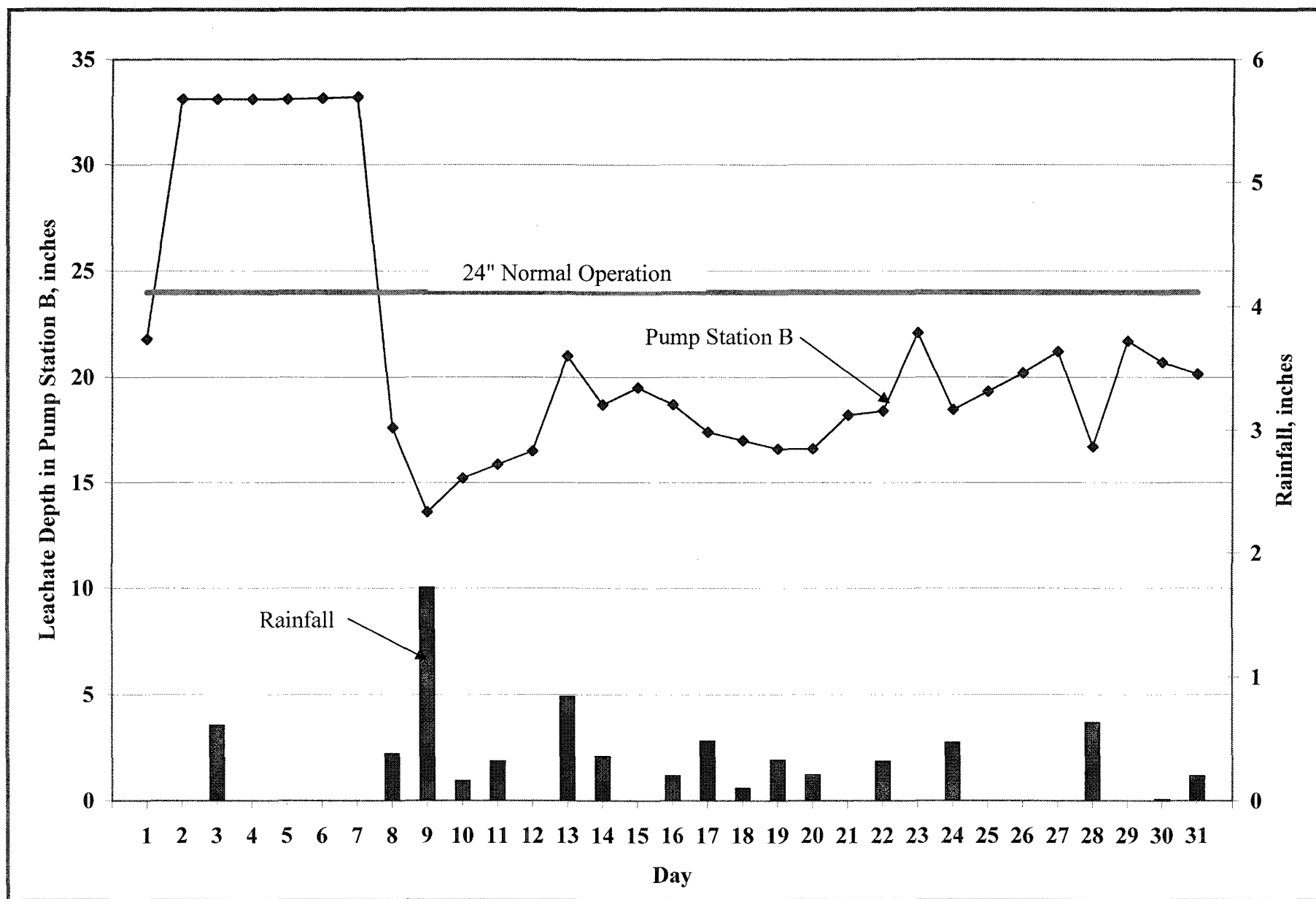


Figure 1. Leachate Levels in Pump Station B and Rainfall for July 2005.

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

(Month/Year) July, 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	10,900	0.00	12.8	40,024	0	3	12'4"	18,032	18,065	0	0.00
2	0.0	13,920	0.00	*24.1	39,610	0	0	12'8"	0	0	0	0.00
3	0.0	NR	0.00	NR	NR	NR	NR	NR	0	0	0	0.61
4	0.0	NR	0.00	NR	NR	NR	NR	NR	36,007	0	0	0.00
5	0.0	58,680	0.00	**24.1	67,099	2,691	0	11'4'	36,023	12,110	12,017	0.00
6	0.0	29,630	0.00	*24.4	34,383	1,929	2	10'8"	18,037	18,058	12,042	0.00
7	0.0	2,100	0.00	*24.2	60,436	0	0	10'6'	30,034	12,032	0	0.00
8	0.0	9,490	0.00	8.6	67,287	3,398	0	10'0"	36,031	18,056	0	0.38
9	0.0	10,790	0.00	4.6	58,653	0	0	10'9"	0	0	0	1.72
10	0.0	NR	NR	NR	NR	NR	NR	NR	0	0	0	0.16
11	0.0	2,580	0.00	7.8	91,198	2,555	0	12'1"	36,034	11,766	0	0.32
12	0.0	9,960	0.00	7.5	44,567	0	0	11'6"	36,027	18,665	0	0.00
13	0.0	11,325	0.00	12.0	44,896	0	0	10'6"	36,021	6,020	4,012	0.84
14	0.0	10,135	0.00	9.7	47,925	2,829	0	10'3"	36,018	0	0	0.36
15	0.0	8,900	0.00	10.5	46,961	0	19	10'3"	36,012	0	0	0.00
16	0.0	9,130	0.00	9.7	46,338	0	0	11'3"	0	0	0	0.20

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: *Pump station B bubbler system not working properly.

** Pump station B pump not working properly, 7/05 thru 7/07 2005.

Prepared by:

Raymond C. Graves

Revised Jan. 16, 2004

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LEACHATE DEPTH/SUMMARY DATA FORM
SOUTHEAST COUNTY LANDFILL

(Month/Year) July, 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	NR	0.00	NR	NR	NR	NR	NR	0	0	0	0.48
18	0.0	3,800	0.00	7.1	85,533	2,588	1	12'3"	36,024	12,043	0	0.10
19	0.0	8,540	0.00	7.6	45,573	0	0	12'4"	30,571	12,042	0	0.33
20	0.0	6,850	0.00	7.6	46,063	2,638	8	11'2"	36,049	6,020	11,982	0.21
21	0.0	4,950	0.00	9.2	46,178	0	4	11'0"	30,001	12,039	7,012	0.00
22	0.0	7,990	0.00	9.4	48,151	2,768	0	10'8"	30,004	12,039	0	0.32
23	0.0	4,090	0.00	13.1	48,043	0	2	11'3"	0	0	0	0.00
24	0.0	NR	0.00	NR	NR	NR	NR	NR	0	0	0	0.47
25	0.0	9,850	0.00	5.8	95,652	2,332	3	12'9"	30,004	12,055	0	0.00
26	0.0	9,300	0.00	11.2	48,072	0	0	12'4"	30,003	17,956	8,095	0.00
27	0.0	11,235	0.00	12.2	49,573	2,586	0	11'10"	36,015	12,049	6,610	0.00
28	0.0	10,565	0.00	7.7	47,872	0	5	11'2"	36,008	18,044	5,957	0.63
29	0.0	4,565	0.00	12.7	45,821	1,653	0	9'10"	36,029	6,017	8,456	0.00
30	0.0	5,705	0.00	11.7	45,718	0	0	9'9"	0	0	0	0.01
31	0.0	NR	0.00	NR	NR	NR	NR	NR	0	0	0	0.20

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. Gave

EFFLUENT DEPTH/QUANTITIES DATA FORM
SOUTHEAST COUNTY LANDFILL

(Month/Year) July, 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	3.10	2.40		17,512	0		30,122	0				
2	3.00	2.40		18,346	0		0	0				
3	NR	NR		19,074	0		0	0				
4	NR	NR		18,590	0		36,181	0				
5	2.90	2.40		18,082	46,381		24,128	0			N	
6	3.00	1.90		17,814	52,561		0	0			N	
7	3.00	1.50		16,180	49,363		0	0			N	
8	2.30	1.50		17,044	55,265		0	0			N	
9	2.10	1.20		19,950	0		0	0				
10	NR	NR		18,644	0		0	0				
11	2.90	1.50		19,218	0		0	0				
12	3.20	1.50		19,496	0		0	0				
13	3.50	1.50		20,622	58,951		0	0			N	
14	2.90	1.60		18,640	0		0	0				
15	3.20	1.60		19,138	61,337		0	0			N	
16	2.30	1.60		19,264	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: Raymond C. Gravel

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

(Month/Year)

July, 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	NR	NR	0	18,438	0		0	0				
18	3.10	1.70	0	18,324	0		0	0				
19	3.40	1.70	0	17,408	0		0	0				
20	3.60	1.80	0	8,332	0		0	0				
21	3.60	1.90	0	22,390	0		0	0				
22	3.60	2.00	0	13,461	52,951		0	0				N
23	2.80	2.10	0	20,087	0		0	0				
24	NR	NR	0	21,646	0		0	0				
25	3.60	2.10	0	21,654	0		0	0				
26	3.60	2.20	0	21,328	42,464		0	0				N
27	3.20	2.30	0	22,060	42,427		0	0				
28	2.70	2.30	0	22,578	58,175		0	0				N
29	2.00	2.30	0	23,244	0		0	0				
30	2.40	2.30	0	21,794	35,335		0	0				N
31	NR	NR	0	22,780	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:

