Project 100494



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January 10, 2007

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

RE: Southeast County Landfill – Leachate Data Quarterly Report

**County Landfill – Leachate Data Quarterly Report

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**The County Landfill – Leachate Data Quarterly Report

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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 January 15, 2007.

The data is being submitted as separate monthly reports for October, November and December 2006. 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 November 12, 20 and 24 due to pump malfunctions. These malfunctions were immediately corrected. On December 19 and 20 the level was above the 24-inch normal level due to the pump station being shut-down for jet cleaning of the access pipe and suction line.

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.

Patricia V. Berry

Landfill Services Section Manager Solid Waste Management Department

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Attachment

xc: Larry Ruiz, SWMD Walter Gray, SWMD Joe O'Neill, JEA Paul Schipfer, EPC

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January 10, 2007

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

RE: Southeast County Landfill -December 2006 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 December 2006. In addition, the SWMD is providing the December 2006 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 December 2006 includes an evaluation by SWMD staff of the monthly data. The report includes a figure depicting the leachate levels in Pump Station B (PS-B) and rainfall. PS-B was below the normal operation level of 24 inches except for December 19 and 20 due to the pump station being shutdown for jet cleaning of the access pipe and suction line. The average depth of leachate in the PS-B sump for the recorded days in December 2006 was 19.9 inches.

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

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

Sincerely,

Patricia V. Berry

Landfill Services Section Manager Solid Waste Management Department

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Attachments

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MEMORANDUM

DATE:

January 8, 2007

TO:

Patricia Berry, Section Manager, Solid Waste Management Department

FROM: Larry Ruiz, General Manager II, Solid Waste Management Department

Raymond Graves, Eng. Tech. II, Solid Waste Management Department

SUBJECT:

Leachate Water Balance Report Forms for December 2006

Southeast County Landfill, Hillsborough County, Florida

The Solid Waste Management Department (SWMD) staff has compiled and reviewed the leachate management operational data from the Southeast County Landfill Phases I-VI and Sections 7-8 of the Capacity Expansion for December 2006. Attached are the Leachate Water Balance Report Form (Table 1), the Leachate Field Data Entry Form (Table 2), and the 2006 Summary (Table 3). Also, attached find Figure 1 showing leachate levels in the Pump Station B sump and rainfall for the month.

TABLE 1

Day (Column I)

Column I presents the calendar days for the month.

Rainfall (Column II)

Column II presents the average rainfall, in inches, as measured in the field from rainfall stations at the site. This month there was 1.98 inch of rainfall at the Southeast County Landfill (SCLF).

MEMORANDUM January 8, 2007 Page 2 of 5

Depth in Pond A (Column III)

Column III presents the daily depth, in feet, of effluent stored in the existing effluent pond (Pond A). The daily depth in Pond A varies as a function of the spray irrigation frequency/duration and effluent hauled from the pond. This month the average depth of effluent stored in Pond A was 3.0 feet.

Depth in Pond B (Column IV)

Column IV presents the daily depth, in feet, of effluent or leachate that is stored in the effluent/leachate storage pond (Pond B). The depth in Pond B varies as a function of the evaporation frequency/duration and effluent or leachate hauled from the pond. This month the average depth of effluent stored in Pond B was 1.8 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 December 19 and 20 due to the pump station being shut-down for jet cleaning of the access pipe and suction line. The average depth of leachate in the PS-B sump was 19.9 inches.

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

Column VI presents the quantity of leachate from Phase IV pumped to PS-B by Temporary Pump Station-6 (TPS-6). The quantity of leachate removed by TPS-6 is measured in gallons by an in-line flow meter and is included in the quantity of leachate pumped to the Main Leachate Pump Station (MLPS) from Phases I-VI (Column VII). The average daily amount of leachate pumped from TPS-6 was 378 gallons. A total of 11,715 gallons of leachate was pumped this month.

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

Column VII presents the daily amount of leachate, in gallons, collected from PS-A and pumped through the MLPS to the 575,000-gallon storage tank at the Leachate Treatment and Reclamation Facility (LTRF) for treatment or disposal. The quantity in column VII also includes the daily amount of leachate, in gallons, pumped from TPS-6. The average daily amount of leachate pumped from PS-A was 36,039 gallons. A total of 1,117,207 gallons of leachate was pumped to the storage tank this month.

MEMORANDUM January 8, 2007 Page 3 of 5

Leachate Pumped from Sections 7-8 Leak Detection System (Column VIII)

Column VIII presents the quantity of leachate removed from the leak detection system (LDS) of Sections 7-8. The quantity is measured by a flow meter before being pumped for removal with Sections 7-8 leachate. The removal rate did not exceed 1,930 gallons per day. This month a total of 171 gallons of leachate was removed from the leak detection system of Sections 7-8.

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

Column IX presents the quantity of leachate collected at Sections 7-8 and pumped to the MLPS. Normally the quantity is measured by a flow meter and includes any leachate removed from the leak detection system of Sections 7-8 (Column VIII). This month an estimated 118,495 gallons of leachate was pumped to the MLPS from Sections 7-8.

Total Leachate Pumped to LTRF (Column X)

Column X presents the total quantity of leachate pumped to the LTRF through the MLPS from Phases I-VI and from Sections 7-8. This month a total of 1,235,702 gallons of leachate was pumped from Phases I-VI and Sections 7-8.

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

Column XI presents the daily amount of leachate, in gallons, stored in the 575,000-gallon leachate holding tank at the LTRF. The amount of leachate stored in the tank is calculated based on the circumference of the tank and the daily level reading. On November 27, 2006, the SWMD began to empty the tank for inspection. The average daily amount of leachate stored in the tank this month was estimated at 70,700 gallons.

Leachate Treated at LTRF (Column XII)

Column XII presents the daily amount of leachate, in gallons, treated at the LTRF. On November 27, 2006, the SWMD began shut-down procedures in preparation for tankage inspection. This month leachate was not treated at the LTRF.

Total Leachate Hauled (Column XIII)

Column XIII presents the daily amount of leachate, in gallons, hauled off site. This month a total of 1,373,329 gallons of leachate was hauled off site.

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Leachate Dust Control (Sprayed) (Column XIV)

Column XIV presents the daily amount of leachate, in gallons, measured from the flow meter at the bypass-loading arm at the leachate storage tank. The leachate is used for dust control in the active area of the landfill. This month leachate was not used for dust control.

Pond A Storage (Column XV)

Column XV presents the daily amount of effluent, in gallons, stored in Pond A. The daily amount stored in the pond is calculated by using the daily depth of effluent in the Pond A (Column IV). Under normal operating conditions, the daily amount of effluent stored in the pond varies depending upon the daily amount of leachate treated at the LTRF, the daily rainfall, daily effluent hauling operations, daily spray irrigation operations, and the daily amount of effluent used for dust control/evaporation. This month a daily average of 106,600 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 amount stored in the pond will vary depending upon the daily amount of effluent removed from the pond by the evaporation system, hauled from the pond, used for dust control or evaporated. This month a daily average of 77,800 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. Effluent was not sprayed at Pond B this month.

Effluent Irrigation (Column XVIII)

Column XVIII presents the daily amount of effluent, in gallons, used for spray irrigation on top of Phases I-VI. The daily amount of effluent irrigation on Phases I-VI is measured from the flow meter at the irrigation pump station. This month a total of 93,537 gallons of effluent was used as spray irrigation.

MEMORANDUM January 8, 2007 Page 5 of 5

Effluent Dust Control (Sprayed) (Column XIX)

Column XIX presents the daily amount of effluent, in gallons, sprayed for dust control in the active areas of the SCLF. The daily amount of effluent used for dust control, is measured from the flow meter at the bypass-loading arm. This month effluent was not sprayed as dust control.

Total Effluent Hauled (Column XX)

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

Total Evaporation (Column XXI)

Column XXI presents the daily amount of leachate and effluent, in gallons, that evaporates and therefore will not be returned to the SCLF and/or require treatment. The landfill evaporation rate includes 80 percent of the daily values from Columns XIV, XVIII, and XIX plus 5 percent of the daily values from Column XVII. Evaporation rates of 80 percent (based on the HELP model water balance analysis for the site) and 5 percent evaporation rate for spray in Pond B are assumed. The total evaporation estimated for this month was 74,800 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 1,235,702 gallons. Total outflow quantity from the LTRF (hauled and evaporated) was 1,373,329 gallons. The change in storage for the month of December decreased by 137,627 gallons.

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

TABLE 1. LEACHATE WATER BALANCE REPORT FORM DECEMBER 2006

SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA

I	П	Ш	IV	v	VI	VII	VIII	ΙX	x	ХI	хп	XIII	xıv	xv	xvı	XVII	XVIII	XIX	xx	XXI
		Depth	Depth	Estimated	Leachate	Leachate	Leachate	Leachate	Total	Leachate	Leachate				1	Effluent				
	1	in	in	Depth	Pumped	Pumped	Pumped from	Pumped	Leachate	in	Treated	Total	Leachate	Pond	Pond	Sprayed	Effluent	Effluent	Total	1 /
i I	1	Pond	Pond	at	to PS-B	to MLPS	Sections 7-8	to MLPS from	Pumped	575K	at	Leachate	Dust Control	A	В	Pond	Irrigation	Dust Control	Effluent	Total
	Rainfall	A	В	PS-B	from TPS-6	from Phases I-VI	Leak Det.	Sections 7-8	to LTRF	Tank	LTRF	Hauled	(Sprayed)	Storage	Storage	В		(Sprayed)	Hauled	Evaporation
Day	(in.)	(ft.)	(in.)	(in.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal)	(gal)	(gal.)	(gai.)	(gal.)	(gal.)
1	0.00	3.5	1.8	19.8	0	38,590	0-	2,500	41,090	158,000	0	58,414	0	140,000	64,000	0	44,535	0	(0 35,600
2	0.00	3.0	1.5	22,2	310	39,661	0	2,970	42,631	156,000	0	87,627	0	108,000	44,000	0	49,002	0	(0 39,200
3	0.00	3.0	0.3	18,3	,.160	37,364	.0	2,080	39,444	115,000	- 0	. 0	0	108,000	1,600	"" 0	0	0		0 0
4	0,00	3.0	0.3	20.2	90	35,785	0	1,370	37,155	122,000	0	51,989	0	108,000	1,600	0	0	0		0 0
5	0.00	3.0	1.7	19.5	520	33,532	0	2,070	35,602	70,000	0	64,072		108,000	57,000	0	.0	0	(0
6	0.00	3.0	1,7	19.7	610	33,763	0	2,610	36,373	60,000	0	57,092		108,000	57,000	0	0	0	(0
7	0.00	3.0	1.2	17.6	700	38,130	0	2,270	40,400	60,000	0	57,165		108,000	28,000	0	0	0		0 0
8	0.00	3.0	1.0	23.1	890	36,308	0	0	36,308	65,000	0	36,428	1	108,000	19,000	0	0	0	(0 0
9	0.00	3.0	1.1	19.2	0	29,688	0	60	29,748	65,000	0	0		108,000	23,000	0	L	0	(0 0
10	0,00	3.0	1.6	19.1	220	31,367	0	4,040	35,407	65,000	0	. 0	0	108,000	51,000	Ō		. 0	!	0 0
11	0.00	2.9	2.0	18.8	0	33,487	0	1,960	35,447	65,000	0	49,834		103,000	80,000	. 0		0	(0 0
12	0.00	2.9	1.7	16.9	150	34,863	0	0	34,863	65,000	0	69,128	0	103,000	57,000	0		0	(0 0
13	0.17	2.9	1.7	21.9	0	37,966	0	3,940	41,906	65,000	0	64,243	0	103,000	57,000	0		0	(0 0
14	0.13	2.9	1.5	20.2	0	39,367	68	0	39,367	65,000	0	61,832	0	103,000	44,000	0		0		0 0
15	0.00	2.9	1.5	21.0	0	44,028	0	90	44,118	53,000	0	51,127	. 0	103,000	44,000	0		0		0 0
16	0.00	2.9	1.2	10.8	0	45,448	0	120	45,568	53,000	0	36,522	0	103,000	28,000	0	V	0	(0 0
17	0,00	2.9	1.4	18,1	" 0	34,085	- 0	0	34,085	53,000	\$ 0		0	103,000	38,000	5.0		0	***********	0 = 0
18	0.00	2.9	1.6	20.1	0	33,931	0	1,640	35,571	53,000	0	43,842		103,000	51,000	0	<u> </u>	0		0 0
19	0.00	2.9	1.0		0	2,298	0		2,298	53,000	0	29,215		103,000	19,000	0		0		0 0
20	0.00	2.9	1.5	33.9	0	48,486	0		48,486	65,000	0	41,206		103,000	44,000	0				0 0
21	0.00	2.9	1.8	19.9	310	45,847	0		45,967	58,000	0	41,253	 	103,000	64,000	0			<u> </u>	0 0
22	0.00	2.9	1.9	20.0	0	41,087	0	-,	43,197	58,000	0	82,254		103,000	72,000	0	<u> </u>		<u> </u>	0 0
23	0.38	2.9	1.8	11.8	850	39,567	78		42,077	65,000	0	36,518		103,000	64,000	0				0
24	0.00	2.9	1.8		340	39,114	.25		42,044	65,000	0			103,000	64,000	- 0				0 0
25	1.30	2.9	2.3	20.8	0	41,321	0	5,000	44,321		0	0	0	103,000	106,000	0				0
26	0.00	3.0	3.3		0	43,880	. 0	,	91,310		0	0	0	108,000	202,000	0	<u> </u>		<u> </u>	0 0
27	0.00	3.0	3.6		2,120	34,237	0	13,160	47,397	65,000	0	72,131		108,000	234,000	0			<u> </u>	0 0
28	0.00	3.0	3.5		1,320	30,946	0	8,130	39,076		0	01,5 11		108,000	223,000	0	0	-		0 0
29	0.00	3.0	3.3		1,020	30,483	0	5,810	36,293	58,000	0	42,513	0	108,000	202,000	0	·	<u>-</u>	<u> </u>	0 0
30	0.00	3.0	3.3	22.7	1,150	31,893	0	5,575	37,468		С	118,554	0	108,000	202,000	0	C	_		<u> </u>
31	0.00	3.0	3,0	17,3	955	30,685	0	0	30,685	48,000	<u> </u>	58,429	0	108,000	172,000	0	<u> </u>	0		0 0
													<u> </u>							
Total	1.98				11,715	1,117,207	171				C	1,373,329) 0	1			93,537	0	1	0 74,800
Daily Average		3.0	1.8	19.9	378	36,039	6	3,822	39,861	70,700				106,600	77,800	0	1	<u></u>	<u> </u>	
Mo. Average										<u> </u>	<u> </u>	<u> </u>	0	<u> </u>	L		3,000	0 \2006\12-06bal		0 2,410

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.
- 3. Daily average is calculated by dividing the total by the actual days measured in the month.
- Dany average is calculated by dividing the total by the animal days measured in the mort.
 Monthly average calculated by dividing the total by the number of days of the month.
 Column II, Trace is less than 0.01 inches and is not included in total.
 Columns III and IV, field measured at staff gauges.

- Column V, PPS-B sensor reading plus 9 inches.
 Columns VIII & IX, Section 7-8 leak detection pumped into Section 7 leachate sump riser.
 Column XI, calculated from depth in 575,000 gal, leachate tank.

- Column XI, varcuated into the part in 173,000 gair, iterated table.
 Columns VI, VII, VIII, JX, XII, XIII, XVIII, and XIX, quantities from flow meters.
 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 DECEMBER 2006

SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA

I	II	Ш	IV	V	VI	VII	VIII	IX	x	XI	XII	хш	XIV	xv	XVI	XVI	хvш	XIX
									Leachate				Effluent	Leachate	Effluent			Effluent
	Reading	Sections 7-8	Sections 7-8	Flow Meter	Flow Meter	Depth in	Leachate	Hauled	Dust Control		Depth in	Depth in	Sprayed	Treated	Irrigation	Effluen	t Hauled	Dust Control
i	PS-B	Leak Det.	Flow Meter	TPS-6	Pump Sta. A	575K Tank	Contractor	County	(Sprayed)	Rainfall	Pond A	Pond B	(Pond B)	at LTRF		Contractor	County	(Sprayed)
Day	(in.)	(gal.)	(gal.)	(gal.)	(gal.)	(ft.)	(gal.)	(gal.)	(gal.)	(in.)	(ft.)	(ft.)	(gal)	(gal.)	(gal.)	(gal.)	(gal.)	(gal)
1	10.8	167,102	12,403,050	5,815,570	2,732,486	5.50	58,414	0	0	0.00	3.5	1.8	0.0	0	44,535	0	0	0
2	13.2	167,102	12,406,020	5,815,880	2,772,147	5.42	87,627	0	0	0.00	3.0	1.5	0.0	0	49,002	0	0	0
3	9,3	167,102	12,408,100	5,816,040	2,809,511	4,00	0	0	0	0.00	3.0	0.3	0.0	0	- 0	0	0	0
4	11.2	167,102	12,409,470	5,816,130	2,845,296	4.25	39,959	12,030	0	0.00	3.0	0.3	0.0	0	0	0	0	0
5	10.5	167,102	12,411,540	5,816,650	2,878,828	2.42	51,809	12,263	0	0.00	3.0	1.7	0.0	0	0	0	0	0
6	10.7	167,102	12,414,150	5,817,260	2,912,591	2.08	51,066	6,026	0	0.00	3.0	1.7	0.0	0	0	0	0	0
7	8.6	167,102	12,416,420	5,817,960	2,950,721	2.08	51,165	6,000	0	0.00	3.0	1.2	0.0	0	0	0	0	0
8	14.1	167,102	12,416,420	5,818,850	2,987,029	2.25	36,428	0	0	0.00	3.0	1.0	0.0	0 :	0	0	0	0
9	10.2	167,102	12,416,480	5,818,850	3,016,717	2.25	0	0	0	0.00	3.0	1.1	0.0	0	0	0	0	0
10	10.1	167,102	12,420,520	5,819,070	3,048,084	2.25	0	0	0	0,00	3.0	1.6	0.0	0	0	0	0	0
11	9.8	167,102	12,422,480	5,819,070	3,081,571	2.25	43,834	6,000	0	0.00	2.9	2.0	0.0	0	0	0	0	0
12	7.9	167,102	12,422,480	5,819,220	3,116,434	2.25	51,128	18,000	0	0.00	2.9	1.7	0.0	0	0	0	0	0
13	12.9	167,102	12,426,420	5,819,220	3,154,400	2.25	64,243	0	0	0.17	2.9	1.7	0.0	0	0	0	0	0
14	11.2	167,170	12,426,420	5,819,220	3,193,767	2.25	43,832	18,000	0	0.13	2.9	1.5	0.0	0	0	0	0	0
15	12.0	167,170	12,426,510	5,819,220	3,237,795	1.83	51,127	0	0	0.00	2.9	1.5	0.0	0	0	0	0	0
16	1.8	167,170	12,426,630	5,819,220	3,283,243	1.83	36,522	0	0	0.00	2.9	1.2	0.0	0	0	0	0	0
17	9.1	167,170	12,426,630	5,819,220	3,317,328	1,83	- 0	0	- 0	0.00	2.9	1.4	0,0	- :0	0	0	0	0
18	11.1	167,170	12,428,270	5,819,220	3,351,259	1.83	43,842	0	0	0.00	2.9	1.6	0.0	0	0	0	0	0
19	18.0	167,170	12,428,270	5,819,220	3,353,557	1.83	29,215	0	0	0.00	2.9	1.0	0.0	0	0	0	0	0
20	24.9	167,170	12,428,270	5,819,220	3,402,043	2,25	29,206	12,000	0	0.00	2.9	1.5	0.0	.0	0	0	0	0
21	10.9	167,170	12,428,390	5,819,530	3,447,890	2,00	29,253	12,000	0	0.00	2.9	1.8	0.0	0	0	0	0	0
22	11.0	137	12,430,500	5,819,530	3,488,977	2.00	70,254	12,000	0	0.00	2.9	1.9	0,0	0	0	0	0	0
23	2.8	215	12,433,010	5,820,380	3,528,544	2.25	36,518	0	0	0.38	2.9	1.8	0.0	0	0	0	0	0
24	9.8	240	12,435,940	5,820,720	3,567,658	2.25	0.	0	0	0.00	2.9	1.8	0.0	0	0	-0	0	0 ÷
25	11.8	240	12,438,940	5,820,720	3,608,979	2.25	0	0	0	1.30	2.9	2.3	0.0	0-	0	0	-0	0
26	6.5	240	12,486,370	5,820,720	3,652,859	2.25	0	0	0	0.00	3.0	3.3	0.0	0	0	0	0	0
27	10.4	240	12,499,530	5,822,840	3,687,096	2.25	66,131	6,000	0	0.00	3.0	3.6	0.0	0	0	0	0	0
28	12.1	240	12,507,660	5,824,160	3,718,042	2.42	43,941	18,000	0	0.00	3.0	3.5	0.0	0	0	0	0	0
29	13.2	240	12,513,470	5,825,180	3,748,525	2.00	36,513	6,000	0	0.00	3,0	3.3	0.0	0	0	0	0	0
30	13.7	240	12,519,045	5,826,330	3,780,418	1.67	118,554	0	0	0.00	3.0	3.3	0.0	0	0	0	0	0
31	8.3	240	12,519,045	5,827,285	3,811,103	1.67	58,429	0	0	0.00	3.0	3.0	0.0	0	0	0_	0	0
Totals						L												
														DEC	iects\halance\	2006\12-06ba	l vlc (Davicad	by ler 1/08/07)

projects\balance\2006\12-06bal.xls (Revised by ler 1/08/07)

Notes:

- 1. NR = No Records, NA = Not Available.
- 2. Values in bold are estimated; values in italic are substitute for missing data and are based on averaged values
- 3 Column IV includes quantities from leak detection system.

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

- 4. Column XI, trace is less than 0.01 inches.
- 6. Columns XII and XIII measured from staff gages in each pond.

TABLE 3. 2006 MONTHLY LEACHATE BALANCE SUMMARY SOUTHEAST COUNTY LANDFILL HILLSBOROUGH COUNTY, FLORIDA

		Le	achate Arriving at L	TRF	Lea	chate Leaving L1	RF		Effluent Disposal		Inflo	w / Outflow For 1	LTRF
		Leachate Hauled	Leachate	Leachate	Total Leachate	Leachate	Leachate	Total	Effluent	Effluent	Total Inflow	Total Outflow	Change
	Rainfall	to LTRF from	from Section 7-8	from Phases I-VI	Hauled	Dust Control	Treated at	Effluent	Dust Control	Irrigation	to	from	in
		HHLF/TRLF	Pumped to LTRF	Pumped to LTRF	from LTRF	(Sprayed)	LTRF	Hauled	(Sprayed)		LTRF	LTRF	Storage ³
Month	(in.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)
January	0.59	0	57,924	1,174,148	180,605	0	1,330,200	54,484	0	1,069,058	1,232,072	1,510,805	-278,733
February	3.73	0	100,705	1,036,262	246,866	87,519	901,500	18,107	0	790,611	1,136,967	1,235,885	-98,918
March	0.10	0	58,666	1,146,298	235,508	160,066	1,034,200	0	0	985,357	1,204,964	1,429,774	-224,810
April	0.17	0	26,367	1,073,620	162,705	20,042	1,119,100	0	0	857,079	1,099,987	1,301,847	-201,860
May	1.22	0	38,814	1,057,227	30,067	0	1,186,800	0	0	1,132,512	1,096,041	1,216,867	-120,826
June	8.33	0	105,196	1,035,231	139,447	0	1,017,100	84,617	0	970,248	1,140,427	1,156,547	-16,120
July	15.67	0	50,052	1,238,861	460,155	0	894,600	686,403	0	269,090	1,288,913	1,354,755	-65,842
August	7.89	0	66,496	1,342,399	706,832	3,064	831,600	285,856	0	596,768	1,408,895	1,541,496	-132,601
September	6.46	0	81,290	1,288,709	731,492	0	913,600	637,975	0	329,191	1,369,999	1,645,092	-275,093
October	1.07	0	39,395	1,284,246	207,451	12,000	1,160,700	0	0	1,100,088	1,323,641	1,380,151	-56,510
November	1.00	0	135,600	1,105,957	418,020	0	991,500	0	0	920,257	1,241,557	1,409,520	-167,963
December	1.98	0	118,495	1,117,207	1,373,329	0	0	0	0	93,537	1,235,702	1,373,329	-137,627
												* .	
YTD Total	48.21	0	879,000	13,900,165	4,892,477	282,691	11,380,900	1,767,442	0	9,113,796	14,779,165	16,556,068	-1,776,903

projects\balance\2006\2006-summary.xls (Revised by ler 1/8/07)

Note:

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

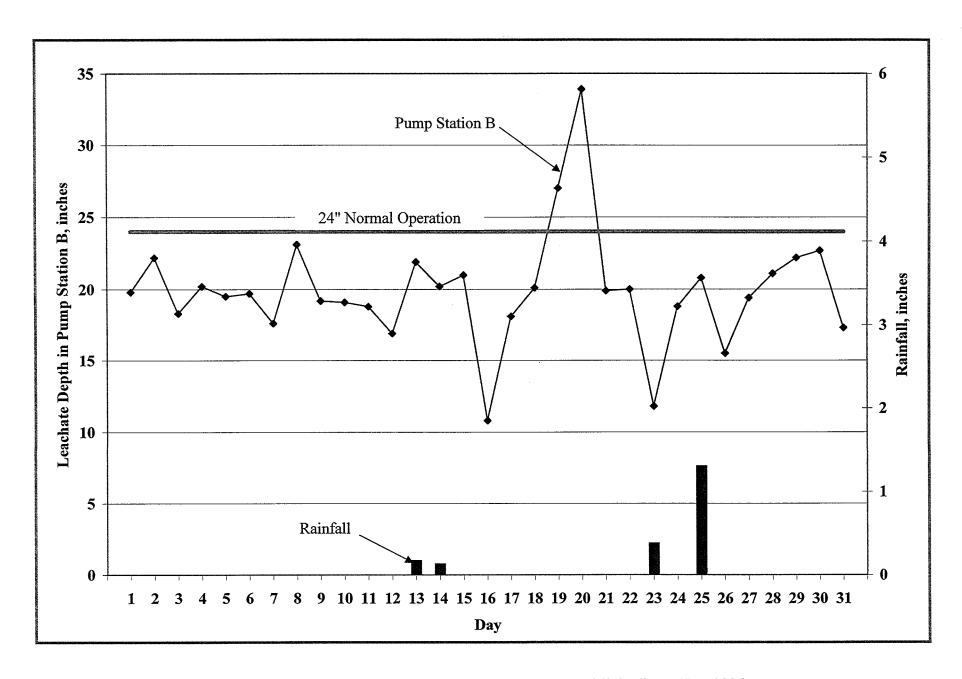


Figure 1. Leachate Levels in Pump Station B and Rainfall for December 2006.

LEACHATE DEPTH/SUMMARY DATA FORM SOUTHEAST COUNTY LANDFILL

(Month/Year)

December,2006

	TP	S-6				Sect	ion 7		Leachate	Hauled	Leachate	
	Depth	Flowmeter	Depth ¹ in Pond B	Pump ² Station B	PS-A Flow Meter	Flowmeter	Leak Detection	Depth in 575k Tank	Contractor	County	Dust Control/ Evap.	Rainfall
Date	(inches)	(gallons)	(feet)	(inches)	(gallons)	(gallons)	(gallons)	(feet)	(gallons)	(gallons)	(gallons)	(inches)
1	0.0	0	0.00	10.8	38,590	2,500	0	5'6"	58,414	0	, <u>, , , , , , , , , , , , , , , , , , </u>	0.00
2	0.0	310	0.00	10.5	39,661	2,970	0	5'5"	87,627	0	0	0.00
3	0.0	160	0.00	9.3	37,364	2,080	0	4'0"	0	0		0.00
4	0.0	90	0.30	11.2	35,785	1,370	0	4'3"	39,959	12,030	0	0.00
· 5	0.0	520	1.70	10.5	33,532	2,070	0	2'5"	51,809	12,263		0.00
6	0.0	610	1.70	10.7	33,763	2,610	0	2'1"	51,066	6,026		0.00
7	0.0	700	1.20	8.6	38,130	2,270	0	2'1"	51,165	6,000		0.00
8	0.0	890	1.00	14.1	36,308	0	0	2'3"		0	0	0.00
9	0.0	0	1.10	10.2	29,688	0	0	2'3"	0	. 0	0	0.00
10	0.0	220	1.60	10.1	31,367	4,040	0	2'3"	0	0	0	0.00
11	0.0	0	2.00	9.8	33,487	1,960	0	2'3"	43,834	6,000	0	0.00
12	0.0	150	1.70	7.9	34,863	0	0	2'3"	51,128	18,000		0.00
13	0.0	0	1.70	12.9	37,966	3,940	0	2'3"	64,243	0	0	0.17
14	0.0	0	1.50	11.2	39,367	0	68	2'3"	43,832	18,000	0	0.13
15	0.0	. 0	1.50	12.0	44,028	90	0	1'10"	51,127	0		0.00
16	0.0	0	1.20	1.8	45,448	120	0	1'10"	36,522	0	0	0.00

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

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

Comments:		·	,
Prepared by: Paymording	Javes		

LEACHATE DEPTH/SUMMARY DATA FORM SOUTHEAST COUNTY LANDFILL

(Month/Year)

December,2006

	TP	S-6				Sect	on 7		Leachate	Hauled	Leachate	
	Depth	Flowmeter	Depth ¹ in Pond B	Pump ² Station B	PS-A Flow Meter	Flowmeter	Leak Detection	Depth in 575k Tank	Contractor	County	Dust Control/ Evap.	Rainfall
Date	(inches)	(gallons)	(feet)	(inches)	(gallons)	(gallons)	(gallons)	(feet)	(gallons)	(gallons)	(gallons)	(inches)
17	0.0	0	1.40	9.1	34,085	0	0	1'10"	0	0	0	0.00
18	0.0	0	1.60	11.1	33,931	1,830	0	1'10"	43,842	0	0	0.00
19	0.0	0	1.00	0.6	2,298	0	0	1'10"	29,215	0	0	0.00
20	0.0	0	1.50	24.9	48,486	0	0	2'3"	29,206	12,000	0	0.00
21	0.0	310	1.80	10.9	45,847	120	0	2'0"	29,253	12,000		0.00
22	0.0	0	1.90	11.0	41,087	2,110	0	2'0"	70,254	12,000		0.00
23	0.0	850	1.80	2.8	39,567	2,510	78	2'3"	36,518	0	0	0.38
24	0.0	340	1.80	9.8	39,114	2,930	25	2'3"	0	0	0	0.00
25	0.0	0	2.30	11.8	41,321	3,000	0	2'3"	0	0	0	1.30
26	0.0	0	3.30	6.5	43,880	47,430	0	2'3"	0	0	0	0.00
27	0.0	2,120	3.60	10.4	34,237	13,160	0	2'3"	66,131	6,000	0	0.00
28	0.0	1,320	3.50	12.1	30,946	- 8,130	0	2'5"	43,941	18,000		0.00
· 29	0.0	1,020	3.30	13.2	30,483	5,810	0	2'0"	36,513	6,000		0.00
30	0.0	150	3.30	13.7	31,893	5,575	0	1'8"	118,554	0	0	0.00
31	0.0	955	3.00	8.3	30,685	0	0	1'8"	58,429	0	0	0.00

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

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

Comments:			·
	. /		
Prepared by:	Karmond Frances		

EFFLUENT DEPTH/QUANTITIES DATA FORM SOUTHEAST COUNTY LANDFILL

(Month/Year)	December,2006

	Depth in	Depth in	Pond B					Effluent ⁴				
	Pond A ¹	Pond B ²	Leak	Leachate	Spray	Evaporated	Hau	led	Dust Control/	Effluent	Time at	Runoff to
			Detection ³	Treated	Irrigated	at Pond B	Contractor	County	Evap.	Stored	End of	Retention
Date	(feet)	(feet)	(gallons)	(gallons)	(gallons)	(gallons)	(gallons)	(gallons)	(gallons)	(gallons)	Rainfall	Area (Y/N)
11	3.50	1.80	0	0	44,535	0	0	. 0				N
2	3.00	1.50	. 0	0	49,002	. 0	0	0				N
3 ·	3.00	0.00	0	0	0	0	. 0	0				
4	3.00	0.00	0	0	0	0	0	0				
5	3.00	0.00	0	0	0	0	0	0				
6	3.00	0.00	0	0	0	0	0	0				
7	3.00	0.00	11	0	0	0	0	0				
8	3.00	0.00	0	0	0	0	0	0				
9	3.00	0.00	0	0	0	0	0	0				
10	3.00	0.00	0	0	0	0	0	0				
11	2.90	0.00	0	0	0	0	. 0	0				
12	2.90	0.00	0	0	0	. 0	0	0				
13	2.90	0.00	0	0	0	0	0	0				
14	2.90	0.00	0	. 0	0	0	0	0				
15	2.90	0.00	0	0	0	0	0	0				,
16	2.90	0.00	0	0	.0	0	0	0				

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

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

Comments:		 		
			······································	
		-		
Prepared by:	Raemon Armon			

SCLF Form #3 - Effluent Quantities

Revised February 12, 2004 09200020.23\LeachateManagementPlan\EffluentQuantities_December,2006.xls

EFFLUENT DEPTH/QUANTITIES DATA FORM SOUTHEAST COUNTY LANDFILL

	•	
(Month/Year)		D1 - 2006
(wond)		December, 2006

	Depth in	Depth in	Pond B				Treated Eff	luent		· · · · · · · · · · · · · · · · · · ·		Effluent ⁴
	Pond A ¹	Pond B ²	Leak	Leachate	Spray	Evaporated	Hau	led	Dust Control/	Effluent	Time at	Runoff to
Date	(feet)	(feet)	Detection ³ (gallons)	Treated (gallons)	Irrigated (gallons)	at Pond B (gallons)	Contractor (gallons)	County (gallons)	Evap. (gallons)	Stored (gallons)	End of Rainfall	Retention Area (Y/N)
17	2.90	0.00	0	0	0		0	0	(Burrows)	(garions)	Rainian	Alea (1/N)
18	2.90	0.00	0	0	0		0	0				<u> </u>
19	2.90	0.00	0	0	0		0	0				
20	2.90	0.00	0	0	0		0	0	2			
21	2.90	0.00	0	0	0		0	. 0	:			
22	2.90	0.00	0	0	0		0	0				
23	2.90	0.00	0	0	0		0					
24	2.90	0.00	0	0			0	0				
25	2.90	0.00	0	0	0		0	0				
26	3.00	0.00	0	0			0	. 0				
27	3.00	0.00	0	0			0	0				
28	3.00	0.00	,0	0	0		0	0	:			
29	3.00			0			0		:		· · · · · · · · · · · · · · · · · · ·	
30	3.00			0			. 0	0				
31	3.00		0	0			0	0				

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

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

	(1) if yes, contact supervisor infinediately. Complete Evaluation Report Form.	1		
Comments:		1		
				
		 	-	
	1			
Prepared by	: Kaymond Cofrans	-	<u> </u>	
		:		



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December 29, 2006

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

RE: Southeast County Landfill -November 2006 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 November 2006. In addition, the SWMD is providing the November 2006 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 November 2006 includes an evaluation by SWMD staff of the monthly data. The report includes a figure depicting the leachate levels in Pump Station B (PS-B) and rainfall. PS-B was below the normal operation level of 24 inches except for November 12, 20 and 24 due to pump malfunctions that have been corrected. The average depth of leachate in the PS-B sump for the recorded days in November 2006 was 19.2 inches.

Ms. Susan J. Pelz December 29, 2006 Page Two

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

Sincerely,

Patricia V. Berry

Landfill Services Section Manager Solid Waste Management Department

Patran V. Berry

Attachments

glfs/lea1106.dep



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MEMORANDUM

DATE:

December 20, 2006

TO:

Patricia Berry, Section Manager, Solid Waste Management Department

FROM:

Larry Ruiz, General Manager II, Solid Waste Management Department Raymond Graves, Eng. Tech. II, Solid Waste Management Department

SUBJECT:

Leachate Water Balance Report Forms for November 2006

Southeast County Landfill, Hillsborough County, Florida

The Solid Waste Management Department (SWMD) staff has compiled and reviewed the leachate management operational data from the Southeast County Landfill Phases I-VI and Sections 7-8 of the Capacity Expansion for November 2006. Attached are the Leachate Water Balance Report Form (Table 1), the Leachate Field Data Entry Form (Table 2), and the 2006 Summary (Table 3). Also, attached find Figure 1 showing leachate levels in the Pump Station B sump and rainfall for the month.

TABLE 1

Day (Column I)

Column I presents the calendar days for the month.

Rainfall (Column II)

Column II presents the average rainfall, in inches, as measured in the field from rainfall stations at the site. This month there was 1.0 inch of rainfall at the Southeast County Landfill (SCLF).

MEMORANDUM December 20, 2006 Page 2 of 6

Depth in Pond A (Column III)

Column III presents the daily depth, in feet, of effluent stored in the existing effluent pond (Pond A). The daily depth in Pond A varies as a function of the spray irrigation frequency/duration and effluent hauled from the pond. This month the average depth of effluent stored in Pond A was 3.2 feet.

Depth in Pond B (Column IV)

Column IV presents the daily depth, in feet, of effluent or leachate that is stored in the effluent/leachate storage pond (Pond B). The depth in Pond B varies as a function of the evaporation frequency/duration and effluent or leachate hauled from the pond. This month the average depth of effluent stored in Pond B was 2.0 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 except for November 12, 20, and 24 due to pump malfunctions that have been corrected. The average depth of leachate in the PS-B sump was 19.2 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 Main Leachate Pump Station (MLPS) from Phases I-VI (Column VII). The average daily amount of leachate pumped from TPS-6 was 200 gallons. A total of 6,000 gallons of leachate was pumped this month.

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

Column VII presents the daily amount of leachate, in gallons, collected from PS-A and pumped through the MLPS to the 575,000-gallon storage tank at the Leachate Treatment and Reclamation Facility (LTRF) for treatment or disposal. The quantity in column VII also includes the daily amount of leachate, in gallons, pumped from TPS-6. The average daily amount of leachate pumped from PS-A was 36,865 gallons. A total of 1,105,957 gallons of leachate was pumped to the storage tank this month.

MEMORANDUM December 20, 2006 Page 3 of 6

Leachate Pumped from Sections 7-8 Leak Detection System (Column VIII)

Column VIII presents the quantity of leachate removed from the leak detection system (LDS) of Sections 7-8. The quantity is measured by a flow meter before being pumped for removal with Sections 7-8 leachate. The removal rate did not exceed 1,930 gallons per day. This month a total of 1,834 gallons of leachate was removed from the leak detection system of Sections 7-8.

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

Column IX presents the quantity of leachate collected at Sections 7-8 and pumped to the MLPS. Normally the quantity is measured by a flow meter and includes any leachate removed from the leak detection system of Sections 7-8 (Column VIII). Beginning on November 10, 2006, the plugs separating the Sections 7 and 8 LCRS were removed. This month an estimated 135,600 gallons of leachate was pumped to the MLPS from Sections 7-8.

Total Leachate Pumped to LTRF (Column X)

Column X presents the total quantity of leachate pumped to the LTRF through the MLPS from Phases I-VI and from Sections 7-8. This month a total of 1,241,557 gallons of leachate was pumped from Phases I-VI and Sections 7-8.

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

Column XI presents the daily amount of leachate, in gallons, stored in the 575,000-gallon leachate holding tank at the LTRF. The amount of leachate stored in the tank is calculated based on the circumference of the tank and the daily level reading. The average daily amount of leachate stored in the tank this month was estimated at 238,800 gallons.

Leachate Treated at LTRF (Column XII)

Column XII presents the daily amount of leachate, in gallons, treated at the LTRF. On November 27, 2006, the SWMD began shut-down procedures in preparation for tankage inspection. This month a total of 991,500 gallons of leachate was treated at the LTRF.

MEMORANDUM December 20, 2006 Page 4 of 6

Total Leachate Hauled (Column XIII)

Column XIII presents the daily amount of leachate, in gallons, hauled off site. This month a total of 418,020 gallons of leachate was hauled off site.

Leachate Dust Control (Sprayed) (Column XIV)

Column XIV presents the daily amount of leachate, in gallons, measured from the flow meter at the bypass-loading arm at the leachate storage tank. The leachate is used for dust control in the active area of the landfill. This month leachate was not used for dust control.

Pond A Storage (Column XV)

Column XV presents the daily amount of effluent, in gallons, stored in Pond A. The daily amount stored in the pond is calculated by using the daily depth of effluent in the Pond A (Column IV). Under normal operating conditions, the daily amount of effluent stored in the pond varies depending upon the daily amount of leachate treated at the LTRF, the daily rainfall, daily effluent hauling operations, daily spray irrigation operations, and the daily amount of effluent used for dust control/evaporation. This month a daily average of 119,600 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 amount stored in the pond will vary depending upon the daily amount of effluent removed from the pond by the evaporation system, hauled from the pond, used for dust control or evaporated. This month a daily average of 83,300 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. Effluent was not sprayed at Pond B this month.

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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 920,257 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 effluent was not sprayed as dust control.

Total Effluent Hauled (Column XX)

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

Total Evaporation (Column XXI)

Column XXI presents the daily amount of leachate and effluent, in gallons, that evaporates and therefore will not be returned to the SCLF and/or require treatment. The landfill evaporation rate includes 80 percent of the daily values from Columns XIV, XVIII, and XIX plus 5 percent of the daily values from Column XVII. Evaporation rates of 80 percent (based on the HELP model water balance analysis for the site) and 5 percent evaporation rate for spray in Pond B are assumed. The total evaporation estimated for this month was 736,200 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.

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Total inflow quantity to the LTRF was 1,241,557 gallons. Total outflow quantity from the LTRF (hauled and evaporated) was 1,409,520 gallons. The change in storage for the month of November decreased by 167,963 gallons.

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

TABLE 1. LEACHATE WATER BALANCE REPORT FORM **NOVEMBER 2006**

SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA

I		ш	īV	v	VI	VII	· vm	ıx	x	ХI	XII	xm	xīv	xv	xvi	XVII	XVIII	XIX	xx	XXI
		Depth	Depth	Estimated	Leachate	Leachate	Leachate	Leachate	Total	Leachate	Leachate					Effluent				
	ŀ	in	in	Depth	Pumped	Pumped	Pumped from	Pumped	Leachate	in	Treated	Total	Leachate	Pond	Pond	Sprayed	Effluent	Effluent	Total	
	ĺ	Pond	Pond	at	to PS-B	to MLPS	Section 7-8	to MLPS from	Pumped	575K	at	Leachate	Dust Control	A	В	Pond	Irrigation	Dust Control	Effluent	Total
A .	Rainfall	A	В	PS-B	from TPS-6	from Phases I-VI	Leak Detection	Section 7-8	to LTRF	Tank	LTRF	Hauled	(Sprayed)	Storage	Storage	В		(Sprayed)	Hauled	Evaporation
Day	(in.)	(fL)	(in.)	(in.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal)	(gal)	(gal.)	(gal.)	(gal.)	(gal.)
1	0.00	3.6	1.7	18.2	310	39,355	43	Ó	39,355	206,000	35,300	12,986	0	145,000	57,000	0	49,986	0	0	40,000
2	0.00	3.0	1.7	18.2	470	41,100	51	2,570	43,670	204,000	36,000	6,516	0	108,000	57,000	0	49,401	0	0	39,500
3	0.00	2.8	1.7		310	37,156	58	0	37,156	199,000	35,000	6,520	0	98,000	57,000	. 0	42,916	0	0	34,300
4	0.00	2.6	1.7		130	33,649	61	0	33,649	199,000	35,400	0	0	88,000	57,000	0	47,880	0	0	38,300
5	0.00	2.3	1,7	17.2	78	32,385	62	2,130	34,515	202,000	35,600	0	0	74,000	57,000	. 0	. 0	0	0	0
6	0.00	3.0	1.7	15.1	0	36,787	63	0	36,787	202,000	37,200	0	0	108,000	57,000	0	42,665	0	0	34,100
7	0.08	2.8	1.7	20.6	462	40,664	65	0	40,664	206,000	37,100	0	0	98,000	57,000	0	0	0	0	0
8	0.00	3.5	1.7		320	48,238	62	2,370	50,608	223,000	37,000	0	0	140,000	57,000	0	36,958	0	0	29,600
9	0.00	3.4	1.7	18.5	180	44,038	63	0	44,038	230,000	37,300	13,031	0	129,000	57,000	0	28,804	0	0	23,000
10	0.00	3.5	1.7	15.3	220	39,278	66	2,175	41,453	233,000	36,600	0	0	140,000	57,000	0	40,127	0	0	32,100
11	0.00	3.2	1.7		0	23,663	64	15,805	39,468	247,000	26,900	0	0	118,000	57,000	0	63,939	0	0	51,200
= 12	0.00	2.6	1.7	32.9	190	29,802	65	5,100	34,902	250,000	34,100	. 0	0	88,000	57,000	. 0	-0	0	0	0
13	0.00	3.3	1.7	14.7	0	46,023	70	2,480	48,503	261,000	38,000	13,025	0	123,000	57,000	0	29,918	0	0	23,900
14	0.00	3.4	1.7	14.3	40	44,131	63	3,060	47,191	259,000	30,100	19,539	0	129,000	57,000	0	39,817	0	0	31,900
15	0.33	3.5	1.7		280	42,996		3,010	46,006	266,000	41,100	13,026	0	140,000	57,000	0	30,578	0	0	.24,500
16	0.44	3.6	1.8	14.9	60	48,638	44	4,920	53,558	269,000	39,400	19,548	0	145,000	64,000	0	0	0	. 0	0
17	0.00	3.6	2.2		0	37,715	43	39,920	77,635	281,000	33,300	13,034	0	145,000	97,000	0	45,840	0	0	36,700
18	0.00	3.4	2,2		. 0	35,683	50		49,783	290,000	36,000	0	0	129,000	97,000	0	44,739	0	0	35,800
-19	0.00	3.2	2.2	20,1	0	35,336	45	7,340	42,676	293,000	41,800	0	0	118,000	97,000	0	0	0	: 0	.0
20	0.00	3.6	2.4	33.1	0	18,796	54	4,620	23,416	302,000	44,100	13,035	0	145,000	115,000	0	52,904	0	0	42,300
21	0.00	3,5	2.4		440	50,015	183	2,330	52,345	278,000	36,500	12,031	0	140,000	115,000	.0	43,474	0	0	34,800
22	0.00	3.0	2.4	20.9	250	35,867	190	1,970	37,837	266,000	32,400	6,014	0	108,000	115,000	0	44,608	0	0	35,700
23	0.00	2.8	2.4		0	21,590	244	3,680	25,270	266,000	36,900	0	0	98,000	115,000	0	0	0	0	0
24	0.00	3.5	2,4		0	14,309	55	1,700	16,009	238,000	36,500	0	0	140,000	115,000	0	47,022	0	0	37,600
25	0.00	3,3	2.4		655	56,550	0	-,	58,190	259,000	38,600	0	0	123,000	115,000	0	38,531	0	0	30,800
- 26	0.00	3,3	2,4		335	36,372		2,730	39,102	259,000	42,000	0	0	123,000	115,000	* * o	0	. 0	0	0
27	0.10	3.6	2.6		0	36,327	0	1,335	37,662	252,000	37,700	66,665	0	145,000	133,000	0	46,306	0	0	37,000
28	0.00	2.7	2.7		1,270	37,350	0	5,205	42,555	218,000	3,600	69,290	0	93,000	143,000	0	27,617	0	0	22,100
29	0.00	2.2	2.7		0	31,072	0	2,290	33,362	156,000	0	83,912	0	70,000	143,000	0	26,227	0	0	21,000
30	0.05	3.5	1.8	15.5	0	31,072	11	3,120	34,192	151,000	0	49,848	0	140,000	64,000	0	0	0	0	0
																				
Total	1.00				6,000	1,105,957	1,834	135,600	1,241,557		991,500	418,020	0				920,257	0	0	736,200
Daily Average		3.2	2.0	19.2	200	36,865	61	4,520	41,385	238,800				119,600	83,300	0				
Mo. Average													0				30,700	0	0	24,540
Notes:																projects\le	achate\balanc	e\2006\11-06.xls	(Revised by	ler 12/18/06)

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.
- Monthly average calculated by dividing the total by the number of days of the month.
 Column II, Trace is less than 0.01 inches and is not included in total.
- 6. Columns III and IV, field measured at staff gauges.

- Column V, PPS-B sensor reading plus 9 inches.
 Columns VIII & IX, Section 7-8 leak detection pumped into Section 7-8 leachate sump riser.
 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.

Form #5 - Leachate Balance Report

TABLE 2. FIELD DATA ENTRY FORM NOVEMBER 2006 SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA

I	ш	Ш	IV	v	VI	VII	VIII	IX	x	XI	XII	XIII	XIV	xv	XVI	XVI	XVIII	XIX
									Leachate				Effluent	Leachate	Effluent			Effluent
1	Reading	Section 7-8	Section 7-8	Flow Meter	Flow Meter	Depth in	Leachate	Hauled	Dust Control		Depth in	Depth in	Sprayed	Treated	Irrigation	Effluent	Hauled	Dust Control
	PS-B	Leak Det.	Flow Meter	TPS-6	Pump Sta. A	575K Tank	Contractor	County	(Sprayed)	Rainfall	Pond A	Pond B	(Pond B)	at LTRF	_	Contractor	County	(Sprayed)
Day	(in.)	(gal.)	(gal.)	(gal.)	(gal.)	(ft.)	(gal.)	(gal.)	(gal.)	(in.)	(ft.)	(ft.)	(gal)	(gal.)	(gal.)	(gal.)	(gal.)	(gal)
1	9.2	165,311	12,264,950	5,809,880	1,627,294	7.17	0	12,986	0	0.00	3.6	1.7	0.0	35,320	49,986	0	0	. 0
2	9.2	165,362	12,267,520	5,810,350	1,668,394	7.08	0	6,516	0	0.00	3.0	1.7	0.0	35,985	49,401	0	0	0
3	10.4	165,420	12,267,520	5,810,660	1,705,550	6.92	0	6,520	0	0.00	2.8	1.7	0.0	35,047	42,916	0	0	0
4	12.2	165,481	12,267,520	5,810,790	1,739,199	6.92	0	0	0	0.00	2.6	1.7	0.0	35,388	47,880	0	0	0
- 5	8.2	165,543	12,269,650	5,810,868	1,771,584	7.00	0	0	- 0	0.00	- 2.3	1.7	0.0	35,591	0	0	. 0	0
6	6.1	165,606	12,269,650	5,810,868	1,808,371	7.00	0	0	0	0.00	3.0	1.7	0.0	37,203	42,665	0	0	0
7	11.6	165,671	12,269,650	5,811,330	1,849,035	7.17	0	0	0	0.08	2.8	1.7	0.0	37,108	0	0	0	0
8	9.9	165,733	12,272,020	5,811,650	1,897,273	7.75	0	0	0	0.00	3.5	1.7	0.0	36,961	36,958	0	0	0
9	9.5	165,796	12,272,020	5,811,830	1,941,311	8.00	0	13,031	0	0.00	3.4	1.7	0.0	37,329	28,804	0	0	0
10	6.3	165,862	12,274,195	5,812,050	1,980,589	8.08	. 0	0	0 ·	0.00	3.5	1.7	0.0	36,558	40,127	0.	0	0
11	7.2	165,926	12,290,000	5,812,050	2,004,252	8.58	0	0	0	0.00	3.2	1.7	0.0	26,857	63,939	0	0	0
12	23.9	165,991	12,295,100	5,812,240	2,034,054	8.67	0	-,-0	0	0.00	2.6	1.7	0.0	34,122	0	0	0	0
13	5.7	166,061	12,297,580	5,812,240	2,080,077	9.08	0	13,025	0	0.00	3.3	1.7	0.0	38,028	29,918	0	0	0
14	5.3	166,124	12,300,640	5,812,280	2,124,208	9.00	0	19,539	0	0.00	3.4	1.7	0.0	30,129	39,817	0 .	0	0
15	6.2	166,180	12,303,650	5,812,560	2,167,204	9.25	0	13,026	0	0.33	3.5	1.7	0.0	41,135	30,578	0	0	0
16	5.9	166,224	12,308,570	5,812,620	2,215,842	9.33	0	19,548	0	0.44	3.6	1.8	0.0	39,435	0	0	0	0
17	12.7	166,267	12,348,490	5,812,620	2,253,557	9.75	0	13,034	0	0.00	3.6	2.2	0.0	33,285	45,840	0	0	0
18	11.2	166,317	12,362,590	5,812,620	2,289,240	10.08	0	0	0	0.00	3.4	2.2	0.0	35,996	44,739	0	0	0
19	11.1	166,362	12,369,930	5,812,620	2,324,576	10.17	0	0	0	0.00	3.2	- 2.2	-0.0	41,807	0	- 0	0	0
20	24.1	166,416	12,374,550	5,812,620	2,343,372	10.50	0	13,035	0	0.00	3.6	2.4	0.0	44,067	52,904	0	0	0
21	5.8	166,599	12,376,880	5,813,060	2,393,387	9.67	0	12,031	0	0.00	3.5	2.4	0.0	36,488	43,474	0	0	0
22	11.9	166,789	12,378,850	5,813,310	2,429,254	9.25	0	6,014	0	0.00	3.0	2.4	0.0	32,352	44,608	0	0	0
23	8.1	167,033	12,382,530	5,813,310	2,450,844	9.25	0	0 .	0	0.00	2.8	2.4	0.0	36,933	0	0	0	0
24	24.4	167,088	12,384,230	5,813,310	2,465,153	8.25	0	0	0	0.00	3.5	2.4	0.0	36,486	47,022	0	0	0
25	5.3	167,088	12,385,870	5,813,965	2,521,703	9.00	0	0	0	0.00	3.3	2.4	0.0	38,613	38,531	0	0	0
26	9,4	167,091	12,388,600	5,814,300	2,558,075	9.00	0	0	. 0	0,00	3.3	2.4	0.0	42,029	.0	- 0	0	0
27	9.8	167,091	12,389,935	5,814,300	2,594,402	8.75	54,639	12,026	0	0.10	3.6	2.6	0.0	37,694	46,306	0	0	0
28	11.5	167,091	12,395,140	5,815,570	2,631,752	7.58	51,202	18,088	0	0.00	2.7	2.7	0.0	3,595	27,617	0	0	0
29	8.2	167,091	12,397,430	5,815,570	2,662,824	5.42	65,791	18,121	0	0.00	2.2	2.7	0,0	0	26,227	0	0	0
30	6.5	167,102	12,400,550	5,815,570	2,693,896	5.25	43,820	6,028	0	0.05	3.5	1.8	0.0	0	0	0	0	0
												<u> </u>	<u> </u>			ļ		
											<u> </u>	<u> </u>	<u> </u>			-\200011.06	<u> </u>	1

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.

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

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- 4. Column XI, trace is less than 0.01 inches.
- 6. Columns XII and XIII measured from staff gages in each pond.

TABLE 3. 2006 MONTHLY LEACHATE BALANCE SUMMARY SOUTHEAST COUNTY LANDFILL HILLSBOROUGH COUNTY, FLORIDA

		Le	achate Arriving at L	TRF	Lea	chate Leaving LT	RF		Effluent Disposal		Inflo	w / Outflow For 1	LTRF
		Leachate Hauled	Leachate	Leachate	Total Leachate	Leachate	Leachate	Total	Effluent	Effluent	Total Inflow	Total Outflow	Change
1	Rainfall	to LTRF from	from Section 7-8	from Phases I-VI	Hauled	Dust Control	Treated at	Effluent	Dust Control	Irrigation	to	from	in
		HHLF/TRLF	Pumped to LTRF	Pumped to LTRF	from LTRF	(Sprayed)	LTRF	Hauled	(Sprayed)		LTRF	LTRF	Storage ³
Month	(in.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)
January	0.59	0	57,924	1,174,148	180,605	0	1,330,200	54,484	0	1,069,058	1,232,072	1,510,805	-278,733
February	3.73	0	100,705	1,036,262	246,866	87,519	901,500	18,107	0	790,611	1,136,967	1,235,885	-98,918
March	0.10	0	58,666	1,146,298	235,508	160,066	1,034,200	0	0	985,357	1,204,964	1,429,774	-224,810
April	0.17	0	26,367	1,073,620	162,705	20,042	1,119,100	0	Ö	857,079	1,099,987	1,301,847	-201,860
May	1.22	0	38,814	1,057,227	30,067	0	1,186,800	0	0	1,132,512	1,096,041	1,216,867	-120,826
June	8.33	0	105,196	1,035,231	139,447	. 0	1,017,100	84,617	0	970,248	1,140,427	1,156,547	-16,120
July	15.67	0	50,052	1,238,861	460,155	0	894,600	686,403	0	269,090	1,288,913	1,354,755	-65,842
August	7.89	0	66,496	1,342,399	706,832	3,064	831,600	285,856	0.	596,768	1,408,895	1,541,496	-132,601
September	6.46	0	81,290	1,288,709	731,492	0	913,600	637,975	0	329,191	1,369,999	1,645,092	-275,093
October	1.07	0	39,395	1,284,246	207,451	12,000	1,160,700	0	0	1,100,088	1,323,641	1,380,151	-56,510
November	1.00	0	135,600	1,105,957	418,020	0	991,500	0	0	920,257	1,241,557	1,409,520	-167,963
December	0.00	0	0	0	0	0	0	0	0	0	0	. 0	0
									:				
YTD Total	46.23	0	760,505	12,782,958	3,519,148	282,691	11,380,900	1,767,442	0	9,020,259	13,543,463	15,182,739	-1,639,276

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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.

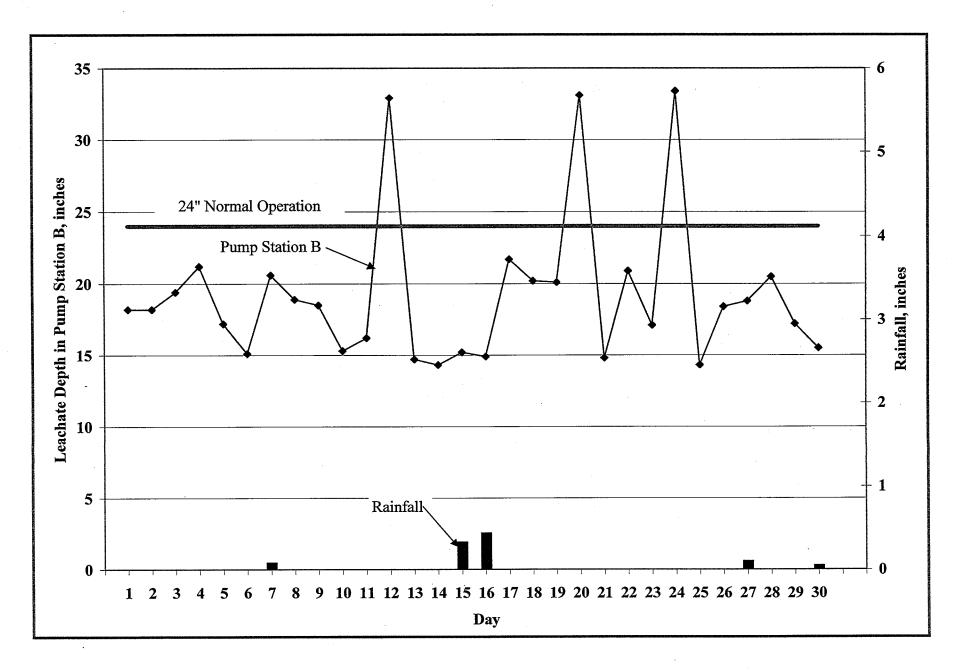


Figure 1. Leachate Levels in Pump Station B and Rainfall for November 2006.

LEACHATE DEPTH/SUMMARY DATA FORM SOUTHEAST COUNTY LANDFILL

Month/Year)	November,2006

	TP	S-6				Sect	on 7		Leachate	Hauled	Leachate	
	Depth	Flowmeter	Depth ¹ in Pond B	Pump ² Station B	PS-A Flow Meter	Flowmeter	Leak Detection	Depth in 575k Tank	Contractor	County	Dust Control/ Evap.	Rainfall
Date	(inches)	(gallons)	(feet)	(inches)	(gallons)	(gallons)	(gallons)	(feet)	(gallons)	(gallons)	(gallons)	(inches)
1	0.0	310	0.00	9.2	39,355	0	43	7'2"	. 0	12,986	0	0.00
2	0.0	470	0.00	9.2	41,100	2,570	51	7'1"	0	6,516	0	0.00
3	0.0	310	0.00	10.4	37,156	0	. 58	6'11"	0	6,520	0	0.00
4	0.0	130	0.00	12.2	33,649	0	61	6'11"	0	0	0	0.00
5	0.0	78	0.00	8.2	32,385	2,130	62	7'0"	0	. 0	0	0.00
6	0.0	0	0.00	6.1	36,787	0	63	7'0"	0	0	0	0.00
7	0.0	462	0.00	11.6	40,664	0	65	7'2"	0	0	0	0.08
8	0.0	320	0.00	9.9	48,238	2,370	62	7'9"	.0	0	0	0.00
9	0.0	180	0.00	9.5	44,038	0	. 63	8'0"	0	13,031	0	0.00
10	0.0	220	0.00	6.3	39,278	2,175	66	8'1"	0	0	0	0.00
11	0.0	0	0.00	7.2	23,663	15,805	64	8'7"	- 0	0	0	0.00
12	0.0	190	0.00	23.9	29,802	5,100	65	8'8"	. 0	. 0	0	0.00
13	0.0	0	0.00	5.7	46,023	2,480	70	9'1"	0	13,025	0	0.00
14	0.0	40	0.00	5.3	44,131	3,060	63	9'0"	0	19,539	0	0.00
15	0.0	280	0.00	6.2	42,996	3,010	56	9'3"	0	13,026	0	0.33
16	0.0	60	0.00	5.9	48,638	4,920	44	9'4"	. 0	19,548	o	0.44

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: Raymand Agest			

LEACHATE DEPTH/SUMMARY DATA FORM SOUTHEAST COUNTY LANDFILL

(Month/Year)	November,2006

	TP	S-6				Secti	on 7		Leachate	Hauled	Leachate	
	Depth	Flowmeter	Depth ¹ in Pond B	Pump ² Station B	PS-A Flow Meter	Flowmeter	Leak Detection	Depth in 575k Tank	Contractor	County	Dust Control/ Evap.	Rainfall
Date	(inches)	(gallons)	(feet)	(inches)	(gallons)	(gallons)	(gallons)	(feet)	(gallons)	(gallons)	(gallons)	(inches)
17	0.0	0	0.00	12.7	37,715	39,920	43	9'9"	0	13,034	0	0.00
18	0.0	0	0.00	11.2	35,683	14,100	50	10'1"	0	. 0	0	0.00
19	0.0	0	0.00	11.1	35,336	7,340	45	10'2"	0	0	0	0.00
20	0.0	0	0.00	24.1	18,795	4,620	54	10'6"	0	13,035	0	0.00
21	0.0	440	0.00	5.8	50,015	2,330	183	9'8"	0	12,031	0	0.00
22	0.0	250	0.00	11.9	35,867	1,970	190	9'3"	0	6,014	0	0.00
23	0.0	0	0.00	8.1	21,590	3,680	235	9'3"	0	0	0	0.00
24	0.0	0	0.00	24.4	14,309	1,700	. 55	8'3"	0	0	0	0.00
25	0.0	655	0.00	5.3	66,550	1,639	0	9'0"	0	0	0	0.00
26	0.0	335	0.00	9.4	36,372	2,730	3	9'0"	0	0	0	0.00
27	0.0	0	0.00	9.8	36,327	1,335	0	8'9"	0	12,026	0	0.10
28	0.0	1,270	0.00	11.5	37,350	5,205	0	7'6"	0	18,088	0	0.00
29	0.0	0	0.00	8.2	0	2,290	0	5'5"	0	18,121	0	0.00
30	0.0	0	0.00	6.5	62,144	3,120	0	5'3"	0	6,028	0	0.05
										,		
				:								

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:	Known Cr	Traver	<u></u>			

EFFLUENT DEPTH/QUANTITIES DATA FORM SOUTHEAST COUNTY LANDFILL

(Month/Year)	November,2006

	Depth in	Depth in	Pond B		Treated Effluent							Effluent ⁴
	Pond A ¹	Pond B ²	Leak	Leachate	Spray	Evaporated	Hauled		Dust Control/	Effluent	Time at	Runoff to
			Detection ³	Treated	Irrigated	at Pond B	Contractor	County	Evap.	Stored	End of	Retention
Date	(feet)	(feet)	(gallons)	(gallons)	(gallons)	(gallons)	(gallons)	(gallons)	(gallons)	(gallons)	Rainfall	Area (Y/N)
1	3.60	1.70	14	35,320	49,986	0	0	0				N
2	3.00	1.70	0	35,985	49,401	0	0	. 0				N
3	2.80	1.70	0	35,047	42,916	0	0	0				N
4	2.60	1.70	0	35,388	47,880	0	0	0				N
5	2.30	1.70	0	35,591	0	0	0	0				
6	3.00	1.70	0	37,203	42,665	0	0	0				N
7	2.80	1.70	0	37,108	0	0	0	0				
8	3.50	1.70	0	36,961	36,958	0	0	0				N
9	3.40	1.70	0	37,329	28,804	0	0	0				N
10	3.50	1.70	0	36,558	40,127	0	0	0				N
11	3.20	1.70	0	26,857	63,939	0	0	0				N
12	2.60	1.70	0	34,122	0	0	0	0				
13	3.30	1.70	0	38,028	29,918	0	0	.0	· · · · · · · · · · · · · · · · · · ·			N
14	3.40	1.70	0	30,129	39,817	0	0	0				N
15	3.50	1.70	0	41,135	30,578	0	0	0				N
16	3.60	1.80	15	39,435	0	0	0	0				

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

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

	(1) 11 900, 001, 001, 001, 001, 001, 001, 0								
Comments:	· <u> </u>								
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Prepared by	Carlman CDa	enne							

EFFLUENT DEPTH/QUANTITIES DATA FORM SOUTHEAST COUNTY LANDFILL

(Month/Voor)	November, 2006
(Month/Year)	November,2000

	Depth in	Depth in	Pond B	-		Treated Effluent						Effluent ⁴
	Pond A ¹	Pond B ²	Leak	Leachate	Spray	Evaporated	Hau	iled	Dust Control/	Effluent	Time at	Runoff to
	-		Detection ³	Treated	Irrigated	at Pond B	Contractor	County	Evap.	Stored	End of	Retention
Date	(feet)	(feet)	(gallons)	(gallons)	(gallons)	(gallons)	(gallons)	(gallons)	(gallons)	(gallons)	Rainfall	Area (Y/N)
17	3.60	2.20	0	33,285	45,840	•	0	0				N
18	3.40	2.20	0	35,996	44,739		0	0				N
19	3.20	2.20	0	41,807	0		0	0				
20	3.60	2.40	9	44,067	52,904		0	0			,	N
21	3.50	2.40	0	36,488	43,474		0	0				N
22	3.00	2.40	. 0	32,352	44,608		. 0	0				N
23	2.80	2.40	0	36,933	0		0	0		,		
24	3.50	2.40	o	36,486	47,022		0	0				N
25	3.30	2.40	0	38,613	38,531		0	0				N
26	3.30	2.40	0	42,029	0		0	0				
27	3.60	2.60	0	37,694	46,306		0	0				N
28	2.70	2.70	0	3,595	27,617		0	0			-	N
29	2.20	2.70	0	0	26,227		0	0				N
30	3.50	1.80	0	0	0		0	0				

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

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

Comments:	-	•					<u> </u>					
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		4.	- •								,	
Prepared by:	Kary	and de	rus		_	•						



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November 15, 2006

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

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

JAN 12 2007

SOUTHWEST DISTRICT TAMPA

RE: Southeast County Landfill -October 2006 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 October 2006. In addition, the SWMD is providing the October 2006 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 October 2006 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 October 2006 was 19.8 inches.

Ms. Susan J. Pelz November 15, 2006 Page Two

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

Sincerely,

Vather V. Berry
Patricia V. Berry

Landfill Services Section Manager Solid Waste Management Department

Attachments

glfs/lea1006.dep



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MEMORANDUM

DATE:

November 3, 2006

TO:

Patricia Berry, Section Manager, Solid Waste Management Department

FROM: Larry Ruiz, General Manager II, Solid Waste Management Department

Raymond Graves, Eng. Tech. II, Solid Waste Management Department

SUBJECT:

Leachate Water Balance Report Forms for October 2006

Southeast County Landfill, Hillsborough County, Florida

The Solid Waste Management Department (SWMD) staff has compiled and reviewed the leachate management operational data from the Southeast County Landfill Phases I-VI and Sections 7-8 of the Capacity Expansion for October 2006. Attached are the Leachate Water Balance Report Form (Table 1), the Leachate Field Data Entry Form (Table 2), and the 2006 Summary (Table 3). Also, attached find Figure 1 showing leachate levels in the Pump Station B sump and rainfall for the month.

TABLE 1

Day (Column I)

Column I presents the calendar days for the month.

Rainfall (Column II)

Column II presents the average rainfall, in inches, as measured in the field from rainfall stations at the site. This month there was 1.07 inches of rainfall at the Southeast County Landfill (SCLF).

MEMORANDUM November 3, 2006 Page 2 of 6

Depth in Pond A (Column III)

Column III presents the daily depth, in feet, of effluent stored in the existing effluent pond (Pond A). The daily depth in Pond A varies as a function of the spray irrigation frequency/duration and effluent hauled from the pond. This month the average depth of effluent stored in Pond A was 3.1 feet.

Depth in Pond B (Column IV)

Column IV presents the daily depth, in feet, of effluent or leachate that is stored in the effluent/leachate storage pond (Pond B). The depth in Pond B varies as a function of the evaporation frequency/duration and effluent or leachate hauled from the pond. This month the average depth of effluent stored in Pond B was 1.4 feet.

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

Column V presents the depth of leachate, in inches, in the PS-B sump. Leachate from Phases I-VI flows to the PS-B sump for removal from the landfill. PS-B then pumps the leachate to Pump Station A (PS-A). Daily depth readings from the PS-B sump are included in this column. PS-B was below the normal operation level of 24 inches. The average depth of leachate in the PS-B sump was 19.8 inches.

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

Column VI presents the quantity of leachate from Phase IV pumped to PS-B by Temporary Pump Station-6 (TPS-6). The quantity of leachate removed by TPS-6 is measured in gallons by an in-line flow meter and is included in the quantity of leachate pumped to the Main Leachate Pump Station (MLPS) from Phases I-VI (Column VII). The average daily amount of leachate pumped from TPS-6 was 646 gallons. A total of 20,020 gallons of leachate was pumped this month.

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

Column VII presents the daily amount of leachate, in gallons, collected from PS-A and pumped through the MLPS to the 575,000-gallon storage tank at the Leachate Treatment and Reclamation Facility (LTRF) for treatment or disposal. The quantity in column VII also includes the daily amount of leachate, in gallons, pumped from TPS-6. The average daily amount of leachate pumped from PS-A was 41,427 gallons. A total of 1,284,246 gallons of leachate was pumped to the storage tank this month.

MEMORANDUM November 3, 2006 Page 3 of 6

Leachate Pumped from Section 7-8 Leak Detection System (Column VIII)

Column VIII presents the quantity of leachate removed from the leak detection system (LDS) of Sections 7 and 8. The quantity is measured by a flow meter before being pumped for removal with Section 7 leachate. The removal rate did not exceed 1,930 gallons per day. This month a total of 1,481 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 Sections 7 and 8 (Column VIII). Beginning sometime after September 23 the flow meter began malfunctioning. The SWMD has begun the process to replace the flow meter and installed a temporary mechanical flow meter until the permanent magnetic flow meter is installed. From the 1st through the 12th, the SWMD has used the calculated daily mean value of 1,950 gallons per day (based on the year to date removal). This month an estimated 39,395 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 1,323,641 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 211,600 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 1,160,700 gallons of leachate was treated at the LTRF.

MEMORANDUM November 3, 2006 Page 4 of 6

Total Leachate Hauled (Column XIII)

Column XIII presents the daily amount of leachate, in gallons, hauled off site. This month a total of 207,451 gallons of leachate was hauled off site.

Leachate Dust Control (Sprayed) (Column XIV)

Column XIV presents the daily amount of leachate, in gallons, measured from the flow meter at the bypass-loading arm at the leachate storage tank. The leachate is used for dust control in the active area of the landfill. This month a total of 12,000 gallons of leachate was used for dust control.

Pond A Storage (Column XV)

Column XV presents the daily amount of effluent, in gallons, stored in Pond A. The daily amount stored in the pond is calculated by using the daily depth of effluent in the Pond A (Column IV). Under normal operating conditions, the daily amount of effluent stored in the pond varies depending upon the daily amount of leachate treated at the LTRF, the daily rainfall, daily effluent hauling operations, daily spray irrigation operations, and the daily amount of effluent used for dust control/evaporation. This month a daily average of 117,100 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 42,800 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. Effluent was not sprayed at Pond B this month.

MEMORANDUM November 3, 2006 Page 5 of 6

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 1,100,088 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 effluent was not sprayed as dust control.

Total Effluent Hauled (Column XX)

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

Total Evaporation (Column XXI)

Column XXI presents the daily amount of leachate and effluent, in gallons, that evaporates and therefore will not be returned to the SCLF and/or require treatment. The landfill evaporation rate includes 80 percent of the daily values from Columns XIV, XVIII, and XIX plus 5 percent of the daily values from Column XVII. Evaporation rates of 80 percent (based on the HELP model water balance analysis for the site) and 5 percent evaporation rate for spray in Pond B are assumed. The total evaporation estimated for this month was 889,600 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.

MEMORANDUM November 3, 2006 Page 6 of 6

Total inflow quantity to the LTRF was 1,323,641 gallons. Total outflow quantity from the LTRF (hauled and evaporated) was 1,380,151 gallons. The change in storage for the month of October decreased by 56,510 gallons.

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

TABLE 1. LEACHATE WATER BALANCE REPORT FORM OCTOBER 2006 SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA

I	П	ш	IV	v	VI	VII	VIII	ΙX	х	ΧI	XII	XIII	XIV	xv	XVI	XVII	XVIII	XIX	xx	xxı
1		Depth	Depth	Estimated	Leachate	Leachate	Leachate	Leachate	Total	Leachate	Leachate			1		Effluent	:			1
	l	in	in	Depth	Pumped	Pumped	Pumped From	Pumped	Leachate	in	Treated	Total	Leachate	Pond	Pond	Sprayed	Effluent	Effluent	Total	!
1		Pond	Pond	at	to PS-B	to MLPS	Sections 7-8	to MLPS	Pumped	575K	at	Leachate	Dust Control	A	В	Pond	Irrigation	Dust Control	Effluent	Total
	Rainfall	A (2)	В	PS-B	from TPS-6	from Phases I-VI	Leak Detection	from Section 7	to LTRF	Tank	LTRF	Hauled	(Sprayed)	Storage	Storage	B		(Sprayed)	Hauled	Evaporation
Day 1	(in.)	(ft.)	(in.)	(in.)	(gal.)	(gal.)	(gal.) 3	(gal.)	(gal.)	(gal.) 185,000	(gal.) 30,000	(gal.)	(gal.)	(gal.)	(gal)	(gal)	(gal.)	(gal.)	(gal.)	(gal.)
2	0.00	2.7 3.2	2.3 2.3	20.5 20.8	925	41,129 40,515	2	1,950 1,950	43,079 42,465	189,000	27,900	13,043	2	93,000 118,000	106,000	0			C	24 800
3	0.00	2.9	2.3	18.9	4,085	40,752	3	1,950	42,463	204,000	29,500	6,518	0	103,000	106,000	0		- 0		2 1,000
4	0.00	2.9	2.1	18,3	3,150	40,732	24	1,950	42,702	216,000	29,500	12,939	0	103,000	88,000	0		0.		
5	0,00	2.8	1.8	18.7	30	43,507	51	1,950	45,457	221,000	26,500	18,546	12,000	98,000	64,000		45,473	0		46,000
6	0.00	2.6	1.7	22,3	1,090	44,656	64	1,950	46,606	218,000	34,800	13,036	12,000	88,000	57,000	0		0		
7	0,00	2.9	1.4	22.2	730	45,169	64	1,950	47,119	218,000	37,500	0	0	103,000	38,000	0	43,753	0		-
8	0.00	2.8	1,4		0	41,486	61		43,436	230,000	36,100	0	0	98,000	38,000	0		0	ſ)
9	0,00	3.4	1.4	20.9	0	42,258	61		44,208	235,000	36,500	13,032	0	129,000	38,000	0		0	C	44,900
10	0.00	3,0	1.4		966	42,530	60	1,950	44,480	235,000	43,200	0	0	108,000	38,000	0		0	0	
11	0.00	2.9	1.3		1,084	44,527	- 60	1,950	46,477	242,000	43,500	0	0	103,000	33,000	0		0	C	
12	0.02	2.9	1.2		1,210	44,347	55	1,950	46,297	245,000	42,900	19,545	0	103,000	28,000	0		0	C	
13	0.00	2.9	1.1		560	46,122	62		. 48,387	238,000	41,400	0	0	103,000	23,000	0		0	. 0	
14	0.00	2.9	0.9		360	40,952	57	1,057	42,009	245,000	44,500	0	. 0	103,000	15,000	0	0	0	C) 0
. 15	0.00	3.6	1,0	20,6	0	38,222	57	0	38,222	240,000	12,400	0	0	-145,000	19,000	0	. 0	- 0		, 0
16	0,00	3.6	1.2	18.7	0	43,802	61	1,893	45,695	240,000	43,800	13,034	0	145,000	28,000	0	51,385	0	0	41,100
17	0.00	3.3	1.2	18.2	0	44,846	55	220	45,066	242,000	41,200	19,542	0	123,000	28,000	0	40,679	0	C	32,500
18 -	0,00	3.3	1.2	20.5	80	43,208	75	0	43,208	230,000	41,300	13,032	0	123,000	28,000	0	46,593	0	C	37,300
19	0.00	3.2	1.2	20.8	130	41,062	45	1,130	42,192	221,000	39,200	19,549	0	118,000	28,000	0	47,043	0	0	37,600
20	0.00	3.0	1.2		155	45,646	40	1,850	47,496	206,000	43,300	13,035	0	108,000	28,000	0	39,424	0	C	31,500
21	0.00	3.1	1.2		645	43,503	56		44,603	209,000	45,600	0	0	113,000	28,000	0	39,718	0	0	7 31,000
22	0.00	3,1	******************		. 0		51		39,387	209,000	41,400	- 0	. 0	113,000	23,000	. 0	*	0	0	
23	0,00	3.6	1.1		0	37,905	49		38,015	206,000	42,800	6,518	0	145,000	23,000	0	,	0	0	31,400
24	0.00	3.5	1.3		1,860	37,546	50		38,936	194,000	42,600	19,564	0	140,000	33,000	0	10,5 10	0	0	37,600
25	0,00	3.4	1,4		510	34,956	49.		36,606	173,000	44,000	6,518	. 0	129,000	38,000	0	45,022	0	0	39,700
26	0.00	3.3			670	36,689	50		37,699	158,000	40,200	0	.0	123,000	38,000	0	02,5	0	0	41,600
27	0.85	3.2			490	38,136	43		38,176	163,000	33,900	0	0	118,000	28,000	0	52,678	0	0	42,100
28	0.20	3.0	1.3		60	46,679	49		48,879	180,000	37,700	0	0	108,000	33,000	0	0	0	0	<u> </u>
29	0,00	3.5	1.3		160	40,662	38	0	40,662	187,000	38,300	. 0	0	140,000	33,000	0		0	0	**********
30	0.00	3.6		-	1.070	34,875	41	0	34,875	187,000	35,000		0	145,000	57,000	0	35,887	0		20,,,00
31	0.00	3.5	1.7	17.2	1,070	38,591	43		38,591	194,000	34,200		0	140,000	57,000		37,150	0		29,700
Total	1.07				20,020	1,284,246	1,481	39,395	1,323,641	-	1,160,700	207,451	12,000				1,100,088			889,600
Daily Average	1.07	3.1	1.4	19.8	20,020	41,427	1,481		42,698	211,600	1,100,700	207,431	12,000	117,100	42,800	^	1,100,088	-		009,000
Mo. Average		5.1	1.4	19.8	646	41,427	48	1,2/1	42,098	211,000			400	117,100	42,000		35,500	0		28,700
1.20. 11101age	L			<u> </u>	L	I							400			proi		006\10-06bal.xl	s (Revised by	

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.
- Monthly average calculated by dividing the total by the number of days of the month.
 Column II, Trace is less than 0.01 inches and is not included in total.
- 6. Columns III and IV, field measured at staff gauges.

- 7. Column V, PPS-B sensor reading plus 9 inches.
- Columns VIII & IX, Section 7-8 leak detection pumped into Section 7 leachate sump riser.
 Column XI, calculated from depth in 575,000 gal. leachate tank.

- Columns VI, VII, VIII, IX, XII, XIII, XIV, XVIII, and XIX, quantities from flow meters.
 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 OCTOBER 2006

SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA

I	И	III	IV	V	VI	VII	VIII	IX	x	XI	XII	XIII	XIV	xv	XVI	XVI	XVIII	XIX
1					-				Leachate				Effluent	Leachate	Effluent	I		Effluent
1	Reading	Section 7-8	Section 7	Flow Meter	Flow Meter	Depth in	Leachate	Hauled	Dust Control		Depth in	Depth in	Sprayed	Treated	Irrigation	Effluen	t Hauled	Dust Control
	PS-B	Leak Det	Flow Meter	TPS-6	Pump Sta. A	575K Tank	Contractor	County	(Sprayed)	Rainfall	Pond A	Pond B	(Pond B)	at LTRF		Contractor	County	(Sprayed)
Day	(in.)	(gal.)	(gal.)	(gal.)	(gal.)	(ft.)	(gal.)	(gal.)	(gal.)	(in.)	(ft.)	(ft.)	(gal)	(gal.)	(gal.)	(gal.)	(gal.)	(gal)
1	11.5	163,790	F-2,641,331	5,790,475	344,822	6.42	0	0.31	0	. 0.00	2.7	2.3	0	29,950	0	0	0	0
2	11.8	163,793	2,641,331	5,790,475	385,337	6.58	0	13,043	0	0.00	3.2	2.3	0	27,922	43,516	0	0	0
3	9.9	163,797	2,641,331	5,794,560	426,089	7.08	0	6,518	0	0.00	2.9	2.3	0	29,450	44,717	0	0	0
4	9.3	163,821	2,641,331	5,797,710	466,750	7.50	0	12,939	0	0.00	2.9	2.1	0	29,478	47,727	0	0	0
5	9.7	163,872	2,641,334	5,797,740	510,257	7.67	0	18,546	12,000	0.00	2.8	1.8	0	26,523	45,473	0	0	0
6	13.3	163,936	2,641,334	5,798,830	554,913	7.58	0	13,036	0	0.00	2.6	1.7	0	34,824	43,191	0	0	0
7	13.2	164,000	2,641,334	5,799,560	600,082	7.58	0	0	0	0.00	2.9	1.4	0	37,483	43,753	0	0	0
- 8	12.1	164,061	2,641,334	5,799,560	641,568	8.00	0	0.50	0	0.00	- 2.8	1.4	. 0	36,073	0	0	0	0
9	11.9	164,122	2,641,334	5,799,560	683,826	8.17	0	13,032	0	0.00	3.4	1.4	0	36,542	56,162	0	0	0
10	12.5	164,182	2,641,334	5,800,526	726,356	8.17	0	0	.0	0.00	3.0	1.4	0	43,179	56,783	0	0	0
11	8.3	164,242	2,641,334	5,801,610	770,883	8.42	0	0	0	0.00	2.9	1.3	0	43,534	51,385	0	0	0
12	10.0	164,297	2,641,334	5,802,820	815,230	8.50	0	19,545	0	0.02	2.9	1.2	0	42,881	45,034	0	0	0
13	10.7	164,359	12,251,220	5,803,380	861,352	8.25	0	0	0	0.00	2.9	1.1	0	41,438	44,023	0	0	0
14	11.9	164,416	12,252,277	5,803,740	902,304	8.50	0	0	0	0.00	2.9	0.9	0	44,483	0	0	0	Ö
15	-11.6	164,473	12,252,277	5,803,740	940,526	8,33	. 0	0	- 0	0.00	3.6	1.0	0	12,380	0	-0	0	0
16	9.7	164,534	12,254,170	5,803,740	984,328	8.33	0	13,034	0	0.00	3.6	1.2	0	43,824	51,385	0	0	0
17	9.2	164,589	12,254,390	5,803,740	1,029,174	8.42	0	19,542	0	0.00	3.3	1.2	0	41,249	40,679	0	0	0
18	11.5	164,664	12,254,390	5,803,820	1,072,382	8.00	0	13,032	0 .	0.00	3.3	1.2	0	41,347	46,593	0	0	0
19	11.8	164,709	12,255,520	5,803,950	1,113,444	7.67	0	19,549	0	0.00	3.2	1.2	0	39,203	47,043	0	0	0
20	12.0	164,749	12,257,370	5,804,105	1,159,090	7.17	0	13,035	0	0.00	3.0	1.2	0	43,331	39,424	0	0	0
21	10.8	164,805	12,258,470	5,804,750	1,202,593	7.25	0	0	0	0.00	3.1	1.2	0	45,614	39,718	0	0	0
22	10,4	164,856		5,804,750	1,241,900	7.25	. 0	0	0	0.00	3.1	33.1.1	0	41,447	-0-	0	0	0
23	8.3	164,905	12,258,660	5,804,750	1,279,805	7.17	0	6,518	0	0.00	3.6	1.1	0	42,767	39,252	0	0	0
24	11.2	164,955	12,260,050	5,806,610	1,317,351	6.75	0	19,564	0	0.00	3.5	1.3	0	42,637	46,946	0	0	0
25	9.3	165,004	12,261,700	5,807,120	1,352,307	6.00	0	6,518	0	0.00	3.4	1.4	0	44,007	49,622	0	0	0
26	10.9	165,054	12,262,710	5,807,790	1,388,996	5.50	0	0	0	0.00	3.3	1.4	0	40,157	51,947	0	0	0
27	12.5	165,097	12,262,750	5,808,280	1,427,132	5.67	0	0	0	0.85	3.2	1.2	0	33,929	52,678	0	0	0
28	9.5	165,146	12,264,950	5,808,340	1,473,811	6.25	0	0	0	0.20	3.0	1.3	0	37,658	0	0	0	0
29	≟11.4	165,184	12,264,950	5,808,500 =	1,514,473	6.50	0	0	0	0.00	3.5	1.3	0	38,264	0 :::	0	. 0	0
30	9.1	165,225	12,264,950	5,808,500	1,549,348	6.50	0	0	0	0.00	3,6	1.7	0	35,034	35,887	0	0	0
31	8.2	165,268	12,264,950	5,809,570	1,587,939	6.75	0	0	0	0.00	3.5	1.7	0	34,230	37,150	0	0	0
															halamas\2	00010 001.1	1. (D 11	v ler 11/03/06)

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.

Type of Cover	Phases I-VI	Section 7
Type of cover	acres	acres
Open	6	0
Intermediate	133.4	12.5
Final	23	Ö .
Not Opened	0	0

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- 4. Column XI, trace is less than 0.01 inches.

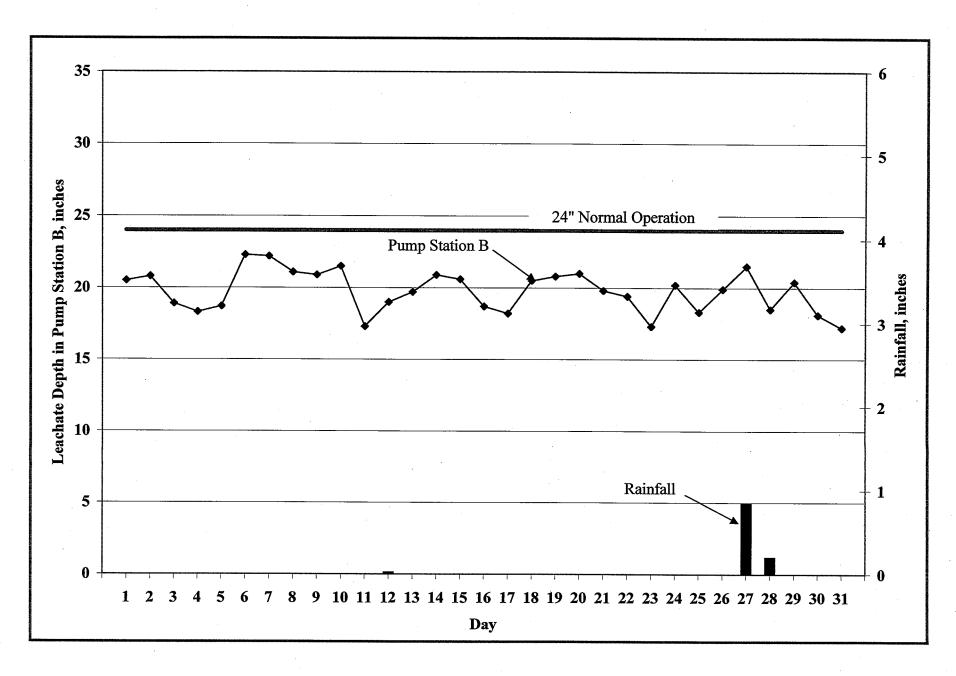


Figure 1. Leachate Levels in Pump Station B and Rainfall for October 2006.

TABLE 3. 2006 MONTHLY LEACHATE BALANCE SUMMARY SOUTHEAST COUNTY LANDFILL HILLSBOROUGH COUNTY, FLORIDA

		Le	achate Arriving at L	TRF	Lea	chate Leaving LT	RF		Effluent Disposal		Inflo	w / Outflow For I	TRF
		Leachate Hauled	Leachate	Leachate	Total Leachate	Leachate	Leachate	Total	Effluent	Effluent	Total Inflow	Total Outflow	Change
	Rainfall	to LTRF from	from Section 7	from Phases I-VI	Hauled	Dust Control	Treated at	Effluent	Dust Control	Irrigation	to	from	in
		HHLF/TRLF	Pumped to LTRF	Pumped to LTRF	from LTRF	(Sprayed)	LTRF	Hauled	(Sprayed)		LTRF	LTRF	Storage ³
Month	(in.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)
January	0.59	0	57,924	1,174,148	180,605	0	1,330,200	54,484	0	1,069,058	1,232,072	1,510,805	-278,733
February	3.73	0	100,705	1,036,262	246,866	87,519	901,500	18,107	. 0	790,611	1,136,967	1,235,885	-98,918
March	0.10	0	58,666	1,146,298	235,508	160,066	1,034,200	0	0	985,357	1,204,964	1,429,774	-224,810
April	0.17	0	26,367	1,073,620	162,705	20,042	1,119,100	0.	0	857,079	1,099,987	1,301,847	-201,860
May	1.22	. 0	38,814	1,057,227	30,067	0	1,186,800	. 0	0	1,132,512	1,096,041	1,216,867	-120,826
June	8.33	0	105,196	1,035,231	139,447	0	1,017,100	84,617	0	970,248	1,140,427	1,156,547	-16,120
July	15.67	0	50,052	1,238,861	460,155	0	894,600	686,403	0	269,090	1,288,913	1,354,755	-65,842
August	7.89	0	66,496	1,342,399	706,832	3,064	831,600	285,856	0	596,768	1,408,895	1,541,496	-132,601
September	6.46	0	81,290	1,288,709	731,492	0	913,600	637,975	0	329,191	1,369,999	1,645,092	-275,093
October	1.07	0	39,395	1,284,246	207,451	12,000	1,160,700	0	0	1,100,088	1,323,641	1,380,151	-56,510
November	0.00	0	0	0	0	0	0	0	0	. 0	0	0	0
December	0.00	0	0	0	0	0	0	0	0	0	0	0	0
YTD Total	45.23	0	624,905	11,677,001	3,101,128	282,691	10,389,400	1,767,442	0	8,100,002	12,301,906	13,773,219	-1,471,313

projects\balance\2006\2006-summary.xls (Revised by ler 11/03/06)

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.

LEACHATE DEPTH/SUMMARY DATA FORM SOUTHEAST COUNTY LANDFILL

(Month/Year)

October,2006

	TP	S-6				Sect	on 7		Leachate	Hauled	Leachate	
	Depth	Flowmeter	Depth ¹ in Pond B	Pump ² Station B	PS-A Flow Meter	Flowmeter	Leak Detection	Depth in 575k Tank	Contractor	County	Dust Control/ Evap.	Rainfall
Date	(inches)	(gallons)	(feet)	(inches)	(gallons)	(gallons)	(gallons)	(feet)	(gallons)	(gallons)	(gallons)	(inches)
1	0.0	925	- 0.00	0.0	41,129	0	4	6'5"	0	0		0.00
2	0.0	0	0.00	0.0	40,515	0	3	6'7"	0	13,043	0	0.00
3	0.0	4,085	0.00	0.0	40,752	0	4	7'1"	0			0.00
4	0.0	3,150	0.00	0.0	40,661	0	24	7'6"	0			0.00
5	0.0	30	0.00	0.0	43,507	0	51	7'8"	0			0.00
6	0.0	1,090	0.00	0.0	44,656	0	64	7'7"	0		0	0.00
7	0.0	730	0.00	0.0	45,169	0	64	7'7"	0		0	0.00
8	0.0	0	0.00	0.0	41,486	0	61	8'0"	0	0	0	0.00
9	0.0	0	0.00	0.0	42,258	0	61	8'2"	0	13,032	0	0.00
10	0.0	960	0.00	0.0	42,530	0	60	8'2"	0		0	0.00
11	0.0	1,084	0.00	0.0	44,527	0	60	8'5"	0	0	0	0.00
12	0.0	1,210	0.00	0.0	44,347	0	54	8'6"	0	19,545	0	0.02
13	0.0	560	0.00	0.0	46,122	2,265	62	8'3"	0	0	0	0.00
14	0.0	360	0.00	0.0	40,952	1,057	· 57	8'6"	0	.0	0	0.00
15	0.0	0	0.00	0.0	38,222	0	57	8'4"	0	0	0	0.00
16	0.0	0	0.00	0.0	43,802	1,893	61	8'4"	0	13,034	0	0.00

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

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

Comments:		
Prepared by: Kaymon Taues		

LEACHATE DEPTH/SUMMARY DATA FORM SOUTHEAST COUNTY LANDFILL

(Month/Year)	October,2006	
(

	TPS-6					Sect	ion 7		Leachate	Hauled	Leachate	
	Depth	Flowmeter	Depth ¹ in Pond B	Pump ² Station B	PS-A Flow Meter	Flowmeter	Leak Detection	Depth in 575k Tank	Contractor	County	Dust Control/ Evap.	Rainfall
Date	(inches)	(gallons)	(feet)	(inches)	(gallons)	(gallons)	(gallons)	(feet)	(gallons)	(gallons)	(gallons)	(inches)
17	0.0	0	0.00	0.0	44,846	220	55	8'5"	0	19,542	0	0.00
18	0.0	80	0.00	0.0	43,208	. 80	75	8'0"	0	13,032	0	0.00
19	0.0	130	0.00	0.0	41,062	1,210	45	7'8"	0	19,549	0	0.00
20	0.0	155	0.00	0.0	45,646	1,850	40	7'2"	. 0	13,035	0	0.00
21	0.0	645	0.00	0.0	43,503	1,100	46	7'3"	0	0	0	- 0.00
22	0.0	0	0.00	0.0	39,307	80	51	7'3"	0	0	0	0.00
23	0.0	0	0.00	0.0	37,905	110	49	7'2"	0	6,518	0	0.00
24	0.0	1,860	0.00	0.0	37,546	1,390	50	6'9"	0	19,564	0	0.00
25	0.0	510	0.00	0.0	34,956	1,650	49	6'0"	. 0	6,518	0	0.00
26	0.0	610	0.00	0.0	36,689	1,010	. 50	5'6"	0	0	0	0.00
27	0.0	490	0.00	0.0	38,136	40	43	5'8"	0	0	0	0.85
28	0.0	140	0.00	0.0	46,679	2,200	49	6'3"	0	0	0	0.20
29	0.0	160	0.00	0.0	40,662	0	38	6'6"	0	0	0	0.00
30	0.0	0	0.00	0.0	34,875	· 0	41	6'6"	0	0	0	0.00
31	0.0	1,070	0.00	0.0	38,591	0	43	6'9"	0	0	0	0.00

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

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

Comments:	·			
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Prepared by: Kaymond Aw	سامعا			

EFFLUENT DEPTH/QUANTITIES DATA FORM SOUTHEAST COUNTY LANDFILL

(Month/Year)	October,2006
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	Depth in	Depth in	Pond B		Treated Effluent							Effluent ⁴
	Pond A ¹	Pond B ²	Leak	Leachate	Spray	Evaporated	Hau	led	Dust Control/	Effluent	Time at	Runoff to
			Detection ³	Treated	Irrigated	at Pond B	Contractor	County	Evap.	Stored	End of	Retention
Date	(feet)	(feet)	(gallons)	(gallons)	(gallons)	(gallons)	(gallons)	(gallons)	(gallons)	(gallons)	Rainfall	Area (Y/N)
1	2.70	2.30	0	29,950	0		0	0				
2	3.20	2.30	0	27,922	43,516		0	. 0				N
3	2.90	2.30	0	29,450	44,717		0	0				N
4	2.90	2.10	0	29,478	0		o	0				N
5	2.80	1.80	0	26,523	0		0	0				
6	2.60	1.70	0	34,824	43,191		0	0				N
. 7	2.90	1.40	0	37,483	43,753		0	0		•		N
8	2.80	1.40	0	36,073	0		0	0				
9	3.40	1.40	0	36,542	56,162		0	0				N
10	3.00	1.40	0	43,179	56,783		0	0				N
11	2.90	1.30	0	43,534	51,385		0	0				N
12	2.90	1.20	0	42,881	45,034		0	0		· · · · · · · · · · · · · · · · · · ·		N
13	2.90	1.10	0	41,438	44,023	-	0	0				N
14	2.90	0.90	0	44,483	0		0	0	-	······································		
15	3.60	1.00	. 0	12,380	0		0	0:		··-		
16	3.60	1.20	0	43,824	51,385		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.

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Comments:												
Prepared by	Raymond Frauer											

EFFLUENT DEPTH/QUANTITIES DATA FORM SOUTHEAST COUNTY LANDFILL

(Month/Year)	October,2006
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	Depth in	Depth in	Pond B		Treated Effluent					Effluent ⁴		
	Pond A ¹	Pond B ²	Leak	Leachate	Spray	Evaporated	Hau	led	Dust Control/	Effluent	Time at	Runoff to
_			Detection ³	Treated	Irrigated	at Pond B	Contractor	County	Evap.	Stored	End of	Retention
Date	(feet)	(feet)	(gallons)	(gallons)	(gallons)	(gallons)	(gallons)	(gallons)	(gallons)	(gallons)	Rainfall	Area (Y/N)
17	3.30	1.20	0	41,249	40,679		0	0				N
18	3.30	1.20	. 0	41,347	46,593		0	0				N
19	3.20	1.20	0	39,203	47,043		0	0				N
20	3.00	1.20	0	43,331	39,424		0	0				N
21	3.10	1.20	0	45,614	39,718		0	0				N
22	3.10	1.10	0	41,447	.0		0	0				
23	3.60	1.10	0	42,767	39,252		0	. 0	,			N
24	3.50	1.30	0	42,637	46,946		0	0				N
25	3.40	1.40	0	44,007	49,622		0	0				N
26	3.30	1.40	0	40,157	51,947		0	0				N
27	3.20	1.20	0	33,929	52,678		0	. 0				N
28	3.00	1.30	0		0		0	0				
29	3.50	1.30	0	38,264	0		0	0				<u> </u>
30	3.60	1.70	0-		35,887		0	0				N
31	3.50	1.70	0		37,150	·	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: Reymond Saw	