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Office of the County Administrator Patricia G. Bean Deputy County Administrator Wally Hill

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

April 13, 2006

Dept. of Environmental Protection

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

APR 14 2006

Southwest District

RE: Southeast County Landfill - Leachate Data Quarterly Report

Dear Ms. Pelz:

In accordance with Specific Conditions No. 16 of Permit No. 35435-006-SO, the Solid Waste Management Department (SWMD) is submitting the quarterly Leachate Water Balance submittal for the Southeast County Landfill for the quarter ending April 15, 2006.

The data is being submitted as separate monthly reports for January, February and March 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 January 7 and February 22, 2006.

Also attached is the top of the phosphatic clay liner elevation at the Pump Station B Sump.

Please advise should you have any questions concerning the attached submittal.

Sincerely,

Patricia V. Berry

Landfill Services Section Manager Solid Waste Management Department

Attachment

xc: Larry Ruiz, SWMD Walter Gray, SWMD Rich Siemering, JEA Paul Schipfer, EPC

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Dept. of Environmental Protection

February 27, 2006

APR 14 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

Southwest District

RE: Southeast County Landfill – January 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 January 2006. In addition, the SWMD is providing the January 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 January 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 January 7, 2006 due to a malfunction of the bubbler system. The average depth of leachate in the PS-B sump for the recorded days in January 2006 was 19.0 inches.

Ms. Susan J. Pelz February 27, 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

Attachments

glfs/lea0106.dep



BOARD OF COUNTY COMMISSIONERS
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Office of the County Administrator Patricia G. Bean Deputy County Administrator Wally Hill

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

#### MEMORANDUM

DATE:

February 22, 2006

TO:

Patricia Berry, Section Manager, Solid Waste Management Department

FROM:

Larry Ruiz, General Manager, Solid Waste Management Department

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

**SUBJECT:** 

Leachate Water Balance Report Forms for January 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 Section 7 of the Capacity Expansion for January 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 0.59 inches of rainfall at the Southeast County Landfill (SCLF).

MEMORANDUM February 22, 2006 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 1.9 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 January 7 due to a malfunction of the bubbler system. The average depth of leachate in the PS-B sump was 19.0 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 1,197 gallons. A total of 37,100 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 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 37,876 gallons. A total of 1,174,148 gallons of leachate was pumped to the storage tank this month.

MEMORANDUM February 22, 2006 Page 3 of 5

#### 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 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 1,116 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). This month 57,924 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 1,232,072 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 249,100 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 1,330,200 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 180,605 gallons of leachate was hauled off site.

MEMORANDUM February 22, 2006 Page 4 of 5

#### 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 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 109,600 gallons of effluent was stored in Pond A.

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

Column XVI presents the daily amount of effluent, in gallons, stored in Pond B. The daily amount stored in the pond is calculated by using the daily depth of effluent in Pond B (Column IV). The volume of the pond at varying depths is estimated using AutoCAD software and calculations based on the conic method for reservoir volumes. Under normal operating conditions, the daily amount of effluent stored in the pond will vary depending upon the daily amount of effluent removed from the pond by the evaporation system, hauled from the pond, used for dust control or evaporated. This month a daily average of 71,400 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 1,069,058 gallons of effluent was used as spray irrigation.

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

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

#### **Total Effluent Hauled (Column XX)**

Column XX presents the daily amount of effluent, in gallons, hauled off site, as measured from the flow meter at the bypass-loading arm. This month a total of 54,484 gallons of effluent was hauled off site.

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

Column XXI presents the daily amount of leachate and effluent, in gallons, that evaporates and therefore will not be returned to the SCLF and/or require treatment. The landfill evaporation rate includes 80 percent of the daily values from Columns XIV, XVIII, and XIX plus 5 percent of the daily values from Column XVII. Evaporation rates of 80 percent (based on the HELP model water balance analysis for the site) and 5 percent evaporation rate for spray in Pond B are assumed. The total evaporation estimated for this month was 855,100 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 1,232,072 gallons. Total outflow quantity from the LTRF (hauled and evaporated) was 1,510,805 gallons. The change in storage for the month of January decreased by 278,733 gallons.

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

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

1	11	ш	īv	V	VI:	VII	vin	ıx	x	xı	XII	хш	xīv	xv	XVI	XVII	xvIII	XIX	xx	ххı
		Depth	Depth	Estimated	Leachate	Leachate	Leachate	Leachate	Total	Leachate	Leachate					Effluent	7,711	ALA	- ^^	
		in	in	Depth	Pumped	Pumped	Pumped from	Pumped	Leachate	in	Treated	Total	Leachate	Pond	Pond	Sprayed	Effluent	Effluent	Total	ı
		Pond	Pond	at	to PS-B	to MLPS	Section 7-8	to MLPS	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.	from Section 7	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.)	(gal.)	(gal.)	(gal.)
	0,10	2.3		21.4	1,686		41	2,757	38,745	358,000	44,300	- 0	- 0	74,000	44,000	0	. 0	0	0	0
2	0.00	3.1	1.5	18.3	114	36,908	42	0	36,908	353,000	50,500	0	0	113,000	44,000	0	49,219	0	0	39,400
3	0.00	3.0	1.5	18.1	0	39,433	42	2,808	42,241	353,000	44,200	18,066	0	108,000	44,000	0	0	0	0	0
4	0.00	3.6	1.7	17.4	3,040		38	2,296	42,595	329,000	46,700	6,019	0	145,000	57,000	0	22,110	0	0	17,700
5	0.00	3.6	1.8	16.6	2,610	39,982	29	0	39,982	326,000	45,000	0	0	145,000	64,000	0	48,350	0	18,190	38,700
6	0.00	3.3	2.0	15.5	1,780	45,148	39	2,709	47,857	324,000	51,000	12,035	0	123,000	80,000	0	77,300	0	. 0	61,800
7	0.00	2.6	2.0	33.4	1,785	31,530	40	0	31,530	309,000	46,300	0	0	88,000	80,000	0	67,556	0	0	54,000
- 8.	0.00	2,3	**1.8	15.6	2,088	34,357	37	2,645	37,002	302,000	42,100	0	0	74,000	64,000	- 0	0	0	0	
9	0.00	2.9	1.9	18.1	1,837	30,697	37	0	30,697	295,000	46,900	12,033	0	103,000	72,000	0	46,994	0	0	37,600
10	0.00	. 3.1	1.9		1,300	33,006	36	2,669	35,675	276,000	58,100	18,049	0	113,000	72,000	0	51,062	0	0	40,800
11	0,00	2.9	1.9	19.2	430	37,721	39	0	37,721	252,000	40,700	6,017	0	103,000	72,000	0	50,512	0	0	40,400
12	0.00	2.7	1.9	16.0	0	40,341	12	2,294	42,635	250,000	46,700	12,032	0	93,000	72,000	0	50,877	0	. 0	40,700
13	0.01	2.6	1.9	15.5	1,590	42,322	56	0	42,322	242,000	44,500	6,015	0	88,000	72,000	0	34,074	0	12,130	27,300
14	0.00	2.4	1.9	15.8	675	44,938	34	2,597	47,535	247,000	44,500	0	0	79,000	72,000	0	54,274	0	0	43,400
15	0,00	.2.9	200000000000000000000000000000000000000		130	40,412	38	0	40,412	245,000	37,200	0	0	103,000	72,000	0	0	0	. 0	0
16	0.00	2.9		19.5	19	36,840	34	2,683	39,523	245,000	47,400	0	0	103,000	64,000	. 0	0	0	0	0
17	0.13	3.6	1.8	17.6	1,456	39,945	14	. 0	39,945	242,000	44,000	12,029	0	145,000	64,000	0	80,552	0	0	64,400
18	0.00	2.9	1.9	19.9	800	39,899	20	0	39,899	238,000	44,900	12,031	0	103,000	72,000	0	0	0	0	0
19	0.25	3.6	1.9		1,050	28,111	46	· · · · · · · · · · · · · · · · · · ·	32,072	242,000	45,200	18,046	0	145,000	72,000	0	45,810	0	0	36,600
20	0.00	3.3	2.0		380		31	<u>_</u>	36,412	192,000	45,200	0	0	123,000	80,000	0	42,766	0	12,091	34,200
21	0.00	3.2	2.0		0	37,851	32		40,849	192,000	45,300	0	0	118,000	80,000	0	73,626	0	0	58,900
22	0.00	- 2.4	2.0	200 (0000000000000000000000000000000000	100		3\$		37,910	185,000	44,400	0	0	79,000	80,000	- 0		. 0	. 0	0
23	0.00	3.4	2.0		0	39,334	36		42,137	189,000	46,200	6,027	0	129,000	80,000	0	50,024	0	0	40,000
24	0.00	3.3	2.0		3,370		31		41,423	185,000	44,800	0	0	123,000	80,000	0	45,892	0	_ 0	36,700
25	0.00	3.2	2.0		3,650	40,619	35	_,-	43,497	185,000	45,300	18,076	0	118,000	80,000	0	0	0	0	0
26	0.00	3.6	2.0		0	35,241	. 42		38,156		30,500	18,116	0	145,000	80,000	0	43,318	0	0	34,700
27	0.00	3.1	2.0		1,350		39		33,352		32,000	0	0	113,000	80,000	. 0	46,204	0	12,073	37,000
28	0.00	2.7	2.0		2,130		45		37,152		32,100	0	0	93,000	80,000	0	45,776	0	0	36,600
29	0,00	2.1		CONTRACTOR OF THE PARTY OF THE			13		35,339		29,200	0	. 0	- 65,000	80,000	0	ő	σ	- 0	0
30	0.00	2.9	2.0		0	47,045	53		50,634	214,000	33,500	0	0	103,000	80,000	0	0	0	0	0
31	0.10	3.5	2,0	21.1	3,510	47,179	50	2,736	49,915	238,000	31,500	6,014	0	140,000	80,000	0	42,762	0	0	34,200
Total	0.59				37,100		1,116	57,924	1,232,072		1,330,200	180,605	0				1,069,058	. 0	54,484	855,100
Daily Average		3.0	1.9	19.0	1,197	37,876	36	1,869	39,744	249,100				109,600	71,400	0				
Mo. Average	ليسل												0				34,500	0	1,800	27,580
Notes:																p	rojects\balanc	e\2006\01-06b2	Lxls (Revised	by ler 2/22/06)

- 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.
- 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.
- 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 JANUARY 2006 SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA

_	I	п	Ш	IV	v	VI	VII	VIII	IX	X	XI	хп	ХШ	XIV	xv	XVI	XVI	XVIII	XIX
		1								Leachate				Effluent	Leachate	Effluent		,	Effluent
		Reading	Section 7-8	Section 7	Flow Meter	Flow Meter	Depth in	Leachate	Hauled	Dust Control		Depth in	Depth in	Sprayed	Treated	Irrigation	Effluent	Hauled	Dust Control
H		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	J	Contractor	County	(Sprayed)
	Day	(in.)	(gal.)	(gal.)	(gal.)	(gal.)	(ft.)	(gal.)	(gal.)	(gal.)	(in.)	(ft.)	(ft.)	(gal)	(gal.)	(gal.)	(gal.)	(gal.)	(gal)
	El-s	12.4	147,814	- 2,074,181	5,642,756	9,946,926	12.42	0 ***	-0	0	0.10	2,3	1.5	0:0	44,317	0	0	0.0	0
L	2	9.3	147,856	2,074,181	5,642,870	9,983,834	12.25	0	0	0	0.00	3.1	1.5	0.0	50,537	49,219	0	0	0
L	3	9.1	147,898	2,076,989	5,642,870	23,267	12.25	0	18,066	0	0.00	3.0	1.5	0.0	44,204	0	0	0	0
L	4	8.4	147,936	2,079,285	5,645,910	63,566	11.42	0 .	6,019	0	0.00	3.6	1.7	0.0	46,725	22,110	0	0 .	0
	5	7.6	147,965	2,079,285	5,648,520	103,548	11.33	0	0	0	0.00	3.6	1.8	0.0	44,979	48,350	0	18,190	0
L	6	6.5	148,004	2,081,994	5,650,300	148,696	11,25	0	12,035	0	0.00	3.3	2.0	0.0	51,039	77,300	0	0	0
	7	24.4	148,044	2,081,994	5,652,085	180,226	10.75	0	0	0	0.00	2.6	2.0	0.0	46,314	67,556	0	0	0
	- 8	6.6	148,081	2,084,639	5,654,173	214,583	10.50	0	- 0	0 -	0.00	2.3	1.8:	0.0	42,121	0	0	0.	0
L	9	9.1	148,118	2,084,639	5,656,010	245,280	10.25	0	12,033	0	0.00	2.9	1.9	0.0	46,865	46,994	0	0	0
L	10	7.8	148,154	2,087,308	5,657,310	278,286	9.58	0	18,049	0	0.00	3.1	1.9	0.0	58,145	51,062	0	0	0
L	11	10.2	148,193	2,087,308	5,657,740	316,007	8.75	0	6,017	0	0.00	2.9	1.9	0.0	40,737	50,512	0	0	0
L	12	7.0	148,205	2,089,602	5,657,740	356,348	8.67	0	12,032	0	0.00	2.7	1.9	0.0	46,704	50,877	0	0	0
┈	13	6.5	148,261	2,089,602	5,659,330	398,670	8.42	0	6,015	0	0.01	2.6	1.9	0.0	44,502	34,074	0	12,130	. 0
	14	6.8	148,295	2,092,199	5,660,005	443,608	8.58	0	0	0	0.00	2,4	1.9	0.0	44,544	54,274	0	0	0
	15	8.7	148(333	2,092,199	5,660,135	484,020	8.50	0	0	0	0.00	2.9	1.9	0.0	37,173	0.000	0	0	0
L	16	10.5	148,367	2,094,882	5,660,154	520,860	8.50	0	0	0	0.00	2.9	1.8	0.0	47,430	0	0	0	0
-	17	8.6	148,381	2,094,882	5,661,610	560,805	8.42	0	12,029	0	0.13	3.6	1.8	0.0	44,047	80,552	0	0	0
-	18	10.9	148,401	2,094,882	5,662,410	600,704	8.25	0	12,031	0	0.00	2.9	1.9	0.0	44,865	0	0	0	0
-	19	12.1	148,447	2,098,843	5,663,460	628,815	8.42	0	18,046	0	0.25	3.6	1.9	0.0	45,211	45,810	0	0	0
ŀ	20	12.6	148,478	2,101,751	5,663,840	662,319	6.67	0	0	0	0.00	3.3	2.0	0.0	45,249	42,766	0	12,091	0
	21	9.7	148,510	2,104,749	5,663,840	700,170	6.67	0	0	0	0.00	3.2	2.0	0.0	45,293	73,626	0	0	0
P	22	13.1	148,545	2,107,477	5,663,940	735,352	6.42	0	0	0	0.00	2.4	2.0	0.0	44,430	0	0	0.7	0_
-	23 24	13.0 6.7	148,581 148.612	2,110,280	5,663,940	774,686	6.58	0	6,027	0	0.00	3.4	2.0	0.0	46,208	50,024	0	0	0
╟		8.6		2,110,280	5,667,310	816,109	6.42	0	0	0	0.00	3.3	2.0	0.0	44,782	45,892	0	0	0
-	25 26	13.4	148,647 148,689	2,113,158	5,670,960	856,728	6.42	0	18,076	0	0.00	3.2	2.0	0.0	45,349	0	0	0	0
∦	27	8.4	148,689	2,116,073	5,670,960	891,969	6.17	0	18,116	0	0.00	3.6	2.0	0.0	30,528	43,318	0	0	0
-	28	8.4	148,728	2,118,539	5,672,310	922,855	5.92	0	0	0	0.00	3.1	2.0	0.0	31,965	46,204	0	12,073	0
	28	12.3	148,7786	2,123,627 2,123,627	5,674,440 5,674,660	954,919 990,258	6.25 6.42	0	0	0	0.00	2.7	2.0	0.0	32,064	45,776	0	0	0
ľ	30	8.8	148,788	2,126,612	5,674,660	1,037,907	7.42	0	0		0.00	2.1	2.0	0.0	29,209	0	0	0	0
}	31	12.1	148,889	2,129,348	5,678,170	1,037,907	8.25	I 0	6,014	0	0.00	2.9	2.0	0.0	33,456	0 42.762	0	0	0
-	Totals	12.1	140,009	2,129,340	2,078,170	1,063,080	0.23	0	180,605	0	0.10	3.5	2.0	0.0	31,535 1,330,527	42,762 1,069,058	0	0	0
<u>L</u>	LUIAIS	l	1		1	<u>L.,</u>	<u>L.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,</u>	1 0	100,003	10	0.39	)	L	<u>.                                    </u>	<del>• • • • • • • • • • • • • • • • • • • </del>		2006\01.06\-	54,484	by ler 2/22/06)

#### 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	0
Not Opened	0	0

projects\balance\2006\01-06bal.xls (Revised by ler 2/22/06)

- 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 L	ΓRF		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 <sup>3</sup>
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	0.00	0	0	0	0	0	0	0	- 0	0	. 0	0	0
March	0.00	0	0	0	0	0	0	0	0	0	0	0	0.
April	0.00	0	0	0	0	0	0	0.	. 0	0	0	0	0
May	0.00	0	0	0	0	0	0	0	0	0	0	0	0
June	0.00	0	0	0	0	0	0	0	0	0	0	0	0
July	0.00	0	0	0	0	0	0	0	0	0	0	0	0
August	0.00	0	0	. 0	0	0	0	0	0	0	0	0	,0
September	0.00	0	0	0	0	0	0	0	0	0	0	0	0
October	0.00	0	0	0	0	0	0	0	0	0	0	0	0
November	0.00	0	0	0	0	0	0	0	0		0	0	0
December	0.00	0	0	0	0	0	0	0	0	0	0	0	
YTD Total	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
Note:										projec		06-summary.xls (Rev	

#### 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.

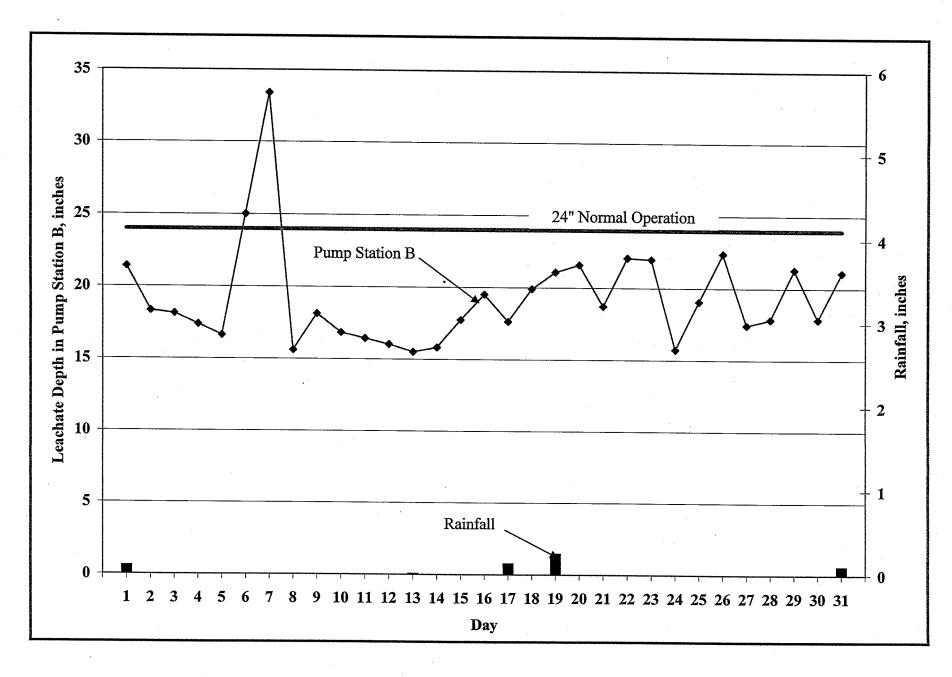


Figure 1. Leachate Levels in Pump Station B and Rainfall for January 2006.

# LEACHATE DEPTH/SUMMARY DATA FORM SOUTHEAST COUNTY LANDFILL

(Month/Year)

January,2006

	TP	S-6				Sect	ion 7		Leachate	Hauled	Leachate	
	Depth	Flowmeter	Depth <sup>1</sup> in Pond B	Pump <sup>2</sup> 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	1,686	0.00	12.4	35,988	2,757	41	12'5"	0	0	0	0.10
2	0.0	114	0.00	9.3	36,908	0	42	12'3"	0	0	0	0.00
3	0.0	0	0.00	9.1	39,433	2,808	42	12'3"	. 0	18,066	0	0.00
4	0.0	3,040	0.00	8.4	40,299	2,296	38	11'5"	0	6,019	0	0.00
5	0.0	2,610	0.00	7.6	39,982	0	29	11'4"	0	0	0	0.00
6	0.0	1,780	0.00	6.5	45,148	2,709	39	11'3"	0	12,035	0	0.00
7	0.0	1,785	0.00	24.4	31,530	0	40	10'9"	0	0	0	0.00
8	0.0	2,088	0.00	6.6	34,357	2,645	37	10'6"	0	0	0	0.00
9	0.0	1,837	0.00	9.1	30,697	0	37	10'3"	0	12,033	0	0.00
10	0.0	1,300	0.00	7.8	33,006	2,669	36	9'7"	0	18,049	0	0.00
11	0.0	430	0.00	10.2	37,721	0	75	8'9"	0	6,017	0	0.00
12	0.0	0	0.00	7.0	40,341	2,300	· 12	8'8"	0	12,032	0	0.00
13	0.0	1,590	0.00	6.5	42,322	0	56	8'5"	0	6,015	0	0.01
14	0.0	675	0.00	6.8	44,938	2,597	34	8'7"	0	0	0	0.00
15	0.0	130	0.00	8.7	40,412	0	38	8'6"	0	0	0	0.00
16	0.0	19	0.00	10.5	36,840	2,683	34	8'6"	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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				٠.				
Prepared by:	Kaymend CJ	Traves						

# LEACHATE DEPTH/SUMMARY DATA FORM SOUTHEAST COUNTY LANDFILL

(Month/Year)

January,2006

	TP	S-6				Sect	on 7		Leachate	Hauled	Leachate	
	Depth	Flowmeter	Depth <sup>1</sup> in Pond B	Pump <sup>2</sup> 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	1,456	0.00	8.6	39,945	0	14	8'5"	0	12,029	0	0.13
18	0.0	800	0.00	10.9	39,899	0	20	8'3"	0	12,031	0	0.00
19	0.0	1,050	0.00	12.1	28,111	3,961	46	8'5"	0	18,046	0	0.25
20	0.0	380	0.00	12.6	33,504	2,908	31	6'8"	0	0	0	0.00
21	0.0	0	0.00	9.7	37,851	2,998	35	6'8"	0	0	0	0.00
22	0.0	100	0.00	13.1	35,182	2,728	35	6'5"	0	0	0	0.00
23	0.0	330	0.00	13.0	39,334	2,803	36	6'7"	0	6,027	o	0.00
24	0.0	3,700	0.00	6.7	41,423	0	31	6'5"	0	0	0	0.00
25	0.0	3,650	0.00	8.6	40,619	2,878	35	6'5"	0	18,076	0	0.00
26	0.0	0	0.00	13.4	35,211	2,915	42	6'2"	0	18,116	0	0.00
27	0.0	1,350	0.00	8.4	30,886	2,466	39	5'11"	0	0	0	0.00
28	0.0	2,130	0.00	8.8	32,064	5,088	45	6'3"	0	0	0	0.00
29	0.0	220	0.00	12.3	35,339	0	13	6'5"	0	0	0	0.00
30	0.0	0	0.00	8.8	47,649	2,985	53	7'11"	0	0	0	0.10
31	0.0	3,510	0.00	12.1	47,179	2,736	50	8'3"	0	6,014	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:										
	· · · · · · · · · · · · · · · · · · ·			4. *						
•.			·.							
Prepared by:	Raymore CoSaverd									

# EFFLUENT DEPTH/QUANTITIES DATA FORM SOUTHEAST COUNTY LANDFILL

	*	
(Month/Year)	January,2006	

	Depth in	Depth in		, , , , , , , , , , , , , , , , , , , ,			Treated 1	Effluent			<u> </u>	Effluent <sup>4</sup>
	Pond A <sup>1</sup>	Pond B <sup>2</sup>	Leak	Leachate	Spray	Evaporated	Hau	led	Dust Control/	Effluent	Time at	Runoff to
	(0.)		Detection <sup>3</sup>	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	2.30	1.50	0	44,317	0		.0	0				<u> </u>
2	3.10	1.50	0	50,537	49,219		0	0				N
3	3.00	1.50	0	44,204	0		0	0				
4	3.60	1.70	0	46,725	22,110		0	0				N
5	3.60	1.80	0	44,979	48,350		0	18,190				N
6	3.30	2.00	0	51,039	77,300		0	0				N
7	2.60	2.00	0	46,314	67,556		0	0		<del></del> -	<del>                                     </del>	N
8	2.30	1.80	0	42,121	0		0	0				1
9	2.90	1.90	0	46,865	46,994		0	0				N
10	3.10	1.90	0	58,145	51,062		0	0			<b> </b>	N
11	2.90	1.90	0	40,737	50,512		0	0				N
12	2.70	1.90	0	46,704	50,877		0	0				N
13	2.60	1.90	0	44,502	34,074		0	12,130			<u> </u>	N
14	2.40	1.90	0	44,544	54,274		0	0				N
15	2.90	1.90	0	37,173	0		0	0				I N
16	2.90			47,430	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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Prepared by:	Carmond Shave	 			

# EFFLUENT DEPTH/QUANTITIES DATA FORM SOUTHEAST COUNTY LANDFILL

O f 41 /57 1	T 0000
(Month/Year)	January,2006
(Alabaman a dear)	January,2000

	Depth in	Depth in	Pond B				Treated Eff	luent				Effluent <sup>4</sup>
,	Pond A <sup>1</sup>	Pond B <sup>2</sup>	Leak	Leachate	Spray	Evaporated	Hau	led	Dust Control/	Effluent	Time at	Runoff to
1			Detection <sup>3</sup>	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	1.80	0	44,047	80,552		0	0				N
18	2.90	1.90	0	44,865	0		0	0				
19	3.60	1.90	0	45,211	45,810		0	0				N
20	3.30	2.00	0	45,249	42,766		0	12,091				N
21	3.20	2.00	0	45,293	73,626		0	0	·			N
22	2.40	2.00	0.	44,430	0		0	0				
23	3.40	2.00	0	46,208	50,024		0	0				N
24	3.30	2.00	. 0	44,782	45,892		0	0		· ·		N
25	3.20	2.00	0	45,349	0		0	0	•			
26	3.60	2.00	0	30,528	43,318		0	. 0				N
27	3.10	2.00	0	31,965	46,204		0	12,073				N
28	2.70	2.00	0	32,064	45,776		0	. 0	,			N
29	2.10	2.00	0	29,209	0		0	0				
30	2.90	2.00	0	33,456	0		0	0				
31	3.50	2.00	0	31,535	42,762		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:		- ' <del>-</del>			
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Prepared by:	Rugnerd D	rared	<u> </u>		•



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March 31, 2006

Dept. of Environmental Protection

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

APR 1 4 2006

Southwest District

RE: Southeast County Landfill -February 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 February 2006. In addition, the SWMD is providing the February 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 February 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 February 22 due to a malfunction of the bubbler system. The average depth of leachate in the PS-B sump for the recorded days in February 2006 was 18.8 inches.

Ms. Susan J. Pelz March 31, 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

Attachments

glfs/lea0206.dep



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

#### MEMORANDUM

DATE:

March 24, 2006

TO:

Patricia Berry, Section Manager, Solid Waste Management Department

FROM:

Larry Ruiz, General Manager, Solid Waste Management Department

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

**SUBJECT:** 

Leachate Water Balance Report Forms for February 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 Section 7 of the Capacity Expansion for February 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 3.73 inches of rainfall at the Southeast County Landfill (SCLF).

MEMORANDUM March 24, 2006 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 2.8 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 2.7 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 February 22 due to a malfunction of the bubbler system. The average depth of leachate in the PS-B sump was 18.8 inches.

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

Column VI presents the quantity of leachate from Phase IV pumped to PS-B by Temporary Pump Station-6 (TPS-6). The quantity of leachate removed by TPS-6 is measured in gallons by an in-line flow meter and is included in the quantity of leachate pumped to the Main Leachate Pump Station (MLPS) from Phases I-VI (Column VII). The average daily amount of leachate pumped from TPS-6 was 608 gallons. A total of 17,020 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 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 37,009 gallons. A total of 1,036,262 gallons of leachate was pumped to the storage tank this month.

MEMORANDUM March 24, 2006 Page 3 of 5

#### 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 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 1,834 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). This month 100,705 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 1,138,801 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 315,300 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 901,500 gallons of leachate was treated at the LTRF.

#### **Total Leachate Hauled (Column XIII)**

Column XIII presents the daily amount of leachate, in gallons, hauled off site. This month a total of 246,866 gallons of leachate was hauled off site.

MEMORANDUM March 24, 2006 Page 4 of 5

#### 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 87,519 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 105,100 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 146,400 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 790,611 gallons of effluent was used as spray irrigation.

MEMORANDUM March 24, 2006 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 a total of 18,107 gallons of effluent was hauled off site.

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

Column XXI presents the daily amount of leachate and effluent, in gallons, that evaporates and therefore will not be returned to the SCLF and/or require treatment. The landfill evaporation rate includes 80 percent of the daily values from Columns XIV, XVIII, and XIX plus 5 percent of the daily values from Column XVII. Evaporation rates of 80 percent (based on the HELP model water balance analysis for the site) and 5 percent evaporation rate for spray in Pond B are assumed. The total evaporation estimated for this month was 702,600 gallons.

#### TABLE 2

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

#### TABLE 3

#### **Leachate Balance Summary**

The Leachate Balance Summary (see Table 3) presents a review of inflow and outflow quantities for the LTRF, as well as rainfall and effluent disposal quantities at the landfill. Total inflow quantity to the LTRF was 1,136,967 gallons. Total outflow quantity from the LTRF (hauled and evaporated) was 1,235,885 gallons. The change in storage for the month of February decreased by 98,918 gallons.

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

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

2 0.0 3 2.3 4 0. 5 0.0 6 0.0 7 0.0 8 0.0 9 0.0 10 0.0	nfall n.) 0.00 0.00 2.85	Depth in Pond A (ft.) 3.2 2.9 2.7 3.3 3.5 3.6 3.6 3.1 3.0 2.8 3.0	Depth in Pond B (in.) 2.0 2.0 2.1 2.5 2.8 3.0 3.1 3.1 3.1	Estimated Depth at PS-B (in.) 20.1 17.2 16.8 16.3 19.9 16.3 17.7 17.5 18.1	Leachate Pumped to P8-B from TPS-6 (gal.)  0 0 895 3,200 1,075 0 0 0 0	46,041 38,843 31,024 33,324	Leachate Pumped from Section 7-8 Leak Det, (gal.)  23 67 24 73 50 50 58 68	Leachate Pumped to MLPS from Section 7 (gal.)  0 3,063 0 9,726 12,404 8,581	Total Leachate Pumped to LTRF (gal.) 38,975 44,855 44,926 55,840 51,297	Leachate in 575K Tank (gal.) 245,000 250,000 259,000 295,000	Leachate Treated at LTRF (gal.) 31,100 31,600 31,500 36,400	Total Leachate Hauled (gal.) 12,039 12,028	Leachate Dust Control (Sprayed) (gal.)  0 0	Pond A Storage (gal.) 123,000 108,000 98,000	Pond B Storage (gal) 80,000 80,000	Effluent Sprayed Pond B (gal) 0	Effluent Irrigation (gal.) 42,912 41,688	Effluent Dust Control (Sprayed) (gal.)  0 0 0	Total Effluent Hauled (gal.) 0 0 12,071	33,400
Day (in.)  1 0.0  2 0.1  3 2.0  4 0.5  6 0.0  7 0.0  8 0.0  9 0.0  10 0.0  11 0.0	nfall (1.0)	Pond A (ft.) 3.2 2.9 2.7 3.3 3.5 3.6 3.6 3.1 3.0 2.8	Pond B (in.) 2.0 2.0 2.1 2.5 2.8 3.0 3.1	at PS-B (in.) 20.1 17.2 16.8 16.3 19.9 16.3 17.7 17.5	to PS-B from TPS-6 (gal.)  0 0 895 3,200 1,075 0	to MLPS from Phases I-VI (gal.) 38,952 41,725 44,902 46,041 38,843 31,024 33,324	Section 7-8 Leak Det, (gal.)  23  67  24  73  50  58	to MLPS from Section 7 (gal.)  0 3,063 0 9,726	Pumped to LTRF (gal.) 38,975 44,855 44,926 55,840	575K Tank (gal.) 245,000 250,000 259,000 295,000	at LTRF (gal.) 31,100 31,600 31,500	Leachate Hauled (gal.) 12,039	Dust Control (Sprayed)	A Storage (gal.) 123,000 108,000	B Storage (gal) 80,000 80,000	Pond B (gal)	(gal.) 42,912 41,688	Dust Control (Sprayed) (gal.)	Effluent Hauled (gal.) 0	Evaporation (gal.) 34,300 33,400
Day (in.)  1 0.0  2 0.1  3 2.0  4 0.5  6 0.0  7 0.0  8 0.0  9 0.0  10 0.0  11 0.0	nfall (1.0)	A (ft.)  3.2 2.9 2.7 3.3 3.6 3.6 3.6 3.1 3.0 2.8	B (in.) 2.0 2.0 2.0 2.1 2.5 2.8 3.0 3.1 3.1	PS-B (in.) 20.1 17.2 16.8 16.3 19.9 16.3 17.7 17.5	from TPS-6 (gal.) 0 0 895 3,200 1,073 0	from Phases I-VI (gal.) 38,952 41,725 44,902 46,041 38,843 31,024 33,324	Leak Det. (gal.)  23  67  24  73  50  58	from Section 7 (gal.)  0 3,063 0 9,726 12,404	to LTRF (gal.) 38,975 44,855 44,926 55,840	Tank (gal.) 245,000 250,000 259,000 295,000	LTRF (gal.) 31,100 31,600 31,500	Hauled (gal.) 12,039	(Sprayed)	Storage (gal.) 123,000 108,000	Storage (gal) 80,000 80,000	B (gal) 0	(gal.) 42,912 41,688	(Sprayed) (gal.)	Hauled (gal.) 0	Evaporation (gal.) 34,300 33,400
Day (in.)  1 0.0  2 0.1  3 2.0  4 0.5  6 0.0  7 0.0  8 0.0  9 0.0  10 0.0  11 0.0	0.00 0.00 0.00 2.85 0.10 0.00 0.00 0.00 0.00 0.00	(ft.) 3.2 2.9 2.7 3.3 3.5 3.6 3.6 3.1 3.0 2.8	(in.) 2.0 2.0 2.0 2.1 2.5 2.8 3.0 3.1 3.1	(in.) 20.1 17.2 16.8 16.3 19.9 16.3 17.7 17.5	(gal.)  0  0  895  3,200  1,07\$  0  0	(gal.) 38,952 41,725 44,902 46,041 38,843 31,024 33,324	(gal.) 23 67 24 73 50 58	(gal.) 0 3,063 0 9,726 12,404	(gal.) 38,975 44,855 44,926 55,840	(gal.) 245,000 250,000 259,000 295,000	(gal.) 31,100 31,600 31,500	(gal.) 12,039		(gal.) 123,000 108,000	(gal) 80,000 80,000	(gal) 0 0	42,912 41,688	(gal.)	(gal.) 0	(gal.) 34,300 33,400
1 0.0 2 0.1 3 2.3 4 0.5 6 0.0 7 0.0 8 0.0 9 0.0 10 0.0 11 0.0	0.00 0.00 2.85 0.10 0.00 0.00 0.00 0.00 0.00 0.00	3.2 2.9 2.7 3.3 3.5 3.6 3.6 3.1 3.0 2.8	2.0 2.0 2.0 2.1 2.5 2.8 3.0 3.1	20.1 17.2 16.8 16.3 19.9 16.3 17.7	0 0 895 3,200 1,07\$ 0	38,952 41,725 44,902 46,041 38,843 31,024 33,324	23 67 24 73 50 58	0 3,063 0 9,726 12,404	38,975 44,855 44,926 55,840	245,000 250,000 259,000 295,000	31,100 31,600 31,500	12,039	(gal.) 0 0 0	123,000 108,000	80,000 80,000	0	42,912 41,688		0	34,300 33,400
2 0.0 3 2.3 4 0.5 6 0.0 7 0.0 8 0.0 9 0.0 10 0.0 11 0.0	0.00 2.85 0.10 0.00 0.00 0.00 0.00 0.00 0.00 0.00	2.9 2.7 3.3 3.5 3.6 3.6 3.1 3.0 2.8	2.0 2.0 2.1 2.5 2.8 3.0 3.1 3.1	17.2 16.8 16.3 19.9 16.3 17.7	895 3,200 1,073 0	41,725 44,902 46,041 38,843 31,024 33,324	67 24 73 50 58	3,063 0 9,726 12,404	44,855 44,926 55,840	250,000 259,000 295,000	31,600 31,500		0	108,000	80,000	0	41,688	0 0 0	0	33,400
3 2.3 4 0.5 6 0.0 7 0.0 8 0.0 9 0.0 10 0.0 11 0.0	2.85 0.10 0.00 0.00 0.00 0.00 0.00 0.00 0.00	2.7 3.3 3.5 3.6 3.6 3.1 3.0 2.8	2.0 2.1 2.5 2.8 3.0 3.1 3.1	16.8 16.3 19.9 16.3 17.7	895 3,200 1,073 0	44,902 46,041 38,843 31,024 33,324	24 73 50 58	0 9,726 12,404	44,926 55,840	259,000 295,000	31,500	12,028	0			0		0	0 12,071	<del> </del>
4 0. 5 0.00 6 0.00 7 0.00 8 0.00 9 0.00 10 0.00 11 0.00 12 0.00	0.10 0.00 0.00 0.00 0.00 0.00 0.00 0.00	3.3 3.5 3.6 3.6 3.1 3.0 2.8	2.1 2.5 2.8 3.0 3.1 3.1	16.3 19.9 16.3 17.7 17.5	3,200 1,075 0 0	46,041 38,843 31,024 33,324	73 50 58	9,726 [2,404	55,840	295,000		0	0	98,000	80,000	이	o	0	12,071	0
5 000 6 000 7 000 8 000 9 000 10 000 11 000 12 000	0,00 0,00 0,00 0,00 0,00 0,00 0,00	3.5 3.6 3.6 3.1 3.0 2.8	2.5 2.8 3.0 3.1 3.1	19.9 16.3 17.7 17.5	1,07S 0 0	38,843 31,024 33,324	50 58	12,404		and the same of th	36,400									
6 0.7 0.2 8 0.2 9 0.1 10 0.1 11 0.3 12 41 0.0 0.	0.00 0.00 0.00 0.00 0.00 0.20	3.6 3.6 3.1 3.0 2.8	2.8 3.0 3.1 3.1	16.3 17.7 17.5	0	31,024 33,324	58		51,297	374.0001		0	0	129,000	88,000	0	0	0	0	0
7 0.0 8 0.0 9 0.1 10 0.1 11 0.3 12 4 0.0	0.00 0.00 0.00 0.00 0.20	3.6 3.1 3.0 2.8	3.0 3.1 3.1	17.7 17.5	0	33,324		8,581			28,800	0	0	145,000	124,000	. 0	0	0	0	0
8 0.1 9 0.1 10 0.1 11 0.1 12 44 0.0	0.00 0.00 0.00 0.20	3.1 3.0 2.8	3.1 3.1	17.5			681		39,663	333,000	31,600	12,028	0	151,000	152,000	0	0	0	0	<del></del>
9 0.1 10 0.1 11 0.1 12 4 0,	0.00 0.00 0.20	3.0 2.8	3.1		0			8,178	41,570	338,000	31,300	12,047	0	151,000	172,000	0	51,440	0	0	12,200
10 0.0 11 0.1 12 4 0,	0,00 0.20	2.8		18.11		36,766	73	5,845	42,684	350,000	32,300	18,070	3,767	118,000	182,000	0	56,710	0	0	48,400
11 0.	0.20				0	34,812	90	5,266	40,168	336,000	29,900	12,044		113,000	182,000	0	39,222	0	0	34,800
12 0,				18.9	0	31,663	80	2,363	34,106	331,000	31,300	0	0	103,000	182,000	0	41,908	0	6,036	
	U.UUI 😅		2.4	22.5	240	Singapor par at the same and an arrange	95	2,789	40,272	345,000	30,800	0	-	113,000	115,000	0	34,440	0	0	27,600
13   0.		- 2.3	2.7	17.4	350		84		44,581	362,000	30,500			79,000	143,000	0 -		0	. 0	
7.4		2.8	3.0	15.6	0		83	2,682	36,986	362,000	31,400	18,079		103,000	172,000	0	30,236	0	0	24,200
	0.00	2.8	3.0	18.5	35		85		34,071	355,000	31,000			103,000	172,000	0	43,328	0	0	43,100
	0.00	2.8	3.0	16.5	285		78		34,440	345,000	28,000	24,100	<del>                                     </del>	103,000	172,000	0	32,854	0	0	28,800
	0.00	2.3	3.0	17.6	560		76		38,341	331,000	64,000	18,064	9,097	79,000	172,000	- 0	0	0	0	.,,
	0.00	2.9	3.0	18.4	655		51		41,775	319,000	30,600	18,039	<u> </u>	108,000	172,000	0	47,982	0	0	
19 0.	0.00	2.4	3.0	17.4	555		71		38,253	302,000	29,900	0		83,000	172,000	0	30,590	0	0	
	220000000000000000000000000000000000000	***************	3,0	16:2	500	38,237	67		41,253	312,000	31,600	***************************************		83,000	172,000	0		0	. 0	
	0.00	3.0	3.0	21.5	. 0		64		38,345	322,000	32,800	12,042		113,000	172,000	0	31,936	0	. 0	22,200
	0.00	2.9	3.0 2.9	15.9 33.9	990		63		31,215	307,000	30,300	18,066		108,000	172,000	. 0	46,950	0	0	42,300
	0.00	2.3	2.9	19.6	1,350		62 59		62	259,000	32,100	0		93,000	162,000	0		0	0	10,100
	0.15	2.4	2.7	22.5			58		72,318	290,000	27,400	12,043		79,000	162,000	0	44,186	0		42,500
	0.00	2.4	2.6	19.3	2,540	<u> </u>	60	3,347	49,418 37,641	297,000 297,000	27,300 34,900	12,043		83,000	143,000	. 0	40,852	0	0	
	0.43	2.4	2.5	17.1	1,050		65	2,885	49,257	297,000 312,000	28(800			83,000 70,000	133,000	U	45,284	. 0		36,200
	0.00	2.8	2.5	19.1	0 0	34,047	49	CONTRACTOR OF THE PROPERTY OF	39,610	312,000	31,700	18,064		103,000	124,000	0	0	0		,
	0.00	3.1	2.5	18.8	490	<del> </del>	58		36,879	324,000	32,600	12,042		118,000	124,000	- 0	39,423	0	0	31,500
- 20				10.6	. 450	33,808	38	2,933	30,079	320,000	32,000	12,042	1 1	110,000	124,000		37,423			31,300
			<del></del>									<b>-</b>				-				+
	-					<del> </del>														<del>                                     </del>
otal 3.	3.73				17,020	1,036,262	1,834	100,705	1,138,801		901,500	246,866	87,519				790,611	0	18,107	702,600
aily Average	_	2.8	2.7	.18.8	608	37,009	66	3,597	40,671	315,300				105,100	146,400	0				
lo. Average									40,671	-			3,100			-	28,200	0 2006\02-06bal.:	600	

#### Notes:

- 1. 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.
- 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.
- 5. Column II, Trace is less than 0.01 inches and is not included in total.
- 6. Columns III and IV, field measured at staff gauges.

- 7. Column V, PPS-B sensor reading plus 9 inches.
- 8. Columns VIII & IX, Section 7-8 leak detection pumped into Section 7 leachate sump riser.
- 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.
- 11. Column XXI includes 80% of the daily values from Columns XIV, XVIII, and XIX plus 5% of the daily values from column XVII.

Revised February 12, 2003

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

I	n	Ш	IV	V	VI	VII	VIII	ΙX	х	XI	XII	хш	XIV	xv	XVI	XVI	XVIII	XIX
		·							Leachate				Effluent	Leachate	Effluent			Effluent
	Reading	Section 7-8	Section 7	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	11.1	148,912	2,129,348	5,678,170	1,124,038	8,50	0	12,039	0	0.00	3.2	2.0	0.0	31,103	42,912	0	.0	0.0
2	8.2	148,979	2,132,411	5,678,170	1,165,763	8.67	0.	12,028	0	0.00	2.9	2.0	0.0	31,582	41,688	0	0	0.0
3	7.8	149,003	2,132,411	5,679,065	1,210,665	9.00	0	0	0	2.85	2.7	2.0	0.0	31,505	. 0	0	12,071	0.0
4	7.3	149,076	2,142,137	5,682,265	1,256,706	10.25	0	0	0	0.10	3.3	2.1	0.0	36,379	.0	0	0	0.0
5	10.9	149,126	2,154,541	5,683,340	1,295,549	-11,25	- 0	0	0	0.00	3.5	2.5	0.0	28,773	0	- 0	.0.	0.0
6	7.3	149,184	2,163,122	5,683,340	1,326,573	11.58	0	12,028	0	0.00	3.6	2.8	0.0	31,579	0	0	. 0	0.0
7	8.7	149,252	2,171,300	5,683,340	1,359,897	11.75	0	12,047	0	0.00	3.6	3.0	0.0	31,334	51,440	0	0	0.0
8	8.5	149,325	2,177,145	5,683,340	1,396,663	12.17	0	18,070	3,767 .	0.00	3.1	3.1	0.0	32,336	56,710	0	0	0.0
9	9.1	149,415	2,182,411	5,683,340	1,431,475	11.67	0	12,044	4,334	0.00	3.0	3.1	0.0	29,895	39,222	0	0	0.0
10	9.9	149,495	2,184,774	5,683,340	1,463,138	11.50	0	0	0	0.00	2.8	3.1	0.0	31,312	41,908	0	6,036	0.0
11	13.5	149,590	2,187,563	5,683,580	1,500,526	12.00	0	0	0	0.20	3.0	2.4	0.0	30,818	34,440	0	0	0.0
12	8.4	149,674	2,190,271	5,683,930	1,542,315	12.58	0	0	- 0	0.00	2.3	2.7	- : 0:0:	30.514	0.00	-0	. 0	0.0
13	6.6	149,757	2,192,953	5,683,930	1,576,536	12.58	0	18,079	0	0.00	2.8	3.0	0,0	31,368	30,236	0	0	0.0
14	9.5	149,842	2,195,874	5,683,965	1,607,601	12.33	0	6,028	10,591	0.00	2.8	3.0	0.0	30,996	43,328	0	0	0.0
15	7.5	149,920	2,198,823	5,684,250	1,639,014	12.00	0	24,100	3,102	0.00	2.8	3.0	0.0	27,980	32,854	0	0	0.0
16	8.6	149,996	2,201,595	5,684,810	1,674,507	11.50	0	18,064	9,097	0.00	2.3	3.0	0.0	63,956	0	0	0	0.0
17	9.4	150,047	2,204,320	5,685,465	1,713,506	11.08	0	18,039	10,903	0.00	2.9	3.0	0.0	30,643	47,982	0	0	0.0
18	8.4	150,118	2,204,320	5,686,020	1,751,688	10.50	0	0	8,994	0.00	2.4	3.0	0.0	29,866	30,590	0	0	0.0
19	7.2	-150,185	2,207,269	5,686,520	1,789,925	10.83	0.14	-0	0:	0.00	2.4	3.0	0.0,	31,571	0	0	0	0.0
20	12.5	150,249	2,209,963	5,686,520	1,825,512	11.17	0	12,042	9,585	0.00	3.0	3.0	0.0	32,845	31,936	0	0	0.0
21	6.9	150,312	. 2,212,706	5,687,510	1,853,921	10.67	0	18,066	5,864	0.00	2.9	3.0	0.0	30,252	46,950	0	0	0.0
22	24.9	150,374	2,212,706	5,688,860	1,853,921	9.00	0	0	8,942	0.00	2.6	2.9	0.0	32,088	48,670	0	0	0.0
23	10.6	150,433	2,215,354	5,690,810	1,923,532	10.08	0	12,043	8,998	0.00	2.3	2.9	0.0	27,381	44,186	0	0	0.0
24	13.5	150,491	2,218,701	5,693,350	1,969,545	10.17	0	12,043	3,342	0.15	2.4	2.7	0.0	27,282	40,852	0	0	0.0
25	10.3	150,551	2,218,701	5,693,650	2,007,126	10.33	0	0	.0	0.00	2.4	2.6	0.0	34,943	45,284	0	. 0	0.0
-26	8.1	150,616	2,221,586	5,694,700	2,053,433	10,83	0	0	0 -	0.43	2.1	2.5	0.0	28,758	0	0	0	0.0
27	10.1	150,665	2,227,100	5,694,760	2,087,480	11.25	0	18,064	. 0	0.00	2.8	2.5	0.0	31,709	0	0	0	0.0
28	9.8	150,723	2,230,053	5,695,190	2,121,348	11.33	0	12,042	0	0.00	3.1	2.5	0.0	32,633	39,423	0	0	0.0
				1							<u> </u>							
		ļ		1						ļ								
Totals		<u> </u>	]	<u> </u>	<u> </u>	<u> </u>	0	246,866	87,519	3.73		<u> </u>	0	901,401	790,611	0	18,107	0

#### Notes:

- 1. NR = No Records, NA = Not Available.
- 2. Values in bold are estimated; values in italic are substitute for missing data and are based on averaged values
- 3 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	0
Not Opened	0	0

projects\balance\2006\02-06bal.xls (Revised by ler 3/24/06)

- 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 L7	RF		Effluent Disposal		Inflo	w / Outflow For I	LTRF
		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 <sup>3</sup>
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	0.00	0	0	0	0	0	0	0	0	0	0	0	0
April	0.00	0	0	0	0	0	0	0	0	0	0	0	0
May	0.00	0	0	0	0	0	0	0	0	0	0	0	0
June	0.00	0	0	0	. 0	0	0	. 0	0	0	0	0	. 0
July	0.00	0	0	0	0	0	0	0	0	0	0	0	0
August	0.00	0	0	0	0	0	0	0	0	o	0	0	0
September	0.00	0	0	0	0	0	0	0	0	0	0	0	0
October	0.00	0	0	0	0	0	0	0	0	0	0	0	0
November	0.00	0	0	0	0	0	0	0	0	0	0	0	0
December	0.00	0	0	0	0	0	. 0	0-	0	0	0	0	0
YTD Total	4.32	0	158,629	2,210,410	427,471	87,519	2,231,700	72,591	0	1,859,669	2,369,039	2,746,690	-377,651

projects\balance\2006\2006-summary.xls (Revised by ler 3/24/06)

#### Note:

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

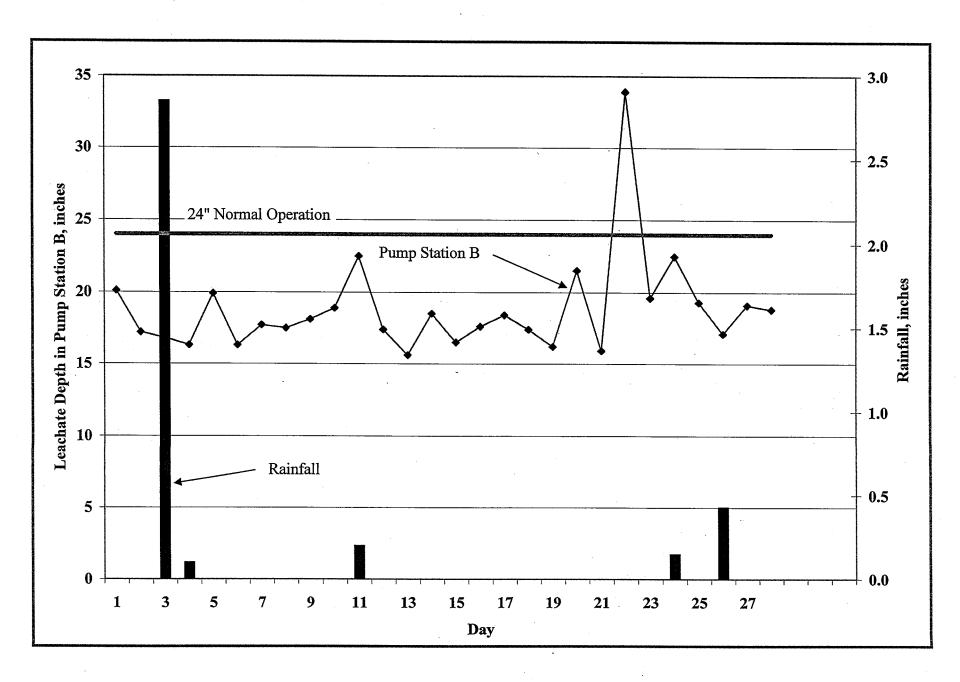


Figure 1. Leachate Levels in Pump Station B and Rainfall for February 2006.

# LEACHATE DEPTH/SUMMARY DATA FORM SOUTHEAST COUNTY LANDFILL

(Month/Year)

Febuary,2006

	TP	S-6				Secti	on 7		Leachate	Hauled	Leachate	
	Depth	Flowmeter	Depth <sup>1</sup> in Pond B	Pump <sup>2</sup> 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	11.1	38,952	0	23	8'6"	. 0	12,039	0	0.00
2	0.0	0	0.00	8.2	41,725	3,063	67	8'8"	0	12,028	0	0.00
3	0.0	895	0.00	7.8	44,902	0	24	9'1"	0	0	0	2.85
4	0.0	3,200	0.00	7.3	46,041	9,726	73	10'3"	0	. 0	. 0	0.10
5	0.0	1,075	0.00	10.9	38,843	12,404	50	11'3"	0	. 0	0	0.00
6	0.0	0	0.00	7.3	31,024	8,581	58	11'7"	0	12,028	0	0.00
7	0.0	0	0.00	8.7	33,324	8,178	68	11'9"	0	12,047	0	0.00
8	0.0	0	0.00	8.5	36,766	5,845	73	12'2"	0	18,070	3,767	0.00
9	0.0	0	0.00	9.1	34,812	5,266	90	11'8'	0	12,044	4,334	0.00
10	0.0	0	0.00	9.9	31,723	2,363	80	11'6"	0	0	o	0.00
11	0.0	240	0.00	13.5	37,388	2,789	95	12'0"	0	18,079	. 0	0.20
12	0.0	350	0.00	8.4	41,789	2,708	84	12'7"	. 0	6,028	0	0.00
13	0.0	0	0.00	6.6	34,221	2,682	83	12'7"	0	. 0	0	0.00
14	0.0	35	0.00	9.5	31,065	2,921	85	12'4"	0	0	10,591	0.00
15	0.0	285	0.00	7.5	31,413	2,981	78	12'0"	0	24,100	3,102	0.00
16	0.0	560	0.00	8.6	35,493	2,772	76	11'6"	0	18,064	9,097	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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*	*	*	•	4.	*	•
Prepared by:	Raymonder	Frence				

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

(Month/Year)

Febuary,2006

	TP	S-6				Secti	on 7		Leachate	Hauled	Leachate	
Dete	Depth	Flowmeter	Depth <sup>1</sup> in Pond B	Pump <sup>2</sup> 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	655	0.00	9.4	38,999	2,725	51	11'1"	0	18,039	10,903	0.00
18	0.0	555	0.00	8.4	38,182	0	71	10'6"	0	0	8,994	0.00
19	0.0	0	0.00	7.2	38,237	2,949	67	10'10"	. 0	0	0	0.00
20	0.0	0	0.00	12.5	35,587	2,694	64	11'2"	0	12,042	9,585	0.00
21	0.0	990	0.00	6.9	28,409	2,743	63	10'8"	0	18,066	5,864	0.00
22	0.0	1,350	0.00	24.9	0	0	62	9'0"	0	. 0	8,942	0.00
23	0.0	1,950	0.00	10.6	69,611	2,648	59	10'1"	0	12,043	8,998	0.00
24	0.0	2,540	0.00	13.5	46,013	3,347	58	10'2"	0	12,043	3,342	0.15
25	0.0	300	0.00	10.3	37,581	0	60	10'4"	0	0	0	0.00
26	0.0	1,050	0.00	8.1	46,307	2,885	65	10'10"	0	0	0	0.43
27	0.0	60	0.00	10.1	34,047	5,514	49	11'3"	0	18,064	. 0	0.00
28	0.0	430	0.00	9.8	33,868	2,953	58	11'4"	0	12,042	0	0.00
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								,				

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: Laymo	2 (Traves			

# EFFLUENT DEPTH/QUANTITIES DATA FORM SOUTHEAST COUNTY LANDFILL

Month/Year)
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Febuary,2006

	Depth in	Depth in	Pond B			•	Treated 1	Effluent				Effluent <sup>4</sup>
	Pond A <sup>1</sup>	Pond B <sup>2</sup>	Leak	Leachate	Spray	Evaporated	· Hau	leđ	Dust Control/	Effluent	Time at	Runoff to
			Detection <sup>3</sup>	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	3.20	2.00	0	31,103	42,912		0	0				N
2	2.90	2.00	0	31,582	41,688		0	0				N
3	2.70	2.00	0	31,505	0		0	12,071				
4	3.30	2.10	0	36,379	0		0	0				
5	3.50	2.50	0	28,773	0		0	0				
6	3.60	2.80	0	31,579	0		0	0				
7	3.60	3.00	o	31,334	51,440		0	0				N
. 8	3.10	3.10	0	32,336	56,710		0	. 0	•			N
9	3.00	3.10	0	29,895	39,222		0	0				N
10	2.80	3.10	0	31,312	41,908		0	6,036				N
11	3.00	2.40	0	30,818	34,440		0	0	,			N
12	2.30	2.70	0	30,514	0		0	0				
13	2.80	3.00	0	31,368	30,236		0	0				N
14	2.80	3.00	0	30,996	43,328		0	0				N
15	2.80	3.00	0	27,980	32,854		0	0				N
16	2.30	3.00	0	63,956	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:	(4) If yes, contac	t Supervisor minie	matery. Complete Evaluation Re-	port Porm.			
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# EFFLUENT DEPTH/QUANTITIES DATA FORM SOUTHEAST COUNTY LANDFILL

(Month/Year)

Febuary,2006

	Depth in	Depth in	Pond B				Treated Eff	luent				Effluent <sup>4</sup>
	Pond A <sup>1</sup>	Pond B <sup>2</sup>	Leak	Leachate	Spray	Evaporated	Hau	led	Dust Control/	Effluent	Time at	Runoff to
			Detection <sup>3</sup>	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	2.90	3.00	0	30,643	47,982		0	0				N
18	2.40	3.00	0	29,866	30,590		0	0				N
19	2.40	3.00	0	31,571	0		0	0				
20	3.00	3.00	0	32,845	31,936		0	0				N
21	2.90	3.00	0	30,252	46,950		0	0				N
22	2.60	2.90	0	32,088	48,670		0	0				N
23	2.30	2.90	0	27,381	44,186		. 0	0				N
24	2.40	2.70	0	27,282	40,852		0	0				N
25	2.40	2.60	0	34,943	45,284		0	0				N
26	2.10	2.50	0	28,758	0		0	. 0				
27	2.80	2.50	0	31,709	0		0	0				
28	3.10	2.50	0	32,633	39,423		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:		· ·	-		
				 <u></u>	
	•	***		 	
Prepared by:	Raymondes	Juno			



**BOARD OF COUNTY COMMISSIONERS** 

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Office of the County Administrator Patricia G. Bean Deputy County Administrator Wally Hill

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Bernardo Garcia
Carl S. Harness
Manus J. O' Donnell

April 13, 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

Dept. of Environmental Protection

APR 14 2006

Southwest District

RE: Southeast County Landfill -March 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 March 2006. In addition, the SWMD is providing the March 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 March 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 March 2006 was 18.4 inches.

Ms. Susan J. Pelz April 13, 2006 Page Two

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

Sincerely,

James V. Berry Patricia V. Berry

Landfill Services Section Manager Solid Waste Management Department

Attachments

glfs/lea0406.dep



**BOARDOFCOUNTY COMMISSIONERS** Kathy Castor Pat Frank Ken Hagan

Jim Norman Jan K. Platt Thomas Scott Ronda Storms

Office of the County Administrator Patricia G. Bean

Deputy County Administrator WallyHill

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

#### MEMORANDUM

DATE:

April 13, 2006

TO:

Patricia Berry, Section Manager, Solid Waste Management Department

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

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

**SUBJECT:** 

Leachate Water Balance Report Forms for March 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 Section 7 of the Capacity Expansion for March 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 0.10 inches of rainfall at the Southeast County Landfill (SCLF).

MEMORANDUM April 13, 2006 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 2.8 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. The average depth of leachate in the PS-B sump was 18.4 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 695 gallons. A total of 21,550 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 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 36,977 gallons. A total of 1,146,298 gallons of leachate was pumped to the storage tank this month.

MEMORANDUM April 13, 2006 Page 3 of 5

## 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 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 1,427 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). This month 58,666 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 1,204,964 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 340,400 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 1,034,200 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 235,508 gallons of leachate was hauled off site.

MEMORANDUM April 13, 2006 Page 4 of 5

# 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 160,066 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 100,600 gallons of effluent was stored in Pond A.

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

Column XVI presents the daily amount of effluent, in gallons, stored in Pond B. The daily amount stored in the pond is calculated by using the daily depth of effluent in Pond B (Column IV). The volume of the pond at varying depths is estimated using AutoCAD software and calculations based on the conic method for reservoir volumes. Under normal operating conditions, the daily amount of effluent stored in the pond will vary depending upon the daily amount of effluent removed from the pond by the evaporation system, hauled from the pond, used for dust control or evaporated. This month a daily average of 76,800 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 985,357 gallons of effluent was used as spray irrigation.

MEMORANDUM April 13, 2006 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 916,400 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 1,204,964 gallons. Total outflow quantity from the LTRF (hauled and evaporated) was 1,429,774 gallons. The change in storage for the month of March decreased by 224,810 gallons.

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

#### TABLE 1. LEACHATE WATER BALANCE REPORT FORM MARCH 2006

#### SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA

I	п	ш	IV	v	VI	VII	VIII	ix	x	XI	XII	XIII	xıv	χV	xvi	XVII	XVIII	XIX	xx ·	XXI
	- 1	Depth	Depth	Estimated	Leachate	Leachate	Leachate	Leachate	Total	Leachate	Leachate					Effluent		1227	72.	T 755
	- 1	in	in	Depth	Pumped	Pumped	Pumped from	Pumped	Leachate	in	Treated	Total	Leachate	Pond	Pond	Sprayed	Effluent	Effluent	Total	
		Pond	Pond	at	to PS-B	to MLPS	Section 7-8	to MLPS	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.	from Section 7	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.)	(gal.)	(gal.)	(gal.)
1 2	0.00	2.9	2.5	17.2	680	38,947	58	3,002	41,949	322,000	32,600	0	2,963	103,000	124,000	Ö	45,622	0	0	38,900
3	0.00	3.1	2,3	18,4	760	39,567	60	2,897	42,464	331,000	31,600	. 0	9,024	113,000	106,000	0	36,816	0	0	36,700
4	0.00	3.3	2.0		1,045	41,205	. 30	2,332	43,537	343,000	39,800	6,067	9,005	123,000	80,000	0	42,285	. 0	0	41,000
-5	0.00	3.2 3.1	2,0	19.6	1,045	40,145	59		42,434	345,000	33,000	0	10,479	118,000	80,000	0	30,508	0	0	32,800
6	0.00			21.7	450	33,326	23	0	33,326	341,000	30,300	0		113,000	80,000	0	0	-0	- 0	
. 7	0.00	3.5	2.0	18.8		33,961	52		37,005	350,000	31,700	0	9,033	140,000	80,000	0	58,626	0	0	54,100
8	0.00	2.9 3.0	2,0	16.0 21.6	1,270	39,814	56	2,676	42,490	355,000	31,400	.0	11,426	103,000	80,000	0	27,446	0	0	31,100
9	0.00	2,9	2.0	16.4	770	36,160	56		38,439	355,000	36,900	6,027	0	108,000	80,000	0		0	0	25,000
10	0.00	2.8	2.0	16.4	980	37,491	49		37,491	355,000	25,100	12,055	8,994	103,000	80,000	.0	31,134	0	0	
11	0.00	2.6	2.0	17.4	1,120 770	41,111	54	3,009	44,120	360,000	29,800	6,021	10,543	98,000	80,000	. 0		0	0	33,100
12	0,00	2.0	-2.0	20.2		37,424	15		37,424	343,000	30,100	18,070	7,147	88,000	80,000	0	39,396	0	0	37,200
13	0.00	2.9	2.0	20.2	515	33,320	76		36,375	336,000	32,000	- 0	-0	74,000	80,000	200000000000000000000000000000000000000		10	0	0 2 2 2 2
14	0.00	2.8	2.0			36,365	57		36,365	348,000	31,600	12,122	0	103,000	80,000	0		0	. 0	,
15	0.00	2,1	2.0	13.3	1,115	40,169		0	40,169	345,000	30,900	12,050	0	98,000	80,000	0	**,===	0	0	70,200
16	0.00	2.2	2.0		240	35,401 35,460	98	0	35,401	348,000	27,000	18,154	8,998	65,000	80,000	0		0	0	
17	0.00	1.8	2.0	18.3	905	36,851	98	0	35,460	333,000	31,900	6,023	11,693	70,000	80,000	0	47,661	0	0	**,500
18	0.00	1,6	1.9		855	38,482	53	6,833	43,684	326,000	29,700	12,045	8,996	52,000	80,000	0	38,608	0	0	
19	0.00	2.2	1.9.		940	36,894	54	2,894	38,482 39,788	326,000 341,000	30,700	0	0	44,000	72,000	0	-	0	0	
20	0,00	2,9	1.9		0	41,848	17		41,848	353,000	33,000	6000	0	70,000	72,000	0	0	0		0
21	0.00	3.4	1.9		2,760	41,929	54	6,023	47,952	365,000	34,800 33,700	6,027	10.500	103,000	72,000	0		0	0	` <u> </u>
22	0.00	3.1	1.9		620	40,351	50	2,892	43,243	355,000	38,500	12,054 18,073	10,522	129,000	72,000	0	46,586	0	0	10,100
23	0.10	2.9	1.9		110	35,676	14	2,052	35,676	355,000	32,300	12,051	7,119 3,546	113,000	72,000	0		0	0	10,200
24	0.00	3.0	1.9		720	37,957	65	2,833	40,790	343,000	30,100	18,062	3,098	108,000	72,000 72,000	0	20,112	0	0	
25	0.00	2.7	1.8		535	36,169	50		40,048	343,000	28,500	18,062	3,098	93,000	64,000	0		0	0	30,100
26	0.00	2.5	1.8	18.6	- 335	32,607	12		32,607	345,000	33,200		0	83,000		- 0 - 3 - 0			0	25,500
27	0.00	3.1	1.8	19.7	10	32,071	46	2,890	34,961	353,000	33,500	6,026	2,537	113,000	64,000	0	************	0	0	*************
28	0.00	3.3	1.8	18.7	530	31,361	40	2,556	33,917	336,000	38,700	12,050	3,507	123,000	64,000		44,516	0	0	- 1,500
29	0.00	3.2	1.8	17.5	320	32,844	49	-	35,800	331,000	40,800	12,045	10,895	118,000	64,000	0	55,567	0	. 0	<del></del>
30	0.00	3.0	1.8	18.5	750	36,438	· 16	0	36,438	302,000	42,900	18,452	10,541	108,000	64,000			0	- 0	<del> </del>
31	0,00	3.5	1.8	18.9	460	34,954	51	327	35,281	269,000	48,100	12,034	10,571	140,000	64,000	0	58,601	0	0	46,900
											,200	,55 (		,	54,000		50,001			40,900
Total	0.10				21,550	1,146,298	1,427	58,666	1,204,964		1,034,200	235,508	160,066				985,357	0	0	916,400
Daily Average		2.8	2.0	18.4	695	36,977	46	1,892	38,870	340,400				100,600	76,800	0	, ,,,,,,,,,,			710,400
Mo. Average													5,200	,	,		31,800	0	<u> </u>	29,560
Notes;									·				· · · · · · · · · · · · · · · · · · ·			pro		2006\03-06bal.>	ls (Revised b	

#### 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.

- 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.
- 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 MARCH 2006

#### SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA

		Ш	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVI	XVIII	XIX
1									Leachate				Effluent	Leachate	Effluent			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	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	8.2	150,781	2,233,055	5,695,870	2,160,295	11.17	0	0	2,963	0.00	2.9	2.5	0	32,633	45,622	0	0	0
2	9.4	150,841	2,235,952	5,696,630	2,199,862	11.50	0	0	9,024	0.00	3.1	2.3	0	31,625	36,816	0	0	0
3	10.7	150,871	2,238,284	5,697,675	2,241,067	11.92	0	6,067	9,005	0.00	3.3	2.0	0	39,848	42,285	0	0	0
4	10.6	150,930	2,240,573	5,698,720	2,281,212	12.00	0	0	10,479	0.00	3.2	2.0	0	32,995	30,508	0	0	0
5	12.7	150,953	2,240,573	5,699,170	2,314,538	11.83	0	0,	. 0	0.00	3.1	2.0	0	30,271	0	- 0	0	0
6	9,8	151,005	2,243,617	5,699,170	2,348,499	12.17	0	0	9,033	0.00	3.5	2.0	0	31,666	58,626	0	0	0
7	7.0	151,061	2,246,293	5,700,440	2,388,313	12.33	0	0	11,426	0.00	2.9	2.0	0	31,431	27,446	0	0	0
8	12.6	151,117	2,248,572	5,701,210	2,424,473	12.33	0	6,027	0	0.00	3.0	2.0	0	36,879	31,233	0	0	0
9	7.4	151,166	2,248,572	5,702,190	2,461,964	12.33	0	12,055	8,994	0.00	2.9	2.0	0	25,115	31,134	0	0	0
10	8.4	151,220	2,251,581	5,703,310	2,503,075	12.50	0	6,021	10,543	0.00	2.8	2.0	0	29,827	38,356	0	0	0
11	10.7	151,235	2,251,581	5,704,080	2,540,499	11.92	0	18,070	7,147	0.00	2.6	2.0	0	30,070	39,396	0	0	0
12	11.2	151,311	2,254,636	5,704,595	2,573,819	11.67	40-	0	0	0.00	2.3	2.0	0	32,042	0 -	0	0	0
13	12,8	151,368	2,254,636	5,704,595	2,610,184	12.08	0	12,122	0	0.00	2.9	2.0	0	31,563	31,648	0	0	0
14	7.3	151,376	2,254,636	5,705,710	2,650,353	12.00	0	12,050	0	0.00	2.8	2.0	0	30,855	60,231	0	0	0
15	4.3	151,474	2,254,636	5,706,650	2,685,754	12,08	0	18,154	8,998	0.00	2.1	2.0	0	27,005	23,480	0	0	0
16	10.1	151,481	2,254,636	5,706,890	2,721,214	11.58	0	6,023	11,693	0.00	2.2	2.0	0	31,882	47,661	0	0	0
17	9.3	151,579	2,261,469	5,707,795	2,758,065	11.33	0	12,045	8,996	0.00	1.8	2.0	0	29,691	38,608	0	0	0
18	8.6	151,632	2,261,469	5,708,650	2,796,547	11.33	0	0	0	0.00	1.6	1.9	0	30,731	0	0	0	0
:19	11.9	151,686	- 2,264,363	5,709,590	2,833,441	11.83	-0	0	0-	~"0.00	2.2	1.9	0	33,047	2 0	- 0	0_	0
20	7.6	151,703	2,264,363	5,709,590	2,875,289	12.25	0	6,027	0	0.00	2.9	1.9	0	34,830	0	0	0	0
21	10.8	151,757	2,270,386	5,712,350	2,917,218	12.67	0	12,054	10,522	0.00	3.4	1.9	0	33,666	46,586	0	0	0
22	7.2	151,807	2,273,278	5,712,970	2,957,569	12,33	0	18,073	7,119	0.00	3.1	1.9	0	38,530	43,131	0	0	0
23	10.4	151,821	2,273,278	5,713,080	2,993,245	12.33	0	12,051	3,546	0.10	2.9	1.9	0	32,342	28,779	0	0	0
24	7.3	151,886	2,276,111	5,713,800	3,031,202	11.92	0	18,062	3,098	0.00	3.0	1.9	0	30,076	42,031	0	0	0
25	8.5	151,936	2,279,990	5,714,335	3,067,371	11.92	0	0	0	0.00	2.7	1.8	0 -	28,538	36,815	0	0	0
26	9.6	151,948	2,279,990	5,714,670	3,099,978	12.00	0	:0	-0	0.00	2.5	-1.8	0	33,195	0	0"	0	. 0
27	10.7	151,994	2,282,880	5,714,680	3,132,049	12.3	0	6,026	2,537	0.00	3.1	1.8	0	33,489	28,520	0	0	0
28	9.7	152,034	2,285,436	5,715,210	3,163,410	11.67	0	12,050	3,507	0.00	3.3	1.8	0	38,686	44,516	0	0	0
29	8.5	152,083	2,288,392	5,715,530	3,196,254	11.50	0	12,045	10,895	0.00	3.2	1.8	0	40,790	55,567	0	0	0
30	9.5	152,099	2,288,392	5,716,280	3,232,692	10.50	0	18,452	10,541	0.00	3.0	1.8	0	42,898	17,761	0	0	0
31	9.9	152,150	2,288,719	5,716,740	3,267,646	9.33	0	12,034	0	0.00	3.5	1.8	0	48,088	58,601	0	0	0
Totals				<u> </u>			00	235,508	160,066	0.10			0	1,034,304	985,357	0	0	0

#### Notes:

- 1. NR = No Records, NA = Not Available.
- 2. Values in bold are estimated; values in italic are substitute for missing data and are based on averaged values
- 3 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	0
Not Opened	0	0

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

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

		Le	achate Arriving at L	TRF	Lea	chate Leaving LT	RF	. 1	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 <sup>3</sup>
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		1,069,058			-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		-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		-224,810
April	0.00	0	0	0	0	0	0	0	0	0	0	0	0
May	0.00	0	0	0	0	0	0	0	0	0	0	0	
June	0.00	0	0	0	0	0	0	0	0	0	0	0	
July	0.00	0	0	0	0	0	0	0	0	0	0	0	
August	0.00	0	0	0	0	0	0	0	0		0	0	
September	0.00	0	0	0	0	0	0	0	0	0	0	0	
October	0.00	0	0	0	0	0	0	0	0	0	0	0	
November	0.00	0	0	0	0	0	0	0	0		0	0	
December	0.00	0	0	0	0	0	0	0	. 0		0	0	
									V			- 0	
YTD Total	4.42	0	217,295	3,356,708	662,979	247,585	3,265,900	72,591	0	2,845,026	3,574,003	4,176,464	-602,461
Note:									· · · · · · · · · · · · · · · · · · ·	ا <u>دو کا د</u>		6-summary.xls (Rev	

#### 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.

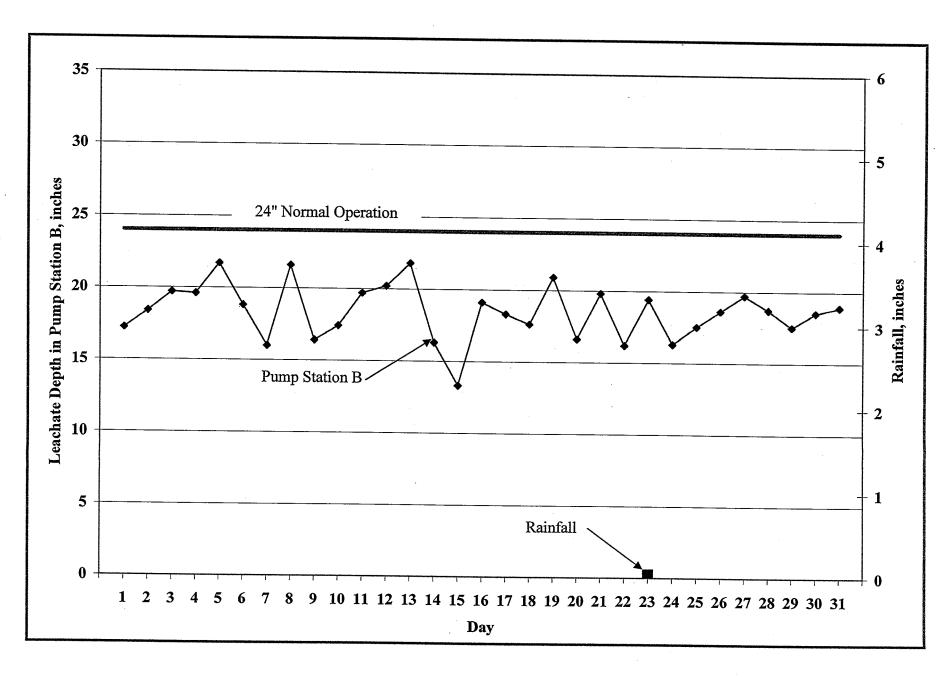


Figure 1. Leachate Levels in Pump Station B and Rainfall for March 2006.

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

(Month/Year)

March,2006

	TP	S-6				Sect	ion 7		Leachate	TTouls J	<del></del>	
Date	Depth (inches)	Flowmeter (gallons)	Depth <sup>1</sup> in Pond B (feet)	Pump <sup>2</sup> Station B	PS-A Flow Meter	Flowmeter	Leak Detection	Depth in 575k Tank	Contractor	Hauled County	Leachate Dust Control/ Evap.	Rainfall
1				(inches)	(gallons)	(gallons)	(gallons)	(feet)	(gallons)	(gallons)	(gallons)	(inches)
1	. 0.0				38,947		58	11'2"	0	6,067	2,963	0.00
2	0.0	760	0.00	9.4	39,567	2,897	60	11'6"	0	0	9,024	0.00
3	0.0	1,045	0.00	10.7	41,205	2,332	30	11'11"	0	0	9,005	0.00
4	0.0	1,055	0.00	10.6	40,145	2,289	59	12'0"	0	0		0.00
5	0.0	450	0.00	12.7	33,326	0	23	11'10"	0	0		
6	0.0	0	0.00	9.8	33,961	3,044	52	12'2"	0	0	<del>-</del>	0.00
7	0.0	1,270	0.00	7.0		2,676	56	12'4"			7,000	0.00
8	0.0	770	0.00	12.6	36,160		56	12'4"	0	0	11,426	0.00
9	0.0	980	0.00	7.4	37,491	0			0	6,027	0	0.00
10	0.0	1,120	0.00	8.4	41,111		49	12'4"	0	12,055	8,993	0.00
11	0.0	770	0.00	10.7		3,009	54	12'6"	0	6,021	10,543	0.00
12	0.0	515			37,424	0	15	11'11"	0	18,070	7,147	0.00
13	0.0		0.00	11.2	33,320	3,055	24	11'8"	0	0	0	0.00
		0	0.00	12.8	36,365	0	57	12'1"	0	12,122	0	0.00
14	0.0	1,115	0.00	7.3	40,169	0	8	12'0"	0	12,050	0	0.00
15	0.0	940	0.00	4.3	35,401	0	98	12'1"	0	18,154	8,998	0.00
16	0.0	240	0.00	10.1	35,460	0	7	11'7"	0	6,023	11,693	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: Karmanl C Succes	· · · · · · · · · · · · · · · · · · ·			

# LEACHATE DEPTH/SUMMARY DATA FORM SOUTHEAST COUNTY LANDFILL

(Month/Year) March,2006

	TPS											
			Depth <sup>1</sup> in	D 2	DO A	Sect	ion 7		Leachate	Hauled	Leachate	
	Depth (inches)	Flowmeter (gallons)	Pond B (feet)	Pump <sup>2</sup> Station B (inches)	PS-A Flow Meter (gallons)	110 111110101	Leak Detection	Depth in 575k Tank	Contractor	County	Dust Control/ Evap.	Rainfall
17	0.0	905	0.00			(gallons)	(gallons)	(feet)	(gallons)	(gallons)	(gallons)	(inches)
18	0.0	855	0.00	8.6	36,851	6,833	98	11'4"	0	12,045	8,996	0.00
19	0.0	940	0.00		38,482		53	11'4"	0	0	0	0.00
20	0.0	0		11.9		2,894	54	11'10"	0	0	0	0.00
21	0.0	2,760	0.00	7.6	- /	0	17	12'3"	0	6,027	0	0.00
22	0.0		0.00	10.8	41,929	6,023	54	12'8"	0	12,054	10,522	0.00
23	0.0	620	0.00	7.2	40,351	2,892	50	12'4"	0	18,073	7,119	0.00
24		110	0.00	10.4	35,676	0	14	12'4"	0	12,051	3,546	
25	0.0	720	0.00	7.3	37,957	2,833	65	11'11"	0	18,062	3,098	0.10
26	0.0	535	0.00	8.5	36,169	3,879	50	11'11"	0	0	0,098	0.00
27	0.0	335	0.00	9.6	32,607	0	12	12'0"	0	0	0	0.00
	0.0	10	0.00	10.7	32,071	2,882	46	12'3"	0	6,026	2.525	0.00
28	0.0	530	0.00	9.7	31,361	2,556	40	11'8"	0		2,537	0.00
29	0.0	320	0.00	8.5	32,844	2,956	49	11'6"	0	12,050	3,507	0.00
30	0.0	750	0.00	9.5	36,438	0	16	10'6"		12,045	10,895	0.00
31	0.0	460	0.00	9.9	34,954	327	51	9'4"	0	18,452	10,541	0.00
								74	0	12,034	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:	
1."	
- Varan V	
Prepared by: Repared by:	

# EFFLUENT DEPTH/QUANTITIES DATA FORM SOUTHEAST COUNTY LANDFILL

(Month/Year)	March,2006
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	Depth in	Depth in	Pond B			Treated Effluent						
ļ	Pond A <sup>1</sup>	Pond B <sup>2</sup>	Leak	Leachate	Spray	Evaporated		Hauled		Effluent	Time at	Effluent <sup>4</sup> Runoff to
Date	(Fa.4)	(6t)	Detection <sup>3</sup>	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	2.90	2.50	0	32,633	45,622		0	0				N
2	3.10	2.30	0	31,625	36,816		0	0				N
3	3.30	2.00	0	39,848	42,285		0	0		······		N
4	3.20	2.00	0	32,995	30,508		0	0				N
5	3.10	2.00	0	30,271	0		0	0			<del> </del>	14
6	3.50	2.00	0	31,666	58,626		. 0	0			<u> </u>	N
7	2.90	2.00	0	31,431	27,446		0	0				N
8	3.00	2.00	0	36,879	31,233		0	0				N
9	2.90	2.00	0	25,115	31,734		0	0			<del> </del>	N
10	2.80	2.00	0	29,827	38,356		0	0			ļ	N
11	2.60	2.00	0	30,070			0	0				N
12	2.30	2.00	0	32,042	0		0	0				IN IN
13	2.90	2.00	0	31,563	31,648		0	0				N
14	2.80	2.00	0		60,231		0	0				N
15	2.10	2.00	0		23,480		0	0				N
16	2.20	2.00	0		47,661		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.

	( ) , , , , ,	complete available at report 1 offi.				
Comments:			 			
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•	<del></del>		 	 *		
Prepared by:	: Kaypord C Show					

# EFFLUENT DEPTH/QUANTITIES DATA FORM SOUTHEAST COUNTY LANDFILL

	Depth in	Depth in	1		Treated Effluent							Effluent <sup>4</sup>
	Pond A <sup>1</sup>	Pond B <sup>2</sup>	Leak	Leachate	Spray	Evaporated	Haul	ed	Dust Control/	Effluent	Time at	Runoff to
Date	(feet)	(feet)	Detection <sup>3</sup> (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	1.80	2.00	0	29,691	38,608		0	0	(8)	(84110110)		1 1 1 1
18	1.60	1.90	0	30,731	0		0	0				<u> </u>
19	2.20	1.90	0	33,047	0		0	0				<del>                                     </del>
20	2.90	1.90	0	34,830	0		0	<u></u>				
21	3.40	1.90	0	33,666	46,586		0	0				
22	3.10	1.90	0	38,530	43,131		0	0				1
23	2.90	1.90	0	32,342	28,779		- 0	0	***	-	<del> </del>	1
24	3.00	1.90	0	30,076	42,031		0	0				1
25	2.70	1.80	0	28,538	36,815		0	0				N
26	2.50	1.80	0	33,195	0		0	0				N
27	3.10	1.80	0	33,489	28,520		ő	0				
28	3.30	1.80	0	38,686	44,516		0	0				N
29	3.20	1.80	0	40,790	55,567		o	. 0		· · · · ·		N
30	3.00			42,898	17,761		0	0				N
31	3.50			48,088	58,601		0	0				N 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:	(1) 11 yes, contact supervisor infinitellately. Complete Evaluation Report Form.									
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								· .		
Prepared by:	Raymont	1 Flewer	·		_					