APR 1 9 2011

CHIEF ADMINISTI ATTICE OFFICER
Helene Marks

CHIEF FINANCIAL ADMINISTRATOR Bonnie M. Wise

DEPUTY COUNTY ADMINISTRATORS Lucia E. Garsys Sharon D. Subadan



Office of the County Administrator Michael S. Merrill

April 13, 2011

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

RE: Southeast County Landfill - March 2011 Leachate Data

Dear Ms. Pelz:

BOARD OF COUNTY COMMISSIONERS

Kevin Beckner

Victor D. Crist Ken Hagan

Al Higginbotham

Mark Sharpe

Lesley "Les" Miller, Jr. Sandra L. Murman

In accordance with the Hillsborough County Solid Waste Management Group (SWMG) Leachate Management Plan (LMP) for the Southeast County Landfill (Landfill), the SWMG is providing the Landfill's Water Balance Report for the month of March 2011. In addition, the SWMG is providing the March 2011 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 (FDEP) 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. 35435-014-SO, Specific Condition No. 8.

As initiated with the April 1996 report, the Landfill leachate information for March 2011 includes an evaluation by SWMG 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 March 9 and 12 due to pump malfunctions. The average depth of leachate in the PS-B sump for the recorded days in March 2011 was 22.3 inches.

Ms. Susan J. Pelz April 13, 2011 Page Two

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

Sincerely

Patricia V. Berry

Section Manager

Solid Waste Management Group Public Utilities Department

Attachments

glfs/lea0311.dep



BOARD OF COUNTY COMMISSIONERS
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Office of the County Administrator
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ADMINISTRATORS
Lucia E. Garsys
Eric R. Johnson
Edith M. Stewart
J. Eugene Gray, Acting
Sharon D. Subadan, Interim
Mark J. Thornton, Interim

MEMORANDUM

DATE:

April 11, 2011

TO:

Patricia Berry, Section Manager, Solid Waste Management Group

FROM:

Larry Ruiz, General Manager III, Solid Waste Management Group Raymond Graves, Sr. Eng. Tech., Solid Waste Management Group

SUBJECT:

Leachate Water Balance Report Forms for March

Southeast County Landfill, Hillsborough County, Florida

The Solid Waste Management Group (SWMG) staff has compiled and reviewed the leachate management operational data from the Southeast County Landfill Phases I-VI, Sections 7-8, and Section 9. Attached are the Leachate Water Balance Report Form (Table 1), the Leachate Field Data Entry Form (Table 2), and the 2011 Summary (Table 3). Also, attached find Figure 1 showing leachate levels in Pump Station B sump of Phases I-VI 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 7.7 inches of rainfall at the Southeast County Landfill (SCLF).

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Depth in Pond A (Column III)

Column III presents the daily depth, in feet, of effluent stored in 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 daily average depth of effluent/stormwater stored in Pond A was 1.4 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 effluent/leachate was not stored in Pond B.

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. This month PS-B was below the normal operation level of 24-inches except for March 9 and 12 due to pump malfunctions. The average recorded depth of leachate in the PS-B sump was 22.3 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 14,625 gallons. A total of 453,390 gallons of leachate was pumped this month.

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

Column VII presents the daily amount of leachate, in gallons, collected from PS-A and pumped through the MLPS to the 575,000-gallon storage tank at the Leachate Treatment and Reclamation Facility (LTRF) for treatment or disposal. The quantity in column VII also includes the daily amount of leachate, in gallons, pumped from TPS-6. The average daily amount of leachate pumped from PS-A was 22,078 gallons. A total of 684,412 gallons of leachate was pumped this month.

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Leachate Pumped from Sections 7-8 LDS (Column VIII)

Column VIII presents the quantity of leachate removed from the leak detection system (LDS) of Sections 7-8. The quantity is measured by a flow meter before being pumped for removal with Sections 7-8 leachate. The removal rate did not exceed 1,930 gallons per day. This month a total of 328 gallons of leachate was removed from the leak detection system of Sections 7-8.

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

Column IX presents the quantity of leachate collected at Sections 7-8 and pumped to the MLPS. The quantity is measured by a flow meter and includes any leachate removed from the leak detection system of Sections 7-8 (Column VIII). This month a total of 20,672 gallons of leachate was pumped from Sections 7-8.

Leachate Pumped to LTRF from the MLPS (Column X)

Column X presents the total quantity of leachate pumped to the LTRF from Phases I-VI and Sections 7-8. This month a total of 705,084 gallons of leachate were pumped to the LTRF.

Leachate Pumped to LTRF from Section 9 (Column XI)

Column XI presents the daily amount of leachate, in gallons, collected from Section 9 and pumped to the 575,000-gallon storage tank at the Leachate Treatment and Reclamation Facility (LTRF) for treatment or disposal. A total of 20,717 gallons of leachate was pumped this month.

Leachate Pumped from Section 9 LDS (Column XII)

Column XII presents the daily amount of leachate, in gallons, collected from the LDS of Section 9 and pumped to the 575,000-gallon storage tank at the LTRF for treatment or disposal. The removal rate did not exceed 4,651 gallons per day. This month a total of 2,945 gallons of leachate were removed from the leak detection system.

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

Column XIII 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. This month leachate was not stored in the tank. On February 9th the tank was emptied in preparation for inspection.

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Effluent in 575,000-Gallon Tank (Column XIV)

Column XIV presents the daily amount of effluent, in gallons, stored in the 575,000-gallon effluent holding tank at the LTRF. The amount of effluent stored in the tank is calculated based on the circumference of the tank and the daily level reading. The treatment plant is down due to tankage inspection. As such, on December 1, 2010, the SWMG began storing leachate in this tank until the inspection of the leachate tank is completed. This month an average of 313,000 gallons of *leachate* was stored in the tank.

Leachate Treated at LTRF (Column XV)

Column XV presents the daily amount of leachate, in gallons, treated at the LTRF. The plant was shutdown on December 22, 2010 in preparation for tankage inspection. This month leachate was not treated at the plant.

Total Leachate Hauled (Column XVI)

Column XVI presents the daily amount of leachate, in gallons, hauled off site. This month a total of 755,806 gallons of leachate was hauled off site.

Leachate Dust Control Sprayed (Column XVII)

Column XVII presents the daily amount of leachate, in gallons, measured from the flow meter at the bypass-loading arm at the leachate storage tank. The leachate is used for dust control in the active area of the landfill. This month 12,009 gallons of leachate were used for dust control.

Pond A Storage (Column XVIII)

Column XVIII 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 38,200 gallons of effluent/stormwater were stored in Pond A.

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Pond B Storage (Column XIX)

Column XIX 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). Under normal operating conditions, the amount stored in the pond will vary depending upon the daily amount of effluent removed from the pond by the evaporation system, hauled from the pond, used for dust control or evaporated. This month effluent/leachate was not stored in Pond B.

Effluent Sprayed at Pond B (Column XX)

Column XX 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 and it is included in Column XXIV. This month effluent was not sprayed in Pond B.

Effluent Irrigation (Column XXI)

Column XXI 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 27,337 gallons of effluent/stormwater was used for spray irrigation.

Effluent Dust Control Sprayed (Column XXII)

Column XXII 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 XXIII)

Column XXIII 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 XXIV)

Column XXIV presents the daily amount of leachate and effluent, in gallons, that evaporates and therefore will not be returned to the SCLF and/or requires treatment. Evaporation rates of 80 percent and 5 percent evaporation rate for spray in Pond B are assumed. The total evaporation estimated for this month was 31,500 gallons.

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TABLE 2

Table 2 presents data assembled from daily logs compiled by the SWMG 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 728,746 gallons. Total outflow quantity from the LTRF was 767,815 gallons. The change in storage for the month decreased by 39,069 gallons.

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

TABLE 1. LEACHATE WATER BALANCE REPORT FORM MARCH 2011 SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA

1	11	m	(V	V	VI	VII	VIII	IX	X	XI	XII	XIII	XIV	XV	XVI	XVII	XVIII	XIX	XX	XXI	XXII	XXIII	XXIV
		Depth	Depth	Estimated	50000000	Leschate	Leachate	Leschste	Leschate	Leschste	Leachate	Leachate.	Effluent	Leachate				1000000	Effluent				
		im	m	Depth	Pumped	Pumped	Pumped from	Pumped	Pumped	Pumped	Pumped from	an	in	Treated	Total	Leachate	Pond	Pond	Sprayed	Effluent	Effluent	Total	1
- 1		Pond	Pend	af	to PS-B	to MLPS	Sections 7-8	to MLPS from	to LTRF from	to LTRF from	Section 9	575K	575K	at	Leachate	Dust Centrol	Α	В	Pond	Irrigation	Dust Control	Effluent	Tot
1	Rainfall	Λ	В	PS-B		from Phases I-VI	LDS	Sections 7-8	MPLS	Section 9	LDS	Tank	Tunk	LTRF	Hauled	(Sprayed)	Storage	Storage	В		(Sprayed)	Hauled	Evapor
Day	(in)	(ft.)	(ft.)	(m)	(gal)	(gal)	(gal.)	(gal.)	(gal)	(gal)	(gal)	(gal)	(gal.)	(gal)	(gal)	(gal)	(gal)	(gal)	(gal)	(gal)	(gal)	(gal.)	(ga
1	0.00	1.6			-	-	7	687		0	0	0	353,000	(12,010	0	44,000	.0	0	- (0		.0
2	0.00	1.8		18.4	15,090	25,018	- 8	975	25,993	0	0	0	358,000	0	30,942	. 0	52,000	0	0	0	0		0
3	0.00	1.8		-	13,830	17,758	8	0	17,758	- 0	0	0	350,000	0	36,910	. 0	52,000	- 0	0	27,337	0		0 2
4	0.00	1.3	0.0	21.4	14,520	-		0	20,942	2,948	2	- 0	329,000	0	36,966	0	36,000	0	0	- 0	0		0
5	0.13	1.3	0.0	22.5	16,890	22,322	. 7	0	22,322	804	2	- 0	307,000		32,796	- 0	36,000	0	0	0	- 0		D
6	0.00	1.3	0.0	22.3	17,055	25,183	7	0	25,183	278	1	0	318,000	0		- 0	36,000	0	0	U	0		a a
7	0.00	1.3	0.0	22.1	17,055	25,185	7	0	25,185	278	- 1	0	329,000		30,517	0	36,000	0	0	0	0	-	0
8	0.33	1.3	0.0	21.6	15,220	24,328	5	0	24,328	1,160	2	0	329,000	. 0	30,998	.0	36,000	0	.0	0	0		0
9	0.00	1.3	0.0	26.1	15,275	21,156	5	0	21,156	1,178	7	0	317,000	0	18,879	0	36,000	0	0	0	0		0
10	1.43	1.3	0.0	21.4	13,225	18,510	0	.0	18,510	3,130	2	0	319,000	. 0	31,383	0	36,000	0	0	0	0	(0
11	0.00	1.3	0.0	22.7	10,600	19,056	13	0	19,056	0	0	0	305,000	0	31,799	-0	36,000	0	0	()	.0	(0
12	0.00	1.3	0.0	25.1	8,480	11,084	0	0	11,084	0	0	0	297,000	-0	0	0	36,000	0	0	0	0	(0
13	0.00	1.3	0.0	24.3	10,665	18,683	0	0	18,683	0	0	0	312,000	0	0	0	36,000	0	0	0	0	(
14	0.00	1.3	0.0	23.4	10,665	18,683	0	0	18,683	0	0	0	326,000	0	32,243	. 0	36,000	0	0	0	0	(
15	0.00	1.3	0.0	23.8	4,590	21,100	0	3,232	24,332	0	0	0	319,000	0	12,507	0	36,000	0	0	- 0	0		5
16	0.00	1.3	0.0	21.3	0	18,430	0	0	18,430	644	2	0	324,000	0	31,2%	0	36,000	- 0	0	- 0	0	- (
17	0.00	1.3	0.0	9.0		0	0	. 0	0	661	. 2	- 0	302,000	0	30,765	0	36,000	0	0	- 0	. 0	(
18	0.00	1.3	0.0	24.0	8,670	15,854	40	1,637	17,491	609	5	0	271,000	. 0	37,310	0	36,000	0	0	0	0		5
19	0.00	1.3	0.0	23.4	15,820	23,282	0	0	23,282	698	3.	0	276,000	0	0	0	36,000	0	.0	0	0	- (5
20	0.00	1.5	0.0	23.5	14,590	21,251	0	0	21,251	2,527	1,457	0	296,000	0	0	0	36,000	0	0	0	0	(
21	0.00	1.3	0.0	23.5			0	0	21,251	2,527		0	317,000	0	37,037	0	36,000	0	0	0	0		1
22	0.00	1.3	0.0	22.6	25,100		67	4,202		0	1	0	314,000	- 0	37,131	0	36,000	0	0	- 0	- 0		
23	0.00	1.3	0.0	21.3	16,870		19	1	23,063	0	0	0	314,000	. 0	37,213	0	36,000	0	.0	0	0	- (-
24	0.00	1.3	0.0	23.5	21,270		14	2,984		509	- 1	0	297,000		36,964	6,001	36,000	0	0	0	0		
25	0.00	1.3	0.0	22 8	21,640		29	0	28,958	1,411	1	0	286,000	0	31,481	3,008	36,000	0	0	0	0	-	
26	0.00	1.3	0.0	21.9	17,730		6	60		0	0	0	278,000	0	0	3,000	36,000	0	0	0	0		
27	0.00		0.0	22.8	18,450		23	4	23,260	300	1		301,000			0	36,000		0	- 0	0		
28	2.28	_	0.0	23.7	18,450		23	- 5	25,260	300	1	0	324,000	0	31,447	0	36,000	0	0	0	0	-	
29	0.00	1.6	0.0	23.9	16,820	21,348	11	4,089	25,437	200	0	0	322,000	- 0	37,706	0	44,000	0	0	0	0		1
30	0.78		0.0	23.7	20,280	-	- 0	1,007	30,183	0	0	0	305,000	- 6	38,345	0	44,000	0	0	0	0	- 0	1
31	2.74		0.0	22.8	24,140	-	17	2,791	33,685	557	0	0	307,000	- 0	31,161	0	48,000	- 0	0	- 0	0	- 0	_
	2.74	100	37.87	44.6	24,140	30,874	Lr	2,771	33,083	331		- 47	307,000	- 0	31,101		40,000	- 0	- 0		U	- 0	-
ı	7.69				453,390	684,412	328	20,672	705,084	20,717	2,945				755,806	12,009				27,337	- 0	10	3
	1.09	174	0.0	22 3						668			313,000	- 0	733,800	14,007	38,200	- 0	- 0	21,531	- 0	0	,
y Average		1.4	0.0	22.3	14,625	22,078	11	667	22,745	5618.	43	. 0	313,000			400	38,200	- 0		400			-
Average																400				900	obalance 201	0	1

- Notes:

 1. NR = No Records, NA = Not Available

 2. Values in bold are estimated, values in talls 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, Tisse is less than 0.01 inches and is not included in total.

 6. Columns III and V. field measured at staff pauges.

TABLE 2. FIELD DATA ENTRY FORM MARCH 2011 SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA

Λ	В	С	D	Е	F	G	Н	1	J	K	L	M	N	0	P	Q	R	S	T	U	V	W FOO
						0 0			C	Pond B	Pond B Effluent	Pond A	Effluent	Depth in 575K Tank	Depth in 575K Tank	Leachate	Leachat	. United	Leachate Dust Control	Effluent	David	Effluen Dust Cont
	n and the state of	Flow Meter TPS-6	Flow Meter	Reading PS-B	Section 9	Section 9 Pump 2	Section 9 LDS	Sections 7-8 Pump	Sections 7-8 LDS	Depth		Depth	Spray Irrigation	Leachate	Effluent	Treated at LTRF	Contractor	County	(Sprayed)	Contractor	County	(Sprayer
av	Rainfall (in.)	(gal.)	Pump Sta A	(in)	Pump 1 (gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(ft.)	(gal)	(ft.)	(gal.)	(ft.)	(ft)	(gal.)	(gal)	(gal.)	(gal.)	(gal.)	(gal)	(gal)
ay I	0.00	23,481,020	9,023,308	11.3	1,833,902	1.444.763	1.875	2.704.723	834	0.0	0.0	1.6	0	0.00	12.25	0	0	12.010	0	0	0	0
2	0.00	23,496,110	9,048,326	9.4	1,833,902	1,444,763	1,875	2,705,698	842	0.0	0.0	1.8	0	0.00	12.42	0	18,932	12,010	0	0	0	0
3	0.00	23,509,940	9,066,084	14.2	1,833,902	1,444,763	1,875	2,705,698	850	0.0	0.0	1.8	27,337	0.00	12.17	0	18,896	18,014	0	0	0	0
4	0.00	23,524,460	9.087.026	12.4	1,834,258	1,447,355	1,877	2,705,698	855	0.0	0.0	1.3	0	0.00	11.42	0	18,938	18,028	0	0	0	0
5	0.13	23,541,350	9,109,348	13.5	1,834,258	1,448,159	1,879	2,705,698	862	0.0	0.0	1.3	0	0.00	10.67	0	32,796	0	0	0	0	0
6	0.00	23,558,405	9,134,533	13.3	1,834,536	1,448,159	1,880	2,705,698	869	0.0	0.0	1.3	0	0.00	11.0	0	0	0	0	0	0	0
7	0.00	23,575,460	9,159,718	13.1	1,834,813	1,448,159	1,880	2,705,698	875	0.0	0.0	1.3	0	0.00	11.42	0	12,505	18,012	0	0	0	0
8	0.33	23,590,680	9,184,046	12.6	1,835,973	1,448,159	1,882	2,705,698	880	0.0	0.0	1.3	0	0.00	11.42	0	18,987	12,011	0	0	0	0
9	0.00	23,605,955	9,205,202	17.1	1,836,881	1,448,429	1,889	2,705,698	885	0.0	0.0	1.3	0	0.00	11.00	0	18,879	0	0	0	0	0
0	1.43	23,619,180	9,223,712	12.4	1,838,521	1,449,919	1,891	2,705,698	885	0.0	0.0	1.3	0	0.00	11.08	0	31,383	0	0	0	0	0
11	0.00	23,629,780	9,242,768	13.7	1,838,521	1,449,919	1,891	2,705,698	898	0.0	0.0	1.3	0	0.00	10.58	0	31,799	0	0	0	0	0
2	0.00	23,638,260	9,253,852	16.1	1,838,521	1,449,919	1,891	2,705,698	898	0.0	0.0	1.3	0	0.00	10.33	0	0	0	0	0	0	0
3	0.00	23,648,925	9,272,535	15.3	1,838,521	1,449,919	1,891	2,705,698	898	0.0	0.0	1.3	0	0.00	10.8	0	0	0	0	0	0	0
14	0.00	23,659,590	9,291,218	14.4	1,838,521	1,449,919	1,891	2,705,698	898	0.0	0.0	1.3	0	0.00	11.33	0	32,243	0	0	0	0	0
15	0.00	23,664,180	9,312,318	14.8	1,838,521	1,449,919	1,891	2,708,930	898	0.0	0.0	1.3	0	0.00	11.08	0	12,507	0	0	0	0	0
16	0.00	23,664,180	9,330,748	12.3	1,839,165	1,449,919	1,893	2,708,930	898	0.0	0.0	1.3	0	0.00	11.25	0	31,296	0	0	0	0	0
17	0.00	23,664,180	9,330,748	0.0	1,839,826	1,449,919	1,895	2,708,930	898	0.0	0.0	1.3	0	0.00	10.50	0	12,602	18,163	0	0	0	0
18	0.00	23,672,850	9,346,602	15.0	1,840,212	1,450,142	1,900	2,710,567	938	0.0	0.0	1.3	0	0.00	9.42	0	31,305	6,005	0	0	0	0
9	0.00	23,688,670	9,369,884	14.4	1,840,216	1,450,836	1,903	2,710,567	938	0.0	0.0	1.3	0	0.00	9.58	0	0	0	0	0	0	0
20	0.00	23,703,260	9,391,135	14.5	1,840,332	1,453,247	3,360	2,710,567	938	0.0	0.0	1.3	0	0.00	10.3	0	0	0	0	0	0	0
21	0.00	23,717,850	9,412,386	14.5	1,840,448	1,455,657	4,816	2,710,567	938	0.0	0.0	1.3	0	0.00	11 00	0	19,027	18,010	0	0	0	0
22	0.00	23,742,950	9,444,274	13.6	1,840,448	1,455,657	4,817	2,714,769	1,005	0.0	0.0	1.3	0	0.00	10.92	0	19,114	18,017	0	0	0	0
23	0.00	23,759,820	9,467,334	12.3	1,840,448	1,455,657	4,817	2,714,772	1,024	0.0	0.0	1.3	0	0.00	10.92	0	19,193	18,020	0	0	0	0
24	0.00	23,781,090	9,496,356	14.5	1,840,957	1,455,657	4,818	2,717,756	1,038	0.0	0.0	1.3	0	0.00	10.33	0	18,943	18,021	6,001	0	0	0
25	0.00	23,802,730	9,525,314	13.8	1,842,368	1,455,657	4,819	2,717,756	1,067	0.0	0.0	1.3	0	0.00	9.92	0	13,472	18,009	3,008	0	0	0
26	0.00	23,820,460	9,547,838	12.9	1,842,368	1,455,657	4,819	2,717,816	1,073	0.0	0.0	1.3	0	0.00	9.67	0	0	0	3,000	0	0	0
7	0.00	23,838,910	9,573,093	13.8	1,842,668	1,455,657	4,820	2,717,821	1,096	0.0	0.0	1.4	0	0.00	10.5	0	0	0	0	0	0	0
28	2.28	23,857,360	9,598,348	14.7	1,842,968	1,455,657	4,820	2,717,825	1,118	0.0	0.0	1.4	0	0.00	11,25	0	13,426	18,021	0	0	0	0
29	0.00	23,874,180	9,619,696	14.9	1,843,168	1,455,657	4,820	2,721,914	1,129	0.0	0.0	1.6	0	0.00	11.17	0	19,687	18,019	0	0	- 0	0
30	0.78	23,894,460	9,649,876	14.7	1,843,504	1,455,920	4,821	2,721,917	1,138	0.0	0.0	1.6	0	0.00	10.58	0	20,044	18,301	0	0	0	0
31	2.74	23,918,600	9,680,770	13.8	1,844,061	1,455,920	4,821	2,724,708	1,155	0.0	0.0	1.7	0	0.00	10.67	0	19,650	11,511	0	0	0	0
otals	7.69										0		27,337			0	485,624	270,182	12,009	0	0 1\03-11bal x	0

- 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 acres	Sections 7-8 acres	Section 9 acres
Open	0	0	5
Intermediate	139.4	19.3	10
Final	23	0	0
Not Opened	0	0	0

- 4. Column B, trace is less than 0.01 inches.
- 5. Columns C, D, F, G, H, I, J, L, N, Q, R-V and W are quantities from flow meters.
 6. Columns K and M measured from staff gages in each pond.

TABLE 3. LEACHATE BALANCE SUMMARY SOUTHEAST COUNTY LANDFILL HILLSBOROUGH COUNTY, FLORIDA YEAR-2011

			Leachato A	niving at LTRF		Lez	chate Leaving Li	TRF		Effluent Disposa		[nflo	w / Outflow For	LTRF
	j	Leachate Hauled	Leachate	Leachate	Leachate	Total Leachate	Leachate	Leachate	Total	Effluent	Effluent	Total Inflow	Total Outflow	Change
	Rainfall	to LTRF from	from Section 9	from Section 7-8	from Phases I-VI	Hauled	Dust Control	Treated at	Effluent	Dust Control	Irrigation	to	from	in
	1	HHLF/TRLF	Pumped to LTRF	Pumped to LTRF	Pumped to LTRF	from LTRF	(Sprayed)	LTRF	Hauled	(Sprayed)		LTRF	LTRF	Storage ³
Month	(in.)	(gal.)	(g <u>zd.</u>)	(gal.)	(gai.)	(gal.)	(gal.)	(gal.)	(gal.)	(ral)	(gal.)	(દ્યાં.)	(gal.)	(gal.)
January	3.65	0	24,351	39,496	739,603	894,048	42,1 <u>0</u> 4	0	0	0	0	803,450	936,152	-132,702
February	0.76	0	23,363	20,193	624,230	759,786	13,056	0	0	0	20,035	667,786	772,842	-105,056
March	7.69	0	23,662	20,672	684,412	755,806	12,009	0	0	. 0	27,337	728,746	767,815	-39,069
April		•												
May														
June														
July														
August														
September			-											
October					:		•					·		
November														
December					·									
YTD Total	12.10	0	71,376	80,361	2,048,245	2,409,640	67,169	0	0	0	47,372	2,199,982	2,476,809	-276,827

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.

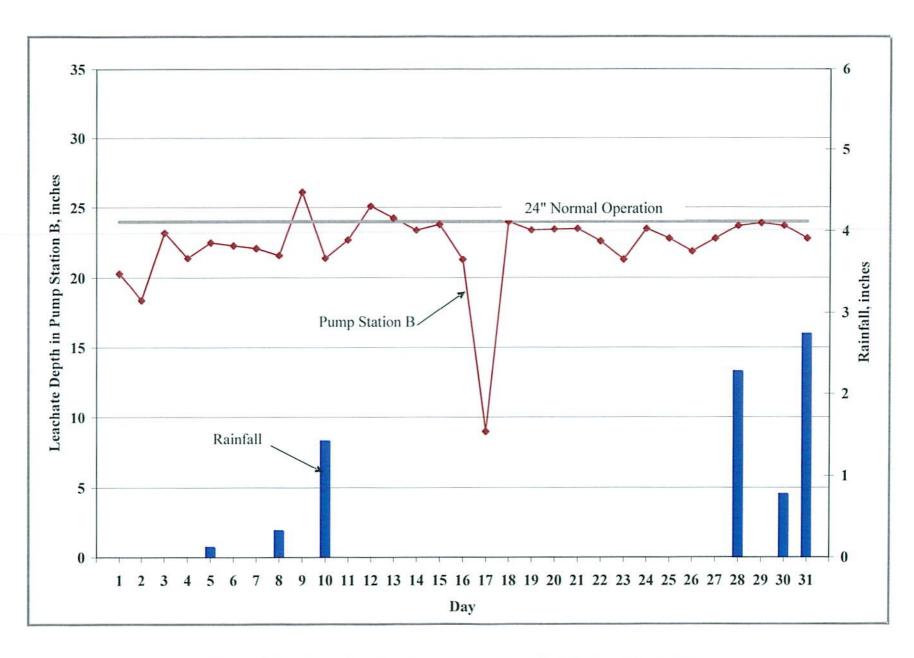


Figure 1. Leachate Levels in Pump Station B and Rainfall for March 2011.

APR 1 9 2011

CHIEF ADMINISTRATIVE OFFICER
Helene Marks

CHIEF FINANCIAL ADMINISTRATOR Bonnie M. Wise

DEPUTY COUNTY ADMINISTRATORS Lucia E. Garsys Sharon D. Subadan



Office of the County Administrator Michael S. Merrill

April 1, 2011

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

RE: Southeast County Landfill - February 2011 Leachate Data

Dear Ms. Pelz:

BOARD OF COUNTY COMMISSIONERS

Kevin Beckner

Victor D. Crist Ken Hagan

Mark Sharpe

Al Higginbotham

Lesley "Les" Miller, Jr. Sandra L. Murman

In accordance with the Hillsborough County Solid Waste Management Group (SWMG) Leachate Management Plan (LMP) for the Southeast County Landfill (Landfill), the SWMG is providing the Landfill's Water Balance Report for the month of February 2011. In addition, the SWMG is providing the February 2011 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 (FDEP) 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. 35435-014-SO, Specific Condition No. 8.

As initiated with the April 1996 report, the Landfill leachate information for February 2011 includes an evaluation by SWMG 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 for the month of February. The average depth of leachate in the PS-B sump for the recorded days in February 2011 was 22.2 inches.

Ms. Susan J. Pelz April 1, 2011 Page Two

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

Sincerely,

Patricia V. Berry

Landfill and Environmental Services Section Manager

Solid Waste Management Group

Attachments

glfs/lea0211.dep



BOARD OF COUNTY COMMISSIONERS Kevin Beckner Victor D. Crist Ken Hagan Al Higginbothum Lesley "Les" Miller, Jr. Sandra L. Murman Mark Sharpe

Office of the County Administrator Michael S. Merrill

ADMINISTRATORS Lucia E. Garsys Eric R. Johnson Edith M. Stewart J. Eugene Gray, Acting Sharon D. Subadan, Interim Mark J. Thornton, Interim

MEMORANDUM

DATE:

March 31, 2011

TO:

Patricia Berry, Section Manager, Solid Waste Management Group

FROM: Larry Ruiz, General Manager III, Solid Waste Management Group Raymond Graves, Sr. Eng. Tech., Solid Waste Management Group

SUBJECT:

Leachate Water Balance Report Forms for February

Southeast County Landfill, Hillsborough County, Florida

The Solid Waste Management Group (SWMG) staff has compiled and reviewed the leachate management operational data from the Southeast County Landfill Phases I-VI, Sections 7-8, and Section 9. Attached are the Leachate Water Balance Report Form (Table 1), the Leachate Field Data Entry Form (Table 2), and the 2011 Summary (Table 3). Also, attached find Figure 1 showing leachate levels in Pump Station B sump of Phases I-VI 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 0.8 inches of rainfall at the Southeast County Landfill (SCLF).

MEMORANDUM March 31, 2011 Page 2 of 6

Depth in Pond A (Column III)

Column III presents the daily depth, in feet, of effluent stored in 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 daily average depth of effluent stored in Pond A was 2.2 feet.

Depth in Pond B (Column IV)

Column IV presents the daily depth, in feet, of effluent or leachate that is stored in the effluent/leachate storage pond (Pond B). The depth in Pond B varies as a function of the evaporation frequency/duration and effluent or leachate hauled from the pond. This month effluent was not stored in Pond B.

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. This month PS-B was below the normal operation level of 24-inches. The average recorded depth of leachate in the PS-B sump was 22.2 inches.

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

Column VI presents the quantity of leachate from Phase IV pumped to PS-B by Temporary Pump Station-6 (TPS-6). The quantity of leachate removed by TPS-6 is measured in gallons by an in-line flow meter and is included in the quantity of leachate pumped to the Main Leachate Pump Station (MLPS) from Phases I-VI (Column VII). The average daily amount of leachate pumped from TPS-6 was 12,718 gallons. A total of 356,100 gallons of leachate was pumped this month.

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

Column VII presents the daily amount of leachate, in gallons, collected from PS-A and pumped through the MLPS to the 575,000-gallon storage tank at the Leachate Treatment and Reclamation Facility (LTRF) for treatment or disposal. The quantity in column VII also includes the daily amount of leachate, in gallons, pumped from TPS-6. The average daily amount of leachate pumped from PS-A was 22,294 gallons. A total of 624,230 gallons of leachate was pumped this month.

MEMORANDUM March 31, 2011 Page 3 of 6

Leachate Pumped from Sections 7-8 LDS (Column VIII)

Column VIII presents the quantity of leachate removed from the leak detection system (LDS) of Sections 7-8. The quantity is measured by a flow meter before being pumped for removal with Sections 7-8 leachate. The removal rate did not exceed 1,930 gallons per day. This month a total of 313 gallons of leachate was removed from the leak detection system of Sections 7-8.

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

Column IX presents the quantity of leachate collected at Sections 7-8 and pumped to the MLPS. The quantity is measured by a flow meter and includes any leachate removed from the leak detection system of Sections 7-8 (Column VIII). This month a total of 20,193 gallons of leachate was pumped from Sections 7-8.

Leachate Pumped to LTRF from the MLPS (Column X)

Column X presents the total quantity of leachate pumped to the LTRF from Phases I-VI and Sections 7-8. This month a total of 644,423 gallons of leachate was pumped to the LTRF.

Leachate Pumped to LTRF from Section 9 (Column XI)

Column XI presents the daily amount of leachate, in gallons, collected from Section 9 and pumped to the 575,000-gallon storage tank at the Leachate Treatment and Reclamation Facility (LTRF) for treatment or disposal. A total of 23,170 gallons of leachate was pumped this month.

Leachate Pumped from Section 9 LDS (Column XII)

Column XII presents the daily amount of leachate, in gallons, collected from the LDS of Section 9 and pumped to the 575,000-gallon storage tank at the LTRF for treatment or disposal. The removal rate did not exceed 4,651 gallons per day. This month a total of 193 gallons of leachate were removed from the leak detection system.

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

Column XIII 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. This month an average of 36,500 gallons of leachate was stored in the tank. On February 9th the tank was emptied in preparation for inspection.

MEMORANDUM March 31, 2011 Page 4 of 6

Effluent in 575,000-Gallon Tank (Column XIV)

Column XIV presents the daily amount of effluent, in gallons, stored in the 575,000-gallon effluent holding tank at the LTRF. The amount of effluent stored in the tank is calculated based on the circumference of the tank and the daily level reading. The treatment plant is down due to tankage inspection. As such, on December 1, 2010, the SWMG began storing leachate in this tank until the inspection of the leachate tank is completed. This month an average of 334,400 gallons of *leachate* was stored in the tank.

Leachate Treated at LTRF (Column XV)

Column XV presents the daily amount of leachate, in gallons, treated at the LTRF. The treatment plant began shut-down procedures in preparation of tankage inspection. The plant was shutdown on December 22, 2010 in preparation for tankage inspection. This month leachate was not treated at the plant.

Total Leachate Hauled (Column XVI)

Column XVI presents the daily amount of leachate, in gallons, hauled off site. This month a total of 759,786 gallons of leachate was hauled off site.

Leachate Dust Control Sprayed (Column XVII)

Column XVII presents the daily amount of leachate, in gallons, measured from the flow meter at the bypass-loading arm at the leachate storage tank. The leachate is used for dust control in the active area of the landfill. This month 13,056 gallons of leachate were used for dust control.

Pond A Storage (Column XVIII)

Column XVIII 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 71,800 gallons of effluent/stormwater were stored in Pond A.

MEMORANDUM March 31, 2011 Page 5 of 6

Pond B Storage (Column XIX)

Column XIX 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). Under normal operating conditions, the amount stored in the pond will vary depending upon the daily amount of effluent removed from the pond by the evaporation system, hauled from the pond, used for dust control or evaporated. This month effluent was not stored in Pond B.

Effluent Sprayed at Pond B (Column XX)

Column XX 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 and it is included in Column XXIV. This month effluent was not sprayed in Pond B.

Effluent Irrigation (Column XXI)

Column XXI 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 20,035 gallons of effluent/stormwater was used for spray irrigation.

Effluent Dust Control Sprayed (Column XXII)

Column XXII 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 XXIII)

Column XXIII 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 XXIV)

Column XXIV presents the daily amount of leachate and effluent, in gallons, that evaporates and therefore will not be returned to the SCLF and/or requires treatment. Evaporation rates of 80 percent and 5 percent evaporation rate for spray in Pond B are assumed. The total evaporation estimated for this month was 26,400 gallons.

MEMORANDUM March 31, 2011 Page 6 of 6

TABLE 2

Table 2 presents data assembled from daily logs compiled by the SWMG 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 667,786 gallons. Total outflow quantity from the LTRF was 772,842 gallons. The change in storage for the month decreased by 105,056 gallons.

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

Table 1. Leachate water balance report form february 2011 Southeast county landfill, Hillsborough County, Florida

	п	1D	TV.	٧	VI	YII.	VIII	, IX	×	77	XII	XIII	viv_	xv	xvı	XVII	XVE	XTX	ХX	XXI	2001	XXIII	XXIV
		Depth	Depth	Encused	Leacher	Lochete	Londers	Leachote	Lauchate	Lauchere	London	Lestine	E@and	Louches	1		1		E:Destal			7=1,1	7,77
1		D	•	Depta	Pozapod	Pumped	Pumped from	Pumped	Pumped	Purrand	Purcped from	is		Treated	Total	(contrary)	Pond	Post	Spanned	Effect	Effects	Total	
1		Pond	Pond	at	⇔PS-B	to M2PS	Sections 7-8	to MC.PS from	್ ಟ1777 ರಿಯ ಾ	to LTRF from	Section 9	575K	575K	81	Leadure	Dust Coursi		0	Pood	Imgaine	Dant Control	Effleen:	Total
	Reinfall		В	PS-B	tom TPS-6	from Phases I-VI	LDS	Sections 7-8	MPLE	Section 9	LDS	Tenk	Teak	LTRF	Harded	(Sprayed)	Storage	Shange			(Sprayed)	Hauded	Liveroreco
Day	(a.)	(E)	(11)	(ia)	(get)	(gal.)	(gal)	(pal)	(gal)	(pal.)	(gal.)	(fat)	(gal.)	(201)	(gp4.)	((44)	(ast)	(mar)	(gal)	(gal)	(faal)	(gal)	(504)
	0.00	1.9	00	21.9	23,400	32,454	9	750	33,204	0	0	000,021	269,000	0	16,067	6,046	57,000			0	0		4,80
2	0.00	1.9	00	21.8	11,300	17,310	. 9	747	18,057	٥		145,000	274,000	0	30,041	-	57,000	8	0	- 6	6		,
3	0.00	1.9	00	217	12,500	21,030	10	717	21,747	0	0	127,000	279,000	0	36,076	0	\$7,000		0		0	-	,
4	0.00	1.9	00	22.5	14,940	22,324	. 13	491	22,815	0	-	115,000	278,000		36,053	C	57,000	. 0	0	0	-		,
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	0.28	2.5	00	22.6	12,010	22,706	13	1,034	23,740	1,164	0	0	353,000		30,579	C	\$1,000		-	-	-		
11	0.00	23	0.0	21.5	12,900	23,334	12	801	34,172	0	-	0	401,000	0	36,772	C	83,000	- 6		•	-		
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23	0.00	22	00	22.1	11,030	22,587	3	3,262	25,849	2314	1	0	343,000	0	31,179	C	70,000	0		20,035	CI	0	16,000
															 								
$\neg \neg$					1																		
(S)	0.76				355,100	634,230	313	20,193	644,633	23,170	193			•	759,786	13,056			-	20,035	C		25,400
usly Average		2.2	60	22.2	12,718	22.294	11		23,015	528	7	36,500	314,400				71,600	0		30,000	- 1		
Co Average						- 112						7.27			 	500	- 14-2			700	61	9	940
															·						- A-01197	- Houlath (ide	

- Notes:

 1 NR = No Records, NA = Net Available

 2 Valoes to bold an estimated, values on table are substance for regarding data and are based on averaged values.

 3. Daily average is enablated by dividing the total by the senial days measured in the mouth.

 4. Monthly average calculated by dividing the stated by the exceptor of days of the mouth.

 5. Cohern II, Trees is less than 0.01 incluss and in our included in total

 6. Coherne III and IV, field measured as staff gauges.

- 7. Column V. FPS-63 sensor reading plus 9 inches.
 8. Columns VIII. & D., Section, 7-8 leak detection purposed into Section 7 brackets source color.
 9. Columns XIII. and XIV. calculated from depth is 575,000 gall tests.
 10. Columns VII.XII, XV-XVIII, and XXX-XXIII, quantum from flow matter.
 11. Columns XVIII statisties 50% of the daily values from Columns XVIII, XXII, and XXXII plus 5% of the daily values from columns XVII. XXII, and XXXIII plus 5% of the daily values from columns XVII. XXII, and XXXIII plus 5% of the daily values from columns XVIII. XXII. and XXXIII plus 5% of the daily values from columns XVIII. XXII. and XXXIII plus 5% of the daily values from columns XVIII. XXII. and XXXIII plus 5% of the daily values from columns XVIII. XXIII. and XXIII plus 5% of the daily values from columns XVIII. XXIII. and XXXIII plus 5% of the daily values from columns XVIII.

TABLE 2 FIELD DATA ENTRY FORM FEBRUARY 2011 SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA

A_	В	С	0	3	£	G	н	l .		ĸ	L	. м	. N	0	P	Q	R	5	T	υ	v	w
			ŀ		1			1			Pond B		Effluent	Depth in	Depth in	Leachate			Leachate			Effluent
1		Flow Meter	Flow Mater	Reading	Section 9	Section 9	Section 9	Sections 7-8	Sections 7-8	Pond B	Effluent	Pond A	Spray	575K Tank	575K Tank	Trented	Leachate	Hauled	Dust Control	Efflorat	Havled	Dust Control
1	Ramiali	TPS-6	Pump Sta. A	PS-B	Pump I	Pump 2	LDS	Pump	LDS	Depth	Sprayed	Depth	Imigation	Leathate	Effluent	at LTRF	Contractor	County	(Sprayed)	Contractor	County	(Sprayed)
Day	(in)	(gal)	(pal)	(in)	(pal)	(gal)	(eal)	(gel.)	(gal)	(ft.)	(gal)	(R .)	(gal.)	(fL)	(ft.)	(pal.)	(gal.)	(pal)	(ppl.)	(cal.)	(gal)	(gal)
	0.00	23,132,510	8,404,582	12,9	1,827,857	1,427,638	1,682	2,684,593	523	0.0	0.0	1,9	0	6.25	9.33	0	18,040	18,027	6,046	. 0	0	0
2	0.00	23,143,810	8,421,892	128	1,827,857	1,427,638	1,682	2,685,340	532	0.0	0.0	1.9	0	5.08	9.50	0	18,035	12,006	0	0	0	0
3	0.00	23,156,310	8,442,922	12.7	1,827,857	1,427,638	1,682	2,686,057	542	0.0	0.0	1.9	0	4.42	9.67	0	18,034	18,042	0	0	0	0
4	0.00	23,171,250	8,465,246	13.5	1,827,857	1,427,638	1,682	2,686,548	554	0.0	0.0	1.9	0	4.00	9.67	. 0	18,035	18,018	0	0	0	0
5	010	23,173,220	8,476,950	14.5	1,828,622	1,427,638	1,683	2,686,854	578	0.0	0.0	1.9	0	3 67	9.75	0	0	0	2,001	. 0	0	0
P(6)2		572 AG 035	100 200	国政党	47.829.343 il	177.6		157.000 900H		\$000¢	100	THE STATE OF		CHECK TO	THE PARTY	10.0	STATE AND ADDRESS	100 C	RICE OF STREET	4594099	area a la	*************************************
7	0.28	23,204,950	8,535,450	12.9	1,830,067	1,427,638	1,685	2,687,143	594	0.0	0.0	1.9	0	3.42	10.25	0	18,029	18,017	0	0	0	0
8	000	23,217,840	8,559,890	12.8	1,830,934	1,427,638	1,688	2,687,705	619	0.0	0,0	1.9	0	2.75	13.58	0	18,036	18,066	2,009	0	0	0
9	0.00	23,229,540	8,580,010	12.8	1,831,200	1,431,849	1,689	2,688,569	620	0.0	0.0	2.5	0	2.42	13.92	0	24,557	12,009	3,000	0	0	0
10	0.28	23,241,550	8,602,716	13.6	1,831,200	1,433,013	1,689	2,689,603	633	0.0	0.0	2.5	0	0.00	13.83	0	19,191	11,748	0	0	D	0
11	0.00	23,254,450	8,626,050	12.5	1,831,200	1,433,013	1,689	2,690,441	645	0.0	0.0	2.5	0	0.00	13.92	0	18,600	18,172	0	0	. 0	0
12	0.00	23,262,640	8,644,546	13.9	1,831,200	1,433,013	1,689	2,690,732	656	0.0	0.0	2.5	. 0	0.00	13.17	0	31,674	0	0	0	0	0
	400	75.276.02	15,663,745	当	1,397,500	対心区のお言	EPIZOU I	23/00/01/P	- Tress	=0.0	1	373 5		PEROPERTY.	E # 1930 E	55#10##SH		150	E STOKE I	0.1.	20-10 P.	CONTRACT OF THE PARTY OF THE PA
14	0 00	23,289,390	8,681,544	12.2	1,831,200	1,433,013	1,689	2,690,903	673	0.0	0.0	2.5	0	0.00	13.50	0	18,597	18,043	0	0	9	0
15	0.00	23,303,285	8,703,228	12.6	1,831,495	1,433,268	1,690	2,691,000	683	0.0	0.0	2.3	0	0.00	12.92	0	18,843	16,599	0	0	0	. 0
16	0.00	23,315,610	8,724,226	12.4	1,831,843	1,433,545	1,849	2,691,173	693	0.0	0.0	2.3	0	0.00	12.42	0	19,354	18,034	0	0	0	0
17	0.00	23,327,400	8,745,542	13.7	1,832,109	1,435,080	1,857	2,691,274	703	0.0	0.0	2.3	0	0.00	12 00	0	18,848	19,048	0	0	0	0
18	080	23,339,010	8,766,482	14.0	1,832,109	1,435,962	1,862	2,691,282	713	0.0	0.0	2.2	0	0.00	11.50	Ċ	18,754	6,000	0	0	0	0
19	0.00	23,350,870		14.6	1,832,109	1,437,787	1,866	2,691,282	724	0.0	0.0	2.4	0	0.00	11.33	0	31,387	0	0	0	0	0
1.20	PHO 000	学的影響				PHASE TOTAL	I TO SECUL		上6月1日 2月 中海	T 00 A	350013	11/4	的加加河	名があるを行					Y 1985 TO 1885		医动物	化过程的原理员
21	0.00	23,375,230	8,835,502	13.0	1,832,109	1,437,787	1,866	2,691,282	759	0.0	0.0	2.4	0	0.00	11.75	0	19,271	12,007	0	0	0	0
22	0.C0	23,390,910	5,562,140	[4.2	1,832,114	1,437,787	1,867	2,697,513	771	00	0.0	2.4	0	0.00	11.92	0	18,789	17,266	0	0	0	0
23	0.00	23,402,700	8,884,142	12.6	1,832,756	1,438,043	1,868	2,697,513	782	0.0	0.0	2.4	0	0.00	11 92	0	18,807	18,020	0	0	0	0
24	8	23,414,180	8,905,976	12.3	1,833,644	1,438,043	1,871	2,697,513	789	0.0	0.0	2.4	Ō	0.00	11.00		18,858	18,022	0	0	. 0	0
25	0.00	23,425,510	8,927,634	13.6	1,833,902	1,438,280	1,872	2,697,513	795	0.0	0.0	2.4	0	000	1025	0	31,722	6,002	0	0	0	0
26	0 00	23,439,050	8,951,184	13.4	1,833,902	1,440,096	1,874	2,697,513	818	0.0	0.0	22	0	0.00	10.25	0	0	0	0	. 0	0	0
	# E COO!	13 152 234		COLCULATION OF THE PARTY OF THE	F3835300				74,324 CT	# CO .	-00	中华		5年10年10年	公里	-0.00	建加强		THE OWNER		La south	
28	0.00	23,465,210	8,996,358	13.1	1,833,902	1,444,763	1,875	2,704,036	827	0.0	0.0	2.2	20,035	0.00	11.92	0	13,116	18,063	0	0	0	0
Totals	0 76									L .	0		20,035			0	448,577	311,209	13,056	0	0	0
																			projects\ba	tance\2011\02	-11bal xls (j	dw 03/04/2011)

Notes:

NR = No Records, NA = Not Available

Values in bold are estimated; values in italic are substitute for missing data and are based on averaged values

Column IV includes quantities from leak detection system

Type of Cover	Phases I-VI acres	Sections 7-8 acres	Section 9
Орея	0	0	5
Intermediate	139.4	19.3	10
Final	23	0	0
Not Opened	0	0	0

4. Column B, trace is less than 0.01 inches.
5. Columns C, D, F, Q, H, I, J, L, N, Q, R-V and W are quantities from flow meters.
6. Columns K and M measured from staff gages in each pond.

TABLE 3. LEACHATE BALANCE SUMMARY SOUTHEAST COUNTY LANDFILL HILLSBOROUGH COUNTY, FLORIDA YEAR-2011

			Leachate A	rriving at LTRF	•	Lea	chate Leaving L1	TRF		Effluent Disposal		Inflo	w / Outflow For I	LTRF
		Leachate Hauled	Leachate	Leachate	Leachate	Total Leachate	Leachate	Leachate	Total	Effluent	Effluent	Total Inflow	Total Outflow	Change
	Rainfall	to LTRF from	from Section 9	from Section 7-8	from Phases I-VI	Hauled	Dust Control	Treated at	Effluent	Dust Control	Irrigation	to	from	in
1		HHLF/TRLF	Pumped to LTRF	Pumped to LTRF	Pumped to LTRF	from LTRF	(Sprayed)	LTRF	Houled	(Sprayed)		LTRF	LTRF	Storage ³
Month	(in.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gul.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)
January	3.65	0	24,351	39,496	739,603		42,104	0	0	. 0	0	803,450		-132,702
February	0.76	0	23,363	20,193	624,230	759,786	13,056	0	0	0	20,035	667,786	772,842	-105,056
March										-				
April														
May														
June														
hily	L			-										
August														
September														
October														
November														
December														
YTD Total	4.41	0	47,714	59,689	1,363,833	1,653,834	55,160	0	0	0	20,035	1,471,236	1,708,994	-237,758

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.

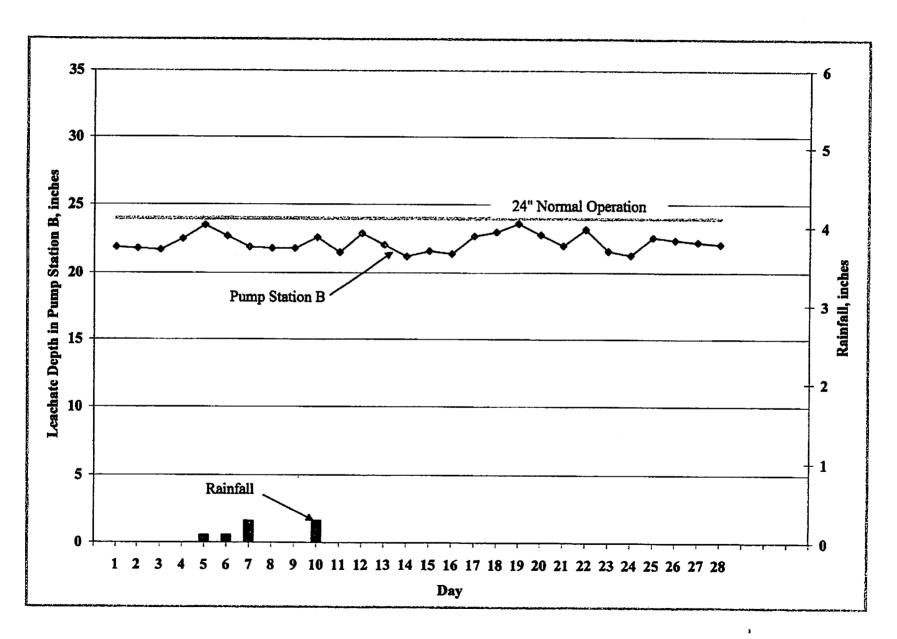


Figure 1. Leachate Levels in Pump Station B and Rainfall for February 2011.



BOARD OF COUNTY COMMISSIONERS
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Office of the County Administrator Michael S. Merrill Dept. Of Environmental Protection

APR 1 9 2011

Southwest District

ADMINISTRATORS
Lucia E. Garsys
Eric R. Johnson
Edith M. Stewart
J. Eugene Gray, Acting
Sharon D. Subadan, Interim
Mark J. Thornton, Interim

February 28, 2011

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

RE: Southeast County Landfill - January 2011 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 for the month of January 2011. In addition, the SWMD is providing the January 2011 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 (FDEP) 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. 35435-014-SO, Specific Condition No. 8.

As initiated with the April 1996 report, the Landfill leachate information for January 2011 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 15 due to a pump malfunction. The average depth of leachate in the PS-B sump for the recorded days in January 2011 was 22.3 inches.

Ms. Susan J. Pelz February 28, 2011 Page Two

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

Sincerely,

Patricia V. Berry

Landfill and Environmental Services Section Manager

Solid Waste Management Division

Attachments

glfs/lea0211.dep



BOARD OF COUNTY COMMISSIONERS Kevin Beckner Victor D. Crist Ken Hagan Al Higginbotham Lesley "Les" Miller, Ic. Sandra L. Murman Mark Sharpe

Office of the County Administrator Michael S. Merrill

ADMINISTRATORS Lucia E. Garsys Eric R. Johnson Edith M. Stewart J. Eugene Gray, Acting Sharon D. Subadan, Interim Mark J. Thornton, Interim

MEMORANDUM

DATE:

February 16, 2011

TO:

Patricia Berry, Section Manager, Solid Waste Management Division

FROM: 20 Larry Ruiz, General Manager III, Solid Waste Management Division

Raymond Graves, Sr. Eng. Tech., Solid Waste Management Division

SUBJECT:

Leachate Water Balance Report Forms for January 2011

Southeast County Landfill, Hillsborough County, Florida

The Solid Waste Management Division (SWMD) staff has compiled and reviewed the leachate management operational data from the Southeast County Landfill Phases I-VI, Sections 7-8, and Section 9. Attached are the Leachate Water Balance Report Form (Table 1), the Leachate Field Data Entry Form (Table 2), and the 2011 Summary (Table 3). Also, attached find Figure 1 showing leachate levels in Pump Station B sump of Phases I-VI 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 3.6 inches of rainfall at the Southeast County Landfill (SCLF).

MEMORANDUM February 16, 2011 Page 2 of 6

Depth in Pond A (Column III)

Column III presents the daily depth, in feet, of effluent stored in 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 daily average depth of effluent stored in Pond A was 1.6 feet.

Depth in Pond B (Column IV)

Column IV presents the daily depth, in feet, of effluent or leachate that is stored in the effluent/leachate storage pond (Pond B). The depth in Pond B varies as a function of the evaporation frequency/duration and effluent or leachate hauled from the pond. This month effluent was not stored in Pond B.

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. This month PS-B was below the normal operation level of 24-inches except for January 15 due a pump malfunction. The average recorded depth of leachate in the PS-B sump was 22.3 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 14,320 gallons. A total of 443,930 gallons of leachate was pumped this month.

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

Column VII presents the daily amount of leachate, in gallons, collected from PS-A and pumped through the MLPS to the 575,000-gallon storage tank at the Leachate Treatment and Reclamation Facility (LTRF) for treatment or disposal. The quantity in column VII also includes the daily amount of leachate, in gallons, pumped from TPS-6. The average daily amount of leachate pumped from PS-A was 23,858 gallons. A total of 739,603 gallons of leachate was pumped this month.

MEMORANDUM February 16, 2011 Page 3 of 6

Leachate Pumped from Sections 7-8 LDS (Column VIII)

Column VIII presents the quantity of leachate removed from the leak detection system (LDS) of Sections 7-8. The quantity is measured by a flow meter before being pumped for removal with Sections 7-8 leachate. The removal rate did not exceed 1,930 gallons per day. This month a total of 460 gallons of leachate was removed from the leak detection system of Sections 7-8.

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

Column IX presents the quantity of leachate collected at Sections 7-8 and pumped to the MLPS. The quantity is measured by a flow meter and includes any leachate removed from the leak detection system of Sections 7-8 (Column VIII). This month a total of 39,496 gallons of leachate was pumped from Sections 7-8.

Leachate Pumped to LTRF from the MLPS (Column X)

Column X presents the total quantity of leachate pumped to the LTRF from Phases I-VI and Sections 7-8. This month a total of 779,099 gallons of leachate was pumped to the LTRF.

Leachate Pumped to LTRF from Section 9 (Column XI)

Column XI presents the daily amount of leachate, in gallons, collected from Section 9 and pumped to the 575,000-gallon storage tank at the Leachate Treatment and Reclamation Facility (LTRF) for treatment or disposal. A total of 24,312 gallons of leachate was pumped this month.

Leachate Pumped from Section 9 LDS (Column XII)

Column XII presents the daily amount of leachate, in gallons, collected from the LDS of Section 9 and pumped to the 575,000-gallon storage tank at the LTRF for treatment or disposal. The removal rate did not exceed 4,651 gallons per day. This month a total of 39 gallons of leachate were removed from the leak detection system.

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

Column XIII 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. This month an average of 192,000 gallons of leachate was stored in the tank.

MEMORANDUM February 16, 2011 Page 4 of 6

Effluent in 575,000-Gallon Tank (Column XIV)

Column XIV presents the daily amount of effluent, in gallons, stored in the 575,000-gallon effluent holding tank at the LTRF. The amount of effluent stored in the tank is calculated based on the circumference of the tank and the daily level reading. The treatment plant is down due to tankage inspection. As such, on December 1, 2010, the SWMD began storing leachate in this tank until the inspection of the leachate tank is completed. This month an average of 372,800 gallons of *leachate* was stored in the tank.

Leachate Treated at LTRF (Column XV)

Column XV presents the daily amount of leachate, in gallons, treated at the LTRF. The treatment plant began shut-down procedures in preparation of tankage inspection. The plant shutdown on December 22, 2010 in preparation for tankage inspection. This month leachate was not treated at the plant.

Total Leachate Hauled (Column XVI)

Column XVI presents the daily amount of leachate, in gallons, hauled off site. This month a total of 894,048 gallons of leachate was hauled off site.

Leachate Dust Control Sprayed (Column XVII)

Column XVII presents the daily amount of leachate, in gallons, measured from the flow meter at the bypass-loading arm at the leachate storage tank. The leachate is used for dust control in the active area of the landfill. This month 42,104 gallons of leachate were used for dust control.

Pond A Storage (Column XVIII)

Column XVIII 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 44,600 gallons of effluent were stored in Pond A.

MEMORANDUM February 16, 2011 Page 5 of 6

Pond B Storage (Column XIX)

Column XIX 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). Under normal operating conditions, the amount stored in the pond will vary depending upon the daily amount of effluent removed from the pond by the evaporation system, hauled from the pond, used for dust control or evaporated. This month effluent was not stored in Pond B.

Effluent Sprayed at Pond B (Column XX)

Column XX 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 and it is included in Column XXIV. This month effluent was not sprayed in Pond B.

Effluent Irrigation (Column XXI)

Column XXI 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 effluent was not used for spray irrigation.

Effluent Dust Control Sprayed (Column XXII)

Column XXII 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 XXIII)

Column XXIII 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 XXIV)

Column XXIV presents the daily amount of leachate and effluent, in gallons, that evaporates and therefore will not be returned to the SCLF and/or requires treatment. Evaporation rates of 80 percent and 5 percent evaporation rate for spray in Pond B are assumed. The total evaporation estimated for this month was 33,700 gallons.

MEMORANDUM February 16, 2011 Page 6 of 6

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 803,450 gallons. Total outflow quantity from the LTRF was 936,152 gallons. The change in storage for the month decreased by 132,702 gallons.

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

TABLE 1. LEACHATE WATER BALANCE REPORT FORM JANUARY 2011 SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA

	п	Ø	īV	v	VI	VI)	VIII	ΙX	X	XI	_xn	XIII	XTV	χv	_ XVI	xvn	XVIII	XIX	xx	XXI	XXII	XXXX	XXIV
		Depth	Depth	Estamated	Leachain	Luschata	Lauchate	Leechase	Leachato	Leachain	منطعتما	(materia)	Efflows	اعطمه					Efficial				
		Ė.	ta	Depts	Pictoped	Pemped	Pumped from	Pecpel	Pursped	Pusped	Pemped from	in	in in	Terated	Total	Leuchete	Pond	Pond	8prayed	Effects	Effluent	Total	1
		Pond	Poss	at	tsPS-B	to MLPS	Sections 7-8	to MCPS from	to LTRP from	to LTRF from	Section 9	575K	575K	#	Lexitate	Don Court	Α .	B	Pond	brigation	Dust Control	Efficient	Total
	Reinfall	A .	В	P3-8	from TPS-6	Geo Phases I-VI	LDS	Sections 7-8	MPLS ·	Section 9	TD8	Tenk	Tack	LTRF	Heriod	(Sprayed)	Sterage	Storage	B	1	(Sprayed)	Hauled	Evaperation
Day	(m)	(£)	(£)	(ic.)	(g <u>s1</u>)	(gal.)	(4al)	(gal.)	(grd.)	(gal)	(gal.)	(gal)	(gal.)	(gal)	(<u>psl.)</u>	(gal.)	(gal.)	(<u>(es/</u>)	(p=0)	(gsi.)	(gal)	(gal.)	(gal.)
	0.00	1.5	0.0		8,160	22,448	11		28,449	87		192,000	430,000	0	. 0	0	40,000	٥	0	-	0		
进入30 000	d date	, S. J. J.	PARTIES.	11.124	HILLS PARK			大きる。お子は		を とり は とう は	大学 田田 田田	7/2,000	A 100000	100	क कार्यक्र		12: 1:22,000			34343779	*** T T O	and the last of	A G 31 44
3	0.00	1.5	0.0	22.8	11,205	21,536	20	1,476	25,012		0	192,000	475,000	0	30,718	6,007	40,000	0	٥		D	0	4,200
4	0.00	1.5	0.0	23.0	17,130	27,316	B	19	27,335	. 0	0	192,000	461,000	Ö	19,500	6,003	40,000		0		0	0	4,800
5	0.01	1.5	0.0	22.7	13,635	32,512	17	20	22,532	. 0	0	192,000	458,000	0	30,619		40,000	٥	. 0	·	•	0	2,400
6	1.00	1.5	0.0	22.5	21,970	32,280	17	. 5	32,285	. 323	. 1	192,000	458,000	0	36,509	Ģ	40,000	•	٥	•	•		1
7	0.00	1.5	0.0	23.0	19,035		13	7,377	37,974	918	. 2	192,000	456,000	0	31,198		40,000	0	0	. 0	0	0	4 (
6	0.00	15	9.0		24,130		17		36,608	2,809	. 6	192,000	458,000	0	31,029	3,000	40,000	0			0	0	2,400
**************************************	- T 10.00	No.	HA LAC	11.512.5	119,735	10000000000000000000000000000000000000	記している。	100	TO VICE	THE REAL PROPERTY.		30 /3100 0	173,000	EE 950	14.10	9	10,000	PROPERTY			4 4 1 40	l'alteredate	
10	0.00	1.5	0.0	22.9	13,155	19,573	18	tos	19,681	1,840	. 1	192,000	477,000	0	41,179	٥	40,000	0	0	•	0	0	4
11 -	0.00	13	0.0	21.0	9,830	20,374	25	3,136	23,510	0	0	192,000	456,000	0	42,744	2,997	49,000	0	0		0	0	2,400
12	0.00	13	0.0	22.7	11,850	18,375	17	154	18,529	0	Ö	192,000	412,000	. 0	42,472	•	49,000		٥	•	0		4 0
13	0.00	15	0.0	22.9	13,160	18,110	15	2	18,112	. 0	0	192,000	461,000		54,441	•	40,000	¢	0	0	•		
14	0.00	1.5	0.0	22.2	13,790	18,773	. 12	2,547	21,320	0	a	192,000	165,000	0	48,436	1,998	43,000	. 0	0		•	0	7,200
15	0.00	1.5	0.0	25.0	11,060	12,280	24	\$14	12,794	309	1	192,000	117,000	0	32,124	. 0	40,000	0	0		٥	0	
PARTIES.	effect to our	;rin_ciaes	BEST OF	2.00	17.715	224 4 79 218	SIE-SINGING	NACOMES	29.830	300000000000000000000000000000000000000	12512159	19700	177200		a Hallo	i sa sautro	1907/2000	×15.6 0	S-12-347.0	19:19:19:10	0	454E-750	Lat of Part
17	1.02	1.5	0.0	22.8	17,715	29,818	6	3	29,820	1,791	8	192,000	307,000	0	33,850	٥	40,000	0	0				
18	0.01	1.5	8.0	22.0	16,525	29,758	12	1,487	33,245	1,543	0	192,000	3,55,000	0	36,011	0	40,000	0	٥		0	0	, ,
19	0.00	1.5	0.0	21.8	14,135	25,224	*	199	25,423	9	· ·	192,000	343,000	٥	37,639	- 0	40,000	0	. 0		0	0	,
20	0.30	1.5	0.0	23.1	15,505	25,411	18	•	25,411	٥	. 0	192,000	326,000	0	37,202	3,000	40,000	•	٥		0	0	2,400
21	0.00	1.7	0.0	22.1	13,195	26,100	21	0	26,120	222	ı	192,000	319,000	0	34,693	0	48,000				0	0	, ,
22	0.00	1.7	_		15,200	29,146	1	3,112	31,260	530	. 0	192,000	337,000	0	31,941	٥	48,000	٥	0	-	•	0	, ,
29-		1.7.	1::L:::00	LICE		1.45.45		LEIGHT AND	CO. 1 C DA 2000		Committee (L.C.)	155:JP2,000	J22,000	F1.2.	221115	515H21520	- 1 A DOD	112:12:10				1121121212 ±10	ESCAP-17:0
24	0.00	1.7	0.0	23 0	15,015	22,393	13	1,597	23,990	3,066	3	192,000	136,000	0	36,331	.0	48,000	•	D	0	0	0	
25	1.30	1.7	0.0	22.5	17,350	24,478	10	224	24,702	•	0	192,000	329,000	0	36,329	0	48,000	0		•	0	0	
26	0.00	1.9	0.0	179	14,990	28,946	16	21	28,967	0	0	192,000	122,000	G	35,351	0	57,000	C	. 0	•	0		
27	0.00	1.9	9.0	21 1	9,520	20,940	15	27	20,967	0	0	192,000	297,000	C	36,025	0	57,000	0	0		0	0	1
23	000	19	0.0	21 2	11,540	16,347	9	3,058	19,405	Ö	•	192,000	288,900	C	30,466	6,100	57,000	0	۰	-	0	0	4,900
29	0.00	1.9	0.0	22.6	12,690	13,433	11	560	13,993	4,162	· ·	192,000	274,000	C	30,505	•	57,000	0	0		0	9	
Call Mornial	30.00	549	20	2010222	in Walls	A: HIN HOLES.	SECULO SECO	interesta	1 2 1 2 M SHE	HEAT AND TOP	in him it is a	1111100	T. CHT.ORG	A Lum	30 b 2 10	3 3 5 A P	32,060		Charles a	13447774	F1677.70	airiale-ille	F2:11:10
31	0.00	1.9	0.0				9	690	26,587	16	٥	192,000	269,000	C	35,326	2,597	\$7,000	0	Ö	0		0	2,400
																			·				
otal .	3.65				443,930	739,603	460	39,496	779,099	24,312	39			C	810,148	42,104			C			0	23,700
Daily Average		1.6	0.0	22.3	14,320	23,85B	15	1,274	25,132	784	1	192,000	372,830				44,600	0					
Co Average					- · · · · ·											1,400					0	0	1,090
												· · · · · · · · · · · · · · · · · · ·								p. o.	Venezales/Ann	(A01-0):=\z	o (les 2/13/09)

- Notes.

 1. Ni = No Records, NA = Not A willable.

 1. Values in bold are estimated, values in table are substitute for cosming data and are based on svensjoid values.

 3. Daily svenage is estimated by dividing the total by the sexual days amounted in the month.

 4. Menthly svenage on skated by dividing the total by the sexual days of the month.

 5. Colorn II. Proces has the month of littles and is not included in total.

 6. Colornas III and IV, field measured at staff gauges.

- 7. Column. V. FPS-B sensor reading plus 9 inches.
 8. Columns VIII & IX, Sention 7-8 leak detection pumped into Sention 7 feathats samp rise;
 9. Column XIII and XIV, extended from depth on 575,000 gal tands.
 10. Columns VIVAII, XV-XVIII, and XX-XVIIII, garathties from show meters.
 11. Column XXIIV includes 80% of the daily values from Columns XXIII, IXXII, and XXIII plus 9% of the duity values from column XXII.

TABLE 2. FIELD DATA ENTRY FORM JANUARY 2011 . SOUTHEAST COUNTY LANDFILL, HILLSBOROUGH COUNTY, FLORIDA

. A	В	С	D	E	F	G	H.	11	J	К	L	М	N	0	P	Q	R	S	. т	U	v	w
			[Pond B		Effluent	Depth in	Depth in	Leachate			Leachate			Effluent
		Flow Meter	Flow Meter	Reading	Section 9	Section 9	Section 9	Sections 7-8	Sections 7-8	Pond B	Effluent	Pond A	Spray	575K Tank	575K Tank	Treated	Leachate	Hauled	Dust Control	Effluent	Houled	Dust Control
	Rainfall		Pump Sta. A	PS-B	Pump I	Pump 2	LDS	Pump	LDS	Depth	Sprayed	Depth	Irrigation	Leschate	Effluent	≃ LTRF	Contractor	County	(Sprayed)	Contractor	County	(Sprayed)
Day	<u>, (n)</u>	(gal)	(gal.)	(in.)	(Rel)	(84)	(gal)	(ppl)	(Rel.)	(A)	(gal)	(ft .)	(R#)	(ፀ)	(fL)	(pal.)	(ml)	(gal.)	(ppl.)	(gsl.)	(gal.)	(spl)
12(2)/2	0.00	22,673,340		13.4	1,824,256	1,406,998	1,647	2,650,348	76	00	0.0	1.5	0	6.67	14 92	0	0	0	0	0	0	0
		22/01/21/2	2070-500-1	Service A				1202100											NAME OF THE OWNER,	The second second	-	
	0.00	22,695,750		13 8	1,824,256	1,406,998	1,647	2,653,300	116	00	0.0	1.5	0	6.67	16.50	0	18,704	12,014	6,007	1 0	0	-
+	0.01	22,713,080		14.0	1,824,256	1,406,998	1,647	2,653,319	136	0.0	0.0	1.5	0	6.67	16 00	. 0	19,500	0	6,003	0		-
-	1.00	22,748,705		13.7			1,647	2,653,339	153	00	0.0	1.5		6.67	15.92	0	18,791	12,028	3,002	0	0	0
7	0.00	22,767,740		14.0	1,824,579 1,825,497	1,406,998	1,648	2,653,344	170	0.0	0.0	1.5	0	6.67	15.92	0	24,479	12,030	0	<u> </u>		
	0.00	22,791,870		12.7	1,826,075	1,409,229	1,656	2,662,010	200	0.0	0.0	1.5	-	6.67	15.83	0	25,174	6,024	0	0	0	
entern.					1,020,073		24320LC	2,602,010							16.25	0	31,099	0	1,000	0	0	0
10	0.00	22.818.180	7.889.214	13.9	1.826.075	1,412,909	1.657	2.662.225	236	0.0	0.0	1.5	0	6.67	16.58		23.959	17.220				SALES CONTRACTOR
10	0.00	22,828,010	7,909,588	12.0	1,826,075	1,412,909	1.657	2,665,361	261	0.0	0.0	1.5	-	667	15.83	0	18,686	24,058	2,997	0	0	
12	0.00	22,839,860	7,927,963	13.7	1,826,075	1.412.909	1.657	2,665,515	278	0.0	0.0	1.5	- ö - l	6.67	15.00	0	24,433	18,039	2,991	-	- 0	
- 12	0.00	22,853,020	7,946,073	13.9	1,826,075	1.412.909	1.657	2.665.517	293	0.0	0.0	1.5	-	6.67	13.92	0	24,394	30,047	- 	 	0	
+3-	0.00	22,866,810	7,964,846	13.3	1,826,075	1,412,909	1,657	2.668.064	305	0.0	0.0	1.5	- 6 - 1	6.67			19.077			0		-
14	0.00	22,877,870	7,977,126	16.0	1,826,384	1,412,509	1,658	2,668,578	329	0.0	00	1.5	- 6	6.67	12.67	0	32,124	29,359	8,998 0		0	0
201850		122877.575				Mark Wall	- 1 060 C	10 8545503			1750 D513		70 STORES			•						
17	1.02	22,913,300	8,036,762	13.8	1.826.838	1.416.036	1,674	2,668,582	341	0.0	0.0	1.5	0	6 67	10.67	n n	33.850	U U U U U U U U U U U U U U U U U U U	U U	O CONTRACTOR	O STANSONS	O CONTRACTOR OF THE PERSON OF
18	001	22,929,825	8,056,762 8,066,520	13.0	1.826.838	1,417,579	1,674	2,672,069	359	0.0	0.0	1.5	-	6 67	12.33	0	18,962	17,049		 	0	
19	0.00	22,943,960	8,091,744	12.8	1.826,838	1,417,579	1.674	2,672,268	367	0.0	0.0	1.5	Ö	6.67	11.92	0	19,617	18,022	- č	1	-	
20	0.30	22,959,865	8,117,155	14.1	1,826,838	1,417,579	1,674	2,672,268	385	0.0	0.0	1.5		6.67	11.33	ŏ	19,216	18,026	3,000		- 0	
21	0.00	22,973,060	8,143,255	13.1	1,827,060	1.417.579	1.675	2,672,268	406	0.0	0.0	1.7	- 6	6.67	11.08	ŏ	18,707	15,986	100	0	ō	
22	0.00	22,988,260	8,171,403	12.1	1,827,590	1,417,579	1,675	2,675,380	413	0.0	0.0	1.7	-	6.67	10.67	•	31,041	0	<u> </u>	i	ŏ	
		1200170			6 207 72			22 07 day 7						TO THE PARTY						CESTOCK TO		Herber out 1854
24	0.00	23,018,290	8,216,189	14.0	1.827.857	1,423,444	1,681	2,678,574	435	0.0	0.0	1.7	0	6 67	11.67	0	18,324	18,007	0	0	0	0
25	130	23,035,640	8.240,667	13.8	1,827,857	1,423,444	1,681	2,678,798	445	00	00	1.7	•	6 67	11.42	0	18,301	18,028	ō	0	0	i o
26	0 00	23,050,630	8,269,613	8.9	1.827,857	1,423,444	1,681	2,678,819	461	0.0	0.0	1.9	0	6.67	11.17	0	18,329	18,022	Ö	0	0	6
27	0.00	23,060,450	8,290,553	121	1,827,857	1,423,444	1,681	2,678,846	476	0.0	0.0	1.9	ò	6.67	10.33	ò	18,307	17,718	ō	ō	ō	Ö
28	0.00	23,071,990	8,306,900	12.2	1,827,857	1,423,444	1,681	2,681,904	485	0.0	0.0	1.9	-	6 67	10.00	0	18,310	12.156	6,100	0	0	0
29	0.00	23,084,680	8,320,333	13.6	1,827,857	1,427,606	1,682	2,682,464	496	0.0	0.0	1.9	0	6.67	9,50	0	30,505	0	0	0	0	Ö
3300	50.00	21.00d.5932		新疆教育 15	F7.927.832-			42.583(45/4)	1411010-52	7.00	2007	6.75	22.0V.C		100		2550414	ALCOHOL:	Harden State	a di Lea	- COLUMN	F2582905-338
31	0.00	23,109,110	8,372,128	13.8	1,827,857	1,427,638	1,682	2,683,843	514	0.0	0.0	1.9	0	6 67	9.33	0	18,308	18,018	2,997	0	0	0
Totals	3.65										0		0			0	562,197	331,851	42,104	0	0	. 0
																	-		proje	ca/balance\20	99-01-09bal a	ds (ler 2/13/09)

- 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 J-VI acres	Sections 7-8 acres	Section 9 zeres
Open	0	0	3
Intermediate	139.4	19.3	10
Final	23	0	0
Not Opened	0	0	0

Column B, trace is less than 0.01 inches.
 Columns C, D, F, G, H, I, J, L, N, Q, R-V and W are quantities from flow meters.
 Columns K and M measured from staff gages in each pond.

TABLE 3. LEACHATE BALANCE SUMMARY SOUTHEAST COUNTY LANDFILL HILLSBOROUGH COUNTY, FLORIDA YEAR-JOI1

			Leachate A	riving at LTRF	_	Lea	chate Leaving L'	TRF		Effluent Disposal		Infle	w / Outflow For I	TRF
	1	Leachate Hauled	Leachate	Leachate	Leachate	Total Leachate	Leachate	Leachme	Total	Effluent	Effluent	Total Inflow	Total Outflow	Change
	Rainfall	to LTRF from	from Section 9	from Section 7-8	from Phases I-VI	Hauled	Dust Control	Treated at	Effluent	Dust Control	Irrigation	to	from	in
		HHLF/TRLF	Pumped to LTRF	Pumped to LTRF	Pumped to LTRF	from LTRF	(Sprayed)	LTRF	Hauled	(Sprayed)		LTRF	LTRP	Storage ³
Month	(in)	(gal.)	(gal.)	(gul.)	(gal.)	(gal)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)	(gal.)
January	3.65	0	24,351	39,496	739,603	894,048	42,104	0	0	0	٥	803,450	936,152	-132,702
February														
March									_					
April														
May								-						
June														
fuly														
August														
September														
October													:	
November														
December														
											•			
YTD Total	3.65	0	24,351	39,496	739,603	894,048	42,104	0	0	0	0	803,450	936,152	-132,702

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

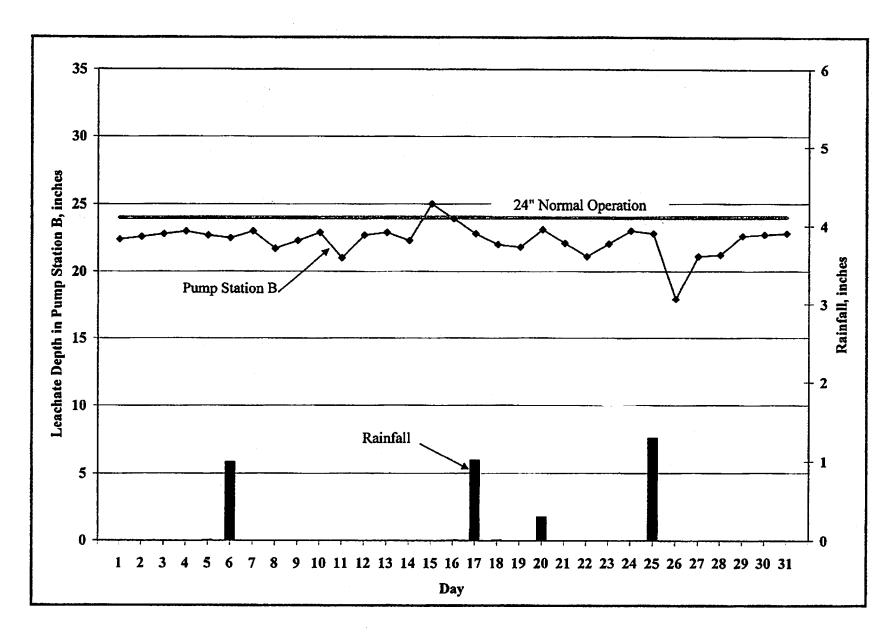


Figure 1. Leachate Levels in Pump Station B and Rainfall for January 2011.