



An employee-owned company

August 9, 2010

Mr. John Morris, P.G.
Florida Department of Environmental Protection
Southwest District Office - Solid Waste Section
13051 N. Telecom Parkway
Temple Terrace, Florida 33637-0926

Dept. Of Environmental Protection
AUG 10 2010
Southwest District

**Re: Manatee County Lena Road Landfill
Monthly Report – July 2010**

Dear Mr. Morris:

This letter includes the following monthly reports: Monthly Water Balance Report (Exhibit A), Monthly Leachate Tracking Summary - 2010 (Exhibit B), Monthly Leachate Meter Readings, Monthly Rainfall, and Monthly Groundwater Gradient Report.

An inward gradient was present in the Stage I Landfill and the Stage III Landfill.

If you should have any questions concerning this report, please call me at 407/806-4153.

Sincerely,

Joe Miller, P.E.
Senior Project Manager

Attachments

cc: Mike Gore, Manatee County Solid Waste Division Manager
Bryan White, Manatee County Landfill Superintendent
Jeanne' Detweiler, Manatee County Division/Landfill
File – 120498.94 0100

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EXHIBIT A

MANATEE COUNTY SOLID WASTE MANAGEMENT FACILITY
 LENA ROAD LANDFILL
 MONTHLY WATER BALANCE REPORT
JULY, 2010

**FLORIDA DEPARTMENT OF
 ENVIRONMENTAL PROTECTION
 AUG 10 2010
 SOUTHWEST DISTRICT
 TAMPA**

A	B	C	D	E	F	G	H
DATE	LEACHATE STAGE I Lift Station 1 (gallons)	LEACHATE STAGE I Lift Station 2 (gallons)	LEACHATE STAGE I TOTAL (gallons)	LEACHATE STAGE III TOTAL (gallons)	TOTAL LEACHATE PUMPED (gallons)	RAINFALL (Inches)	RAINFALL (gallons)
01-Jul-10	34,910	280	35,190	14,900	50,090	0.07	319,355
02-Jul-10	28,930	270	29,200	15,600	44,800	0.04	182,489
03-Jul-10	0	0	0	0	0	1.34	6,113,365
04-Jul-10	0	0	0	0	0	0.37	1,688,019
05-Jul-10	0	0	0	0	0	1.36	6,204,610
06-Jul-10	168,170	1,240	169,410	59,800	229,210	0.10	456,221
07-Jul-10	40,940	360	41,300	16,100	57,400	0.00	0
08-Jul-10	39,880	440	40,320	15,300	55,620	0.00	0
09-Jul-10	38,860	890	39,750	14,400	54,150	0.00	0
10-Jul-10	0	0	0	0	0	0.00	0
11-Jul-10	0	0	0	0	0	0.00	0
12-Jul-10	105,930	2,720	108,650	40,000	148,650	0.00	0
13-Jul-10	31,130	940	32,070	11,100	43,170	0.00	0
14-Jul-10	29,510	1,220	30,730	11,200	41,930	0.88	4,014,747
15-Jul-10	27,880	800	28,680	10,600	39,280	1.15	5,246,545
16-Jul-10	42,470	710	43,180	12,800	55,980	0.00	0
17-Jul-10	0	0	0	0	0	0.00	0
18-Jul-10	0	0	0	0	0	0.10	456,221
19-Jul-10	97,910	2,070	99,980	37,600	137,580	0.00	0
20-Jul-10	27,260	1,150	28,410	10,100	38,510	0.00	0
21-Jul-10	29,750	740	30,490	11,400	41,890	0.00	0
22-Jul-10	29,240	860	30,100	11,000	41,100	0.00	0
23-Jul-10	32,550	760	33,310	12,100	45,410	0.79	3,604,148
24-Jul-10	0	0	0	0	0	0.15	684,332
25-Jul-10	0	0	0	0	0	0.03	136,866
26-Jul-10	83,680	1,580	85,260	31,800	117,060	0.00	0
27-Jul-10	25,280	250	25,530	10,000	35,530	0.00	0
28-Jul-10	25,680	1,100	26,780	10,100	36,880	0.00	0
29-Jul-10	25,250	440	25,690	9,900	35,590	0.21	958,065
30-Jul-10	27,810	320	28,130	10,300	38,430	0.00	0
31-Jul-10	0	0	0	0	0	0.00	0
TOTAL	993,020	19,140	1,012,160	376,100	1,388,260	6.59	30,064,984
Leachate Pumped as Percentage of Rainfall			5.5%	3.2%			

Column Notes:

- A - Date of reading.
- B - Leachate pumped (gallons) from Stage I by lift station 1.
- C - Leachate pumped (gallons) from Stage I by lift station 2.
- D - Total Stage I leachate pumpage (B+C).
- E - Leachate pumped (gallons) from Stage III.
- F - Total leachate pumped to WWTP storage tank (D+E).
- G - Rainfall (inches) recorded on this date.
- H - Rainfall (gallons) calculated based on open area (G x Area x 27,156 gal/acre-in).

	Stage I (acres)	Stage III (acres)	TOTAL (acres)
Initial Cover	--	66.0	66.0
Intermediate Cover	102.0	--	102.0
Closed	30.0	--	30.0
TOTAL	132.0	66.0	198.0
Open Area	102.0	66.0	168.0

Comments

EXHIBIT B

MANATEE COUNTY SOLID WASTE MANAGEMENT FACILITY LENA ROAD LANDFILL MONTHLY LEACHATE TRACKING SUMMARY -- 2010

	B	C	D	E	F	G	H
MONTH	STAGE I	STAGE III	TOTAL			STAGE I	STAGE III
	LEACHATE	LEACHATE	LEACHATE	RAINFALL	RAINFALL	LEACHATE/ RAINFALL	LEACHATE /RAINFALL
	(gallons)	(gallons)	(gallons)	(inches)	(gallons)	(%)	(%)
JANUARY	680,510	605,300	1,285,810	3.21	14,644,704	7.7%	10.5%
FEBRUARY	728,310	543,100	1,271,410	2.72	12,409,219	9.7%	11.1%
MARCH	890,130	579,900	1,470,030	4.36	19,891,249	7.4%	7.4%
APRIL	780,100	485,800	1,265,900	2.54	11,588,021	11.1%	10.7%
MAY	536,970	374,700	911,670	1.78	8,120,739	10.9%	11.7%
JUNE	600,970	367,900	968,870	8.68	39,600,009	2.5%	2.4%
JULY	1,012,160	376,100	1,388,260	6.59	30,064,984	5.5%	3.2%
AUGUST							
SEPTEMBER							
OCTOBER							
NOVEMBER							
DECEMBER							
TOTAL	5,229,150	3,332,800	8,561,950	29.88	136,318,926	6.3%	6.2%

Notes:

1. (B) Total leachate pumped from Stage I.
2. (C) Total leachate pumped from Stage III.
3. (D) Total leachate (Column B+C) pumped to the WWTP storage tank.
4. (E) Total rainfall in inches.
5. (F) Total rainfall in gallons (Stage I and III Open Area of 168-acres x Rainfall)
6. (G) Stage I leachate pumped as a percentage of rainfall.
7. (H) Stage III leachate pumped as a percentage of rainfall.

Landfill Stage Land Areas

	Stage I	Stage III	TOTAL
	(acres)	(acres)	(acres)
Initial Cover	--	66.0	66.0
Intermediate Cov.	102.0	--	102.0
Closed	30.0	--	30.0
TOTAL	132.0	66.0	198.0
Open Area	102.0	66.0	168.0

Landfill

LANDFILL SHEET		
2010 July	RAIN FALL	LEACHATE MGD
1	0.07	0.019
2	0.04	0.018
3	1.34	0.017
4	0.37	0.021
5	1.36	0.020
6	0.10	0.028
7	0.00	0.023
8	0.00	0.021
9	0.00	0.019
10	0.00	0.018
11	0.00	0.018
12	0.00	0.017
13	0.00	0.016
14	0.88	0.016
15	1.15	0.016
16	0.00	0.019
17	0.00	0.017
18	0.10	0.017
19	0.00	0.017
20	0.00	0.016
21	0.00	0.015
22	0.00	0.016
23	0.79	0.015
24	0.15	0.015
25	0.03	0.015
26	0.00	0.014
27	0.00	0.014
28	0.00	0.014
29	0.21	0.014
30	0.00	0.015
31	0.00	0.014
TOTAL	6.59	0.534
AVG		0.017
MIN		
MAX	1.36	0.028

LAKE LEVEL DATA IN FEET NGVD	
SOUTH (86 ACRE)	EAST (63 ACRE)
38.40	31.50
38.30	31.70
38.20	32.10
38.50	32.80
38.40	33.00
38.30	33.40
38.30	33.80
38.10	33.90
38.10	34.00
38.00	34.30
38.00	35.00
37.90	35.00
37.80	35.10
38.00	35.40
37.80	35.40
37.90	35.70
37.80	35.90
37.80	35.80
37.70	36.10
37.50	36.40
37.40	36.40
37.30	36.40
37.40	36.40
37.20	36.30
37.10	36.40
37.00	36.30
36.90	36.10
36.20	36.30
36.80	36.30
36.60	36.00
36.60	36.10

Fax # 9-708-5668

FIGURE L-7

Manatee County Lena Road Landfill

Monthly Groundwater Gradient Report

Month and Year: JULY 2010

Piezometers Inside Slurry Wall				Groundwater Monitoring Wells Outside Slurry Wall		
Piezometer	Riser Elevation	Leachate Elevation	Gradient Flow	Monitoring Well	Riser Elevation	Groundwater Elevation
P-1	42.68	29.73	<i>inward</i>	GW-1	38.68	29.93
P-2	42.32	29.03	<i>inward</i>	GW-2	40.92	29.86
P-3	40.36	26.00	<i>inward</i>	GW-3	39.40	33.75
P-4	40.78	22.08	<i>inward</i>	GW-4	40.53	32.68
P-5	40.73	20.92	<i>inward</i>	GW-5	39.90	31.11
P-6	40.74	19.87	<i>inward</i>	GW-6	38.95	31.56
P-7	40.60	18.99	<i>inward</i>	GW-7	39.49	29.99
P-8	40.21	19.69	<i>inward</i>	GW-8	39.75	30.41
P-9	39.97	19.44	<i>inward</i>	GW-9	39.65	29.74
P-10	39.86	19.31	<i>inward</i>	GW-10	38.34	29.25
P-11	40.52	22.43	<i>inward</i>	GW-11	38.26	30.44
P-12	43.28	29.55	<i>inward</i>	GW-12	42.09	31.82
P-13	44.78	30.51	<i>inward</i>	GW-13	44.79	32.50
P-14	45.09	29.83	<i>inward</i>	GW-14	39.63	33.55
P-15	45.57	30.97	<i>inward</i>	GW-15	42.33	34.67
P-16	44.67	31.09	<i>inward</i>	GW-16	44.41	35.02
P-17	44.28	30.05	<i>inward</i>	GW-17	42.19	33.62

Comments:

Date Data Collected: July 28, 2010

Form Revised December 6, 2004