



An employee-owned company

March 7, 2011

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  
MAR 08 2011  
Southwest District

**Re: Manatee County Lena Road Landfill  
Monthly Report – February 2011**

Dear Mr. Morris:

This letter includes the following monthly reports: Monthly Water Balance Report (Exhibit A), Monthly Leachate Tracking Summary - 2011 (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  
Anthony Detweiler, Manatee County Landfill Operations Supervisor  
File – 120498.94 0100

u:\so\projects\manatee county\sw-05 annual monitoring\2011\february\monthlyltr\_february 2011.doc

# EXHIBIT A

MANATEE COUNTY SOLID WASTE MANAGEMENT FACILITY  
 LENA ROAD LANDFILL  
 MONTHLY WATER BALANCE REPORT  
**February, 2011**

Dept. Of Environmental Protection  
**MAR 08 2011**  
 Southwest District

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-Feb-11	17,210	0	17,210	0	17,210	0.00	0
02-Feb-11	13,880	1,070	14,950	0	14,950	0.00	0
03-Feb-11	13,680	1,010	14,690	0	14,690	0.00	0
04-Feb-11	13,670	1,160	14,830	0	14,830	0.00	0
05-Feb-11	0	0	0	0	0	0.00	0
06-Feb-11	0	0	0	0	0	0.20	912,443
07-Feb-11	46,350	3,560	49,910	0	49,910	0.48	2,189,862
08-Feb-11	14,020	1,720	15,740	800	16,540	0.00	0
09-Feb-11	12,650	6,400	19,050	0	19,050	0.00	0
10-Feb-11	13,710	1,690	15,400	0	15,400	0.29	1,323,042
11-Feb-11	14,650	1,570	16,220	0	16,220	0.00	0
12-Feb-11	0	0	0	0	0	0.00	0
13-Feb-11	0	0	0	0	0	0.00	0
14-Feb-11	32,560	20,300	52,860	0	52,860	0.00	0
15-Feb-11	13,270	4,770	18,040	0	18,040	0.00	0
16-Feb-11	13,620	1,270	14,890	0	14,890	0.00	0
17-Feb-11	13,970	1,650	15,620	0	15,620	0.00	0
18-Feb-11	12,320	1,370	13,690	0	13,690	0.00	0
19-Feb-11	0	0	0	0	0	0.00	0
20-Feb-11	0	0	0	0	0	0.00	0
21-Feb-11	0	0	0	0	0	0.00	0
22-Feb-11	58,510	7,330	65,840	5,400	71,240	0.00	0
23-Feb-11	13,610	3,820	17,430	16,300	33,730	0.00	0
24-Feb-11	12,890	3,640	16,530	8,500	25,030	0.00	0
25-Feb-11	15,610	3,760	19,370	7,800	27,170	0.00	0
26-Feb-11	0	0	0	0	0	0.00	0
27-Feb-11	0	0	0	0	0	0.00	0
28-Feb-11	43,260	8,330	51,590	22,200	73,790	0.00	0
	0	0	0	0	0	0.00	0
	0	0	0	0	0	0.00	0
	0	0	0	0	0	0.00	0
	0	0	0	0	0	0.00	0
<b>TOTAL</b>	<b>389,440</b>	<b>74,420</b>	<b>463,860</b>	<b>61,000</b>	<b>524,860</b>	<b>0.97</b>	<b>4,425,347</b>
Leachate Pumped as Percentage of Rainfall			17.3%	3.5%			

**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
<b>TOTAL</b>	<b>132.0</b>	<b>66.0</b>	<b>198.0</b>
<b>Open Area</b>	<b>102.0</b>	<b>66.0</b>	<b>168.0</b>

**Comments**

## EXHIBIT B

### MANATEE COUNTY SOLID WASTE MANAGEMENT FACILITY LENA ROAD LANDFILL MONTHLY LEACHATE TRACKING SUMMARY -- 2011

	B	C	D	E	F	G	H
	STAGE I	STAGE III	TOTAL			STAGE I	STAGE III
MONTH	LEACHATE	LEACHATE	LEACHATE	RAINFALL	RAINFALL	LEACHATE/ RAINFALL	LEACHATE /RAINFALL
	(gallons)	(gallons)	(gallons)	(inches)	(gallons)	(%)	(%)
JANUARY	563,230	153,700	716,930	3.67	16,743,322	5.5%	2.3%
FEBRUARY	463,860	61,000	524,860	0.97	4,425,347	17.3%	3.5%
MARCH							
APRIL							
MAY							
JUNE							
JULY							
AUGUST							
SEPTEMBER							
OCTOBER							
NOVEMBER							
DECEMBER							
<b>TOTAL</b>	<b>1,027,090</b>	<b>214,700</b>	<b>1,241,790</b>	<b>4.64</b>	<b>21,168,669</b>	<b>8.0%</b>	<b>2.6%</b>

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**

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



Landfill

Dept. Of Environmental Protection

MAR 08 2011

Southwest District

LANDFILL SHEET			LAKE LEVEL DATA IN FEET NGVD	
2011 Feb	RAIN FALL	LEACHATE MGD	SOUTH (86 ACRE)	EAST (63 ACRE)
1	0.00	0.004	38.30	29.90
2	0.00	0.004	38.20	29.90
3	0.00	0.004	38.20	29.60
4	0.00	0.004	38.20	29.60
5	0.00	0.005	38.10	29.60
6	0.20	0.005	38.10	29.60
7	0.48	0.004	38.10	30.40
8	0.00	0.004	38.00	30.70
9	0.00	0.003	37.90	30.70
10	0.29	0.005	38.00	30.90
11	0.00	0.004	38.00	31.10
12	0.00	0.003	37.90	31.20
13	0.00	0.003	37.90	31.10
14	0.00	0.003	37.80	31.40
15	0.00	0.004	37.60	31.80
16	0.00	0.004	37.50	31.40
17	0.00	0.004	37.40	31.00
18	0.00	0.004	37.30	30.80
19	0.00	0.004	37.30	30.80
20	0.00	0.004	37.10	30.80
21	0.00	0.007	37.00	30.70
22	0.00	0.010	37.00	30.20
23	0.00	0.011	37.00	30.00
24	0.00	0.009	37.00	29.80
25	0.00	0.009	36.90	29.70
26	0.00	0.008	36.90	29.30
27	0.00	0.008	36.80	29.20
28	0.00	0.008	36.80	29.00
29				
30				
31				
TOTAL	0.97	0.149		
AVG		0.005		
MIN				
MAX	0.48	0.011		

Fax # 9-708-5668

## FIGURE L-7

Manatee County Lena Road Landfill

# Monthly Groundwater Gradient Report

Month and Year: FEBRUARY 2011

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	29.56	<i>inward</i>	GW-1	38.68	33.77
P-2	42.32	28.72	<i>inward</i>	GW-2	40.92	30.94
P-3	40.36	24.98	<i>inward</i>	GW-3	39.40	31.78
P-4	40.78	22.05	<i>inward</i>	GW-4	40.53	31.43
P-5	40.73	21.54	<i>inward</i>	GW-5	39.90	31.14
P-6	40.74	24.13	<i>inward</i>	GW-6	38.95	30.28
P-7	40.60	21.10	<i>inward</i>	GW-7	39.49	27.84
P-8	40.21	21.19	<i>inward</i>	GW-8	39.75	26.73
P-9	39.97	21.21	<i>inward</i>	GW-9	39.65	26.82
P-10	39.86	20.28	<i>inward</i>	GW-10	38.34	27.08
P-11	40.52	22.37	<i>inward</i>	GW-11	38.26	29.61
P-12	43.28	29.38	<i>inward</i>	GW-12	42.09	30.69
P-13	44.78	30.45	<i>inward</i>	GW-13	44.79	31.29
P-14	45.09	29.77	<i>inward</i>	GW-14	39.63	33.79
P-15	45.57	30.87	<i>inward</i>	GW-15	42.33	34.84
P-16	44.67	30.69	<i>inward</i>	GW-16	44.41	34.42
P-17	44.28	29.75	<i>inward</i>	GW-17	42.19	34.54

Comments:

Date Data Collected: February 25, 2011

Form Revised December 6, 2004