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May 1, 2012

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  
MAY 03 2012  
Southwest District

**Re: Manatee County Lena Road Landfill  
Monthly Report – April 2012**

Dear Mr. Morris:

This letter includes the following monthly reports: Monthly Water Balance Report (Exhibit A), Monthly Leachate Tracking Summary - 2012 (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

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# EXHIBIT A

MANATEE COUNTY SOLID WASTE MANAGEMENT FACILITY  
 LENA ROAD LANDFILL  
 MONTHLY WATER BALANCE REPORT  
 APRIL, 2012

Dept. of Environmental Protection  
 MAY 03 2012  
 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-Apr-12	0	0	0	0	0	0.00	0
02-Apr-12	43,330	3,710	47,040	27,000	74,040	0.00	0
03-Apr-12	12,730	850	13,580	7,100	20,680	0.00	0
04-Apr-12	12,550	1,760	14,310	7,300	21,610	0.00	0
05-Apr-12	16,700	70	16,770	10,700	27,470	0.20	912,443
06-Apr-12	14,500	0	14,500	9,300	23,800	0.00	0
07-Apr-12	0	0	0	0	0	0.00	0
08-Apr-12	0	0	0	0	0	0.00	0
09-Apr-12	26,060	10,880	36,940	18,200	55,140	0.00	0
10-Apr-12	12,310	3,170	15,480	7,400	22,880	0.00	0
11-Apr-12	11,810	1,750	13,560	7,500	21,060	0.00	0
12-Apr-12	12,300	520	12,820	8,800	21,620	0.00	0
13-Apr-12	10,680	3,590	14,270	5,600	19,870	0.00	0
14-Apr-12	0	0	0	0	0	0.00	0
15-Apr-12	0	0	0	0	0	0.00	0
16-Apr-12	29,220	5,900	35,120	18,300	53,420	0.00	0
17-Apr-12	10,990	2,400	13,390	9,400	22,790	0.00	0
18-Apr-12	14,050	20	14,070	9,400	23,470	0.00	0
19-Apr-12	14,580	0	14,580	7,300	21,880	0.05	228,111
20-Apr-12	15,230	10	15,240	9,200	24,440	0.00	0
21-Apr-12	0	0	0	0	0	2.49	11,359,910
22-Apr-12	0	0	0	0	0	1.82	8,303,228
23-Apr-12	55,800	3,160	58,960	45,100	104,060	0.00	0
24-Apr-12	10,270	3,760	14,030	11,300	25,330	0.00	0
25-Apr-12	10,010	2,490	12,500	12,800	25,300	0.00	0
26-Apr-12	10,690	3,100	13,790	10,900	24,690	0.00	0
27-Apr-12	11,950	2,940	14,890	10,600	25,490	0.00	0
28-Apr-12	0	0	0	0	0	0.00	0
29-Apr-12	0	0	0	0	0	0.10	456,221
30-Apr-12	40,640	1,520	42,160	31,700	73,860	0.00	0
	0	0	0	0	0	0.00	0
<b>TOTAL</b>	<b>396,400</b>	<b>51,600</b>	<b>448,000</b>	<b>284,900</b>	<b>732,900</b>	<b>4.66</b>	<b>21,259,913</b>
Leachate Pumped as Percentage of Rainfall			3.5%	3.4%			

**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 -- 2012

	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	524,770	212,500	737,270	0.94	4,288,480	20.2%	12.6%
FEBRUARY	500,670	193,200	693,870	0.64	2,919,816	28.2%	16.8%
MARCH	497,140	214,600	711,740	2.84	12,956,685	6.3%	4.2%
APRIL	448,000	284,900	732,900	4.66	21,259,913	3.5%	3.4%
MAY							
JUNE							
JULY							
AUGUST							
SEPTEMBER							
OCTOBER							
NOVEMBER							
DECEMBER							
<b>TOTAL</b>	<b>1,970,580</b>	<b>905,200</b>	<b>2,875,780</b>	<b>9.08</b>	<b>41,424,894</b>	<b>7.8%</b>	<b>5.6%</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**

	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
<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 SHEET			LAKE LEVEL DATA IN FEET NGVD	
2012 Apr	RAIN FALL	LEACHATE MGD	SOUTH (86 ACRE)	EAST (63 ACRE)
1	0.00	0.006	38.30	28.20
2	0.00	0.005	38.30	28.00
3	0.00	0.005	38.30	28.00
4	0.00	0.006	38.30	28.10
5	0.20	0.006	38.30	28.40
6	0.00	0.006	38.30	28.60
7	0.00	0.004	38.40	28.50
8	0.00	0.005	38.40	28.50
9	0.00	0.006	38.40	28.60
10	0.00	0.006	38.20	28.40
11	0.00	0.005	38.10	28.20
12	0.00	0.005	38.00	27.80
13	0.00	0.005	37.90	27.60
14	0.00	0.004	37.80	27.60
15	0.00	0.005	37.60	27.30
16	0.00	0.006	37.40	27.10
17	0.00	0.007	37.30	26.80
18	0.00	0.008	37.10	26.80
19	0.05	0.006	37.10	26.80
20	0.00	0.006	37.00	26.60
21	2.49	0.008	37.50	27.10
22	1.82	0.010	38.00	27.70
23	0.00	0.008	38.40	28.00
24	0.00	0.006	38.60	28.40
25	0.00	0.007	39.00	28.80
26	0.00	0.008	39.00	29.10
27	0.00	0.008	39.00	29.30
28	0.00	0.008	39.10	29.80
29	0.10	0.008	39.30	30.00
30	0.00	0.007	39.40	30.30
31				
TOTAL	4.66	0.190		
AVG		0.006		
MIN				
MAX	2.49	0.010		

Fax # 9-708-5668

## FIGURE L-7

Manatee County Lena Road Landfill

# Monthly Groundwater Gradient Report

Month and Year: APRIL 2012

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	30.00	<i>inward</i>	GW-1	38.68	30.70
P-2	42.32	29.86	<i>inward</i>	GW-2	40.92	30.80
P-3	40.36	24.82	<i>inward</i>	GW-3	39.40	30.89
P-4	40.78	23.68	<i>inward</i>	GW-4	40.53	30.34
P-5	40.73	23.62	<i>inward</i>	GW-5	39.90	30.45
P-6	40.74	23.66	<i>inward</i>	GW-6	38.95	29.54
P-7	40.60	23.52	<i>inward</i>	GW-7	39.49	26.59
P-8	40.21	23.55	<i>inward</i>	GW-8	39.75	25.19
P-9	39.97	23.56	<i>inward</i>	GW-9	39.65	25.30
P-10	39.86	22.55	<i>inward</i>	GW-10	38.34	25.15
P-11	40.52	23.71	<i>inward</i>	GW-11	38.26	29.11
P-12	43.28	29.86	<i>inward</i>	GW-12	42.09	30.22
P-13	44.78	30.57	<i>inward</i>	GW-13	44.79	32.23
P-14	45.09	30.59	<i>inward</i>	GW-14	39.63	31.57
P-15	45.57	31.26	<i>inward</i>	GW-15	42.33	32.31
P-16	44.67	31.16	<i>inward</i>	GW-16	44.41	31.81
P-17	44.28	30.00	<i>inward</i>	GW-17	42.19	31.45

Comments:

Date Data Collected: April 10, 2012

Form Revised December 6, 2004