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May 9, 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
MAY 12 2011
Southwest District

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

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EXHIBIT A

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

Dept. Of Environmental Protection
MAY 12 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-Apr-11	33,810	300	34,110	17,300	51,410	0.00	0
02-Apr-11	0	0	0	0	0	0.00	0
03-Apr-11	0	0	0	0	0	0.00	0
04-Apr-11	73,970	8,000	81,970	44,000	125,970	0.00	0
05-Apr-11	29,450	1,200	30,650	12,100	42,750	0.99	4,516,591
06-Apr-11	19,780	3,120	22,900	11,300	34,200	0.00	0
07-Apr-11	21,510	3,720	25,230	13,000	38,230	0.00	0
08-Apr-11	23,510	740	24,250	13,900	38,150	0.00	0
09-Apr-11	0	0	0	0	0	0.00	0
10-Apr-11	0	0	0	0	0	0.00	0
11-Apr-11	69,960	370	70,330	33,600	103,930	0.00	0
12-Apr-11	19,340	1,270	20,610	10,300	30,910	0.00	0
13-Apr-11	27,410	1,410	28,820	9,600	38,420	0.00	0
14-Apr-11	20,670	2,330	23,000	9,700	32,700	0.00	0
15-Apr-11	21,670	1,720	23,390	9,700	33,090	0.00	0
16-Apr-11	0	0	0	0	0	0.00	0
17-Apr-11	0	0	0	0	0	0.00	0
18-Apr-11	66,170	3,540	69,710	27,300	97,010	0.00	0
19-Apr-11	13,380	1,110	14,490	9,100	23,590	0.00	0
20-Apr-11	17,750	380	18,130	8,100	26,230	0.00	0
21-Apr-11	27,090	1,840	28,930	8,100	37,030	0.00	0
22-Apr-11	8,880	2,980	11,860	8,900	20,760	0.00	0
23-Apr-11	0	0	0	0	0	0.05	228,111
24-Apr-11	0	0	0	0	0	1.89	8,622,583
25-Apr-11	53,910	4,600	58,510	23,200	81,710	0.00	0
26-Apr-11	21,770	440	22,210	9,400	31,610	0.00	0
27-Apr-11	21,520	0	21,520	9,200	30,720	0.00	0
28-Apr-11	18,340	390	18,730	16,600	35,330	0.00	0
29-Apr-11	16,430	500	16,930	700	17,630	0.00	0
30-Apr-11	0	0	0	0	0	0.00	0
	0	0	0	0	0	0.00	0
TOTAL	626,320	39,960	666,280	305,100	971,380	2.93	13,367,284
Leachate Pumped as Percentage of Rainfall			8.2%	5.8%			

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 -- 2011

	B	C	D	E	F	G	H
MONTH	STAGE I LEACHATE (gallons)	STAGE III LEACHATE (gallons)	TOTAL LEACHATE (gallons)	RAINFALL (inches)	RAINFALL (gallons)	STAGE I LEACHATE/ RAINFALL (%)	STAGE III LEACHATE /RAINFALL (%)
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	522,550	237,300	759,850	8.59	39,189,410	2.2%	1.5%
APRIL	666,280	305,100	971,380	2.93	13,367,284	8.2%	5.8%
MAY							
JUNE							
JULY							
AUGUST							
SEPTEMBER							
OCTOBER							
NOVEMBER							
DECEMBER							
TOTAL	2,215,920	757,100	2,973,020	16.16	73,725,363	5.0%	2.6%

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 (acres)	Stage III (acres)	TOTAL (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			LAKE LEVEL DATA IN FEET NGVD	
2011 Apr	RAIN FALL	LEACHATE MGD	SOUTH (86 ACRE)	EAST (63 ACRE)
1	0.00	0.871	37.50	32.70
2	0.00	0.025	37.50	33.00
3	0.00	0.017	37.60	33.00
4	0.00	0.010	37.70	33.60
5	0.99	0.007	37.80	34.10
6	0.00	0.014	37.80	34.30
7	0.00	0.015	37.70	34.60
8	0.00	0.015	37.70	34.70
9	0.00	0.014	37.70	35.10
10	0.00	0.013	37.70	35.10
11	0.00	0.014	37.70	35.40
12	0.00	0.013	37.70	35.70
13	0.00	0.013	37.70	36.00
14	0.00	0.013	37.70	36.10
15	0.00	0.013	37.60	36.10
16	0.00	0.012	37.60	36.00
17	0.00	0.012	37.70	35.90
18	0.00	0.011	37.70	35.80
19	0.00	0.011	37.70	35.60
20	0.00	0.010	37.60	35.50
21	0.00	0.010	37.50	35.50
22	0.00	0.011	37.40	35.30
23	0.05	0.010	37.40	35.10
24	1.89	0.010	37.40	35.30
25	0.00	0.012	37.50	35.40
26	0.00	0.012	37.50	35.30
27	0.00	0.012	37.50	35.10
28	0.00	0.011	37.50	35.20
29	0.00	0.012	37.50	35.20
30	0.00	0.011	37.50	34.60
31				
TOTAL	2.93	1.234		
AVG		0.041		
MIN				
MAX	1.89	0.871		

Fax # 9-708-5668

FIGURE L-7

Dept. Of Environmental Protection
 MAY 12 2011
 Southwest District

Manatee County Lena Road Landfill

Monthly Groundwater Gradient Report

Month and Year: APRIL 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	29.68	<i>inward</i>	GW-1	38.68	31.90
P-2	42.32	28.92	<i>inward</i>	GW-2	40.92	32.09
P-3	40.36	24.98	<i>inward</i>	GW-3	39.40	33.25
P-4	40.78	22.03	<i>inward</i>	GW-4	40.53	32.28
P-5	40.73	21.53	<i>inward</i>	GW-5	39.90	31.90
P-6	40.74	21.26	<i>inward</i>	GW-6	38.95	31.21
P-7	40.60	22.50	<i>inward</i>	GW-7	39.49	29.69
P-8	40.21	21.31	<i>inward</i>	GW-8	39.75	29.30
P-9	39.97	21.25	<i>inward</i>	GW-9	39.65	29.00
P-10	39.86	20.33	<i>inward</i>	GW-10	38.34	28.99
P-11	40.52	22.34	<i>inward</i>	GW-11	38.26	30.76
P-12	43.28	29.38	<i>inward</i>	GW-12	42.09	31.37
P-13	44.78	30.28	<i>inward</i>	GW-13	44.79	31.74
P-14	45.09	29.79	<i>inward</i>	GW-14	39.63	33.19
P-15	45.57	30.95	<i>inward</i>	GW-15	42.33	33.58
P-16	44.67	31.13	<i>inward</i>	GW-16	44.41	34.61
P-17	44.28	30.00	<i>inward</i>	GW-17	42.19	33.45

Comments:

Date Data Collected: April 27, 2011

Form Revised December 6, 2004