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June 6, 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
JUN 08 2011
Southwest District

**Re: Manatee County Lena Road Landfill
Monthly Report – May 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
MAY, 2011

FLORIDA DEPARTMENT OF
 ENVIRONMENTAL PROTECTION
JUN 08 2011
 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-May-11	0	0	0	0	0	0.00	0
02-May-11	48,980	7,090	56,070	26,000	82,070	0.00	0
03-May-11	15,250	1,910	17,160	6,900	24,060	0.00	0
04-May-11	16,550	2,000	18,550	7,200	25,750	0.00	0
05-May-11	16,430	1,690	18,120	7,200	25,320	0.00	0
06-May-11	17,860	460	18,320	7,300	25,620	0.89	4,060,370
07-May-11	0	0	0	0	0	0.00	0
08-May-11	0	0	0	0	0	0.00	0
09-May-11	58,910	2,480	61,390	24,700	86,090	0.00	0
10-May-11	13,930	380	14,310	4,400	18,710	0.00	0
11-May-11	17,690	710	18,400	7,100	25,500	0.00	0
12-May-11	0	0	0	0	0	0.00	0
13-May-11	29,910	1,510	31,420	24,800	56,220	0.00	0
14-May-11	0	0	0	0	0	0.17	775,576
15-May-11	0	0	0	0	0	0.05	228,111
16-May-11	57,390	830	58,220	68,800	127,020	0.00	0
17-May-11	17,240	230	17,470	19,300	36,770	0.00	0
18-May-11	17,780	960	18,740	21,400	40,140	0.00	0
19-May-11	14,400	3,600	18,000	19,400	37,400	0.00	0
20-May-11	12,420	1,080	13,500	18,800	32,300	0.00	0
21-May-11	0	0	0	0	0	0.00	0
22-May-11	0	0	0	0	0	0.00	0
23-May-11	41,400	6,400	47,800	58,800	106,600	0.00	0
24-May-11	13,390	3,090	16,480	18,400	34,880	0.00	0
25-May-11	14,080	3,560	17,640	19,300	36,940	0.00	0
26-May-11	14,040	3,010	17,050	21,100	38,150	0.00	0
27-May-11	14,030	1,390	15,420	18,300	33,720	0.00	0
28-May-11	0	0	0	0	0	0.00	0
29-May-11	0	0	0	0	0	0.00	0
30-May-11	0	0	0	0	0	0.00	0
31-May-11	52,540	12,470	65,010	78,600	143,610	0.00	0
TOTAL	504,220	54,850	559,070	477,800	1,036,870	1.11	5,064,056
Leachate Pumped as Percentage of Rainfall			18.2%	24.0%			

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	STAGE III	TOTAL			STAGE I	STAGE III
	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	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	559,070	477,800	1,036,870	1.11	5,064,056	18.2%	24.0%
JUNE							
JULY							
AUGUST							
SEPTEMBER							
OCTOBER							
NOVEMBER							
DECEMBER							
TOTAL	2,774,990	1,234,900	4,009,890	17.27	78,789,419	5.8%	4.0%

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			LAKE LEVEL DATA IN FEET NGVD	
2011 May	RAIN FALL	LEACHATE MGD	SOUTH (86 ACRE)	EAST (63 ACRE)
1	0.00	0.010	37.50	34.60
2	0.00	0.010	37.50	34.30
3	0.00	0.010	37.40	34.20
4	0.00	0.010	37.40	33.90
5	0.00	0.011	37.40	33.90
6	0.89	0.011	37.40	33.90
7	0.00	0.011	37.50	33.60
8	0.00	0.010	37.40	33.60
9	0.00	0.011	37.30	33.40
10	0.00	0.012	37.40	33.50
11	0.00	0.009	37.30	33.10
12	0.00	0.017	37.20	33.10
13	0.00	0.013	37.10	33.30
14	0.17	0.013	37.30	33.00
15	0.05	0.011	37.20	32.80
16	0.00	0.011	37.20	32.80
17	0.00	0.011	37.10	32.60
18	0.00	0.007	37.10	32.60
19	0.00	0.007	37.10	32.10
20	0.00	0.007	36.90	32.00
21	0.00	0.007	37.00	31.40
22	0.00	0.008	36.80	31.30
23	0.00	0.007	36.80	31.20
24	0.00	0.007	36.70	31.20
25	0.00	0.008	36.60	30.40
26	0.00	0.008	36.60	31.10
27	0.00	0.007	36.50	30.90
28	0.00	0.008	36.40	30.90
29	0.00	0.007	36.40	29.60
30	0.00	0.007	36.40	29.60
31	0.00	0.007	36.30	29.30
TOTAL	1.11	0.293		
AVG		0.009		
MIN				
MAX	0.89	0.017		

Fax # 9-708-5668

FIGURE L-7

Manatee County Lena Road Landfill

Monthly Groundwater Gradient Report

Month and Year: MAY 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	30.74
P-2	42.32	28.69	<i>inward</i>	GW-2	40.92	30.77
P-3	40.36	24.86	<i>inward</i>	GW-3	39.40	32.55
P-4	40.78	21.86	<i>inward</i>	GW-4	40.53	31.35
P-5	40.73	21.37	<i>inward</i>	GW-5	39.90	31.13
P-6	40.74	21.22	<i>inward</i>	GW-6	38.95	30.48
P-7	40.60	22.19	<i>inward</i>	GW-7	39.49	28.58
P-8	40.21	21.09	<i>inward</i>	GW-8	39.75	29.38
P-9	39.97	21.00	<i>inward</i>	GW-9	39.65	26.71
P-10	39.86	20.10	<i>inward</i>	GW-10	38.34	27.08
P-11	40.52	22.25	<i>inward</i>	GW-11	38.26	29.80
P-12	43.28	29.12	<i>inward</i>	GW-12	42.09	30.93
P-13	44.78	30.08	<i>inward</i>	GW-13	44.79	31.89
P-14	45.09	29.59	<i>inward</i>	GW-14	39.63	32.33
P-15	45.57	30.74	<i>inward</i>	GW-15	42.33	35.20
P-16	44.67	31.11	<i>inward</i>	GW-16	44.41	33.91
P-17	44.28	29.95	<i>inward</i>	GW-17	42.19	33.09

Comments:

Date Data Collected: May 17, 2011

Form Revised December 6, 2004