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June 3, 2013

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 04 2013
Orlando, Florida

**Re: Manatee County Lena Road Landfill
Monthly Report – May 2013**

Dear Mr. Morris:

This letter includes the following monthly reports: Monthly Water Balance Report (Exhibit A), Monthly Leachate Tracking Summary - 2013 (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

EXHIBIT A

MANATEE COUNTY SOLID WASTE MANAGEMENT FACILITY

LENA ROAD LANDFILL

MONTHLY WATER BALANCE REPORT

MAY, 2013

Dept. of Environmental Protection
JUN 04 2013
 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-May-13	15,850	350	16,200	56,700	72,900	1.25	5,702,766
02-May-13	16,800	250	17,050	33,100	50,150	0.89	4,060,370
03-May-13	19,890	410	20,300	28,200	48,500	0.00	0
04-May-13	0	0	0	0	0	0.00	0
05-May-13	0	0	0	0	0	0.00	0
06-May-13	49,580	3,680	53,260	64,600	117,860	0.00	0
07-May-13	12,010	1,830	13,840	15,100	28,940	0.00	0
08-May-13	11,990	1,900	13,890	15,800	29,690	0.00	0
09-May-13	170	2,070	2,240	0	2,240	0.00	0
10-May-13	0	0	0	0	0	0.00	0
11-May-13	0	0	0	0	0	0.00	0
12-May-13	0	0	0	0	0	0.00	0
13-May-13	63,370	9,842	73,212	69,400	142,612	0.00	0
14-May-13	11,390	3,488	14,878	12,800	27,678	0.00	0
15-May-13	13,710	4,490	18,200	14,300	32,500	0.00	0
16-May-13	14,560	2,320	16,880	14,100	30,980	0.00	0
17-May-13	15,580	2,720	18,300	12,600	30,900	0.00	0
18-May-13	0	0	0	0	0	0.00	0
19-May-13	0	0	0	0	0	0.00	0
20-May-13	44,090	8,040	52,130	37,700	89,830	0.70	3,193,549
21-May-13	15,320	990	16,310	14,100	30,410	0.20	912,443
22-May-13	16,820	1,370	18,190	13,000	31,190	0.00	0
23-May-13	15,320	1,440	16,760	11,300	28,060	0.00	0
24-May-13	13,760	1,230	14,990	11,100	26,090	0.00	0
25-May-13	0	0	0	0	0	0.00	0
26-May-13	0	0	0	0	0	0.00	0
27-May-13	0	0	0	0	0	0.00	0
28-May-13	50,070	17,960	68,030	7,100	75,130	0.35	1,596,775
29-May-13	14,550	1,080	15,630	23,600	39,230	0.05	228,111
30-May-13	14,180	2,410	16,590	14,100	30,690	0.00	0
31-May-13	14,560	1,730	16,290	10,000	26,290	0.27	1,231,798
TOTAL	443,670	69,600	513,170	478,700	991,870	3.71	16,925,810
Leachate Pumped as Percentage of Rainfall			5.0%	7.2%			

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 -- 2013

	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	620,550	296,600	917,150	0.73	3,330,416	30.7%	22.7%
FEBRUARY	544,840	235,500	780,340	1.21	5,520,278	16.3%	10.9%
MARCH	621,720	19,300	641,020	1.47	6,706,453	15.3%	0.7%
APRIL	592,420	0	592,420	4.13	18,841,940	5.2%	0.0%
MAY	513,170	478,700	991,870	3.71	16,925,810	5.0%	7.2%
JUNE			0		0		
JULY			0		0		
AUGUST			0		0		
SEPTEMBER			0		0		
OCTOBER			0		0		
NOVEMBER			0		0		
DECEMBER			0		0		
TOTAL	2,892,700	1,030,100	3,922,800	11.25	51,324,897	9.3%	5.1%

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 SHEET			LAKE LEVEL DATA IN FEET NGVD	
2013 May	RAIN FALL	LEACHATE MGD	SOUTH (86 ACRE)	EAST (63 ACRE)
1	1.25	0.011	40.70	31.80
2	0.89	0.011	40.70	31.70
3	0.00	0.010	40.70	31.70
4	0.00	0.009	40.90	31.80
5	0.00	0.008	41.10	31.70
6	0.00	0.008	41.10	31.90
7	0.00	0.008	41.10	32.00
8	0.00	0.005	41.10	32.00
9	0.00	0.002	41.10	32.00
10	0.00	0.013	41.20	32.00
11	0.00	0.007	41.10	32.00
12	0.00	0.007	41.10	32.10
13	0.00	0.007	41.20	32.10
14	0.00	0.007	41.00	31.90
15	0.00	0.006	40.90	31.70
16	0.00	0.006	40.70	31.50
17	0.00	0.006	40.60	31.50
18	0.00	0.006	40.40	31.40
19	0.00	0.006	40.30	31.20
20	0.70	0.006	40.10	31.20
21	0.20	0.006	40.10	31.20
22	0.00	0.006	40.10	31.20
23	0.00	0.005	40.00	31.20
24	0.00	0.005	39.90	31.10
25	0.00	0.003	39.80	31.10
26	0.00	0.003	39.70	31.10
27	0.00	0.003	39.60	31.10
28	0.35	0.005	39.60	31.00
29	0.05	0.007	39.50	31.00
30	0.00	0.006	39.40	31.10
31	0.27	0.006	39.50	31.10
TOTAL	3.71	0.204		
AVG		0.007		
MIN				
MAX	1.25	0.013		

Fax # 9-708-5668

FIGURE L-7

Manatee County Lena Road Landfill

Monthly Groundwater Gradient Report

Month and Year: MAY 2013

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	30.06	<i>inward</i>	GW-1	38.68	31.98
P-2	42.32	29.92	<i>inward</i>	GW-2	40.92	32.06
P-3	40.36	24.95	<i>inward</i>	GW-3	39.40	31.63
P-4	40.78	23.69	<i>inward</i>	GW-4	40.53	30.81
P-5	40.73	23.66	<i>inward</i>	GW-5	39.90	30.74
P-6	40.74	23.60	<i>inward</i>	GW-6	38.95	29.98
P-7	40.60	23.54	<i>inward</i>	GW-7	39.49	27.16
P-8	40.21	23.52	<i>inward</i>	GW-8	39.75	25.70
P-9	39.97	23.59	<i>inward</i>	GW-9	39.65	25.62
P-10	39.86	22.61	<i>inward</i>	GW-10	38.34	25.49
P-11	40.52	23.83	<i>inward</i>	GW-11	38.26	28.04
P-12	43.28	30.12	<i>inward</i>	GW-12	42.09	30.39
P-13	44.78	30.67	<i>inward</i>	GW-13	44.79	33.05
P-14	45.09	30.64	<i>inward</i>	GW-14	39.63	32.66
P-15	45.57	31.00	<i>inward</i>	GW-15	42.33	33.53
P-16	44.67	31.21	<i>inward</i>	GW-16	44.41	33.32
P-17	44.28	30.06	<i>inward</i>	GW-17	42.19	32.96

Comments:

Date Data Collected: May 13, 2013

Form Revised December 6, 2004