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October 3, 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
OCT 09 2012
Southwest District

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

SEPTEMBER, 2012

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-Sep-12	0	0	0	0	0	0.00	0
02-Sep-12	0	0	0	0	0	0.00	0
03-Sep-12	0	0	0	0	0	0.00	0
04-Sep-12	124,990	1,610	126,600	93,100	219,700	0.00	0
05-Sep-12	30,440	50	30,490	20,000	50,490	0.00	0
06-Sep-12	29,210	90	29,300	18,500	47,800	0.00	0
07-Sep-12	29,830	550	30,380	19,900	50,280	0.00	0
08-Sep-12	0	0	0	0	0	0.00	0
09-Sep-12	0	0	0	0	0	0.20	912,443
10-Sep-12	85,750	120	85,870	56,800	142,670	0.34	1,551,152
11-Sep-12	24,630	70	24,700	16,800	41,500	0.00	0
12-Sep-12	23,150	190	23,340	16,600	39,940	0.00	0
13-Sep-12	25,730	240	25,970	18,500	44,470	0.00	0
14-Sep-12	27,030	220	27,250	18,200	45,450	0.45	2,052,996
15-Sep-12	0	0	0	0	0	0.00	0
16-Sep-12	0	0	0	0	0	0.89	4,060,370
17-Sep-12	75,080	900	75,980	49,400	125,380	0.02	91,244
18-Sep-12	27,130	150	27,280	18,300	45,580	0.31	1,414,286
19-Sep-12	23,850	90	23,940	14,800	38,740	0.03	136,866
20-Sep-12	23,220	190	23,410	16,600	40,010	0.00	0
21-Sep-12	24,170	380	24,550	15,000	39,550	0.47	2,144,240
22-Sep-12	0	0	0	0	0	0.70	3,193,549
23-Sep-12	0	0	0	0	0	0.00	0
24-Sep-12	77,170	1,690	78,860	45,900	124,760	0.00	0
25-Sep-12	23,280	1,400	24,680	16,500	41,180	0.00	0
26-Sep-12	22,900	1,640	24,540	15,000	39,540	0.21	958,065
27-Sep-12	22,740	1,490	24,230	14,600	38,830	0.00	0
28-Sep-12	24,300	620	24,920	14,700	39,620	0.05	228,111
29-Sep-12	0	0	0	0	0	0.00	0
30-Sep-12	0	0	0	0	0	0.00	0
	0	0	0	0	0		0
TOTAL	744,600	11,690	756,290	499,200	1,255,490	3.67	16,743,322
Leachate Pumped as Percentage of Rainfall			7.4%	7.6%			

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 -- 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	401,400	277,100	678,500	2.30	10,493,090	6.3%	6.7%
JUNE	726,920	611,600	1,338,520	24.07	109,812,468	1.1%	1.4%
JULY	1,061,690	831,300	1,892,990	13.25	60,449,323	2.9%	3.5%
AUGUST	909,100	665,100	1,574,200	11.62	53,012,916	2.8%	3.2%
SEPTEMBER	756,290	499,200	1,255,490	3.67	16,743,322	7.4%	7.6%
OCTOBER							
NOVEMBER							
DECEMBER							
TOTAL	5,825,980	3,789,500	9,615,480	63.99	291,936,012	3.3%	3.3%

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

Southwest District
Dept. of Environmental Protection
OCT 09 2012

LANDFILL SHEET		
2012 Sep	RAIN FALL	LEACHATE MGD
1	0.00	0.010
2	0.00	0.010
3	0.00	0.010
4	0.00	0.010
5	0.00	0.010
6	0.00	0.010
7	0.00	0.010
8	0.00	0.010
9	0.20	0.009
10	0.34	0.008
11	0.00	0.008
12	0.00	0.008
13	0.00	0.008
14	0.45	0.008
15	0.00	0.008
16	0.89	0.008
17	0.02	0.008
18	0.31	0.009
19	0.03	0.008
20	0.00	0.008
21	0.47	0.008
22	0.70	0.008
23	0.00	0.009
24	0.00	0.007
25	0.00	0.007
26	0.21	0.007
27	0.00	0.007
28	0.05	0.008
29	0.00	0.008
30	0.00	0.008
31		
TOTAL	3.67	0.255
AVG		0.009
MIN		
MAX	0.89	0.010

LAKE LEVEL DATA IN FEET NGVD	
SOUTH (86 ACRE)	EAST (63 ACRE)
48.90	40.50
48.80	40.70
48.80	40.90
48.80	41.00
49.00	41.00
49.10	41.00
49.20	40.80
49.30	40.90
49.50	40.80
49.60	40.80
49.70	40.70
49.80	40.70
50.00	40.60
50.10	40.60
50.20	40.50
50.30	40.50
50.50	40.50
50.60	40.50
50.60	40.50
50.60	40.40
50.40	40.80
50.20	41.10
50.00	41.40
49.80	41.70
49.60	41.90
49.50	42.10
49.50	42.10
49.50	42.10
49.50	42.00
49.60	41.90

Fax # 9-708-5668

FIGURE L-7

Manatee County Lena Road Landfill

Monthly Groundwater Gradient Report

Month and Year: SEPTEMBER 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	30.19	<i>inward</i>	GW-1	38.68	33.02
P-2	42.32	30.11	<i>inward</i>	GW-2	40.92	33.39
P-3	40.36	25.17	<i>inward</i>	GW-3	39.40	33.46
P-4	40.78	23.76	<i>inward</i>	GW-4	40.53	32.29
P-5	40.73	23.69	<i>inward</i>	GW-5	39.90	31.90
P-6	40.74	23.62	<i>inward</i>	GW-6	38.95	31.34
P-7	40.60	23.61	<i>inward</i>	GW-7	39.49	29.61
P-8	40.21	23.57	<i>inward</i>	GW-8	39.75	28.62
P-9	39.97	23.59	<i>inward</i>	GW-9	39.65	30.31
P-10	39.86	22.60	<i>inward</i>	GW-10	38.34	29.14
P-11	40.52	23.82	<i>inward</i>	GW-11	38.26	30.46
P-12	43.28	31.17	<i>inward</i>	GW-12	42.09	31.57
P-13	44.78	30.73	<i>inward</i>	GW-13	44.79	32.24
P-14	45.09	30.63	<i>inward</i>	GW-14	39.63	33.97
P-15	45.57	31.01	<i>inward</i>	GW-15	42.33	34.76
P-16	44.67	31.18	<i>inward</i>	GW-16	44.41	35.79
P-17	44.28	30.06	<i>inward</i>	GW-17	42.19	33.57

Comments:

Date Data Collected: September 13, 2012

Form Revised December 6, 2004