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October 4, 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

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

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
OCT 05 2011
SOUTHWEST DISTRICT
TAMPA

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, 2011

FLORIDA DEPARTMENT OF
 ENVIRONMENTAL PROTECTION
OCT 05 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-Sep-11	17,710	20	17,730	5,700	23,430	0.15	684,332
02-Sep-11	18,080	270	18,350	5,500	23,850	0.00	0
03-Sep-11	0	0	0	0	0	1.45	6,615,209
04-Sep-11	0	0	0	0	0	0.00	0
05-Sep-11	0	0	0	0	0	0.04	182,489
06-Sep-11	93,880	210	94,090	38,700	132,790	0.89	4,060,370
07-Sep-11	27,890	10	27,900	18,300	46,200	1.18	5,383,411
08-Sep-11	33,330	70	33,400	18,500	51,900	0.00	0
09-Sep-11	29,090	40	29,130	18,400	47,530	0.10	456,221
10-Sep-11	0	0	0	0	0	0.20	912,443
11-Sep-11	0	0	0	0	0	0.00	0
12-Sep-11	78,020	100	78,120	39,000	117,120	0.00	0
13-Sep-11	26,720	190	26,910	11,200	38,110	0.00	0
14-Sep-11	27,710	100	27,810	11,500	39,310	0.00	0
15-Sep-11	23,840	690	24,530	9,800	34,330	0.00	0
16-Sep-11	22,260	280	22,540	7,600	30,140	0.00	0
17-Sep-11	0	0	0	0	0	0.00	0
18-Sep-11	0	0	0	0	0	0.14	638,710
19-Sep-11	66,480	1,450	67,930	25,000	92,930	0.00	0
20-Sep-11	22,790	610	23,400	7,600	31,000	0.03	136,866
21-Sep-11	21,780	180	21,960	7,800	29,760	0.00	0
22-Sep-11	21,050	120	21,170	6,000	27,170	0.20	912,443
23-Sep-11	22,020	190	22,210	7,800	30,010	0.63	2,874,194
24-Sep-11	0	0	0	0	0	0.10	456,221
25-Sep-11	0	0	0	0	0	1.25	5,702,766
26-Sep-11	75,970	70	76,040	36,000	112,040	0.17	775,576
27-Sep-11	25,760	0	25,760	15,200	40,960	0.03	136,866
28-Sep-11	27,560	360	27,920	18,800	46,720	0.00	0
29-Sep-11	27,750	140	27,890	15,300	43,190	0.00	0
30-Sep-11	26,060	140	26,200	11,500	37,700	0.00	0
	0	0	0	0	0	0.00	0
TOTAL	735,750	5,240	740,990	335,200	1,076,190	6.56	29,928,118
Leachate Pumped as Percentage of Rainfall			4.1%	2.9%			

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	463,120	642,500	1,105,620	5.21	23,769,130	3.2%	6.9%
JULY	333,160	348,300	681,460	6.57	29,973,740	1.8%	3.0%
AUGUST	760,350	84,100	844,450	7.17	32,711,067	3.8%	0.7%
SEPTEMBER	740,990	335,200	1,076,190	6.56	29,928,118	4.1%	2.9%
OCTOBER							
NOVEMBER							
DECEMBER							
TOTAL	5,072,610	2,645,000	7,717,610	42.78	195,171,474	4.3%	3.4%

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 Sep	RAIN FALL	LEACHATE MGD	SOUTH (86 ACRE)	EAST (63 ACRE)
1	0.15	0.005	38.50	34.80
2	0.00	0.006	38.50	35.30
3	1.45	0.006	38.70	35.70
4	0.00	0.008	38.60	35.80
5	0.04	0.008	38.60	36.30
6	0.89	0.010	38.70	36.90
7	1.18	0.011	38.80	37.40
8	0.00	0.013	38.70	37.70
9	0.10	0.011	38.40	38.30
10	0.20	0.011	38.40	38.60
11	0.00	0.010	38.70	38.90
12	0.00	0.010	38.70	39.20
13	0.00	0.008	38.70	39.20
14	0.00	0.008	38.70	39.50
15	0.00	0.007	38.70	40.00
16	0.00	0.006	38.60	40.00
17	0.00	0.007	38.70	40.30
18	0.14	0.007	38.70	40.60
19	0.00	0.007	38.70	40.60
20	0.03	0.007	38.70	40.80
21	0.00	0.008	38.70	41.10
22	0.20	0.007	38.70	41.00
23	0.63	0.008	38.90	41.80
24	0.10	0.008	38.90	42.00
25	1.25	0.008	40.00	42.40
26	0.17	0.010	40.00	42.70
27	0.03	0.010	39.00	43.10
28	0.00	0.010	38.90	43.00
29	0.00	0.009	38.90	43.20
30	0.00	0.009	38.90	43.20
31				
TOTAL	6.56	0.253		
AVG		0.008		
MIN				
MAX	1.45	0.013		

Fax # 9-708-5668

9/1/11	6278912	3798960	2795178	34.39	31.64	OK	R.B.
9/2/11	6280720	3799230	2795233	34.38	31.60	OK	R.B.
9/6/11	6290108	3799440	2795620	34.49	32.11	OK	R.B.
9/7/11	6292897	3799450	2795803	34.85	32.50	OK	R.B.
9/8/11	6296230	3799520	2795988	34.63	32.31	OK	R.B.
9/9/11	6299139	3799560	2796172	34.54	32.27	OK	R.B.
9/12/11	6306941	3799660	2796562	34.12	32.00	OK	R.B.
9/13/11	6309613	3799880	2796674	34.11	31.90	OK	R.B.
9/14/11	6312384	3799950	2796789	34.10	31.82	OK	R.B.
9/15/11	6314768	3800640	2796887	34.10	31.72	OK	R.B.
9/16/11	6316994	3800920	2796963	34.09	31.64	OK	R.B.
9/19/11	6323612	3802370	2797213	34.06	31.48	OK	R.B.
9/20/11	6325921	3802980	2797289	34.06	31.38	OK	R.B.
9/21/11	6328099	3803160	2797367	34.07	31.30	OK	R.B.
9/22/11	6330204	3803280	2797427	34.06	31.24	OK	R.B.
9/23/11	6332406	3803470	2797505	34.07	31.20	OK	R.B.
9/26/11	6340003	3803540	2797865	34.75	32.32	OK	R.B.
9/27/11	6342579	3803540	2798017	34.62	32.30	OK	R.B.
9/28/11	6345335	3803900	2798205	34.44	32.22	OK	R.B.
9/29/11	6348110	3804040	2798358	34.27	32.13	OK	R.B.
9/30/11	6350716	3804180	2798473	34.08	32.00	OK	R.B.

FIGURE L-7

Manatee County Lena Road Landfill

Monthly Groundwater Gradient Report

Month and Year: SEPTEMBER 2011

Piezometers Inside Slurry Wall			Gradient Flow	Groundwater Monitoring Wells Outside Slurry Wall		
Piezometer	Riser Elevation	Leachate Elevation		Monitoring Well	Riser Elevation	Groundwater Elevation
P-1	42.68	30.31	<i>inward</i>	GW-1	38.68	33.64
P-2	42.32	30.13	<i>inward</i>	GW-2	40.92	33.43
P-3	40.36	25.71	<i>inward</i>	GW-3	39.40	33.93
P-4	40.78	23.79	<i>inward</i>	GW-4	40.53	32.73
P-5	40.73	23.70	<i>inward</i>	GW-5	39.90	32.28
P-6	40.74	23.59	<i>inward</i>	GW-6	38.95	31.68
P-7	40.60	23.58	<i>inward</i>	GW-7	39.49	30.13
P-8	40.21	23.62	<i>inward</i>	GW-8	39.75	29.54
P-9	39.97	23.56	<i>inward</i>	GW-9	39.65	29.21
P-10	39.86	22.57	<i>inward</i>	GW-10	38.34	29.54
P-11	40.52	23.66	<i>inward</i>	GW-11	38.26	30.80
P-12	43.28	30.07	<i>inward</i>	GW-12	42.09	31.47
P-13	44.78	32.17	<i>inward</i>	GW-13	44.79	34.20
P-14	45.09	30.62	<i>inward</i>	GW-14	39.63	34.02
P-15	45.57	30.99	<i>inward</i>	GW-15	42.33	34.24
P-16	44.67	31.14	<i>inward</i>	GW-16	44.41	35.66
P-17	44.28	30.05	<i>inward</i>	GW-17	42.19	34.13

Comments:

Date Data Collected: September 20, 2011

Form Revised December 6, 2004