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September 5, 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
SEP 06 2012
Southwest District

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

AUGUST, 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-Aug-12	32,270	0	32,270	22,000	54,270	0.00	0
02-Aug-12	30,330	0	30,330	20,800	51,130	0.00	0
03-Aug-12	30,250	70	30,320	20,600	50,920	0.00	0
04-Aug-12	0	0	0	0	0	0.00	0
05-Aug-12	0	0	0	0	0	0.10	456,221
06-Aug-12	26,190	100	26,290	17,300	43,590	3.17	14,462,215
07-Aug-12	0	140	140	0	140	0.00	0
08-Aug-12	27,520	40	27,560	21,200	48,760	0.00	0
09-Aug-12	27,980	0	27,980	22,200	50,180	0.00	0
10-Aug-12	30,310	30	30,340	23,900	54,240	1.95	8,896,315
11-Aug-12	0	0	0	0	0	0.00	0
12-Aug-12	0	0	0	0	0	0.20	912,443
13-Aug-12	93,430	160	93,590	70,600	164,190	0.00	0
14-Aug-12	32,780	170	32,950	25,300	58,250	0.00	0
15-Aug-12	31,690	0	31,690	23,700	55,390	0.00	0
16-Aug-12	30,480	10	30,490	24,300	54,790	0.98	4,470,969
17-Aug-12	35,760	90	35,850	26,600	62,450	0.00	0
18-Aug-12	0	0	0	0	0	0.08	364,977
19-Aug-12	0	0	0	0	0	0.43	1,961,752
20-Aug-12	95,200	20	95,220	71,900	167,120	0.75	3,421,660
21-Aug-12	31,140	30	31,170	23,000	54,170	0.99	4,516,591
22-Aug-12	32,260	110	32,370	24,600	56,970	0.00	0
23-Aug-12	34,930	10	34,940	24,800	59,740	0.00	0
24-Aug-12	33,290	10	33,300	26,500	59,800	0.00	0
25-Aug-12	0	0	0	0	0	0.00	0
26-Aug-12	0	0	0	0	0	0.60	2,737,328
27-Aug-12	0	0	0	0	0	1.69	7,710,140
28-Aug-12	153,110	120	153,230	105,800	259,030	0.60	2,737,328
29-Aug-12	39,380	0	39,380	25,000	64,380	0.02	91,244
30-Aug-12	30,200	10	30,210	21,700	51,910	0.04	182,489
31-Aug-12	29,480	0	29,480	23,300	52,780	0.02	91,244
TOTAL	907,980	1,120	909,100	665,100	1,574,200	11.62	53,012,916
Leachate Pumped as Percentage of Rainfall			2.8%	3.2%			

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 -- 2012

	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	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							
OCTOBER							
NOVEMBER							
DECEMBER							
TOTAL	5,069,690	3,290,300	8,359,990	60.32	275,192,691	3.0%	3.0%

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 (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

LECHATE AUGUST 2012

DATE	LEACHATE			STORMWATER		COMMENTS	NAME
	METER # 1	METER # 2	METER # 3	S. G. # 1	S. G. # 2		
8/1/12	6873499	4643070	2832536	32.31	32.41	OK	R.B.
8/2/12	6876532	4643070	2832744	32.31	32.22	OK	R.B.
8/3/12	6879557	4643140	2832950	32.32	32.10	OK	R.B.
8/6/12	6882176	4643240	2833123	32.36	31.80	OK	R.B.
8/7/12	6882176	4643380	2833123	32.35	32.34	OK	R.B.
8/8/12	6884928	4643420	2833335	32.35	32.29	OK	R.B.
8/9/12	6887726	4643420	2833357	32.35	32.20	OK	R.B.
8/10/12	6890757	4642450	2833796	32.36	32.12	OK	R.B.
8/13/12	6900100	4643610	2834502	34.07	32.21	OK	R.B.
8/14/12	6903378	4643780	2834755	34.20	32.30	OK	R.B.
8/15/12	6906547	4643780	2834812	34.23	32.22	OK	R.B.
8/16/12	6909595	4643790	2835235	34.25	32.14	OK	R.B.
8/17/12	6913171	4643880	2835521	34.30	32.30	OK	R.B.
8/20/12	6922691	4643900	2836226	34.43	32.10	OK	R.B.
8/21/12	6925865	4643920	2836450	34.49	32.02	OK	R.B.
8/22/12	6929031	4644040	2836666	34.65	32.36	OK	R.B.
8/23/12	6932524	4644080	2836944	34.56	32.30	OK	R.B.
8/24/12	6935853	4644060	2837209	34.47	32.26	OK	R.B.
8/27/12	stop	Day					
8/28/12	6957164	4644120	2838367	34.67	32.36	OK	R.B.
8/29/12	6955102	4644120	2838517	34.58	32.29	OK	R.B.
8/30/12	6958122	4644190	2838734	34.53	32.24	OK	R.B.
8/31/12	6961670	4644190	2838967	33.92	32.18	OK	R.B.

LANDFILL SHEET		
2012 Aug	RAIN FALL	LEACHATE MGD
1	0.00	0.010
2	0.00	0.010
3	0.00	0.009
4	0.00	0.009
5	0.10	0.009
6	3.17	0.009
7	0.00	0.011
8	0.00	0.010
9	0.00	0.010
10	1.95	0.010
11	0.00	0.010
12	0.20	0.009
13	0.00	0.010
14	0.00	0.011
15	0.00	0.010
16	0.98	0.010
17	0.00	0.011
18	0.08	0.011
19	0.43	0.010
20	0.75	0.010
21	0.99	0.009
22	0.00	0.010
23	0.00	0.012
24	0.00	0.011
25	0.00	0.011
26	0.60	0.011
27	1.69	0.140
28	0.60	0.012
29	0.02	0.011
30	0.04	0.010
31	0.02	0.010
TOTAL	11.62	0.446
AVG		0.014
MIN		
MAX	3.17	0.140

LAKE LEVEL DATA IN FEET NGVD	
SOUTH (86 ACRE)	EAST (63 ACRE)
47.80	37.20
47.80	37.20
47.80	37.10
47.80	37.10
47.80	37.00
47.90	37.10
48.00	37.20
48.00	37.40
47.90	37.40
48.10	37.50
48.10	37.50
48.10	37.50
48.10	37.70
48.10	37.90
48.00	38.20
48.10	38.20
48.00	38.10
48.00	38.30
48.00	38.60
48.00	38.80
48.20	38.80
48.20	38.90
48.30	39.20
48.40	39.20
48.50	39.20
48.50	39.20
48.90	39.40
48.90	39.70
48.90	40.00
48.90	40.10
48.90	40.30

FIGURE L-7

Manatee County Lena Road Landfill

Monthly Groundwater Gradient Report

Month and Year: AUGUST 2012

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	30.23	<i>inward</i>	GW-1	38.68	34.59
P-2	42.32	30.17	<i>inward</i>	GW-2	40.92	34.97
P-3	40.36	25.42	<i>inward</i>	GW-3	39.40	35.20
P-4	40.78	23.84	<i>inward</i>	GW-4	40.53	34.13
P-5	40.73	23.70	<i>inward</i>	GW-5	39.90	33.33
P-6	40.74	23.69	<i>inward</i>	GW-6	38.95	32.91
P-7	40.60	23.60	<i>inward</i>	GW-7	39.49	31.88
P-8	40.21	23.56	<i>inward</i>	GW-8	39.75	30.69
P-9	39.97	23.62	<i>inward</i>	GW-9	39.65	31.95
P-10	39.86	22.62	<i>inward</i>	GW-10	38.34	31.15
P-11	40.52	23.87	<i>inward</i>	GW-11	38.26	31.80
P-12	43.28	30.35	<i>inward</i>	GW-12	42.09	32.39
P-13	44.78	30.78	<i>inward</i>	GW-13	44.79	34.54
P-14	45.09	30.71	<i>inward</i>	GW-14	39.63	35.35
P-15	45.57	31.07	<i>inward</i>	GW-15	42.33	35.73
P-16	44.67	31.17	<i>inward</i>	GW-16	44.41	36.26
P-17	44.28	30.06	<i>inward</i>	GW-17	42.19	35.17

Comments:

Date Data Collected: August 23, 2012

Form Revised December 6, 2004