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January 9, 2013

Dept. Of Environmental Protection

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

JAN 11 2013

Southwest District

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

DECEMBER, 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-Dec-12	0	0	0	0	0	0.00	0
02-Dec-12	0	0	0	0	0	0.00	0
03-Dec-12	50,750	3,910	54,660	29,300	83,960	0.00	0
04-Dec-12	16,400	140	16,540	9,200	25,740	0.00	0
05-Dec-12	18,940	1,880	20,820	11,400	32,220	0.00	0
06-Dec-12	21,230	1,640	22,870	10,500	33,370	0.00	0
07-Dec-12	22,170	330	22,500	12,200	34,700	0.00	0
08-Dec-12	0	0	0	0	0	0.00	0
09-Dec-12	0	0	0	0	0	0.00	0
10-Dec-12	54,660	1,960	56,620	28,900	85,520	0.95	4,334.102
11-Dec-12	19,750	170	19,920	10,500	30,420	0.40	1,824.885
12-Dec-12	15,780	0	15,780	9,000	24,780	0.03	136.866
13-Dec-12	15,150	630	15,780	9,300	25,080	0.00	0
14-Dec-12	14,200	1,210	15,410	9,400	24,810	0.00	0
15-Dec-12	0	0	0	0	0	0.00	0
16-Dec-12	0	0	0	0	0	0.00	0
17-Dec-12	56,350	0	56,350	30,600	86,950	0.00	0
18-Dec-12	19,520	130	19,650	10,800	30,450	0.00	0
19-Dec-12	14,960	490	15,450	9,000	24,450	0.02	91,244
20-Dec-12	15,980	1,080	17,060	9,100	26,160	0.00	0
21-Dec-12	17,300	710	18,010	10,500	28,510	0.35	1,596.775
22-Dec-12	0	0	0	0	0	0.00	0
23-Dec-12	0	0	0	0	0	0.00	0
24-Dec-12	43,480	8,450	51,930	26,200	78,130	0.00	0
25-Dec-12	0	0	0	0	0	0.00	0
26-Dec-12	42,410	5,270	47,680	21,000	68,680	0.13	593.088
27-Dec-12	15,890	2,660	18,550	9,200	27,750	0.00	0
28-Dec-12	14,790	6,630	21,420	9,200	30,620	0.30	1,368.664
29-Dec-12	0	0	0	0	0	0.19	866.820
30-Dec-12	0	0	0	0	0	0.00	0
31-Dec-12	0	0	0	0	0	0.00	0
TOTAL	489,710	37,290	527,000	275,300	802,300	2.37	10,812,445
Leachate Pumped as Percentage of Rainfall			8.0%	6.5%			

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	827,830	480,900	1,308,730	3.44	15,694,013	8.7%	7.8%
NOVEMBER	612,860	318,800	931,660	0.76	3,467,282	29.1%	23.4%
DECEMBER	527,000	275,300	802,300	2.37	10,812,445	8.0%	6.5%
TOTAL	7,793,670	4,864,500	12,658,170	70.56	321,909,752	4.0%	3.8%

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

	METER # 1	METER # 2	METER # 3	S. G. # 1	S. G. # 2		
12/3/12	7170841	4798120	2852249	33.47	DRY	OK	TRE
12/4/12	7172481	4798260	2852341	33.48	DRY	OK	R.B.
12/5/12	7174375	4800140	2852455	33.47	DRY	OK	R.B.
12/6/12	7176498	4801780	2852560	33.47	DRY	OK	R.B.
12/7/12	7178715	4802110	2852682	33.47	DRY	OK	R.B.
12/10/12	7184181	4804070	2852971	33.48	DRY	OK	R.B.
12/11/12	7186156	4804010	2853076	33.55	DRY	OK	R.B.
12/12/12	7187734	4804241	2853166	33.57	DRY	OK	R.B.
12/13/12	7189249	4804240	2853255	33.57	DRY	OK	R.B.
11/14/12	7190669	4804870	2853353	33.56	DRY	OK	R.B.
12/17/12	7196304	4806080	2853659	33.56	DRY	OK	R.B.
12/18/12	7198256	4806210	2853767	33.56	DRY	OK	R.B.
12/19/12	7199752	4806700	2853857	33.55	DRY	OK	R.B.
12/20/12	7201350	4807780	2853948	33.55	DRY	OK	R.B.
12/21/12	7203080	4808490	2854053	33.57	DRY	OK	R.B.
12/24/12	7207428	4816940	2854315	33.55	DRY	OK	R.B.
12/26/12	7211669	4822210	2854525	33.54	DRY	OK	R.B.
12/27/12	7213258	4824870	2854617	33.55	DRY	OK	R.B.
12/28/12	7214737	4831500	2854709	33.54	DRY	OK	R.B.

LANDFILL SHEET			LAKE LEVEL DATA IN FEET NGVD	
2012 Dec	RAIN FALL	LEACHATE MGD	SOUTH (86 ACRE)	EAST (63 ACRE)
1	0.00	0.006	43.80	36.80
2	0.00	0.006	43.70	36.70
3	0.00	0.006	43.50	36.60
4	0.00	0.006	43.30	36.40
5	0.00	0.006	43.10	36.30
6	0.00	0.006	42.90	36.20
7	0.00	0.006	42.80	36.20
8	0.00	0.006	42.70	36.00
9	0.00	0.005	42.60	36.00
10	0.95	0.007	42.40	36.00
11	0.40	0.006	42.70	36.20
12	0.03	0.006	43.20	36.40
13	0.00	0.005	43.80	36.40
14	0.00	0.006	44.10	36.40
15	0.00	0.006	44.00	36.30
16	0.00	0.007	43.90	36.30
17	0.00	0.006	43.90	36.20
18	0.00	0.005	43.90	36.30
19	0.02	0.005	43.90	36.20
20	0.00	0.006	43.90	36.20
21	0.35	0.006	44.00	36.20
22	0.00	0.004	44.00	36.20
23	0.00	0.005	44.10	36.20
24	0.00	0.007	44.20	36.10
25	0.00	0.006	44.20	36.10
26	0.13	0.007	44.40	36.20
27	0.00	0.005	44.60	36.10
28	0.30	0.006	44.70	36.10
29	0.19	0.006	45.20	36.10
30	0.00	0.004	45.70	36.10
31	0.00	0.006	46.10	36.20
TOTAL	2.37	0.180		
AVG		0.006		
MIN				
MAX	0.95	0.007		

Fax # 9-708-5668

FIGURE L-7

Manatee County Lena Road Landfill

Monthly Groundwater Gradient Report

Month and Year: DECEMBER 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	30.11	<i>inward</i>	GW-1	38.68	31.94
P-2	42.32	29.91	<i>inward</i>	GW-2	40.92	31.96
P-3	40.36	25.04	<i>inward</i>	GW-3	39.40	32.01
P-4	40.78	23.72	<i>inward</i>	GW-4	40.53	31.19
P-5	40.73	23.66	<i>inward</i>	GW-5	39.90	30.96
P-6	40.74	23.60	<i>inward</i>	GW-6	38.95	30.16
P-7	40.60	23.58	<i>inward</i>	GW-7	39.49	27.57
P-8	40.21	23.53	<i>inward</i>	GW-8	39.75	26.23
P-9	39.97	23.61	<i>inward</i>	GW-9	39.65	26.58
P-10	39.86	22.61	<i>inward</i>	GW-10	38.34	26.50
P-11	40.52	23.80	<i>inward</i>	GW-11	38.26	28.36
P-12	43.28	30.12	<i>inward</i>	GW-12	42.09	30.57
P-13	44.78	30.70	<i>inward</i>	GW-13	44.79	33.58
P-14	45.09	30.67	<i>inward</i>	GW-14	39.63	34.13
P-15	45.57	31.04	<i>inward</i>	GW-15	42.33	34.90
P-16	44.67	31.19	<i>inward</i>	GW-16	44.41	34.83
P-17	44.28	30.08	<i>inward</i>	GW-17	42.19	33.59

Comments:

Date Data Collected: December 20, 2012

Form Revised December 6, 2004