



An employee-owned company

February 3, 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

Dept. Of Environmental Protection
FEB 07 2011
Southwest District

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

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
JANUARY, 2011

Dept. Of Environmental Protection
FEB 07 2011
 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-Jan-11	0	0	0	0	0	0.00	0
02-Jan-11	0	0	0	0	0	0.02	91,244
03-Jan-11	39,250	17,340	56,590	19,100	75,690	0.00	0
04-Jan-11	12,440	7,820	20,260	6,300	26,560	0.00	0
05-Jan-11	1,990	3,270	5,260	400	5,660	0.00	0
06-Jan-11	0	0	0	0	0	0.82	3,741,015
07-Jan-11	0	9,010	9,010	5,700	14,710	0.00	0
08-Jan-11	0	0	0	0	0	0.00	0
09-Jan-11	0	0	0	0	0	0.00	0
10-Jan-11	0	13,730	13,730	15,100	28,830	0.04	182,489
11-Jan-11	55,970	4,220	60,190	4,800	64,990	0.00	0
12-Jan-11	17,400	4,500	21,900	5,400	27,300	0.00	0
13-Jan-11	12,740	6,350	19,090	5,000	24,090	0.00	0
14-Jan-11	51,370	7,010	58,380	5,700	64,080	0.00	0
15-Jan-11	0	0	0	0	0	0.00	0
16-Jan-11	0	0	0	0	0	0.05	228,111
17-Jan-11	14,240	12,800	27,040	17,600	44,640	0.04	182,489
18-Jan-11	18,580	6,060	24,640	5,800	30,440	0.00	0
19-Jan-11	15,850	2,860	18,710	5,600	24,310	0.28	1,277,420
20-Jan-11	15,060	5,250	20,310	6,200	26,510	0.00	0
21-Jan-11	14,870	5,860	20,730	5,400	26,130	0.11	501,843
22-Jan-11	0	0	0	0	0	0.00	0
23-Jan-11	0	0	0	0	0	0.00	0
24-Jan-11	45,340	12,210	57,550	18,000	75,550	0.00	0
25-Jan-11	13,200	4,950	18,150	5,500	23,650	2.00	9,124,428
26-Jan-11	17,940	3,000	20,940	7,500	28,440	0.31	1,414,286
27-Jan-11	13,190	8,290	21,480	8,400	29,880	0.00	0
28-Jan-11	14,840	5,500	20,340	600	20,940	0.00	0
29-Jan-11	0	0	0	0	0	0.00	0
30-Jan-11	0	0	0	0	0	0.00	0
31-Jan-11	41,160	7,770	48,930	5,600	54,530	0.00	0
TOTAL	416,430	147,800	563,230	153,700	716,930	3.67	16,743,322
Leachate Pumped as Percentage of Rainfall			5.5%	2.3%			

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							
MARCH							
APRIL							
MAY							
JUNE							
JULY							
AUGUST							
SEPTEMBER							
OCTOBER							
NOVEMBER							
DECEMBER							
TOTAL	563,230	153,700	716,930	3.67	16,743,322	5.5%	2.3%

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

Landfill

LANDFILL SHEET			LAKE LEVEL DATA IN FEET NGVD	
2011 Jan	RAIN FALL	LEACHATE MGD	SOUTH (86 ACRE)	EAST (63 ACRE)
1	0.00	0.009	36.20	25.10
2	0.02	0.009	36.10	25.10
3	0.00	0.009	36.00	24.90
4	0.00	0.007	35.90	24.70
5	0.00	0.000	36.00	24.20
6	0.82	0.002	36.10	24.80
7	0.00	0.003	36.10	25.10
8	0.00	0.003	36.00	25.50
9	0.00	0.003	36.00	25.90
10	0.04	0.014	36.00	26.30
11	0.00	0.011	36.00	26.30
12	0.00	0.008	36.70	26.30
13	0.00	0.007	36.70	26.10
14	0.00	0.008	36.50	25.90
15	0.00	0.009	36.40	25.90
16	0.05	0.009	36.30	25.60
17	0.04	0.010	36.50	25.70
18	0.00	0.009	36.40	26.00
19	0.28	0.008	36.40	26.20
20	0.00	0.008	36.40	26.60
21	0.11	0.009	36.60	26.90
22	0.00	0.010	37.10	27.20
23	0.00	0.007	37.20	25.80
24	0.00	0.007	37.30	27.30
25	2.00	0.007	37.50	27.80
26	0.31	0.010	37.50	27.70
27	0.00	0.006	37.50	28.60
28	0.00	0.007	37.90	29.10
29	0.00	0.007	38.30	29.10
30	0.00	0.004	38.30	29.40
31	0.00	0.004	38.30	29.70
TOTAL	3.67	0.224		
AVG		0.007		
MIN				
MAX	2.00	0.014		

Fax # 9-708-5668

FIGURE L-7

Manatee County Lena Road Landfill

Monthly Groundwater Gradient Report

Month and Year: JANUARY 2011

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	29.43	<i>inward</i>	GW-1	38.68	32.76
P-2	42.32	28.52	<i>inward</i>	GW-2	40.92	31.34
P-3	40.36	25.00	<i>inward</i>	GW-3	39.40	32.54
P-4	40.78	22.03	<i>inward</i>	GW-4	40.53	32.68
P-5	40.73	20.92	<i>inward</i>	GW-5	39.90	32.25
P-6	40.74	20.35	<i>inward</i>	GW-6	38.95	31.42
P-7	40.60	20.18	<i>inward</i>	GW-7	39.49	29.32
P-8	40.21	20.06	<i>inward</i>	GW-8	39.75	28.57
P-9	39.97	20.17	<i>inward</i>	GW-9	39.65	28.37
P-10	39.86	19.56	<i>inward</i>	GW-10	38.34	28.20
P-11	40.52	22.24	<i>inward</i>	GW-11	38.26	30.95
P-12	43.28	29.10	<i>inward</i>	GW-12	42.09	31.12
P-13	44.78	30.10	<i>inward</i>	GW-13	44.79	31.37
P-14	45.09	29.71	<i>inward</i>	GW-14	39.63	33.89
P-15	45.57	30.87	<i>inward</i>	GW-15	42.33	35.33
P-16	44.67	30.96	<i>inward</i>	GW-16	44.41	34.15
P-17	44.28	29.90	<i>inward</i>	GW-17	42.19	34.88

Comments:

Date Data Collected: January 27, 2010

Form Revised December 6, 2004