



An employee-owned company

April 14, 2006

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

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
APR 17 2006
SOUTHWEST DISTRICT
TAMPA

**Re: Manatee County Lena Road Landfill
Monthly Report – March 2006**

Dear Mr. Morris:

This letter includes the following monthly reports: Monthly Water Balance Report (Exhibit A), Leachate-tracking Summary (Exhibit B), Leachate Meter Readings, Monthly Rainfall, Monthly Groundwater Gradient Report and first quarter 2006 Landfill Gas Monitoring Report for the perimeter probes and points. An inward gradient was present in Stage I and Stage III of the landfill.

Piezometers P-3, P-4, P-5, P-6, P-7 and P-11 were installed for the Stage III Landfill. GW-11 is scheduled for installation on April 19, 2006. Then the piezometers and monitoring well will be surveyed, and ready for monitoring in May 2006. To determine the gradient direction, the water level in GW-3, GW-4, GW-5 and GW-6 were compared to the leachate reading in P-2; and GW-7 was compared to P-8. Existing PZ-17 and GC-6 were left in place to measure the gradient direction on the south side of the Stage III Landfill.

If you should have any questions concerning this report, please call me at 407/647-7275, Ext. 4153.

Sincerely,

A handwritten signature in blue ink that reads 'Joe Miller'.

Joe Miller, P.E.
Senior Project Manager

Attachments

cc: Daniel T. Gray, Director, Utility Operations Department
Gus DiFonzo, Solid Waste Manager
Mike Gore/Jeanne Detweiler, Manatee County Landfill Division
File – 120498.94 0100

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EXHIBIT A

MANATEE COUNTY SOLID WASTE MANAGEMENT FACILITY
 LENA ROAD LANDFILL
 MONTHLY WATER BALANCE REPORT
 MARCH, 2006

FLORIDA DEPARTMENT OF
 ENVIRONMENTAL PROTECTION
 APR 17 2006
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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-Mar-06	6,880	2,730	9,610	59,500	69,110	0.00	0
02-Mar-06	1,790	3,840	5,630	77,100	82,730	0.00	0
03-Mar-06	29,880	2,210	32,090	41,000	73,090	0.00	0
04-Mar-06	0	0	0	0	0	0.00	0
05-Mar-06	0	0	0	0	0	0.00	0
06-Mar-06	33,070	7,420	40,490	175,300	215,790	0.00	0
07-Mar-06	14,830	3,320	18,150	68,600	86,750	0.00	0
08-Mar-06	8,880	2,200	11,080	44,200	55,280	0.00	0
09-Mar-06	12,190	2,750	14,940	56,900	71,840	0.00	0
10-Mar-06	16,220	3,910	20,130	69,200	89,330	0.00	0
11-Mar-06	0	0	0	0	0	0.00	0
12-Mar-06	0	0	0	0	0	0.00	0
13-Mar-06	30,630	7,160	37,790	151,500	189,290	0.00	0
14-Mar-06	13,460	3,450	16,910	55,800	72,710	0.00	0
15-Mar-06	12,450	2,770	15,220	63,900	79,120	0.00	0
16-Mar-06	9,050	2,380	11,430	46,100	57,530	0.00	0
17-Mar-06	11,300	2,670	13,970	51,200	65,170	0.00	0
18-Mar-06	0	0	0	0	0	0.00	0
19-Mar-06	0	0	0	0	0	0.00	0
20-Mar-06	39,030	9,310	48,340	161,700	210,040	0.00	0
21-Mar-06	14,280	3,190	17,470	53,600	71,070	0.00	0
22-Mar-06	12,720	3,180	15,900	53,500	69,400	0.00	0
23-Mar-06	10,440	2,390	12,830	50,600	63,430	1.07	4,881,568
24-Mar-06	12,370	2,900	15,270	53,400	68,670	0.00	0
25-Mar-06	0	0	0	0	0	0.00	0
26-Mar-06	0	0	0	0	0	0.00	0
27-Mar-06	31,820	7,640	39,460	160,000	199,460	0.00	0
28-Mar-06	10,190	2,650	12,840	57,600	70,440	0.00	0
29-Mar-06	9,950	2,380	12,330	47,800	60,130	0.00	0
30-Mar-06	11,620	2,660	14,280	52,600	66,880	0.00	0
31-Mar-06	12,060	2,920	14,980	58,700	73,680	0.00	0
TOTAL	365,110	86,030	451,140	1,709,800	2,160,940	1.07	4,881,568
Leachate Pumped as Percentage of Rainfall			15.2%	89.2%			

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 -- 2006

	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	367,660	3,189,600	3,557,260	1.78	8,120,739	7.5%	100.0%
FEBRUARY	504,280	1,919,500	2,423,780	2.09	9,535,025	8.7%	51.2%
MARCH	451,140	1,709,800	2,160,940	1.07	4,881,568	15.2%	89.2%
APRIL							
MAY							
JUNE							
JULY							
AUGUST							
SEPTEMBER							
OCTOBER							
NOVEMBER							
DECEMBER							
TOTAL	1,323,080	6,818,900	8,141,980	4.94	22,537,332	9.7%	77.0%

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.

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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

Landfill

LANDFILL SHEET		
2006 Mar	RAIN FALL	LEACHATE MGD
1	0.00	0.076
2	0.00	0.076
3	0.00	0.074
4	0.00	0.071
5	0.00	0.067
6	0.00	0.069
7	0.00	0.069
8	0.00	0.067
9	0.00	0.069
10	0.00	0.069
11	0.00	0.066
12	0.00	0.065
13	0.00	0.066
14	0.00	0.067
15	0.00	0.061
16	0.00	0.063
17	0.00	0.064
18	0.00	0.064
19	0.00	0.063
20	0.00	0.064
21	0.00	0.063
22	0.00	0.060
23	1.07	0.060
24	0.00	0.062
25	0.00	0.059
26	0.00	0.058
27	0.00	0.055
28	0.00	0.055
29	0.00	0.056
30	0.00	0.056
31	0.00	0.055
TOTAL	1.07	1.989
AVG		0.064
MIN		
MAX	1.07	0.076

Fax # 9-741-3396

**LEACHATE METER READINGS
MARCH 2006**

DATE	LEACHATE			STORMWATER		COMMENTS	NAME
	METER #1	METER #2	METER #3	S. G. #1	S. G. #2		
3/1/06	2808732	1759099	2142899	32.19	29.70	OK	AD
3/2/06	280411	1759483	2143670	32.00	29.65	OK	AD
3/3/06	2811399	1759704	2144080	31.74	29.65	OK	AD
3/6/06	2814706	1760446	2145833	31.74	29.65	OK	AD
3/7/06	2816189	1760778	2146519	31.74	29.65	OK	AD
3/8/06	2817077	1760998	2146961	31.74	29.65	OK	AD
3/9/06	2818296	1761273	2147530	31.74	29.65	OK	AD
3/10/06	2819918	1761664	2148222	31.74	29.65	OK	AD
3/13/06	2822981	1762380	2149737	31.85	29.50	OK	AD
3/14/06	2824327	1762785	2150295	31.85	29.50	OK	AD
3/15/06	2825572	1763062	2150934	31.85	29.50	OK	AD
3/16/06	2826877	1763240	2151395	31.85	29.50	OK	AD
3/17/06	2827607	1763507	2151907	31.80	29.43	OK	AD
3/20/06	2831510	1764438	2153524	31.70	29.43	OK	AD
3/21/06	2832938	1764757	2154060	31.70	29.40	OK	AD
3/22/06	2834210	1765075	2154595	31.70	29.40	OK	AD
3/23/06	2835254	1765314	2155101	31.68	29.40	OK	AD
3/24/06	2836491	1765604	2155635	31.84	29.40	OK	AD
3/27/06	2839673	1766368	2157235	31.77	29.40	OK	AD
3/28/06	2840192	1766633	2157811	31.82	29.40	OK	AD
3/29/06	2841687	1766871	2158289	31.87	29.40	OK	AD
3/30/06	2842849	1767137	2158815	31.87	29.40	OK	AD
3/31/06	2844055	1767429	2159402	31.85	29.40	OK	AD

FIGURE L-7

Manatee County Lena Road Landfill

Monthly Groundwater Gradient Report

Month and Year: MARCH 2006

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	29.38	<i>inward</i>	GW-1	38.68	29.83
P-2	42.32	28.44	<i>inward</i>	GW-2	40.92	29.81
P-3 (P-2)*	42.32	28.44	<i>inward</i>	GW-3	39.40	31.46
P-4 (P-2)*	42.32	28.44	<i>inward</i>	GW-4	40.53	30.79
P-5 (P-2)*	42.32	28.44	<i>inward</i>	GW-5	39.90	30.10
P-6 (P-2) *	42.32	28.44	<i>inward</i>	GW-6	38.95	29.17
P-7 (P-8)*	40.21	18.65	<i>inward</i>	GW-7	39.49	27.06
P-8	40.21	18.65	<i>inward</i>	GW-8	39.75	26.30
P-9	39.97	19.56	<i>inward</i>	GW-9	39.65	26.54
P-10	39.86	20.44	<i>inward</i>	GW-10	38.34	26.53
P-11(PZ-17) **	40.57	24.42	<i>inward</i>	GW-11 (GC-6)**	39.02	29.94
P-12	43.28	29.36	<i>inward</i>	GW-12	42.09	30.50
P-13	44.78	30.18	<i>inward</i>	GW-13	44.79	31.94
P-14	45.09	29.78	<i>inward</i>	GW-14	39.63	34.10
P-15	45.57	30.90	<i>inward</i>	GW-15	42.33	35.68
P-16	44.67	31.07	<i>inward</i>	GW-16	44.41	36.18
P-17	44.28	29.90	<i>inward</i>	GW-17	42.19	33.52

Comments:

* Piezometers P-3, P-4, P-5, P-6 and P-7 could not be installed due to construction in this area.

The reading from P-2 was used to compare water levels to GW-2, GW-3, GW-4, GW-5 & GW-6; and P-8 for GW-7.

** P-11 and GW-11 could not be installed due to construction in this area.

PZ-17 and GC-6 were left in-place and used to measure the gradient in this area.

Date Data Collected: March 20, 2006

Form Revised December 6, 2004