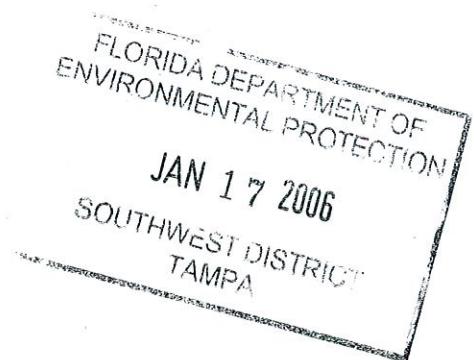




An employee-owned company

LR
Gradient
39884

January 13, 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

**Re: Manatee County Lena Road Landfill
Monthly Report – December 2005**

Dear Mr. Morris:

Attached is the December 2005 monthly report for the Lena Road Landfill. The report consists of the monthly water balance report (Exhibit A), the leachate-tracking summary (Exhibit B), the field readings for the water balance report, the monthly rainfall and the monthly groundwater gradient report. An inward gradient was present in Stage I and Stage III of the landfill.

The groundwater monitoring wells and piezometers were replaced as required by the recently issued landfill operation permit. Piezometers P-3, P-4, P-5, P-6, and P-7 could not be installed on the north side of the Stage III Landfill due to the construction in this area related to replacement of the leachate collection system. To determine the gradient direction, the water level in GW-3 was compared to P-2; GW-4 and GW-5 was compared to PZ-12A; and GW-6 and GW-7 were compared to PZ-13. P-11 and GW-11 could not be installed on the south side of the Stage III Landfill due to the pending construction. Existing PZ-17 and GC-6 were left in place to measure the gradient direction on the south side of the Stage III Landfill. P-3, P-4, P-5, P-6, P-7, P-11 and GW-11 will be installed as soon as the leachate collection system replacement is completed.

If you should have any questions concerning this report, please contact me in our Orlando office at 407/647-7275, Ext. 4153.

Sincerely,

Joe Miller, P.E.
Senior Project Manager

Attachments

Mr. John Morris, P.G.

January 13, 2006

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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, December 2005

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EXHIBIT A

MANATEE COUNTY SOLID WASTE MANAGEMENT FACILITY
 LENA ROAD LANDFILL
 MONTHLY WATER BALANCE REPORT
 DECEMBER, 2005

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-05	13,520	3,000	16,520	114,000	130,520	0.00	0
02-Dec-05	13,090	10,770	23,860	127,800	151,660	0.00	0
03-Dec-05	0	0	0	0	0	0.00	0
04-Dec-05	0	0	0	0	0	0.00	0
05-Dec-05	39,920	9,030	48,950	336,400	385,350	0.12	547,466
06-Dec-05	14,100	1,650	15,750	88,600	104,350	0.03	136,866
07-Dec-05	0	1,600	1,600	0	1,600	0.05	228,111
08-Dec-05	0	0	0	0	0	0.15	684,332
09-Dec-05	0	2,950	2,950	0	2,950	0.00	0
10-Dec-05	0	0	0	0	0	0.00	0
11-Dec-05	0	0	0	0	0	0.04	182,489
12-Dec-05	0	12,100	12,100	0	12,100	0.00	0
13-Dec-05	0	0	0	0	0	0.00	0
14-Dec-05	0	5,800	5,800	0	5,800	0.00	0
15-Dec-05	12,960	3,240	16,200	67,800	84,000	0.04	182,489
16-Dec-05	21,100	3,480	24,580	102,200	126,780	0.00	0
17-Dec-05	0	0	0	0	0	0.33	1,505,530
18-Dec-05	0	0	0	0	0	0.00	0
19-Dec-05	79,870	8,000	87,870	312,000	399,870	0.00	0
20-Dec-05	13,050	2,770	15,820	115,100	130,920	0.00	0
21-Dec-05	12,760	2,950	15,710	100,700	116,410	0.00	0
22-Dec-05	11,990	2,660	14,650	128,700	143,350	0.00	0
23-Dec-05	12,760	2,900	15,660	117,800	133,460	0.00	0
24-Dec-05	0	0	0	0	0	0.00	0
25-Dec-05	0	0	0	0	0	0.09	410,599
26-Dec-05	0	0	0	0	0	0.00	0
27-Dec-05	0	0	0	0	0	0.00	0
28-Dec-05	78,060	15,490	93,550	494,800	588,350	0.00	0
29-Dec-05	18,220	4,000	22,220	106,700	128,920	0.02	91,244
30-Dec-05	13,870	2,560	16,430	80,400	96,830	0.00	0
31-Dec-05	0	0	0	0	0	0.00	0
TOTAL	355,270	94,950	450,220	2,293,000	2,743,220	0.87	3,969,125
Leachate Pumped as Percentage of Rainfall			18.7%	147.1%			

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 -- 2005

	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	736,740	2,684,167	3,420,907	1.51	6,888,942	17.6%	99.2%
FEBRUARY	545,500	2,046,567	2,592,067	4.89	22,309,222	4.0%	23.4%
MARCH	779,900	5,231,667	6,011,567	5.34	24,362,218	5.3%	54.7%
APRIL	607,730	2,340,867	2,948,597	4.57	20,849,314	4.8%	28.6%
MAY	636,620	2,336,167	2,972,787	3.92	17,883,875	5.9%	33.3%
JUNE	710,600	4,870,700	5,581,300	10.15	46,306,462	2.5%	26.8%
JULY	675,600	4,090,000	4,765,600	8.35	38,094,479	2.9%	27.3%
AUGUST	686,010	3,424,800	4,110,810	4.47	20,393,092	5.5%	42.7%
SEPTEMBER	600,670	2,375,900	2,976,570	1.38	6,295,854	15.7%	96.1%
OCTOBER	578,770	3,971,200	4,549,970	4.00	18,248,852	5.2%	55.4%
NOVEMBER	570,100	4,094,400	4,664,500	2.81	12,819,819	7.3%	81.3%
DECEMBER	450,220	2,293,000	2,743,220	0.87	3,969,125	18.7%	147.1%
TOTAL	7,578,460	39,759,435	47,337,895	52.26	238,421,253	5.2%	42.4%

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		
2005 Dec	RAIN FALL	LEACHATE MGD
1	0.00	0.300
2	0.00	0.173
3	0.00	0.191
4	0.00	0.197
5	0.12	0.190
6	0.03	0.169
7	0.05	0.178
8	0.15	0.174
9	0.00	0.193
10	0.00	0.112
11	0.04	0.097
12	0.00	0.126
13	0.00	0.096
14	0.00	0.127
15	0.04	0.300
16	0.00	0.163
17	0.33	0.163
18	0.00	0.175
19	0.00	0.182
20	0.00	0.163
21	0.00	0.159
22	0.00	0.168
23	0.00	0.158
24	0.00	0.129
25	0.09	0.130
26	0.00	0.112
27	0.00	0.104
28	0.00	0.108
29	0.02	0.109
30	0.00	0.089
31	0.00	0.084
TOTAL	0.87	4.819
AVG		0.155
MIN		
MAX	0.33	0.300

Fax # 9-741-3396

