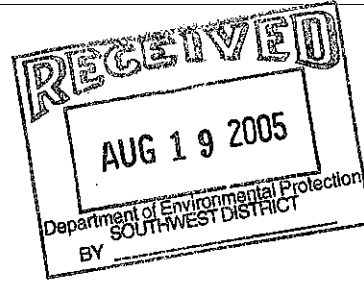




An employee-owned company

39884  
AA

August 16, 2005



Mr. John Morris, P.G.  
Florida Department of Environmental Protection  
Southwest District Office - Solid Waste Section  
3804 Coconut Palm Drive  
Tampa, Florida 33619

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

Dear Mr. Morris:

Attached is the July 2005 monthly report for the Lena Road Landfill in accordance with Specific Condition Numbers 17, 18, and 33 of Operations Permit Number 39884-001-SO. The report consists of the monthly water balance report (Exhibit A), the field readings for the water balance report, the leachate-tracking summary (Exhibit B), and a monthly groundwater gradient report.

An inward gradient was present in Stage I and Stage III of the landfill. An outward gradient was present in Stage II of the landfill, but Stage II contains no solid waste. This is the last monthly report using the gradient measurement for the old piezometers and wells, which were abandoned and replaced. The August report will measure the gradient using the new wells.

The month of July saw a total of 8.35-inches of rainfall recorded for the entire month. The highest daily rate of 2.38 inches fell on July 13.

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

cc: Daniel T. Gray, Director, Utility Operations Department  
Gus DiFonzo, Solid Waste Manager  
Mike Gore/Jeanne Detweiler, Manatee County Landfill Division  
File – 120498.93 0100, July 2005

U:\OldGWASTEMAN\Manatee County\SW-05 Annual Monitoring\2005\July\_2005\MonthlyLtr\_July2005.doc

EXHIBIT A

MANATEE COUNTY SOLID WASTE MANAGEMENT FACILITY

LENA ROAD LANDFILL

MONTHLY WATER BALANCE REPORT

JULY, 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-Jul-05	19,590	3,650	23,240	92,300	115,540	0.00	0
02-Jul-05	0	0	0	0	0	0.12	547,466
03-Jul-05	0	0	0	0	0	0.00	0
04-Jul-05	0	0	0	0	0	0.00	0
05-Jul-05	70,510	13,660	84,170	315,100	399,270	0.00	0
06-Jul-05	19,430	3,900	23,330	72,100	95,430	0.00	0
07-Jul-05	17,450	3,370	20,820	62,200	83,020	0.00	0
08-Jul-05	19,100	7,580	26,680	83,700	110,380	0.08	364,977
09-Jul-05	0	0	0	0	0	0.99	4,516,591
10-Jul-05	0	0	0	0	0	0.33	1,505,530
11-Jul-05	56,830	12,800	69,630	297,000	366,630	0.00	0
12-Jul-05	14,910	3,400	18,310	88,000	106,310	0.02	91,244
13-Jul-05	15,610	4,260	19,870	80,000	99,870	2.38	10,858,067
14-Jul-05	25,180	5,800	30,980	354,100	385,080	2.02	9,215,670
15-Jul-05	19,430	4,290	23,720	366,600	390,320	0.30	1,368,664
16-Jul-05	0	0	0	0	0	0.00	0
17-Jul-05	0	0	0	0	0	0.26	1,186,175
18-Jul-05	61,790	12,930	74,720	689,300	764,020	0.00	0
19-Jul-05	20,540	3,960	24,500	164,000	188,500	0.23	1,049,309
20-Jul-05	19,030	3,920	22,950	147,300	170,250	0.27	1,231,798
21-Jul-05	19,370	3,940	23,310	139,600	162,910	0.32	1,459,908
22-Jul-05	20,390	4,060	24,450	140,200	164,650	0.00	0
23-Jul-05	0	0	0	0	0	0.00	0
24-Jul-05	0	0	0	0	0	0.84	3,832,259
25-Jul-05	60,610	11,890	72,500	453,200	525,700	0.01	45,622
26-Jul-05	20,910	3,800	24,710	154,200	178,910	0.00	0
27-Jul-05	19,920	3,750	23,670	138,900	162,570	0.00	0
28-Jul-05	20,200	4,100	24,300	138,200	162,500	0.04	182,489
29-Jul-05	17,380	2,360	19,740	114,000	133,740	0.13	593,088
30-Jul-05	0	0	0	0	0	0.01	45,622
31-Jul-05	0	0	0	0	0	0.00	0
<b>TOTAL</b>	<b>558,180</b>	<b>117,420</b>	<b>675,600</b>	<b>4,090,000</b>	<b>4,765,600</b>	<b>8.35</b>	<b>38,094,479</b>
Leachate Pumped as Percentage of Rainfall			2.9%	27.3%			

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
<b>TOTAL</b>	<b>132.0</b>	<b>66.0</b>	<b>198.0</b>
<b>Open Area</b>	<b>102.0</b>	<b>66.0</b>	<b>168.0</b>

Comments

## EXHIBIT B

### MANATEE COUNTY SOLID WASTE MANAGEMENT FACILITY LENA ROAD LANDFILL MONTHLY LEACHATE TRACKING SUMMARY -- 2005

	B	C	D	E	F	G	H
	STAGE I	STAGE III	TOTAL			STAGE I	STAGE III
MONTH	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							
SEPTEMBER							
OCTOBER							
NOVEMBER							
DECEMBER							
<b>TOTAL</b>	<b>4,692,690</b>	<b>23,600,135</b>	<b>28,292,825</b>	<b>38.73</b>	<b>176,694,511</b>	<b>4.4%</b>	<b>34.0%</b>

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
<b>TOTAL</b>	<b>132.0</b>	<b>66.0</b>	<b>198.0</b>
<b>Open Area</b>	<b>102.0</b>	<b>66.0</b>	<b>168.0</b>

Manatee County Lena Road Landfill  
Groundwater Gradient  
July 2005

AA

**Inside Slurry Wall**

**Outside Slurry Wall**

Piezometer	Riser Elevation	Groundwater Elevation	Gradient Flow	Monitoring Well	Riser Elevation	Groundwater Elevation
			<b>STAGE I</b>			
PZ-1	42.55	29.09	<i>inward</i>	MW-5	39.88	29.16
PZ-2	42.47	29.98	<i>inward</i>	MW-2	41.13	32.30
PZ-3A	44.90	29.15	<i>inward</i>	MW-1	42.58	34.30
PZ-4A	47.73	29.90	<i>inward</i>	CW-4	37.48	35.49
PZ-5	43.94	30.15	<i>inward</i>	CW-5A	41.18	38.80
PZ-6	44.73	31.06	<i>inward</i>	SG-1		34.15
PZ-7	47.76	30.17	<i>inward</i>	MW-6	39.29	34.96
PZ-19	45.87	28.72	<i>inward</i>	PZ-11	38.94	33.31

Dry 32.80

			<b>STAGE II</b>			
PZ-8	37.63	33.35	<i>outward</i>	LRII-5	36.75	33.08
PZ-9	39.20	33.49	<i>outward</i>	LRII-4	33.85	29.62
PZ-10	37.05	33.50	<i>outward</i>	LRII-2	36.48	32.17
PZ-11	38.94	33.31	<i>inward</i>	LRII-1	37.97	33.55

			<b>STAGE III</b>			
PZ-12A	38.48	28.98	<i>inward</i>	GC-2	38.15	33.76
PZ-13	35.36	29.39	<i>inward</i>	GC-3	35.02	30.08
PZ-14A	34.58	23.02	<i>inward</i>	GC-4A	34.96	31.18
PZ-15C	40.46	21.37	<i>inward</i>	PZ-15A	39.79	32.58
PZ-16B	40.22	21.12	<i>inward</i>	PZ-16A	39.05	28.95
PZ-17	40.57	28.97	<i>inward</i>	SG-2		29.50
PZ-18	40.16	29.35	<i>inward</i>	SG-3		33.70

Dry 28.90

Dry 33.50

<b>Additional In-House Monitoring Data</b>						
<u>Stage I</u>						
PZ-2	42.47	29.98	<i>inward</i>	MW-3	42.32	34.19
<u>Stage II</u>						
PZ-9	39.20	33.49	<i>outward</i>	LRII-3	33.47	30.27
<u>Stage III</u>						
PZ-15C	40.46	21.37	<i>inward</i>	GC-1A	31.75	27.85
PZ-16B	40.22	21.12	<i>inward</i>	GC-5	36.46	29.56
PZ-17	40.57	28.97	<i>inward</i>	GC-6	39.02	32.04

Notes: The table is arranged so any piezometer can be compared to its corresponding monitoring point. For example, PZ-1 is located on the opposite side of the slurry wall from MW-5. Thus data from PZ-1 are compared to data from MW-5.

Report includes riser elevations determined by certified survey conducted by County Staff (Aug. 10, 1999). Riser elevations for MW-1, MW-3, PZ-9, PZ-11 and PZ-19 were resurveyed on November 13, 2002. PZ-12A and GC-4A were resurveyed in April 2003.

Data Collection: July 18, 2005



Landfill

LANDFILL SHEET		
2005 Jul	RAIN FALL	LEACHATE MGD
1	0.00	0.167
2	0.12	0.155
3	0.00	0.145
4	0.00	0.134
5	0.00	0.132
6	0.00	0.130
7	0.00	0.118
8	0.08	0.087
9	0.99	0.090
10	0.33	0.103
11	0.00	0.098
12	0.02	0.091
13	2.38	0.140
14	2.02	0.323
15	0.30	0.461
16	0.00	0.262
17	0.26	0.214
18	0.00	0.193
19	0.23	0.178
20	0.27	0.167
21	0.32	0.157
22	0.00	0.171
23	0.00	0.171
24	0.84	0.164
25	0.01	0.211
26	0.00	0.175
27	0.00	0.166
28	0.04	0.156
29	0.13	0.133
30	0.01	0.125
31	0.00	0.120
<b>TOTAL</b>	<b>8.35</b>	<b>5.137</b>
<b>AVG</b>		<b>0.166</b>
<b>MIN</b>		
<b>MAX</b>	<b>2.38</b>	<b>0.461</b>

Fax # 9-741-3386