



An employee-owned company

January 9, 2007

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

Project # 39884
Dept. of Environmental
Protection

JAN 10 2007

Southwest District

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

An inward gradient was present in Stage I and Stage III of the 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: 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
 December, 2006

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

JAN 10 2007

SOUTHWEST DISTRICT
TAMPA

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-06	10,670	200	10,870	58,200	69,070	0.00	0
02-Dec-06	0	0	0	0	0	0.00	0
03-Dec-06	0	0	0	0	0	0.00	0
04-Dec-06	34,800	3,200	38,000	193,400	231,400	0.00	0
05-Dec-06	8,370	1,600	9,970	48,800	58,770	0.00	0
06-Dec-06	12,250	2,100	14,350	60,600	74,950	0.00	0
07-Dec-06	11,590	1,200	12,790	49,200	61,990	0.02	91,244
08-Dec-06	8,400	1,500	9,900	43,000	52,900	0.00	0
09-Dec-06	0	0	0	0	0	0.00	0
10-Dec-06	0	0	0	0	0	0.00	0
11-Dec-06	31,160	6,500	37,660	165,700	203,360	0.00	0
12-Dec-06	10,720	1,700	12,420	46,700	59,120	0.00	0
13-Dec-06	10,210	2,600	12,810	38,300	51,110	0.09	410,599
14-Dec-06	17,680	2,200	19,880	63,300	83,180	0.14	638,710
15-Dec-06	14,950	2,600	17,550	48,000	65,550	0.01	45,622
16-Dec-06	0	0	0	0	0	0.00	0
17-Dec-06	0	0	0	0	0	0.00	0
18-Dec-06	31,840	5,100	36,940	136,300	173,240	0.00	0
19-Dec-06	0	0	0	0	0	0.00	0
20-Dec-06	22,820	4,300	27,120	94,900	122,020	0.00	0
21-Dec-06	9,500	2,000	11,500	37,500	49,000	0.00	0
22-Dec-06	14,120	3,000	17,120	50,700	67,820	0.00	0
23-Dec-06	0	0	0	0	0	0.22	1,003,687
24-Dec-06	0	0	0	0	0	0.00	0
25-Dec-06	0	0	0	0	0	1.31	5,976,499
26-Dec-06	0	0	0	0	0	0.03	136,866
27-Dec-06	60,300	12,700	73,000	216,200	289,200	0.00	0
28-Dec-06	8,100	1,900	10,000	45,800	55,800	0.00	0
29-Dec-06	10,720	2,600	13,320	56,000	69,320	0.00	0
30-Dec-06	0	0	0	0	0	0.00	0
31-Dec-06	0	0	0	0	0	0.00	0
TOTAL	328,200	57,000	385,200	1,452,600	1,837,800	1.82	8,303,228
Leachate Pumped as Percentage of Rainfall			7.6%	44.5%			

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 -- 2006

	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	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	394,120	1,366,500	1,760,620	0.21	958,065	67.8%	363.1%
MAY	429,690	1,582,600	2,012,290	1.51	6,888,942	10.3%	58.5%
JUNE	462,310	1,971,000	2,433,310	8.15	37,182,036	2.0%	13.5%
JULY	636,220	2,865,400	3,501,620	9.49	43,295,402	2.4%	16.8%
AUGUST	1,296,150	3,662,000	4,958,150	9.79	44,664,066	4.8%	20.9%
SEPTEMBER	3,965,900	3,719,900	7,685,800	11.62	53,012,916	12.3%	17.9%
OCTOBER	2,527,400	2,138,500	4,665,900	1.80	8,211,983	50.7%	66.3%
NOVEMBER	438,760	1,154,300	1,593,060	1.06	4,835,946	14.9%	60.8%
DECEMBER	385,200	1,452,600	1,837,800	1.82	8,303,228	7.6%	44.5%
TOTAL	11,858,830	26,731,700	38,590,530	50.39	229,889,915	8.5%	29.6%

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

**LEACHATE METER READINGS
DECEMBER 2006**

DATE	LEACHATE			STORMWATER		COMMENTS	NAME
	METER # 1	METER # 2	METER # 3	S. G. # 1	S. G. # 2		
12/1/06	3212863	86600	2344586	32.12	29.74	OK	AD
12/2/06							
12/4/06	3216343	89200	2346520	32.17	29.73	OK	AD
12/5/06	3217180	90800	2347008	32.20	29.73	OK	AD
12/6/06	3218405	92900	2347614	32.21	29.72	OK	AD
12/7/06	3219564	94100	2348106	32.22	29.72	OK	AD
12/8/06	3220404	95600	2348536	32.22	29.72	OK	AD
12/9/06							
12/11/06	3223520	102100	2350193	32.27	29.70	OK	AD
12/12/06	3224592	103800	2350660	31.95	29.70	OK	AD
12/13/06	3225613	106400	2351043	31.66	29.70	OK	AD
12/14/06	3227381	108600	2351676	31.71	29.49	OK	1345
12/15/06	3228876	111200	2352156	31.65	29.47	OK	1348
12/16/06							
12/18/06	3232060	116300	2353519	31.68	29.48	OK	AD
12/19/06							
12/20/06	3234342	120600	2354468	31.69	29.47	OK	AD
12/21/06	3235292	122600	2354842	31.75	29.47	OK	AD
12/22/06	3236704	125600	2355350	31.76	29.47	OK	AD
12/23/06							
12/26/06	Holiday						
12/27/06	3242734	136300	2357512	32.10	29.97	OK	AD
12/28/06	3243544	140260	2357970	32.08	29.96	OK	AD
12/29/06	3244616	142800	2358530	32.68	29.96	OK	AD
12/30/06							

Landfill

LANDFILL SHEET		
2006 Dec	RAIN FALL	LEACHATE MGD
1	0.00	0.015
2	0.00	0.014
3	0.00	0.013
4	0.00	0.013
5	0.00	0.013
6	0.00	0.013
7	0.02	0.013
8	0.00	0.012
9	0.00	0.011
10	0.00	0.012
11	0.00	0.012
12	0.00	0.012
13	0.09	0.012
14	0.14	0.012
15	0.01	0.012
16	0.00	0.011
17	0.00	0.011
18	0.00	0.011
19	0.00	0.011
20	0.00	0.011
21	0.00	0.011
22	0.00	0.011
23	0.22	0.011
24	0.00	0.011
25	1.31	0.011
26	0.03	0.011
27	0.00	0.010
28	0.00	0.010
29	0.00	0.011
30	0.00	0.011
31	0.00	0.011
TOTAL	1.82	0.363
AVG		0.012
MIN		
MAX	1.31	0.015

Fax # 9-741-3396

FIGURE L-7

Manatee County Lena Road Landfill

Monthly Groundwater Gradient Report

Month and Year: December 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	29.41	<i>inward</i>	GW-1	38.68	30.03
P-2	42.32	28.50	<i>inward</i>	GW-2	40.92	29.98
P-3	40.36	26.13	<i>inward</i>	GW-3	39.40	31.30
P-4	40.78	22.19	<i>inward</i>	GW-4	40.53	30.70
P-5	40.73	21.11	<i>inward</i>	GW-5	39.90	30.15
P-6	40.74	19.85	<i>inward</i>	GW-6	38.95	29.33
P-7	40.60	18.92	<i>inward</i>	GW-7	39.49	27.26
P-8	40.21	18.62	<i>inward</i>	GW-8	39.75	26.26
P-9	39.97	19.54	<i>inward</i>	GW-9	39.65	26.56
P-10	39.86	19.37	<i>inward</i>	GW-10	38.34	26.57
P-11	40.52	22.80	<i>inward</i>	GW-11	38.26	29.57
P-12	43.28	29.45	<i>inward</i>	GW-12	42.09	29.50
P-13	44.78	30.37	<i>inward</i>	GW-13	44.79	32.22
P-14	45.09	29.85	<i>inward</i>	GW-14	39.63	34.03
P-15	45.57	30.97	<i>inward</i>	GW-15	42.33	35.33
P-16	44.67	31.05	<i>inward</i>	GW-16	44.41	35.10
P-17	44.28	29.93	<i>inward</i>	GW-17	42.19	33.46

Comments:

Date Data Collected: December 20, 2006

Form Revised December 20, 2004