



Atkins North America, Inc.
482 South Keller Road
Orlando, Florida 32810-6101
Telephone: +1.407.647.7275
www.atkinsglobal.com/northamerica

March 1, 2012

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

MAR 02 2012

Southwest District

**Re: Manatee County Lena Road Landfill
Monthly Report – February 2012**

Dear Mr. Morris:

This letter includes the following monthly reports: Monthly Water Balance Report (Exhibit A), Monthly Leachate Tracking Summary - 2012 (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

u:\so\projects\manatee county\sw-05 annual monitoring\2012\february\monthlyltr_february 2012.docx

EXHIBIT A

MANATEE COUNTY SOLID WASTE MANAGEMENT FACILITY

LENA ROAD LANDFILL

MONTHLY WATER BALANCE REPORT

FEBRUARY, 2012

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
MAR 02 2012
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-Feb-12	2,140	1,770	3,910	7,300	11,210	0.00	0
02-Feb-12	0	3,490	3,490	7,000	10,490	0.00	0
03-Feb-12	25,980	6,620	32,600	6,700	39,300	0.00	0
04-Feb-12	0	0	0	0	0	0.00	0
05-Feb-12	0	0	0	0	0	0.00	0
06-Feb-12	43,760	17,000	60,760	20,700	81,460	0.00	0
07-Feb-12	13,590	6,780	20,370	6,900	27,270	0.05	228,111
08-Feb-12	13,040	3,900	16,940	6,800	23,740	0.00	0
09-Feb-12	12,040	6,470	18,510	7,100	25,610	0.00	0
10-Feb-12	12,520	5,910	18,430	7,000	25,430	0.50	2,281,107
11-Feb-12	0	0	0	0	0	0.09	410,599
12-Feb-12	0	0	0	0	0	0.00	0
13-Feb-12	32,900	12,560	45,460	17,500	62,960	0.00	0
14-Feb-12	14,950	4,690	19,640	6,900	26,540	0.00	0
15-Feb-12	11,190	4,510	15,700	7,900	23,600	0.00	0
16-Feb-12	12,080	3,590	15,670	5,100	20,770	0.00	0
17-Feb-12	14,110	8,500	22,610	6,800	29,410	0.00	0
18-Feb-12	0	0	0	0	0	0.00	0
19-Feb-12	0	0	0	0	0	0.00	0
20-Feb-12	0	0	0	0	0	0.00	0
21-Feb-12	52,350	20,020	72,370	27,800	100,170	0.00	0
22-Feb-12	11,750	5,220	16,970	7,000	23,970	0.00	0
23-Feb-12	16,220	2,670	18,890	6,800	25,690	0.00	0
24-Feb-12	13,600	4,940	18,540	6,800	25,340	0.00	0
25-Feb-12	0	0	0	0	0	0.00	0
26-Feb-12	0	0	0	0	0	0.00	0
27-Feb-12	26,070	21,510	47,580	17,500	65,080	0.00	0
28-Feb-12	10,140	4,130	14,270	6,900	21,170	0.00	0
29-Feb-12	12,000	5,960	17,960	6,700	24,660	0.00	0
	0	0	0	0	0	0.00	0
	0	0	0	0	0	0.00	0
TOTAL	350,430	150,240	500,670	193,200	693,870	0.64	2,919,816
Leachate Pumped as Percentage of Rainfall			28.2%	16.8%			

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 -- 2012

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
MAR 02 2012
SOUTHWEST DISTRICT
TAMPA

	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	524,770	212,500	737,270	0.94	4,288,480	20.2%	12.6%
FEBRUARY	500,670	193,200	693,870	0.64	2,919,816	28.2%	16.8%
MARCH							
APRIL							
MAY							
JUNE							
JULY							
AUGUST							
SEPTEMBER							
OCTOBER							
NOVEMBER							
DECEMBER							
TOTAL	1,025,440	405,700	1,431,140	1.58	7,208,297	23.4%	14.3%

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 (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

LECHATE FEBUARY 2012

[illegible]

LANDFILL SHEET			LAKE LEVEL DATA IN FEET NGVD	
2012 Feb	RAIN FALL	LEACHATE MGD	SOUTH (86 ACRE)	EAST (63 ACRE)
1	0.00	0.002	37.10	30.80
2	0.00	0.006	37.00	30.40
3	0.00	0.005	37.00	30.30
4	0.00	0.005	37.00	30.00
5	0.00	0.005	37.00	29.90
6	0.00	0.005	37.10	29.80
7	0.05	0.005	37.30	30.00
8	0.00	0.005	37.50	30.00
9	0.00	0.004	37.50	30.10
10	0.50	0.006	37.50	30.00
11	0.09	0.005	37.80	30.20
12	0.00	0.004	37.90	30.40
13	0.00	0.007	38.00	30.50
14	0.00	0.008	37.90	30.60
15	0.00	0.006	37.90	30.70
16	0.00	0.005	37.80	30.50
17	0.00	0.005	37.80	30.40
18	0.00	0.006	38.00	30.30
19	0.00	0.006	38.20	30.30
20	0.00	0.004	38.30	30.20
21	0.00	0.005	38.40	30.30
22	0.00	0.006	38.50	30.00
23	0.00	0.006	38.60	30.00
24	0.00	0.005	38.60	30.00
25	0.00	0.004	38.80	29.90
26	0.00	0.003	38.90	29.80
27	0.00	0.004	38.90	29.70
28	0.00	0.005	38.90	29.60
29	0.00	0.005	38.80	29.40
30				
31				
TOTAL	0.64	0.147		
AVG		0.005		
MIN				
MAX	0.50	0.008		

Fax # 9-708-5668

FIGURE L-7

Manatee County Lena Road Landfill

Monthly Groundwater Gradient Report

Month and Year: FEBRUARY 2012

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	30.18	inward	GW-1	38.68	31.57
P-2	42.32	29.97	inward	GW-2	40.92	31.29
P-3	40.36	24.91	inward	GW-3	39.40	31.19
P-4	40.78	23.77	inward	GW-4	40.53	30.45
P-5	40.73	23.72	inward	GW-5	39.90	30.07
P-6	40.74	23.65	inward	GW-6	38.95	29.30
P-7	40.60	23.64	inward	GW-7	39.49	26.96
P-8	40.21	23.61	inward	GW-8	39.75	25.68
P-9	39.97	23.64	inward	GW-9	39.65	26.27
P-10	39.86	22.64	inward	GW-10	38.34	26.20
P-11	40.52	23.78	inward	GW-11	38.26	28.61
P-12	43.28	29.93	inward	GW-12	42.09	30.17
P-13	44.78	30.72	inward	GW-13	44.79	32.85
P-14	45.09	30.68	inward	GW-14	39.63	32.24
P-15	45.57	31.02	inward	GW-15	42.33	32.92
P-16	44.67	31.19	inward	GW-16	44.41	32.34
P-17	44.28	30.06	inward	GW-17	42.19	32.48

Comments:

Date Data Collected: February 23, 2012

Form Revised December 6, 2004