



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

June 4, 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
JUN 06 2012
Southwest District

**Re: Manatee County Lena Road Landfill
Monthly Report – May 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\may\monthlyltr_may 2012.docx

EXHIBIT A

MANATEE COUNTY SOLID WASTE MANAGEMENT FACILITY
 LENA ROAD LANDFILL
 MONTHLY WATER BALANCE REPORT
MAY, 2012

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-May-12	13,370	20	13,390	10,900	24,290	0.00	0
02-May-12	13,540	0	13,540	10,500	24,040	0.00	0
03-May-12	12,650	270	12,920	9,000	21,920	0.00	0
04-May-12	13,100	0	13,100	7,300	20,400	0.00	0
05-May-12	0	0	0	0	0	0.00	0
06-May-12	0	0	0	0	0	0.00	0
07-May-12	0	640	640	0	640	0.00	0
08-May-12	56,620	0	56,620	42,100	98,720	0.00	0
09-May-12	11,220	30	11,250	7,200	18,450	0.00	0
10-May-12	15,710	0	15,710	9,100	24,810	0.00	0
11-May-12	11,160	10	11,170	9,300	20,470	0.00	0
12-May-12	0	0	0	0	0	0.00	0
13-May-12	0	0	0	0	0	0.00	0
14-May-12	31,180	50	31,230	23,200	54,430	0.00	0
15-May-12	13,620	20	13,640	9,000	22,640	0.00	0
16-May-12	11,940	0	11,940	8,800	20,740	0.94	4,288,480
17-May-12	14,310	10	14,320	8,900	23,220	0.47	2,144,240
18-May-12	13,700	0	13,700	10,600	24,300	0.00	0
19-May-12	0	0	0	0	0	0.00	0
20-May-12	0	0	0	0	0	0.00	0
21-May-12	37,860	40	37,900	26,900	64,800	0.00	0
22-May-12	12,910	20	12,930	7,400	20,330	0.00	0
23-May-12	13,120	0	13,120	8,800	21,920	0.05	228,111
24-May-12	14,340	0	14,340	10,500	24,840	0.10	456,221
25-May-12	11,250	0	11,250	7,300	18,550	0.00	0
26-May-12	0	0	0	0	0	0.00	0
27-May-12	0	0	0	0	0	0.00	0
28-May-12	0	0	0	0	0	0.64	2,919,816
29-May-12	48,420	0	48,420	33,900	82,320	0.00	0
30-May-12	12,090	4,520	16,610	7,300	23,910	0.00	0
31-May-12	13,300	360	13,660	9,100	22,760	0.10	456,221
TOTAL	395,410	5,990	401,400	277,100	678,500	2.30	10,493,090
Leachate Pumped as Percentage of Rainfall			6.3%	6.7%			

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

	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	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	497,140	214,600	711,740	2.84	12,956,685	6.3%	4.2%
APRIL	448,000	284,900	732,900	4.66	21,259,913	3.5%	3.4%
MAY	401,400	277,100	678,500	2.30	10,493,090	6.3%	6.7%
JUNE							
JULY							
AUGUST							
SEPTEMBER							
OCTOBER							
NOVEMBER							
DECEMBER							
TOTAL	2,371,980	1,182,300	3,554,280	11.38	51,917,984	7.5%	5.8%

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

LECHATE MAY 2012

DATE	LEACHATE			STORMWATER		COMMENTS	NAME
	METER # 1	METER # 2	METER # 3	S. G. # 1	S. G. # 2		
5/1/12	46254503	4624140	2815225	32.18	30.34	OK	R.B.
5/2/12	4625857	4624140	2815380	32.16	30.19	OK	R.B.
5/3/12	46257127	4624410	2815420	32.14	30.08	OK	R.B.
5/4/12	46258432	4624410	2815493	32.12	29.92	OK	R.B.
5/7/12	46258432	4625250	2815493	32.08	29.70	OK	R.B.
5/8/12	46264094	4625050	2815914	32.05	29.60	OK	R.B.
5/9/12	46265216	4625080	2815986	32.03	29.52	OK	R.B.
5/10/12	46266787	4625080	2816077	32.01	29.42	OK	R.B.
5/11/12	46267903	4625090	2816170	32.00	29.31	OK	R.B.
5/14/12	46271021	4625140	2816402	31.98	Dry	OK	R.B.
5/15/12	46272383	4625110	2816492	31.97	Dry	OK	R.B.
5/16/12	46273577	4625160	2816580	31.96	Dry	OK	R.B.
5/17/12	46275008	4625170	2816669	31.98	29.16	OK	R.B.
5/18/12	46276378	4625170	2816775	31.97	Dry	OK	R.B.
5/21/12	46280164	4625210	2817044	31.93	Dry	OK	R.B.
5/22/12	46281455	4625230	2817118	31.89	Dry	OK	R.B.
5/23/12	46282767	4625230	2817206	31.87	Dry	OK	R.B.
5/24/12	46284201	METER NOT WORKING	2817311	31.84	Dry	OK	R.B.
5/25/12	46285326	METER NOT WORKING	2817384	31.82	Dry	OK	R.B.
5/29/12	46290168	METER NOT WORKING	2817723	31.80	Dry	OK	R.B.
5/30/12	46291377	4629150	2817796	31.77	Dry	OK	R.B.
5/31/12	46292707	4630110	2817887	31.76	Dry	OK	R.B.

Landfill

LANDFILL SHEET			LAKE LEVEL DATA IN FEET NGVD	
2012 May	RAIN FALL	LEACHATE MGD	SOUTH (86 ACRE)	EAST (63 ACRE)
1	0.00	0.006	39.40	30.40
2	0.00	0.006	39.40	30.40
3	0.00	0.006	39.30	30.00
4	0.00	0.006	39.40	30.30
5	0.00	0.006	39.60	30.30
6	0.00	0.005	39.60	30.30
7	0.00	0.007	39.60	30.20
8	0.00	0.008	39.70	30.30
9	0.00	0.008	39.60	30.10
10	0.00	0.007	39.70	29.90
11	0.00	0.004	39.70	29.50
12	0.00	0.004	39.70	29.60
13	0.00	0.005	39.80	29.70
14	0.00	0.005	39.80	29.60
15	0.00	0.005	39.80	29.50
16	0.94	0.005	39.90	29.70
17	0.47	0.006	40.00	29.70
18	0.00	0.005	40.00	29.70
19	0.00	0.006	40.10	30.00
20	0.00	0.006	40.00	30.20
21	0.00	0.005	40.00	30.30
22	0.00	0.006	40.10	30.60
23	0.05	0.006	39.90	30.40
24	0.10	0.006	39.90	30.20
25	0.00	0.004	39.90	29.90
26	0.00	0.004	39.90	29.50
27	0.00	0.005	40.10	29.50
28	0.64	0.005	40.10	29.40
29	0.00	0.005	40.10	29.40
30	0.00	0.005	40.10	29.30
31	0.10	0.005	40.00	29.20
TOTAL	2.30	0.172		
AVG		0.006		
MIN				
MAX	0.94	0.008		

Fax # 9-708-5668

FIGURE L-7

Manatee County Lena Road Landfill

Monthly Groundwater Gradient Report

Month and Year: MAY 2012

Piezometers Inside Slurry Wall				Groundwater Monitoring Wells Outside Slurry Wall		
Piezometer	Riser Elevation	Leachate Elevation	Gradient Flow	Monitoring Well	Riser Elevation	Groundwater Elevation
P-1	42.68	30.15	<i>inward</i>	GW-1	38.68	31.08
P-2	42.32	29.98	<i>inward</i>	GW-2	40.92	31.27
P-3	40.36	24.91	<i>inward</i>	GW-3	39.40	31.38
P-4	40.78	23.73	<i>inward</i>	GW-4	40.53	30.65
P-5	40.73	23.69	<i>inward</i>	GW-5	39.90	30.55
P-6	40.74	23.59	<i>inward</i>	GW-6	38.95	29.81
P-7	40.60	23.57	<i>inward</i>	GW-7	39.49	27.74
P-8	40.21	23.58	<i>inward</i>	GW-8	39.75	25.68
P-9	39.97	23.64	<i>inward</i>	GW-9	39.65	26.05
P-10	39.86	22.62	<i>inward</i>	GW-10	38.34	26.48
P-11	40.52	23.80	<i>inward</i>	GW-11	38.26	29.11
P-12	43.28	29.94	<i>inward</i>	GW-12	42.09	30.75
P-13	44.78	30.68	<i>inward</i>	GW-13	44.79	32.21
P-14	45.09	30.66	<i>inward</i>	GW-14	39.63	31.85
P-15	45.57	31.06	<i>inward</i>	GW-15	42.33	32.41
P-16	44.67	31.26	<i>inward</i>	GW-16	44.41	32.18
P-17	44.28	30.08	<i>inward</i>	GW-17	42.19	32.20

Comments:

Date Data Collected: May 10, 2012

Form Revised December 6, 2004