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June 28, 2007

Mr. John Morris, P.G.
Florida Department of Environmental Protection
Southwest District Office - Solid Waste Section
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
JUL 13 2007
SOUTHWEST DISTRICT
TAMPA

**Re: Manatee County Lena Road Landfill
Methane Point Sampling – Second Quarter 2007**

Dear Mr. Morris:

The methane monitoring probes and points at the Lena Road Landfill were sampled for the second quarter on June 21, 2007 using a CES-LandTEC Gas Extraction Monitor (GEM) Model 2000. The results are summarized on the attached table.

The readings at all the probes and points were zero.

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
Michael Gore, Manatee County Landfill Division
File – 120498.94 0200, Monitoring

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MISSING REPORT FOR
JULY - SEP 2004

MANATEE COUNTY LENA ROAD LANDFILL

GAS MONITORING REPORT

2nd QUARTER 2007

MARCH 2007 -- JUNE 2007

METHANE GAS READINGS

Gas Well	Date Collected	Reading % LEL
Well 1	6/21/2007	0.0
Well 2	6/21/2007	0.0
Well 3	6/21/2007	0.0
Well 4	6/21/2007	0.0
Well 5	6/21/2007	0.0
Well 6	6/21/2007	0.0
Well 7	6/21/2007	0.0
Well 8	6/21/2007	0.0
Well 9A	6/21/2007	0.0
Well 10	6/21/2007	0.0
Well 11A	6/21/2007	0.0
Well 11B	6/21/2007	0.0
Well 11C	6/21/2007	0.0
Well 12	6/21/2007	0.0
Well 13	6/21/2007	0.0
Well 14	6/21/2007	0.0
Well 15	6/21/2007	0.0
Well 16	6/21/2007	0.0
Well 17	6/21/2007	0.0
Well 18	n/a	*

Gas Point	Date Collected	Reading % LEL
Point 1	6/21/2007	0.0
Point 2	6/21/2007	0.0
Point 3	6/21/2007	0.0
Point 4	6/21/2007	0.0
Point 5	6/21/2007	0.0
Point 6	6/21/2007	0.0
Point 8	n/a	Note 8

GAS POINT LOCATION DESCRIPTIONS

- 1 Gary Seeley Office (to become secure storage)
(building moved to area near equipment trailer)
- 2 Pre-fab Shed on North Side of Office
- 3 Main Offices
- 4 Vehicle Maintenance Garage
- 5 Haz Waste Area (All Storage Sheds)
- 6 Equipment Trailer
- 8 Generator House
(Removed)

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
JUL 13 2007
SOUTHWEST DISTRICT
TAMPA

Notes

* Well 18 removed due to Stage III landfill activity.



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July 11, 2007

Mr. John R. Morris, P.G.
Florida Department of Environmental Protection
Southwest District
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
JUL 13 2007
SOUTHWEST DISTRICT
TAMPA

**Re: Manatee County Erie Road Class I Landfill
Long-term Care Permit No. 69686-002-SF
Gas Migration Monitoring Report (Q2 - 2007)**

Dear Mr. Morris:

On behalf of Manatee County, PBS&J is submitting the 2007 second quarter report for the Erie Road Landfill gas monitoring probes. Enclosed is a table with the results expressed in percent of the lower explosive limit (LEL) at each of the monitoring probes.

All readings were zero for the second quarter of 2007. All readings were zero for the first quarter of 2007 too.

If you have any questions, please call me at 407-806-4153.

Sincerely,

Joe Miller, P.E.
Project Manager

Cc: Daniel T. Gray, Director, Utility Operations Department
Gus DiFonzo, Manatee County
Mike Gore, Manatee County
File 120498.27

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FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

JUL 13 2007

SOUTHWEST DISTRICT
TAMPA

MANATEE COUNTY
ERIE ROAD LANDFILL
METHANE PROBE GAS MONITORING

YEAR	2007	2007			
	QUARTER 1	QUARTER 2			
PROBE ID	DATE: 3/21/07	DATE: 6/21/07			
	CH4 (LEL)	CH4 (LEL)			
1	0.0%	0.0%			
2	0.0%	0.0%			
3	0.0%	0.0%			
3A	0.0%	0.0%			
4	0.0%	0.0%			
4A	0.0%	0.0%			
5	0.0%	0.0%			
5A	0.0%	0.0%			
6	0.0%	0.0%			
6A	0.0%	0.0%			
7	0.0%	0.0%			
8	0.0%	0.0%			
9	0.0%	0.0%			
10	0.0%	0.0%			
11	0.0%	0.0%			
12	0.0%	0.0%			
13	0.0%	0.0%			
14	0.0%	0.0%			
15	0.0%	0.0%			
16	0.0%	0.0%			
17	0.0%	0.0%			
18	0.0%	0.0%			
19	0.0%	0.0%			
20	0.0%	0.0%			
21	0.0%	0.0%			
22	0.0%	0.0%			
23	0.0%	0.0%			
24	0.0%	0.0%			
25	0.0%	0.0%			
26	0.0%	0.0%			
27	0.0%	0.0%			
28	0.0%	0.0%			
29	0.0%	0.0%			
30	0.0%	0.0%			
31	0.0%	0.0%			
32	0.0%	0.0%			
33	0.0%	0.0%			
34	0.0%	0.0%			
35	0.0%	0.0%			
36	0.0%	0.0%			
37	0.0%	0.0%			
38	0.0%	0.0%			
39	0.0%	0.0%			
NOTES					
	1) % LEL based on calculation from GEM2000 methane content measurement: $(20 \times \text{CH}_4)/100$.				
	2) %LEL based on GEM2000 LEL reading.				
	3) Gas probe number 39 repairs effected 3/24/2005				
	4) Gas probe number 39 repaired				
	5) Gas probes 3A, 4A, 5A and 6A installed on August 23, 2005				
	6) Gas probes 20 and 22 repaired.				



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An employee-owned company

April 9, 2007

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
APR 11 2007
SOUTHWEST DISTRICT
TAMPA

Mr. John Morris, P.G.
Florida Department of Environmental Protection
Southwest District Office - Solid Waste Section
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926

**Re: Manatee County Lena Road Landfill
Methane Point Sampling – First Quarter 2007**

Dear Mr. Morris:

The methane monitoring probes and points at the Lena Road Landfill were sampled for the second quarter on April 3, 2007 using a CES-LandTEC Gas Extraction Monitor (GEM) Model 2000. The results are summarized on the attached table.

The readings at all the probes and points were zero.

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
Michael Gore, Manatee County Landfill Division
File – 120498.94 0200, Monitoring

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MANATEE COUNTY LENA ROAD LANDFILL

GAS MONITORING REPORT

1ST QUARTER 2007

JANUARY 2007 -- MARCH 2007

METHANE GAS READINGS

Gas Well	Date Collected	Reading % LEL
Well 1	4/3/2007	0.0
Well 2	4/3/2007	0.0
Well 3	4/3/2007	0.0
Well 4	4/3/2007	0.0
Well 5	4/3/2007	0.0
Well 6	4/3/2007	0.0
Well 7	4/3/2007	0.0
Well 8	4/3/2007	0.0
Well 9A	4/3/2007	0.0
Well 10	4/3/2007	0.0
Well 11A	4/3/2007	0.0
Well 11B	4/3/2007	0.0
Well 11C	4/3/2007	0.0
Well 12	4/3/2007	0.0
Well 13	4/3/2007	0.0
Well 14	4/3/2007	0.0
Well 15	4/3/2007	0.0
Well 16	4/3/2007	0.0
Well 17	4/3/2007	0.0
Well 18	n/a	*

Gas Point	Date Collected	Reading % LEL
Point 1	4/3/2007	0.0%
Point 2	4/3/2007	0.0%
Point 3	4/3/2007	0.0%
Point 4	4/3/2007	0.0%
Point 5	4/3/2007	0.0%
Point 6	4/3/2007	0.0%
Point 8	n/a	Note 8

GAS POINT LOCATION DESCRIPTIONS

- 1 Gary Seeley Office (to become secure storage)
(building moved to area near equipment trailer)
- 2 Pre-fab Shed on North Side of Office
- 3 Main Offices
- 4 Vehicle Maintenance Garage
- 5 Haz Waste Area (All Storage Sheds)
- 6 Equipment Trailer
- 8 Generator House
(Removed)

Notes

* Well 18 removed due to Stage III landfill activity.



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An employee-owned company

April 9, 2007

Mr. John R. Morris, P.G.
Florida Department of Environmental Protection
Southwest District
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
APR 11 2007
SOUTHWEST DISTRICT
TAMPA

**Re: Manatee County Erie Road Class I Landfill
Long-term Care Permit No. 69686-002-SF
Gas Migration Monitoring Report (Q1 2007)**

Dear Mr. Morris:

On behalf of Manatee County, PBS&J is submitting the 2007 first quarter report for the Erie Road Landfill gas monitoring probes. Enclosed is a table with the results expressed in percent of the lower explosive limit (LEL) at each of the monitoring probes.

All readings were zero for the first quarter of 2007.

If you have any questions, please call me at 407-806-4153.

Sincerely,

Joe Miller, P.E.
Project Manager

Cc: Daniel T. Gray, Director, Utility Operations Department
Gus DiFonzo, Manatee County
Mike Gore, Manatee County
File 120498.27

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**MANATEE COUNTY
ERIE ROAD LANDFILL
METHANE PROBE GAS MONITORING**

YEAR	2006	2006	2006	2006	2006	2007
	QUARTER 1	QUARTER 2	QUARTER 3	QUARTER 3 (re-check)	QUARTER 4	QUARTER 1
PROBE ID	DATE: 03/28/06 CH4 (LEL) Note 1	DATE: 07/06/06 CH4 (LEL) Note 2	DATE: 09/05/06 CH4 (LEL) Note 2	DATE: 09/29/06 CH4 (LEL) Note 2	DATE: 12/08/06 CH4 (LEL)	DATE: 3/21/07 CH4 (LEL)
1	0.0%	0.0%	0.0%		0.0%	0.0%
2	0.0%	0.0%	0.0%		0.0%	0.0%
3	0.0%	0.0%	100%	1.8%	0.0%	0.0%
3A	0.0%	0.0%	0.0%		0.0%	0.0%
4	0.0%	0.0%	64%	>100%	0.0%	0.0%
4A	0.0%	0.0%	0.0%		0.0%	0.0%
5	0.0%	0.0%	>100%	>100%	0.0%	0.0%
5A	0.0%	0.0%	0.0%		0.0%	0.0%
6	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%
6A	0.0%	0.0%	0.0%		0.0%	0.0%
7	0.0%	0.0%	0.0%		0.0%	0.0%
8	1.0%	0.0%	0.0%		0.0%	0.0%
9	0.0%	0.0%	0.0%		0.0%	0.0%
10	0.0%	0.0%	>100%	>100%	0.0%	0.0%
11	0.0%	0.0%	0.0%		0.0%	0.0%
12	0.0%	0.0%	0.0%		0.0%	0.0%
13	1.0%	0.0%	13%	0.0%	0.0%	0.0%
14	0.0%	0.0%	0.0%		0.0%	0.0%
15	0.0%	0.0%	0.0%		0.0%	0.0%
16	0.0%	0.0%	0.0%		0.0%	0.0%
17	0.0%	0.0%	0.0%		0.0%	0.0%
18	0.0%	0.0%	13.0%	0.0%	0.0%	0.0%
19	1.0%	0.0%	0.0%		0.0%	0.0%
20	0.0%	0.0%	0.0%		0.0%	0.0%
21	0.0%	0.0%	0.0%		0.0%	0.0%
22	1.0%	0.0%	0.0%		0.0%	0.0%
23	1.0%	0.0%	0.0%		0.0%	0.0%
24	0.0%	0.0%	0.0%		0.0%	0.0%
25	0.0%	0.0%	0.0%		0.0%	0.0%
26	0.0%	0.0%	0.0%		0.0%	0.0%
27	0.0%	0.0%	7.0%	0.0%	0.0%	0.0%
28	0.0%	0.0%	0.0%		0.0%	0.0%
29	0.0%	0.0%	0.0%		0.0%	0.0%
30	0.0%	0.0%	0.0%		0.0%	0.0%
31	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%
32	0.0%	0.0%	0.0%		0.0%	0.0%
33	0.0%	0.0%	0.0%		0.0%	0.0%
34	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%
35	0.0%	0.0%	0.0%		0.0%	0.0%
36	1.0%	0.0%	0.0%		0.0%	0.0%
37	0.0%	0.0%	1.0%	0.0%	0.0%	0.0%
38	1.0%	0.0%	>100%	>100%	0.0%	0.0%
39	0.0%	0.0%	0.0%		0.0%	0.0%

NOTES

- 1) % LEL based on calculation from GEM2000 methane content measurement: $(20 \times \text{CH}_4) / 100$.
- 2) %LEL based on GEM2000 LEL reading.
- 3) Gas probe number 39 repairs effected 3/24/2005
- 4) Gas probe number 39 repaired
- 5) Gas probes 3A, 4A, 5A and 6A installed on August 23, 2005
- 6) Gas probes 20 and 22 repaired.



An employee-owned company

Proj # 35884
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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, FL 33637-0926

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
JAN 10 2007
SOUTHWEST DISTRICT
TAMPA

Re: Manatee County Lena Road Landfill
Methane Point Sampling – Fourth Quarter 2006

Dear Mr. Morris:

The methane monitoring probes and points at the Lena Road Landfill were sampled for the second quarter on December 7, 2006 using a CES-LandTEC Gas Extraction Monitor (GEM) Model 2000. The results are summarized on the attached table.

The readings at all the probes and points were zero.

If you should have any questions concerning this report, please contact me in our Orlando office 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
Michael Gore, Manatee County Landfill Division
File – 120498.94 0200, Monitoring

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MANATEE COUNTY LENA ROAD LANDFILL

GAS MONITORING REPORT

4 th QUARTER 2006

OCTOBER 2006 -- DECEMBER 2006

METHANE GAS READINGS

Gas Well	Date Collected	Reading % LEL
Well 1	12/7/2006	0.0
Well 2	12/7/2006	0.0
Well 3	12/7/2006	0.0
Well 4	12/7/2006	0.0
Well 5	12/7/2006	0.0
Well 6	12/7/2006	0.0
Well 7	12/7/2006	0.0
Well 8	12/7/2006	0.0
Well 9A	12/7/2006	0.0
Well 10	12/7/2006	0.0
Well 11A	12/7/2006	0.0
Well 11B	12/7/2006	0.0
Well 11C	12/7/2006	0.0
Well 12	12/7/2006	0.0
Well 13	12/7/2006	0.0
Well 14	12/7/2006	0.0
Well 15	12/7/2006	0.0
Well 16	12/7/2006	0.0
Well 17	12/7/2006	0.0
Well 18	n/a	*

Gas Point	Date Collected	Reading % LEL
Point 1	12/7/2006	0.0%
Point 2	12/7/2006	0.0%
Point 3	12/7/2006	0.0%
Point 4	12/7/2006	0.0%
Point 5	12/7/2006	0.0%
Point 6	12/7/2006	0.0%
Point 8	n/a	Note 8

GAS POINT LOCATION DESCRIPTIONS

- 1 Gary Seeley Office (to become secure storage)
(building moved to area near equipment trailer)
- 2 Pre-fab Shed on North Side of Office
- 3 Main Offices
- 4 Vehicle Maintenance Garage
- 5 Haz Waste Area (All Storage Sheds)
- 6 Equipment Trailer
- 8 Generator House
(Removed)

Notes

* Well 18 removed due to Stage III landfill activity.



An employee-owned company

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September 8, 2006

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

SEP 15 2006

SOUTHWEST DISTRICT
TAMPA

Mr. John Morris, P.G.
Florida Department of Environmental Protection
Southwest District Office - Solid Waste Section
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926

**Re: Manatee County Lena Road Landfill
Methane Point Sampling – Third Quarter 2006**

Dear Mr. Morris:

The methane monitoring probes and points at the Lena Road Landfill were sampled for the third quarter on September 5, 2006 using a CES-LandTEC Gas Extraction Monitor (GEM) Model 2000. The results are summarized on the attached table.

The readings at all the probes and points were zero.

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

cc: Daniel T. Gray, Director, Utility Operations Department
Gus DiFonzo, Solid Waste Manager
Michael Gore, Manatee County Landfill Division
File – 120498.94 0200, Monitoring

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MANATEE COUNTY LENA ROAD LANDFILL

GAS MONITORING REPORT

THIRD QUARTER 2006

JULY 2006 -- SEPTEMBER 2006

METHANE GAS READINGS

Gas Well	Date Collected	Reading % LEL
Well 1	9/5/2006	0.0
Well 2	9/5/2006	0.0
Well 3	9/5/2006	0.0
Well 4	9/5/2006	0.0
Well 5	9/5/2006	0.0
Well 6	9/5/2006	0.0
Well 7	9/5/2006	0.0
Well 8	9/5/2006	0.0
Well 9A	9/5/2006	0.0
Well 10	9/5/2006	0.0
Well 11A	9/5/2006	0.0
Well 11B	9/5/2006	0.0
Well 11C	9/5/2006	0.0
Well 12	9/5/2006	0.0
Well 13	9/5/2006	0.0
Well 14	9/5/2006	0.0
Well 15	9/5/2006	0.0
Well 16	9/5/2006	0.0
Well 17	9/5/2006	0.0
Well 18	n/a	*

Gas Point	Date Collected	Reading % LEL
Point 1	9/5/2006	0.0%
Point 2	9/5/2006	0.0%
Point 3	9/5/2006	0.0%
Point 4	9/5/2006	0.0%
Point 5	9/5/2006	0.0%
Point 6	9/5/2006	0.0%
Point 8	9/5/2006	-

GAS POINT LOCATION DESCRIPTIONS

- 1 Gary Seeley Office (to become secure storage)
(building moved to area near equipment trailer)
- 2 Pre-fab Shed on North Side of Office
- 3 Main Offices
- 4 Vehicle Maintenance Garage
- 5 Haz Waste Area (All Storage Sheds)
- 6 Equipment Trailer
- 8 Generator House
(Removed)

FLORIDA DEPARTMENT OF
 ENVIRONMENTAL PROTECTION
 SEP 15 2006
 SOUTHWEST DISTRICT
 TAMPA

Notes

* Well 18 removed due to Stage III landfill activity.



An employee-owned company

July 15, 2006

Mr. John Morris, P.G.
Florida Department of Environmental Protection
Southwest District Office - Solid Waste Section
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926

**Re: Manatee County Lena Road Landfill
Methane Point Sampling – Second Quarter 2006**

Dear Mr. Morris:

The methane monitoring probes and points at the Lena Road Landfill were sampled for the second quarter on July 6, 2006 using a CES-LandTEC Gas Extraction Monitor (GEM) Model 2000. The results are summarized on the attached table.

The readings at all the probes and points were zero.

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

cc: Danielle Nichols, FDEP
Daniel T. Gray, Director, Utility Operations Department
Gus DiFonzo, Solid Waste Manager
Michael Gore, Manatee County Landfill Division
File – 120498.94 0200, Monitoring

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Dept. of Environmental
Protection

JUL 20 2006

Southwest District

MANATEE COUNTY LENA ROAD LANDFILL
GAS MONITORING REPORT
SECOND QUARTER 2006
APRIL 2006 -- JUNE 2006
METHANE GAS READINGS

Gas Well	Date Collected	Reading % LEL
Well 1	7/6/2006	0.0
Well 2	7/6/2006	0.0
Well 3	7/6/2006	0.0
Well 4	7/6/2006	0.0
Well 5	7/6/2006	0.0
Well 6	7/6/2006	0.0
Well 7	7/6/2006	0.0
Well 8	7/6/2006	0.0
Well 9A	7/6/2006	0.0
Well 10	7/6/2006	0.0
Well 11A	7/6/2006	0.0
Well 11B	7/6/2006	0.0
Well 11C	7/6/2006	0.0
Well 12	7/6/2006	0.0
Well 13	7/6/2006	0.0
Well 14	7/6/2006	0.0
Well 15	7/6/2006	0.0
Well 16	7/6/2006	0.0
Well 17	7/6/2006	0.0
Well 18	n/a	*

Gas Point	Date Collected	Reading % LEL
Point 1	7/6/2006	0.0%
Point 2	7/6/2006	0.0%
Point 3	7/6/2006	0.0%
Point 4	7/6/2006	0.0%
Point 5	7/6/2006	0.0%
Point 6	7/6/2006	0.0%
Point 8	7/6/2006	-

GAS POINT LOCATION DESCRIPTIONS

- 1 Gary Seeley Office (to become secure storage)
(building moved to area near equipment trailer)
- 2 Pre-fab Shed on North Side of Office
- 3 Main Offices
- 4 Vehicle Maintenance Garage
- 5 Haz Waste Area (All Storage Sheds)
- 6 Equipment Trailer
- 8 Generator House
(Removed)

Notes

* Well 18 removed due to Stage III landfill activity.

Dept. of Environmental
 Protection
 JUL 20 2006
 Southwest District



39884

4/17/06

April 14, 2006

Mr. John Morris, P.G.
Florida Department of Environmental Protection
Southwest District Office - Solid Waste Section
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

APR 17 2006

SOUTHWEST DISTRICT
TAMPA

**Re: Manatee County Lena Road Landfill
Methane Point Sampling – First Quarter 2006**

Dear Mr. Morris:

The methane monitoring probes and points at the Lena Road Landfill were sampled on March 27, 2006 using a CES-LandTEC Gas Extraction Monitor (GEM) Model 2000. The results are summarized on the attached table.

The readings at all the probes and points were zero.

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

cc: Danielle Nichols, FDEP
Daniel T. Gray, Director, Utility Operations Department
Gus DiFonzo, Solid Waste Manager
Michael Gore, Manatee County Landfill Division
File – 120498.94 0200, Monitoring

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MANATEE COUNTY LENA ROAD LANDFILL

GAS MONITORING REPORT

1st QUARTER 2006

JANUARY 2006 -- MARCH 2006

METHANE GAS READINGS

Gas Well	Date Collected	Reading % LEL
Well 1	3/27/2006	0.0
Well 2	3/27/2006	0.0
Well 3	3/27/2006	0.0
Well 4	3/27/2006	0.0
Well 5	3/27/2006	0.0
Well 6	3/27/2006	0.0
Well 7	3/27/2006	0.0
Well 8	3/27/2006	0.0
Well 9A	3/27/2006	0.0
Well 10	3/27/2006	0.0
Well 11A	3/27/2006	0.0
Well 11B	3/27/2006	0.0
Well 11C	3/27/2006	0.0
Well 12	3/27/2006	0.0
Well 13	3/27/2006	0.0
Well 14	3/27/2006	0.0
Well 15	3/27/2006	0.0
Well 16	3/27/2006	0.0
Well 17	3/27/2006	0.0
Well 18	n/a	*

Gas Point	Date Collected	Reading % LEL
Point 1	3/27/2006	0.0%
Point 2	3/27/2006	0.0%
Point 3	3/27/2006	0.0%
Point 4	3/27/2006	0.0%
Point 5	3/27/2006	0.0%
Point 6	3/27/2006	0.0%
Point 8	3/27/2006	-

GAS POINT LOCATION DESCRIPTIONS

- 1 Gary Seeley Office (to become secure storage)
(building moved to area near equipment trailer)
- 2 Pre-fab Shed on North Side of Office
- 3 Main Offices
- 4 Vehicle Maintenance Garage
- 5 Haz Waste Area (All Storage Sheds)
- 6 Equipment Trailer
- 8 Generator House
(Removed)

FLORIDA DEPARTMENT OF
 ENVIRONMENTAL PROTECTION
 APR 17 2006
 SOUTHWEST DISTRICT
 TAMPA

Notes

- * Well 18 removed due to Stage III landfill activity.



An employee-owned company

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, FL 33637-0926



**Re: Manatee County Lena Road Landfill
Methane Point Sampling – Fourth Quarter 2005**

Dear Mr. Morris:

The methane monitoring probes and points at the Lena Road Landfill were sampled on December 29, 2005 using a CES-LandTEC Gas Extraction Monitor (GEM) Model 2000. The results are summarized on the attached table.

The readings at all the probes and points were zero.

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: Danielle Nichols, FDEP
Daniel T. Gray, Director, Utility Operations Department
Gus DiFonzo, Solid Waste Manager
Michael Gore, Manatee County Landfill Division
File – 120498.93 0200, June 2005 Monitoring

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MANATEE COUNTY LENA ROAD LANDFILL

GAS MONITORING REPORT

4th QUARTER 2005

SEPTEMBER -- DECEMBER 2005

METHANE GAS READINGS

Gas Well	Date Collected	Reading % LEL
Well 1	12/29/2005	0.0
Well 2	12/29/2005	0.0
Well 3	12/29/2005	0.0
Well 4	12/29/2005	0.0
Well 5	12/29/2005	0.0
Well 6	12/29/2005	0.0
Well 7	12/29/2005	0.0
Well 8	12/29/2005	0.0
Well 9A	12/29/2005	0.0
Well 10	12/29/2005	0.0
Well 11A	12/29/2005	0.0
Well 11B	12/29/2005	0.0
Well 11C	12/29/2005	0.0
Well 12	12/29/2005	0.0
Well 13	12/29/2005	0.0
Well 14	12/29/2005	0.0
Well 15	12/29/2005	0.0
Well 16	12/29/2005	0.0
Well 17	12/29/2005	0.0
Well 18	n/a	*

Gas Point	Date Collected	Reading % LEL
Point 1	12/29/2005	0.0%
Point 2	12/29/2005	0.0%
Point 3	12/29/2005	0.0%
Point 4	12/29/2005	0.0%
Point 5	12/29/2005	0.0%
Point 6	12/29/2005	0.0%
Point 8	12/29/2005	0.0%

GAS POINT LOCATION DESCRIPTIONS

- 1 Gary Seeley Office (to become secure storage)
(building moved to area near equipment trailer)
- 2 Pre-fab Shed on North Side of Office
- 3 Main Offices
- 4 Vehicle Maintenance Garage
- 5 Haz Waste Area (All Storage Sheds)
- 6 Equipment Trailer
- 8 Generator House

Notes

* Well 18 removed due to Stage III landfill activity.



An employee-owned company

G-mr

39884
J 10/13

October 11, 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
Methane Point Sampling – Third Quarter 2005**

Dear Mr. Morris:

The methane monitoring probes and points at the Lena Road Landfill were sampled on October 4, 2005 using a CES-LandTEC Gas Extraction Monitor (GEM) Model 2000. The results are summarized on the attached table.

The readings at all the probes and points were zero.

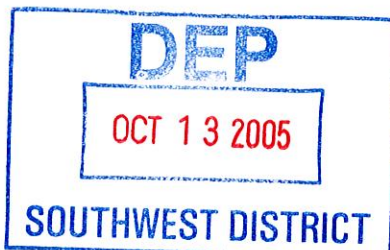
If you should have any questions concerning this report, please contact me in our Orlando office at 407/647-7275, Ext. 4153.

Sincerely,

Joe Miller, P.E.
Senior Project Manager

cc: Danielle Nichols, FDEP
Daniel T. Gray, Director, Utility Operations Department
Gus DiFonzo, Solid Waste Manager
Michael Gore, Manatee County Landfill Division
File – 120498.93 0200, June 2005 Monitoring

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MANATEE COUNTY LENA ROAD LANDFILL

GAS MONITORING REPORT

3th QUARTER 2005

JULY -- SEPTEMBER 2005

METHANE GAS READINGS

Gas Well	Date Collected	Reading % LEL
Well 1	10/4/2005	0.0
Well 2	10/4/2005	0.0
Well 3	10/4/2005	0.0
Well 4	10/4/2005	0.0
Well 5	10/4/2005	0.0
Well 6	10/4/2005	0.0
Well 7	10/4/2005	0.0
Well 8	10/4/2005	0.0
Well 9A	10/4/2005	0.0
Well 10	10/4/2005	0.0
Well 11A	10/4/2005	0.0
Well 11B	10/4/2005	0.0
Well 11C	10/4/2005	0.0
Well 12	10/4/2005	0.0
Well 13	10/4/2005	0.0
Well 14	10/4/2005	0.0
Well 15	10/4/2005	0.0
Well 16	10/4/2005	0.0
Well 17	10/4/2005	0.0
Well 18	n/a	*

Gas Point	Date Collected	Reading % LEL
Point 1	10/4/2005	0.0%
Point 2	10/4/2005	0.0%
Point 3	10/4/2005	0.0%
Point 4	10/4/2005	0.0%
Point 5	10/4/2005	0.0%
Point 6	10/4/2005	0.0%
Point 8	10/4/2005	0.0%

GAS POINT LOCATION DESCRIPTIONS

- 1 Gary Seeley Office (to become secure storage)
(building moved to area near equipment trailer)
- 2 Pre-fab Shed on North Side of Office
- 3 Main Offices
- 4 Vehicle Maintenance Garage
- 5 Haz Waste Area (All Storage Sheds)
- 6 Equipment Trailer
- 8 Generator House

Notes

- * Well 18 removed due to Stage III landfill activity.





An employee-owned company

April 12, 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
Methane Point Sampling – January through March 2005**

Dear Mr. Morris:

Twenty-seven (27) methane-monitoring points at the Lena Road Landfill were sampled on March 31, 2005 using a CES-LandTEC Gas Extraction Monitor (GEM) Model 2000.

Methane levels at all probes with the exception of **GMW-11A** were less than the maximum permissible levels of 25% of the lower explosive limit (LEL) for the interior of on-site structures and 100% for points at or beyond the landfill boundary, as described by Chapter 62-701.530(1) of the Florida Administrative Code. The methane level at GMW-11A was greater than 100% of the LEL (methane content 5.4%). A quarterly gas-probe monitoring table is attached.

In accordance with the Gas Remediation Plan for GMW-11A, gas monitoring probes GMW-11B and GMW-11C were installed approximately 50 feet and 200 feet north of the location of GMW-11A on June 28, 2004. As part of the quarterly sampling regimen, these probes were also sampled for the presence of methane gas. The methane levels at GMW-11B and GMW-11C were both found to be 2.0% of the LEL.

Considering the readings at GMW-11B and GMW-11C, the saturated ground conditions due to heavy March rainfall, and since the location of probe GMW-11A is outside the slurry wall, it seems unlikely that this gas is due to the migration of methane from the landfill. It is suspected that the presence of this gas is due to the decay of naturally-occurring organic material in the subsurface.

If you should have any questions concerning this report, please contact me in our Orlando office at 407/647-7275, Ext. 4153, or Chris Gaw at Ext. 4370.

Sincerely,

Joe Miller, P.E.
Senior Project Manager

cc: Simone Core, P.E., FDEP SW District
Daniel T. Gray, Director, Utility Operations Department
Gus DiFonzo, Solid Waste Manager
Michael Gore, Manatee County Landfill Division
File – 120498.93 0200, March 2005 Monitoring

120498.93 0200, March 2005 Monitoring Report

MANATEE COUNTY LENA ROAD LANDFILL
GAS MONITORING REPORT
1ST QUARTER 2005
JANUARY -- MARCH 2005
METHANE GAS READINGS

Gas Well	Date Collected	Reading % LEL
Well 1	3/31/2005	1.0
Well 2	3/31/2005	0.0
Well 3	3/31/2005	0.0
Well 4	3/31/2005	0.0
Well 5	3/31/2005	1.0
Well 6	3/31/2005	1.0
Well 7	3/31/2005	2.0
Well 8	3/31/2005	1.0
Well 9A	3/31/2005	3.0
Well 10	3/31/2005	1.0
Well 11A	3/31/2005	>100
Well 11B	3/31/2005	2.0
Well 11C	3/31/2005	2.0
Well 12	3/31/2005	4.0
Well 13	3/31/2005	1.0
Well 14	3/31/2005	0.0
Well 15	3/31/2005	2.0
Well 16	3/31/2005	0.0
Well 17	3/31/2005	1.0
Well 18	n/a	*

Gas Point	Date Collected	Reading % LEL
Point 1	3/31/2005	2.0%
Point 2	3/31/2005	0.0%
Point 3	3/31/2005	2.0%
Point 4	3/31/2005	0.0%
Point 5	3/31/2005	0.0%
Point 6	3/31/2005	0.0%
Point 8	3/31/2005	0.0%

GAS POINT LOCATION DESCRIPTIONS

- 1 Gary Seeley Office (to become secure storage)
(building moved to area near equipment trailer)
- 2 Pre-fab Shed on North Side of Office
- 3 Main Offices
- 4 Vehicle Maintenance Garage
- 5 Haz Waste Area (All Storage Sheds)
- 6 Equipment Trailer
- 8 Generator House

Notes

* Well 18 removed due to Stage III landfill activity.





An employee-owned company

January 5, 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
Methane Point Sampling – October through December 2004**

Dear Mr. Morris:

Twenty-seven (27) methane-monitoring points at the Lena Road Landfill were sampled on December 17, 2004 using a CES-LandTEC Gas Extraction Monitor (GEM) Model 2000.

Methane levels at all probes with the exception of GMW-11A were less than the maximum permissible levels of 25% of the lower explosive limit (LEL) for the interior of on-site structures and 100% for points at or beyond the landfill boundary, as described by Chapter 62-701.530(1) of the Florida Administrative Code. The methane level at GMW-11A was greater than 100% of the LEL (methane content 5.4%). A quarterly gas probe monitoring table is attached.

In accordance with the Gas Remediation Plan for GMW-11A, gas monitoring probes GMW-11B and GMW-11C were installed approximately 50 feet and 200 feet north of the location of GMW-11A on June 28, 2004. As part of the quarterly sampling, the probes were sampled for methane gas on September 23, 2004. The methane levels at GMW-11B and GMW-11C were both 0% of the LEL, respectively.

Considering the readings at GMW-11B and GMW-11C, the saturated ground conditions, and since the location of probe GMW-11A is outside the slurry wall, it seems unlikely that this gas is due to the migration of methane from the landfill. It is suspected that the presence of this gas is due to the decay of naturally occurring organic material in the subsurface.

If you should have any questions concerning this report, please contact me in our Orlando office at 407/647-7275, Ext. 4153, or Chris Gaw at Ext. 4370.

Sincerely,

Joe Miller, P.E.
Senior Project Manager

cc: Simone Core, P.E., FDEP SW District
Daniel T. Gray, Director, Utility Operations Department
Gus DiFonzo, Solid Waste Manager
Michael Gore, Manatee County Landfill Division
File – 120498.93 0200, December 2004 Monitoring

MANATEE COUNTY LENA ROAD LANDFILL
GAS MONITORING REPORT
4TH QUARTER 2004
OCTOBER -- DECEMBER 2004
METHANE GAS READINGS

Gas Well	Date Collected	Reading % LEL
Well 1	12/17/2004	0.0
Well 2	12/17/2004	0.0
Well 3	12/17/2004	0.0
Well 4	12/17/2004	0.0
Well 5	12/17/2004	0.0
Well 6	12/17/2004	0.0
Well 7	12/17/2004	0.0
Well 8	12/17/2004	0.0
Well 9A	12/17/2004	0.0
Well 10	12/17/2004	0.0
Well 11A	12/17/2004	>100
Well 11B	12/17/2004	0.0
Well 11C	12/17/2004	0.0
Well 12	12/17/2004	0.0
Well 13	12/17/2004	0.0
Well 14	12/17/2004	0.0
Well 15	12/17/2004	0.0
Well 16	12/17/2004	0.0
Well 17	12/17/2004	0.0
Well 18	n/a	*

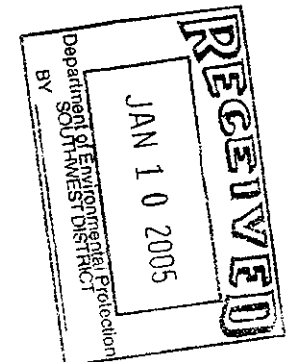
Gas Point	Date Collected	Reading % LEL
Point 1	12/17/2004	0.0%
Point 2	12/17/2004	0.0%
Point 3	12/17/2004	0.0%
Point 4	12/17/2004	0.0%
Point 5	12/17/2004	0.0%
Point 6	12/17/2004	0.0%
Point 8	12/17/2004	0.0%

GAS POINT LOCATION DESCRIPTIONS

- 1 Gary Seeley Office (to become secure storage)
(building moved to area near equipment trailer)
- 2 Pre-fab Shed on North Side of Office
- 3 Main Offices
- 4 Vehicle Maintenance Garage
- 5 Haz Waste Area (All Storage Sheds)
- 6 Equipment Trailer
- 8 Generator House

Notes

* Well 18 removed due to Stage III landfill activity.



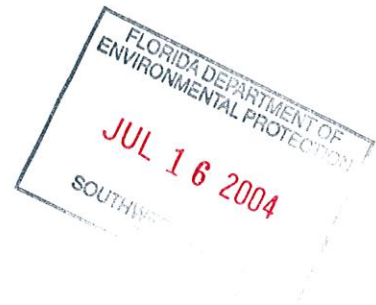


An employee-owned company

39884
JR 10/6/04

July 13, 2004

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
Methane Point Sampling – April through June 2004**

Dear Mr. Morris:

Twenty-seven methane-monitoring points at the Lena Road Landfill were sampled on June 17, 28 and 29, 2004 using a CES-LandTEC Gas Extraction Monitor (GEM) Model 2000. Methane levels at all but one of the sampling locations were less than the maximum permissible levels of 25% of the Lower Explosive Limit (LEL) for the interior of structures and 100% for points at or beyond the landfill boundary, as described by Chapter 62-701.530(1) of the Florida Administrative Code. The methane level at GMW-11A was 280% of the LEL. A quarterly gas-monitoring table is attached.

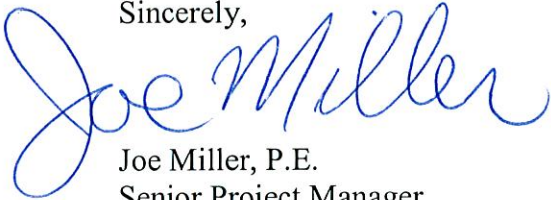
In September 2003, GMW-11A was installed in the approximate former location of GMW-11. Readings at GMW-11A recorded on September 26 and 30, 2003, were in excess of 100% of the LEL on both dates. Since it is outside the slurry wall and considering the saturated ground conditions in the area, it seems unlikely that this gas is due to the migration of methane from the landfill. It is suspected that the presence of this gas is due to the decay of naturally-occurring organic material in the subsurface. The methane level in GMW-11A encountered during the December 2003 and March 2004 sampling events were 57% and 124% of the LEL, respectively. Recommendations for addressing the situation at GMW-11A were described in the Gas Remediation Plan, submitted as part of the previous quarterly report.

In accordance with the aforementioned Gas Remediation Plan, gas monitoring probes GMW-11B and GMW-11C were installed approximately 50 feet and 200 feet north of the location of GMW-11A on June 28, 2004. The probes were sampled for methane gas on June 29, 2004. The methane levels at both locations were below the permissible level of 100% of the LEL. A probe construction detail and plan are attached.

Mr. John Morris, P.G.
July 13, 2004
Page 2

If you should have any questions concerning this report, please contact me in our Orlando office at 407/647-7275, Ext. 4153, or Javen Figueroa at Ext. 4288.

Sincerely,



Joe Miller, P.E.
Senior Project Manager

cc: Simone Core, P.E., FDEP SW District
Daniel T. Gray, Director, Utility Operations Department
Gus DiFonzo, Solid Waste Manager
Michael Gore, Manatee County Landfill Division
File – 120498.91 9200, June 2004 Monitoring

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MANATEE COUNTY LENA ROAD LANDFILL

GAS MONITORING REPORT

2ND QUARTER 2004

APRIL -- JUNE 2004

METHANE GAS READINGS

Gas Well	Date Collected	Reading % LEL
Well 1	6/17/2004	0.0
Well 2	6/17/2004	0.0
Well 3	6/17/2004	0.0
Well 4	6/17/2004	0.0
Well 5	6/17/2004	0.0
Well 6	6/17/2004	0.0
Well 7	6/28/2004	0.0
Well 8	6/28/2004	0.0
Well 9A	6/17/2004	0.0
Well 10	6/17/2004	0.0
Well 11A	6/17/2004	280.0
Well 11B	6/29/2004	2.0
Well 11C	6/26/2004	0.0
Well 12	6/28/2004	0.0
Well 13	6/28/2004	0.0
Well 14	6/28/2004	0.0
Well 15	6/28/2004	0.0
Well 16	6/28/2004	0.0
Well 17	6/28/2004	0.0
Well 18	6/17/2004	70.0

Gas Point	Date Collected	Reading % LEL
Point 1	6/28/2004	0.0%
Point 2	6/28/2004	0.0%
Point 3	6/28/2004	0.0%
Point 4	6/28/2004	0.0%
Point 5	6/28/2004	0.0%
Point 6	6/28/2004	0.0%
Point 8	6/28/2004	0.0%

GAS POINT LOCATION DESCRIPTIONS

1 Gary Seeley Office

(building moved to area near equipment trailer)

2 Shed by Soda Machine

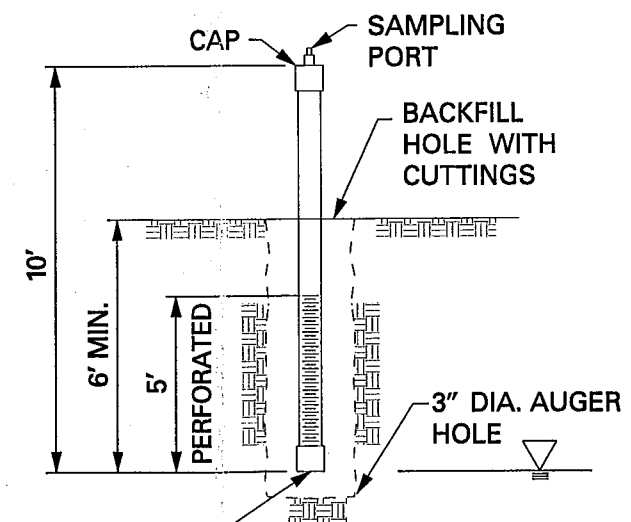
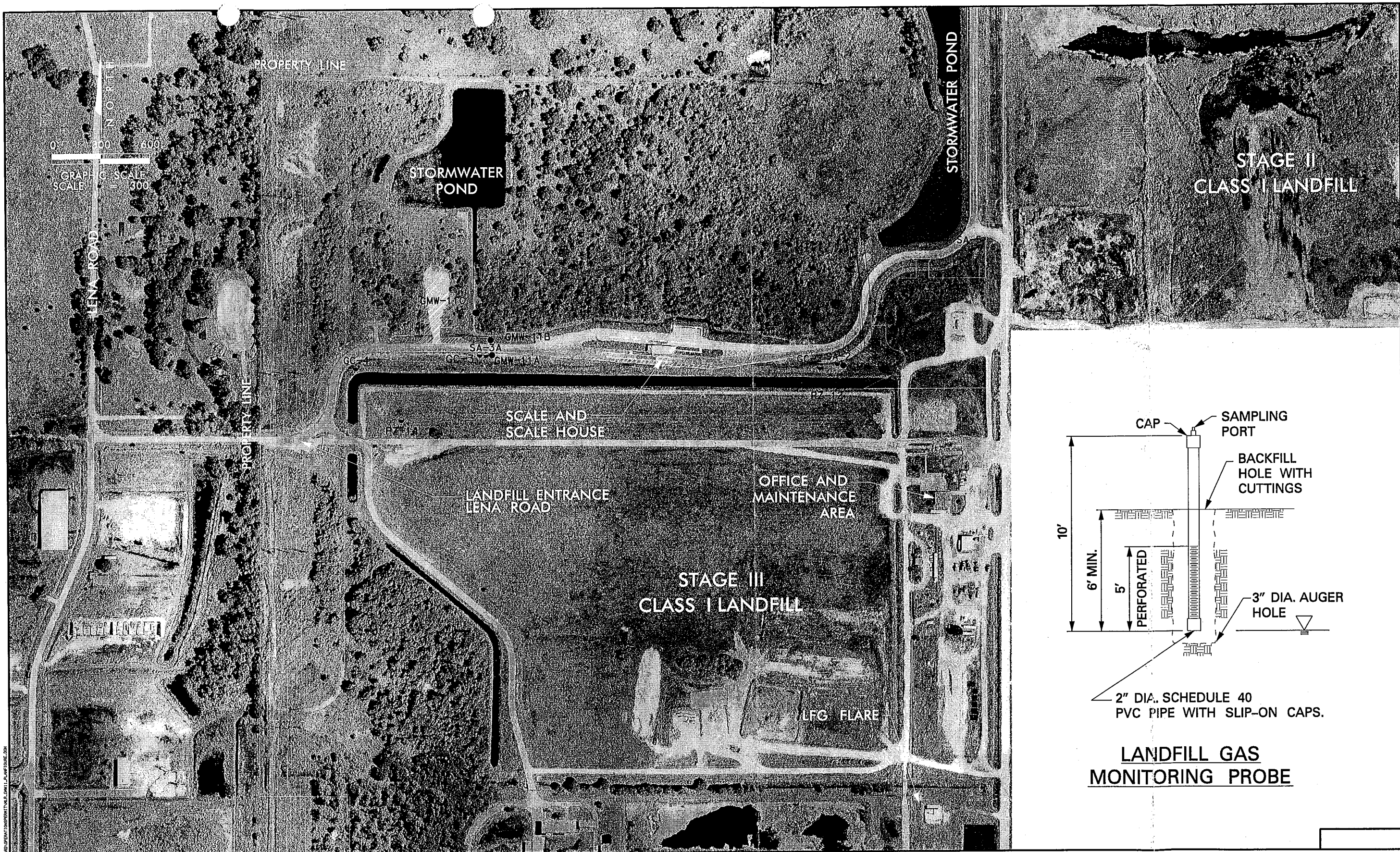
3 Main Offices

4 Vehicle Maintenance Garage

5 Haz Waste Area (All Storage Sheds)

6 Equipment Trailer

8 Shed by Weigh Station (Generator House)



**LANDFILL GAS
MONITORING PROBE**



488 South Keller Road
Orlando, FL 32810-6101
Tel. (407) 647-7275
Fax. (407) 647-0624
www.pbsj.com
PORT BUCKLEY, BURKH & JERNIGAN, Inc.
4th Floor
8001 N.W. 10th Ave., Miami, FL 33178-2507
FIDPR Certificate of Authorization No. 24

CLIENT
**MANATEE COUNTY
BOARD OF COUNTY COMMISSIONERS**

PROJECT
LENA ROAD LANDFILL

TASK
**GAS MONITORING PROBES
11B AND 11C PLAN AND DETAIL**

ORIGINAL
REVISIONS:
1.
2.
3.
4.
5.

Name: JOSEPH L. MILLER
Florida P.E. No. 58177
Address: PBS&J
488 S. Keller Road
Orlando, FL 32810-6101
Signature _____ Date _____

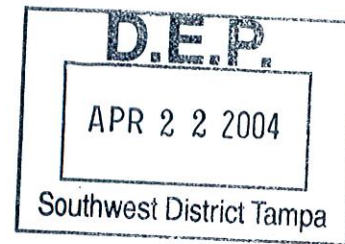
JOB NO. 120498.91
DRAWN JSF
DESIGN JSF
CHECKED JLM
O.C. JLM
SHEET /



An employee-owned company

April 19, 2004

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
Methane Point Sampling – January through March 2004**

Dear Mr. Morris:

Twenty-five methane-monitoring points at the Lena Road Landfill were sampled on March 25, 2004 using a CES-LandTEC Gas Extraction Monitor (GEM) Model 2000. Methane levels at all but one of the sampling locations were less than the maximum permissible levels of 25% of the Lower Explosive Limit (LEL) for the interior of structures and 100% for points at or beyond the landfill boundary, as described by Chapter 62-701.530(1) of the Florida Administrative Code. The methane level at GMW-11A was 124% of the LEL. A quarterly gas-monitoring table is attached.

In September 2003, GMW-11A was installed in the approximate former location of GMW-11. Readings at GMW-11A were recorded on September 26 and 30, 2003. Readings in excess of the 100% of the LEL were recorded on both dates. Since it is outside the slurry wall and considering the saturated ground conditions in the area, it seems unlikely that this gas is due to the migration of methane from the landfill. It is suspected that the presence of this gas is due to the decay of naturally-occurring organic material in the subsurface. The methane level in GMW-11A encountered during the December 2003 sampling event was 57% of the LEL, below the maximum permissible level of 100%. Recommendations for addressing the situation at GMW-11A are described in the attached Gas Remediation Plan.

If you should have any questions concerning this report, please contact me in our Orlando office at 407/647-7275, Ext. 153, or Javen Figueroa at Ext. 288, or Chris Gaw at Ext. 370.

Sincerely,

Joe Miller, P.E.
Senior Project Manager

cc: Kim Ford, P.E., FDEP SW District
Daniel T. Gray, Director, Utility Operations Department
Gus DiFonzo, Solid Waste Manager
C. Michael Gore / Jeanne Detweiler, Manatee County Landfill Division
File – 120498.91 9200, March 2004 Monitoring

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MANATEE COUNTY LENA ROAD LANDFILL

GAS MONITORING REPORT

1ST QUARTER 2004

JANUARY -- MARCH 2004

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0
Well 2	0.0
Well 3	0.0
Well 4	0.0
Well 5	1.0
Well 6	1.0
Well 7	1.0
Well 8	0.0
Well 9A	0.0
Well 10	0.0
Well 11A	124.0
Well 12	0.0
Well 13	0.0
Well 14	0.0
Well 15	0.0
Well 16	0.0
Well 17	0.0
Well 18	1.0

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 8	0.0%

GAS POINT LOCATION DESCRIPTIONS

- 1 Gary Seeley Office (former: Litter Enforcement Office)
(building moved to area near equipment trailer)
- 2 Shed by Soda Machine
- 3 Main Office
- 4 Vehicle Maintenance Garage
- 5 Haz Waste Area
- 6 Equipment Trailer
- 8 Shed by Weigh Station (Generator House)

Gas readings taken on March 25, 2004

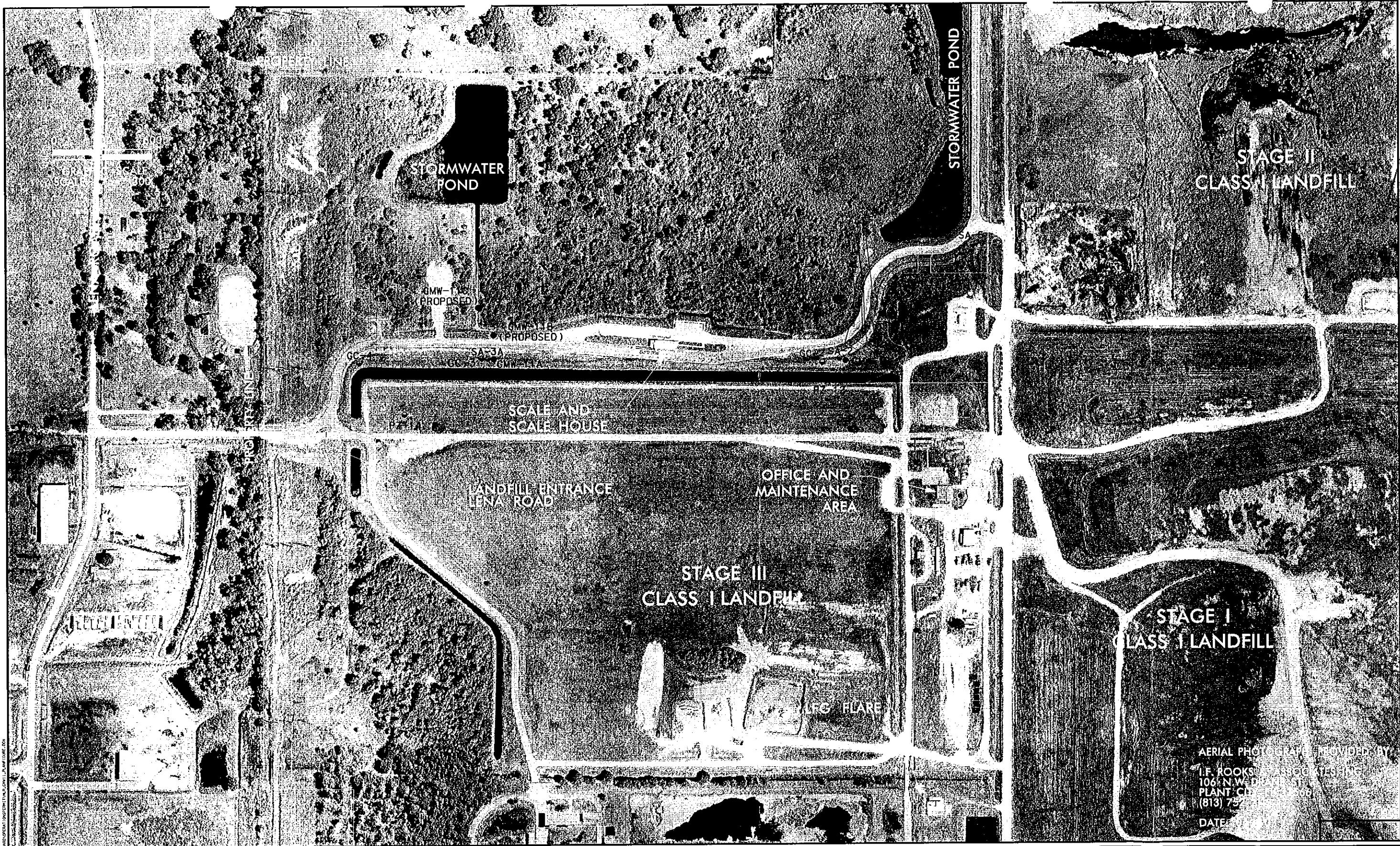
GAS REMEDIATION PLAN

In accordance with Lena Road Operations Permit No. 39884-001-SO, PBS&J submits the following Gas Remediation Plan. This plan addresses the high methane gas levels that have been observed at gas monitoring probe GMW-11A in September 2003 and March 2004.

In our letter response to FDEP's October 31, 2003 comments, dated November 24, 2003, we suggested the following course of action:

Methane was detected in GMW-11A. Since the County is not landfilling in Stage III, and there is only a limited amount of old waste in Stage III, we believe the methane comes from a natural source. The methane may be the result of decaying yard waste used to stabilize the area for vehicles. For the remediation plan, we will probe the soil between GMW-11A and the Stage III Landfill to determine the extent of methane in the area. Based on the results, we will submit a new location for replacement of GMW-11. We will submit the results of the investigation, the well installation detail and proposed location with the renewal application for the Landfill Operation Permit.

We propose to modify the original plan described above by installing GMW-11B and GMW-11C to the north of the current location of GMW-11A. The proposed probe locations are shown on the attached Figure. A PBS&J engineer will oversee the installation process. The probes will be screened for the presence of methane using a CES-Landtec GEM 2000 gas emissions monitor. If a positive methane gas reading is observed in GMW-11C, another probe will be installed approximately 100 feet to the north, along the access road to the stormwater pond. This process will continue until no methane gas is encountered.



D.E.P.
APR 2 2 2004
Southwest District Tampa

PBS& 432 South Keller Road Orlando, FL 32810-6101 Tel: (407) 647-7875 Fax: (407) 647-0624 www.pbsf.com <small>PORT BUCKLEY, SCHULH & JERNIGAN, Inc. 601 N.W. 107th Ave., Miami, FL 33178-3607 FPR Certificate of Authorization No. 24</small>	CLIENT	PROJECT	TASK	ORIGINAL REVISIONS: 1. _____ 2. _____ 3. _____ 4. _____ 5. _____	Name: JOSEPH L. MILLER Florida P.E. No.: 80177 Address: P3584 451 N. Keller Road Orlando, FL 32810-6101 Signature _____ Date _____	JOB NO. 00-000.00 DRAWN _____ RGC DESIGN _____ JLM/RGC CHECKED _____ JLM O.C. _____ OED SHEET /
	MANATEE COUNTY	LENA ROAD LANDFILL				
	BOARD OF COUNTY COMMISSIONERS					

received 4-15-04
@ inspection 39884
JR 5-7-04

April 9, 2004

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
Methane Point Sampling – January through March 2004

Dear Mr. Morris:

Twenty-five methane-monitoring points at the Lena Road Landfill were sampled on March 25, 2004 using a CES-LandTEC Gas Extraction Monitor (GEM) Model 2000. Methane levels at all but one of the sampling locations were less than the maximum permissible levels of 25% of the Lower Explosive Limit (LEL) for the interior of structures and 100% for points at or beyond the landfill boundary, as described by Chapter 62-701.530(1) of the Florida Administrative Code. The methane level at GMW-11A was 124% of the LEL. A quarterly gas-monitoring table is attached.

In September 2003, GMW-11A was installed in the approximate former location of GMW-11. Readings at GMW-11A were recorded on September 26 and 30, 2003. Readings in excess of the 100% of the LEL were recorded on both dates. Since it is outside the slurry wall and considering the saturated ground conditions in the area, it seems unlikely that this gas is due to the migration of methane from the landfill. It is suspected that the presence of this gas is due to the decay of naturally-occurring organic material in the subsurface. The methane level in GMW-11A encountered during the December 2003 sampling event was 57% of the LEL, below the maximum permissible level of 100%. Recommendations for addressing the situation at GMW-11A are described in the attached Gas Remediation Plan.

If you should have any questions concerning this report, please contact me in our Orlando office at 407/647-7275, Ext. 153, or Javen Figueroa at Ext. 288, or Chris Gaw at Ext. 370.

Sincerely,

Joe Miller, P.E.
Senior Project Manager

cc: Kim Ford, P.E., FDEP SW District
Daniel T. Gray, Director, Utility Operations Department
Gus DiFonzo, Solid Waste Manager
C. Michael Gore / Jeanne Detweiler, Manatee County Landfill Division
File – 120498.91 9200, March 2004 Monitoring

MANATEE COUNTY LENA ROAD LANDFILL
GAS MONITORING REPORT
1ST QUARTER 2004
JANUARY -- MARCH 2004
METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0
Well 2	0.0
Well 3	0.0
Well 4	0.0
Well 5	1.0
Well 6	1.0
Well 7	1.0
Well 8	0.0
Well 9A	0.0
Well 10	0.0
Well 11A	124.0
Well 12	0.0
Well 13	0.0
Well 14	0.0
Well 15	0.0
Well 16	0.0
Well 17	0.0
Well 18	1.0

Gas readings taken on March 25, 2004

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 8	0.0%

GAS POINT LOCATION DESCRIPTIONS

- 1 Gary Seeley Office (former: Litter Enforcement Office)
(building moved to area near equipment trailer)
- 2 Shed by Soda Machine
- 3 Main Office
- 4 Vehicle Maintenance Garage
- 5 Haz Waste Area
- 6 Equipment Trailer
- 8 Shed by Weigh Station (Generator House)

GAS REMEDIATION PLAN

In accordance with Lena Road Operations Permit No. 39884-001-SO, PBS&J submits the following Gas Remediation Plan. This plan addresses the high methane gas levels that have been observed at gas monitoring probe GMW-11A in September 2003 and March 2004.

In our letter response to FDEP's October 31, 2003 comments, dated November 24, 2003, we suggested the following course of action:

Methane was detected in GMW-11A. Since the County is not landfilling in Stage III, and there is only a limited amount of old waste in Stage III, we believe the methane comes from a natural source. The methane may be the result of decaying yard waste used to stabilize the area for vehicles. For the remediation plan, we will probe the soil between GMW-11A and the Stage III Landfill to determine the extent of methane in the area. Based on the results, we will submit a new location for replacement of GMW-11. We will submit the results of the investigation, the well installation detail and proposed location with the renewal application for the Landfill Operation Permit.

We propose to modify the original plan described above to include only the reinstallation of MW-11A, with the results, installation details and location to be submitted with the renewal application for the Landfill Operation Permit. The proposed probe location is shown on the attached Figure. A PBS&J engineer will oversee the installation process to ensure that the replacement probe is not installed in methane producing organics or organic soils. The open borehole will be screened for the presence of methane using a CES-Landtec GEM 2000 gas emissions monitor. If a positive methane reading is observed, the probe location will be moved approximately 100 feet to the north, along the access road to the stormwater pond. This process will continue until no organics or methane gases are encountered at the probe location. The new probe will be designated GMW-11B.



An employee-owned company

39884
JK 2-2-04

January 14, 2004

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
Methane Point Sampling – October through December 2003**



Dear Mr. Morris:

Twenty-five methane-monitoring points at the Lena Road Landfill were sampled on December 30, 2003 using a CES-LandTEC Gas Extraction Monitor (GEM) Model 2000. Methane levels at all of the sampling locations were less than the maximum permissible levels of 25% of the Lower Explosive Limit (LEL) for the interior of structures and 100% for points at or beyond the landfill boundary, as described by Chapter 62-701.530(1) of the Florida Administrative Code. A quarterly gas-monitoring table is attached.

In September GMW-11A was installed in the approximate former location of GMW-11. Readings at GMW-11A were recorded on September 26 and 30, 2003. Readings in excess of the 100% of the LEL were recorded on both dates. Since it is outside the slurry wall and considering the saturated ground conditions in the area, it seems unlikely that this gas is due to the migration of methane from the landfill. It is suspected that the presence of this gas is due to the decay of naturally-occurring organic material in the subsurface. The methane level in GMW-11A encountered during the December 2003 sampling event was 57% of the LEL, below the maximum permissible level of 100%. The presence of methane at GMW-11A will continue to be monitored.

If you should have any questions concerning this report, please contact me in our Orlando office at 407/647-7275, Ext. 153, or Javen Figueroa at Ext. 288, or Chris Gaw at Ext. 370.

Sincerely,

Joe Miller, P.E.
Senior Project Manager

cc: Kim Ford, P.E., FDEP SW District
Daniel T. Gray, Director, Utility Operations Department
Gus DiFonzo, Solid Waste Manager
C. Michael Gore / Jeanne Detweiler, Manatee County Landfill Division
File – 120498.90 9200, December 2003 Monitoring

U:\OldG\WASTEMAN\Manatee County\SW-05 Annual Monitoring\2003\December2003\Methane Point Q4_2003.doc

MANATEE COUNTY LENA ROAD LANDFILL

GAS MONITORING REPORT

3rd QUARTER 2003

OCTOBER -- DECEMBER 2003

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0
Well 2	0.0
Well 3	0.0
Well 4	0.0
Well 5	0.0
Well 6	0.0
Well 7	0.0
Well 8	0.0
Well 9A	0.0
Well 10	0.0
Well 11A	57.0
Well 12	0.0
Well 13	0.0
Well 14	0.0
Well 15	0.0
Well 16	0.0
Well 17	0.0
Well 18	42.0

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 8	0.0%

GAS POINT LOCATION DESCRIPTIONS

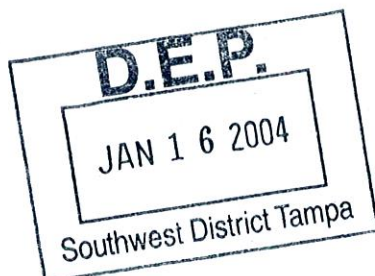
- 1 Gary Seeley Office (former: Litter Enforcement Office)
(building moved to area near equipment trailer)
- 2 Shed by Soda Machine
- 3 Main Office
- 4 Vehicle Maintenance Garage
- 5 Haz Waste Area
- 6 Equipment Trailer
- 8 Shed by Weigh Station (Generator House)

Gas readings taken on December 30, 2003



Ardaman & Associates, Inc.

Geotechnical, Environmental and
Materials Consultants



Revised January 15, 2004
August 14, 2003
File No. 03-8758

TO: Hewitt Contracting Co., Inc.
P.O. Box 20487
Bradenton FL 34204

Attention: Andy Walker

SUBJECT: Gas Well Installation at Lena Road Landfill, Manatee County, Florida

Dear Mr. Christenson:

As requested, Ardaman & Associates, Inc. has completed the installation of the Gas Monitoring Well GMW-11A at the Lena Road Landfill in Manatee County, Florida. Enclosed please find a copy of the monitor well permit, associated stipulations and well completion reports.

It has been a pleasure to be of assistance to you with this project. Please contact our office if we may be of further service.

Very truly yours,

Ardaman & Associates, Inc.

Ashby Hoover, P.E.
Project Engineer
Eng. Reg. No. 49942

AH:nh

cc: John R. Morris, P.G. (FDEP)
Post Buckley Schuh & Jernigan



STATE OF FLORIDA PERMIT APPLICATION TO CONSTRUCT,
REPAIR, MODIFY, OR ABANDON A WELL

- ☒ Southwest
☐ Northwest
☐ St. Johns River
☐ South Florida
☐ Suwannee River

THIS FORM **MUST BE FILLED OUT COMPLETELY.**

The water well contractor is responsible for completing this form and forwarding the permit to the appropriate delegated county where applicable.

CHECK BOX FOR APPROPRIATE DISTRICT. ADDRESS ON BACK OF PERMIT FORM.

Permit No. 1825601
Florida Unique I.D. 1825601
Permit Stipulations Required (See attached)
62-524 well ☐
CUP/WUP Application No. 39

ABOVE THIS LINE FOR OFFICIAL USE ONLY

1. Owner, Legal Name of Entity if Corporation _____ Address _____ City _____ Zip _____ Telephone Number _____

2. Well Location Address, Road Name or Number, City _____

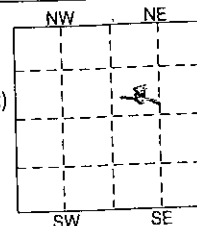
3. Well Drilling Contractor _____ License No. _____ Telephone No. _____

Address _____ (Indicate Well on Chart)

City _____ State _____ Zip _____

4. 3 1/4 of 2 1/4 of Section _____
(smallest) (biggest)

5. Township _____ Range _____



6. County _____ Subdivision Name _____ Lot _____ Block _____ Unit _____

7. Number of proposed wells 1 Check the use of well: (See back of permit for additional choices) _____ Domestic _____ Monitor (type) _____
Irrigation (type) _____ Public Water Supply (type) _____ List Other _____
(See Back) (See Back)
Distance from septic system _____ ft. Description of facility _____ Estimated start of construction date _____

8. Application for: _____ New Construction _____ Repair/Modify _____ Abandonment _____ (Reason for Abandonment) _____

9. Estimated: Well Depth _____ Casing Depth _____ Screen Interval from _____ to _____
Casing Material: Blk-Steel / Gal / PVC _____ Casing Diameter _____ Seal Material _____

10. If applicable: Proposed Grouting Interval From _____ to _____ Seal Material _____
From _____ to _____ Seal Material _____
From _____ to _____ Seal Material _____

11. Telescope Casing _____ or Liner _____ (check one) Diameter _____
Blk-Steel / Galvanized / PVC _____ Other (specify: _____)

12. Method of Construction: _____ Rotary _____ Cable Tool _____ Combination _____
_____ Auger _____ Other (specify: _____)

13. Indicate total No. of wells on site _____ List number of unused wells on site _____

14. Is this well or any other well or water withdrawal on the owner's contiguous property covered under a Consumptive/Water Use Permit (CUP/WUP) or CUP/WUP Application? _____ No _____ Yes

(If yes, complete the following) CUP/WUP No. _____

District well I.D. No. _____

Latitude _____ Longitude _____

Data obtained from GPS _____ or map _____ or survey _____ (map datum NAD 27 _____ NAD 83 _____)

15. I hereby certify that I will comply with the applicable rules of Title 40, Florida Administrative Code, and that a water use permit or artificial recharge permit, if needed, has been or will be obtained prior to commencement of well construction. I further certify that all information provided on this application is accurate and that I will obtain necessary approval from other federal, state, or local governments, if applicable. I agree to provide a well completion report to the District within 30 days after drilling or the permit expiration, whichever occurs first.

I certify that I am the owner of the property, that the information provided is accurate, and that I am aware of my responsibilities under Chapter 373, Florida Statutes, to maintain or properly abandon this well; or, I certify that I am the agent for the owner, that the information provided is accurate, and that I have informed the owner of his responsibilities as stated above. Owner consents to personnel of the WMD or a representative access to the well site.

Signature of Contractor _____

License No. _____

Owner's or Agent's Signature _____

Date _____

DO NOT WRITE BELOW THIS LINE — FOR OFFICIAL USE ONLY

Approval Granted By: _____

Issue Date: 8-5-03

Hydrologist Approval _____

Initials _____

Owner Number: 283132

Fee Received: \$ _____

Receipt No.: _____

Check No.: _____

THIS PERMIT NOT VALID UNTIL PROPERLY SIGNED BY AN AUTHORIZED OFFICER OR REPRESENTATIVE OF THE WMD. IT SHALL BE AVAILABLE AT THE WELL SITE DURING ALL DRILLING OPERATIONS. **This permit is valid for 90 days from date of issue.**

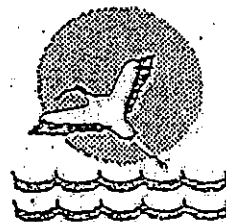
WHITE: ORIGINAL FILE
YELLOW: DRILLING CONTRACTOR
PINK: OWNER



MANATEE COUNTY GOVERNMENT

"To Serve With Excellence"

ENVIRONMENTAL MANAGEMENT DEPARTMENT



STIPULATION NUMBER #39 WELL AND DRILLHOLE ABANDONMENT

It will be the water well contractor's responsibility to have any incomplete well or drillhole attempted under this permit properly abandoned.

Any incomplete or abandoned well or drillhole as described in 40D-3, Florida Administrative Code (F.A.C.), shall be abandoned as follows:

- A. The well shall be examined from land surface to the original depth of construction for debris or obstructions (any debris or obstruction shall be removed prior to abandonment).
- B. The well shall be plugged from bottom to top by an approved method of grouting with either Portland neat cement grout or an approved Bentonite product as specified in 40D-3.517 2. (b), F.A.C.

It will be the owner's responsibility to have any well completed under this permit, or any existing well on this property, which meets the definition of an abandoned well as defined in Chapter 40D-3.021(1), F.A.C., properly abandoned in accordance with Chapter 40D-3.531, F.A.C.

It will be the owner's responsibility to have any inactive well which does not meet the above criteria and is no threat to the water resource properly capped in an air and water tight manner with a threaded, welded or bolted cover or valve. If the pump and well seal are water tight, the pump may be left in place. If practical, a protective cover two (2) feet in height shall be placed around the well casing.

- A. Wells with a diameter of six (6) inches or more without pumping equipment shall have the well casing extended a minimum of two (2) feet above land surface.
- B. Wells with a diameter of less than six (6) inches without pumping equipment shall be securely set in a concrete slab and have either the well casing extended a minimum height of two (2) feet above land surface or a protective cover centered over the well casing. The concrete slab shall be a minimum of four (4) inches in thickness by two (2) feet by two (2) feet square. The protective cover shall be set in the concrete slab and extend a minimum of two (2) feet above land surface.

In flood prone areas all wells shall extend a minimum of one (1) foot above the 100 year flood elevation, if practical, in accordance with Chapter 40D-3.521(4), F.A.C.

Any plugging operations shall be permitted separately from this permit by the Environmental Management Department (EMD) and be witnessed by designated EMD representative. Arrangement for a EMD representative shall be made with the Manatee County EMD office. With a minimum of twenty four (24) hours in advance of these operations. A EMD representative will be available for assignment during normal working hours (8:00 AM - 5:00 PM), Monday through Friday. Travel time must be taken into consideration. Exemptions may be made for extenuating circumstances. For scheduling, please contact the Manatee County EMD at (841) 742-5980.

Approved by:

Permit Number:

03-504,688170,01

Date:

8-5-03



MANATEE COUNTY GOVERNMENT

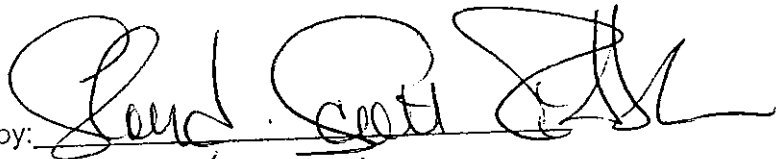
"To Serve With Excellence"

ENVIRONMENTAL MANAGEMENT DEPARTMENT



STIPULATION # 23 TEST/MONITOR WELL

- A. This well is to be used as a test/monitor well. If it is to be converted into a production well, an additional permit shall be obtained.
- B. There shall be no injection of fluids into the monitor well without prior written approval from the **Environmental Management Department (EMD)**. This includes, but is not limited to treated ground water, or the introduction of microbes for In-Situ aquifer restoration.
- C. The well shall be constructed in such a manner to prevent the unauthorized interchange of water between different water bearing zones (i.e., breaching of confining beds, clays or hardpan intervals) as per Chapter 62-532.500 (2)(C), Florida Administrative Code (F.A.C.).
- D. Prior written approval from the **(EMD)** shall be required if the monitor well will be pumped for use in hydrodynamic control and/or contaminant plume management, if quantities reach or exceed requirement of a Water Use Permit.
- E. All monitor wells constructed at any facility which has been designated as a ground water contamination site, or a possible ground water contamination site, shall adhere to the construction standards set forth by The Department of Environmental Protection and other applicable rules.
- F. In the event the well needs to be abandoned, an abandonment permit shall be obtained prior to commencing with abandonment operations.
- G. An observer from our Regulation Department is required on all abandonments to ensure compliance with applicable 40D-3 regulations. Please contact **EMD Representative** for additional information.

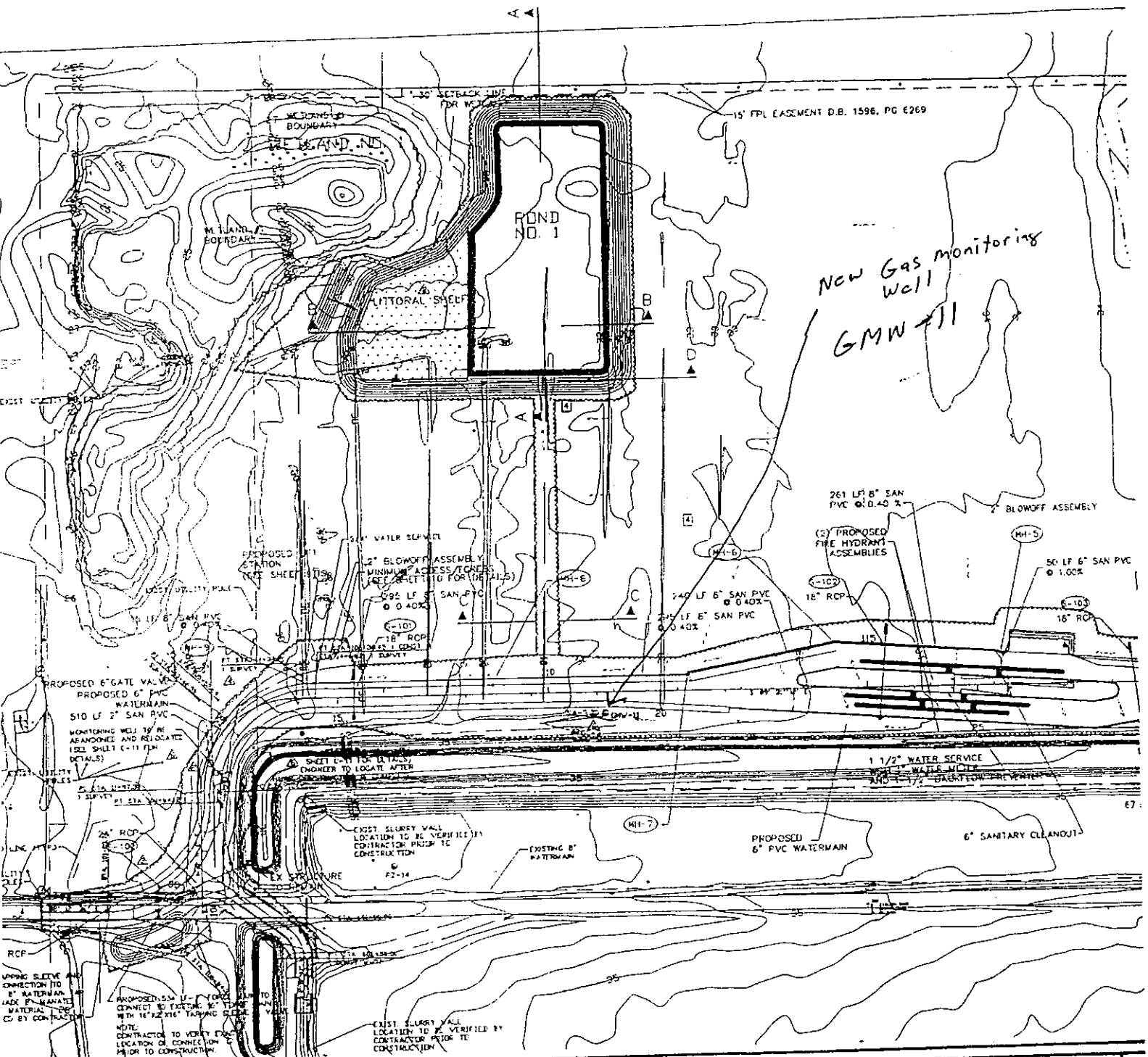
Approved by: 

Permit # 03-504 688170.01



Date: 8-5-03

Stip #23
(10/01)

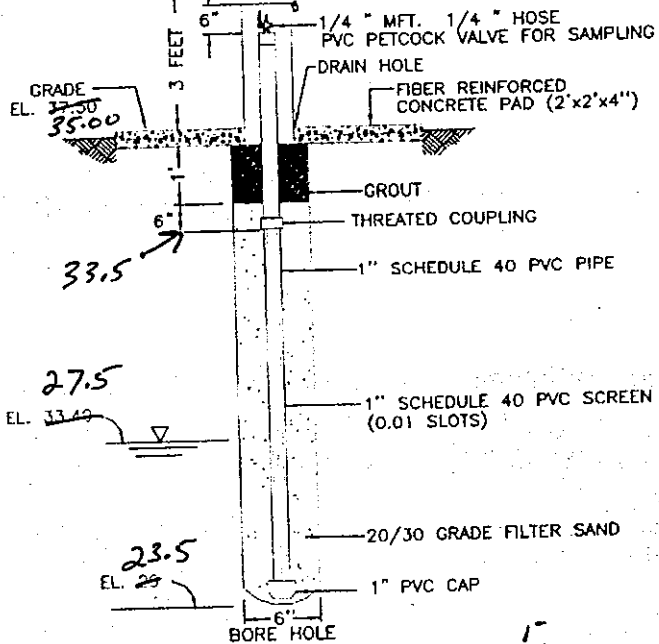
COPY TO OWNER



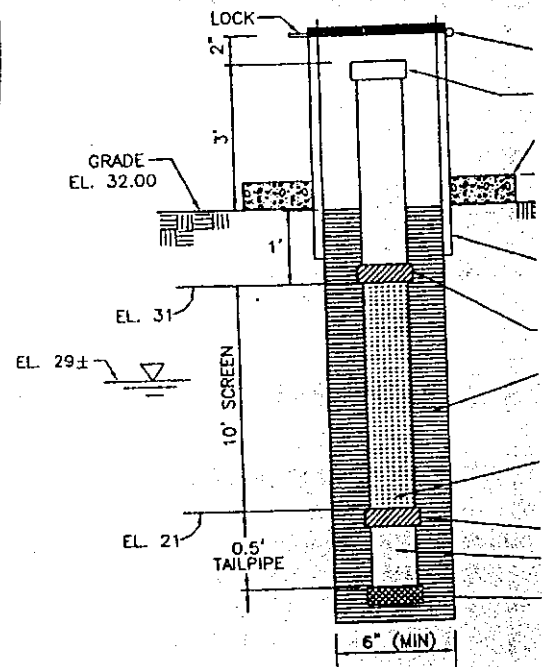
*New Gas monitoring well
GMW #11*

 <p>330 SOUTH PINEAPPLE AVE. SUITE 112 SARASOTA, FLORIDA 34236 PH. (841) 554-4036 FERR CERTIFICATE OF AUTHORIZATION NO. 24</p>	<p>CLIENT MANATEE COUNTY PROJECT MANAGEMENT DEPARTMENT</p> <p>4410 66TH STREET WEST BRADENTON, FLORIDA 34210</p> 	<p>PROJECT LENA ROAD LANDFILL ACCESS ROAD, SCALE AND SCALEHOUSE</p>
--	--	--

4" ALUMINUM WELL PROTECTOR
WITH LOCKED CAP AND PROBE
NUMBER STENCILED ON SIDE



GMW-9A
(TO REPLACE GMW-9)
NTS



GC-4A
(TO REPLACE GC-4)
NTS



330 SOUTH PINEAPPLE AVE.
SUITE 113
SARASOTA, FLORIDA 34236
TEL. (941) 954-4036
FBPR CERTIFICATE OF
AUTHORIZATION NO. 24

CLIENT

MANATEE COUNTY
PROJECT MANAGEMENT
DEPARTMENT

4410 66TH STREET WEST
BRADENTON, FLORIDA 34210



PROJECT

LENA ROAD LA

ACCESS ROAD S

SCALEHOL

WELL COMPLETION REPORT (Please complete in black ink or type.)

PERMIT # 688170.01 CUP/WUP # _____ DID # _____
If permit is for multiple wells indicate the number of wells drilled _____
Indicate remaining wells to be cancelled _____
WATER WELL CONTRACTOR'S
SIGNATURE [Signature] License # 2868
certify that the information provided in this report is accurate and true.

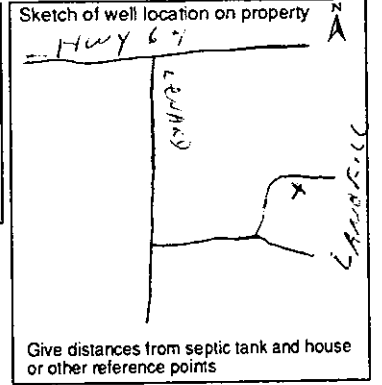
Grout	No. of Bags	From (Ft.)	To (Ft.)
Neat Cement:	<u>1</u>	<u>0</u>	<u>1.5</u>
Bentonite:			

WELL LOCATION: County MANATEE
3 1/4 of 2 1/4 of Section 06 Twp: 35 Rge: 19
Latitude _____ Longitude _____

DATE STAMP

Official Use Only

CHEMICAL ANALYSIS WHEN REQUIRED
Iron: _____ ppm Sulfate: _____ ppm
Chloride: _____ ppm
[] Lab Test [] Field Test Kit
Pump Type
[] Centrifugal [] Jet [] Submersible [] Turbine
Horsepower _____ Capacity _____ G.P.M. _____
Pump Depth _____ Ft. Intake Depth _____ Ft.



OWNER'S NAME MANATEE C.O. FOR
COMPLETION DA 8/13/03 Florida Unique I.D. 03504
WELL USE: DEP/Public _____ Irrigation _____ Domestic _____ Monitor ☒
HRS Limited _____ 62-524 _____ Other _____
DRILL METHOD [] Rotary [] Cable Tool [] Combination
[] Jet [] Auger [] Other _____

Measured Static Water Level <u>3</u>		Measured Pumping Water Level _____	
After _____ Hours at _____ G.P.M. Measuring Pt. (Describe): _____			
Which is _____ Ft. [] Above [] Below Land Surface			
Casing: [] Black Steel [] Galv. <input checked="" type="checkbox"/> PVC Other _____			
[] Open Hole <input checked="" type="checkbox"/> Screen	Depth (Ft.)		DRILL CUTTINGS LOG Examine cuttings every 20 ft. or at formation changes. Note cavities, depth to producing zones.
Casing Diameter & Depth (Ft.)	From	To	Color Grain Size Type of Material
Diameter <u>4 1/2"</u>	<u>0</u>	<u>4</u>	<u>GYD GRA FSA SIMIR</u>
From <u>7.3</u>	<u>4</u>	<u>12</u>	<u>TAND GRA FSA 51</u>
To <u>1.5</u>			
<u>SCREEN</u>			
Diameter <u>1"</u>			
From <u>1.5</u>			
To <u>11.5</u>			
Liner [] or Casing []			
Diameter _____			
From _____			
To _____			

Driller's Name: J. DWIGGINS
(print or type)

Florida Department of Environmental Protection
Twin Towers Office Bldg. 2600 Blair Stone Road Tallahassee, Florida 32399-2400

DEP Form # 62-522.900(3)
Form Title <u>MONITOR WELL COMPLETION REPORT</u>
Effective Date _____
DEP Application No. _____ (Filled in by DEP)

MONITOR WELL COMPLETION REPORT

DATE: _____

INSTALLATION NAME: _____

DEP PERMIT NUMBER: _____ GMS NUMBER: _____

WELL NUMBER: GMW-11A WELL NAME: _____

DESIGNATION: Background _____ Immediate _____ Compliance _____

LATITUDE/LONGITUDE: _____

AQUIFER MONITORED: _____

INSTALLATION METHOD: Hollow stem auger

INSTALLED BY: Ardaman & Associates Inc, Jim DWIGGINS #2868

TOTAL DEPTH: 11.5' (bls) DEPTH OF SCREEN: 11.5' (bls)

SCREEN LENGTH: 10'.0 SCREEN SLOT SIZE: .010 SCREEN TYPE: slotted PVC

CASING DIAMETER: 1" CASING TYPE: PVC

LENGTH OF CASING: 1.5' BLS FILTER PACK MATERIAL: 20/30

TOP OF CASING ELEVATION (MSL): _____

GROUND SURFACE ELEVATION (MSL): 33.0'

COMPLETION DATE: 8/13/03

DESCRIBE WELL DEVELOPMENT: _____

POST DEVELOPMENT WATER LEVEL ELEVATION (MSL): _____

DATE AND TIME MEASURED: _____

REMARKS: (soils information, stratigraphy, etc.): landfill gas monitor well

REPORT PREPARED BY: [Signature]
(name, company, phone number)

NOTE: PLEASE ATTACH BORING LOG.

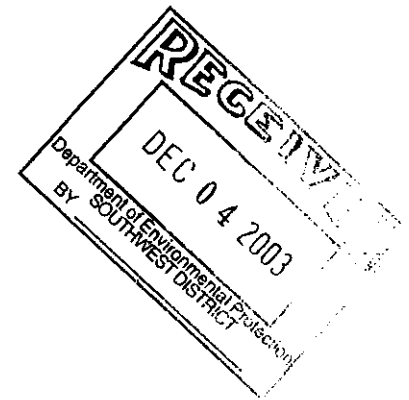
(bls)= Below Land Surface



An employee-owned company

November 24, 2003

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



RE: Lena Road Class I Landfill
FDEP Letter Dated October 31, 2003 to Mr. Gus DiFonzo

Dear Mr. Morris:

We reviewed the above referenced letter, and have the following explanations for the comments in our reports.

GMW-5: Q3-2001	When we began reading the gas monitoring wells in September 2001, we could not find GMW-5 and presumed it was destroyed. GMW-5 was then located for Q4-2001, and has been read each quarter since then. GMW-5 was never replaced.
GMW-10: Q1-2002	We could not access the well for a reading due to construction. The construction was completed, and GMW-10 was accessible for the next reading. GMW-10 was never replaced.
GMW-10: Q3-2002	The third quarter report (July, August and September) 2002 gives the reading for GMW-10 as 0.0%.
GMW-11:	This well was lost during the construction for the new landfill access road, and cannot be found. It was either buried under fill, or removed by the contractor. GMW-11 was replaced by GMW-11A. Permit Specific Condition 36 requests a permit modification application for replacement of a ground water monitoring well. We were unaware that a permit modification was required for replacement of a gas monitoring well too. GMW-11A was installed using the detail approved for GMW-9A. Since GMW-11A has detected methane, we plan to convert it to a vent, and will submit a permit application for replacement of GMW-11 after we determine the source and extent of methane in the area. The remediation plan is described at the end of this letter.
GMW-15: Q4-2001	The well could not be located for the Q4-2001 reading due to dense vegetation. The vegetation was cut back and we located the well for the next quarterly monitoring report. GMW-15 was never replaced.
GMW-16: Q1-2002	The well could not be located for the Q1-2002 reading due to dense vegetation. The vegetation was cut back and we located the

Mr. John Morris, FDEP
November 24, 2003
Page 2 of 2

well for the next quarterly monitoring report. GMW-16 was never replaced.

GMW-18: Q3-2001 When we began reading the gas monitoring wells in September 2001, we could not find GMW-18. GMW-18 was then located, and has been read each quarter since then. GMW-18 was never replaced.

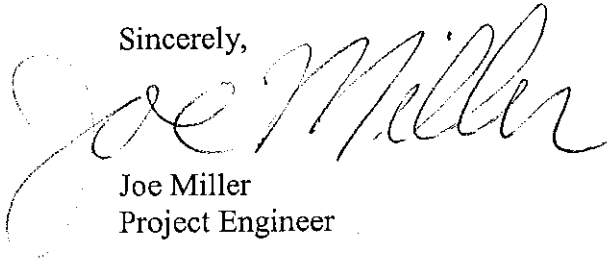
PZ-12 was not replaced. The riser on PZ-12 was damaged when, we believe, a vehicle backed into it. Cutting off the damaged section, and replacing it with a new riser repaired the riser. The well riser elevation was surveyed and designated as PZ-12A. The coordinates are the same.

The Lena Road Landfill Operation Permit expires July 15, 2004, and we are preparing the renewal application. We will submit a revised landfill operation plan with current monitor well, piezometer and gas well monitoring identification numbers and location maps.

Methane was detected in GMW-11A. Since the County is not landfilling in Stage III, and there is only a limited amount of old waste in Stage III, we believe the methane comes from a natural source. The methane may be the result of decaying yard waste used to stabilize the area for vehicles. For the remediation plan, we will probe the soil between GMW-11A and the Stage III Landfill to determine the extent of methane in the area. Based on the results, we will submit a new location for replacement of GMW-11. We will submit the results of the investigation, the well installation detail and proposed location with the renewal application for the Landfill Operation Permit.

If you have any questions, please call me at 407-647-7275 Ext. 153.

Sincerely,



Joe Miller
Project Engineer

Cc: Gus DiFonzo, Manatee County
Mike Gore, Manatee County

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Department of Environmental Protection

Jeb Bush
Governor

Southwest District
3804 Coconut Palm Drive
Tampa, Florida 33619

David B. Struhs
Secretary

Mr. Gus DiFonzo
Manatee County Utility Operations Department
4410 66th Street West
Bradenton, FL 34210

October 31, 2003

Re: Lena Road Class I Landfill, Permit No. 39884-001-SO, Manatee County
Gradient Monitoring/Piezometer Replacement, Gas Monitoring Well Replacement

Dear Mr. DiFonzo:

This letter has been prepared to identify the Department's continuing concerns regarding the status of several monitoring points at the referenced facility. Please recall that permit modification No. 39884-009 was issued on December 16, 2002 to specifically address the installation of replacement monitoring points (well GC-4A and gas monitoring location GMW-9A) that were impacted by construction activities at the facility. In addition, the Department's letter dated February 24, 2003 identified the need for further modifications to the permit based on the reported damage to interior gradient monitoring location PZ-12 and requested the submittal of technical justification for its proposed replacement. The PBS&J monthly reports indicated replacement PZ-12A was put in service in March 2003 (report dated April 21, 2003) and the survey information for the riser elevation at this new location was available in April 2003 (report dated May 15, 2003). It is noted that the requested justification of construction details for the replacement piezometer, abandonment records for the damaged piezometer, and permit modification application were not submitted to authorize the installation of this replacement piezometer.

Selected quarterly gas monitoring reports prepared by PBS&J also appear to indicate that several gas monitoring locations were obstructed, damaged, destroyed and/or replaced, as summarized below:

- GMW-5: Q3-2001 – destroyed; no later indication that it was replaced
- GMW-10: Q1-2002 – obstructed, Q3-2002 – unable to be located; no later indication that it was replaced
- GMW-11: Q2-2002 – unable to be located; Q1-2003 – unable to be located; Q2-2003 – unable to be located
- GMW-11A: Q3-2003 – replacement gas well installed August 2003
- GWM-15: Q4-2001 – unable to be located; Q1-2002 – replaced
- GWM-16: Q1-2002 – replaced
- GMW18: Q3-2001 – unable to be located; no later indication that it was replaced

Please identify which of the listed gas monitoring locations have been physically replaced. For all gas monitoring locations that were replaced please provide the dates of replacement, construction details and unique identification number for each replacement location, and a discussion of how the damaged gas monitoring location was properly abandoned. Please also submit revisions to Figure K-3 from the Operations Plan (Landfill Gas Migration Monitoring Locations) and the drawing entitled "Lena Road Landfill Methane Gas Monitoring Location Map" prepared by Manatee County Public Works Department dated November 4, 1994 to reflect the unique identification numbers assigned to all current gas monitoring locations.

Please note that Specific Condition No. 28 requires immediate Department notification upon discovery of damage to or failure of any portion of the landfill facilities that are regulated by the operations permit. This condition also requires the permittee to follow up with written detailed notification within seven days of the occurrence to propose remedial measures. The descriptions provided in the PBS&J reports for monthly gradient data or quarterly gas monitoring data have not been submitted in a timely manner to address the notification requirements of this permit condition.

"More Protection, Less Process"

Mr. Gus DiFonzo
October 31, 2003
Page 2 of 2

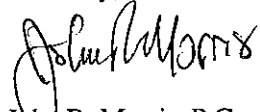
Please be advised that changes to the gradient and gas monitoring locations presented above require the submittal of a minor permit modification request. Please submit the permit modification application form, supporting information and application fee within 30 days of the date of this letter. The supporting information must address the following issues, at a minimum:

- Justification of the construction details for the replacement piezometer PZ-12A (total depth, screen length, top and bottom screen elevations, historical water level range recorded at PZ-12)
- Revisions to the Stormwater/Leachate Management Plan to reflect all current monitor well and piezometer identification numbers (Table 1, Table 2, Figure 2 and Exhibit C)
- Documentation of proper abandonment of PZ-12 in accordance with Specific Condition No. 37
- Revisions to the Operation Plan to reflect all current gas monitoring location identification numbers (Figure K-3 and Table K-4)

It is also noted that the gas monitoring report prepared for Q3-2003 indicates that measurements exceeded 100% of the lower explosive limit for combustible gases at location GWM-11A (PBS&J report dated October 15, 2003). The report indicates that the elevated gas measurements were obtained at this location on September 26, 2003 and confirmed on September 30, 2003. The indications in the report that it appears unlikely that the gas is due to migration from the landfill and that it is suspected that the presence of this gas is due to the decay of naturally-occurring organic material in the subsurface were not substantiated. Please submit the gas remediation plan required by Specific Condition No. 20 to detail the nature and extent of the elevated gas measurements and propose a remedy. Please include the construction details and soil description for replacement gas monitoring location GMW-11A as part of the remediation plan.

Please contact me at (813) 744-6100, extension 336, if you have any questions regarding this letter.

Sincerely,



John R. Morris, P.G.
Solid Waste Section

cc: Mike Gore, Manatee County Landfill Superintendent, 3333 Lena Road, Bradenton, FL 34210
Joe Miller, P.E., PBS&J, 482 South Keller Road, Orlando, FL 32810
Susan Pelz, P.E., FDEP Tampa
Kim Ford, P.E., FDEP Tampa
Lora Ross, FDEP Tampa



An employee-owned company



October 15, 2003

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
Quarterly Report, Methane Point Sampling – September 2003**

Dear Mr. Morris:

Twenty-six methane-monitoring points at the Lena Road Landfill were sampled on September 26, 2003 using a CES-LandTEC Gas Extraction Monitor (GEM) Model 2000. Methane levels at all of the sampling locations, with the exception of GMW-11A, were less than the maximum levels of 25% of the Lower Explosive Limit (LEL) for the interior of structures and 100% for points at or beyond the landfill boundary, as described by Chapter 62-701.530(1) of the Florida Administrative Code. A quarterly gas-monitoring table is attached.

In September GMW-11A was installed in the approximate former location of GMW-11. Readings at GMW-11A were recorded on September 26 and 30, 2003. Readings in excess of the 100% of the LEL were recorded on both dates. Since is outside the slurry wall and considering the saturated ground conditions in the area, it seems unlikely that this gas is due to the migration of methane from the landfill. It is suspected that the presence of this gas is due to the decay of naturally-occurring organic material in the subsurface. The presence of methane at GMW-11A will continue to be monitored.

If you should have any questions concerning this report, please contact me in our Orlando office at 407/647-7275, Ext. 153, or Javen Figueroa at Ext. 288, or Chris Gaw at Ext. 370.

Sincerely,

Joe Miller, P.E.
Senior Project Manager

cc: **Kim Ford, P.E., FDEP SW District**
Daniel T. Gray, Director, Utility Operations Department
Gus DiFonzo, Solid Waste Manager
C. Michael Gore / Jeanne Detweiler, Manatee County Landfill Division
File – 120498.90 9100, September 2003 Monitoring

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MANATEE COUNTY LENA ROAD LANDFILL

GAS MONITORING REPORT

3rd QUARTER 2003

JULY -- SEPTEMBER 2003

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0
Well 2	0.0
Well 3	1.0
Well 4	0.0
Well 5	0.0
Well 6	1.0
Well 7	0.0
Well 8	1.0
Well 9A	0.0
Well 10	0.0
*Well 11A	100.0
Well 12	1.0
Well 13	0.0
Well 14	0.0
Well 15	0.0
Well 16	0.0
Well 17	2.0
Well 18	5.0

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 8	0.0%

GAS POINT LOCATION DESCRIPTIONS

- 1 Gary Seeley Office (former: Litter Enforcement Office)
(building moved to area near equipment trailer)
- 2 Shed by Soda Machine
- 3 Main Office
- 4 Vehicle Maintenance Garage
- 5 Haz Waste Area
- 6 Equipment Trailer
- 8 Shed by Weigh Station (Generator House)

Gas readings taken on September 26 2003
Well 11A installed August 2003



An employee-owned company

October 15, 2003



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
Quarterly Report, Methane Point Sampling – September 2003**

Dear Mr. Morris:

Twenty-six methane-monitoring points at the Lena Road Landfill were sampled on September 26, 2003 using a CES-LandTEC Gas Extraction Monitor (GEM) Model 2000. Methane levels at all of the sampling locations, with the exception of GMW-11A, were less than the maximum levels of 25% of the Lower Explosive Limit (LEL) for the interior of structures and 100% for points at or beyond the landfill boundary, as described by Chapter 62-701.530(1) of the Florida Administrative Code. A quarterly gas-monitoring table is attached.

In September GMW-11A was installed in the approximate former location of GMW-11. Readings at GMW-11A were recorded on September 26 and 30, 2003. Readings in excess of the 100% of the LEL were recorded on both dates. Since is outside the slurry wall and considering the saturated ground conditions in the area, it seems unlikely that this gas is due to the migration of methane from the landfill. It is suspected that the presence of this gas is due to the decay of naturally-occurring organic material in the subsurface. The presence of methane at GMW-11A will continue to be monitored.

If you should have any questions concerning this report, please contact me in our Orlando office at 407/647-7275, Ext. 153, or Javen Figueroa at Ext. 288, or Chris Gaw at Ext. 370.

Sincerely,

Joe Miller, P.E.
Senior Project Manager

cc: Kim Ford, P.E., FDEP SW District
Daniel T. Gray, Director, Utility Operations Department
Gus DiFonzo, Solid Waste Manager
C. Michael Gore / Jeanne Detweiler, Manatee County Landfill Division
File – 120498.90 9100, September 2003 Monitoring

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39884

MANATEE COUNTY LENA ROAD LANDFILL

GAS MONITORING REPORT

3rd QUARTER 2003

JULY -- SEPTEMBER 2003

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0
Well 2	0.0
Well 3	1.0
Well 4	0.0
Well 5	0.0
Well 6	1.0
Well 7	0.0
Well 8	1.0
Well 9A	0.0
Well 10	0.0
*Well 11A	100.0
Well 12	1.0
Well 13	0.0
Well 14	0.0
Well 15	0.0
Well 16	0.0
Well 17	2.0
Well 18	5.0

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 8	0.0%

GAS POINT LOCATION DESCRIPTIONS

- 1 Gary Seeley Office (former: Litter Enforcement Office)
(building moved to area near equipment trailer)
- 2 Shed by Soda Machine
- 3 Main Office
- 4 Vehicle Maintenance Garage
- 5 Haz Waste Area
- 6 Equipment Trailer
- 8 Shed by Weigh Station (Generator House)

Gas readings taken on September 26 2003

Well 11A installed August 2003

34884
R 9-8-03

MANATEE COUNTY LENA ROAD LANDFILL

GAS MONITORING REPORT

2nd QUARTER 2003

APRIL -- JUNE 2003

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0
Well 2	0.0
Well 3	1.0
Well 4	0.0
Well 5	0.0
Well 6	1.0
Well 7	0.0
Well 8	1.0
Well 9A	0.0
Well 10	0.0
Well 11	*
Well 12	1.0
Well 13	0.0
Well 14	0.0
Well 15	10.0
Well 16	0.0
Well 17	4.0
Well 18	22.0

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	8.0%
Point 6	0.0%
Point 8	0.0%

GAS POINT LOCATIONS

- 1 Gary Seeley Office (former: Litter Enforcement Office)
(building moved to area near equipment trailer)
- 2 Shed by Soda Machine
- 3 Main Office
- 4 Vehicle Maintenance Garage
- 5 Haz Waste Area
- 6 Equipment Trailer
- 8 Shed by Weigh Station (Generator House)

Gas readings taken on June 25-26, 2003

* Unable to locate.



MANATEE COUNTY LENA ROAD LANDFILL
GAS MONITORING REPORT
6TH QUARTER: JANUARY - MARCH 2003

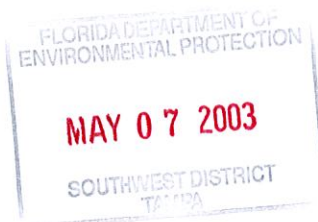
METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0
Well 2	0.0
Well 3	0.0
Well 4	0.0
Well 5	0.0
Well 6	0.0
Well 7	0.0
Well 8	0.0
Well 9	0.0
Well 10	0.0
Well 11	*
Well 12	0.0
Well 13	0.0
Well 14	0.0
Well 15	2.0
Well 16	0.0
Well 17	0.0
Well 18	18.0

Gas Point	Reading % LEL
Point 1	2.0%
Point 2	2.0%
Point 3	0.0%
Point 4	0.0%
Point 5	2.0%
Point 6	0.0%
Point 8	0.0%

Gas readings taken on March 25, 2003

* Unable to locate.





An employee-owned company
January 15, 2003



39884
2A 3/6/03

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 – December 2002** *AS*

Dear Mr. Morris:

Attached is the December 2002 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, leachate tracking summary, monthly gradient report, field readings for the water balance report and a quarterly gas monitoring table.

An inward gradient was present in Stage I and Stage III at all of the gradient pairs. An outward gradient was present in Stage II at two of the gradient pairs. However, Stage II has no solid waste. One of the piezometers, PZ-12, was destroyed as a result of the new scale house construction. Therefore, a comparison of the groundwater elevations of PZ-12 and GC-2 was not available. The contractor responsible for destroying the well is planning to reinstall it as soon as possible.

Twenty-three methane monitoring points on site were sampled on December 17, 2002 using a CES-Landtec Gas Extraction Monitor (GEM) Model 2000. Methane levels at all of the 23 sample points were less than the maximum levels of 25% of the Lower Explosive Limit (LEL) for the interior of structures and 100% for points at or beyond the landfill boundary, as described by Chapter 62-701.530(1) of the Florida Administrative Code.

If you should have any questions concerning this report, please contact me in our Orlando office at 407/647-7275, Ext. 153, or Javen Figueroa at Ext. 288.

Sincerely,

Joe Miller, P.E.
Senior Project Manager

cc: Kim Ford, P.E., FDEP SW District
Daniel T. Gray, Director, Utility Operations Department
Gus DiFonzo, Solid Waste Manager
C. Michael Gore, Landfill Superintendent
Gwen Pagington, Solid Waste Program Specialist
File – 120498.90 9100, December 2002 Monitoring

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MANATEE COUNTY LENA ROAD LANDFILL
GAS MONITORING REPORT
5TH QUARTER: OCTOBER - DECEMBER 2002

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0
Well 2	2.0
Well 3	0.0
Well 4	2.0
Well 5	0.0
Well 6	0.0
Well 7	2.0
Well 8	0.0
Well 9	2.0
Well 10	2.0
Well 11	2.0
Well 12	2.0
Well 13	2.0
Well 14	2.0
Well 15	0.0
Well 16	0.0
Well 17	0.0
Well 18	18.0

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 8	0.0%

Gas readings taken December 17, 2002



An employee-owned company

October 8, 2002

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



39884
RA 11-22-02

**Re: Manatee County Lena Road Landfill
Monthly Report – September 2002**

Dear Mr. Morris:

Attached is the September 2002 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, leachate tracking summary, monthly gradient report, field readings for the water balance report and a **quarterly gas monitoring table**.

An inward gradient was present in Stage I and Stage III at all of the gradient pairs. An outward gradient was present in Stage II at one of the gradient pairs. However, Stage II has no solid waste.

Twenty-three methane sampling points on site were sampled on October 2, 2002 using a CES-Landtec Gas Extraction Monitor (GEM) Model 2000. Methane levels at all of the 23 sample points were less than the maximum levels of 25% of the Lower Explosive Limit (LEL) for the interior of structures and 100% for points at or beyond the landfill boundary, as described by Chapter 62-701.530(1) of the Florida Administrative Code. Wells 9 and 11 could not be located due to construction activities in that area.

If you should have any questions concerning this report, please contact me in our Orlando office at 407/647-7275 Ext. 153, or Javen Figueroa at Ext. 288.

Sincerely,

Joe Miller, P.E.
Senior Project Manager

cc: Kim Ford, P.E., FDEP SW District
Daniel T. Gray, Director, Utility Operations Department
Gus DiFonzo, Solid Waste Manager
C. Michael Gore, Landfill Superintendent
Gwen Pagington, Solid Waste Program Specialist
File – 120498.05 0101 September Monitoring

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**MANATEE COUNTY LENA ROAD LANDFILL
GAS MONITORING REPORT
4TH QUARTER: JULY - SEPTEMBER 2002**



METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	1.0%
Well 2	2.0%
Well 3	1.0%
Well 4	1.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	--
Well 10	0.0%
Well 11	--
Well 12	2.0%
Well 13	1.0%
Well 14	2.0%
Well 15	2.0%
Well 16	1.0%
Well 17	2.0%
Well 18	1.0%

Gas Point	Reading % LEL
Point 1	1.0%
Point 2	1.0%
Point 3	2.0%
Point 4	2.0%
Point 5	1.0%
Point 6	2.0%
Point 8	2.0%

Gas readings taken October 2, 2002

Wells 9 and 11 could not be located due to construction in area.



An employee-owned company

July 16, 2002

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



#39884
dh 11-22-02

**Re: Manatee County Lena Road Landfill
Monthly Report – June 2002**

Dear Mr. Morris:

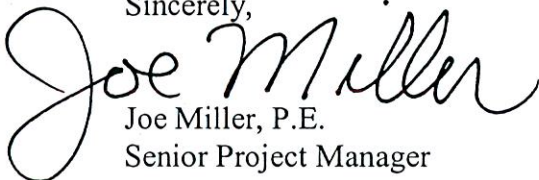
Attached is the June 2002 monthly report for the Lena Road Landfill in accordance with specific condition numbers 17, 18, and 33 of Operations Permit Number 39884-001-SO. The report consists of the monthly water balance report, leachate tracking summary, monthly gradient report, field readings for the water balance report and a quarterly gas monitoring table.

An inward gradient was present in Stage I and Stage III at all of the gradient pairs. An outward gradient was present in Stage II at all the gradient pairs, however, Stage II has no solid waste.

The 23 methane sampling points on site were sampled on June 27, 2002 using a CES-Landtec Gas Extraction Monitor (GEM) Model 2000. Methane levels at 22 of the 23 sample points were less than the maximum levels of 25% of the Lower Explosive Limit (LEL) for the interior of structures and 100% for points at or beyond the landfill boundary, as described by Chapter 62-701.530(1) of the Florida Administrative Code. However, the level of methane gas in Well 18, within the Stage III landfill, was above 100% of LEL. Wells 9 and 11 could not be located due to construction activities in that area.

If you should have any questions concerning this report, please contact me in our Orlando office at 407/647-7275 Ext. 153, or Javen Figueroa at Ext. 288.

Sincerely,


Joe Miller, P.E.
Senior Project Manager

cc: Kim Ford, P.E., FDEP SW District
Daniel T. Gray, Director, Utility Operations Department
Gus DiFonzo, Solid Waste Manager
C. Michael Gore, Landfill Superintendent
Gwen Pagington, Solid Waste Program Specialist
File – 120498.05 Manatee, Lena Road Landfill, Monitoring

MANATEE COUNTY LENA ROAD LANDFILL
GAS MONITORING REPORT
3RD QUARTER: APRIL - JUNE 2002

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	2.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	--
Well 10	0.0%
Well 11	--
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	>100%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 8	0.0%

Gas readings taken June 27, 2002

Wells 9 and 11 could not be located due to construction in area.



An employee-owned company

April 12, 2002

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

39884
513012002 88
D.E.P.
APR 16 2002
Southwest District Tampa

**Re: Manatee County Lena Road Landfill
Monthly Report – March 2002**

Dear Mr. Morris:

Attached is the October 2001 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, leachate tracking summary, monthly gradient report, field readings for the water balance report and a quarterly gas monitoring table.

An inward gradient was present in Stage I and Stage III at all of the gradient pairs. An outward gradient was present in Stage II at all the gradient pairs, however, Stage II has no solid waste.

The 25 methane sampling points on site were sampled on March 27, 2002 using a CES-Landtec Gas Extraction Monitor (GEM) Model 2000. Methane levels at all 25 sample points were less than the maximum levels of 25% of the Lower Explosive Limit (LEL) for the interior of structures and 100% of LEL at or beyond the landfill boundary, as described by Chapter 62-701.530(1) of the Florida Administrative Code.

If you should have any questions concerning this report, please contact me in our Orlando office at 407/647-7275 Ext. 153, or Javen Figueroa at Ext. 288.

Sincerely,

Joe Miller, P.E.
Senior Project Manager

cc: Robert Butera, P.E., FDEP SW District
Kim Ford, P.E., FDEP SW District
Steve Morgan, FDEP SW District
Daniel T. Gray, Director, Utility Operations Department
Gus DiFonzo, Solid Waste Manager
C. Michael Gore, Landfill Superintendent
Gwen Pagington, Solid Waste Program Specialist
File – 120498.05 Manatee, Lena Road Landfill, Monitoring

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MANATEE COUNTY LENA ROAD LANDFILL
GAS MONITORING REPORT
3RD QUARTER: JANUARY - MARCH 2002

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	N/A
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	28.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	2.0%
Point 5	0.0%
Point 6	0.0%
Point 8	0.0%

Gas readings taken March 27, 2002

Well 10 could not be sampled due to obstruction on well casing caused by construction in area.

Wells 15 and 16 were replaced.



An employee-owned company

January 22, 2002

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 - December 2001**

Dear Mr. Morris:

Attached is the December 2001 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, leachate tracking summary, monthly gradient report and field readings for the water balance report.

An inward gradient was present in Stage I and Stage III at all of the gradient pairs. An outward gradient was present in Stage II at all the gradient pairs, however, Stage II has no solid waste.

The modifications to the leachate pumping system are complete. After December 3, 2001, leachate was pumped directly to the wastewater treatment plant rather than to the leachate pond.

In addition, the 25 methane sampling points on site were checked and sampled on December 18, 2001 using a Thermo Environmental Instruments, Inc. Model 680 Hydrogen Vapor Meter (HVM). One well, GMW-15, has been destroyed since the last event and needs to be reinstalled. Methane levels at all 24 sample points were less than the maximum levels of 25% of the Lower Explosive Limit (LEL) for the interior of structures and 100% of LEL at or beyond the landfill boundary, as described by Chapter 62-701.530(1) of the Florida Administrative Code. A tabular summary of the results is attached. The results are included with this letter. No methane was detected, except for at GMW-18, which measured 11% of the LEL. It should be noted that GMW-18 is located on the interior of Stage III.

If you should have any questions concerning this report, please contact me in our Orlando office at 407/647-7275 Ext. 153, or Javen Figueroa at Ext. 288.

Sincerely,

Joe Miller, P.E.
Senior Project Manager

cc: Robert Butera, P.E., FDEP SW District
Kim Ford, P.E., FDEP SW District
Steve Morgan, FDEP SW District
Daniel T. Gray, Director, Utility Operations Department

Gus DiFonzo, Solid Waste Manager
C. Michael Gore, Landfill Superintendent
Gwen Pagington, Solid Waste Program Specialist
File – 120498.05 Manatee, Lena Road Landfill, Monitoring

G:\WASTEMAN\Manatee County\SW-5 Annual Monitoring\December2001\TRANSLTRDecember2001.doc

MANATEE COUNTY LENA ROAD LANDFILL
GAS MONITORING REPORT
2ND QUARTER: OCTOBER - DECEMBER 2001

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	Destroyed
Well 16	0.0%
Well 17	0.0%
Well 18	11.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 8	0.0%



Gas readings taken December 18, 2001



An employee-owned company

January 22, 2002

183748
39884
RECEIVED

JAN 24 2002

Department of Environmental Protection
SOUTHWEST DISTRICT

BY _____

GAS
MONITORING
DATA

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 - December 2001**

RECEIVED
JAN 24 2002

Department of Environmental Protection
SOUTHWEST DISTRICT

BY _____

Dear Mr. Morris:

Attached is the December 2001 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, leachate tracking summary, monthly gradient report and field readings for the water balance report.

An inward gradient was present in Stage I and Stage III at all of the gradient pairs. An outward gradient was present in Stage II at all the gradient pairs, however, Stage II has no solid waste.

The modifications to the leachate pumping system are complete. After December 3, 2001, leachate was pumped directly to the wastewater treatment plant rather than to the leachate pond.

In addition, the 25 methane sampling points on site were checked and sampled on December 18, 2001 using a Thermo Environmental Instruments, Inc. Model 680 Hydrogen Vapor Meter (HVM). One well, GMW-15, has been destroyed since the last event and needs to be reinstalled. Methane levels at all 24 sample points were less than the maximum levels of 25% of the Lower Explosive Limit (LEL) for the interior of structures and 100% of LEL at or beyond the landfill boundary, as described by Chapter 62-701.530(1) of the Florida Administrative Code. A tabular summary of the results is attached. The results are included with this letter. No methane was detected, except for at GMW-18, which measured 11% of the LEL. It should be noted that GMW-18 is located on the interior of Stage III.

If you should have any questions concerning this report, please contact me in our Orlando office at 407/647-7275 Ext. 153, or Javen Figueroa at Ext. 288.

Sincerely,

Joe Miller, P.E.
Senior Project Manager

cc: Robert Butera, P.E., FDEP SW District
Kim Ford, P.E., FDEP SW District
Steve Morgan, FDEP SW District
Daniel T. Gray, Director, Utility Operations Department

Gus DiFonzo, Solid Waste Manager
C. Michael Gore, Landfill Superintendent
Gwen Pagington, Solid Waste Program Specialist
File – 120498.05 Manatee, Lena Road Landfill, Monitoring

G:\WASTEMAN\Manatee County\SW-5 Annual Monitoring\December2001\TRANSLTRDecember2001.doc

MANATEE COUNTY LENA ROAD LANDFILL
GAS MONITORING REPORT
2ND QUARTER: OCTOBER - DECEMBER 2001

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	Destroyed
Well 16	0.0%
Well 17	0.0%
Well 18	11.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 8	0.0%

Gas readings taken December 18, 2001

Florida Department of
Environmental Protection

Southwest District

Handwritten: JRM 11/26/01

CONVERSATION RECORD

Date November 26, 2001

Subject Lena Road Gas Monitoring Reports

Time 2:20 PM

Permit No. 39884-001-SO

County Manatee

Mr. Gus DiFonzo

Phone No. 941-795-3473

Representing Manatee County Solid Waste Section

☐ **Phoned Me** ☒ **Was Called** ☐ **Scheduled Meeting** ☐ **Unscheduled Meeting**

Other Individuals in Conversation/Meeting _____

Summary of Conversation/Meeting:

Mr. DiFonzo was called regarding the November 21, 2001 fax which stated that it contained the data for quarter four 2000. The sampling date was January 20, 2001. The Department file contains a prior sampling event from January 10, 2001. Mr. DiFonzo stated that HDR had equipment problems when they went to sample during the fourth quarter of 2000 and did not sample until January. I suggested that in the future these problems should be reported. The January 10, 2001 sampling will count as the fourth quarter 2000 sampling event and the January 20, 2001 sampling event will count as the first quarter of 2001. I asked if PBS&J was sampling tomorrow for the fourth quarter of 2001. Mr. DiFonzo stated that they would sample soon.

We also discussed the Third Quarter 2001 report by PBS&J, received November 19, 2001, which reported on the cover page that they had sampled all 25 monitoring points. Yet, on the summary table, PBS&J reported that Well 5 was destroyed and that they were unable to locate Well 18. Mr. DiFonzo stated that he had not received his copy of the report, and would discuss the above issue with PBS&J at their meeting later this week.

Signature _____

Handwritten Signature: Sara I. Smithee
Sara I. Smithee

Title _____

E.S. I, Solid Waste Section

MANATEE COUNTY LENA ROAD LANDFILL
GAS MONITORING REPORT
1ST QUARTER: JULY - SEPTEMBER 2001

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	2.0%
Well 4	2.0%
Well 5	Destroyed
Well 6	2.0%
Well 7	2.0%
Well 8	2.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	2.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	2.0%
Well 18	Unable to locate

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	2.0%
Point 5	2.0%
Point 6	2.0%
Point 8	0.0%

Gas readings taken August 14, 2001

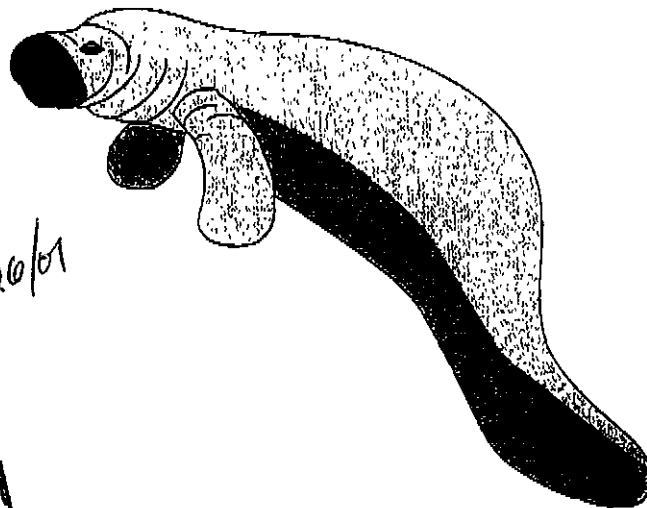


J 11/26

MANATEE COUNTY PUBLIC WORKS
SOLID WASTE/LANDFILL SECTION

FACSIMILE COVER MEMO

FAX # (941)795-3490



PLEASE DELIVER THE FOLLOWING PAGE(S)

TO: Sara Smith, ESI-SW Section
FL Dept. of Env. Protection

ADDRESS: 813/744-6125

FROM: Gus DiFonzo, Solid Waste Manager

DATE: 11-21-2001 TIME TRANSMITTED: 10:40am

SUBJECT: Manatee County Lena Road Landfill
Methane Gas Readings Report

PLEASE CALL UPON RECEIPT _____ PLEASE HANDLE CONFIDENTIALLY _____

COMMENTS:

As noted in your July 25, 2001 inspection of the above noted Landfill with regard to the missing Methane Gas Monitoring Report for the period of October through December, 2000, please find following a copy of that report.

We apologize for the delay in our response.

TOTAL NUMBER OF PAGES INCLUDING COVER MEMO: 2

4410 66th Street West
Bradenton, Florida 34210

941/795-3473

MANATEE COUNTY LENA ROAD LANDFILL
GAS MONITORING REPORT
JANUARY 2001

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	0.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 8	0.0%

Gas readings taken January 20, 2001

**MANATEE COUNTY LENA ROAD LANDFILL
GAS MONITORING REPORT
1ST QUARTER: JULY - SEPTEMBER 2001**

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION

NOV 19 2001

SOUTHWEST DISTRICT
TAMPA

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	2.0%
Well 4	2.0%
Well 5	Destroyed
Well 6	2.0%
Well 7	2.0%
Well 8	2.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	2.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	2.0%
Well 18	Unable to locate

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	2.0%
Point 5	2.0%
Point 6	2.0%
Point 8	0.0%

Gas readings taken August 14, 2001

39884

May 7, 2001

HDR

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

**RE: Manatee County Lena Road Landfill
Monthly Report- April 2001**

RECEIVED
MAY 08 2001
Department of Environmental Protection
SOUTHWEST DISTRICT

Dear Mr. Morris:

Attached is the April 2001 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, the leachate tracking summary, the monthly gradient report, and the quarterly methane gas monitoring report.

As indicated on the gradient monitoring sheets, an inward gradient is present at Stage I at all of the gradient pairs. An inward gradient is present at all operational pairs at Stage III. Stage II is not receiving solid waste at this time.

If you should have any questions concerning this report, please contact me in our Tampa office at (813) 282-2300.

Sincerely,

HDR Engineering, Inc.

Deborah Daigle, P.G.
Sr. Hydrogeologist

gas monitoring data
only. others filed
separately

cc: Kim Ford, P.E., FDEP SW District
Robert Butera, P.E., FDEP SW District
Steve Morgan, FDEP SW District
Daniel T. Gray, Manatee County Utilities Operations Director
Gus Difonzo, Manatee County Solid Waste Manager
C. Michael Gore, Manatee County Landfill Superintendent

HDR Engineering, Inc.

Employee Owned

Suite 250
2202 North Westshore Blvd.
Tampa, Florida
33607-5755

Telephone
813 282-2300
Fax
813 282-2430

**MANATEE COUNTY LENA ROAD LANDFILL
GAS MONITORING REPORT
APRIL 2001**

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	0.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 8	0.0%

Gas readings taken April 30, 2001

39884

February 15, 2001

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

D.E.P.
FEB 16 2001
Southwest District Tampa

HDR

**RE: Manatee County Lena Road Landfill
Monthly Report- January 2001**

Dear Mr. Morris:

Attached is the January 2001 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, the leachate tracking summary, the monthly gradient report, and the quarterly gas monitoring report.

As indicated on the gradient monitoring sheets, an inward gradient is present at Stage I at all gradient pairs. An inward gradient is present at all operational pairs at Stage III. Stage II is not receiving solid waste at this time.

Construction activities at Stage III, per construction permit no. 39884-003-SC issued April 27, 2000, resulted in damage to piezometers PZ-15B and PZ-16 which prevented access to the piezometers for measurement. The County has replace these piezometers, however, the top of casing elevations for the new piezometers were not available as of this report. The County has also replaced PZ-14 located on the northwest corner of Stage III.

If you should have any questions concerning this report, please contact me in our Tampa office at (813) 282-2300.

Sincerely,

HDR Engineering, Inc.



Deborah Daigle, P.G.
Sr. Hydrogeologist

*methane monitoring
only. others filed
separately*

cc: Kim Ford, P.E., FDEP SW District
Robert Butera, P.E., FDEP SW District
Steve Morgan, FDEP SW District
Dan Rothfuss, Manatee County Interim Solid Waste Director
Daniel T. Gray, Manatee County Utilities Operations Manager
Gus Difonzo, Manatee County Solid Waste Manager
C. Michael Gore, Manatee County Landfill Supervisor

HDR Engineering, Inc.

Employee Owned

Suite 250
2202 North Westshore Blvd.
Tampa, Florida
33607-5755

Telephone
813 282-2300
Fax
813 282-2430



**MANATEE COUNTY LENA ROAD LANDFILL
GAS MONITORING REPORT
JANUARY 2001**

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	0.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 8	0.0%

Gas readings taken January 10, 2001

MANATEE COUNTY LENA ROAD LANDFILL

GAS MONITORING REPORT

September 2000

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	26.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 8	0.0%



Gas readings taken September 15, 2000

MANATEE COUNTY LENA ROAD LANDFILL

GAS MONITORING REPORT

September 2000

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	26.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 8	0.0%

Gas readings taken September 15, 2000

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
OCT 16 2000
SOUTHWEST DISTRICT
TAMPA

39884
gas

July 14, 2000

HDR

D.E.P.

JUL 14 2000

Southwest District Tampa

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

**RE: Manatee County Lena Road Landfill
Monthly Report- June 2000**

GAS MONITORING
DATA

(OTHER DATA FILED
SEPARATELY)

Dear Mr. Morris:

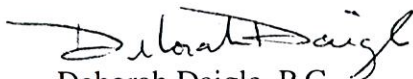
Attached is the June 2000 monthly report for the Lena Road landfill in accordance with specific condition numbers 17, 18 and 33 of operations permit number 39884-001-SO. The report consists of the monthly water balance report, the leachate tracking summary, and the monthly gradient report. The quarterly methane gas monitoring results are also included with this report.

As indicated on the gradient monitoring sheets, an inward gradient is present at Stage I and Stage III. Stage II is not receiving solid waste at this time. All methane gas readings were below detection at the gas monitoring wells.

If you should have any questions concerning this report, please contact our Tampa office at (813) 282-2300.

Sincerely,

HDR Engineering, Inc.


Deborah Daigle, P.G.
Sr. Hydrogeologist

Cc: Kim Ford, P.E., FDEP SW District
Robert Butera, P.E., FDEP SW District
Steve Morgan, FDEP SW District
Len Bramble, P.E., Manatee County Public Works Director
Daniel T. Gray, Manatee County Utilities Operations Manager
Gus Difonzo, Manatee County Solid Waste Manager
C. Michael Gore, Manatee County Landfill Supervisor

HDR Engineering, Inc.

Employee Owned

2202 North West Shore Boulevard
Suite 250
Tampa, Florida
33607-5755

Telephone
813 282-2300
Fax
813 282-2430

**MANATEE COUNTY LENA ROAD LANDFILL
GAS MONITORING REPORT
JUNE 2000**

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	0.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 8	0.0%

Gas readings taken June 16, 2000

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
JUL 14 2000
SOUTHWEST DISTRICT
TAMPA

**MANATEE COUNTY LENA ROAD LANDFILL
GAS MONITORING REPORT
JANUARY 2000**

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	0.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 8	0.0%

Gas readings taken January 20, 2000

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
FEB 15 2000
SOUTHWEST DISTRICT
TAMPA

**MANATEE COUNTY LENA ROAD LANDFILL
GAS MONITORING REPORT
DECEMBER, 1999**

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	1.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	1.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	0.0%
Well 11	1.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	0.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 8	0.0%

Gas readings taken December 16, 1999

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
JAN 18 2000
SOUTHWEST DISTRICT
TAMPA

MANATEE COUNTY LENA ROAD LANDFILL

GAS MONITORING REPORT

~~OCTOBER~~, 1999

November

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	1.0%
Well 7	1.0%
Well 8	1.0%
Well 9	1.0%
Well 10	1.0%
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	1.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	0.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 8	0.0%

Gas readings taken November 16, 1999

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
DEC 22 1999
SOUTHWEST DISTRICT
TAMPA

MANATEE COUNTY LENA ROAD LANDFILL
GAS MONITORING REPORT
OCTOBER, 1999

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	1.0%
Well 3	1.0%
Well 4	1.0%
Well 5	1.0%
Well 6	0.0%
Well 7	1.0%
Well 8	1.0%
Well 9	1.0%
Well 10	1.0%
Well 11	1.0%
Well 12	0.0%
Well 13	0.0%
Well 14	5.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	0.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 8	0.0%

Gas readings taken October 13, 1999

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
NOV 22 1999
SOUTHWEST DISTRICT
TAMPA

**MANATEE COUNTY LENA ROAD LANDFILL
GAS MONITORING REPORT
SEPTEMBER, 1999**

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	1.0%
Well 2	2.0%
Well 3	1.0%
Well 4	1.0%
Well 5	0.0%
Well 6	1.0%
Well 7	1.0%
Well 8	1.0%
Well 9	1.0%
Well 10	2.0%
Well 11	1.0%
Well 12	0.0%
Well 13	0.0%
Well 14	6.0%
Well 15	1.0%
Well 16	0.0%
Well 17	1.0%
Well 18	1.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 8	0.0%

Gas readings taken September 15, 1999

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
OCT 18 1999
SOUTHWEST DISTRICT
TAMPA

MANATEE COUNTY LENA ROAD LANDFILL
GAS MONITORING REPORT
AUGUST, 1999

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	1.0%
Well 3	1.0%
Well 4	0.0%
Well 5	1.0%
Well 6	0.0%
Well 7	0.0%
Well 8	1.0%
Well 9	1.0%
Well 10	0.0%
Well 11	1.0%
Well 12	1.0%
Well 13	1.0%
Well 14	1.0%
Well 15	1.0%
Well 16	1.0%
Well 17	1.0%
Well 18	0.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 8	0.0%

Gas readings taken August 18, 1999

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
OCT 06 1999
SOUTHWEST DISTRICT
TAMPA



D.E.P.
AUG 18 1999
Southwest District Tampa

39884
MANATEE COUNTY
GOVERNMENT
Public Works Department

August 13, 1999

Allison Amram, P.G.
Division of Waste Management
Department of Environmental Protection, South West District
3804 Coconut Palm Drive
Tampa, Florida 33619

Re: Manatee County Lena Road Landfill
Monthly Report Submittal

Dear Ms. Amram:


Enclosed please find the July, 1999 water balance report, leachate tracking summary, gradient report, and methane gas readings.

If you need additional information regarding these reports, please contact me at 941/795-3428.
Thank you for your assistance in this matter.

Sincerely,

Gwen Pagington,
Solid Waste Program Specialist

/gbp

cc: Len Bramble, P.E., Public Works Director
Daniel T. Gray, Utilities Operations Manager
Robert Butera, P.E., FDEP
Kim Ford, P.E., FDEP
Gus DiFonzo, Solid Waste Manager 
C. Michael Gore, Landfill Superintendent

MANATEE COUNTY LENA ROAD LANDFILL

GAS MONITORING REPORT

JULY, 1999

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.1%
Well 3	0.0%
Well 4	0.1%
Well 5	0.1%
Well 6	0.1%
Well 7	0.1%
Well 8	0.1%
Well 9	0.1%
Well 10	0.1%
Well 11	0.1%
Well 12	0.1%
Well 13	0.1%
Well 14	0.0%
Well 15	0.4%
Well 16	0.1%
Well 17	0.0%
Well 18	0.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 8	0.0%

Gas readings taken July 14, 1999

FLORIDA DEPARTMENT OF
 ENVIRONMENTAL PROTECTION
AUG 18 1999
 SOUTHWEST DISTRICT
 TAMPA



Lena Rd 39884
MANATEE COUNTY
GOVERNMENT
Public Works Department
gas

July 27, 1999

D.E.P.
JUL 30 1999
Southwest District Tampa

Allison Amram, P.G.
Division of Waste Management
Department of Environmental Protection, South West District
3804 Coconut Palm Drive
Tampa, Florida 33619

Re: Manatee County Lena Road Landfill
Monthly Report Submittal

Dear Ms. Amram:

Enclosed please find the June, 1999 water balance, leachate tracking summary, gradient report, and methane gas readings. We would like to note that Kim Ford, P.E., has been faxed daily groundwater readings since the time of completion of this report. Those readings indicate we have been maintaining an inward gradient.

If you need additional information regarding these reports, please contact me at 941/795-3473. Thank you for your assistance in this matter.

Sincerely,

Gus A. DiFonzo, *ba*
Solid Waste Manager

/gbp

cc: Len Bramble, P.E., Public Works Director
Daniel T. Gray, Utilities Operations Manager
Robert Butera, P.E., FDEP
Kim Ford, P.E., FDEP
C. Michael Gore, Landfill Superintendent

MANATEE COUNTY LENA ROAD LANDFILL

GAS MONITORING REPORT

JUNE, 1999

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	0.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 8	0.0%

Gas readings taken June 16, 1999

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
AUG 16 1999
SOUTHWEST DISTRICT
TAMPA

nc'd 4/18/99

MANATEE COUNTY LENA ROAD LANDFILL
GAS MONITORING REPORT
MAY, 1999

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	1.0%
Well 3	0.0%
Well 4	1.0%
Well 5	1.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	1.0%
Well 10	1.0%
Well 11	1.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	0.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 7	0.0%
Point 8	0.0%

Gas readings taken May 27, 1999

MANATEE COUNTY, LENA ROAD LANDFILL WETLAND AND GAS MONITORING REPORT APRIL, 1999

WETLAND STAFF GAUGE READINGS

	Week 1	Week 2	Week 3	Week 4
Wetland 1	N/D	N/D	N/D	N/D
Wetland 2	N/D	N/D	N/D	N/D
Wetland 3	N/D	N/D	N/D	N/D
Wetland 4	N/D	N/D	N/D	N/D
Wetland 5	N/D	N/D	N/D	N/D
Wetland 6	N/D	N/D	N/D	N/D
Wetland 7	N/D	N/D	N/D	N/D
Wetland 8	N/D	N/D	N/D	N/D
Wetland 12	N/D	N/D	N/D	N/D

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	0.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 7	0.0%
Point 8	0.0%

FLORIDA DEPARTMENT OF
 ENVIRONMENTAL PROTECTION
 MAY 20 1999
 SOUTHWEST DISTRICT
 TAMPA

*Lena Rd gas data
 rec'd 5/20/99
 10/98 - 4/99*

MANATEE COUNTY, LENA ROAD LANDFILL WETLAND AND GAS MONITORING REPORT MARCH, 1999

WETLAND STAFF GAUGE READINGS

	Week 1	Week 2	Week 3	Week 4
Wetland 1	N/D	N/D	N/D	N/D
Wetland 2	N/D	N/D	N/D	N/D
Wetland 3	N/D	N/D	N/D	N/D
Wetland 4	N/D	N/D	N/D	N/D
Wetland 5	N/D	N/D	N/D	N/D
Wetland 6	N/D	N/D	N/D	N/D
Wetland 7	N/D	N/D	N/D	N/D
Wetland 8	N/D	N/D	N/D	N/D
Wetland 12	N/D	N/D	N/D	N/D

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	0.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 7	0.0%
Point 8	0.0%

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
MAY 20 1999
SOUTHWEST DISTRICT
TAMPA

MANATEE COUNTY, LENA ROAD LANDFILL WETLAND AND GAS MONITORING REPORT FEBRUARY, 1999

WETLAND STAFF GAUGE READINGS

	Week 1	Week 2	Week 3	Week 4
Wetland 1	N/D	N/D	N/D	N/D
Wetland 2	N/D	N/D	N/D	N/D
Wetland 3	N/D	N/D	N/D	N/D
Wetland 4	N/D	N/D	N/D	N/D
Wetland 5	N/D	N/D	N/D	N/D
Wetland 6	N/D	N/D	N/D	N/D
Wetland 7	N/D	N/D	N/D	N/D
Wetland 8	N/D	N/D	N/D	N/D
Wetland 12	N/D	N/D	N/D	N/D

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	0.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 7	0.0%
Point 8	0.0%

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
MAY 20 1999
SOUTHWEST DISTRICT
TAMPA

MANATEE COUNTY, LENA ROAD LANDFILL WETLAND AND GAS MONITORING REPORT JANUARY, 1999

WETLAND STAFF GAUGE READINGS

	Week 1	Week 2	Week 3	Week 4
Wetland 1	N/D	N/D	N/D	N/D
Wetland 2	N/D	N/D	N/D	N/D
Wetland 3	N/D	N/D	N/D	N/D
Wetland 4	N/D	N/D	N/D	N/D
Wetland 5	N/D	N/D	N/D	N/D
Wetland 6	N/D	N/D	N/D	N/D
Wetland 7	N/D	N/D	N/D	N/D
Wetland 8	N/D	N/D	N/D	N/D
Wetland 12	N/D	N/D	N/D	N/D

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	0.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 7	0.0%
Point 8	0.0%

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
MAY 20 1999
SOUTHWEST DISTRICT
TAMPA

MANATEE COUNTY, LENA ROAD LANDFILL WETLAND AND GAS MONITORING REPORT DECEMBER, 1998

WETLAND STAFF GAUGE READINGS

	Week 1	Week 2	Week 3	Week 4
	N/D	N/D	16-Dec-98	N/D
Wetland 1	N/D	N/D	35.3	N/D
Wetland 2	N/D	N/D	33.9	N/D
Wetland 3	N/D	N/D	34.8	N/D
Wetland 4	N/D	N/D	38.7	N/D
Wetland 5	N/D	N/D	37.3	N/D
Wetland 6	N/D	N/D	35.4	N/D
Wetland 7	N/D	N/D	32.4	N/D
Wetland 8	N/D	N/D	31.4	N/D
Wetland 12	N/D	N/D	31.6	N/D

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	0.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 7	0.0%
Point 8	0.0%

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
MAY 20 1999
SOUTHWEST DISTRICT
TAMPA

MANATEE COUNTY, LENA ROAD LANDFILL WETLAND AND GAS MONITORING REPORT NOVEMBER, 1998

WETLAND STAFF GAUGE READINGS

	Week 1	Week 2	Week 3	Week 4
	02-Nov-98	09-Nov-98	16-Nov-98	23-Nov-98
Wetland 1	35.4	N/D	N/D	N/D
Wetland 2	34.0	N/D	N/D	N/D
Wetland 3	34.8	N/D	N/D	N/D
Wetland 4	36.7	N/D	N/D	N/D
Wetland 5	37.7	N/D	N/D	N/D
Wetland 6	36.4	N/D	N/D	N/D
Wetland 7	32.9	N/D	N/D	N/D
Wetland 8	31.6	N/D	N/D	N/D
Wetland 12	31.6	N/D	N/D	N/D

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	0.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 7	0.0%
Point 8	0.0%

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
MAY 20 1999
SOUTHWEST DISTRICT
TAMPA

MANATEE COUNTY, LENA ROAD LANDFILL

WETLAND AND GAS MONITORING REPORT OCTOBER, 1998

WETLAND STAFF GAUGE READINGS

	Week 1	Week 2	Week 3	Week 4
	05-Oct-98	12-Oct-98	19-Oct-98	26-Oct-98
Wetland 1	N/D	N/D	35.5	35.5
Wetland 2	N/D	N/D	35.1	35.5
Wetland 3	N/D	N/D	34.7	36.1
Wetland 4	N/D	N/D	39.2	39.5
Wetland 5	N/D	N/D	37.9	38.1
Wetland 6	N/D	N/D	34.5	34.7
Wetland 7	N/D	N/D	33.0	33.5
Wetland 8	N/D	N/D	31.5	31.9
Wetland 12	N/D	N/D	31.7	32.2

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	0.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 7	0.0%
Point 8	0.0%

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
MAY 20 1999
SOUTHWEST DISTRICT
TAMPA

MANATEE COUNTY, LENA ROAD LANDFILL WETLAND AND GAS MONITORING REPORT SEPTEMBER 1998

WETLAND STAFF GAUGE READINGS

	Week 1	Week 2	Week 3	Week 4
	01-Sep-98	07-Sep-98	14-Sep-98	28-Sep-98
Wetland 1	N/D	N/D	35.3	35.5
Wetland 2	N/D	N/D	36.1	35.5
Wetland 3	N/D	N/D	34.7	36.1
Wetland 4	N/D	N/D	38.7	39.5
Wetland 5	N/D	N/D	38.1	38.1
Wetland 6	N/D	N/D	34.5	34.7
Wetland 7	N/D	N/D	32.5	33.5
Wetland 8	N/D	N/D	31.5	31.9
Wetland 12	N/D	N/D	31.5	32.2

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	N/D
Well 2	N/D
Well 3	N/D
Well 4	N/D
Well 5	N/D
Well 6	N/D
Well 7	N/D
Well 8	N/D
Well 9	N/D
Well 10	N/D
Well 11	N/D
Well 12	N/D
Well 13	N/D
Well 14	N/D
Well 15	N/D
Well 16	N/D
Well 17	N/D
Well 18	N/D

Gas Point	Reading % LEL
Point 1	N/D
Point 2	N/D
Point 3	N/D
Point 4	N/D
Point 5	N/D
Point 6	N/D
Point 7	N/D
Point 8	N/D

Gas data was not collected for September 1998

D.E.P.
 OCT 20 1998
 COUNTY OF
 TAMPA

MANATEE COUNTY, LENA ROAD LANDFILL

WETLAND AND GAS MONITORING REPORT AUGUST 1998

WETLAND STAFF GAUGE READINGS

	Week 1	Week 2	Week 3	Week 4
	05-Aug-98	12-Aug-98	19-Aug-98	26-Aug-98
Wetland 1	35.2	N/D	35.8	N/D
Wetland 2	33.5	N/D	36.1	N/D
Wetland 3	34.5	N/D	35.5	N/D
Wetland 4	38.5	N/D	39.0	N/D
Wetland 5	36.4	N/D	37.0	N/D
Wetland 6	33.9	N/D	34.1	N/D
Wetland 7	32.5	N/D	32.5	N/D
Wetland 8	31.2	N/D	31.5	N/D
Wetland 12	30.7	N/D	31.1	N/D

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	N/D
Well 2	N/D
Well 3	N/D
Well 4	N/D
Well 5	N/D
Well 6	N/D
Well 7	N/D
Well 8	N/D
Well 9	N/D
Well 10	N/D
Well 11	N/D
Well 12	N/D
Well 13	N/D
Well 14	N/D
Well 15	N/D
Well 16	N/D
Well 17	N/D
Well 18	N/D

Gas Point	Reading % LEL
Point 1	N/D
Point 2	N/D
Point 3	N/D
Point 4	N/D
Point 5	N/D
Point 6	N/D
Point 7	N/D
Point 8	N/D

Gas data was not collected for August 1998

D.E.P.
 SEP 24 1998
 COUNTY OF MANATEE
 TAMPA

MANATEE COUNTY, LENA ROAD LANDFILL WETLAND AND GAS MONITORING REPORT JULY 1998

WETLAND STAFF GAUGE READINGS

	Week 1	Week 2	Week 3	Week 4
	01-Jul-98	14-Jul-98	22-Jul-98	28-Jul-98
Wetland 1	35.9	N/D	35.3	N/D
Wetland 2	33.6	N/D	33.5	N/D
Wetland 3	34.7	N/D	34.7	N/D
Wetland 4	38.5	N/D	38.5	N/D
Wetland 5	36.5	N/D	35.5	N/D
Wetland 6	33.8	N/D	33.9	N/D
Wetland 7	32.5	N/D	32.5	N/D
Wetland 8	31.3	N/D	31.5	N/D
Wetland 12	30.7	N/D	30.7	N/D

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	N/D
Well 2	N/D
Well 3	N/D
Well 4	N/D
Well 5	N/D
Well 6	N/D
Well 7	N/D
Well 8	N/D
Well 9	N/D
Well 10	N/D
Well 11	N/D
Well 12	N/D
Well 13	N/D
Well 14	N/D
Well 15	N/D
Well 16	N/D
Well 17	N/D
Well 18	N/D

Gas Point	Reading % LEL
Point 1	N/D
Point 2	N/D
Point 3	N/D
Point 4	N/D
Point 5	N/D
Point 6	N/D
Point 7	N/D
Point 8	N/D

D.E.P.
AUG 10 1998
SOUTHWEST DISTRICT
TAMPA

Gas data was not collected for July 1998

MANATEE COUNTY, LENA ROAD LANDFILL

WETLAND AND GAS MONITORING REPORT MAY 1998

WETLAND STAFF GAUGE READINGS

	Week 1	Week 2	Week 3	Week 4
	07-May-98	14-May-98	21-May-98	27-May-98
Wetland 1	N/D	35.6	37.1	35.0
Wetland 2	N/D	33.7	36.2	33.6
Wetland 3	N/D	34.9	36.5	34.5
Wetland 4	N/D	38.9	40.5	38.5
Wetland 5	N/D	37.7	39.5	37.0
Wetland 6	N/D	34.7	35.9	33.9
Wetland 7	N/D	34.8	33.5	32.5
Wetland 8	N/D	31.7	32.1	31.2
Wetland 12	N/D	31.7	32.3	30.7

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	0.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 7	0.0%
Point 8	0.0%

Gas data collected on May 14, 1998

red 5/18/98
Lena Rd gas
file

MANATEE COUNTY, LENA ROAD LANDFILL WETLAND AND GAS MONITORING REPORT APRIL 1998

WETLAND STAFF GAUGE READINGS

	Week 1	Week 2	Week 3	Week 4
	02-Apr-98	09-Apr-98	16-Apr-98	23-Apr-98
Wetland 1	N/D	N/D	N/D	N/D
Wetland 2	N/D	N/D	N/D	N/D
Wetland 3	N/D	N/D	N/D	N/D
Wetland 4	N/D	N/D	N/D	N/D
Wetland 5	N/D	N/D	N/D	N/D
Wetland 6	N/D	N/D	N/D	N/D
Wetland 7	N/D	N/D	N/D	N/D
Wetland 8	N/D	N/D	N/D	N/D
Wetland 12	N/D	N/D	N/D	N/D

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	0.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 7	0.0%
Point 8	0.0%

Gas data collected on Apr. 22, 1998

MANATEE COUNTY, LENA ROAD LANDFILL

WETLAND AND GAS MONITORING REPORT FEBRUARY 1998

WETLAND STAFF GAUGE READINGS

	Week 1	Week 2	Week 3	Week 4
	04-Feb-98	11-Feb-98	19-Feb-98	26-Feb-98
Wetland 1	36.0	N/D	37.1	N/D
Wetland 2	34.9	N/D	36.2	N/D
Wetland 3	35.3	N/D	36.5	N/D
Wetland 4	40.5	N/D	40.5	N/D
Wetland 5	28.3	N/D	39.5	N/D
Wetland 6	34.8	N/D	35.9	N/D
Wetland 7	33.4	N/D	33.5	N/D
Wetland 8	32.0	N/D	32.1	N/D
Wetland 12	32.3	N/D	32.3	N/D

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	0.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 7	0.0%
Point 8	0.0%

Gas data collected on Feb. 20, 1998

Lena Rd gas h/p

MANATEE COUNTY, LENA ROAD LANDFILL

WETLAND AND GAS MONITORING REPORT JANUARY 1998

WETLAND STAFF GAUGE READINGS

	Week 1	Week 2	Week 3	Week 4
	05-Jan-98	14-Jan-98	21-Jan-98	28-Jan-98
Wetland 1	N/D	35.6	N/D	36.1
Wetland 2	N/D	34.5	N/D	35.2
Wetland 3	N/D	35.1	N/D	35.5
Wetland 4	N/D	40.9	N/D	41.0
Wetland 5	N/D	38.2	N/D	38.5
Wetland 6	N/D	34.7	N/D	35.0
Wetland 7	N/D	33.3	N/D	33.5
Wetland 8	N/D	31.0	N/D	32.2
Wetland 12	N/D	32.3	N/D	32.4

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	0.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 7	0.0%
Point 8	0.0%

Gas data collected on Jan. 5, 1998

*lena Rd gas
file
rec'd 3/5/98*

MANATEE COUNTY, LENA ROAD LANDFILL

WETLAND AND GAS MONITORING REPORT DECEMBER 1997

WETLAND STAFF GAUGE READINGS

	Week 1	Week 2	Week 3	Week 4
	03-Dec-97	10-Dec-97	18-Dec-97	
Wetland 1	35.6	35.6	36.0	
Wetland 2	34.5	34.1	34.9	
Wetland 3	35.0	35.0	35.4	
Wetland 4	40.5	40.5	40.5	
Wetland 5	38.3	38.3	38.5	
Wetland 6	34.7	34.8	34.8	
Wetland 7	33.3	33.3	33.5	
Wetland 8	31.7	31.7	32.1	
Wetland 12	32.2	33.3	32.5	

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	0.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 7	0.0%
Point 8	0.0%

Gas data collected on Dec. 18, 1997

D.E.P.
JAN 15 1998
SOUTHWEST DISTRICT
TAMPA

MANATEE COUNTY, LENA ROAD LANDFILL

WETLAND AND GAS MONITORING REPORT OCTOBER 1997

[Handwritten Signature]

WETLAND STAFF GAUGE READINGS

	Week 1	Week 2	Week 3	Week 4
	05-Nov-97	13-Nov-97	19-Nov-97	26-Nov-97
Wetland 1	35.7	35.7	36.0	35.6
Wetland 2	34.5	34.5	36.2	34.5
Wetland 3	35.0	34.9	35.3	35.0
Wetland 4	40.3	40.5	40.8	40.3
Wetland 5	38.2	38.1	38.3	38.3
Wetland 6	34.8	34.7	34.8	34.7
Wetland 7	33.3	33.2	33.4	33.3
Wetland 8	31.8	31.6	32.0	31.6
Wetland 12	32.2	32.1	32.3	32.3

METHANE GAS READINGS

Gas Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	0.0%

Gas Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 7	0.0%
Point 8	0.0%

Gas data collected on Nov. 18, 1997

D.E.P.
 JAN 15 1998
 SOUTH WEST LANDFILL
 TAMPA

Lena Rd gas

MANATEE COUNTY, LENA RAOD LANDFILL

MONTHLY WETLAND AND GAS MONITORING FOR OCTOBER 1997

WETLAND STAFF GAUGE READINGS

	Week 1	Week 2	Week 3	Week 4
	09-Oct-97	15-Oct-97	22-Oct-97	29-Oct-97
Wetland 1	35.4	35.3	35.3	35.5
Wetland 2	35.5	35.4	34.3	34.5
Wetland 3	34.8	34.7	34.7	34.8
Wetland 4	41.0	40.4	40.3	40.3
Wetland 5	38.1	37.9	37.8	37.9
Wetland 6	34.5	34.6	34.6	34.6
Wetland 7	33.3	33.1	33.0	33.1
Wetland 8	31.6	31.5	31.4	31.5
Wetland 12	32.2	32.1	32.0	32.0

METHANE GAS READINGS

Gas Monitoring Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	0.0%

Data collected on 15-Oct-97

Gas Monitoring Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 7	0.0%
Point 8	0.0%

Data collected on 15-Oct-97

MANATEE COUNTY, LENA ROAD LANDFILL

MONTHLY WETLAND AND GAS MONITORING FOR AUGUST 1997

WETLAND STAFF GAUGE READINGS

	Week 1	Week 2	Week 3	Week 4
	09-Aug-97	13-Aug-97	20-Aug-97	27-Aug-97
Wetland 1	36.9	36.7	36.1	35.9
Wetland 2	35.9	35.9	36.5	35.5
Wetland 3	35.7	36.5	36.5	35.0
Wetland 4	40.8	40.5	41.0	40.5
Wetland 5	37.5	37.5	37.6	37.5
Wetland 6	34.6	34.7	34.6	34.7
Wetland 7	33.1	33.1	33.3	33.2
Wetland 8	31.5	31.5	31.7	31.5
Wetland 12	32.1	32.1	32.2	32.1

METHANE GAS READINGS

Gas Monitoring Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	5.0%
Well 16	0.0%
Well 17	0.0%
Well 18	69.0%

Data collected on 27-Aug-97

Gas Monitoring Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 7	0.0%
Point 8	0.0%

Data collected on 27-Aug-97

AK
Rec'd 9/16/97
KNC

Lena Rd
gas file

MANATEE COUNTY, LENA RAOD LANDFILL

MONTHLY WETLAND AND GAS MONITORING FOR JUNE 1997

WETLAND STAFF GAUGE READINGS

	Week 1	Week 2	Week 3	Week 4
	02-Jun-97	11-Jun-97	18-Jun-97	
Wetland 1	35.0	36.9	35.9	
Wetland 2	35.5	33.5	33.5	
Wetland 3	35.5	34.7	34.5	
Wetland 4	38.5	38.5	38.5	
Wetland 5	36.0	35.9	35.5	
Wetland 6	34.1	34.0	33.9	
Wetland 7	32.5	32.5	32.5	
Wetland 8	31.2	31.3	31.2	
Wetland 12	31.2	31.2	30.7	

METAHNE GAS READINGS

Gas Monitoring Well	Reading % LEL
Well 1	0.0%
Well 2	0.0%
Well 3	0.0%
Well 4	0.0%
Well 5	0.0%
Well 6	0.0%
Well 7	0.0%
Well 8	0.0%
Well 9	0.0%
Well 10	0.0%
Well 11	0.0%
Well 12	0.0%
Well 13	0.0%
Well 14	0.0%
Well 15	0.0%
Well 16	0.0%
Well 17	0.0%
Well 18	0.0%

Data collected on 17-Jun-97

Gas Monitoring Point	Reading % LEL
Point 1	0.0%
Point 2	0.0%
Point 3	0.0%
Point 4	0.0%
Point 5	0.0%
Point 6	0.0%
Point 7	0.0%
Point 8	0.0%

Data collected on 17-Jun-97

gas mon file
 rec'd 8/8/97

MONTHLY WATER BALANCE AND GAS MONITORING REPORTS FOR THE MONTH OF APRIL 1997

D.E.P.
JUN 10 1997
Tampa

DATE	INPUT TO STAGE I	LEACHATE STAGE II	POND G.P.D. STAGE III	LEACHATE POND LEVEL	LEACHATE TO WWTP IN G.P.D.	RAINFALL IN INCHES	STORMWATER POND LEVEL	WEST WEIR DISCHARGE pH	REMARKS
1*	N/R		N/R	27.4	N/R	0.00	30.0		
2*	N/R		N/R	27.4	N/R	0.00	30.0		
3*	N/R		N/R	27.4	N/R	0.00	30.0		
4	341,267		263,200	27.4	43,100	N/R	30.0		
5*	N/R		N/R	27.5	N/R	0.00	30.0		
6*	N/R		N/R	27.5	N/R	0.00	30.0		
7	114,520		102,200	27.6	3,500	0.00	30.0		
8	35,780		33,400	27.6	2,100	0.00	30.0		
9*	N/R		N/R	27.8	N/R	0.00	30.0		
10*	N/R		N/R	27.8	N/R	0.00	30.0		
11	103,410		97,600	27.9	7,900	0.40	30.0		
12*	N/R		N/R	28.0	N/R	0.00	30.0		
13*	N/R		N/R	28.0	N/R	0.00	30.0		
14	356,595		17,300	28.0	98,400	0.70	30.0		
15	27,995		35,200	28.1	1,100	0.22	30.0		
16	459,100		43,400	28.0	113,800	0.00	29.9		
17	493,920		48,200	27.9	170,300	0.00	29.9		
18	314,310		31,800	27.9	98,400	0.00	29.9		
19*	N/R		N/R	27.8	N/R	0.00	29.9		
20*	N/R		N/R	27.7	N/R	0.00	29.9		
21	1,332,400		121,400	27.6	412,400	0.00	29.9		
22	187,570		48,815	27.7	42,800	0.00	29.8		
23*	N/R		N/R	27.7	N/R	2.00	29.8		
24*	N/R		N/R	28.0	N/R	0.00	30.3		
25*	N/R		N/R	28.0	N/R	0.00	30.4		
26*	N/R		N/R	28.1	N/R	3.30	30.4		
27*	N/R		N/R	29.0	N/R	0.00	32.2		
28	973,130		299,885	29.3	189,300	N/R	31.5		
29*	N/R		N/R	28.7	N/R	0.00	32.0		
30	742,800		820,900	28.9	1,383,900	0.00	31.6		
31									
TOTAL	5,482,797		1,963,300		2,567,000	6.62			

TOTAL ACREAGE--STAGE I: Open - 10 Intermediate - 120 Closed - 30

TOTAL ACREAGE--STAGE III: Open - 0 Intermediate - 71 Closed - 0

WETLANDS STAFF GAUGE LEVELS

Date Read: 4/16/97	Date Read: 4/30/97	Date Read:	Date Read:	Date Read:
# 1 35.1	# 1 35.7	# 1	# 1	
# 2 33.5	# 2 34.7	# 2	# 2	
# 3 34.7	# 3 35.1	# 3	# 3	
# 4 38.5	# 4 39.3	# 4	# 4	
# 5 35.5	# 5 36.8	# 5	# 5	
# 6 33.9	# 6 34.3	# 6	# 6	
# 7 32.5	# 7 32.5	# 7	# 7	
# 8 31.2	# 8 31.5	# 8	# 8	
# 12 30.8	# 12 31.6	# 12	# 12	

GAS MONITORING WELLS	
WELL NUMBER	READING % L.E.L.
1	0.0%
2	0.0%
3	0.0%
4	0.0%
5	0.0%
6	0.0%
7	0.0%
8	0.0%
9	0.0%
10	0.0%
11	0.0%
12	0.0%
13	0.0%
14	17.0%
15	8.0%
16	0.0%
17	0.0%
18	99.0%

1. N/R: Not reported due to weekends, holidays, staff sickness.

well is inside slurry wall.

GAS MONITORING POINTS AND WELLS

READ: 4/30/97

Gas Monitoring Points, % L.E.L.	
#1	0.0%
#2	0.0%
#3	0.0%
#4	0.0%
#5	0.0%
#6	0.0%
#7	0.0%
#8	0.0%

gas file

MONTHLY WATER BALANCE AND GAS MONITORING REPORTS FOR THE MONTH OF MARCH 1997

DATE	INPUT TO STAGE I	LEACHATE STAGE II	POND G.P.D. STAGE III	LEACHATE POND LEVEL	LEACHATE TO WWTP IN G.P.D.	RAINFALL IN INCHES	STORMWATER POND LEVEL	WEST WEIR DISCHARGE pH	REMARKS
1*	N/R		N/R	28.4	N/R	0.00	30.3	N/R	
2*	N/R		N/R	28.4	N/R	0.00	30.3	N/R	
3*	N/R		N/R	28.5	N/R	0.00	30.3	N/R	
4	1,112,967		257,320	28.5	418,000	0.00	30.3	7.1	
5	28,200		37,280	28.5	3,100	0.00	30.3	6.9	
6	33,500		43,500	28.5	800	0.00	30.3	6.9	
7*	N/R		N/R	28.5	N/R	0.00	30.2	N/R	
8*	N/R		N/R	28.5	N/R	0.00	30.2	N/R	
9*	N/R		N/R	28.6	N/R	0.10	30.2	N/R	
10	120,600		146,000	28.7	45,400	0.00	30.3	6.8	
11	43,000		39,000	28.7	58,000	0.00	30.3	6.7	
12	44,100		42,800	28.8	5,300	0.00	30.3	6.8	
13	31,100		30,400	28.9	2,100	0.00	30.3	6.9	
14	37,700		28,800	29.0	1,600	0.70	30.3	6.6	
15*	N/R		N/R	29.0	N/R	0.00	30.3	N/R	
16*	N/R		N/R	29.0	N/R	0.00	30.3	N/R	
17*	N/R		N/R	N/R	N/R	0.00	N/R	N/R	
18*	N/R		N/R	N/R	N/R	0.00	N/R	N/R	
19	387,400		192,900	28.9	174,600	0.00	30.2	6.8	
20*	N/R		N/R	N/R	N/R	0.57	N/R	N/R	
21*	N/R		N/R	28.9	N/R	0.78	30.3	N/R	
22*	N/R		N/R	28.7	N/R	0.00	30.3	N/R	
23*	N/R		N/R	28.5	N/R	0.00	30.4	N/R	
24	2,029,200		185,500	28.4	1,021,000	0.00	30.3	6.7	
25	482,300		35,700	28.0	307,000	0.60	30.4	6.9	
26	563,605		42,000	27.7	200,000	0.10	30.3	6.4	
27	492,398		38,600	27.5	256,000	0.00	30.3	6.4	
28	418,900		35,400	27.2	269,700	0.00	29.8	6.6	
29*	N/R		N/R	27.2	N/R	0.00	29.8	0.0	
30*	N/R		N/R	27.3	N/R	0.00	29.8	0.0	
31*	N/R		N/R	27.3	N/R	0.20	30.0	0.0	
TOTAL	5,824,970		1,155,200		2,762,600	3.05			

TOTAL ACREAGE--STAGE I: Open - 10 Intermediate - 120 Closed - 30

TOTAL ACREAGE--STAGE III: Open - 0 Intermediate - 71 Closed - 0

WETLANDS STAFF GAUGE LEVELS

Date Read: 3-1-97	Date Read: 3-5-97	Date Read: 3-12-97	Date Read: 3-19-97	Date Read: 3-26-97
# 1 35.1	# 1 35.1	# 1 35.0	# 1 35.1	# 1 35.0
# 2 33.6	# 2 33.5	# 2 33.5	# 2 33.5	# 2 33.5
# 3 34.7	# 3 34.7	# 3 34.5	# 3 34.5	# 3 34.6
# 4 38.5	# 4 38.5	# 4 38.5	# 4 38.5	# 4 38.5
# 5 35.5	# 5 35.5	# 5 35.5	# 5 35.5	# 5 35.5
# 6 33.9	# 6 33.8	# 6 33.8	# 6 33.9	# 6 33.8
# 7 32.5	# 7 32.5	# 7 32.3	# 7 32.4	# 7 32.3
# 8 31.2	# 8 31.2	# 8 31.2	# 8 31.2	# 8 31.2
# 12 30.8	# 12 30.7	# 12 30.5	# 12 30.5	# 12 30.9

GAS MONITORING WELLS	
WELL NUMBER	READING % L.E.L.
1	0.0%
2	0.0%
3	0.0%
4	0.0%
5	0.0%
6	0.0%
7	0.0%
8	0.0%
9	0.0%
10	0.0%
11	0.0%
12	0.0%
13	0.0%
14	0.0%
15	N/R
16	0.0%
17	0.0%
18	0.0%

1. N/R: Not reported due to weekends, holidays, staff sickness.

GAS MONITORING POINTS AND WELLS

READ: 3-13-97

Gas Monitoring Points, % L.E.L.	
#1	0.0%
#2	0.0%
#3	0.0%
#4	0.0%
#5	0.0%
#6	0.0%
#7	0.0%
#8	0.0%

Long Rd
gas file

MONTHLY WATER BALANCE AND GAS MONITORING REPORTS FOR THE MONTH OF FEBRUARY 1997

D.E.P.
APR 04 1997
SOUTH FLORIDA WATER TAMP

DATE	INPUT TO STAGE I	LEACHATE STAGE II	POND G.P.D. STAGE III	LEACHATE POND LEVEL	LEACHATE TO WWTF IN G.P.D.	RAINFALL IN INCHES	STORMWATER POND LEVEL	WEST WEIR DISCHARGE pH	REMARKS
1*	N/R		N/R	28.2	N/R	0.00	30.3	N/R	
2*	N/R		N/R	28.0	N/R	0.00	30.3	N/R	
3	952,669		124,700	28.0	385,000	0.00	30.3	6.7	
4	41,000		54,800	28.5	5,200	N/R	30.3	6.9	
5	27,300		35,800	28.1	1,100	0.00	30.3	7.3	
6	27,400		36,500	28.2	3,300	0.00	30.3	6.6	
7	31,300		42,000	28.3	4,400	0.00	30.3	6.8	
8*	N/R		N/R	28.3	N/R	0.00	30.3	N/R	
9*	N/R		N/R	28.3	N/R	0.00	30.3	N/R	
10	96,000		125,800	28.3	7,400	0.20	30.3	6.8	
11	39,800		39,800	28.4	1,100	0.00	30.3	6.8	
12	30,100		40,900	28.4	3,100	0.00	30.3	7.1	
13	29,800		36,800	28.4	1,300	0.00	30.3	6.7	
14	39,800		43,700	28.4	8,700	0.00	30.3	7.3	
15*	N/R		N/R	28.5	N/R	0.40	30.3	N/R	
16*	N/R		N/R	28.5	N/R	0.70	30.3	N/R	
17	85,700		111,000	28.8	6,900	0.00	30.4	7.0	
18*	N/R		N/R	28.8	N/R	0.00	30.4	N/R	
19	59,100		89,200	28.8	5,700	0.00	30.4	6.9	
20	42,500		56,200	28.8	2,800	0.00	30.4	6.9	
21	36,200		45,700	28.9	4,600	0.00	30.4	6.8	
22*	N/R		N/R	29.0	N/R	0.00	30.3	N/R	
23*	N/R		N/R	29.0	N/R	0.00	30.3	N/R	
24	537,500		130,000	28.8	179,400	0.00	30.3	6.6	
25	567,731		52,600	28.7	213,900	0.11	30.3	7.0	
26	373,002		35,500	28.4	168,700	0.00	30.3	7.0	
27*	N/R		N/R	28.4	N/R	0.00	30.3	N/R	
28*	N/R		N/R	28.4	N/R	0.00	30.3	N/R	
29									
30									
31									
TOTAL	3,016,902		1,101,000		1,002,600	1.41			

TOTAL ACREAGE--STAGE I: Open - 10 Intermediate - 120 Closed - 30

TOTAL ACREAGE--STAGE III: Open - 0 Intermediate - 71 Closed - 0

WETLANDS STAFF GAUGE LEVELS

Date Read: 2-5-97	Date Read: 2-12-97	Date Read: 2-21-97	Date Read: 2-26-97	Date Read:
# 1 35.1	# 1 35.1	# 1 35.0	# 1 35.1	
# 2 34.0	# 2 33.9	# 2 33.8	# 2 33.6	
# 3 34.7	# 3 34.5	# 3 34.7	# 3 34.7	
# 4 38.5	# 4 38.5	# 4 38.5	# 4 38.5	
# 5 35.5	# 5 35.5	# 5 35.5	# 5 35.5	
# 6 33.9	# 6 33.9	# 6 33.9	# 6 33.9	
# 7 32.4	# 7 32.4	# 7 32.5	# 7 32.5	
# 8 31.2	# 8 31.3	# 8 31.2	# 8 31.2	
# 12 30.7	# 12 30.5	# 12 30.9	# 12 30.8	

GAS MONITORING WELLS		
WELL NUMBER	READING % L.E.L.	
1		0.0%
2		0.0%
3		0.0%
4		0.0%
5		0.0%
6		0.0%
7		0.0%
8		0.0%
9		0.0%
10		0.0%
11		0.0%
12		0.0%
13		0.0%
14		0.0%
15	N/R	
16		0.0%
17		0.0%
18		24.0%

1. N/R: Not reported due to weekends, holidays, staff sickness.

GAS MONITORING POINTS AND WELLS

READ: 2-17-97

Gas Monitoring Points, % L.E.L.		
#1		0.0%
#2		0.0%
#3		0.0%
#4		0.0%
#5		0.0%
#6		0.0%
#7		0.0%
#8		0.0%

MONTHLY WATER BALANCE AND GAS MONITORING REPORTS FOR THE MONTH OF January 1997

DATE	INPUT TO STAGE I	LEACHATE STAGE II	POND G.P.D. STAGE III	LEACHATE POND LEVEL	LEACHATE TO WWTP IN G.P.D.	RAINFALL IN INCHES	STORMWATER POND LEVEL	WEST WEIR DISCHARGE pH	REMARKS
1*	N/R		N/R	27.7	N/R	0.00	30.2	N/R	
2	187,926		279,400	27.8	23,400	0.00	30.2	7.3	
3*	N/R		N/R	27.8	N/R	0.00	30.2	N/R	
4*	N/R		N/R	27.8	N/R	0.00	30.2	N/R	
5*	N/R		N/R	27.8	N/R	0.00	30.2	N/R	
6	128,595		165,100	28.0	28,600	0.00	30.2	7.1	
7*	N/R		N/R	28.1	N/R	0.00	30.2	N/R	
8*	N/R		N/R	28.0	N/R	0.00	30.2	N/R	
9	113,203		137,200	28.2	16,500	1.10	30.2	7.2	
10	33,597		44,900	28.3	3,000	0.00	30.3	7.2	
11*	N/R		N/R	28.4	N/R	0.00	30.3	N/R	
12*	N/R		N/R	28.4	N/R	0.00	30.3	N/R	
13	79,523		129,700	28.5	6,300	0.20	30.3	6.4	
14	25,957		42,800	28.5	1,500	0.00	30.3	6.6	
15	443,832		46,100	28.4	168,700	0.00	30.3	6.6	
16	473,100		49,700	28.1	183,600	0.00	30.3	6.6	
17*	N/R		N/R	28.1	N/R	0.00	30.3	N/R	
18*	N/R		N/R	28.1	N/R	0.00	30.3	N/R	
19*	N/R		N/R	28.2	N/R	0.00	30.3	N/R	
20	634,368		181,000	28.2	223,700	0.00	30.3	6.7	
21	27,700		42,500	28.2	3,300	0.00	30.3	6.9	
22*	N/R		N/R	28.3	N/R	N/R	30.3	N/R	
23	59,100		90,100	28.4	5,600	0.00	30.3	6.8	
24	39,500		51,900	28.4	4,500	0.00	30.3	6.8	
25*	N/R		N/R	28.5	N/R	0.60	30.4	N/R	
26*	N/R		N/R	28.6	N/R	0.00	30.3	N/R	
27	91,600		126,700	28.7	9,700	0.00	30.4	6.7	
28	51,635		49,425	28.7	8,400	N/R	30.3	6.7	
29*	N/R		N/R	28.7	N/R	0.00	30.3	N/R	
30	868,796		86,075	28.4	391,500	N/R	30.3	6.7	
31	537,700		50,600	28.4	186,900	0.00	30.4	6.9	
TOTAL	3,796,131		1,573,200		1,265,200	1.90			

TOTAL ACREAGE--STAGE I: Open - 10 Intermediate - 120 Closed - 30

TOTAL ACREAGE--STAGE III: Open - 0 Intermediate - 71 Closed - 0

WETLANDS STAFF GAUGE LEVELS

Date Read: 1-2-97	Date Read: 1-9-97	Date Read: 1-15-97	Date Read: 1-23-97	Date Read: 1-30-97
# 1 35.1	# 1 35.1	# 1 34.9	# 1 35.0	# 1 35.0
# 2 34.1	# 2 34.0	# 2 34.2	# 2 34.1	# 2 34.1
# 3 34.7	# 3 34.6	# 3 34.6	# 3 34.6	# 3 34.7
# 4 38.5	# 4 38.5	# 4 38.5	# 4 38.5	# 4 38.4
# 5 35.6	# 5 35.5	# 5 35.5	# 5 35.5	# 5 35.5
# 6 33.9	# 6 33.9	# 6 33.8	# 6 33.8	# 6 34.9
# 7 32.5	# 7 32.4	# 7 32.4	# 7 32.3	# 7 32.4
# 8 31.3	# 8 31.2	# 8 31.3	# 8 31.2	# 8 31.2
# 12 30.8	# 12 30.7	# 12 30.8	# 12 30.7	# 12 30.9

GAS MONITORING WELLS	
WELL NUMBER	READING % L.E.L.
1	0.0%
2	0.0%
3	0.0%
4	0.0%
5	0.0%
6	0.0%
7	0.0%
8	0.0%
9	0.0%
10	0.0%
11	0.0%
12	0.0%
13	0.0%
14	0.0%
15	N/R
16	0.0%
17	0.0%
18	3900.0%

1. N/R: Not reported due to weekends, holidays, staff sickness.

inside slurry wall

GAS MONITORING POINTS AND WELLS

READ: 1-6-97

Gas Monitoring Points, % L.E.L.	
#1	0.0%
#2	0.0%
#3	0.0%
#4	0.0%
#5	0.0%
#6	0.0%
#7	0.0%
#8	0.0%

Lena Rd
Geo File

(Rec'd
2/2/97)

Jan
1997

MONTHLY WATER BALANCE AND GAS MONITORING REPORTS FOR THE MONTH OF A DECEMBER, 1996

D.E.P.
FEB 26 1997
SOUTH FLORIDA
TAMPA

DATE	INPUT TO STAGE I	LEACHATE STAGE II	POND G.P.D. STAGE III	LEACHATE POND LEVEL	LEACHATE TO WWTP IN G.P.D.	RAINFALL IN INCHES	STORMWATER POND LEVEL	WEST WEIR DISCHARGE pH	REMARKS
1*	N/R		N/R	27.6	N/R	1.20	30.0	N/R	
2	108,475		155,300	27.8	9,500	0.05	30.1	7.1	
3	96,460		58,118	27.9	28,400	0.00	30.1	7.1	
4	473,446		55,782	27.8	125,600	0.00	30.1	7.0	
5*	N/R		N/R	27.7	N/R	0.00	30.1	N/R	
6	911,710		110,000	27.7	287,800	0.00	30.1	7.1	
7*	N/R		N/R	27.7	N/R	0.90	30.1	N/R	
8*	N/R		N/R	27.7	N/R	0.00	30.1	N/R	
9	1,337,249		173,100	27.5	432,300	0.00	30.2	6.9	
10	478,401		63,100	27.4	169,900	0.00	30.2	7.2	
11	74,669		64,800	27.4	22,900	0.00	30.2	7.1	
12	39,300		54,800	27.5	1,600	0.00	30.2	7.3	
13	48,700		64,500	27.6	7,900	0.00	30.3	7.1	
14*	N/R		N/R	27.7	N/R	0.00	30.2	N/R	
15*	N/R		N/R	27.7	N/R	0.00	30.2	N/R	
16	88,900		153,900	27.8	12,900	0.00	30.2	6.9	
17*	N/R		N/R	27.9	N/R	0.00	30.2	N/R	
18	78,600		125,600	28.0	10,200	0.00	30.2	7.4	
19	126,230		51,000	28.0	23,400	0.00	30.2	7.3	
20	342,000		36,225	27.8	150,600	0.00	30.2	7.2	
21*	N/R		N/R	27.7	N/R	0.00	30.2	N/R	
22*	N/R		N/R	27.6	N/R	0.00	30.2	N/R	
23	1,430,602		156,375	27.6	413,600	0.00	30.2	7.1	
24	525,100		57,800	27.5	174,200	0.00	30.2	7.4	
25*	N/R		N/R	27.4	N/R	0.00	30.2	N/R	
26	846,968		100,800	27.4	259,300	0.00	30.2	7.7	
27	25,500		36,300	27.4	7,000	0.00	30.2	7.5	
28*	N/R		N/R	27.5	N/R	0.00	30.2	N/R	
29*	N/R		N/R	27.6	N/R	0.00	30.2	N/R	
30*	N/R		N/R	27.6	N/R	0.00	30.2	N/R	
31*	N/R		N/R	27.7	N/R	0.00	30.2	N/R	
TOTAL	7,032,310		1,517,500		2,137,100	2.15			

TOTAL ACREAGE--STAGE I: Open - 10 Intermediate - 120 Closed - 30

TOTAL ACREAGE--STAGE III: Open - 0 Intermediate - 71 Closed - 0

WETLANDS STAFF GAUGE LEVELS

Date Read: 12-4-96	Date Read: 12-11-96	Date Read: 12-18-96	Date Read: 12-27-96	Date Read:
# 1 35.2	# 1 35.2	# 1 35.2	# 1 35.1	
# 2 34.0	# 2 34.3	# 2 34.2	# 2 34.2	
# 3 34.7	# 3 34.7	# 3 34.7	# 3 34.7	
# 4 38.5	# 4 38.5	# 4 38.5	# 4 38.5	
# 5 35.8	# 5 35.9	# 5 35.9	# 5 35.5	
# 6 33.9	# 6 33.9	# 6 33.9	# 6 33.9	
# 7 32.5	# 7 32.5	# 7 32.5	# 7 32.5	
# 8 31.2	# 8 31.3	# 8 31.2	# 8 31.2	
# 12 30.9	# 12 31.0	# 12 30.9	# 12 30.8	

GAS MONITORING WELLS	
WELL NUMBER	READING % L.E.L.
1	N/R
2	N/R
3	N/R
4	N/R
5	N/R
6	N/R
7	N/R
8	N/R
9	N/R
10	N/R
11	N/R
12	N/R
13	N/R
14	N/R
15	N/R
16	N/R
17	N/R
18	N/R

1. N/R: Not reported due to weekends, holidays, staff sickness.

GAS MONITORING POINTS AND WELLS READ: N/R

Gas Monitoring Points, % L.E.L.	
#1	N/R
#2	N/R
#3	N/R
#4	N/R
#5	N/R
#6	N/R
#7	N/R
#8	N/R



Lena Rd gas file

MANATEE COUNTY GOVERNMENT

Public Works Department

D.E.P.

October 18, 1996

OCT 23 1996

Allison Amram, P.G.
Division of Waste Management
Department of Environmental Protection, South West District
3804 Coconut Palm Drive
Tampa, FL 33619

SOUTH
TAMPA

Re: Manatee County Solid Waste Management Facility
Lena Road Landfill

Dear Ms. Amram:

Enclosed please find the September 1996, monthly ground water gradient, water balance and leachate tracking summary for the above referenced subject. Be advised that gas monitoring well 15 is damaged. This well is located next to our fuel island. The well was accidentally run over by the refueling truck. I believe the well is still functional. However, the protective casing above grade is damaged and needs to be replaced. Staff will work with PSI for repairs to the well. If you have any questions or require additional information please call me at 941-748-5543.

Sincerely,

Benjamin L. Alex

Benjamin L. Alex
Solid Waste Technical Coordinator

cc: Kim Ford, P.E., FDEP
Len Bramble, P.E., Public Works Director
Dan Gray, Utilities Operations Manager
Gus DiFonzo, Solid Waste Manager *HA*

MONTHLY WATER BALANCE AND GAS MONITORING REPORTS FOR THE MONTH OF A SEPTEMBER, 1996

DATE	INPUT TO	LEACHATE	POND G.P.D.	LEACHATE	LEACHATE TO	RAINFALL	STORMWATER	WEST WEIR	REMARKS
	STAGE I	STAGE II	STAGE III	POND LEVEL	WWTP IN G.P.D.	IN INCHES	POND LEVEL	DISCHARGE pH	
1*	N/R		N/R	27.7	N/R	0.00	31.9	N/R	
2	1,192,265		620,099	27.6	391,400	0.00	31.9	6.9	
3	557,750		160,200	27.6	203,600	0.00	31.9	6.8	
4*	N/R		N/R	27.5	N/R	0.00	31.9	N/R	
5	833,115		299,600	27.5	277,900	0.00	31.9	7.1	
6	84,900		161,000	27.5	OFF	0.00	31.9	7.3	
7*	N/R		N/R	27.5	N/R	0.00	31.9	N/R	
8	N/R		N/R	27.5	N/R	0.65	31.8	N/R	
9	221,850		250,580	27.6	OFF	0.20	31.9	6.8	
10*	N/R		N/R	27.6	N/R	1.40	31.9	N/R	
11	1,122,033		282,120	27.6	427,000	0.45	32.6	6.8	
12	714,600		285,680	27.6	273,300	0.00	32.1	7.2	
13	416,217		135,817	27.6	155,500	0.00	31.5	6.7	
14*	N/R		N/R	27.6	N/R	0.00	30.8	N/R	
15*	N/R		N/R	27.6	N/R	0.00	30.0	N/R	
16*	N/R		N/R	27.6	N/R	0.00	30.0	N/R	
17	1,114,550		285,583	27.6	355,000	0.00	30.0	6.7	
18*	N/R		N/R	27.6	N/R	0.00	30.1	N/R	
19	193,800		25,725	27.6	OFF	0.00	30.1	7.0	
20	80,475		225,194	27.6	OFF	0.00	30.1	6.9	
21*	N/R		N/R	27.7	N/R	0.11	30.2	N/R	
22*	N/R		N/R	27.9	N/R	0.75	30.1	N/R	
23	230,425		440,981	27.9	OFF	0.00	30.2	6.6	
24	296,091		157,820	28.0	0	0.00	30.2	6.6	
25*	N/R		N/R	27.7	N/R	0.00	30.2	N/R	
26	792,089		200,500	27.7	31,000	0.00	30.2	6.7	
27 *	N/R		N/R	27.7	N/R	0.00	30.2	N/R	
28*	N/R		N/R	27.7	N/R	0.00	30.2	N/R	
29*	N/R		N/R	27.7	N/R	0.00	31.9	N/R	
30	153,320		413,000	27.8	OFF	0.00	30.3	6.8	
TOTAL	8,003,480		3,943,899		2,114,700	3.56			

TOTAL ACREAGE--STAGE I: Open - 10 Intermediate - 120 Closed - 30

TOTAL ACREAGE--STAGE III: Open - 0 Intermediate - 71 Closed - 0

WETLANDS STAFF GAUGE LEVELS

Date Read: 9-3-96		Date Read: 9-11-96		Date Read: 9-19-96		Date Read: 9-26-96		Date Read:	
# 1	35.1	# 1	35.3	# 1	34.9	# 1	35.0		
# 2	34.0	# 2	34.5	# 2	34.3	# 2	34.2		
# 3	34.7	# 3	34.9	# 3	34.7	# 3	34.7		
# 4	38.5	# 4	38.7	# 4	38.5	# 4	38.5		
# 5	36.8	# 5	37.0	# 5	36.7	# 5	36.7		
# 6	34.1	# 6	34.3	# 6	34.2	# 6	34.2		
# 7	32.8	# 7	32.9	# 7	32.9	# 7	32.9		
# 8	31.3	# 8	31.4	# 8	31.4	# 8	31.4		
# 12	31.5	# 12	31.6	# 12	31.6	# 12	31.5		

GAS MONITORING WELLS

WELL	READING
NUMBER	% L.E.L.
1	0.0%
2	0.0%
3	0.0%
4	0.0%
5	0.0%
6	0.0%
7	0.0%
8	0.0%
9	0.0%
10	0.0%
11	2.0%
12	0.0%
13	0.0%
14	0.0%
15	Damaged
16	0.0%
17	0.0%
18	0.0%

1. N/R: Not reported due to weekends, holidays, staff sickness.

GAS MONITORING POINTS AND WELLS

READ: 9-20-96

Gas Monitoring Points, % L.E.L.	
#1	0.0%
#2	0.0%
#3	0.0%
#4	0.0%
#5	0.0%
#6	0.0%
#7	0.0%
#8	0.0%

Zena Rd rec'd 9/18/96

MONTHLY WATER BALANCE AND GAS MONITORING REPORTS FOR THE MONTH OF A AUGUST, 1996

DATE	INPUT TO STAGE I	LEACHATE STAGE II	POND G.P.D. STAGE III	LEACHATE POND LEVEL	LEACHATE TO WWTF IN G.P.D.	RAINFALL IN INCHES	STORMWATER POND LEVEL	WEST WEIR DISCHARGE pH	REMARKS
1	30,520		127,382	27.7	0	0.00	30.7	7.1	
2	511,207		86,820	27.7	11,600	0.10	30.7	7.0	
3*	N/R		N/R	27.7	N/R	0.13	30.7	N/R	
4*	N/R		N/R	27.8	N/R	0.00	30.8	N/R	
5	966,500		292,180	27.8	83,000	0.25	30.8	7.3	
6	414,501		99,520	27.9	33,100	0.40	30.8	6.8	
7	364,400		87,580	27.8	29,700	0.00	30.8	6.9	
8	375,298		88,400	27.8	26,100	0.00	30.8	7.1	
9	389,000		91,300	27.8	21,800	1.05	30.9	6.8	
10*	N/R		N/R	27.8	N/R	0.00	31.0	N/R	
11*	N/R		N/R	27.9	N/R	0.00	30.0	N/R	
12	1,587,255		341,500	28.7	209,600	0.53	31.0	7.2	
13	548,150		115,900	28.1	191,000	0.00	31.1	6.9	
14	652,850		131,630	27.8	238,300	0.00	31.1	7.1	
15	424,400		82,190	28.0	152,100	0.00	31.1	7.2	
16	522,100		99,998	27.5	190,600	0.00	31.2	7.4	
17*	N/R		N/R	27.5	N/R	2.70	31.1	N/R	
18*	N/R		N/R	27.5	N/R	0.00	31.8	N/R	
19	606,419		137,482	27.5	209,500	0.35	31.6	7.1	
20	437,282		N/R	27.1	170,700	0.00	31.9	7.2	
21	680,318		N/R	27.5	185,800	0.00	31.9	6.8	
22*	N/R		N/R	27.5	N/R	0.00	31.9	N/R	
23*	N/R		N/R	27.5	N/R	0.15	31.8	N/R	
24*	N/R		N/R	27.5	N/R	0.12	31.9	N/R	
25*	N/R		N/R	27.5	N/R	0.00	31.9	N/R	
26	386,550		OFF	27.5	OFF	0.00	31.9	6.7	
27	168,650		OFF	27.5	OFF	0.00	31.9	6.9	
28*	N/R		N/R	27.5	N/R	0.00	31.9	N/R	
29	158,550		121,425	27.5	OFF	0.00	31.9	6.9	
30	57,720		284,696	27.5	OFF	0.00	31.9	6.3	
31*	N/R		N/R	27.7	OFF	0.00	31.9	N/R	
TOTAL	9,281,670		2,188,003		1,752,900	5.78			

TOTAL ACREAGE--STAGE I: Open - 10 Intermediate - 120 Closed - 30

TOTAL ACREAGE--STAGE III: Open - 0 Intermediate - 71 Closed - 0

WETLANDS STAFF GAUGE LEVELS

Date Read: 8-7-96	Date Read: 8-14-96	Date Read: 8-27-96	Date Read: 7-31-96	Date Read:
# 1 35.2	# 1 35.2	# 1 34.3	# 1 35.2	
# 2 34.1	# 2 34.3	# 2 34.5	# 2 34.2	
# 3 34.6	# 3 34.7	# 3 34.6	# 3 34.7	
# 4 38.9	# 4 38.9	# 4 38.6	# 4 38.0	
# 5 37.2	# 5 37.2	# 5 37.0	# 5 37.2	
# 6 34.3	# 6 34.5	# 6 34.3	# 6 34.3	
# 7 32.9	# 7 33.1	# 7 32.9	# 7 33.9	
# 8 31.3	# 8 31.5	# 8 31.4	# 8 31.4	
# 12 31.7	# 12 31.8	# 12 31.6	# 12 31.6	

GAS MONITORING WELLS	
WELL NUMBER	READING % L.E.L.
1	0.0%
2	0.0%
3	0.0%
4	0.0%
5	0.0%
6	0.0%
7	0.0%
8	0.0%
9	0.0%
10	0.0%
11	0.0%
12	0.0%
13	8.0%
14	17.0%
15	0.0%
16	0.0%
17	0.0%
18	0.0%

1. N/R: Not reported due to weekends, holidays, staff sickness.

GAS MONITORING POINTS
AND WELLS
READ: 8-21-96

Gas Monitoring Points, % L.E.L.	
#1	0.0%
#2	0.0%
#3	0.0%
#4	0.0%
#5	0.0%
#6	0.0%
#7	0.0%
#8	0.0%

Zena Rd gas monitoring
Monitored by

Lena Rd

MONTHLY WATER BALANCE AND GAS MONITORING REPORTS FOR THE MONTH OF JULY, 1996

DATE	INPUT TO STAGE I	LEACHATE STAGE II	POND G.P.D. STAGE III	LEACHATE POND LEVEL	LEACHATE TO WWTP IN G.P.D.	RAINFALL IN INCHES	STORMWATER POND LEVEL	WEST WEIR DISCHARGE pH	REMARKS
1*	N/R		N/R	30.1	N/R	0.00	32.4	N/R	
2	1,141,312		379,879	29.7	219,300	0.00	32.5	N/R	
3*	N/R		N/R	29.7	N/R	0.00	32.5	N/R	
4*	N/R		N/R	29.5	N/R	0.01	32.5	N/R	
5*	N/R		N/R	29.4	N/R	0.30	32.5	N/R	
6*	N/R		N/R	29.4	N/R	1.60	32.1	N/R	
7*	N/R		N/R	29.2	N/R	0.00	31.9	N/R	
	2,317,225		971,620	29.4	6,275,000	0.00	32.0	7.1	
	565,279		196,280	28.9	218,700	0.00	32.0	7.0	
10	372,420		123,520	28.9	147,000	0.50	32.0	7.1	
11	542,370		174,600	28.9	210,200	0.00	32.0	7.0	
12	540,210		165,000	28.7	207,800	0.00	32.0	6.9	
13*	N/R		N/R	28.7	N/R	0.00	32.0	N/R	
14*	N/R		N/R	28.8	N/R	0.00	32.0	N/R	
15	1,606,220		459,500	28.8	633,000	1.20	32.0	7.0	
16	669,050		281,600	28.5	269,000	0.00	32.4	6.9	
17	509,349		173,680	27.9	212,800	0.00	32.4	6.9	
18	387,150		125,220	27.7	157,800	0.00	32.5	6.7	
19	514,050		160,500	27.5	210,500	0.00	32.5	6.7	
20*	N/R		N/R	27.1	N/R	0.00	32.5	N/R	
21*	N/R		N/R	27.1	N/R	0.00	32.4	N/R	
22	1,260,990		456,099	27.4	465,400	0.00	32.5	6.7	
23	594,300		185,781	27.4	29,900	0.00	32.3	6.9	
24	305,350		91,218	27.4	15,800	0.10	32.4	6.8	
25	434,050		127,082	27.4	22,600	0.00	32.4	6.9	
26	437,450		123,520	27.3	20,400	0.00	32.3	7.1	
27*	N/R		N/R	27.3	N/R	0.00	31.9	N/R	
28*	N/R		N/R	27.3	N/R	0.00	31.8	N/R	
	N/R		N/R	27.3	N/R	0.00	30.7	N/R	
	695,075		463,180	27.3	21,800	1.10	30.5	7.3	
31	22,200		173,718	27.5	0	0.00	30.7	7.0	
TOTAL	12,914,050		4,831,997		9,337,000	4.81			

TOTAL ACREAGE--STAGE I: Open - 10 Intermediate - 120 Closed - 30

TOTAL ACREAGE--STAGE III: Open - 0 Intermediate - 71 Closed - 0

WETLANDS STAFF GAUGE LEVELS

Date Read: 7-10-96	Date Read: 7-17-96	Date Read: 7-24-96	Date Read: 7-31-96	Date Read:
# 1 35.7	# 1 35.5	# 1 35.1	# 1 35.2	
# 2 34.7	# 2 34.5	# 2 34.2	# 2 34.2	
# 3 35.0	# 3 34.9	# 3 34.7	# 3 34.7	
# 4 38.3	# 4 38.5	# 4 38.3	# 4 38.0	
# 5 37.8	# 5 37.8	# 5 37.4	# 5 37.2	
# 6 34.7	# 6 34.6	# 6 34.5	# 6 34.3	
# 7 33.2	# 7 33.2	# 7 33.0	# 7 33.9	
# 8 31.6	# 8 31.5	# 8 31.5	# 8 31.4	
# 12 32.0	# 12 31.7	# 12 31.8	# 12 31.6	

GAS MONITORING WELLS	
WELL NUMBER	READING % L.E.L.
1	0.0%
2	0.0%
3	0.0%
4	0.0%
5	0.0%
6	0.0%
7	0.0%
8	0.0%
9	0.0%
10	0.0%
11	0.0%
12	0.0%
13	0.0%
14	12.0%
15	0.0%
16	0.0%
17	0.0%
18	9.0%

1. N/R: Not reported due to weekends, holidays, staff sickness.

GAS MONITORING POINTS AND WELLS READ: 7-15-96

Gas Monitoring Points, % L.E.L.	
#1	0.0%
#2	0.0%
#3	0.0%
#4	0.0%
#5	0.0%
#6	0.0%
#7	0.0%
#8	0.0%

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Lena Rd

MONTHLY WATER BALANCE AND GAS MONITORING REPORTS FOR THE MONTH OF JUNE, 1996

DATE	INPUT TO STAGE I	LEACHATE STAGE II	POND G.P.D. STAGE III	LEACHATE POND LEVEL	LEACHATE TO WWTP IN G.P.D.	RAINFALL IN INCHES	STORMWATER POND LEVEL	WEST WEIR DISCHARGE pH	REMARKS
1*	N/R		N/R	28.6	N/R	0.00	31.2	N/R	
2*	N/R		N/R	28.6	N/R	0.00	31.2	N/R	
3	881,450		539,470	28.6	210,000	0.00	31.2	6.7	
4	265,020		108,600	28.6	70,800	0.00	31.2	6.9	
5	300,930		116,420	28.6	83,500	0.00	31.2	6.9	
6	341,550		104,780	28.4	85,500	0.00	31.2	6.4	
7	311,000		80,720	28.4	56,200	0.00	31.2	6.4	
8*	N/R		N/R	28.4	N/R	0.00	31.2	N/R	
9*	N/R		N/R	28.4	N/R	0.20	31.2	N/R	
10	1,097,257		223,880	28.4	42,500	1.10	31.2	7.0	
11	475,633		109,120	28.5	1,800	0.16	31.4	6.9	
12	433,520		80,080	28.8	5,500	1.85	31.4	7.0	
13	401,250		279,920	29.3	28,400	0.10	32.5	6.8	
14	458,040		110,480	29.3	18,000	0.00	32.4	7.1	
15	N/R		N/R	29.3	N/R	0.00	32.4	N/R	
16	N/R		N/R	29.5	N/R	1.90	32.5	N/R	
17	1,131,536		631,322	30.0	34,400	0.02	33.3	7.2	
18*	N/R		N/R	30.1	N/R	0.00	32.5	N/R	
19*	N/R		N/R	N/R	N/R	N/R	N/R	N/R	
20	1,203,502		570,600	30.3	994,800	0.00	31.5	7.1	
21	492,344		322,002	30.5	330,000	0.25	33.0	7.1	
22*	N/R		N/R	30.5	N/R	0.00	32.7	N/R	
23*	N/R		N/R	30.5	N/R	0.00	32.3	N/R	
24	1,399,210		816,596	30.4	634,900	0.00	31.6	6.8	
25	385,946		160,000	30.3	172,500	0.00	31.6	6.5	
26	496,132		191,300	30.3	191,000	0.10	31.6	6.5	
27*	N/R		N/R	30.1	221,000	1.60	31.7	N/R	
28*	N/R		N/R	31.2	249,000	0.00	32.4	N/R	
29	N/R		N/R	N/R	N/R	0.15	N/R	N/R	
30	N/R		N/R	N/R	N/R	0.00	N/R	N/R	
31									
TOTAL	10,074,320		4,445,290		3,429,800	7.43			

TOTAL ACREAGE--STAGE I: Open - 10 Intermediate - 120 Closed - 30

TOTAL ACREAGE--STAGE III: Open - 0 Intermediate - 71 Closed - 0

WETLANDS STAFF GAUGE LEVELS

Date Read: 6-05-96	Date Read: 6-12-96	Date Read: 6-20-96	Date Read: 6-24-96	Date Read:
# 1 35.1	# 1 35.7	# 1 36.3	# 1 35.8	
# 2 34.5	# 2 35.6	# 2 35.0	# 2 35.0	
# 3 34.8	# 3 34.8	# 3 34.8	# 3 35.3	
# 4 38.9	# 4 38.6	# 4 39.5	# 4 39.6	
# 5 37.4	# 5 37.3	# 5 37.8	# 5 37.8	
# 6 34.2	# 6 34.1	# 6 34.7	# 6 34.6	
# 7 32.8	# 7 32.6	# 7 33.1	# 7 33.1	
# 8 31.3	# 8 31.3	# 8 31.8	# 8 31.7	
# 12 31.2	# 12 31.1	# 12 31.8	# 12 31.9	

GAS MONITORING WELLS	
WELL	READING
NUMBER	% L.E.L.
1	0.0%
2	0.0%
3	0.0%
4	0.0%
5	0.0%
6	0.0%
7	0.0%
8	0.0%
9	0.0%
10	0.0%
11	0.0%
12	0.0%
13	7.0%
14	29.0%
15	0.0%
16	0.0%
17	0.0%
18	23.0%

1. N/R: Not reported due to weekends, holidays, staff sickness.

GAS MONITORING POINTS AND WELLS

READ: 6-14-96

Gas Monitoring Points, % L.E.L.	
#	% L.E.L.
#1	0.0%
#2	0.0%
#3	0.0%
#4	0.0%
#5	3.0%
#6	0.0%
#7	0.0%
#8	0.0%

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MONTHLY WATER BALANCE AND GAS MONITORING REPORTS FOR THE MONTH OF MAY, 1996

DATE	INPUT TO STAGE I	LEACHATE STAGE II	POND G.P.D. STAGE III	LEACHATE POND LEVEL	LEACHATE TO WWTP IN G.P.D.	RAINFALL IN INCHES	STORMWATER POND LEVEL	WEST WEIR DISCHARGE pH	REMARKS
1	769,580		144,600	28.8	492,000	0.00	32.6	6.6	
2	351,100		66,400	28.7	190,800	0.00	32.6	6.5	
3	337,870		64,120	28.5	178,600	0.40	32.6	6.7	
4*	N/R		N/R	28.5	N/R	0.10	32.6	N/R	
5*	N/R		N/R	28.4	N/R	0.00	32.7	N/R	
6	903,930		182,980	28.3	375,500	0.00	32.7	6.9	
7	319,850		60,700	27.9	124,400	0.00	32.7	6.9	
8	320,900		57,500	27.8	127,300	0.30	32.7	6.7	
9*	N/R		N/R	27.8	N/R	0.50	32.7	N/R	
10	637,395		111,900	27.8	242,800	0.00	32.7	6.5	
11*	N/R		N/R	27.8	N/R	0.00	32.8	N/R	
12*	N/R		N/R	27.6	N/R	0.00	32.8	N/R	
13	862,130		149,120	27.7	311,200	0.00	32.8	6.4	
14	350,750		59,380	27.7	124,000	0.00	32.8	6.2	
15	272,850		46,000	27.5	97,500	0.00	32.7	6.6	
16	279,660		47,100	27.4	76,500	0.00	32.7	6.6	
17	261,860		43,820	27.4	20,800	0.00	32.7	6.8	
18*	N/R		N/R	27.4	N/R	0.00	32.6	N/R	
19*	N/R		N/R	27.4	N/R	0.00	32.6	N/R	
20	1,084,255		140,980	27.6	62,500	0.80	32.2	6.3	
21	410,450		48,700	27.6	19,300	1.55	32.7	6.6	
22	354,220		134,300	27.7	20,000	0.51	33.1	6.6	
23	371,675		86,900	27.7	8,600	0.00	3.2	6.4	
24	286,080		77,100	27.6	5,800	0.10	33.0	6.6	
25*	N/R		N/R	27.7	N/R	0.00	32.6	N/R	
26*	N/R		N/R	27.7	N/R	0.00	31.9	N/R	
27*	N/R		N/R	29.9	N/R	0.00	31.2	N/R	
28*	N/R		N/R	27.7	N/R	0.00	30.6	N/R	
29	1,424,470		362,420	27.7	21,000	0.10	30.0	6.6	
30	266,450		62,580	27.7	2,300	3.40	29.9	6.8	
31	267,500		369,430	28.6	13,900	0.00	31.3	6.5	
TOTAL	10,132,975		2,316,030		2,514,800	7.76			

TOTAL ACREAGE--STAGE I: Open - 10 Intermediate - 120 Closed - 30

TOTAL ACREAGE--STAGE III: Open - 0 Intermediate - 71 Closed - 0

WETLANDS STAFF GAUGE LEVELS

Date Read: 5-01-96	Date Read: 5-08-96	Date Read: 5-15-96	Date Read: 5-29-96	Date Read:
# 1 35.3	# 1 35.2	# 1 35.2	# 1 35.1	
# 2 34.5	# 2 34.3	# 2 34.3	# 2 34.3	
# 3 34.8	# 3 34.8	# 3 34.7	# 3 34.7	
# 4 39.4	# 4 38.8	# 4 38.4	# 4 38.8	
# 5 37.6	# 5 37.5	# 5 37.4	# 5 37.3	
# 6 34.5	# 6 34.3	# 6 34.1	# 6 34.1	
# 7 33.9	# 7 34.8	# 7 32.7	# 7 32.7	
# 8 31.3	# 8 31.2	# 8 31.3	# 8 31.2	
# 12 31.5	# 12 31.4	# 12 31.2	# 12 31.2	

GAS MONITORING WELLS		
WELL NUMBER	READING % L.E.L.	
1		0.0%
2		0.0%
3		0.0%
4		0.0%
5		0.0%
6		0.0%
7		0.0%
8		0.0%
9		0.0%
10		0.0%
11		0.0%
12		0.0%
13		0.0%
14		0.0%
15		0.0%
16		0.0%
17		0.0%
18		0.0%

1. N/R: Not reported due to weekends, holidays, staff sickness.

GAS MONITORING POINTS AND WELLS

READ: 5-16-96

Gas Monitoring Points, % L.E.L.		
#1		0.0%
#2		0.0%
#3		N/R
#4		0.0%
#5		0.0%
#6		0.0%
#7		0.0%
#8		0.0%

Lena Rd gas file

MONTHLY WATER BALANCE AND GAS MONITORING REPORTS FOR THE MONTH OF APRIL, 1996

DATE	INPUT TO STAGE I	LEACHATE STAGE II	POND G.P.D. STAGE III	LEACHATE POND LEVEL	LEACHATE TO WWTP IN G.P.D.	RAINFALL IN INCHES	STORMWATER POND LEVEL	WEST WEIR DISCHARGE pH	REMARKS
1	470,650		302,100	32.0	690,400	0.01	33.3	6.6	
2	149,200		98,000	32.0	242,500	0.00	33.3	6.5	
3	132,500		86,800	31.0	220,500	0.00	33.3	6.7	
4	139,830		88,100	32.4	228,500	0.00	33.0	6.5	
5	117,940		72,700	32.1	189,000	0.00	33.0	6.5	
6*	N/R		N/R	32.7	N/R	0.00	32.8	N/R	
7*	N/R		N/R	32.9	N/R	0.00	32.7	N/R	
8*	N/R		N/R	33.0	N/R	0.30	32.8	N/R	
9	53,461		323,500	33.0	852,200	0.00	32.6	6.4	
10	442,110		795,000	32.8	242,300	0.00	32.6	6.4	
11*	N/R		N/R	32.6	N/R	0.00	32.6	N/R	
12	811,650		139,200	32.4	444,500	0.00	32.5	6.6	
13*	N/R		N/R	32.2	N/R	0.00	32.6	N/R	
14*	N/R		N/R	32.0	N/R	0.00	32.7	N/R	
15*	N/R		N/R	32.6	N/R	0.40	31.8	N/R	
16*	N/R		N/R	32.8	N/R	0.00	31.6	N/R	
17*	N/R		N/R	32.7	N/R	0.00	31.3	N/R	
18	2,474,320		377,000	31.3	1,226,700	0.00	32.6	6.4	
19	412,590		66,920	32.0	12,500	0.00	32.3	6.2	
20	N/R		N/R	31.8	N/R	0.00	32.2	N/R	
21	N/R		N/R	31.5	N/R	0.00	32.2	N/R	
22	943,205		182,080	31.3	0	0.00	32.3	6.4	
23	381,150		56,220	31.3	201,400	0.00	32.2	6.4	
24	390,950		57,780	30.7	87,600	0.15	32.2	6.3	
25	353,850		51,100	30.5	0	0.00	32.3	6.4	
26	440,450		62,500	30.0	240,000	0.50	32.3	6.6	
27 *	N/R		N/R	29.9	N/R	0.00	32.3	N/R	
28*	N/R		N/R	29.8	N/R	0.00	32.3	N/R	
29	1,106,170		153,400	29.8	723,900	0.10	32.4	6.5	
30									
31									
TOTAL	8,820,026		2,912,400		5,602,000	1.46			

TOTAL ACREAGE--STAGE I: Open - 10 Intermediate - 120 Closed - 30

TOTAL ACREAGE--STAGE III: Open - 0 Intermediate - 71 Closed - 0

WETLANDS STAFF GAUGE LEVELS

Date Read: 4-03-96	Date Read: 4-18-96	Date Read: 4-24-96	Date Read:	Date Read:
# 1 35.3	# 1 35.1	# 1 35.2		
# 2 34.5	# 2 34.3	# 2 34.2		
# 3 34.7	# 3 34.7	# 3 34.7		
# 4 39.6	# 4 39.5	# 4 38.9		
# 5 37.8	# 5 37.7	# 5 37.5		
# 6 35.6	# 6 34.5	# 6 34.4		
# 7 33.1	# 7 33.0	# 7 32.8		
# 8 31.6	# 8 31.4	# 8 31.2		
# 12 31.7	# 12 31.5	# 12 31.4		

GAS MONITORING WELLS	
WELL NUMBER	READING % L.E.L.
1	0.0%
2	0.0%
3	0.0%
4	0.0%
5	0.0%
6	0.0%
7	0.0%
8	0.0%
9	0.0%
10	0.0%
11	0.0%
12	0.0%
13	0.0%
14	0.0%
15	0.0%
16	0.0%
17	0.0%
18	0.0%

1. N/R: Not reported due to weekends, holidays, staff sickness.

GAS MONITORING POINTS AND WELLS

READ: 4-18-96

Gas Monitoring Points, % L.E.L.	
#1	0.0%
#2	0.0%
#3	0.0%
#4	0.0%
#5	0.0%
#6	0.0%
#7	0.0%
#8	0.0%

Lena Rd
Rd 5/20/96

MONTHLY WATER BALANCE AND GAS MONITORING REPORTS FOR THE MONTH OF MARCH, 1996

DATE	INPUT TO STAGE I	LEACHATE STAGE II	POND G.P.D. STAGE III	LEACHATE POND LEVEL	LEACHATE TO WWTP IN G.P.D.	RAINFALL IN INCHES	STORMWATER POND LEVEL	WEST WEIR DISCHARGE pH	REMARKS
1	129,642		60,500	32.4	275,500	1.00	33.9	6.6	
2*	N/R		N/R	32.4	N/R	1.00	34.4	N/R	
3*	N/R		N/R	32.2	N/R	0.00	34.5	N/R	
4	414,003		366,700	32.0	751,500	0.00	34.5	6.5	
5	153,810		100,000	32.0	258,500	0.00	34.5	6.6	
6	163,525		108,700	31.8	286,000	0.00	34.5	6.5	
7	150,085		93,000	31.6	260,500	0.00	34.5	6.3	
8	133,271		79,400	31.4	237,200	0.10	34.5	6.6	
9*	N/R		N/R	31.0	N/R	0.00	34.5	N/R	
10*	N/R		N/R	31.0	N/R	0.00	34.5	N/R	
11	360,618		245,500	30.7	766,500	0.25	34.5	6.7	
12	100,655		75,400	31.0	238,500	0.00	34.1	6.6	
13	122,135		92,500	32.0	304,800	0.00	33.9	6.7	
14	105,231		78,200	32.0	254,000	0.00	33.9	6.4	
15	98,515		71,800	31.6	244,000	0.00	33.8	6.5	
16*	N/R		N/R	31.5	N/R	0.00	33.9	N/R	
17*	N/R		N/R	31.3	N/R	0.00	33.9	N/R	
18	327,870		222,800	31.0	776,700	0.00	33.8	5.7	
19	103,805		58,800	30.9	220,400	0.00	33.9	6.5	
20	124,175		73,400	30.7	274,900	0.00	33.9	6.6	
21	110,145		67,500	30.5	249,000	0.00	33.9	6.7	
22	88,455		55,100	30.0	205,500	0.00	33.9	6.6	
23*	N/R		N/R	29.8	N/R	0.00	33.9	N/R	
24*	N/R		N/R	29.7	N/R	0.00	33.9	N/R	
25	295,915		193,900	29.2	742,500	0.00	33.9	6.7	
26	85,520		70,000	29.0	271,000	0.50	33.9	6.6	
27	90,909		60,220	29.0	234,200	1.10	33.9	6.6	
28	74,990		81,980	28.8	235,900	0.65	34.0	6.4	
29	67,696		105,400	28.7	235,500	0.00	34.3	6.6	
30	N/R		N/R	28.7	N/R	0.80	34.3	N/R	
31	N/R		N/R	31.9	N/R	0.15	33.5	N/R	
TOTAL	3,300,970		2,360,800		7,322,600	5.55			

TOTAL ACREAGE--STAGE I: Open - 5 Intermediate - 125 Closed - 30

TOTAL ACREAGE--STAGE III: Open - 0 Intermediate - 71 Closed - 0

WETLANDS STAFF GAUGE LEVELS

Date Read: 3-06-96	Date Read: 3-13-96	Date Read: 3-20-96	Date Read: 3-27-96	Date Read:
# 1 35.3	# 1 35.2	# 1 35.1	# 1 35.2	
# 2 34.5	# 2 34.3	# 2 34.2	# 2 34.6	
# 3 34.8	# 3 34.7	# 3 35.7	# 3 34.7	
# 4 39.3	# 4 38.4	# 4 38.5	# 4 39.9	
# 5 38.0	# 5 37.9	# 5 37.8	# 5 37.7	
# 6 34.7	# 6 34.6	# 6 34.5	# 6 34.4	
# 7 33.1	# 7 33.1	# 7 33.0	# 7 32.9	
# 8 31.7	# 8 31.6	# 8 31.5	# 8 32.3	
# 12 31.8	# 12 31.7	# 12 31.6	# 12 31.5	

GAS MONITORING WELLS		
WELL NUMBER	READING % L.E.L.	
1		0.0%
2		0.0%
3		0.0%
4		0.0%
5		0.0%
6		0.0%
7		0.0%
8		0.0%
9		0.0%
10		0.0%
11		0.0%
12		1.0%
13		1.0%
14		1.0%
15		1.0%
16		0.0%
17		2.0%
18		1.0%

1. N/R: Not reported due to weekends, holidays, staff sickness.

GAS MONITORING POINTS AND WELLS

READ: 3-15-96

Gas Monitoring Points, % L.E.L.	
#1	1.0%
#2	1.0%
#3	1.0%
#4	1.0%
#5	0.0%
#6	2.0%
#7	3.0%
#8	1.0%

with pond

MONTHLY WATER BALANCE AND GAS MONITORING REPORTS FOR THE MONTH OF FEBRUARY, 1996

DATE	INPUT TO STAGE I	LEACHATE STAGE II	POND G.P.D. STAGE III	LEACHATE POND LEVEL	LEACHATE TO WWTP IN G.P.D.	RAINFALL IN INCHES	STORMWATER POND LEVEL	WEST WEIR DISCHARGE pH	REMARKS
1	104,220		50,000	33.0	177,900	0.00	34.0	6.2	
2	129,145		50,000	32.9	210,100	0.00	34.0	6.4	
3*	N/R		N/R	32.9	N/R	0.70	34.0	N/R	
4*	N/R		N/R	32.9	N/R	0.00	34.0	N/R	
5	160,270		50,000	32.9	247,100	0.00	34.0	6.6	
6	1,545		50,000	33.0	10,500	0.00	34.0	6.6	
7	11,958		50,000	33.0	11,500	0.00	34.1	6.6	
	13,877		50,000	33.0	11,900	0.00	34.1	6.6	
	14,160		50,000	33.2	13,400	0.00	34.1	6.5	
10*	N/R		N/R	33.2	N/R	0.00	34.1	N/R	
11*	N/R		N/R	33.4	N/R	0.00	34.2	N/R	
12	35,768			33.4	35,500	0.00	34.2	6.6	
13	9,152		68,000	33.4	10,000	0.00	34.2	6.6	Q meter stg. III
14	12,132		67,400	33.4	12,300	0.00	34.2	6.6	
15	13,686		66,200	33.4	12,000	0.15	34.2	7.2	
16	13,617		64,700	33.7	12,000	0.00	34.3	6.6	
17*	N/R		N/R	33.7	N/R	0.00	34.2	N/R	
18*	N/R		N/R	33.8	N/R	0.00	34.2	N/R	
19	56,555		192,800	33.8	67,000	0.00	34.2	6.2	
20	182,045		66,000	33.7	227,700	0.00	34.0	6.4	
21	179,355		61,400	33.5	274,500	0.00	34.0	6.6	
22	158,745		64,300	33.2	271,300	0.00	34.0	6.6	
23	137,065		62,100	33.0	259,500	0.00	34.0	6.4	
24*	N/R		N/R	32.9	N/R	0.00	34.1	N/R	
25*	N/R		N/R	32.7	N/R	0.00	34.1	N/R	
26	405,027		189,600	33.2	795,700	0.00	34.0	6.4	
27	100,869		53,000	31.9	237,500	0.00	34.0	6.7	
28	160,515		68,500	32.4	307,900	0.00	33.9	6.6	
	149,879		49,800	32.4	225,600	0.35	33.9	6.6	
31									
TOTAL	2,049,585		1,423,800		3,430,900	1.20			
TOTAL ACREAGE--STAGE I: Open - 5 Intermediate - 125 Closed - 30									
TOTAL ACREAGE--STAGE III: Open - 0 Intermediate - 71 Closed - 0									

WETLANDS STAFF GAUGE LEVELS

Date Read: 2-07-96	Date Read: 2-13-96	Date Read: 2-21-96	Date Read: 2-28-96	Date Read:
# 1 35.2	# 1 35.1	# 1 35.1	# 1 35.1	
# 2 35.5	# 2 34.4	# 2 34.2	# 2 34.2	
# 3 35.0	# 3 34.7	# 3 34.7	# 3 34.7	
# 4 39.3	# 4 38.7	# 4 39.1	# 4 39.9	
# 5 38.2	# 5 38.1	# 5 38.0	# 5 37.9	
# 6 34.6	# 6 34.5	# 6 34.5	# 6 34.5	
# 7 33.1	# 7 33.1	# 7 33.1	# 7 33.0	
# 8 31.6	# 8 31.5	# 8 31.5	# 8 31.4	
# 12 31.7	# 12 31.6	# 12 31.6	# 12 31.5	

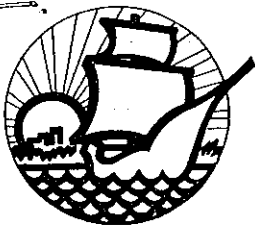
GAS MONITORING WELLS	
WELL NUMBER	READING % L.E.L.
1	0.0%
2	2.0%
3	0.0%
4	0.0%
5	0.0%
6	0.0%
7	0.0%
8	0.0%
9	0.0%
10	0.0%
11	0.0%
12	0.0%
13	0.0%
14	0.0%
15	0.0%
16	0.0%
17	0.0%
18	0.0%

1. Stage III volumes estimated due to broken totalizer. New totalizer installed on 2/12/96.
2. N/R: Not reported due to weekends, holidays, staff sickness.

GAS MONITORING POINTS AND WELLS

READ: 2-17-96

Gas Monitoring Points, % L.E.L.	
#1	1.0%
#2	0.0%
#3	1.0%
#4	0.0%
#5	0.0%
#6	0.0%
#7	0.0%
#8	0.0%



D.E.P.
APR 10 1996
SOUTHWEST DISTRICT
TAMPA

*gas file
Leno Rd 45*
**MANATEE COUNTY
GOVERNMENT**
Public Works Department

April 3, 1996

Allison Amram, P.G.
Division of Waste Management
Department of Environmental Protection, South West District
3804 Coconut Palm Drive
Tampa, FL 33619

Re: Manatee County Solid Waste Management Facility
1st Quarter 1996 Gas Monitoring and Waste Quantity Report

Dear Ms. Amram:

Enclosed is the referenced subject for the period January through October 1996. The Gas Monitoring Report, Table 1, shows that the measurements for the lower explosive limit for methane was within acceptable values as given in our operating permit, specific condition No. 14.

The Waste Quantity Report, Table 2, summarizes the attached Material Class Report for each month. The grand total of material landfilled, recycled and diverted is 93,530 tons, 6,632 and 191 tons, respectively. If you require further information, or need assistance regarding this matter, please contact me at (941) 748-5543.

Sincerely,

Benjamin L. Alex

Benjamin L. Alex
Solid Waste Technical Coordinator

cc: Lenox E. "Len" Bramble, P.E., Public Works Director
Dan Gray, Utilities Operations Manager
AKG Gus DiFonzo, Solid Waste Manager



Lena Rad Sanitary Landfill
Table 1
Quarterly Gas Monitoring Report
January - March 1996

Gas Monitoring Wells

<u>Monitoring Well</u>	<u>January</u>	<u>February</u>	<u>March</u>
1	0.0	0.0	0.0
2	0.0	2.0	0.0
3	0.0	0.0	0.0
4	0.0	0.0	0.0
5	0.0	0.0	0.0
6	0.0	0.0	0.0
7	0.0	0.0	0.0
8	0.0	0.0	0.0
9	0.0	0.0	0.0
10	0.0	0.0	0.0
11	0.0	0.0	0.0
12	0.0	0.0	1.0
13	0.0	0.0	1.0
14	0.0	0.0	1.0
15	0.0	0.0	1.0
16	0.0	0.0	0.0
17	0.0	0.0	2.0
18	0.0	1.0	0.0

Gas Monitoring Points

<u>Monitoring Point</u>	<u>January</u>	<u>February</u>	<u>March</u>
1	0.0	1.0	1.0
2	2.0	0.0	1.0
3	4.0	1.0	0.0
4	0.0	0.0	1.0
5	3.0	0.0	0.0
6	0.0	0.0	2.0
7	2.0	0.0	3.0
8	0.0	0.0	1.0

Lena Rad Sanitary Landfill
Table 1 (Cont.)
Quarterly Gas Monitoring Report
January - March 1996

NOTES:

1. All values given in percent.
2. All values reported on a monthly basis, submitted with the monthly ground water balance report.
3. All wells sampled for the lower explosive limit of methane per specific condition 14 of the operating permit.
4. January, February and March data collected on 1/19/96, 2/16/96 and 3/15/96, respectively.
5. Gas monitoring point No. 1 (GMP-1) is located at the scalehouse.
6. GMP-2 a storage shed.
7. GMP-3 is the administration building.
8. GMP-4 is the maintenance building.
9. GMP-5 is the household hazardous waste facility.
10. GMP-6 is a trailer which houses landfill equipment.
11. GMP-7 is a trailer which houses four (4) employees.
12. GMP-8 is a shed which shelters a generator.



MANATEE COUNTY GOVERNMENT

Public Works Department

RECEIVED
FEB - 9 1996

Department of Environmental Protection
SOUTHWEST DISTRICT

BY _____

February 2, 1996

Allison Amram, P.G.
Division of Waste Management
Department of Environmental Protection, South West District
3804 Coconut Palm Drive
Tampa, FL 33619

Re: Manatee County Solid Waste Management Facility
4th Quarter 1995 Gas Monitoring and Waste Quantity Report

Dear Ms. Amram:

Enclosed is the referenced subject for the period October through December 1995. The Gas Monitoring Report, Table 1, shows that the lower explosive limit for methane was recorded once during the quarter. However, the percent methane measured was within acceptable values as given in our operating permit, specific condition No. 14.

The Waste Quantity Report, Table 2, summarizes the attached Material Class Report for each month. The grand total of material landfilled, recycled and diverted is 95,709, 1,460 and 139 tons, respectively. If you require further information, or need assistance regarding this matter, please contact me at (941) 748-5543.

Sincerely,

Benjamin L. Alex
Solid Waste Technical Coordinator

cc: Lenox E. "Len" Bramble, P.E., Public Works Director
Dan Gray, Utilities Operations Manager
Gus DiFonzo, Solid Waste Manager *AD*

Lena Raod Sanitary Landfill
Table 1
Quarterly Gas Monitoring Report
October - December 1995

Gas Monitoring Wells

<u>Monitoring Well</u>	<u>October</u>	<u>November</u>	<u>December</u>
1	0.0	0.0	0.0
2	0.0	0.0	0.0
3	0.0	0.0	0.0
4	0.0	0.0	0.0
5	0.0	0.0	0.0
6	0.0	0.0	0.0
7	0.0	0.0	0.0
8	0.0	0.0	0.0
9	0.0	0.0	0.0
10	0.0	0.0	0.0
11	0.0	0.0	0.0
12	0.0	0.0	0.0
13	0.0	0.0	0.0
14	48.0	0.0	0.0
15	0.0	0.0	0.0
16	0.0	0.0	0.0
17	0.0	0.0	0.0
18	0.0	0.0	0.0

Gas Monitoring Points

<u>Monitoring Point</u>	<u>July</u>	<u>August</u>	<u>September</u>
1	0.0	0.0	0.0
2	0.0	0.0	0.0
3	0.0	0.0	0.0
4	0.0	0.0	0.0
5	0.0	0.0	0.0
6	0.0	0.0	0.0
7	0.0	0.0	0.0
8	0.0	0.0	0.0

Notes:

1. All values given in percent.
2. Refer to the December Water Balance Report, dated January 16, 1996, for an explanation of GMPs 5 and 7.
3. All wells sampled for the lower explosive limit of methane per specific condition 14 of the operating permit.
4. October, November and December data were collected on 10/20/95, 11/17/95 and 12/15/95, respectively.

MONTHLY WATER BALANCE AND GAS MONITORING REPORTS FOR THE MONTH OF DECEMBER, 1995

Zena Rd. landfill - Gas File
rcd 1/19/96

DATE	INPUT TO STAGE I	LEACHATE STAGE II	POND G.P.D. STAGE III	LEACHATE POND LEVEL	LEACHATE TO WWTP IN G.P.D.	RAINFALL IN INCHES	STORMWATER POND LEVEL	WEST WEIR DISCHARGE pH	REMARKS
1	164,933		65,000	32.2	315,700	0.00	34.3	6.4	
2*	N/R		N/R	31.8	N/R	0.00	34.3	N/R	
3*	N/R		N/R	32.0	N/R	0.00	34.0	N/R	
4	580,290		195,000	32.0	1,143,900	0.00	34.0	6.4	
5	197,925		65,000	32.0	385,000	0.00	33.8	6.4	
6	185,445		65,000	33.7	367,000	0.00	34.0	6.4	
7	172,734		65,000	31.7	350,800	0.00	33.8	6.4	
8	182,951		65,000	32.0	372,900	0.00	33.4	6.6	
9*	N/R		N/R	32.0	N/R	0.00	33.4	N/R	
10*	N/R		N/R	31.4	N/R	0.10	33.5	N/R	
11	492,375		195,000	31.0	1,085,300	0.00	33.4	6.4	
12	163,420		65,000	31.0	383,000	0.00	33.4	6.4	
13	187,230		65,000	30.9	396,400	0.00	33.4	6.6	
14	139,848		65,000	31.3	307,600	0.00	33.4	6.4	
15	172,148		65,000	31.6	379,000	0.00	32.9	6.5	
16*	N/R		N/R	31.5	N/R	0.00	32.9	N/R	
17*	N/R		N/R	31.0	N/R	0.00	32.9	N/R	
18	447,922		195,000	30.7	1,084,000	0.00	32.9	6.4	
19	145,938		65,000	31.9	371,100	0.18	32.7	6.6	
20	150,030		65,000	31.4	758,500	0.00	32.4	6.5	
21	137,720		65,000	31.0	377,500	0.00	32.4	6.5	
22	137,792		65,000	30.8	388,000	0.04	32.4	6.5	
23*	N/R		N/R	30.4	N/R	0.00	32.6	N/R	
24*	N/R		N/R	29.9	N/R	0.00	32.6	N/R	
25*	N/R		N/R	29.9	N/R	0.00	32.6	N/R	
26	485,449		260,000	30.0	878,500	0.00	32.6	6.4	
27	89,259		65,000	30.0	10,500	0.00	32.5	6.6	
28	90,455		65,000	30.1	11,000	0.00	32.6	6.6	
29	90,677		65,000	30.7	11,500	0.98	32.5	6.6	
30*	N/R		N/R	30.7	N/R	0.00	32.5	N/R	
31*	N/R		N/R	30.8	N/R		32.5	N/R	
TOTAL	4,414,541		1,885,000		9,377,200	1.30			
TOTAL ACREAGE--STAGE I: Open - 6 Intermediate - 113 Closed - 0									
TOTAL ACREAGE--STAGE III: Open - 0 Intermediate - 71 Closed - 0									

GAS MONITORING WELLS	
WELL NUMBER	READING (Percent)
1	0.0
2	0.0
3	0.0
4	0.0
5	0.0
6	0.0
7	0.0
8	0.0
9	0.0
10	0.0
11	0.0
12	0.0
13	0.0
14	0.0
15	0.0
16	0.0
17	0.0
18	0.0

1. Stage III volumes estimated due to broken totalizer. New totalizer has been ordered but not yet received.
2. N/R: Not reported due to weekend and holidays.

WETLANDS STAFF GAUGE LEVELS

Date Read: 12-05-95	Date Read: 12-13-95	Date Read: 12-20-95	Date Read: 12-27-95	Date Read:
# 1 35.3	#1 35.1	#1 35.1	#1 35.1	#1
# 2 34.3	#2 34.3	#2 34.3	#2 34.2	#2
# 3 34.8	#3 34.7	#3 34.8	#3 35.7	#3
# 4 40.8	#4 40.5	#4 40.2	#4 39.5	#4
# 5 38.9	#5 38.9	#5 38.7	#5 38.7	#5
# 6 34.6	#6 34.6	#6 34.6	#6 34.5	#6
# 7 33.1	#7 33.0	#7 32.9	#7 32.9	#7
# 8 31.5	#8 31.3	#8 31.2	#8 31.2	#8
#12 31.6	#12 31.5	#12 31.5	#12 31.4	#12

**GAS MONITORING POINTS
AND WELLS**

READ: 12-15-95

Gas Monitoring Points	
#1	0%
#2	0%
#3	0%
#4	0%
#6	0%
#8	0%

MONTHLY WATER BALANCE AND GAS MONITORING REPORTS FOR THE MONTH OF NOVEMBER, 1995

DATE	INPUT TO STAGE I	LEACHATE STAGE II	POND G.P.D. STAGE III	LEACHATE POND LEVEL	LEACHATE TO WWTP IN G.P.D.	RAINFALL IN INCHES	STORMWATER POND LEVEL	WEST WEIR DISCHARGE pH	REMARKS
1	272,988		225,000	34.6	249,500	0.43	35.9	6.4	Stage III estimated
2	243,825		225,000	34.9	88,200	0.00	36.0	6.3	Stage III estimated
3	553,820		225,000	34.8	299,100	0.00	36.0	6.2	Stage III estimated
4*	N/R		N/R	35.3	N/R	0.00	35.8	N/R	
5*	N/R		N/R	35.2	N/R	0.00	35.9	N/R	
6	876,368		675,000	35.0	998,700	0.00	35.9	6.4	Stage III estimated
7	329,485		225,000	34.8	339,000	0.00	36.0	6.4	Stage III estimated
8	331,147		225,000	34.8	438,500	0.25	36.0	6.3	Stage III estimated
9	248,615		225,000	34.7	325,000	0.00	35.7	6.4	Stage III estimated
10	369,195		225,000	34.4	502,500	0.00	35.7	6.4	Stage III estimated
11*	N/R		N/R	34.2	N/R	0.04	35.7	N/R	
12*	N/R		N/R	34.4	N/R	0.00	35.5	N/R	
13	953,449		675,000	33.0	1,253,800	0.00	35.4	6.4	Stage III estimated
14	294,100		225,000	34.2	387,700	0.00	35.3	6.4	Stage III estimated
15	334,298		225,000	34.8	487,500	0.00	35.2	6.6	Stage III estimated
16	260,848		225,000	34.3	385,000	0.00	35.0	6.4	Stage III estimated
17	269,030		225,000	33.8	348,500	0.00	35.0	6.4	Stage III estimated
18*	N/R		N/R	33.4	N/R	0.00	35.0	N/R	
19*	N/R		N/R	33.2	N/R	0.00	35.0	N/R	
20	902,430		675,000	33.6	1,334,800	0.00	34.7	6.4	Stage III estimated
21	262,720		225,000	32.3	412,700	0.00	34.9	6.4	Stage III estimated
22	273,693		225,000	33.7	427,900	0.00	34.7	6.4	Stage III estimated
23*	N/R		N/R	33.2	N/R	0.00	34.6	N/R	
24*	N/R		N/R	33.0	N/R	0.00	34.6	N/R	
25*	N/R		N/R	32.7	N/R	0.00	34.2	N/R	
26*	N/R		N/R	31.9	N/R	0.00	34.2	N/R	
27	1,316,692		1,125,000	32.7	2,458,900	0.00	34.1	6.3	Stage III estimated
28	228,525		225,000	33.0	38,310	0.02	34.0	6.4	Stage III estimated
29	214,360		225,000	33.7	380,200	0.46	34.0	6.4	
30	192,487		225,000	32.3	356,200	0.00	34.1	6.4	
31									
TOTAL	8,727,875		6,750,000		11,512,010	1.20			

TOTAL ACREAGE--STAGE I: Open - 6 Intermediate - 113 Closed - 0

TOTAL ACREAGE--STAGE III: Open - 0 Intermediate - 71 Closed - 0

WETLANDS STAFF GAUGE LEVELS

Date Read: 11-01-95	Date Read: 11-08-95	Date Read: 11-15-95	Date Read: 11-22-95	Date Read:
#1 36.5	#1 35.6	#1 35.3	#1 35.2	#1
#2 35.4	#2 34.7	#2 34.5	#2 34.4	#2
#3 35.6	#3 35.1	#3 34.8	#3 34.8	#3
#4 40.6	#4 40.8	#4 40.1	#4 40.5	#4
#5 39.0	#5 39.1	#5 39.1	#5 39.1	#5
#6 35.1	#6 35.0	#6 34.7	#6 34.7	#6
#7 33.6	#7 33.3	#7 33.2	#7 33.1	#7
#8 32.1	#8 31.8	#8 31.6	#8 31.5	#8
#12 32.3	#12 32.0	#12 31.8	#12 31.7	#12

GAS MONITORING WELLS	
WELL NUMBER	READING (Percent)
1	0.0
2	0.0
3	0.0
4	0.0
5	0.0
6	0.0
7	0.0
8	0.0
9	0.0
10	0.0
11	0.0
12	0.0
13	0.0
14	0.0
15	0.0
16	0.0
17	0.0
18	0.0

A: N.R. -- Not reported due to weekend & holiday.

B: Stage III volume estimated by determining avg. number of pump runs hours & multiplying by est. flow rate based on Oct. data.

C: Stage III volumes estimated due to broken totalizer. New totalizer has been ordered.

Gas Monitoring Points	
#1	0%
#2	0%
#3	0%
#4	0%
#5	N/A
#6	0%
#7	N/A
#8	0%

MONTHLY WATER BALANCE AND GAS MONITORING REPORTS FOR THE MONTH OF OCTOBER, 1995

DATE	INPUT TO STAGE I	LEACHATE STAGE II	POND G.P.D. STAGE III	LEACHATE POND LEVEL	LEACHATE TO WWTP IN G.P.D.	RAINFALL IN INCHES	STORMWATER POND LEVEL	WEST WEIR DISCHARGE pH	REMARKS
1*	N/R		N/R	33.2	N/R	0.00	34.9	N/R	
2*	N/R		N/R	N/R	N/R	N/R	N/R	N/R	Data not taken
3	2,137,260		328,100	33.2	2,326,100	0.06	34.6	6.4	
4	409,121		326,652	33.6	596,700	0.14	34.4	6.4	Stage III estimated
5	369,747		481,176	33.1	527,000	1.73	34.8	5.9	Stage III estimated
6	313,503		302,300	34.8	346,500	2.00	35.0	6.2	
7*	N/R		N/R	34.6	N/R	0.00	35.6	N/R	
8*	N/R		N/R	34.5	N/R	0.02	35.5	N/R	
9	940,405		1,012,500	34.5	1,036,500	0.47	35.6	6.3	
10	306,862		375,100	34.6	332,200	0.35	35.7	6.4	
11	340,199		535,000	34.6	373,000	0.00	36.0	6.3	
12	324,846		489,000	34.6	341,000	0.16	36.0	6.4	
13	350,325		518,000	34.6	347,100	0.02	35.9	6.4	
14*	N/R		N/R	35.5	N/R	0.14	35.7	N/R	
15*	N/R		N/R	35.5	N/R	0.06	35.6	N/R	
16	1,087,584		635,400	35.5	991,800	0.00	35.8	6.4	
17	395,355		418,584	35.6	378,500	0.06	35.6	6.4	Stage III estimated
18	318,531		305,136	35.4	310,700	0.06	35.7	6.4	
19	319,172		312,960	35.3	336,300	0.03	35.7	6.3	Stage III estimated
20	382,550		385,332	35.0	369,500	0.03	35.7	6.2	Stage III estimated
21*	N/R		N/R	34.8	N/R	0.00	35.8	N/R	
22*	N/R		N/R	34.6	N/R	0.00	35.7	N/R	
23	1,069,012		312,960	34.4	1,011,100	0.00	35.7	6.4	Stage III estimated
24	474,276		264,080	34.5	568,700	0.00	35.4	6.4	Stage III estimated
25	470,780		318,828	33.8	579,500	0.00	35.4	6.4	Stage III estimated
26	432,585		219,077	33.3	536,800	0.00	35.4	6.4	Stage III estimated
27	513,555		289,488	33.3	671,400	0.00	35.4	6.4	Stage III estimated
28*	N/R		N/R	33.0	N/R	0.00	35.4	N/R	
29*	N/R		N/R	32.6	N/R	0.00	35.3	N/R	
30	1,033,345		312,960	32.6	1,335,500	0.00	35.0	6.4	Stage III estimated
31	242,577		232,764	33.0	243,100	3.64	34.9	6.4	Stage III estimated
TOTAL	12,231,590		8,375,377		13,559,000	8.97			
TOTAL ACREAGE--STAGE I: Open - 6 Intermediate - 113 Closed - 0									
TOTAL ACREAGE--STAGE III: Open - 0 Intermediate - 71 Closed - 0									

WETLANDS STAFF GAUGE LEVELS

Date Read: 10-04-95	Date Read: 10-11-95	Date Read: 10-18-95	Date Read: 10-25-95	Date Read:
#1 35.3	#1 36.3	#1 35.5	#1 35.2	#1
#2 34.5	#2 35.5	#2 35.5	#2 34.5	#2
#3 34.9	#3 36.8	#3 35.1	#3 34.8	#3
#4 N/A	#4 40.5	#4 40.1	#4 40.2	#4
#5 34.8	#5 39.2	#5 39.0	#5 39.0	#5
#6 34.7	#6 35.0	#6 35.0	#6 34.8	#6
#7 33.2	#7 33.3	#7 33.3	#7 33.2	#7
#8 31.7	#8 32.0	#8 32.8	#8 31.6	#8
#12 31.7	#12 32.0	#12 31.9	#12 31.8	#12

GAS MONITORING WELLS	
WELL NUMBER	READING (Percent)
1	0.0
2	0.0
3	0.0
4	0.0
5	0.0
6	0.0
7	0.0
8	0.0
9	0.0
10	0.0
11	0.0
12	0.0
13	0.0
14	48.0
15	0.0
16	0.0
17	0.0
18	0.0

A): N.R. - Not reported due to weekend.

B): Stage III volumes estimated due to broken totalizer. New totalizer has been ordered.

Gas Monitoring Points	
#	%
#1	0%
#2	0%
#3	0%
#4	0%
#5	N/A
#6	0%
#7	0%
#8	0%

MONTHLY WATER BALANCE AND GAS MONITORING REPORTS FOR THE MONTH OF SEPTEMBER, 1995

DATE	INPUT TO STAGE I	LEACHATE STAGE II	POND G.P.D. STAGE III	LEACHATE POND LEVEL	LEACHATE TO WWTP IN G.P.D.	RAINFALL IN INCHES	STORMWATER POND LEVEL	WEST WEIR DISCHARGE pH	REMARKS
1	205,332		88,200	35.4	484,800	0.51	36.2	6.9	
2*	N/R		N/R	35.2	N/R	0.00	36.0	N/R	
3*	N/R		N/R	35.0	N/R	0.00	36.0	N/R	
4*	N/R		N/R	35.0	N/R	0.00	35.8	N/R	
5	880,340		383,160	34.9	1,922,500	0.40	35.5	6.4	Stage III estimated
6	292,360		383,160	35.6	513,800	0.19	35.5	6.4	Stage III estimated
7	302,675		296,100	35.3	525,500	0.31	35.5	6.4	
8	247,170		220,800	34.9	429,700	0.00	35.5	6.4	
9*	N/R		N/R	34.7	N/R	0.16	35.4	N/R	
10*	N/R		N/R	34.2	N/R	0.18	35.5	N/R	
11	822,120		64,490	33.9	1,531,100	1.81	35.8	6.4	
12	259,660		327,500	34.0	491,700	0.06	36.0	6.4	
13	305,066		381,000	33.9	576,000	1.05	35.7	6.0	
14	273,029		348,600	33.9	519,000	0.00	35.7	6.4	
15	321,180		361,400	34.3	509,600	0.00	35.5	6.3	
16*	N/R		N/R	34.3	N/R	0.00	35.4	N/R	
17*	N/R		N/R	34.9	N/R	0.00	35.2	N/R	
18	757,185		741,800	34.9	941,700	0.00	35.0	6.4	
19	250,362		119,520	35.7	199,600	0.00	35.2	6.3	Stage III estimated
20	454,758		11,200	35.4	552,000	0.00	35.0	6.4	
21	365,017		166,600	34.9	464,800	0.00	35.0	6.4	
22	324,242		18,942	34.5	519,600	0.02	35.1	6.2	
23*	N/R		N/R	34.1	N/R	0.29	34.9	N/R	
24*	N/R		N/R	34.6	N/R	0.00	34.8		
25	1,112,794		947,500	34.0	1,410,100	0.02	34.8	6.6	
26	386,784		147,300	34.7	511,500	0.00	34.8	N/R	
27	370,801		125,900	33.2	502,500	2.48	34.8	N/R	
28	397,328		312,900	33.8	561,200	0.02	35.3	6.6	
29	435,615		391,800	33.4	643,000	0.00	35.3	6.4	
30*	N/R		N/R	33.7	N/R	1.05	34.9	6.4	
31									
TOTAL	8,763,818		5,837,872		13,809,700	8.55			

TOTAL ACREAGE--STAGE I: Open - 6 Intermediate - 113 Closed - 0

TOTAL ACREAGE--STAGE III: Open - 0 Intermediate - 71 Closed - 0

WETLANDS STAFF GAUGE LEVELS

Date Read: 09-06-95	Date Read: 09-13-95	Date Read: 09-20-95	Date Read: 09-27-95	Date Read:
# 1 35.8	#1 36.0	#1 35.5	#1 35.5	#1
# 2 36.3	#2 35.1	#2 35.7	#2 34.4	#2
# 3 36.6	#3 35.5	#3 35.0	#3 39.8	#3
# 4 40.4	#4 40.5	#4 40.3	#4 40.2	#4
# 5 35.5	#5 38.5	#5 38.5	#5 37.5	#5
# 6 34.9	#6 34.4	#6 34.7	#6 34.6	#6
# 7 33.3	#7 33.3	#7 33.2	#7 33.1	#7
# 8 31.0	#8 31.8	#8 31.7	#8 31.5	#8
#12 32.0	#12 31.9	#12 31.8	#12 31.6	#12

D.E.P.
OCT 16 1995
SOUTHWEST DISTRICT
TAMPA

GAS MONITORING WELLS	
WELL NUMBER	READING (Percent)
1	0.0
2	0.0
3	0.0
4	0.0
5	0.0
6	0.0
7	0.0
8	0.0
9	0.0
10	0.0
11	0.0
12	0.0
13	0.0
14	0.0
15	0.0
16	0.0
17	0.0
18	0.0

A): N.R. - Not reported
due to weekend.

B): Stage volumes estimated
due to clogged totalizer.

Gas Monitoring Points	
#	0%
#1	0%
#2	0%
#3	0%
#4	0%
#5	N/A
#6	0%
#7	N/A
#8	0%

MONTHLY WATER BALANCE AND GAS MONITORING REPORTS FOR THE MONTH OF AUGUST, 1995

DATE	INPUT TO STAGE I	LEACHATE STAGE II	POND G.P.D. STAGE III	LEACHATE POND LEVEL	LEACHATE TO WWTP IN G.P.D.	RAINFALL IN INCHES	STORMWATER POND LEVEL	WEST WEIR DISCHARGE	REMARKS
1	496,000		164,816	31.0	257,200	0.00	34.0	6.2	Stage III estimated
2	408,200		153,700	30.9	125,700	1.75	34.0	6.9	
3	443,800		320,000	31.6	288,600	2.23	35.4	4.9	
4	467,500		393,500	32.9	218,800	0.00	36.0	6.8	
5	N.R.		N.R.	33.0	N.R.	0.00	36.0	N.R.	
6	N.R.		N.R.	33.6	N.R.	0.00	35.8	N.R.	
7	1,257,600		435,000	33.6	655,700	0.00	35.8	6.6	
8	425,500		159,000	34.0	279,200	0.00	35.5	6.6	
9	491,700		192,500	33.7	332,700	1.02	35.5	6.6	
10	475,500		222,500	33.8	327,800	0.00	35.5	6.6	
11	611,150		85,800	33.8	422,300	0.40	35.4	6.6	
12	N.R.		N.R.	34.0	N.R.	0.90	35.2	N.R.	
13	N.R.		N.R.	34.0	N.R.	0.00	35.8	N.R.	
14	197,933		519,919	33.9	1,327,900	0.00	35.7	6.6	Stage III estimated
15	514,090		234,100	33.9	455,400	0.06	35.7	6.4	
16	461,196		155,900	33.9	376,800	0.00	35.3	6.6	
17	382,755		151,500	33.7	389,400	0.00	35.0	6.6	
18	357,669		182,200	33.7	406,200	1.20	35.0	6.6	
19	N.R.		N.R.	34.0	N.R.	0.00	35.0	N.R.	
20	N.R.		N.R.	34.2	N.R.	0.01	35.0	N.R.	
21	1,077,652		712,000	34.2	559,600	0.00	35.0	6.4	
22	338,444		167,400	34.2	164,500	0.20	35.0	6.4	
23	360,606		37,600	34.2	190,100	1.65	34.9	6.4	
24	222,935		45,441	34.0	577,400	0.05	35.5	6.2	Stage III estimated
25	471,576		55,360	34.0	503,400	1.04	35.5	6.6	Stage III estimated
26	N.R.		N.R.	35.3	N.R.	1.91	37.6	N.R.	
27	N.R.		N.R.	35.3	N.R.	0.00	36.3	N.R.	
28	76,931		1,107,216	35.3	1,352,500	0.00	36.0	6.6	
29	950,000		309,500	35.8	454,000	0.05	35.8	6.4	Stage I estimated
30	211,722		386,500	35.6	510,800	0.13	35.8	6.4	
31	185,860		341,300	35.4	451,300	1.65	35.7	6.5	
TOTAL	10,886,319		6,532,752		10,627,300	14.25			
TOTAL ACREAGE -- STAGE I: Open - 6 Intermediate - 113 Closed - 0									
TOTAL ACREAGE -- STAGE III: Open - 0 Intermediate - 71 Closed - 0									

GAS MONITORING WELLS	
WELL NUMBER	READING (Percent)
1	0.0
2	0.0
3	0.0
4	0.0
5	0.0
6	0.0
7	0.0
8	0.0
9	0.0
10	0.0
11	0.0
12	0.0
13	0.0
14	0.0
15	0.0
16	0.0
17	0.0
18	0.0

A): N.R. - Not reported due to weekend.

B): Stage volumes estimate due to clogged totalizer

WETLANDS STAFF GAUGE LEVELS

Date Read: 08-02-95	Date Read: 08-09-95	Date Read: 08-16-95	Date Read: 08-23-95	Date Read: 08-30-95
#1 36.3	#1 36.3	#1 36.1	#1 35.7	#1 36.5
#2 36.0	#2 36.2	#2 35.3	#2 34.7	#2 36.2
#3 35.3	#3 36.1	#3 35.6	#3 35.0	#3 Gauge Under Water
#4 38.6	#4 36.9	#4 40.3	#4 40.1	#4 40.5
#5 36.7	#5 37.2	#5 37.5	#5 37.3	#5 38.4
#6 34.6	#6 34.7	#6 34.7	#6 34.6	#6 34.9
#7 33.2	#7 33.2	#7 33.2	#7 33.2	#7 33.5
#8 31.7	#8 31.7	#8 31.7	#8 31.7	#8 33.0
#12 31.9	#12 31.9	#12 31.8	#12 31.8	#12 32.1

Gas Monitoring Points	
#1	0%
#2	0%
#3	0%
#4	0%
#5	0%
#6	0%
#7	0%
#8	0%



file gas mon.

MANATEE COUNTY GOVERNMENT

Public Services Department

RECEIVED
OCT 16 1995

October 11, 1995

Department of Environmental Protection
SOUTHWEST DISTRICT
BY _____

Allison Amram, P.G.
Division of Waste Management
Department of Environmental Protection, South West District
3804 Coconut Palm Drive
Tampa, FL 33619

Re: Manatee County Solid Waste Management Facility
Lena Road Landfill
Permit No. SO41-211176

Dear Ms. Amram:

Enclosed are the quarterly Gas Monitoring and Waste Quantity Reports for the period July through September 1995. As shown on Table 1, the lower explosive limit for methane was recorded twice during the quarter. However, the percent methane measured was within acceptable values as given in our operating permit, specific condition No. 14.

Also included are quarterly totals for materials received at the landfill. As shown Table 2, the grand total of material landfilled, recycled and diverted is 76,692, 1,283.7 and 70.4 tons, respectively.

If you require further information, or need assistance regarding this matter, please contact me at (941) 748-5543.

Sincerely,

Benjamin S. Alex

Benjamin L. Alex
Solid Waste Technical Coordinator

BLA

cc: Lenox E. "Len" Bramble, P.E., Public Services Director
Daniel T. Gray, Utilities Operations Manager
PD Gus DiFonzo, Solid Waste Manager

Lena Raod Sanitary Landfill
Table 1
Quarterly Gas Monitoring Report
July - September 1995

Gas Monitoring Wells

<u>Monitoring Well</u>	<u>July</u>	<u>August</u>	<u>September</u>
1	2.0	0.0	0.0
2	0.0	0.0	0.0
3	0.0	0.0	0.0
4	0.0	0.0	0.0
5	0.0	0.0	0.0
6	0.0	0.0	0.0
7	0.0	0.0	0.0
8	0.0	0.0	0.0
9	0.0	0.0	0.0
10	0.0	0.0	0.0
11	0.0	0.0	0.0
12	0.0	0.0	0.0
13	0.0	0.0	0.0
14	0.0	0.0	0.0
15	0.0	0.0	0.0
16	0.0	0.0	0.0
17	0.0	0.0	0.0
18	70.0	0.0	0.0

Gas Monitoring Points

<u>Monitoring Point</u>	<u>July</u>	<u>August</u>	<u>September</u>
1	0.0	0.0	0.0
2	0.0	0.0	0.0
3	0.0	0.0	0.0
4	0.0	0.0	0.0
5	0.0	0.0	0.0
6	0.0	0.0	0.0
7	0.0	0.0	0.0
8	0.0	0.0	0.0

Notes:

1. All values given in percent.
2. All values reported on a monthly basis, submitted with the monthly ground water balance report.
3. All wells sampled for the lower explosive limit of methane per specific condition 14 of the operating permit.

MONTHLY WATER BALANCE AND GAS MONITORING REPORTS FOR THE MONTH OF JUNE, 1995

DATE	INPUT TO STAGE I	LEACHATE STAGE II	POND G.P.D. STAGE III	LEACHATE POND LEVEL	LEACHATE TO WWTP IN G.P.D.	RAINFALL IN INCHES	STORMWATER POND LEVEL	WEST WEIR DISCHARGE pH	REMARKS
1	491,010		70,100	29.5	127,200	0.00	31.0	8.0	
2	431,040		30,400	29.3	205,400	3.36	31.4	7.0	
3				31.4		1.96	32.2		
4				31.7		0.38	33.7		
5 *	1,360,419		9,750	31.7	675,500	0.42	33.8	6.6	
6	450,550		Off	31.8	268,900	0.00	33.7	6.6	LS Mtr.2&3 Cleaned
7	430,450		209,950	31.8	260,600	0.00	33.5	6.6	
8	393,550		Off	31.7	235,200	0.00	33.4	6.6	
9	402,450		Off	31.5	242,500	0.00	33.1	6.8	Switched LS3 w/ LS2
10				31.4		0.04	33.0		
11				31.3		0.06	33.0		
12 *	1,206,000		119	32.9	721,100	0.01	32.9	6.9	
13	348,000		1,000	30.8	207,100	0.66	32.9	0.4	Recleaned LS3
14	750,000		68,000	30.8	226,400	0.00	32.9	7.1	
15	595,000		62,000	30.6	282,400	0.00	32.9	6.6	
16	627,000		50,000	30.1	308,400	0.00	32.8	6.4	GMW15 damaged
17				30.9		0.00	32.9		
18				29.5		0.05	32.8		
19 *	1,699,000		167,000	29.5	905,000	0.00	32.8	6.5	
20	477,000		52,000	29.3	266,000	0.00	32.7	6.4	
21	621,000		77,000	29.9	359,700	0.12	32.4	6.5	
22	535,000		45,000	30.7	303,200	0.05	32.0	6.5	
23	590,000		69,000	30.3	346,300	0.07	32.0	6.6	
24				29.9		0.20	32.9		
25				29.5		1.05	32.9		
26 *	1,594,000		195,000	29.5	966,500	0.00	32.3	6.4	
27	494,000		68,000	29.2	337,000	0.00	32.3	6.6	
28	501,000		75,000	29.2	345,300	0.00	31.8	6.6	
29	483,000		3,000	29.9	332,800	0.00	31.7	6.7	
30	522,000		0	29.5	361,100	0.00	31.8	6.9	
31									
* High reading due to absence of Saturday & Sunday Readings.									
TOTAL	15,001,469		1,252,319		8,283,600	8.43			

TOTAL ACREAGE--STAGE I: Open - 0 Intermediate - 0 Closed - 0

TOTAL ACREAGE--STAGE III: Open - 0 Intermediate - 0 Closed - 0

WETLANDS STAFF GAUGE LEVELS

Date Read: 06-07-95	Date Read: 06-14-95	Date Read: 06-21-95	Date Read: 06-28-95	Date Read: N/A
#1 35.2	#1 35.1	#1 35.9	#1 35.0	
#2 34.5	#2 34.5	#2 34.2	#2 34.2	
#3 34.9	#3 34.7	#3 34.6	#3 34.5	
#4 38.7	#4 38.5	#4 38.5	#4 38.5	
#5 37.0	#5 36.8	#5 36.5	#5 36.5	
#6 34.5	#6 34.3	#6 34.1	#6 34.2	
#7 33.1	#7 33.1	#7 32.9	#7 32.9	
#8 31.8	#8 31.6	#8 31.4	#8 31.5	
#12 31.9	#12 31.7	#12 31.5	#12 31.5	

GAS MONITORING WELLS	
WELL NUMBER	READING (Percent)
1	0.0
2	2.0
3	1.0
4	5.0
5	2.0
6	2.0
7	0.0
8	2.0
9	0.0
10	0.0
11	0.0
12	1.0
13	0.0
14	0.0
15	0.0
16	0.0
17	0.0
18	2.0

Gas Monitoring Points	
#1	0%
#2	0%
#3	0%
#4	0%
#5	N/A
#6	0%
#7	0%
#8	0%

Lena Rd
gas tip

MONTHLY WATER BALANCE AND GAS MONITORING REPORT FOR THE MONTH OF MAY, 1995

Lena Road
gas file
(Manatee Co)

DATE	INPUT TO STAGE I	LEACHATE STAGE II	POND G.P.D. STAGE III	LEACHATE POND LEVEL	LEACHATE TO WWTP IN G.P.D.	RAINFALL IN INCHES	STORMWATER POND LEVEL	WEST WEIR DISCHARGE pH	REMARKS
1	249,537		74,540	27.5	35,300		32.8	7.2	
2	83,400		369,900	27.6	11,600		32.8	7.2	
3	148,550		270,100	27.6	69,200		32.8	7.2	
4	361,950		231,900	27.6	184,600		32.8	7.2	
5	345,040		40,500	27.5	64,200		32.7	6.9	
6				27.6			32.8		
7				27.4			32.7		
8	1,143,520		119,580	27.3	507		32.7	7.2	
9	361,480		79,920	27.3	212,100		32.7	7.4	Leachate pump #1 broken
10	360,980		160,100	27.2	219,900		32.7	7.0	
11	365,975		220,470	27.2	64,800		32.7	8.0	
12	346,995		109,930	27.1	53,900		32.7	8.2	
13				27.1			32.7		
14				27.1			32.7		
15	713,930		449,560	27.1	128,600		32.7	7.6	
16	72,150		160,040	27.2	11,000		32.7	7.3	
17	376,280		170,650	29.0	65,000		32.0	7.9	
18	374,288		139,250	30.0	148,500		32.8	7.9	
19	355,342		80,080	30.9	160,900		32.8	7.6	
20				30.8		0.11	31.5		
21				30.7			31.5		
22	1,178,030		290,120	30.6	437,600		31.5	7.6	
23	420,040		159,900	30.3	145,000		31.4	7.2	
24	418,950		79,950	30.3	140,500		31.3	7.9	
25	451,043		79,950	30.0	173,200		31.4	8.2	
26	357,102		80,050	30.0	131,500		31.4	7.9	
27				29.9		0.85	31.3		
28				29.6		0.38	31.4		
29				29.3			31.4	7.4	
30	1,836,925		229,950	29.0	844,400		31.4	8.0	
31	523,915		80,000	29.7	325,200		31.1		
TOTAL	2,676,520		3,676,440		3,627,507	1.34			

TOTAL ACREAGE--STAGE I: Open - 2 Intermediate - 117 Closed - 0
TOTAL ACREAGE--STAGE III: Open - 0 Intermediate - 71 Closed - 0

GAS MONITORING WELLS	
WELL NUMBER	READING (Percent)
1	2
2	0
3	0
4	8
5	OXY-19.0 / LEL-0 h2s--1
6	0
7	0
8	OXY-20.5 / LEL-0 h2s--1
9	0
10	0
11	OXY-8.7 / LEL-1 h2s--1
12	0
13	0
14	0
15	OXY-4.4 / LEL-8 h2s--0
16	0
17	0
18	OXY - 9.7

WETLANDS STAFF GAUGE LEVELS

Date Read: 05-03-95	Date Read: 05-10-95	Date Read: 05-17-95	Date Read: 05-24-95	Date Read: 05-31-94
# 1 34.8	# 1 34.8	# 1 34.8	# 1 34.8	# 1 34.8
# 2 33.7	# 2 33.5	# 2 33.5	# 2 33.5	# 2 33.5
# 3 34.5	# 3 34.5	# 3 34.5	# 3 34.5	# 3 34.5
# 4 38.0	# 4 38.7	# 4 38.5	# 4 38.5	# 4 38.5
# 5 36.9	# 5 36.7	# 5 36.5	# 5 36.2	# 5 34.9
# 6 34.1	# 6 33.9	# 6 33.8	# 6 33.8	# 6 33.8
# 7 32.0	# 7 32.9	# 7 32.7	# 7 32.5	# 7 38.5
# 8 31.6	# 8 31.9	# 8 31.7	# 8 31.5	# 8 31.5
# 12 31.6	# 12 31.3	# 12 31.2	# 12 30.0	# 12 30.9



Lena Rd gas mon.

MANATEE COUNTY GOVERNMENT

Public Works Department

May 12, 1995

Allison Amram, Environmental Specialist
Division of Waste Management, Southwest District
Florida Department of Environmental Protection
3804 Coconut Palm Drive
Tampa, Florida 33619

Re: Manatee County Solid Waste Management Facility
Permit No. SO41-211176

Dear Ms. Amram:

Enclosed please find the water balance, water gradients, and the material summary reports for April, 1995. In addition, we have incorporated the gas monitoring well and points readings, the leachate and stormwater pond levels, and wetlands staff gauge readings into the water balance report sheet. The total acreage status for Stage III, as well as Stage I, is also outlined at the bottom of the report.

If you require further information regarding this matter, please contact this office at 813/748-5543.

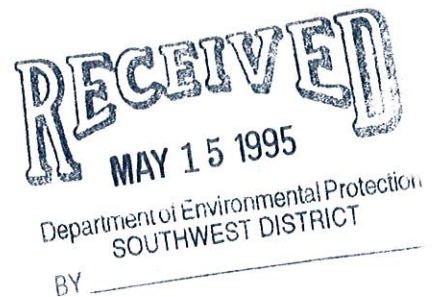
Sincerely,

Gus A. DiFonzo
Solid Waste Manager

/gbp

Enclosures: 3

cc: Robert Butera, P.E., FDEP
Kim Ford, P.E., FDEP
Lenox E. "Len" Bramble, Director
Daniel T. Gray, Utilities Operations Manager
Robert Hall, P.E., Utilities Engineer



MONTHLY WATER BALANCE AND GAS MONITORING REPORTS FOR THE MONTH OF APRIL, 1995

DATE	INPUT TO LEACHATE POND G.P.D.			LEACHATE	LEACHATE TO	RAINFALL	STORMWATER	WEST WEIR	REMARKS
	STAGE I	STAGE II	STAGE III	POND LEVEL	WWTP IN G.P.D.	IN INCHES	POND LEVEL	DISCHARGE pH	
1									
2									
3	1,171,840		150,640	28	413,800		32.9	7.3	
4	440,545		46,300	28	157,800		32.9	7.4	
5	406,465		56,470	28	138,800		32.9	7.4	
6	439,888		63,730	28	155,900	0.30	32.9	7.2	
7	385,712		63,800	28.3	122,800	0.48	32.9	7.2	
8									
9									
10	1,189,880		157,155	27.4	416,800		32.9	7.0	
11	2,572,953		540,300	27.4	12,600		32.9	7.2	
12	286,480		169,800	27.5	24,000		32.9	7.1	
13	87,790		* Remarks	27.5	11,800	0.01	32.9	7.2	Flow Meter Broken
14	99,910		* Remarks	27.6	13,100		32.9	7.4	Flow Meter Broken
15									
16									
17	1,157,060		1,050,600	27.4	411,700		32.7	7.0	
18	1,151,310		319,840	27.2	118,300		32.7	6.9	
19	71,450		389,460	27.2	13,000		32.7	7.2	
20	75,250		300,200	27.2	11,000		32.85	6.9	
21	79,002		310,300	27.3	12,200		32.8	6.9	
22									
23									
24	661,978		1,099,600	27.3	184,800		32.8	7.0	
25	410,000		400,400	27.3	134,500		32.7	6.9	
26	830,030		920,400	27.2	131,200	0.06	32.7	7.2	
27	150,425		580,070	27.2	107,300		32.7	7.2	
28	489,558		1,004,620	27.1	11,500		32.7	6.6	
29									
30									
31									
TOTAL	12,157,526	0	7,623,685		2,602,900	0.85			

TOTAL ACREAGE--STAGE I:	Open: 2	Intermediate: 117	Closed: 0
TOTAL ACREAGE--STAGE III:	Open: 0	Intermediate: 71	Closed: 0

5/11/95-gbp

GAS MONITORING WELLS	
STATION NUMBER	READING
1	1
2	0
3	2
4	3
5	4
6	1
7	0
8	0
9	6
10	22
11	0
12	3
13	3
14	74
15	24
16	2
17	2
18	83
GAS MONITORING POINTS	
#1	3
#2	1
#3	0
#4	1
#5	N/A
#6	0
#7	1
#8	4
REMARKS	
Readings taken on 3rd Friday of each month.	

WETLANDS STAFF GAUGE LEVELS	
Date Read: 4-5	
#1	35.2
#2	34.2
#3	34.6
#4	39.6
#5	37.3
#6	34.3
#7	33.2
#8	32.2
#12	32.0
Date Read: 4-12	
#1	35.1
#2	34.1
#3	34.6
#4	39.5
#5	37.2
#6	34.3
#7	33.1
#8	32.1
#12	32.0
Date Read: 4-19	
#1	34.9
#2	34.0
#3	34.5
#4	39.3
#5	37.1
#6	34.2
#7	33.1
#8	32.0
#12	31.7
Date Read: 4-26	
#1	34.8
#2	33.5
#3	34.5
#4	39.1
#5	36.9
#6	34.0
#7	33.1
#8	31.9
#12	31.5

4/95
Der report.

in gradient
file

MONITORING WELL, PIEZOMETER WATER TABLE ELEVATIONS (N.G.V.D.); FT.
DATE MEASURED 22-APR-95

WELL #	N.G.V.D.	PIEZOMETER	N.G.V.D.
MW 2	34.02	PZ 2	42.53
MW 1	32.51	PZ 3	44.93
CW 4	32.33	PZ 4	45.04
CW 5A	N/A	PZ 5	43.71
		PZ 6	44.33
MW 6	32.53	PZ 7	44.69
LR2-5	30.11	PZ 8	37.63
LR2-3	26.26	PZ 9	36.56
LR2-2	29.45	PZ 10	37.05
LR2-1	32.10	PZ 11	37.94
GC 2	31.48	PZ 12	38.39
GC 3	28.98	PZ 13	35.09
GC 4	28.69	PZ 14	33.47
GC 1A	N/A	PZ 15	33.20
GC 5	27.39	PZ 16	34.63
GC 6	30.60	PZ 17	40.82

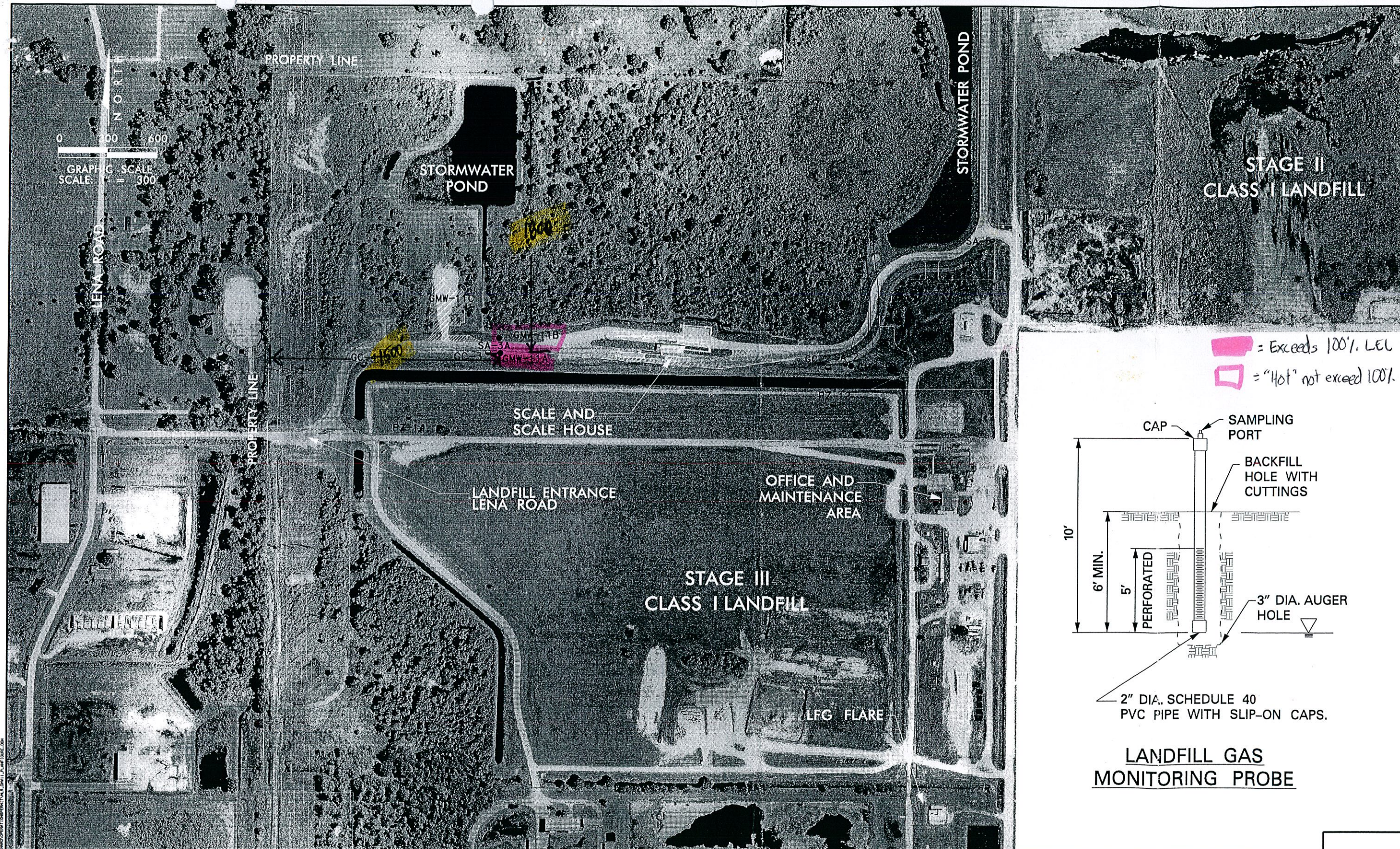
APR 26 1995

Material Class Report
Public Works - Lena Road Landfill
 Reporting Period 04/30/1995

Page: 1

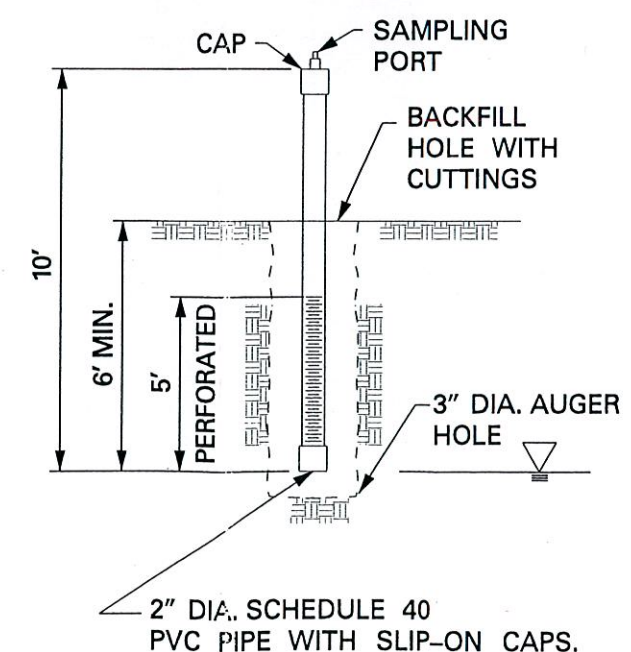
Material Class	Current Month			Year To Date		
	Landfilled (lbs)	Diverted (lbs)	Recycled (lbs)	Landfilled (lbs)	Diverted (lbs)	Recycled (lbs)
ASH						
C & D	4,607,222			4,607,222		
CLEAN-UP	174,620			31,291,880		
CONCRETE						
FLUFF						
FUEL			2,815,420			2,815,420
IL-TIRES		6,220			109,520	
ILLEGAL	70,940			582,080		
LBK-S	865,400			6,472,240		
MIXED	44,777,804			346,540,504		
MULCH			732,120			15,968,110
MULCH-NC			391,920			391,920
ROOFING				16,202,140		
SH-TIRES						652,040
TIRES		56,100			361,880	
WH-GOODS			245,990			458,660
WOOD		10,489,182			50,575,785	
	50,495,986	10,551,502	4,185,450	405,696,066	51,047,185	20,286,150 TOTAL

Handwritten: 21 May 96



STAGE II
CLASS I LANDFILL

Exceeds 100% LEL
"Hot" not exceed 100%



LANDFILL GAS
MONITORING PROBE



482 South Keller Road
Orlando, FL 32810-6101
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Fax. (407) 647-0824
www.pbsj.com
PORT BUCKLEY, SCHUB & JENNYMAN, Inc.
254 FRODO
3001 N.W. 107th Ave., Miami, FL 33178-2507
FBR Certificate of Authorization No. 24

CLIENT
MANATEE COUNTY
BOARD OF COUNTY COMMISSIONERS

PROJECT
LENA ROAD LANDFILL

TASK
GAS MONITORING PROBES
11B AND 11C PLAN AND DETAIL

ORIGINAL
REVISIONS:
1.
2.
3.
4.
5.

Name: JOSEPH L. MILLER
Florida P.E. No. 39177
Address: PBS&J
482 S. Keller Road
Orlando, FL 32810-6101
Signature _____ Date _____

JOB NO. 120498.91
DRAWN JSF
DESIGN JSF
CHECKED JLM
Q.C. JLM
SHEET /