



An employee-owned company

June 15, 2006

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

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
JUN 15 2006
SOUTHWEST DISTRICT
TAMPA

**Re: Manatee County Lena Road Landfill
Monthly Report – May 2006**

Dear Mr. Morris:

This letter includes the following monthly reports: Monthly Water Balance Report (Exhibit A), Leachate-Tracking Summary (Exhibit B), Leachate Meter Readings, Monthly Rainfall, Monthly Groundwater Gradient Report.

An inward gradient was present in Stage I and Stage III of the landfill.

If you should have any questions concerning this report, please call me at 407/647-7275, Ext. 4153.

Sincerely,

Joe Miller, P.E.
Senior Project Manager

Attachments

cc: Daniel T. Gray, Director, Utility Operations Department
Gus DiFonzo, Solid Waste Manager
Mike Gore/Jeanne Detweiler, Manatee County Landfill Division
File – 120498.94 0100

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EXHIBIT A

MANATEE COUNTY SOLID WASTE MANAGEMENT FACILITY
 LENA ROAD LANDFILL
 MONTHLY WATER BALANCE REPORT
 MAY, 2006

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
 JUN 15 2006
 SOUTHWEST DISTRICT
 TAMPA

| A | B | C | D | E | F | G | H |
|---|---|---|--|--|------------------------------------|----------------------|-----------------------|
| DATE | LEACHATE STAGE I Lift Station 1 (gallons) | LEACHATE STAGE I Lift Station 2 (gallons) | LEACHATE STAGE I TOTAL (gallons) | LEACHATE STAGE III TOTAL (gallons) | TOTAL LEACHATE PUMPED (gallons) | RAINFALL (inches) | RAINFALL (gallons) |
| 01-May-06 | 26,120 | 6,960 | 33,080 | 134,400 | 167,480 | 0.00 | 0 |
| 02-May-06 | 12,800 | 5,870 | 18,670 | 62,800 | 81,470 | 0.00 | 0 |
| 03-May-06 | 9,250 | 2,430 | 11,680 | 53,500 | 65,180 | 0.00 | 0 |
| 04-May-06 | 8,070 | 2,150 | 10,220 | 46,800 | 57,020 | 0.00 | 0 |
| 05-May-06 | 12,120 | 2,960 | 15,080 | 64,600 | 79,680 | 0.00 | 0 |
| 06-May-06 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0 |
| 07-May-06 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0 |
| 08-May-06 | 35,100 | 9,190 | 44,290 | 160,300 | 204,590 | 0.00 | 0 |
| 09-May-06 | 16,420 | 3,230 | 19,650 | 53,500 | 73,150 | 0.78 | 3,558,526 |
| 10-May-06 | 6,910 | 2,710 | 9,620 | 47,700 | 57,320 | 0.00 | 0 |
| 11-May-06 | 8,960 | 2,420 | 11,380 | 36,400 | 47,780 | 0.02 | 91,244 |
| 12-May-06 | 10,720 | 2,700 | 13,420 | 43,600 | 57,020 | 0.00 | 0 |
| 13-May-06 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0 |
| 14-May-06 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0 |
| 15-May-06 | 29,280 | 7,530 | 36,810 | 137,600 | 174,410 | 0.00 | 0 |
| 16-May-06 | 14,440 | 3,750 | 18,190 | 59,800 | 77,990 | 0.71 | 3,239,171 |
| 17-May-06 | 11,040 | 2,670 | 13,710 | 38,800 | 52,510 | 0.00 | 0 |
| 18-May-06 | 11,440 | 2,680 | 14,120 | 49,200 | 63,320 | 0.00 | 0 |
| 19-May-06 | 8,670 | 2,520 | 11,190 | 41,000 | 52,190 | 0.00 | 0 |
| 20-May-06 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0 |
| 21-May-06 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0 |
| 22-May-06 | 29,970 | 7,480 | 37,450 | 143,500 | 180,950 | 0.00 | 0 |
| 23-May-06 | 8,810 | 2,380 | 11,190 | 40,100 | 51,290 | 0.00 | 0 |
| 24-May-06 | 10,970 | 2,170 | 13,140 | 51,500 | 64,640 | 0.00 | 0 |
| 25-May-06 | 8,850 | 2,920 | 11,770 | 38,500 | 50,270 | 0.00 | 0 |
| 26-May-06 | 9,520 | 2,410 | 11,930 | 40,400 | 52,330 | 0.00 | 0 |
| 27-May-06 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0 |
| 28-May-06 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0 |
| 29-May-06 | 0 | 0 | 0 | 0 | 0 | 0.00 | 0 |
| 30-May-06 | 39,610 | 10,610 | 50,220 | 188,800 | 239,020 | 0.00 | 0 |
| 31-May-06 | 10,150 | 2,730 | 12,880 | 49,800 | 62,680 | 0.00 | 0 |
| TOTAL | 339,220 | 90,470 | 429,690 | 1,582,600 | 2,012,290 | 1.51 | 6,888,942 |
| Leachate Pumped as Percentage of Rainfall | | | 10.3% | 58.5% | | | |

Column Notes:

- A - Date of reading.
- B - Leachate pumped (gallons) from Stage I by lift station 1.
- C - Leachate pumped (gallons) from Stage I by lift station 2.
- D - Total Stage I leachate pumpage (B+C).
- E - Leachate pumped (gallons) from Stage III.
- F - Total leachate pumped to WWTP storage tank (D+E).
- G - Rainfall (inches) recorded on this date.
- H - Rainfall (gallons) calculated based on open area (G x Area x 27,156 gal/acre-in).

| | Stage I (acres) | Stage III (acres) | TOTAL (acres) |
|--------------------|--------------------|----------------------|------------------|
| Initial Cover | -- | 66.0 | 66.0 |
| Intermediate Cover | 102.0 | -- | 102.0 |
| Closed | 30.0 | -- | 30.0 |
| TOTAL | 132.0 | 66.0 | 198.0 |
| Open Area | 102.0 | 66.0 | 168.0 |

Comments

EXHIBIT B

MANATEE COUNTY SOLID WASTE MANAGEMENT FACILITY LENA ROAD LANDFILL MONTHLY LEACHATE TRACKING SUMMARY -- 2006

| | B | C | D | E | F | G | H |
|--------------|------------------|------------------|-------------------|-------------|-------------------|-----------------------|-----------------------|
| MONTH | STAGE I | STAGE III | TOTAL | | | STAGE I | STAGE III |
| | LEACHATE | LEACHATE | LEACHATE | RAINFALL | RAINFALL | LEACHATE/ RAINFALL | LEACHATE /RAINFALL |
| | (gallons) | (gallons) | (gallons) | (inches) | (gallons) | (%) | (%) |
| JANUARY | 367,660 | 3,189,600 | 3,557,260 | 1.78 | 8,120,739 | 7.5% | 100.0% |
| FEBRUARY | 504,280 | 1,919,500 | 2,423,780 | 2.09 | 9,535,025 | 8.7% | 51.2% |
| MARCH | 451,140 | 1,709,800 | 2,160,940 | 1.07 | 4,881,568 | 15.2% | 89.2% |
| APRIL | 394,120 | 1,366,500 | 1,760,620 | 0.21 | 958,065 | 67.8% | 363.1% |
| MAY | 429,690 | 1,582,600 | 2,012,290 | 1.51 | 6,888,942 | 10.3% | 58.5% |
| JUNE | | | | | | | |
| JULY | | | | | | | |
| AUGUST | | | | | | | |
| SEPTEMBER | | | | | | | |
| OCTOBER | | | | | | | |
| NOVEMBER | | | | | | | |
| DECEMBER | | | | | | | |
| TOTAL | 2,146,890 | 9,768,000 | 11,914,890 | 6.66 | 30,384,339 | 11.6% | 81.8% |

Notes:

1. (B) Total leachate pumped from Stage I.
2. (C) Total leachate pumped from Stage III.
3. (D) Total leachate (Column B+C) pumped to the WWTP storage tank.
4. (E) Total rainfall in inches.
5. (F) Total rainfall in gallons (Stage I and III Open Area of 168-acres x Rainfall)
6. (G) Stage I leachate pumped as a percentage of rainfall.
7. (H) Stage III leachate pumped as a percentage of rainfall.

Landfill Stage Land Areas

| | Stage I | Stage III | TOTAL |
|------------------|--------------|-------------|--------------|
| | (acres) | (acres) | (acres) |
| Initial Cover | -- | 66.0 | 66.0 |
| Intermediate Cov | 102.0 | -- | 102.0 |
| Closed | 30.0 | -- | 30.0 |
| TOTAL | 132.0 | 66.0 | 198.0 |
| Open Area | 102.0 | 66.0 | 168.0 |

LEACHATE METER READINGS
MARCH 2006

| DATE | LEACHATE | | | STORMWATER | | | COMMENTS | NAME |
|---------|-----------|-----------|-----------|------------|-----------|-----------|----------|------|
| | METER # 1 | METER # 2 | METER # 3 | S. G. # 1 | S. G. # 2 | S. G. # 2 | | |
| 5/1/06 | 2878365 | 1775839 | 2174411 | 32.00 | 28.90 | 28.90 | OK | AD |
| 5/2/06 | 2879145 | 1776426 | 2175039 | 32.00 | 28.90 | 28.90 | OK | AD |
| 5/3/06 | 2880570 | 1776669 | 2175574 | 32.00 | 28.90 | 28.90 | OK | AD |
| 5/4/06 | 2881377 | 1776884 | 2176042 | 32.00 | 28.90 | 28.90 | OK | CM |
| 5/5/06 | 2882589 | 1777180 | 2176688 | 32.00 | 28.90 | 28.90 | OK | CM |
| 5/8/06 | 2886099 | 1778099 | 2178291 | 32.00 | 28.90 | 28.90 | OK | AD |
| 5/9/06 | 2887741 | 1778482 | 2178826 | 32.00 | 28.90 | 28.90 | OK | AD |
| 5/10/06 | 2888432 | 1778683 | 2179303 | 32.00 | 28.90 | 28.90 | OK | AD |
| 5/11/06 | 2889328 | 1778935 | 2179667 | 32.00 | 28.90 | 28.90 | OK | AD |
| 5/12/06 | 2890400 | 1779205 | 2180103 | 32.00 | 28.90 | 28.90 | OK | AD |
| 5/15/06 | 2893328 | 1779958 | 2181479 | 32.00 | 28.90 | 28.90 | OK | AD |
| 5/16/06 | 2894772 | 1780333 | 2182077 | 32.00 | 28.90 | 28.90 | OK | AD |
| 5/17/06 | 2895896 | 1780600 | 2182465 | 32.08 | 28.90 | 28.90 | OK | AD |
| 5/18/06 | 2897020 | 1780868 | 2182957 | 32.08 | 28.90 | 28.90 | OK | AD |
| 5/19/06 | 2897887 | 178112 | 2183367 | 32.08 | 28.90 | 28.90 | OK | AD |
| 5/22/06 | 2900884 | 1781868 | 2184802 | 32.08 | 28.90 | 28.90 | OK | AD |
| 5/23/06 | 2901765 | 1782106 | 2185203 | 32.08 | 28.90 | 28.90 | OK | AD |
| 5/24/06 | 2902862 | 1782323 | 2185718 | 32.08 | 28.90 | 28.90 | OK | AD |
| 5/25/06 | 2903747 | 1782615 | 2186103 | 32.08 | 28.90 | 28.90 | OK | AD |
| 5/26/06 | 2904699 | 1782856 | 2186507 | 32.08 | 28.90 | 28.90 | OK | AD |
| 5/30/06 | 2908160 | 1783917 | 2188395 | 32.00 | 28.90 | 28.90 | OK | AD |
| 5/31/06 | 2909675 | 1784190 | 2188883 | 32.00 | 28.90 | 28.90 | OK | AD |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Landfill

| LANDFILL SHEET | | |
|----------------|--------------|-----------------|
| 2006 May | RAIN FALL | LEACHATE MGD |
| 1 | 0.00 | 0.040 |
| 2 | 0.00 | 0.044 |
| 3 | 0.00 | 0.096 |
| 4 | 0.00 | 0.350 |
| 5 | 0.00 | 1.518 |
| 6 | 0.00 | 0.015 |
| 7 | 0.00 | 0.015 |
| 8 | 0.00 | 0.015 |
| 9 | 0.78 | 0.015 |
| 10 | 0.00 | 0.014 |
| 11 | 0.02 | 0.023 |
| 12 | 0.00 | 0.016 |
| 13 | 0.00 | 0.014 |
| 14 | 0.00 | 0.016 |
| 15 | 0.00 | 0.014 |
| 16 | 0.71 | 0.019 |
| 17 | 0.00 | 0.016 |
| 18 | 0.00 | 0.013 |
| 19 | 0.00 | 0.013 |
| 20 | 0.00 | 0.013 |
| 21 | 0.00 | 0.013 |
| 22 | 0.00 | 0.014 |
| 23 | 0.00 | 0.014 |
| 24 | 0.00 | 0.015 |
| 25 | 0.00 | 0.012 |
| 26 | 0.00 | 0.013 |
| 27 | 0.00 | 0.013 |
| 28 | 0.00 | 0.012 |
| 29 | 0.00 | 0.013 |
| 30 | 0.00 | 0.010 |
| 31 | 0.00 | 0.013 |
| TOTAL | 1.51 | 2.421 |
| AVG | | 0.078 |
| MIN | | |
| MAX | 0.78 | 1.518 |

Fax # 9-741-3396

FIGURE L-7

Manatee County Lena Road Landfill

Monthly Groundwater Gradient Report

Month and Year: May 2006

| Piezometers Inside Slurry Wall | | | | Groundwater Monitoring Wells Outside Slurry Wall | | |
|-----------------------------------|--------------------|-----------------------|------------------|---|--------------------|--------------------------|
| Piezometer | Riser Elevation | Leachate Elevation | Gradient Flow | Monitoring Well | Riser Elevation | Groundwater Elevation |
| P-1 | 42.68 | 29.27 | <i>inward</i> | GW-1 | 38.68 | 29.28 |
| P-2 | 42.32 | 28.49 | <i>inward</i> | GW-2 | 40.92 | 30.02 |
| P-3 * | 42.32 | 27.95 | <i>inward</i> | GW-3 | 39.40 | 30.49 |
| P-4 * | 42.32 | 23.97 | <i>inward</i> | GW-4 | 40.53 | 30.83 |
| P-5 * | 42.32 | 22.90 | <i>inward</i> | GW-5 | 39.90 | 29.15 |
| P-6 * | 42.32 | 20.46 | <i>inward</i> | GW-6 | 38.95 | 28.29 |
| P-7* | 42.32 | 20.64 | <i>inward</i> | GW-7 | 39.49 | 26.13 |
| P-8 | 40.21 | 18.62 | <i>inward</i> | GW-8 | 39.75 | 25.45 |
| P-9 | 39.97 | 19.54 | <i>inward</i> | GW-9 | 39.65 | 26.05 |
| P-10 | 39.86 | 19.32 | <i>inward</i> | GW-10 | 38.34 | 25.80 |
| P-11** | 40.57 | 23.07 | <i>inward</i> | GW-11 ** | 39.02 | 30.00 |
| P-12 | 43.28 | 29.29 | <i>inward</i> | GW-12 | 42.09 | 29.67 |
| P-13 | 44.78 | 30.17 | <i>inward</i> | GW-13 | 44.79 | 31.97 |
| P-14 | 45.09 | 29.90 | <i>inward</i> | GW-14 | 39.63 | 33.59 |
| P-15 | 45.57 | 30.97 | <i>inward</i> | GW-15 | 42.33 | 35.19 |
| P-16 | 44.67 | 31.18 | <i>inward</i> | GW-16 | 44.41 | 34.41 |
| P-17 | 44.28 | 29.94 | <i>inward</i> | GW-17 | 42.19 | 32.81 |

Comments:

* Piezometers P-3, P-4, P-5, P-6 and P-7 were installed but not surveyed. Riser elevations estimated based on P-2.

** P-11 and GW-11 were installed, but not surveyed. Riser elevations were estimated based on dike elevations.

Date Data Collected: May 11, 2006

Form Revised December 6, 2004