



An employee-owned company

July 14, 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  
Monthly Report – June 2005**

Dear Mr. Morris:

Attached is the June 2005 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 (Exhibit A), the field readings for the water balance report, the leachate-tracking summary (Exhibit B), and a monthly groundwater gradient report.

An inward gradient was present in Stage I and Stage III of the landfill. An outward gradient was present in Stage II of the landfill. Please note that Stage II contains no solid waste.

The month of June saw a total of 10.15-inches of rainfall recorded for the entire month. The highest daily rate of 2.00 inches fell on June 11.

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: Daniel T. Gray, Director, Utility Operations Department  
Gus DiFonzo, Solid Waste Manager  
Mike Gore/Jeanne Detweiler, Manatee County Landfill Division  
File – 120498.93 0100, June 2005

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Manatee County Lena Road Landfill  
Groundwater Gradient  
June 2005

**Inside Slurry Wall**

**Outside Slurry Wall**

| Piezometer     | Riser Elevation | Groundwater Elevation | Gradient Flow | Monitoring Well | Riser Elevation | Groundwater Elevation |
|----------------|-----------------|-----------------------|---------------|-----------------|-----------------|-----------------------|
| <b>STAGE I</b> |                 |                       |               |                 |                 |                       |
| PZ-1           | 42.55           | 29.23                 | <i>inward</i> | MW-5            | 39.88           | 32.45                 |
| PZ-2           | 42.47           | 29.02                 | <i>inward</i> | MW-2            | 41.13           | 33.23                 |
| PZ-3A          | 44.90           | 29.20                 | <i>inward</i> | MW-1            | 42.58           | 34.68                 |
| PZ-4A          | 47.73           | 29.97                 | <i>inward</i> | CW-4            | 37.48           | 35.30                 |
| PZ-5           | 43.94           | 26.24                 | <i>inward</i> | CW-5A           | 41.18           | 38.79                 |
| PZ-6           | 44.73           | 31.20                 | <i>inward</i> | SG-1            |                 | 34.05                 |
| PZ-7           | 47.76           | 30.08                 | <i>inward</i> | MW-6            | 39.29           | 34.91                 |
| PZ-19          | 45.87           | 28.73                 | <i>inward</i> | PZ-11           | 38.94           | 33.29                 |

Dry 32.80

|                 |       |       |                |        |       |       |
|-----------------|-------|-------|----------------|--------|-------|-------|
| <b>STAGE II</b> |       |       |                |        |       |       |
| PZ-8            | 37.63 | 33.25 | <i>outward</i> | LRII-5 | 36.75 | 32.81 |
| PZ-9            | 39.20 | 33.48 | <i>outward</i> | LRII-4 | 33.85 | 29.36 |
| PZ-10           | 37.05 | 33.42 | <i>outward</i> | LRII-2 | 36.48 | 32.08 |
| PZ-11           | 38.94 | 33.29 | <i>inward</i>  | LRII-1 | 37.97 | 33.95 |

|                  |       |       |               |        |       |       |
|------------------|-------|-------|---------------|--------|-------|-------|
| <b>STAGE III</b> |       |       |               |        |       |       |
| PZ-12A           | 38.48 | 28.95 | <i>inward</i> | GC-2   | 38.15 | 32.36 |
| PZ-13            | 35.36 | 29.18 | <i>inward</i> | GC-3   | 35.02 | 29.93 |
| PZ-14A           | 34.58 | 22.93 | <i>inward</i> | GC-4A  | 34.96 | 30.80 |
| PZ-15C           | 40.46 | 21.38 | <i>inward</i> | PZ-15A | 39.79 | 32.17 |
| PZ-16B           | 40.22 | 21.20 | <i>inward</i> | PZ-16A | 39.05 | 28.93 |
| PZ-17            | 40.57 | 29.01 | <i>inward</i> | SG-2   |       | 29.40 |
| PZ-18            | 40.16 | 29.23 | <i>inward</i> | SG-3   |       | 33.36 |

Dry 28.90

Dry 33.50

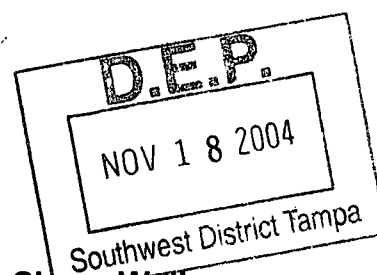
| <b>Additional In-House Monitoring Data</b> |       |       |                |        |       |       |
|--------------------------------------------|-------|-------|----------------|--------|-------|-------|
| <u>Stage I</u>                             |       |       |                |        |       |       |
| PZ-2                                       | 42.47 | 30.02 | <i>inward</i>  | MW-3   | 42.32 | 34.64 |
| <u>Stage II</u>                            |       |       |                |        |       |       |
| PZ-9                                       | 39.20 | 33.48 | <i>outward</i> | LRII-3 | 33.47 | 27.67 |
| <u>Stage III</u>                           |       |       |                |        |       |       |
| PZ-15C                                     | 40.46 | 21.38 | <i>inward</i>  | GC-1A  | 31.75 | 28.73 |
| PZ-16B                                     | 40.22 | 21.20 | <i>inward</i>  | GC-5   | 36.46 | 29.27 |
| PZ-17                                      | 40.57 | 29.01 | <i>inward</i>  | GC-6   | 39.02 | 31.43 |

Notes: The table is arranged so any piezometer can be compared to its corresponding monitoring point. For example, PZ-1 is located on the opposite side of the slurry wall from MW-5. Thus data from PZ-1 are compared to data from MW-5.

Report includes riser elevations determined by certified survey conducted by County Staff (Aug. 10, 1999).  
Riser elevations for MW-1, MW-3, PZ-9, PZ-11 and PZ-19 were resurveyed on November 13, 2002.  
PZ-12A and GC-4A were resurveyed in April 2003.

Data Collection: June 16, 2005

Manatee County Lena Road Landfill  
Groundwater Gradient  
October 2004



**Inside Slurry Wall**

**Outside Slurry Wall**

| Piezometer     | Riser<br>Elevation | Groundwater<br>Elevation | Gradient<br>Flow | Monitoring<br>Well | Riser<br>Elevation | Groundwater<br>Elevation |
|----------------|--------------------|--------------------------|------------------|--------------------|--------------------|--------------------------|
| <b>STAGE I</b> |                    |                          |                  |                    |                    |                          |
| PZ-1           | 42.55              | 29.11                    | <i>inward</i>    | MW-5               | 39.88              | 31.63                    |
| PZ-2           | 42.47              | 30.06                    | <i>inward</i>    | MW-2               | 41.13              | 32.20                    |
| PZ-3A          | 44.90              | 29.81                    | <i>inward</i>    | MW-1               | 42.58              | 33.95                    |
| PZ-4A          | 47.73              | 29.97                    | <i>inward</i>    | CW-4               | 37.48              | 35.10                    |
| PZ-5           | 43.94              | 30.21                    | <i>inward</i>    | CW-5A              | 41.18              | 38.68                    |
| PZ-6           | 44.73              | 30.98                    | <i>inward</i>    | SG-1               |                    | 33.41                    |
| PZ-7           | 47.76              | 30.06                    | <i>inward</i>    | MW-6               | 39.29              | 33.63                    |
| PZ-19          | 45.87              | 28.65                    | <i>inward</i>    | PZ-11              | 38.94              | 33.74                    |

Dry 32.80

|                 |       |       |                |        |       |       |
|-----------------|-------|-------|----------------|--------|-------|-------|
| <b>STAGE II</b> |       |       |                |        |       |       |
| PZ-8            | 37.63 | 33.78 | <i>outward</i> | LRII-5 | 36.75 | 31.66 |
| PZ-9            | 39.20 | 33.84 | <i>outward</i> | LRII-4 | 33.85 | 28.88 |
| PZ-10           | 37.05 | 33.85 | <i>outward</i> | LRII-2 | 36.48 | 31.31 |
| PZ-11           | 38.94 | 33.74 | <i>outward</i> | LRII-1 | 37.97 | 32.77 |

|                  |       |       |               |        |       |       |
|------------------|-------|-------|---------------|--------|-------|-------|
| <b>STAGE III</b> |       |       |               |        |       |       |
| PZ-12A           | 38.48 | 29.35 | <i>inward</i> | GC-2   | 38.15 | 32.30 |
| PZ-13            | 35.36 | 28.34 | <i>inward</i> | GC-3   | 35.02 | 29.26 |
| PZ-14A           | 34.58 | 24.99 | <i>inward</i> | GC-4A  | 34.96 | 29.74 |
| PZ-15C           | 40.46 | 24.22 | <i>inward</i> | PZ-15A | 39.79 | 32.03 |
| PZ-16B           | 40.22 | 25.03 | <i>inward</i> | PZ-16A | 39.05 | 28.63 |
| PZ-17            | 40.57 | 28.85 | <i>inward</i> | SG-2   |       | 29.48 |
| PZ-18            | 40.16 | 28.92 | <i>inward</i> | SG-3   |       | 33.50 |

Dry 28.90  
Dry 33.50

| <b>Additional In-House Monitoring Data</b> |       |       |                |        |       |       |
|--------------------------------------------|-------|-------|----------------|--------|-------|-------|
| <b>Stage I</b>                             |       |       |                |        |       |       |
| PZ-2                                       | 42.47 | 30.06 | <i>inward</i>  | MW-3   | 42.32 | 33.74 |
| <b>Stage II</b>                            |       |       |                |        |       |       |
| PZ-9                                       | 39.20 | 33.84 | <i>outward</i> | LRII-3 | 33.47 | 28.22 |
| <b>Stage III</b>                           |       |       |                |        |       |       |
| PZ-15C                                     | 40.46 | 24.22 | <i>inward</i>  | GC-1A  | 31.75 | 27.18 |
| PZ-16B                                     | 40.22 | 25.03 | <i>inward</i>  | GC-5   | 36.46 | 28.99 |
| PZ-17                                      | 40.57 | 28.85 | <i>inward</i>  | GC-6   | 39.02 | 31.27 |

Notes: The table is arranged so any piezometer can be compared to its corresponding monitoring point. For example, PZ-1 is located on the opposite side of the slurry wall from MW-5. Thus data from PZ-1 are compared to data from MW-5.

Report includes riser elevations determined by certified survey conducted by County Staff (Aug. 10, 1999). Riser elevations for MW-1, MW-3, PZ-9, PZ-11 and PZ-19 were resurveyed on November 13, 2002. PZ-12A and GC-4A were resurveyed in April 2003.

Data Collection: October 7 and 14, 2004

Lena Rd  
gradient data

**Manatee County Lena Road Landfill  
Groundwater Gradient  
August 2004**

**Inside Slurry Wall**

**Outside Slurry Wall**

| Piezometer     | Riser<br>Elevation | Groundwater<br>Elevation | Gradient<br>Flow | Monitoring<br>Well | Riser<br>Elevation | Groundwater<br>Elevation |
|----------------|--------------------|--------------------------|------------------|--------------------|--------------------|--------------------------|
| <b>STAGE I</b> |                    |                          |                  |                    |                    |                          |
| PZ-1           | 42.55              | 29.36                    | <i>inward</i>    | MW-5               | 39.88              | 32.82                    |
| PZ-2           | 42.47              | 29.95                    | <i>inward</i>    | MW-2               | 41.13              | 33.71                    |
| PZ-3A          | 44.90              | 29.17                    | <i>inward</i>    | MW-1               | 42.58              | 34.68                    |
| PZ-4A          | 47.73              | 29.84                    | <i>inward</i>    | CW-4               | 37.48              | 35.14                    |
| PZ-5           | 43.94              | 30.26                    | <i>inward</i>    | CW-5A              | 41.18              | 38.11                    |
| PZ-6           | 44.73              | 31.65                    | <i>inward</i>    | SG-1               |                    | 34.08                    |
| PZ-7           | 47.76              | 30.25                    | <i>inward</i>    | MW-6               | 39.29              | 35.98                    |
| PZ-19          | 45.87              | 28.69                    | <i>inward</i>    | PZ-11              | 38.94              | 34.54                    |

- 3.46  
- 3.76  
- 5.51  
- 5.3  
- 7.85  
Dry 32.80 - 2.43  
- 5.73  
- 5.85

|                 |       |       |                |        |       |       |
|-----------------|-------|-------|----------------|--------|-------|-------|
| <b>STAGE II</b> |       |       |                |        |       |       |
| PZ-8            | 37.63 | 34.63 | <i>outward</i> | LR11-5 | 36.75 | 32.56 |
| PZ-9            | 39.20 | 34.37 | <i>outward</i> | LR11-4 | 33.85 | 28.70 |
| PZ-10           | 37.05 | 34.34 | <i>outward</i> | LR11-2 | 36.48 | 32.10 |
| PZ-11           | 38.94 | 34.54 | <i>outward</i> | LR11-1 | 37.97 | 34.35 |

2.07  
5.67  
2.24  
0.19

|                  |       |       |               |        |       |       |
|------------------|-------|-------|---------------|--------|-------|-------|
| <b>STAGE III</b> |       |       |               |        |       |       |
| PZ-12A           | 38.48 | 30.14 | <i>inward</i> | GC-2   | 38.15 | 34.00 |
| PZ-13            | 35.36 | 28.34 | <i>inward</i> | GC-3   | 35.02 | 30.52 |
| PZ-14A           | 34.58 | 25.95 | <i>inward</i> | GC-4A  | 34.96 | 31.96 |
| PZ-15C           | 40.46 | 24.75 | <i>inward</i> | PZ-15A | 39.79 | 33.01 |
| PZ-16B           | 40.22 | 26.97 | <i>inward</i> | PZ-16A | 39.05 | 29.86 |
| PZ-17            | 40.57 | 29.15 | <i>inward</i> | SG-2   |       | 30.60 |
| PZ-18            | 40.16 | 29.66 | <i>inward</i> | SG-3   |       | 34.00 |

- 3.86  
- 2.18  
- 6.01  
- 8.26  
- 2.89  
Dry 28.90 - 1.45  
Dry 33.50 - 4.34

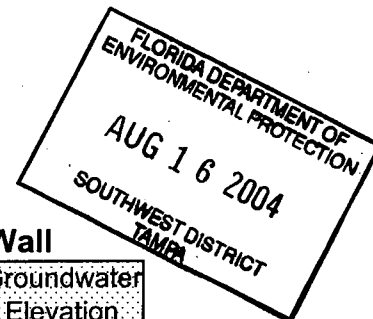
| <b>Additional In-House Monitoring Data</b> |       |       |                |        |       |       |
|--------------------------------------------|-------|-------|----------------|--------|-------|-------|
| <u>Stage I</u>                             |       |       |                |        |       |       |
| PZ-2                                       | 42.47 | 29.95 | <i>inward</i>  | MW-3   | 42.32 | 35.32 |
| <u>Stage II</u>                            |       |       |                |        |       |       |
| PZ-9                                       | 39.20 | 34.37 | <i>outward</i> | LR11-3 | 33.47 | 28.52 |
| <u>Stage III</u>                           |       |       |                |        |       |       |
| PZ-15C                                     | 40.46 | 24.75 | <i>inward</i>  | GC-1A  | 31.75 | 28.31 |
| PZ-16B                                     | 40.22 | 26.97 | <i>inward</i>  | GC-5   | 36.46 | 31.21 |
| PZ-17                                      | 40.57 | 29.15 | <i>inward</i>  | GC-6   | 39.02 | 32.55 |

Notes: The table is arranged so any piezometer can be compared to its corresponding monitoring point. For example, PZ-1 is located on the opposite side of the slurry wall from MW-5. Thus data from PZ-1 are compared to data from MW-5.

Report includes riser elevations determined by certified survey conducted by County Staff (Aug. 10, 1999).  
Riser elevations for MW-1, MW-3, PZ-9, PZ-11 and PZ-19 were resurveyed on November 13, 2002.  
PZ-12A and GC-4A were resurveyed in April 2003.

Data Collection: August 6, 2004

Manatee County Lena Road Landfill  
Groundwater Gradient  
July 2004



**Inside Slurry Wall**

**Outside Slurry Wall**

| Piezometer     | Riser Elevation | Groundwater Elevation | Gradient Flow | Monitoring Well | Riser Elevation | Groundwater Elevation |
|----------------|-----------------|-----------------------|---------------|-----------------|-----------------|-----------------------|
| <b>STAGE I</b> |                 |                       |               |                 |                 |                       |
| PZ-1           | 42.55           | 29.50                 | inward        | MW-5            | 39.88           | 31.38                 |
| PZ-2           | 42.47           | 30.07                 | inward        | MW-2            | 41.13           | 31.53                 |
| PZ-3A          | 44.90           | 29.20                 | inward        | MW-1            | 42.58           | 33.52                 |
| PZ-4A          | 47.73           | 29.94                 | inward        | CW-4            | 37.48           | 34.20                 |
| PZ-5           | 43.94           | 31.20                 | inward        | CW-5A           | 41.18           | 35.92                 |
| PZ-6           | 44.73           | 30.98                 | inward        | SG-1            |                 | 33.64                 |
| PZ-7           | 47.76           | 30.06                 | inward        | MW-6            | 39.29           | 32.32                 |
| PZ-19          | 45.87           | 29.51                 | inward        | PZ-11           | 38.94           | 33.54                 |

- 1.88  
- 1.40  
- 4.32  
- 4.26  
- 4.72  
Dry 32.80 - 2.66  
- 2.26  
- 4.03

|                 |       |       |         |        |       |       |
|-----------------|-------|-------|---------|--------|-------|-------|
| <b>STAGE II</b> |       |       |         |        |       |       |
| PZ-8            | 37.63 | 33.58 | outward | LRII-5 | 36.75 | 29.28 |
| PZ-9            | 39.20 | 33.62 | outward | LRII-4 | 33.85 | 26.35 |
| PZ-10           | 37.05 | 33.76 | outward | LRII-2 | 36.48 | 29.03 |
| PZ-11           | 38.94 | 33.54 | outward | LRII-1 | 37.97 | 33.41 |

4.3  
7.27  
4.73  
0.13

|                  |       |       |        |        |       |       |
|------------------|-------|-------|--------|--------|-------|-------|
| <b>STAGE III</b> |       |       |        |        |       |       |
| PZ-12A           | 38.48 | 28.75 | inward | GC-2   | 38.15 | 32.57 |
| PZ-13            | 35.36 | 25.84 | inward | GC-3   | 35.02 | 27.30 |
| PZ-14A           | 34.58 | 20.42 | inward | GC-4A  | 34.96 | 28.79 |
| PZ-15C           | 40.46 | 20.39 | inward | PZ-15A | 39.79 | 31.52 |
| PZ-16B           | 40.22 | 21.25 | inward | PZ-16A | 39.05 | 29.18 |
| PZ-17            | 40.57 | 28.69 | inward | SG-2   |       | 29.26 |
| PZ-18            | 40.16 | 29.04 | inward | SG-3   |       | 33.60 |

- 3.82  
- 1.46  
- 8.37  
- 11.13  
- 7.93  
Dry 28.90 - 0.57  
Dry 33.50 - 4.56

| <b>Additional In-House Monitoring Data</b> |       |       |         |        |       |       |
|--------------------------------------------|-------|-------|---------|--------|-------|-------|
| <b>Stage I</b>                             |       |       |         |        |       |       |
| PZ-2                                       | 42.47 | 30.07 | inward  | MW-3   | 42.32 | 33.43 |
| <b>Stage II</b>                            |       |       |         |        |       |       |
| PZ-9                                       | 39.20 | 33.62 | outward | LRII-3 | 33.47 | 25.79 |
| <b>Stage III</b>                           |       |       |         |        |       |       |
| PZ-15C                                     | 40.46 | 20.39 | inward  | GC-1A  | 31.75 | 27.12 |
| PZ-16B                                     | 40.22 | 21.25 | inward  | GC-5   | 36.46 | 29.51 |
| PZ-17                                      | 40.57 | 28.69 | inward  | GC-6   | 39.02 | 30.81 |

**Notes:**

The table is arranged so any piezometer can be compared to its corresponding monitoring point. For example, PZ-1 is located on the opposite side of the slurry wall from MW-5. Thus data from PZ-1 are compared to data from MW-5.

Report includes riser elevations determined by certified survey conducted by County Staff (Aug. 10, 1999).  
Riser elevations for MW-1, MW-3, PZ-9, PZ-11 and PZ-19 were resurveyed on November 13, 2002.  
PZ-12A and GC-4A were resurveyed in April 2003.

Data Collection: July 7, 2004

Manatee County Lena Road Landfill  
Groundwater Gradient  
June 2004

**Inside Slurry Wall**

**Outside Slurry Wall**

| Piezometer     | Riser Elevation | Groundwater Elevation | Gradient Flow | Monitoring Well | Riser Elevation | Groundwater Elevation |
|----------------|-----------------|-----------------------|---------------|-----------------|-----------------|-----------------------|
| <b>STAGE I</b> |                 |                       |               |                 |                 |                       |
| PZ-1           | 42.55           | 29.15                 | inward        | MW-5            | 39.88           | 31.36                 |
| PZ-2           | 42.47           | 30.23                 | inward        | MW-2            | 41.13           | 31.18                 |
| PZ-3A          | 44.90           | 29.09                 | inward        | MW-1            | 42.58           | 32.04                 |
| PZ-4A          | 47.73           | 29.88                 | inward        | CW-4            | 37.48           | 33.66                 |
| PZ-5           | 43.94           | 31.14                 | inward        | CW-5A           | 41.18           | 34.55                 |
| PZ-6           | 44.73           | 31.02                 | inward        | SG-1            |                 | 34.58                 |
| PZ-7           | 47.76           | 29.92                 | inward        | MW-6            | 39.29           | 33.11                 |
| PZ-19          | 45.87           | 28.62                 | inward        | PZ-11           | 38.94           | 33.09                 |

- 2.21  
- 0.95  
- 2.95  
- 3.78  
- 3.41  
Dry 32.80 - 3.56  
- 3.19  
- 4.47

|                 |       |       |         |        |       |       |
|-----------------|-------|-------|---------|--------|-------|-------|
| <b>STAGE II</b> |       |       |         |        |       |       |
| PZ-8            | 37.63 | 33.48 | outward | LRII-5 | 36.75 | 28.01 |
| PZ-9            | 39.20 | 33.20 | outward | LRII-4 | 33.85 | 24.97 |
| PZ-10           | 37.05 | 33.74 | outward | LRII-2 | 36.48 | 28.00 |
| PZ-11           | 38.94 | 33.09 | outward | LRII-1 | 37.97 | 32.66 |

S.47  
8.23  
S.74  
0.43

|                  |       |       |        |        |       |       |
|------------------|-------|-------|--------|--------|-------|-------|
| <b>STAGE III</b> |       |       |        |        |       |       |
| PZ-12A           | 38.48 | 28.65 | inward | GC-2   | 38.15 | 32.22 |
| PZ-13            | 35.36 | 25.01 | inward | GC-3   | 35.02 | 26.49 |
| PZ-14A           | 34.58 | 21.48 | inward | GC-4A  | 34.96 | 28.89 |
| PZ-15C           | 40.46 | 20.45 | inward | PZ-15A | 39.79 | 32.23 |
| PZ-16B           | 40.22 | 21.67 | inward | PZ-16A | 39.05 | 29.52 |
| PZ-17            | 40.57 | 28.47 | inward | SG-2   |       | 30.10 |
| PZ-18            | 40.16 | 29.12 | inward | SG-3   |       | 34.30 |

- 3.57  
- 1.48  
- 7.41  
- 11.78  
- 7.85  
Dry 28.90 - 1.63  
Dry 33.50 - 5.18

| <b>Additional In-House Monitoring Data</b> |       |       |         |        |       |       |
|--------------------------------------------|-------|-------|---------|--------|-------|-------|
| <b>Stage I</b>                             |       |       |         |        |       |       |
| PZ-2                                       | 42.47 | 30.23 | inward  | MW-3   | 42.32 | 31.59 |
| <b>Stage II</b>                            |       |       |         |        |       |       |
| PZ-9                                       | 39.20 | 33.20 | outward | LRII-3 | 33.47 | 24.65 |
| <b>Stage III</b>                           |       |       |         |        |       |       |
| PZ-15C                                     | 40.46 | 20.45 | inward  | GC-1A  | 31.75 | 28.03 |
| PZ-16B                                     | 40.22 | 21.67 | inward  | GC-5   | 36.46 | 29.78 |
| PZ-17                                      | 40.57 | 28.47 | inward  | GC-6   | 39.02 | 32.07 |

Notes: The table is arranged so any piezometer can be compared to its corresponding monitoring point. For example, PZ-1 is located on the opposite side of the slurry wall from MW-5. Thus data from PZ-1 are compared to data from MW-5.

Report includes riser elevations determined by certified survey conducted by County Staff (Aug. 10, 1999).  
Riser elevations for MW-1, MW-3, PZ-9, PZ-11 and PZ-19 were resurveyed on November 13, 2002.  
PZ-12A and GC-4A were resurveyed in April 2003.

Stage I Landfill - 132 acres (Closed - 30 ac., Intermediate - 102 ac., Open - 0 ac.)  
Stage II Landfill - 110 acres (Closed - 0 ac., Intermediate - 0 ac., Open - 0 ac. No waste in Stage II.)  
Stage III Landfill - 65 acres (Closed - 0 ac., Intermediate - 38 ac., Open - 27 ac.)

Data Collection: June 14, 2004

Manatee County Lena Road Landfill  
Groundwater Gradient  
May 2004

Entered in spreadsheet 7/22/04 smc.

**Inside Slurry Wall**

**Outside Slurry Wall**

| Piezometer     | Riser Elevation | Groundwater Elevation | Gradient Flow | Monitoring Well | Riser Elevation | Groundwater Elevation |
|----------------|-----------------|-----------------------|---------------|-----------------|-----------------|-----------------------|
| <b>STAGE I</b> |                 |                       |               |                 |                 |                       |
| PZ-1           | 42.55           | 29.08                 | inward        | MW-5            | 39.88           | 31.12                 |
| PZ-2           | 42.47           | 30.12                 | inward        | MW-2            | 41.13           | 31.69                 |
| PZ-3A          | 44.90           | 29.08                 | inward        | MW-1            | 42.58           | 32.39                 |
| PZ-4A          | 47.73           | 29.88                 | inward        | CW-4            | 37.48           | 34.18                 |
| PZ-5           | 43.94           | 30.16                 | inward        | CW-5A           | 41.18           | 37.58                 |
| PZ-6           | 44.73           | 30.88                 | inward        | SG-1            |                 | 33.25                 |
| PZ-7           | 47.76           | 29.86                 | inward        | MW-6            | 39.29           | 32.91                 |
| PZ-19          | 45.87           | 28.50                 | inward        | PZ-11           | 38.94           | 33.45                 |

Dry 32.80

|                 |       |       |         |        |       |       |
|-----------------|-------|-------|---------|--------|-------|-------|
| <b>STAGE II</b> |       |       |         |        |       |       |
| PZ-8            | 37.63 | 33.38 | outward | LRII-5 | 36.75 | 29.13 |
| PZ-9            | 39.20 | 33.49 | outward | LRII-4 | 33.85 | 25.90 |
| PZ-10           | 37.05 | 33.49 | outward | LRII-2 | 36.48 | 28.48 |
| PZ-11           | 38.94 | 33.45 | outward | LRII-1 | 37.97 | 32.13 |

|                  |       |       |        |        |       |       |
|------------------|-------|-------|--------|--------|-------|-------|
| <b>STAGE III</b> |       |       |        |        |       |       |
| PZ-12A           | 38.48 | 28.29 | inward | GC-2   | 38.15 | 31.15 |
| PZ-13            | 35.36 | 25.06 | inward | GC-3   | 35.02 | 26.29 |
| PZ-14A           | 34.58 | 19.85 | inward | GC-4A  | 34.96 | 28.60 |
| PZ-15C           | 40.46 | 19.99 | inward | PZ-15A | 39.79 | 31.29 |
| PZ-16B           | 40.22 | 20.80 | inward | PZ-16A | 39.05 | 29.27 |
| PZ-17            | 40.57 | 28.46 | inward | SG-2   |       | 30.35 |
| PZ-18            | 40.16 | 28.76 | inward | SG-3   |       | 33.50 |

Dry 28.90

Dry 33.50

| <b>Additional In-House Monitoring Data</b> |       |       |         |        |       |       |
|--------------------------------------------|-------|-------|---------|--------|-------|-------|
| <b>Stage I</b>                             |       |       |         |        |       |       |
| PZ-2                                       | 42.47 | 30.12 | inward  | MW-3   | 42.32 | 32.49 |
| <b>Stage II</b>                            |       |       |         |        |       |       |
| PZ-9                                       | 39.20 | 33.49 | outward | LRII-3 | 33.47 | 25.52 |
| <b>Stage III</b>                           |       |       |         |        |       |       |
| PZ-15C                                     | 40.46 | 19.99 | inward  | GC-1A  | 31.75 | 26.57 |
| PZ-16B                                     | 40.22 | 20.80 | inward  | GC-5   | 36.46 | 28.76 |
| PZ-17                                      | 40.57 | 28.46 | inward  | GC-6   | 39.02 | 30.79 |

Notes:

The table is arranged so any piezometer can be compared to its corresponding monitoring point. For example, PZ-1 is located on the opposite side of the slurry wall from MW-5. Thus data from PZ-1 are compared to data from MW-5.

Report includes riser elevations determined by certified survey conducted by County Staff (Aug. 10, 1999). Riser elevations for MW-1, MW-3, PZ-9, PZ-11 and PZ-19 were resurveyed on November 13, 2002. PZ-12A and GC-4A were resurveyed in April 2003.

Stage I Landfill - 132 acres (Closed - 30 ac., Intermediate - 102 ac., Open - 0 ac.)

Stage II Landfill - 110 acres (Closed - 0 ac., Intermediate - 0 ac., Open - 0 ac. No waste in Stage II.)

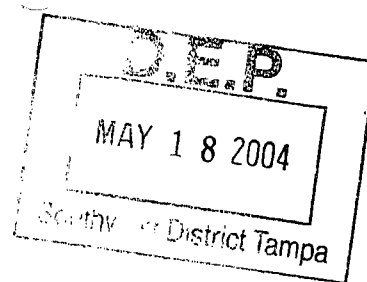
Stage III Landfill - 65 acres (Closed - 0 ac., Intermediate - 38 ac., Open - 27 ac.)

Data Collection: May 6, 2004



An employee-owned company

May 17, 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  
Monthly Report – April 2004**

Dear Mr. Morris:

Attached is the April 2004 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 (Exhibit A), field readings for the water balance report, leachate tracking summary (Exhibit B), and a monthly groundwater gradient report.

An inward gradient was present in Stage I and Stage III of the landfill. An outward gradient was present in Stage II of the landfill. It should be noted that Stage II contains no solid waste.

April was a period of moderate rainfall for Manatee County, with a total of 3.30 inches of rain recorded for the entire month. The highest rainfall day came on April 12<sup>th</sup>, with a total of 1.68 inches of rainfall recorded. There was a total of 0.61 inches of rainfall reported for the month of March.

If you should have any questions concerning this report, please contact me in our Orlando office at 407/647-7275, Ext. 153, 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  
Michael Gore / Jeanne Detweiler, Manatee County Landfill Division  
File – 120498.91 9100, April 2004

U:\OldG\WASTEMAN\Manatee County\SW-05 Annual Monitoring\2004\April2004\MonthlyLtr\_April2004.doc

Manatee County Lena Road Landfill  
Groundwater Gradient  
April 2004

| Inside Slurry Wall |                 |                       |                | Outside Slurry Wall |                 |                       |
|--------------------|-----------------|-----------------------|----------------|---------------------|-----------------|-----------------------|
| Piezometer         | Riser Elevation | Groundwater Elevation | Gradient Flow  | Monitoring Well     | Riser Elevation | Groundwater Elevation |
| <b>STAGE I</b>     |                 |                       |                |                     |                 |                       |
| PZ-1               | 42.55           | 29.15                 | <i>inward</i>  | MW-5                | 39.88           | 31.18                 |
| PZ-2               | 42.47           | 29.95                 | <i>inward</i>  | MW-2                | 41.13           | 31.55                 |
| PZ-3A              | 44.90           | 29.09                 | <i>inward</i>  | MW-1                | 42.58           | 32.52                 |
| PZ-4A              | 47.73           | 29.88                 | <i>inward</i>  | CW-4                | 37.48           | 34.81                 |
| PZ-5               | 43.94           | 30.19                 | <i>inward</i>  | CW-5A               | 41.18           | 38.38                 |
| PZ-6               | 44.73           | 30.92                 | <i>inward</i>  | SG-1                |                 | 33.28                 |
| PZ-7               | 47.76           | 30.00                 | <i>inward</i>  | MW-6                | 39.29           | 32.93                 |
| PZ-19              | 45.87           | 28.59                 | <i>inward</i>  | PZ-11               | 38.94           | 33.48                 |
| <b>STAGE II</b>    |                 |                       |                |                     |                 |                       |
| PZ-8               | 37.63           | 33.49                 | <i>outward</i> | LRII-5              | 36.75           | 29.60                 |
| PZ-9               | 39.20           | 33.59                 | <i>outward</i> | LRII-4              | 33.85           | 26.28                 |
| PZ-10              | 37.05           | 33.47                 | <i>outward</i> | LRII-2              | 36.48           | 28.93                 |
| PZ-11              | 38.94           | 33.48                 | <i>outward</i> | LRII-1              | 37.97           | 31.92                 |
| <b>STAGE III</b>   |                 |                       |                |                     |                 |                       |
| PZ-12A             | 38.48           | 28.45                 | <i>inward</i>  | GC-2                | 38.15           | 30.86                 |
| PZ-13              | 35.36           | 25.40                 | <i>inward</i>  | GC-3                | 35.02           | 27.70                 |
| PZ-14A             | 34.58           | 19.93                 | <i>inward</i>  | GC-4A               | 34.96           | 29.18                 |
| PZ-15C             | 40.46           | 20.03                 | <i>inward</i>  | PZ-15A              | 39.79           | 31.49                 |
| PZ-16B             | 40.22           | 20.84                 | <i>inward</i>  | PZ-16A              | 39.05           | 29.33                 |
| PZ-17              | 40.57           | 28.62                 | <i>inward</i>  | SG-2                |                 | 30.40                 |
| PZ-18              | 40.16           | 28.89                 | <i>inward</i>  | SG-3                |                 | 33.50                 |

Dry 32.80

NO BURIED  
WASTE IN  
STAGE II

Dry 28.90

Dry 33.50

| Additional In-House Monitoring Data |       |       |                |        |       |       |
|-------------------------------------|-------|-------|----------------|--------|-------|-------|
| <b>Stage I</b>                      |       |       |                |        |       |       |
| PZ-2                                | 42.47 | 29.95 | <i>inward</i>  | MW-3   | 42.32 | 32.02 |
| <b>Stage II</b>                     |       |       |                |        |       |       |
| PZ-9                                | 39.20 | 33.59 | <i>outward</i> | LRII-3 | 33.47 | 25.84 |
| <b>Stage III</b>                    |       |       |                |        |       |       |
| PZ-15C                              | 40.46 | 20.03 | <i>inward</i>  | GC-1A  | 31.75 | 26.65 |
| PZ-16B                              | 40.22 | 20.84 | <i>inward</i>  | GC-5   | 36.46 | 28.88 |
| PZ-17                               | 40.57 | 28.62 | <i>inward</i>  | GC-6   | 39.02 | 30.50 |

Notes: The table is arranged so any piezometer can be compared to its corresponding monitoring point. For example, PZ-1 is located on the opposite side of the slurry wall from MW-5. Thus data from PZ-1 are compared to data from MW-5.

Report includes riser elevations determined by certified survey conducted by County Staff (Aug. 10, 1999).

Riser elevations for MW-1, MW-3, PZ-9, PZ-11 and PZ-19 were resurveyed on November 13, 2002.

PZ-12A and GC-4A were resurveyed in April 2003.

Stage I Landfill - 131 acres (Closed - 30 ac., Intermediate - 91 ac., Open - 10 ac.)

Stage II Landfill - 110 acres (Closed - 0 ac., Intermediate - 0 ac., Open - 0 ac. No waste in Stage II.)

Stage III Landfill - 75 acres (Closed - 0 ac., Intermediate - 75 ac., Open - 0 ac.)

Data Collection: April 1, 2004

# EXHIBIT A

MANATEE COUNTY SOLID WASTE MANAGEMENT FACILITY  
LENA ROAD LANDFILL  
MONTHLY WATER BALANCE REPORT  
APRIL, 2004

| A            | B                                     | C                                     | D                     | E                           | F                  |
|--------------|---------------------------------------|---------------------------------------|-----------------------|-----------------------------|--------------------|
| DATE         | LEACHATE<br>STAGE I<br>Lift Station 1 | LEACHATE<br>STAGE I<br>Lift Station 2 | LEACHATE<br>STAGE III | TOTAL<br>LEACHATE<br>PUMPED | RAINFALL<br>INCHES |
| 01-Apr-04    | 26,420                                | 4,740                                 | 64,500                | 95,660                      | 0.00               |
| 02-Apr-04    | 23,330                                | 4,710                                 | 64,400                | 92,440                      | 0.00               |
| 03-Apr-04    | 0                                     | 0                                     | 0                     | 0                           | 0.00               |
| 04-Apr-04    | 0                                     | 0                                     | 0                     | 0                           | 0.00               |
| 05-Apr-04    | 66,770                                | 13,060                                | 185,700               | 265,530                     | 0.00               |
| 06-Apr-04    | 20,530                                | 4,160                                 | 59,200                | 83,890                      | 0.00               |
| 07-Apr-04    | 21,800                                | 4,460                                 | 58,300                | 84,560                      | 0.00               |
| 08-Apr-04    | 24,470                                | 4,450                                 | 57,900                | 86,820                      | 0.00               |
| 09-Apr-04    | 23,580                                | 4,700                                 | 56,600                | 84,880                      | 0.00               |
| 10-Apr-04    | 0                                     | 0                                     | 0                     | 0                           | 0.00               |
| 11-Apr-04    | 0                                     | 0                                     | 0                     | 0                           | 0.70               |
| 12-Apr-04    | 69,670                                | 13,940                                | 172,100               | 255,710                     | 1.68               |
| 13-Apr-04    | 22,480                                | 4,370                                 | 60,400                | 87,250                      | 0.19               |
| 14-Apr-04    | 17,670                                | 3,810                                 | 73,200                | 94,680                      | 0.00               |
| 15-Apr-04    | 17,900                                | 3,850                                 | 71,800                | 93,550                      | 0.00               |
| 16-Apr-04    | 17,770                                | 3,860                                 | 71,000                | 92,630                      | 0.00               |
| 17-Apr-04    | 0                                     | 0                                     | 0                     | 0                           | 0.00               |
| 18-Apr-04    | 0                                     | 0                                     | 0                     | 0                           | 0.00               |
| 19-Apr-04    | 50,880                                | 10,800                                | 188,500               | 250,180                     | 0.00               |
| 20-Apr-04    | 21,780                                | 4,740                                 | 61,700                | 88,220                      | 0.00               |
| 21-Apr-04    | 24,380                                | 4,780                                 | 60,800                | 89,960                      | 0.00               |
| 22-Apr-04    | 23,340                                | 4,790                                 | 61,500                | 89,630                      | 0.00               |
| 23-Apr-04    | 20,710                                | 4,200                                 | 57,700                | 82,610                      | 0.00               |
| 24-Apr-04    | 0                                     | 0                                     | 0                     | 0                           | 0.00               |
| 25-Apr-04    | 0                                     | 0                                     | 0                     | 0                           | 0.00               |
| 26-Apr-04    | 63,620                                | 12,860                                | 171,000               | 247,480                     | 0.00               |
| 27-Apr-04    | 23,820                                | 4,750                                 | 59,300                | 87,870                      | 0.62               |
| 28-Apr-04    | 20,030                                | 4,160                                 | 55,200                | 79,390                      | 0.00               |
| 29-Apr-04    | 17,780                                | 3,600                                 | 54,500                | 75,880                      | 0.00               |
| 30-Apr-04    | 19,580                                | 4,190                                 | 55,000                | 78,770                      | 0.11               |
|              |                                       |                                       |                       |                             |                    |
|              |                                       |                                       |                       |                             |                    |
| <b>TOTAL</b> | <b>638,310</b>                        | <b>128,980</b>                        | <b>1,820,300</b>      | <b>2,587,590</b>            | <b>3.30</b>        |

Notes:

A - DATE OF READINGS.

B - LEACHATE PUMPED FROM STAGE I BY LIFT STATION 1 IN GALLONS SINCE PREVIOUS DATE RECORDED.

C - LEACHATE PUMPED FROM STAGE I BY LIFT STATION 2 IN GALLONS SINCE PREVIOUS DATE RECORDED.

D - LEACHATE PUMPED FROM STAGE III IN GALLONS SINCE PREVIOUS DATE RECORDED.

E - TOTAL LEACHATE PUMPED TO WWTP STORAGE TANK, WHICH IS THE SUM OF COLUMNS B + C + D.

F - RAINFALL RECORDED ON THIS DATE IN INCHES.

# EXHIBIT B

## MANATEE COUNTY SOLID WASTE MANAGEMENT FACILITY LENA ROAD LANDFILL MONTHLY LEACHATE TRACKING SUMMARY -- 2004

|           | A                   | B                     | C                 | D                  |
|-----------|---------------------|-----------------------|-------------------|--------------------|
| MONTH     | LEACHATE<br>STAGE I | LEACHATE<br>STAGE III | TOTAL<br>LEACHATE | RAINFALL<br>INCHES |
| JANUARY   | 723,030             | 2,140,200             | 2,863,230         | 1.72               |
| FEBRUARY  | 692,080             | 2,340,700             | 3,032,780         | 4.48               |
| MARCH     | 868,360             | 3,054,800             | 3,923,160         | 0.61               |
| APRIL     | 767,290             | 1,820,300             | 2,587,590         | 3.30               |
| MAY       |                     |                       |                   |                    |
| JUNE      |                     |                       |                   |                    |
| JULY      |                     |                       |                   |                    |
| AUGUST    |                     |                       |                   |                    |
| SEPTEMBER |                     |                       |                   |                    |
| OCTOBER   |                     |                       |                   |                    |
| NOVEMBER  |                     |                       |                   |                    |
| DECEMBER  |                     |                       |                   |                    |
| TOTAL     | 3,050,760           | 9,356,000             | 12,406,760        | 10.11              |

### Notes:

1. (A) Total leachate generated from Stage I.
2. (B) Total leachate generated from Stage III.
3. (C) Total leachate generate (Column A+B) and pumped to the WWTP storage tank.
4. (D) Total rainfall in inches.

**Manatee County Government****Utility Operations Department****Landfill Division****Phone: (941) 795-3481****Fax: (941) 741-3396****FAX COVER SHEET****PLEASE DELIVER THE FOLLOWING PAGE(S):****TO:** Jay**FAX #:** 407-647-0624 **DEPARTMENT:** PBS+J**FROM:** Jeanne Detweiler**DATE:** 5/3/04**SUBJECT:** April Leachate + Rainfall Totals**PLEASE CALL UPON RECEIPT** ☐**PLEASE HANDLE CONFIDENTIALLY** ☐**COMMENTS:**Have a great week!  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_**TOTAL NUMBER OF PAGES INCLUDING COVER MEMO:** 3**IF YOU DO NOT RECEIVE ALL PAGES, PLEASE CALL AS SOON AS POSSIBLE.**

**LEACHATE METER READINGS**  
**APRIL 2004**

| DATE    | LEACHATE |          |          |        | STORMWATER |         | W.W.T.P. INTAKE<br>METER | NAME |
|---------|----------|----------|----------|--------|------------|---------|--------------------------|------|
|         | METER #1 | METER #2 | METER #3 | TOTALS | S.G.       | S.G. #2 |                          |      |
| 3-31-04 | 1535003  | 1491602  | 1154812  |        | 32.00      | 30.65   |                          |      |
| 4-1     | 1537645  | 1498076  | 1155457  |        | 32.00      | 29.35   |                          | 27.8 |
| 4-2     | 1539978  | 1492547  | 1156101  |        | 31.88      | 30.50   |                          | 27.8 |
| 4-5     | 1546655  | 1493853  | 1157958  |        | 31.75      | 30.40   |                          | 27.8 |
| 4-6     | 1548708  | 1494269  | 1158550  |        | 31.75      | 30.30   |                          | 27.8 |
| 4-7     | 1550888  | 1494715  | 1159133  |        | 31.68      | 30.50   |                          | 27.8 |
| 4-8     | 1553335  | 1495160  | 1159712  |        | 31.68      | 29.35   |                          | 27.8 |
| 4-9     | 1555693  | 1495680  | 1160278  |        | 31.67      | 29.90   |                          | 27.8 |
| 4-12    | 1562660  | 1497024  | 1161999  |        | 31.86      | 30.66   |                          | 27.8 |
| 4-13    | 1564908  | 1497461  | 1162603  |        | 32.36      | 30.10   |                          | 27.8 |
| 4-14    | 1566675  | 1497842  | 1163335  |        | 32.44      | 29.70   |                          | 27.8 |
| 4-15    | 1568465  | 1498227  | 1164053  |        | 32.39      | 29.30   |                          | 27.8 |
| 4-16    | 1570242  | 1498613  | 1164763  |        | 32.32      | 29.95   |                          | 27.8 |
| 4-19    | 1575330  | 1499693  | 1166648  |        | 32.30      | 29.85   |                          | 27.8 |
| 4-20    | 1577508  | 1500167  | 1167265  |        | 32.23      | 30.35   |                          | 27.8 |
| 4-21    | 1579946  | 1500645  | 1167823  |        | 32.23      | 29.30   |                          | 27.8 |
| 4-22    | 1582280  | 1501124  | 1168488  |        | 32.23      | 29.50   |                          | 27.8 |
| 4-23    | 1584351  | 1501544  | 1169065  |        | 32.20      | 30.20   |                          | 27.8 |
| 4-26    | 1590713  | 1502830  | 1170775  |        | 32.17      | 29.85   |                          | 27.8 |
| 4-27    | 1593095  | 1503305  | 1171368  |        | 32.24      | 29.96   |                          | 27.8 |
| 4-28    | 1595098  | 1503721  | 1171920  |        | 32.28      | 29.25   |                          | 27.8 |
| 4-29    | 1596876  | 1504081  | 1172465  |        | 32.27      | 29.20   |                          | 27.8 |
| 4-30    | 1598834  | 1504500  | 1173015  |        | 32.26      | 29.75   |                          | 27.8 |
|         |          |          |          |        |            |         |                          |      |
|         |          |          |          |        |            |         |                          |      |
|         |          |          |          |        |            |         |                          |      |
|         |          |          |          |        |            |         |                          |      |
|         |          |          |          |        |            |         |                          |      |

FROM SCALEHOUSE/HHW

5-19-1995 8:25AM

941 741 3396

P.2

## Landfill

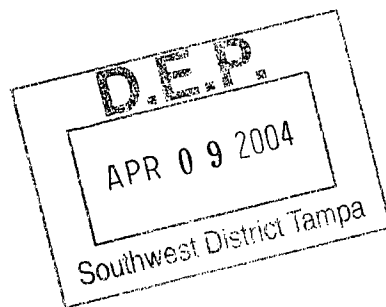
| LANDFILL SHEET |              |                 |
|----------------|--------------|-----------------|
| 2004<br>Apr    | RAIN<br>FALL | LEACHATE<br>MGD |
| 1              | 0.00         | 0.013           |
| 2              | 0.00         | 0.013           |
| 3              | 0.00         | 0.013           |
| 4              | 0.00         | 0.013           |
| 5              | 0.00         | 0.012           |
| 6              | 0.00         | 0.012           |
| 7              | 0.00         | 0.012           |
| 8              | 0.00         | 0.012           |
| 9              | 0.00         | 0.012           |
| 10             | 0.00         | 0.012           |
| 11             | 0.70         | 0.012           |
| 12             | 1.68         | 0.013           |
| 13             | 0.19         | 0.014           |
| 14             | 0.00         | 0.014           |
| 15             | 0.00         | 0.014           |
| 16             | 0.00         | 0.013           |
| 17             | 0.00         | 0.013           |
| 18             | 0.00         | 0.013           |
| 19             | 0.00         | 0.013           |
| 20             | 0.00         | 0.014           |
| 21             | 0.00         | 0.014           |
| 22             | 0.00         | 0.013           |
| 23             | 0.00         | 0.013           |
| 24             | 0.00         | 0.013           |
| 25             | 0.00         | 0.013           |
| 26             | 0.00         | 0.012           |
| 27             | 0.62         | 0.013           |
| 28             | 0.00         | 0.012           |
| 29             | 0.00         | 0.012           |
| 30             | 0.11         | 0.012           |
|                | 0.00         | 0.000           |
| TOTAL          | 3.30         | 0.384           |
| AVG            |              | 0.012           |
| MIN            |              |                 |
| MAX            | 1.68         | 0.014           |

Fax # 9-741-3396



An employee-owned company

April 7, 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  
Monthly Report – March 2004**

Dear Mr. Morris:

Attached is the March 2004 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 (Exhibit A), field readings for the water balance report, leachate tracking summary (Exhibit B), and a monthly groundwater gradient report.

An inward gradient was present in Stage I and Stage III of the landfill. An outward gradient was present in Stage II of the landfill. It should be noted that Stage II contains no solid waste.

March was a period of very low rainfall for Manatee County, with a total of 0.61 inches of rain recorded for the entire month. The highest rainfall day came on March 16<sup>th</sup>, with a total of 0.56 inches of rainfall recorded. There was a total of 4.48 inches of rainfall reported for the month of February.

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

Sincerely,

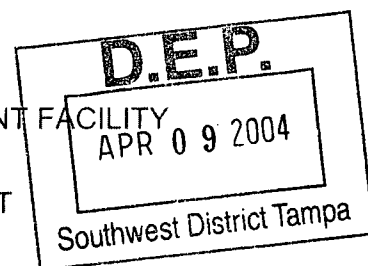
Joe Miller, P.E.  
Senior Project Manager

cc: Kim Ford, P.E., FDEP SW District  
Daniel T. Gray, Director, Utility Operations Department  
Gus DiFonzo, Solid Waste Manager  
Michael Gore / Jeanne Detweiler, Manatee County Landfill Division  
File – 120498.91 9100, March 2004

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# EXHIBIT A

MANATEE COUNTY SOLID WASTE MANAGEMENT FACILITY  
LENA ROAD LANDFILL  
MONTHLY WATER BALANCE REPORT  
MARCH, 2004



| A            | B                                     | C                                     | D                     | E                           | F                  |
|--------------|---------------------------------------|---------------------------------------|-----------------------|-----------------------------|--------------------|
| DATE         | LEACHATE<br>STAGE I<br>Lift Station 1 | LEACHATE<br>STAGE I<br>Lift Station 2 | LEACHATE<br>STAGE III | TOTAL<br>LEACHATE<br>PUMPED | RAINFALL<br>INCHES |
| 01-Mar-04    | 49,590                                | 17,110                                | 368,900               | 435,600                     | 0.00               |
| 02-Mar-04    | 17,870                                | 6,570                                 | 112,200               | 136,640                     | 0.00               |
| 03-Mar-04    | 18,080                                | 6,570                                 | 109,800               | 134,450                     | 0.00               |
| 04-Mar-04    | 18,770                                | 7,110                                 | 106,200               | 132,080                     | 0.00               |
| 05-Mar-04    | 20,840                                | 7,620                                 | 109,600               | 138,060                     | 0.00               |
| 06-Mar-04    | 0                                     | 0                                     | 0                     | 0                           | 0.00               |
| 07-Mar-04    | 0                                     | 0                                     | 0                     | 0                           | 0.00               |
| 08-Mar-04    | 56,770                                | 20,840                                | 298,000               | 375,610                     | 0.00               |
| 09-Mar-04    | 20,050                                | 7,260                                 | 98,400                | 125,710                     | 0.00               |
| 10-Mar-04    | 20,970                                | 7,820                                 | 97,000                | 125,790                     | 0.00               |
| 11-Mar-04    | 15,720                                | 5,600                                 | 93,500                | 114,820                     | 0.02               |
| 12-Mar-04    | 17,490                                | 6,190                                 | 93,000                | 116,680                     | 0.00               |
| 13-Mar-04    | 0                                     | 0                                     | 0                     | 0                           | 0.00               |
| 14-Mar-04    | 0                                     | 0                                     | 0                     | 0                           | 0.00               |
| 15-Mar-04    | 56,670                                | 23,840                                | 281,800               | 362,310                     | 0.03               |
| 16-Mar-04    | 20,740                                | 8,460                                 | 84,500                | 113,700                     | 0.56               |
| 17-Mar-04    | 21,070                                | 7,930                                 | 82,200                | 111,200                     | 0.00               |
| 18-Mar-04    | 18,860                                | 6,800                                 | 85,500                | 111,160                     | 0.00               |
| 19-Mar-04    | 17,200                                | 5,950                                 | 86,800                | 109,950                     | 0.00               |
| 20-Mar-04    | 0                                     | 0                                     | 0                     | 0                           | 0.00               |
| 21-Mar-04    | 0                                     | 0                                     | 0                     | 0                           | 0.00               |
| 22-Mar-04    | 53,740                                | 22,100                                | 256,500               | 332,340                     | 0.00               |
| 23-Mar-04    | 17,860                                | 6,480                                 | 89,800                | 114,140                     | 0.00               |
| 24-Mar-04    | 2,340                                 | 4,690                                 | 23,100                | 30,130                      | 0.00               |
| 25-Mar-04    | 38,610                                | 4,830                                 | 148,700               | 192,140                     | 0.00               |
| 26-Mar-04    | 25,650                                | 4,530                                 | 86,500                | 116,680                     | 0.00               |
| 27-Mar-04    | 0                                     | 0                                     | 0                     | 0                           | 0.00               |
| 28-Mar-04    | 0                                     | 0                                     | 0                     | 0                           | 0.00               |
| 29-Mar-04    | 78,630                                | 14,590                                | 215,000               | 308,220                     | 0.00               |
| 30-Mar-04    | 23,150                                | 4,470                                 | 62,900                | 90,520                      | 0.00               |
| 31-Mar-04    | 25,570                                | 4,760                                 | 64,900                | 95,230                      | 0.00               |
| <b>TOTAL</b> | <b>656,240</b>                        | <b>212,120</b>                        | <b>3,054,800</b>      | <b>3,923,160</b>            | <b>0.61</b>        |

## Notes:

A - DATE OF READINGS.

B - LEACHATE PUMPED FROM STAGE I BY LIFT STATION 1 IN GALLONS SINCE PREVIOUS DATE RECORDED.

C - LEACHATE PUMPED FROM STAGE I BY LIFT STATION 2 IN GALLONS SINCE PREVIOUS DATE RECORDED.

D - LEACHATE PUMPED FROM STAGE III IN GALLONS SINCE PREVIOUS DATE RECORDED.

E - TOTAL LEACHATE PUMPED TO WWTP STORAGE TANK, WHICH IS THE SUM OF COLUMNS B + C + D.

F - RAINFALL RECORDED ON THIS DATE IN INCHES.

# EXHIBIT B

## MANATEE COUNTY SOLID WASTE MANAGEMENT FACILITY LENA ROAD LANDFILL MONTHLY LEACHATE TRACKING SUMMARY -- 2004

|           | A                   | B                     | C                 | D                  |
|-----------|---------------------|-----------------------|-------------------|--------------------|
| MONTH     | LEACHATE<br>STAGE I | LEACHATE<br>STAGE III | TOTAL<br>LEACHATE | RAINFALL<br>INCHES |
| JANUARY   | 723,030             | 2,140,200             | 2,863,230         | 1.72               |
| FEBRUARY  | 692,080             | 2,340,700             | 3,032,780         | 4.48               |
| MARCH     | 868,360             | 3,054,800             | 3,923,160         | 0.61               |
| APRIL     |                     |                       |                   |                    |
| MAY       |                     |                       |                   |                    |
| JUNE      |                     |                       |                   |                    |
| JULY      |                     |                       |                   |                    |
| AUGUST    |                     |                       |                   |                    |
| SEPTEMBER |                     |                       |                   |                    |
| OCTOBER   |                     |                       |                   |                    |
| NOVEMBER  |                     |                       |                   |                    |
| DECEMBER  |                     |                       |                   |                    |
| TOTAL     | 2,283,470           | 7,535,700             | 9,819,170         | 6.81               |

Notes:

1. (A) Total leachate generated from Stage I.
2. (B) Total leachate generated from Stage III.
3. (C) Total leachate generate (Column A+B) and pumped to the WWTP storage tank.
4. (D) Total rainfall in inches.

**Manatee County Government****Utility Operations Department****Landfill Division****Phone: (941) 795-3481****Fax: (941) 741-3396****FAX COVER SHEET****PLEASE DELIVER THE FOLLOWING PAGE(S):****TO:** Chris Gaur**FAX #:** \_\_\_\_\_ **DEPARTMENT:** PBS+J**FROM:** Joanne Detweiler**DATE:** 4/1/04**SUBJECT:** Monthly Rainfall + Leachate Totals**PLEASE CALL UPON RECEIPT****PLEASE HANDLE CONFIDENTIALLY** \_\_\_\_\_**COMMENTS:**

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**TOTAL NUMBER OF PAGES INCLUDING COVER MEMO:** 3**IF YOU DO NOT RECEIVE ALL PAGES, PLEASE CALL AS SOON AS POSSIBLE.**

Landfill

| LANDFILL SHEET |              |                 |
|----------------|--------------|-----------------|
| 2004<br>Mar    | RAIN<br>FALL | LEACHATE<br>MGD |
| 1              | 0.00         | 0.109           |
| 2              | 0.00         | 0.107           |
| 3              | 0.00         | 0.105           |
| 4              | 0.00         | 0.106           |
| 5              | 0.00         | 0.105           |
| 6              | 0.00         | 0.103           |
| 7              | 0.00         | 0.102           |
| 8              | 0.00         | 0.101           |
| 9              | 0.00         | 0.100           |
| 10             | 0.00         | 0.097           |
| 11             | 0.02         | 0.092           |
| 12             | 0.00         | 0.095           |
| 13             | 0.00         | 0.094           |
| 14             | 0.00         | 0.093           |
| 15             | 0.03         | 0.096           |
| 16             | 0.56         | 0.098           |
| 17             | 0.00         | 0.096           |
| 18             | 0.00         | 0.090           |
| 19             | 0.00         | 0.087           |
| 20             | 0.00         | 0.088           |
| 21             | 0.00         | 0.091           |
| 22             | 0.00         | 0.093           |
| 23             | 0.00         | 0.166           |
| 24             | 0.00         | 0.088           |
| 25             | 0.00         | 0.016           |
| 26             | 0.00         | 0.014           |
| 27             | 0.00         | 0.014           |
| 28             | 0.00         | 0.014           |
| 29             | 0.00         | 0.013           |
| 30             | 0.00         | 0.013           |
| 31             | 0.00         | 0.014           |
| TOTAL          | 0.61         | 2.500           |
| AVG            |              | 0.081           |
| MIN            |              |                 |
| MAX            | 0.56         | 0.166           |

Fax # 9-741-3396

**LEACHATE METER READINGS**  
**MARCH 2004**

| DATE    | LEACHATE |          |          |        | STORMWATER |         | W.W.T.P. INTAKE | NAME |
|---------|----------|----------|----------|--------|------------|---------|-----------------|------|
|         | METER #1 | METER #2 | METER #3 | TOTALS | S.G.       | S.G. #2 | METER           |      |
| 2-27-04 | 1469379  | 1470390  | 1124264  |        | 32.98      | 30.65   |                 |      |
| 3-1-04  | 1474338  | 1472101  | 1127953  |        | 32.75      | 30.59   |                 | 2.8  |
| 3-2-04  | 1476125  | 1472758  | 1129075  |        | 32.73      | 30.57   |                 | 2.8  |
| 3-3-04  | 1477933  | 1473415  | 1130173  |        | 32.72      | 30.55   |                 | 2.8  |
| 3-4-04  | 1479810  | 1474126  | 1131235  |        | 32.70      | 30.35   |                 | 2.8  |
| 3-5-04  | 1481894  | 1474888  | 1132331  |        | 32.70      | 30.25   |                 | G.R. |
| 3-8-04  | 1487571  | 1476972  | 1135311  |        | 32.70      | 30.40   |                 | 2.8  |
| 3-9-04  | 1489576  | 1477698  | 1136295  |        | 32.65      | 30.20   |                 | 2.8  |
| 3-10-04 | 1491673  | 1478480  | 1137265  |        | 32.60      | 30.50   |                 | 2.8  |
| 3-11-04 | 1493245  | 1479040  | 1138200  |        | 32.62      | 30.50   |                 | 2.8  |
| 3-12-04 | 1494994  | 1479659  | 1139130  |        | 32.44      | 29.35   |                 | 2.8  |
| 3-15-04 | 1500661  | 1482043  | 1141948  |        | 32.46      | 29.97   |                 | 2.8  |
| 3-16-04 | 1502735  | 1482889  | 1142793  |        | 32.48      | 30.05   |                 | 2.8  |
| 3-17-04 | 1504842  | 1483682  | 1143615  |        | 32.59      | 30.25   |                 | 2.8  |
| 3-18-04 | 1506728  | 1484362  | 1144470  |        | 32.59      | 30.40   |                 | 2.8  |
| 3-19-04 | 1508448  | 1484957  | 1145338  |        | 32.60      | 29.90   |                 | 2.8  |
| 3-22-04 | 1513822  | 1487167  | 1147903  |        | 32.60      | 29.95   |                 | 2.8  |
| 3-23-04 | 1515608  | 1487815  | 1148801  |        | 32.50      | 29.18   |                 | 2.8  |
| 3-24-04 | 1515842  | 1488284  | 1149032  |        | 32.47      | 29.78   |                 | 2.8  |
| 3-25-04 | 1519703  | 1488767  | 1150519  |        | 32.26      | 29.60   |                 | 2.8  |
| 3-26-04 | 1522268  | 1489220  | 1151384  |        | 32.18      | 29.20   |                 | 2.8  |
| 3-29-04 | 1530131  | 1490679  | 1153534  |        | 32.13      | 30.43   |                 | 2.8  |
| 3-30-04 | 1532446  | 1491126  | 1154163  |        | 32.08      | 30.35   |                 | 2.8  |
| 3-31-04 | 1535003  | 1491602  | 1154812  |        | 32.00      | 30.50   |                 | 2.8  |
|         |          |          |          |        |            |         |                 |      |
|         |          |          |          |        |            |         |                 |      |
|         |          |          |          |        |            |         |                 |      |
|         |          |          |          |        |            |         |                 |      |
|         |          |          |          |        |            |         |                 |      |

Manatee County Lena Road Landfill  
Groundwater Gradient  
March 2004

**Inside Slurry Wall**

**Outside Slurry Wall**

| Piezometer | Riser<br>Elevation | Groundwater<br>Elevation | Gradient<br>Flow      | Monitoring<br>Well | Riser<br>Elevation | Groundwater<br>Elevation |
|------------|--------------------|--------------------------|-----------------------|--------------------|--------------------|--------------------------|
|            |                    |                          | <b><u>STAGE I</u></b> |                    |                    |                          |
| PZ-1       | 42.55              | 29.11                    | <i>inward</i>         | MW-5               | 39.88              | 31.23                    |
| PZ-2       | 42.47              | 30.07                    | <i>inward</i>         | MW-2               | 41.13              | 31.61                    |
| PZ-3A      | 44.90              | 28.99                    | <i>inward</i>         | MW-1               | 42.58              | 32.83                    |
| PZ-4A      | 47.73              | 29.83                    | <i>inward</i>         | CW-4               | 37.48              | 35.06                    |
| PZ-5       | 43.94              | 30.14                    | <i>inward</i>         | CW-5A              | 41.18              | 38.58                    |
| PZ-6       | 44.73              | 31.26                    | <i>inward</i>         | SG-1               |                    | 33.84                    |
| PZ-7       | 47.76              | 29.95                    | <i>inward</i>         | MW-6               | 39.29              | 33.48                    |
| PZ-19      | 45.87              | 28.58                    | <i>inward</i>         | PZ-11              | 38.94              | 33.89                    |

Dry 32.80

|       |       |       |                        |        |       |       |
|-------|-------|-------|------------------------|--------|-------|-------|
|       |       |       | <b><u>STAGE II</u></b> |        |       |       |
| PZ-8  | 37.63 | 33.91 | <i>outward</i>         | LRII-5 | 36.75 | 30.41 |
| PZ-9  | 39.20 | 33.86 | <i>outward</i>         | LRII-4 | 33.85 | 27.08 |
| PZ-10 | 37.05 | 34.00 | <i>outward</i>         | LRII-2 | 36.48 | 29.91 |
| PZ-11 | 38.94 | 33.89 | <i>outward</i>         | LRII-1 | 37.97 | 33.32 |

NO BURIED  
WASTE IN  
STAGE II

|        |       |       |                         |        |       |       |
|--------|-------|-------|-------------------------|--------|-------|-------|
|        |       |       | <b><u>STAGE III</u></b> |        |       |       |
| PZ-12A | 38.48 | 28.65 | <i>inward</i>           | GC-2   | 38.15 | 31.77 |
| PZ-13  | 35.36 | 25.93 | <i>inward</i>           | GC-3   | 35.02 | 27.72 |
| PZ-14A | 34.58 | 20.03 | <i>inward</i>           | GC-4A  | 34.96 | 29.37 |
| PZ-15C | 40.46 | 20.05 | <i>inward</i>           | PZ-15A | 39.79 | 31.38 |
| PZ-16B | 40.22 | 20.96 | <i>inward</i>           | PZ-16A | 39.05 | 29.38 |
| PZ-17  | 40.57 | 28.57 | <i>inward</i>           | SG-2   |       | 30.72 |
| PZ-18  | 40.16 | 29.06 | <i>inward</i>           | SG-3   |       | 33.90 |

Dry 28.90  
Dry 33.64

| <b><u>Additional In-House Monitoring Data</u></b> |       |       |                |        |       |       |
|---------------------------------------------------|-------|-------|----------------|--------|-------|-------|
| <b><u>Stage I</u></b>                             |       |       |                |        |       |       |
| PZ-2                                              | 42.47 | 30.07 | <i>inward</i>  | MW-3   | 42.32 | 32.34 |
| <b><u>Stage II</u></b>                            |       |       |                |        |       |       |
| PZ-9                                              | 39.20 | 33.86 | <i>outward</i> | LRII-3 | 33.47 | 26.78 |
| <b><u>Stage III</u></b>                           |       |       |                |        |       |       |
| PZ-15C                                            | 40.46 | 20.05 | <i>inward</i>  | GC-1A  | 31.75 | 27.15 |
| PZ-16B                                            | 40.22 | 20.96 | <i>inward</i>  | GC-5   | 36.46 | 29.05 |
| PZ-17                                             | 40.57 | 28.57 | <i>inward</i>  | GC-6   | 39.02 | 31.06 |

Notes: The table is arranged so any piezometer can be compared to its corresponding monitoring point. For example, PZ-1 is located on the opposite side of the slurry wall from MW-5. Thus data from PZ-1 are compared to data from MW-5.

Report includes riser elevations determined by certified survey conducted by County Staff (Aug. 10, 1999).  
Riser elevations for MW-1, MW-3, PZ-9, PZ-11 and PZ-19 were resurveyed on November 13, 2002.  
PZ-12A and GC-4A were resurveyed in April 2003.

Stage I Landfill - 131 acres (Closed - 30 ac., Intermediate - 91 ac., Open - 10 ac.)  
Stage II Landfill - 110 acres (Closed - 0 ac., Intermediate - 0 ac., Open - 0 ac. No waste in Stage II.)  
Stage III Landfill - 75 acres (Closed - 0 ac., Intermediate - 75 ac., Open - 0 ac.)

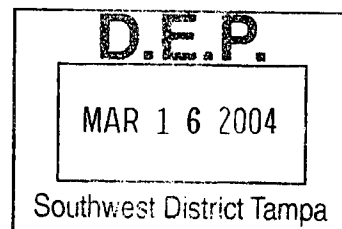
Data Collection: March 10, 2004



An employee-owned company

March 15, 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  
Monthly Report – February 2004**

Dear Mr. Morris:

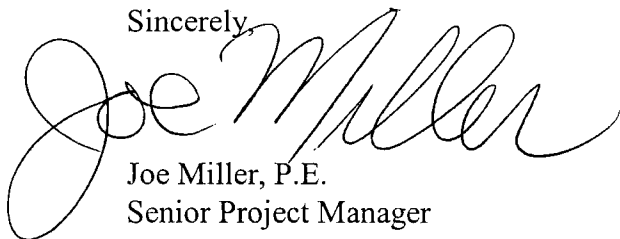
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An inward gradient was present in Stage I and Stage III of the landfill. An outward gradient was present in Stage II of the landfill. It should be noted that Stage II contains no solid waste.

February was a period of moderate rainfall for Manatee County with a total of 4.48 inches of rain recorded for the entire month. The highest rainfall day came on February 25<sup>th</sup>, with a total of 2.84 inches of rainfall recorded. There was a total of 1.72 inches of rainfall reported for the month of January.

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

Sincerely,



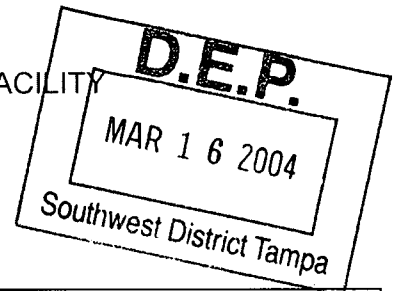
Joe Miller, P.E.  
Senior Project Manager

cc: Kim Ford, P.E., FDEP SW District  
Daniel T. Gray, Director, Utility Operations Department  
Gus DiFonzo, Solid Waste Manager  
Michael Gore / Jeanne Detweiler, Manatee County Landfill Division  
File – 120498.91 9100, February 2004

U:\OldG\WASTEMAN\Manatee County\SW-05 Annual Monitoring\2004\February2004\MonthlyLtr\_Feb2004.doc

# EXHIBIT A

MANATEE COUNTY SOLID WASTE MANAGEMENT FACILITY  
LENA ROAD LANDFILL  
MONTHLY WATER BALANCE REPORT  
FEBRUARY, 2004



| A            | B                                     | C                                     | D                     | E                           | F                  |
|--------------|---------------------------------------|---------------------------------------|-----------------------|-----------------------------|--------------------|
| DATE         | LEACHATE<br>STAGE I<br>Lift Station 1 | LEACHATE<br>STAGE I<br>Lift Station 2 | LEACHATE<br>STAGE III | TOTAL<br>LEACHATE<br>PUMPED | RAINFALL<br>INCHES |
| 01-Feb-04    | 0                                     | 0                                     | 0                     | 0                           | 0.39               |
| 02-Feb-04    | 55,740                                | 23,420                                | 212,600               | 291,760                     | 0.00               |
| 03-Feb-04    | 13,830                                | 6,030                                 | 68,800                | 88,660                      | 0.00               |
| 04-Feb-04    | 14,220                                | 6,060                                 | 70,900                | 91,180                      | 0.00               |
| 05-Feb-04    | 15,780                                | 6,660                                 | 71,900                | 94,340                      | 0.00               |
| 06-Feb-04    | 16,720                                | 6,980                                 | 71,700                | 95,400                      | 0.05               |
| 07-Feb-04    | 0                                     | 0                                     | 0                     | 0                           | 0.00               |
| 08-Feb-04    | 0                                     | 0                                     | 0                     | 0                           | 0.00               |
| 09-Feb-04    | 43,130                                | 17,860                                | 213,300               | 274,290                     | 0.00               |
| 10-Feb-04    | 17,650                                | 7,440                                 | 73,200                | 98,290                      | 0.00               |
| 11-Feb-04    | 18,010                                | 7,840                                 | 67,400                | 93,250                      | 0.00               |
| 12-Feb-04    | 18,680                                | 7,800                                 | 69,300                | 95,780                      | 0.00               |
| 13-Feb-04    | 17,350                                | 7,220                                 | 70,200                | 94,770                      | 0.00               |
| 14-Feb-04    | 0                                     | 0                                     | 0                     | 0                           | 1.02               |
| 15-Feb-04    | 0                                     | 0                                     | 0                     | 0                           | 0.15               |
| 16-Feb-04    | 0                                     | 0                                     | 0                     | 0                           | 0.00               |
| 17-Feb-04    | 66,950                                | 27,320                                | 292,600               | 386,870                     | 0.01               |
| 18-Feb-04    | 14,000                                | 5,730                                 | 80,400                | 100,130                     | 0.00               |
| 19-Feb-04    | 15,910                                | 6,530                                 | 80,400                | 102,840                     | 0.00               |
| 20-Feb-04    | 18,760                                | 8,030                                 | 76,300                | 103,090                     | 0.00               |
| 21-Feb-04    | 0                                     | 0                                     | 0                     | 0                           | 0.00               |
| 22-Feb-04    | 0                                     | 0                                     | 0                     | 0                           | 0.00               |
| 23-Feb-04    | 56,220                                | 22,440                                | 231,200               | 309,860                     | 0.00               |
| 24-Feb-04    | 19,240                                | 8,030                                 | 83,800                | 111,070                     | 0.00               |
| 25-Feb-04    | 25,800                                | 9,380                                 | 145,300               | 180,480                     | 2.84               |
| 26-Feb-04    | 26,150                                | 8,990                                 | 237,300               | 272,440                     | 0.01               |
| 27-Feb-04    | 18,140                                | 6,040                                 | 124,100               | 148,280                     | 0.00               |
| 28-Feb-04    | 0                                     | 0                                     | 0                     | 0                           | 0.01               |
| 29-Feb-04    | 0                                     | 0                                     | 0                     | 0                           | 0.00               |
|              |                                       |                                       |                       |                             |                    |
|              |                                       |                                       |                       |                             |                    |
|              |                                       |                                       |                       |                             |                    |
| <b>TOTAL</b> | <b>492,280</b>                        | <b>199,800</b>                        | <b>2,340,700</b>      | <b>3,032,780</b>            | <b>4.48</b>        |

## Notes:

A - DATE OF READINGS.

B - LEACHATE PUMPED FROM STAGE I BY LIFT STATION 1 IN GALLONS SINCE PREVIOUS DATE RECORDED.

C - LEACHATE PUMPED FROM STAGE I BY LIFT STATION 2 IN GALLONS SINCE PREVIOUS DATE RECORDED.

D - LEACHATE PUMPED FROM STAGE III IN GALLONS SINCE PREVIOUS DATE RECORDED.

E - TOTAL LEACHATE PUMPED TO WWTP STORAGE TANK, WHICH IS THE SUM OF COLUMNS B + C + D.

F - RAINFALL RECORDED ON THIS DATE IN INCHES.

# EXHIBIT B

## MANATEE COUNTY SOLID WASTE MANAGEMENT FACILITY LENA ROAD LANDFILL MONTHLY LEACHATE TRACKING SUMMARY -- 2004

|           | A                   | B                     | C                 | D                  |
|-----------|---------------------|-----------------------|-------------------|--------------------|
| MONTH     | LEACHATE<br>STAGE I | LEACHATE<br>STAGE III | TOTAL<br>LEACHATE | RAINFALL<br>INCHES |
| JANUARY   | 723,030             | 2,140,200             | 2,863,230         | 1.72               |
| FEBRUARY  | 692,080             | 2,340,700             | 3,032,780         | 4.48               |
| MARCH     |                     |                       |                   |                    |
| APRIL     |                     |                       |                   |                    |
| MAY       |                     |                       |                   |                    |
| JUNE      |                     |                       |                   |                    |
| JULY      |                     |                       |                   |                    |
| AUGUST    |                     |                       |                   |                    |
| SEPTEMBER |                     |                       |                   |                    |
| OCTOBER   |                     |                       |                   |                    |
| NOVEMBER  |                     |                       |                   |                    |
| DECEMBER  |                     |                       |                   |                    |
| TOTAL     | 1,415,110           | 4,480,900             | 5,896,010         | 6.20               |

### Notes:

1. (A) Total leachate generated from Stage I.
2. (B) Total leachate generated from Stage III.
3. (C) Total leachate generate (Column A+B) and pumped to the WWTP storage tank.
4. (D) Total rainfall in inches.

Manatee County Lena Road Landfill  
Groundwater Gradient  
February 2004

**Inside Slurry Wall**

**Outside Slurry Wall**

| Piezometer     | Riser<br>Elevation | Groundwater<br>Elevation | Gradient<br>Flow | Monitoring<br>Well | Riser<br>Elevation | Groundwater<br>Elevation |
|----------------|--------------------|--------------------------|------------------|--------------------|--------------------|--------------------------|
| <b>STAGE I</b> |                    |                          |                  |                    |                    |                          |
| PZ-1           | 42.55              | 29.12                    | <i>inward</i>    | MW-5               | 39.88              | 30.14                    |
| PZ-2           | 42.47              | 30.17                    | <i>inward</i>    | MW-2               | 41.13              | 31.34                    |
| PZ-3A          | 44.90              | 29.10                    | <i>inward</i>    | MW-1               | 42.58              | 32.18                    |
| PZ-4A          | 47.73              | 29.95                    | <i>inward</i>    | CW-4               | 37.48              | 34.93                    |
| PZ-5           | 43.94              | 30.27                    | <i>inward</i>    | CW-5A              | 41.18              | 38.08                    |
| PZ-6           | 44.73              | 31.30                    | <i>inward</i>    | SG-1               |                    | 33.54                    |
| PZ-7           | 47.76              | 30.01                    | <i>inward</i>    | MW-6               | 39.29              | 33.14                    |
| PZ-19          | 45.87              | 28.67                    | <i>inward</i>    | PZ-11              | 38.94              | 33.89                    |

Dry 32.80

|                 |       |       |                |        |       |       |
|-----------------|-------|-------|----------------|--------|-------|-------|
| <b>STAGE II</b> |       |       |                |        |       |       |
| PZ-8            | 37.63 | 33.80 | <i>outward</i> | LRII-5 | 36.75 | 29.36 |
| PZ-9            | 39.20 | 33.73 | <i>outward</i> | LRII-4 | 33.85 | 26.17 |
| PZ-10           | 37.05 | 33.80 | <i>outward</i> | LRII-2 | 36.48 | 28.96 |
| PZ-11           | 38.94 | 33.89 | <i>outward</i> | LRII-1 | 37.97 | 31.97 |

NO BURIED  
WASTE IN  
STAGE II

|                  |       |       |               |        |       |       |
|------------------|-------|-------|---------------|--------|-------|-------|
| <b>STAGE III</b> |       |       |               |        |       |       |
| PZ-12A           | 38.48 | 28.43 | <i>inward</i> | GC-2   | 38.15 | 31.43 |
| PZ-13            | 35.36 | 24.96 | <i>inward</i> | GC-3   | 35.02 | 27.03 |
| PZ-14A           | 34.58 | 19.83 | <i>inward</i> | GC-4A  | 34.96 | 29.14 |
| PZ-15C           | 40.46 | 19.95 | <i>inward</i> | PZ-15A | 39.79 | 30.89 |
| PZ-16B           | 40.22 | 20.86 | <i>inward</i> | PZ-16A | 39.05 | 29.38 |
| PZ-17            | 40.57 | 28.53 | <i>inward</i> | SG-2   |       | 30.48 |
| PZ-18            | 40.16 | 28.96 | <i>inward</i> | SG-3   |       | 33.86 |

Dry 28.90  
Dry 33.64

| <b>Additional In-House Monitoring Data</b> |       |       |                |        |       |       |
|--------------------------------------------|-------|-------|----------------|--------|-------|-------|
| <b>Stage I</b>                             |       |       |                |        |       |       |
| PZ-2                                       | 42.47 | 30.17 | <i>inward</i>  | MW-3   | 42.32 | 31.21 |
| <b>Stage II</b>                            |       |       |                |        |       |       |
| PZ-9                                       | 39.20 | 33.73 | <i>outward</i> | LRII-3 | 33.47 | 25.86 |
| <b>Stage III</b>                           |       |       |                |        |       |       |
| PZ-15C                                     | 40.46 | 19.95 | <i>inward</i>  | GC-1A  | 31.75 | 27.08 |
| PZ-16B                                     | 40.22 | 20.86 | <i>inward</i>  | GC-5   | 36.46 | 28.91 |
| PZ-17                                      | 40.57 | 28.53 | <i>inward</i>  | GC-6   | 39.02 | 30.76 |

Notes: The table is arranged so any piezometer can be compared to its corresponding monitoring point. For example, PZ-1 is located on the opposite side of the slurry wall from MW-5. Thus data from PZ-1 are compared to data from MW-5.

Report includes riser elevations determined by certified survey conducted by County Staff (dated Aug. 10, 19  
Riser elevations for MW-1, MW-3, PZ-9, PZ-11 and PZ-19 were resurveyed on November 13, 2002.  
PZ-12A and GC-4A were resurveyed in April 2003.

Stage I Landfill - 131 acres (Closed - 30 ac., Intermediate - 91 ac., Open - 10 ac.)

Stage II Landfill - 110 acres (Closed - 0 ac., Intermediate - 0 ac., Open - 0 ac. No waste in Stage II.)

Stage III Landfill - 75 acres (Closed - 0 ac., Intermediate - 75 ac., Open - 0 ac.)

Data Collection: February 11, 2004

**Manatee County Government****Utility Operations Department****Landfill Division****Phone: (941) 795-3481****Fax: (941) 741-3396****FAX COVER SHEET****PLEASE DELIVER THE FOLLOWING PAGE(S):****TO:** Chris Coar & Jay Figueroa**FAX #:** 407-647-0624 **DEPARTMENT:** PBS+J**FROM:** Jeannie Detweiler**DATE:** 3/2/04**SUBJECT:** February Leachate + Rainfall Totals**PLEASE CALL UPON RECEIPT****PLEASE HANDLE CONFIDENTIALLY** \_\_\_\_\_**COMMENTS:**Call if you need anything!Thanks**TOTAL NUMBER OF PAGES INCLUDING COVER MEMO:** 3**IF YOU DO NOT RECEIVE ALL PAGES, PLEASE CALL AS SOON AS POSSIBLE.**

3-18-1995 11:38AM

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## Landfill

| LANDFILL SHEET |              |                 |
|----------------|--------------|-----------------|
| 2004<br>Feb    | RAIN<br>FALL | LEACHATE<br>MGD |
| 1              | 0.39         | 0.076           |
| 2              | 0.00         | 0.074           |
| 3              | 0.00         | 0.072           |
| 4              | 0.00         | 0.073           |
| 5              | 0.00         | 0.075           |
| 6              | 0.05         | 0.077           |
| 7              | 0.00         | 0.074           |
| 8              | 0.00         | 0.067           |
| 9              | 0.00         | 0.071           |
| 10             | 0.00         | 0.077           |
| 11             | 0.00         | 0.076           |
| 12             | 0.00         | 0.074           |
| 13             | 0.00         | 0.073           |
| 14             | 1.02         | 0.077           |
| 15             | 0.15         | 0.080           |
| 16             | 0.00         | 0.076           |
| 17             | 0.01         | 0.076           |
| 18             | 0.00         | 0.077           |
| 19             | 0.00         | 0.079           |
| 20             | 0.00         | 0.084           |
| 21             | 0.00         | 0.083           |
| 22             | 0.00         | 0.079           |
| 23             | 0.00         | 0.080           |
| 24             | 0.00         | 0.084           |
| 25             | 2.84         | 0.218           |
| 26             | 0.01         | 0.128           |
| 27             | 0.00         | 0.119           |
| 28             | 0.01         | 0.112           |
| 29             | 0.00         | 0.111           |
| TOTAL          | 4.48         | 2.522           |
| AVG            |              | 0.087           |
| MIN            |              |                 |
| MAX            | 2.84         | 0.218           |

Fax # 8-795-3396

7413396