



Jeb Bush  
Governor

# Department of Environmental Protection

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

October 11, 2005

**RECEIVED**

OCT 17 2005

Solid Waste Section

Colleen M. Castille  
Secretary

CERTIFIED MAIL 7002 3150 0003 8463 3667  
RETURN RECEIPT REQUESTED

## NOTICE OF PERMIT

Manatee County, Utility Operations  
Mr. Daniel T. Gray, Director  
4410 66<sup>th</sup> Street West  
Bradenton, Fl. 34210

RE: Lena Road Class I Landfill  
Leachate collection system modification  
Modification #39884-012-SO/MM to existing  
**Operation Permit 39884-010-SO/01**

Dear Mr. Gray:

Attached is modified Operation Permit 39884-010-SO/01, issued pursuant to Section(s) 403.087(1), Florida Statutes. The following Conditions have been revised in modification number 39884-012-SO/MM:

SPECIFIC CONDITIONS	FROM	TO	TYPE OF MODIFICATION
A.2.d.	N/A	New	New permit documentation
A.9.d.	Existing	Deleted	Condition satisfied per SWFWMD permit
B.1.b(3)	N/A	New	Submit revised drawings showing sequence and schedule for construction and filling
B.1.c	N/A	New	Conditions related to LCS modification construction
B.3.	N/A	New	Conditions specifying information needed in Record Documents
C.1.a.	Existing	Amended	Clarify Sequence of filling includes western part of Stage I
C.5.a(2)	Existing	Amended	Clarify street sweepings and dredge soils are acceptable for use as initial cover
C.10.e(2)	Existing	Amended	Clarify that erosions may be repaired within 24 hours of end of storm event

This letter and its attachments constitute a **complete permit** and **replace** all previous permits and permit modifications for the above referenced facility.

"More Protection, Less Process"

Printed on recycled paper.

The Department's proposed agency action shall become final unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, Florida Statutes (F.S.), before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000.

Petitions by the applicant or any of the parties listed below must be filed within 14 days of receipt of this written notice. Petitions filed by other persons must be filed within 14 days of publication of the notice or receipt of the written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of such notice, regardless of the date of publication. The petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Department's action is based must contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are or will be affected by the Department's action or proposed action;
- (d) A statement of all material facts disputed by petitioner or a statement that there are no disputed facts;
- (e) A statement of the ultimate facts alleged, including a statement of the specific facts, which the petitioner contends, warrant reversal or modification of the Department's action or proposed action;

(f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the Department's action or proposed action; and

(g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wants the Department to take with respect to the Department's action or proposed action.

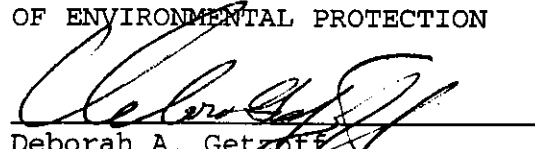
A petition that does not dispute the material facts on which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above. In accordance with Section 120.573, F.S., the Department advises that mediation is not available in this case under the provisions of that statute. This does not prevent any interested parties from agreeing to other forms of alternate dispute resolution.

Any party to this order has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110, Florida Rules of Appellate Procedure, with the clerk of the Department in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tampa, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

  
Deborah A. Getzoff  
District Director  
Southwest District

DAG/sjp  
Attachment

Copies furnished to:

Manatee County Board of County Commissioners  
Manatee County Notification List  
Gus DiFonzo, Manatee Co., 4410 66<sup>th</sup> St. West, Bradenton, Fl. 34210  
Joseph L. Miller, P.E., PBSJ, 482 South Keller Rd., Orlando, Fl. 32810  
Chris McGuire, OGC Tallahassee  
Fred Wick, FDEP Tallahassee  
Richard Tedder, P.E., FDEP Tallahassee  
(Permit Notebook)

**CERTIFICATE OF SERVICE**

This undersigned duly designated deputy clerk hereby certifies that this **NOTICE OF PERMIT** and all copies were mailed before the close of business on Oct. 11, 2005 to the listed persons.  
(date stamp)

FILING AND ACKNOWLEDGMENT  
FILED, on this date, pursuant to Section 120.52(10), Florida Statutes, with the designated Department, Clerk, receipt of which is hereby acknowledged.

Dana Black  
Clerk

10/11/05  
Date



Jeb Bush  
Governor

# Department of Environmental Protection

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

RECEIVED

OCT 17 2005

Solid Waste Section  
Colleen M. Castille  
Secretary

## PERMITTEE

Manatee County  
Daniel T. Gray  
Utility Operations Director  
4410 66<sup>th</sup> Street West  
Bradenton, FL 34210

## PERMIT/CERTIFICATION

WACS ID No: SWD-41-44795  
Permit No: 39884-010-SO/01  
Date of Issue: 06/13/2005  
Expiration Date: 06/13/2010  
County: Manatee  
Lat/Long: 27°28'10"N  
82°26'35"W  
Sec/Town/Rge: 1/35S/18E  
31/34S/19E  
6&7/35S/19E  
Project: Lena Road Class I  
Landfill

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 62-4, 62-302, 62-330, 62-522, 62-550, and 62-701. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the Department and made a part hereof and specifically described as follows:

To operate, monitor and maintain a landfill and related facilities (approximately 316 acres), referred to as the Lena Road Class I Landfill, subject to the specific and general conditions attached, for disposal of solid waste, located 3333 Lena Road, Bradenton, Manatee County, Florida. The specific conditions attached are for the operation, monitoring and maintenance of:

1. Lena Road Class I Landfill Facility and related appurtenances

Replaces Permit No.: 39884-001-SO (as modified)

Includes modification #39884-012-SO/MM, issued 10/11/2005.

General Information:	
Disposal acres	316 acres
Bottom liner design	Natural Soils (approx. el. +29 ft. NGVD-see Sheet C-3, ref.SC#A.2.a(10)) w/perimeter slurry wall
LCS design	Underdrains and lift stations, slurry wall keyed into the underlying natural clay unit
LDS design	none
Final elevation	+136 feet NGVD [ref.SC#A.2.a(2)]
Slopes	5H:1V, top slope 1%, intermediate cover 2%

This permit contains compliance items summarized in **Attachment 1** that shall be complied with and submitted to the Department by the dates noted. If the compliance dates are not met and submittals are not received by the Department on the dates noted, enforcement action may be initiated to assure compliance with the conditions of this permit.

**GENERAL CONDITIONS:**

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.161, 403.727, or 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of rights, nor any infringement of federal, State, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

**GENERAL CONDITIONS:**

(General Condition #7, cont'd)

- (a) Have access to and copy any records that must be kept under conditions of the permit;
- (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- (a) A description of and cause of noncompliance; and
- (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Rule 62-4.120 and 62-730.300, Florida Administrative Code, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

**GENERAL CONDITIONS:**

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- (a) Determination of Best Available Control Technology (BACT)
- (b) Determination of Prevention of Significant Deterioration (PSD)
- (c) Certification of compliance with State Water Quality Standards (Section 401, PL 92-500)
- (d) Compliance with New Source Performance Standards

14. The permittee shall comply with the following:

(a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

(b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

- (c) Records of monitoring information shall include:
- 1. the date, exact place, and time of sampling or measurements;
  - 2. the person responsible for performing the sampling or measurements;
  - 3. the dates analyses were performed;
  - 4. the person responsible for performing the analyses;
  - 5. the analytical techniques or methods used;
  - 6. the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.



**SPECIFIC CONDITIONS: PART A -Solid Waste Facility General Requirements**

1. **Landfill Designation.** This site shall be classified as a Class I landfill and shall be operated in accordance with all applicable requirements of Chapters 62-4, 62-302, 62-330, 62-520, 62-522, 62-550, 62-701 and 62-703, Florida Administrative Code (F.A.C.) and all applicable requirements of Department rules.

2. **Permit Application Documentation.** This permit is valid for operation, monitoring and maintenance of the Class I landfill and related systems (including but not limited to: household hazardous waste collection and storage facility, community drop off center, yard waste processing area, gas management system and stormwater/leachate management system, etc.) in accordance with the reports, plans and other information prepared by PBS&J (unless otherwise specified) as follows:

a. Application and Engineering Report for Renewal of Landfill Operation Permit for Lena Road Landfill, (3-hole punched bound documents) dated April 30, 2004 (received May 14, 2004), as revised, replaced or amended (information inserted into original) dated September 9, 2004, October 6, 2004, December 14, 2004, February 7, 2005 and March 17, 2005 (received September 10, 2004, October 7, 2004, December 15, 2004, February 16, 2005 and March 18, 2005). This information includes, but is not limited to:

- 1) Lena Road Landfill Operations Plan, Part L;
- 2) Geotechnical Investigation Requirements, Part J;
- 3) Household Hazardous Waste Collection and Storage Facility Operation Plan, Attachment L-2;
- 4) Water Quality and Leachate Monitoring Requirements, Part M;
- 5) Gas Management System Requirements, Part O;
- 6) Landfill Closure Requirements, Part P;
- 7) Long Term Care Requirements, Part R;
- 8) Financial Responsibility Requirements, Part S;
- 9) Lena Road Landfill Leachate Collection System High Pressure Water Jetting and Video Pipeline Inspection, Appendix A.
- 10) Permit Renewal Drawings for Manatee County Lena Road Landfill Fill Sequence Plan Stage III Landfill from 2004 to 2014, dated September 2004 (received October 7, 2004);

**SPECIFIC CONDITIONS: PART A, Solid Waste Facility General Requirements**

(Specific Condition #A.2., cont'd)

b. Response to DEP's First Request for Additional Information (permit file) dated September 9, 2004 and October 6, 2004 (received September 10, 2004 and October 7, 2004);

c. Response to DEP's Second Request for Additional Information (permit file) dated December 14, 2004 and February 7, 2005 (received December 15, 2004 and February 7, 2005);

d. Information regarding leachate collection system modifications, prepared by PBSJ (unless other wise noted) received June 22, 2005, August 15, 2005, September 20, 2005 (except plans, collated into spiral bound documents) including:

1) Application form and transmittal letter received June 22, 2005;

2) Progress Report Slurry Wall Construction, Lena Road Landfill, August 19, 1989 through September 22, 1989, prepared by Ardaman & Associates, received June 22, 2005;

3) Construction Quality Assurance Plan, revised August 12, 2005 (received August 15, 2005);

4) Manatee County Lena Road Landfill Pending Permit No. 39884-012-SO/MM Stage III Landfill Leachate Collection System Modification, August 5, 2005, Calculations,... (including revised calculations received September 20, 2005) received August 15, 2005; and

5) Construction plans for Lena Road Landfill Stormwater System Improvements, September 2005 (22 sheets), received September 20, 2005.

New 10/11/2005.

and in accordance with Department rules.

**3. Permit Modifications.**

a. Construction, operation, or other activities not previously approved as part of this permit shall require a separate Department permit unless the Department determines a permit modification to be more appropriate, or unless otherwise approved in writing by the Department.

b. Any significant changes to the operations at the facility shall require a permit modification. Permits shall be modified in accordance with the requirements of Rule 62-4.080, F.A.C. A modification which is reasonably expected to lead to substantially different environmental impacts which require a detailed review by the Department is considered a substantial modification.

**SPECIFIC CONDITIONS: PART A, Solid Waste Facility General Requirements**

(Specific Condition #A.3, cont'd)

- c. Excavation plans for the proposed remaining portion of Stage III are included on Sheet C-3 of the Permit Renewal Drawings [ref. SC#A.2.a(10)]. However, operation in this area shall not be initiated until the certification of construction completion requirements of Specific Condition #B.2 have been completed and approved by the Department.
4. **Permit Renewal.** No later than **November 11, 2009**, the permittee shall apply for a renewal of a permit on forms and in a manner prescribed by the Department, in order to assure conformance with all applicable Department rules. Permits shall be renewed at least every five years as required by Rule 62-701.320(10), F.A.C. Operation permit renewal shall include, but not be limited to, an updated Operations Plan and Site Plans for sequence of filling with cross-sections of lifts.
5. **Professional Certification.** Where required by Chapter 471 (P.E.) or Chapter 492 (P.G.), Florida Statutes, applicable portions of permit applications and supporting documents which are submitted to the Department for public record shall be signed and sealed by the professional(s) who prepared or approved them.
6. **General Conditions.** The permittee shall be aware of and operate under the "General Conditions". General Conditions are binding upon the permittee and enforceable pursuant to Chapter 403, Florida Statutes.
7. **Permit Acceptance.** By acceptance of this Permit, the Permittee certifies that he/she has read and understands the obligations imposed by the Specific and General Conditions contained herein and also including date of permit expiration and renewal deadlines. It is a violation of this permit for failure to comply with all conditions and deadlines.
8. **Regulations.** Chapter 62-701, F.A.C., effective May 27, 2001, is incorporated into this permit by reference. In the event that the regulations governing this permitted operation are revised, the Department shall notify the permittee, and the permittee shall request modification of those specific conditions which are affected by the revision of regulations to incorporate those revisions.
9. **Prohibitions.**
  - a. The prohibitions of Rule 62-701.300, F.A.C., shall not be violated by the activities at this facility.

**SPECIFIC CONDITIONS: PART A, Solid Waste Facility General Requirements**

(Specific Condition #A.9, cont'd)

b. In the event that surface depressions or other occurrences which may be indicative of sinkhole activity or subsurface instability, are discovered onsite, or within 500 feet of the site, the Department shall be notified in accordance with Specific Condition #C.10.b, below. The written notification shall include a description of the incident, the location and size of the affected area shown on an appropriate plan sheet, and for incidents within or immediately adjacent to the slurry wall, a corrective action plan which describes the actions necessary to prevent the unimpeded discharge of waste or leachate into ground or surface water.

c. Waste Burning. Open burning of solid waste is prohibited except in accordance with Rule 62-701.300(3) and Chapter 62-256, F.A.C. All fires which require longer than one (1) hour to extinguish must be promptly reported to the Department in accordance with Specific Condition #C.10.b., below.

d. ~~Figure G-1 [ref. SC#A.2.a, Section G] indicates that portions of the western and southwestern part of Stage III are within areas subject to potential flooding. Pursuant to Rule 62-701.340(4)(a), F.A.C., a landfill shall not be located in the 100-year floodplain where it will reduce temporary water storage capacity of the floodplain unless compensating storage is provided. Therefore, disposal operations shall not be conducted in these areas unless documentation from the water management district (SWFWMD) or the Department's ERP Section indicates that compensating storage for the 100-year flood has been provided.~~  
**Deleted 10/11/2005** [this condition satisfied per SWFWMD permit].

**SPECIFIC CONDITIONS: PART B - Construction Requirements**

1. All significant construction activities shall be approved by the Department prior to initiating work, unless specifically authorized otherwise.

a. This permit **does not** authorize the construction of the final cover system for any portion of the landfill. Construction of the final cover and related systems shall require a separate permit or major modification of this permit in accordance with Specific Condition #A.3 above.

b. Stage III.

1) This permit authorizes construction (excavation) of the bottom of Stage III disposal area as shown on Sheet C-3 of the Permit Renewal drawings [ref.SC#A.2.a(10)].

2) **At least sixty (60) days prior to initiation** of any below grade excavation work (e.g., remaining Stage III disposal area), the permittee shall submit a sufficient number of boring logs with supporting calculations to confirm the elevation of the bottom clay layer and demonstrate that the clay layer will not be adversely affected by hydrostatic uplift. The calculations shall demonstrate a minimum safety factor of 1.5 against hydrostatic uplift of the bottom clay layer. In the event that the excavation activities reveal unexpected subsurface conditions (e.g., the absence of clay, the presence of sandy soils, etc.) additional borings with supporting calculations to demonstrate that the clay layer is adequately impervious and will not be adversely affected by hydrostatic uplift may be required.

3) **At least thirty (30) days prior to initiation** of any below grade excavation work (e.g., remaining Stage III disposal area), the permittee shall submit a request for modification that includes scaled drawings showing the phased construction of the remaining portions of Stage III and the expected schedule for completion of each phase.  
**New 10/11/2005**.

c. **Leachate collection system modification.**

1) Leachate collection systems shall have a construction quality assurance plan to provide personnel with adequate information to achieve continuous compliance with the construction requirements. The Construction Quality Assurance Plan shall be in accordance with Rules 62-701.400(7) and (8), F.A.C., the CQA Plan [ref.SC#A.2.d(3)], and the conditions of this permit. The professional engineer or his designee shall be on-site at all times during leachate collection system construction (including manholes) to monitor construction activities. The leachate collection system modifications shall be constructed in accordance with the information listed in Specific Condition #A.2.d.

2) This permit **does not** authorize the installation, repair, or replacement of geosynthetic liner material.

**SPECIFIC CONDITIONS: PART B - Construction Requirements**

(Specific Condition #B.1.c., cont'd)

3) In the event that the slurry wall or the anchored edge of the closure liner in Stage I is impacted during construction, the Department shall be notified and corrective actions shall be detailed in accordance with Specific Condition #C.10.b. of this permit.

4) A complete set of construction drawings and shop drawings, which include daily additions, deletions and revisions, shall be maintained on-site at all times for reference. Drawings which show the locations of geomembrane panel seams and repairs shall be kept on-site at all times for reference.

5) Leachate shall not be deposited, injected, dumped, spilled, leaked, or discharged in any manner to the land, surface water or groundwater outside the liner system at any time during the construction activities.

6) Unsatisfactory, defective or non-conforming work shall be reported to the Engineer and shall be corrected, or the reasons for not correcting the work shall be recorded and maintained onsite for reference and inspections. Documentation of the corrections or reasons for not correcting the work shall be submitted with the Record Documents required by Specific Conditions #B.1 and #B.2.

7) Construction activities such as QA/QC testing of the geosynthetics or soil materials, surveying, etc. shall not be carried out in non-daylight hours without prior Department approval. If these activities will be conducted during nighttime hours, the Department shall be notified **at least 1 week** in advance to allow for Department observation. This notification shall include a description of the methods which will be used to provide adequate illumination to ensure that the quality of the construction is not compromised.

8) All excavations shall be maintained free from standing water. Except for the stormwater management system construction, no construction, including pipe laying, shall be allowed in water. Groundwater shall be maintained at least 12 inches below excavations. In the event that it appears that the excavation is being impacted by groundwater, the contractor shall take the corrective actions necessary to demonstrate that the groundwater is sufficiently below the bottom of the excavation.

9) The permeability of the clean granular material shall be at least  $1 \times 10^{-3}$  cm/sec. The frequency of testing shall be in accordance with Table 02220-A for "clean common fill." A minimum of three gradation tests on the "clean granular backfill" shall be conducted [ref. §4.2, CQAP].

10) In the event that the slurry wall is impacted by the construction activities, it shall be repaired in accordance with the Specifications and CQA Plan, Section 3.

11) The soils testing laboratory shall be independent of the contractor [see §02220-1.03.A].

**SPECIFIC CONDITIONS: PART B - Construction Requirements**

(Specific Condition #B.1.c., cont'd)

12) Soils and other materials excavated from inside the slurry wall shall not be stockpiled or stored outside the slurry wall, or in areas that drain outside the slurry wall [see §02220-2.01.A.2., ref. §02220-3.02.A.8.].

13) Water generated from dewatering activities within the slurry are considered to be leachate and shall be managed appropriately [ref. §02220-3.01.B.1 & 3, §02220-3.03.B.].

New 10/11/2005.

2. **Certification of Construction Completion.** All information required by this Specific Condition shall be signed and sealed by a registered professional engineer or land surveyor as appropriate. At the completion of construction, information listed below shall be provided to the Department as part of the Certification of Construction Completion.

a. **Within sixty (60) days** after any specified construction (e.g., excavation of the remaining portion of Stage III) has been completed, the following activities shall be completed and submitted by the permittee. This information shall be approved by the Department prior to operation in this area:

1) The owner or operator shall submit a Certification of Construction Completion, Form 62-701.900(2), signed and sealed by the professional engineer responsible for the construction to the Department for approval, and shall arrange for Department representatives to inspect the construction in the company of the permittee, the engineer, and the facility operator.

2) The owner or operator shall submit Record Drawings/Documents showing all changes (i.e. all additions, deletions, revisions to the plans previously approved by the Department including site grades and elevations). The Record Documents shall include as-built plans details and elevations (survey) as appropriate.

3) The owner or operator shall submit a narrative indicating all changes in plans and the cause of the deviations, and certification by the design engineer to the Department.

4) The engineer of record shall provide a report to verify conformance with the project specifications. The report including all related testing results shall be submitted to the Department along with the completion of construction documents.

**SPECIFIC CONDITIONS: PART B - Construction Requirements**

(Specific Condition #B.2.a, cont'd)

5) In the event that the slurry wall was impacted by the construction activities, documentation demonstrating that the integrity of the slurry wall was not adversely affected shall be submitted with the Certification of Construction Completion.

b. The as-built cell floor elevations shall correlate with the calculations required by Specific Condition #B.1.c. and demonstrate a minimum safety factor of 1.5 against hydrostatic uplift of the bottom clay layer at the as-built elevation.

3. **Record Drawings/Documents.**

a. The Record Drawings/Documents shall include, but not be limited to, the following information:

- 1) Location of all anchor trenches (if appropriate);
- 2) As-built elevations for the leachate collection pipes (including elevations in the trenches and inverts at the manholes) and ditch elevations;
- 3) Daily construction reports (CQA and/or general contractor);
- 6) Copies of photographs documenting all stages of the construction project;
- 8) Documentation that demonstrates that all leachate collection system piping has been video inspected and/or pressure cleaned. This documentation shall also detail all deficiencies discovered and corrective actions taken.

New 10/11/2005.

b. The as-built survey of the leachate collection system piping invert elevations shall demonstrate that the pipes were constructed at  $\pm 5\%$  of the design slope.

New 10/11/2005.



**SPECIFIC CONDITIONS: PART C - Operation Requirements**

**1. Facility Operation Requirements.**

a. The permittee shall operate this facility in accordance with Rule 62-701.500, F.A.C., the Permit Renewal Drawings [ref. SC#A.2.a(10)] and the Operations Plan [ref. SC#A.2.a(1)], and any other applicable requirements. This permit authorizes disposal operations in **Stage III and western portion of Stage I only (i.e. Sequences 3-6)**.

**Amended 10/11/2005**.

b. Waste shall not be disposed (unloaded, spread, or compacted) during non-daylight hours, unless sufficient lighting is provided to adequately assess the materials and remove unacceptable wastes.

c. Sufficient personnel and equipment shall be utilized to adequately operate the facility.

d. Ponded Water/Leachate. All surface water at Lena Road Landfill within the area surrounded by the slurry wall is considered as "stormwater/leachate." In the event of stormwater control problems which allow prolonged (greater than 72 hours) contact of ponded water with waste, the disposal of waste in the affected area shall cease until the leachate has been collected and appropriate drainage has been restored.

e. In the event of equipment breakdown or scheduled maintenance of essential equipment (such as equipment required for spreading, compacting and covering waste), the owner or operator shall ensure that sufficient reserve equipment is operating at the site **within 24 hours** of the occurrence. In the event that sufficient reserve equipment is not obtained **within 24 hours**, the permittee shall notify the Department in accordance with Specific Condition #C.10.b., below and provide a schedule for corrective actions.

f. Unauthorized Wastes. A sufficient number of spotters and operators shall be utilized at the facility for removing unacceptable wastes (such as liquids, biomedical waste, hazardous and unknown wastes, etc.) from the working face. At a minimum, spotting shall occur at the working face from the ground (while off of the equipment) while waste is being disposed.

**SPECIFIC CONDITIONS: PART C - Operation Requirements**

(Specific Condition #C.1., cont'd)

g. Special Wastes. The design, operation, and monitoring of disposal or control of any "special wastes" shall be in accordance with the Operation Plan [ref.SC#A.2.a(1)] and with Rules 62-701.300(8) and 62-701.520, F.A.C., and any other applicable Department rules, to protect the public safety, health and welfare. The special wastes shall be stored and managed such that discharge of contaminants to the environment is prevented.

1) Wastes which may include residual contaminants (such as gasoline, oil, paint, antifreeze, PCBs, etc.) shall be stored and managed such that the residues or constituents thereof are not spilled, leaked, dumped, or otherwise discharged onto the soil or into surface or groundwaters.

2) Special wastes (such as lead acid batteries, white goods, etc.), found at the working face, shall be stored in locations which do not adversely affect the sequence of filling, and shall be managed as described in the Operations Plan. These wastes shall be removed from the site for proper recycling or disposal at the frequency described in the Operation Plan and this permit, unless another frequency for removal is approved in writing by the Department.

3) Asbestos. Asbestos shall be managed in accordance with Rule 62-701.520(4), F.A.C., the Operation Plan [ref. SC#A.2.a(1)], and all other applicable federal and Department rules. The location of asbestos disposal shall be recorded in accordance with 40 CFR Part 61.154.

4) Contaminated Soil. Contaminated soil (except dredge spoil) shall be disposed within the working area and shall have representative analytical results demonstrate that the material is not hazardous and that the material has been adequately dewatered prior to delivery so that the material passes the paint filter test.

5) White Goods and other scrap metal. White goods and lawnmowers which may contain liquids (such as oil or gasoline), chlorofluorocarbons (CFCs such as freon), or other gases shall be stored and managed in a manner such that the liquids are contained, and CFCs or other gases are not discharged to the atmosphere. White goods which have had the refrigerant appropriately removed and lawn mowers which have had liquids removed shall be clearly marked. White goods shall be removed at least **semi-annually (every 6 months)**.

6) Yard Trash. Yard trash (including clean wood) shall be managed according to Rule 62-709.320, F.A.C., and as described in the Operation Plan [ref.SC#A.2.a(1)].

**SPECIFIC CONDITIONS: PART C - Operation Requirements**

(Specific Condition #C.1.g., cont'd)

7) Waste Tires. Waste tires may be stored at the Citizen Drop-off Facility, designated waste tire container near the working face or the waste tire processing facility. The waste tire containers shall be emptied when full.

h. Household Hazardous Waste (HHW). Household hazardous waste shall be managed in accordance with the Household Hazardous Waste Collection and Storage Facility (HHWCSF) Operation Plan [ref. SC#A.2.a(3)], and stored at the HHWCSF.

1) HHW shall be identified, and then segregated for storage within the containment area of the HHWCSF by the end of each collection day. Waste received at the HHWCSF shall be stored within containment areas at all times.

2) Spillage shall be removed and properly packaged for disposal. Soils which have been contaminated by spills shall be removed and packaged for proper disposal on the same day as the spill occurred.

3) Liquids, including contaminated rainwater, shall not be discharged outside of the containment structures.

4) Incompatible materials shall not be stored in the same area and shall not be bulked together.

5) Records on the quantities of HHW collected and removed for disposal shall be compiled monthly and maintained at the facility for Department review upon request.

6) Miscellaneous household hazardous wastes (such as paint, fluorescent light bulbs, chemicals, etc.) shall be managed as described in the HHWCSF Operation Plan [ref. SC#A.2.a(3)].

7) Lead acid batteries. Lead acid batteries are accepted at HHWCSF. Any incidental lead acid batteries that are discovered in waste delivered to the site shall be stored in a manner which prevents the discharge of contaminants to the environment. Lead acid batteries shall be removed for appropriate disposal or recycling when a maximum quantity of 80 batteries is stored on-site. [ref. Op. Plan, page L-8]

8) Used oil. Used oil is accepted at the HHWCSF. Any used oil that is accepted shall be stored in a manner which prevents discharge to the environment. Used oil shall be removed at least quarterly (every 3 months) or when a maximum quantity of 1000 gallons is stored onsite, whichever occurs sooner. [ref. SC#A.2.a(1) and A.2.a(3)]

**SPECIFIC CONDITIONS: PART C - Operation Requirements**

(Specific Condition #C.1.h., cont'd)

9) **Paint.** Paint is accepted and bulked at the HHWCSF. Any paint that is accepted shall be managed and stored in a manner which prevents discharge to the environment, and shall be removed at least quarterly (every 3 months) or when a maximum quantity of 500 gallons is stored onsite, whichever occurs sooner. [ref. SC#A.2.a(1) and A.2.a(3)]

10) **Electronics.** Electronics to be recycled shall be stored in an undamaged condition, and removed at least quarterly (every 3 months). Electronics that have been damaged (such as broken into pieces) shall be removed and stored in a covered containment area to prevent contact with rainfall and related discharge, and removed at least quarterly (every 3 months). [ref. SC#A.2.a(1) and A.2.a(3)]

i. Site Inspections.

1) The owner or operator shall inspect the site for erosion and settlement (low spots and improperly graded areas) daily on operating days. Erosion and settlement shall be repaired in accordance with Specific Condition #C.10., below.

2) The owner or operator shall inspect the landfill facility for the presence of objectionable odors at the property boundary **daily on operating days**. In the event that objectionable odors are detected at the property boundary, the owner or operator shall abate the odors in accordance with Specific Condition #C.9., below.

3) Litter fences shall be installed near the active face to capture wind-blown litter. In addition, the owner or operator shall inspect the normal traffic areas of the facility for litter **daily on operating days**. The accessible property boundaries shall be inspected for litter **at least weekly**. Litter shall be collected and disposed of in the Class I landfill **at least once per day on operating days**, or more often as necessary. In the event that the litter control program is ineffective, the operator shall notify the Department, and implement additional litter control measures **within 30 days**.

j. The top edge of the slurry wall shall be clearly marked in as many locations as required to prevent waste disposal and stormwater/leachate runoff outside the slurry wall. The markers shall be of a sufficient size or design that effectively prevents waste disposal in unauthorized areas. The markers shall be maintained at all times throughout the operation of the facility to prevent waste disposal and leachate runoff outside the slurry wall.

**SPECIFIC CONDITIONS: PART C - Operation Requirements**

**2. Operating Personnel.**

a. The owner or operator shall be responsible for operating and maintaining the facility in an orderly, safe, and sanitary manner.

b. Sufficient trained personnel shall be available, to adequately operate the facility in compliance with this permit and Department rules. As required by Rule 62-701.500(1), F.A.C., at least one trained operator shall be at the site when either area receives waste. At least one trained spotter shall be at each working face when waste is received and unloaded, to inspect each load of waste from the ground (while off of the equipment), and to identify and properly manage prohibited materials.

c. The permittee shall notify the Department in writing of a change of the County's primary on-site supervisor within 7 days of the effective start date of this new responsible individual. Training documentation shall be maintained at the landfill site, and copies shall be provided to the Department upon request.

**3. Control of Access.** Access to, and use of, the facility shall be controlled as required by Rule 62-701.500(5), F.A.C. Adequate access to the working face shall be provided for all weather conditions while the facility is receiving waste for disposal.

**4. Monitoring of Waste.**

a. Wastes shall be monitored as required by Rule 62-701.500(6), F.A.C., including a load checking program and associated activities. The owner or operator shall conduct three random load checks per week at the active working face. Documentation of the three random load checks, including descriptions (type and quantity) of unacceptable wastes discovered, shall be maintained on-site, and copies provided to the Department upon request. Load checks shall document the occurrence, type of unacceptable wastes, removal and disposition of unauthorized wastes discovered in the loads.

b. The permittee shall not accept hazardous waste or any hazardous substance at this site. Hazardous wastes are wastes listed in 40 CFR 261 Subpart D as hazardous or are wastes characterized in 40 CFR 261 Subpart C as hazardous. Hazardous substances are those defined in Section 403.703, Florida Statute or in any other applicable state or federal law or administrative rule. Sludges or other wastes which may be hazardous should be disposed of in accordance with Rules 62-701.300(4) and 62-701.500(6)(b), F.A.C. In the event that hazardous wastes are discovered, the Department shall be notified in accordance with Specific Condition #C.10.

**SPECIFIC CONDITIONS: PART C - Operation Requirements**

(Specific Condition #C.4., cont'd)

c. The permittee shall maintain a program which prohibits the disposal of bulk industrial wastes which operating personnel reasonably believe to either be or contain hazardous waste, without first obtaining a chemical analysis of the material showing the waste to be non-hazardous. The chemical analysis of any such material so placed in the landfill, along with the customer's name and date of disposal, shall be kept on file by the operating authority on-site.

d. Sludges generated from stormwater/leachate system maintenance shall be dewatered and adequately characterized as non-hazardous prior to disposal.

5. **Waste Handling Requirements.** All disposed solid waste shall be covered as required by Rule 62-701.500(7), F.A.C.

a. Initial Cover. Initial cover shall be applied and maintained at the end of each working day in the Class I landfill area in accordance with Rule 62-701.500(7)(e), F.A.C., so as to protect the public health and welfare.

1) All solid waste disposed of in the Class I disposal area, must be covered with at least 6 inches of compacted earth or other suitable material as approved by the Department (in writing), at the end of each working day. Working areas which have received initial cover and exhibit erosion which results in exposed waste shall be repaired within three days of discovery.

2) The following alternate daily cover materials are acceptable for use at this facility: tarps, soil with up to 25% fines from the yard processing area, shredded tires, ground-up construction and demolition debris including asphalt roofing shingles, dredged soils that have been sufficiently dewatered, and street sweepings.

**Amended 10/11/2005**.

3) Alternate daily cover materials not listed in this Specific Condition are required to be approved by the Department prior to use at the facility

b. Intermediate Cover. Intermediate cover shall be applied and maintained in accordance with Rules 62-701.500(7)(a) and (f), F.A.C. Cover materials other than soil (unless identified herein) shall not be used for intermediate cover without prior written Department approval.

1) An intermediate cover of 12 inches of compacted soil in addition to the six (6) inch initial cover shall be applied within seven (7) days of cell completion if final cover or an additional lift is not to be applied within 180 days of cell completion.

**SPECIFIC CONDITIONS: PART C - Operation Requirements**

(Specific Condition #C.5., cont'd)

c. Cover materials which have been previously used for intermediate or initial cover, and which contain solid waste shall not be re-used on areas which discharge outside the slurry wall.

**6. Working Face.**

a. As required by Rule 62-701.500(7)(d), F.A.C., the permittee shall minimize the size of the working face to minimize leachate, and unnecessary use of cover material. The permittee shall maintain the working face of a cell only wide enough to efficiently accommodate the maximum quantity of vehicles discharging waste simultaneously and to minimize the exposed area.

b. Waste shall be spread and compacted in accordance with the Operation Plan. Slopes shall be maintained in accordance with the Operations Drawings [ref. SC#A.2.a(10)]. All waste slopes (including the working face) shall be no greater (steeper) than 5H:1V [ref. SC#A.2.a(2), Part J].

**7. Method and Sequence of Filling.** The method and sequence of filling shall be in accordance with Permit Renewal Drawings [ref. SC#A.2.a(10)], and as described in the Operation Plan, or as otherwise approved in writing by the Department.

**8. Leachate Management.**

a. Leachate shall be managed in accordance with the requirements of Rule 62-701.500(8), F.A.C., the Operation Plan [ref. SC#A.2.a(1)], the Water Quality and Leachate Monitoring Requirements [ref. SC#A.2.a(4)], and other applicable Department rules.

b. Leachate which has accumulated on the surface in low areas shall be collected and removed, or redirected away from the active disposal areas within 72 hours.

c. Leachate Collection and Removal System (LCRS)  
Inspections/Maintenance.

1) The Stormwater/Leachate Management System shall minimize stormwater from entering waste filled areas. All stormwater/leachate conveyances shall be inspected daily to verify adequate performance. Conveyances not performing adequately shall be repaired **within three days of discovery**. Documentation of all inspections and repairs shall be kept on file at the facility. [ref. SC#A.2.a(1)]

**SPECIFIC CONDITIONS: PART C - Operation Requirements**

(Specific Condition #C.8.c., cont'd)

2) The leachate collection and removal system underdrains and gravity pipelines shall be video inspected or water pressure cleaned to verify adequate performance at least once during this permit period. Force mains shall be video inspected or water pressure cleaned when the pump station performance indicates that the force mains may be obstructed. An inspection report shall be provided and shall include an evaluation of the effectiveness of the system, the locations of cleaning and video inspections (indicated on a Site Plan drawn to scale) with the locations and the cause of all obstructions encountered, proposed corrective actions, and schedule for implementation of corrective actions as appropriate. If the pipes are water-jet cleaned, the report shall include a description of the method of cleaning. Components not performing adequately shall be repaired as necessary. **No later than one hundred and eighty (180) days prior to permit expiration**, a final report summarizing the inspection results (with a copy of the inspection report) and describing the related corrective actions (repairs) when required (with photographic documentation for all repairs and a copy of the inspection videotape) shall be signed and sealed by a professional engineer, and shall be submitted to the Department to verify adequate performance of the leachate collection and removal system. The permittee shall retain a copy of the final report, each inspection report, and each inspection videotape at the facility for reference, and shall provide a copy to the Department upon request.

3) Each pump and pump station and related sensors and controller mechanisms shall be inspected on a semi-annual basis. Pump performance shall be verified and current draw recorded. Pumps showing reduced performance shall be removed for maintenance and repair, and a replacement pump installed if required for continued compliance. Documentation of all inspections shall be kept on file at the facility, and provided to the Department upon request.

4) Unless otherwise specified in this permit, the leachate collection and removal system components shall be inspected and maintained as described in the Operations Plan [ref. SC#A.2.a(1)].



**SPECIFIC CONDITIONS: PART C - Operation Requirements**

(Specific Condition #C.8.c, cont'd)

5) Upon the discovery of any defective (obstructed, separated, deformed) portion of the leachate collection system, the disposal of waste in the affected area shall cease in the affected area until the leachate collection system performance has been restored. Construction of improvements to any part of the LCRS, including significant repairs to the leachate collection system, may require a permit modification pursuant to Specific Condition #A.3. The design and related supporting documents for the construction of improvements shall be substantially equivalent to those required for new construction.

d. Leachate quantities.

1) In the event of a failure of leachate metering or pumping equipment which is not corrected **within 24 hours of detection**, the Department shall be notified, and corrective actions implemented in accordance with Specific Condition #C.10.

2) Leachate generation reports shall be compiled and submitted to the Department **monthly, by the 15<sup>th</sup> of the following month**. Leachate generation reports shall include the number of open, intermediate and closed acres, the quantities of stormwater/leachate collected, stored, recirculated and disposed off-site to a wastewater treatment facility, and daily precipitation amounts greater than one tenth of an inch.

9. **Control of Nuisance Conditions.**

a. The owner or operator shall control odors, vectors (mosquitoes, other insects, rodents), and fugitive particulates (dust, smoke) arising from the operation so as to protect the public health and welfare. Such control shall minimize the creation of nuisance conditions on adjoining property. Complaints received from the general public, and confirmed by Department personnel upon site inspection, shall constitute a nuisance condition, and the permittee must take immediate corrective action to abate the nuisance.

b. In the event that the odor control measures performed at the facility do not sufficiently abate objectionable odors offsite, the permittee shall submit an odor abatement plan to the Department **within sixty (60) days** of initial detection. The odor abatement plan shall include at a minimum, a description of the proposed corrective actions and a schedule for implementation.

**SPECIFIC CONDITIONS: PART C - Operation Requirements**

**10. Facility Maintenance and Repair.**

a. The site shall be properly maintained including maintenance of access roads to disposal areas, equipment, stormwater/leachate management systems, cover systems and berms, gas monitoring system, surface water monitoring system, and groundwater monitoring system. Erosion and ponded water in disposal areas shall be prevented.

b. In the event of damage to any portion of the landfill site facilities, unauthorized stormwater/leachate discharge outside the slurry wall, failure of any portion of the landfill systems (including damaged or dry groundwater monitoring wells), fire, explosion, the development of sinkhole(s) or other subsurface instability at the site, the permittee shall **immediately (within 24 hours)** notify the Department explaining such occurrence and remedial measures to be taken, method to prevent reoccurrence, and time needed for repairs. **Written, detailed notification shall be submitted to the Department within seven (7) days following the occurrence.** Routine maintenance does not require notification but shall be noted on daily reports.

c. In the event that any portion of the groundwater or gradient monitoring system is damaged or unable to be sampled, corrective actions shall be completed **within sixty (60) days** of the written notification specified in Specific Condition #C.10.b., unless otherwise approved by the Department. Corrective actions which include relocation or installation of new groundwater monitoring wells shall be in accordance with Specific Condition #E.5., or as otherwise approved by the Department.

d. In the event that the leachate management systems are damaged or are not operating effectively, corrective actions shall be initiated **within thirty (30) days** of the written notification specified in Specific Condition #C.10.b., unless otherwise approved by the Department.

e. Erosion. Intermediately covered disposal areas, or other disposal areas which exhibit significant erosion, shall be repaired according to the following schedule:

1) If the cover materials have eroded such that greater than 50% of the cover in that location has been eroded, then initiate repair of the affected area within three (3) days of discovery; and

2) If waste is exposed, then repair the affected area by the end of the next working day, or within 24 hours after the event that caused the waste to be exposed has ceased.  
**Amended 10/11/2005.**

f. Settlement. Areas which exhibit settlement (low spots and improperly graded areas) that may cause ponding of water shall be repaired (additional soil placed, regraded, seeded and/or sodded) **within seven (7) days.**

**SPECIFIC CONDITIONS: PART D - Recordkeeping**

**1. Operation Plan and Operating Record.**

a. Each landfill owner or operator shall have an operational plan which meets the requirements of Rule 62-701.500(2), F.A.C. A copy of the Department approved permit, operational plan, construction reports and record drawings, and supporting information shall be kept at the facility at all times for reference and inspections. Operating records as required by Rule 62-701.500(3), F.A.C., are part of the operations plan, and shall also be maintained at the site.

b. Proposed changes to the current Department-approved **Operation Plan** [ref.SC#A.2.a(1)] shall be submitted in writing to the Department for review and may require a permit modification in accordance with Specific Condition #A.3. The **Operation Plan** shall be updated as operations change and for renewal of the permit. Revised pages shall be provided as replacement pages with revisions noted (deletions may be struckthrough ~~(struckthrough)~~ and additions may be shaded (shaded) or a similar method may be used) and each page numbered with the document title and date of revision.

c. Unless specified otherwise in this permit, all submittals, notifications, requests for permit modification, shall be provided to the Southwest District Solid Waste Section, 3804 Coconut Palm Drive, Tampa, FL 33619.

d. The following reports, documents and other information shall be maintained at the facility for reference, and copies shall be provided to the Department upon request:

- 1) Waste quantity reports required by Rule 62-701.500(4), F.A.C.;
- 2) A log of the facility operator's daily inspections, and any subsequent corrective actions;
- 3) Load checking records;
- 4) A list of incidents of disposal of unacceptable or prohibited wastes. This list should include the generator's name and address, and a description of the waste disposed;
- 5) Operator and spotter training certificates and other documentation;
- 6) Log of odor complaints and corrective action; and
- 7) Records as described in Rule 62-701.500(13). These records shall include all certifications for construction completion.

**SPECIFIC CONDITIONS: PART D - Recordkeeping**

(Specific Condition #D.1., cont'd)

e. **Capacity Report.** The owner or operator shall conduct a topographic survey of, and shall estimate the remaining disposal capacity and site life of each disposal area as required by Rule 62-701.500(13)(c), F.A.C. **Annually, no later than March 1<sup>st</sup> each year,** a copy of this survey, supporting capacity calculations, signed and sealed by a registered professional engineer and/or licensed professional land surveyor as appropriate shall be submitted to the Department. The survey shall demonstrate that the waste sideslopes are no greater than the design (5H:1V), that the top elevation does not exceed design elevation, and that all other design features and related improvements conform to the Department-approved Permit Renewal Drawings [ref.SC#A.2.a(10)] and other supporting information [ref.SC#A.2.a(2)].

2. **Waste Records.**

a. Waste records shall be maintained as required by Rule 62-701.500(4), F.A.C. The owner or operator of the facility shall weigh each load of waste as it is received (with scales at the facility) and record, in tons per day, the amount of waste debris and material received. This information shall be compiled **monthly** and submitted to the Department (Solid Waste Section, Department of Environmental Protection, 2600 Blair Stone Road, M.S. 4565, Tallahassee, Florida 32399-2400) **quarterly, by January 15<sup>th</sup>, April 15<sup>th</sup>, July 15<sup>th</sup> and October 15<sup>th</sup> of each year.** Waste shall not be accepted for disposal at the landfill unless weight scales are available at the facility and are in proper working condition.

b. Records shall be kept for all recycled electronics, including the quantities sent to each recycler, and related receipts with the name and address of each recycler.

3. **Financial Assurance.** The permittee shall provide financial assurance for this facility and related appurtenances in accordance with Rule 62-701.630, F.A.C.

a. All costs for closure shall be adjusted and submitted **annually, by March 1<sup>st</sup> each year** to: Solid Waste Manager, Solid Waste Section, Department of Environmental Protection, 3804 Coconut Palm Drive, Tampa, Florida 33619-1352.

b. Proof that the financial mechanism has been adequately funded shall be submitted **annually** to: Financial Coordinator, Solid Waste Section, Department of Environmental Protection, 2600 Blair Stone Road, MS#4565, Tallahassee, Florida 32399-2400.

**SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements**

**1. Water Quality Monitoring Quality Assurance.**

a. All field work done in connection with the facility's Water Quality Monitoring Plan shall be conducted in accordance with the Standard Operating Procedures (SOPs) described in DEP-SOP-001/01 (February 1, 2004), as referenced in Rule 62-160.210(1), F.A.C. All laboratory analyses done in connection with the facility's Water Quality Monitoring Plan shall be conducted by firms that hold certificates from the Department of Health Environmental Laboratory Certification Program under Chapter 64E-1, F.A.C., as referenced in Rule 62-160.300(1), F.A.C. The SOPs utilized and the laboratory's list of certified test methods and analytes must specifically address the types of sampling and analytical work that are required by the permit and shall be implemented by all persons performing sample collection or analysis related to this permit. Alternate field procedures and laboratory methods may be used if approved according to the requirements of Rules 62-160.220 and 62-160.330, F.A.C., respectively.

b. The field testing, sample collection and preservation and laboratory testing, including the collection of quality control samples, shall be in accordance with methods approved by the Department in accordance with Rule 62-4.246 and Chapter 62-160; F.A.C. Approved methods published by the Department or as published in Standard Methods, A.S.T.M., or EPA methods shall be used.

**2. Zone of Discharge.**

a. The zone of discharge for this landfill shall extend horizontally 100 feet from the limits of the landfill slurry wall (designated as Stage I, II and III landfill areas) or to the property boundary, whichever is less, and shall extend vertically to the bottom of the surficial aquifer.

b. The permittee shall ensure that the water quality standards and minimum criteria for Class G-II ground water will not be exceeded at the boundary of the zone of discharge according to Rule 62-520.420, F.A.C., and that the minimum criteria listed in Rule 62-520.400, F.A.C., will not be exceeded outside the footprint of the landfill slurry wall (designated as Stage I, II and III landfill areas).

**SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements**

3. **Ground Water Monitor Well Locations.** The ground water monitoring system is designed and constructed in accordance with Part M ("Water Quality and Leachate Monitoring Requirements") of the document entitled "Application and Engineering Report for Renewal of Landfill Operation Permit", prepared by PBS&J, dated April 30, 2004, revised September 7, 2004 and December 6, 2004 [ref. SC #A.2.a]. The ground water monitor wells are located on Figure M-1 prepared by PBS&J ("Water Quality and Elevation Monitoring Network") received December 15, 2004 (**attached**), as follows:

WACS Testsite			
<u>Well Number</u>	<u>ID No.</u>	<u>Aquifer</u>	<u>Designation</u>
GW-1 *	21593	Surficial	Detection
GW-2 *	21594	Surficial	Detection
GW-3 *	21595	Surficial	Detection
GW-4 *	21596	Surficial	Detection
GW-5 *	21597	Surficial	Detection
GW-6 *	21598	Surficial	Detection
GW-7 *	21599	Surficial	Detection
GW-8 *	21600	Surficial	Detection
GW-9 *	21601	Surficial	Detection
GW-10 *	21602	Surficial	Detection
GW-11 *	21603	Surficial	Detection
GW-12 *	21604	Surficial	Detection
GW-13 *	21605	Surficial	Detection
GW-14 *	21606	Surficial	Detection
GW-15 *	21607	Surficial	Detection
GW-16 *	21608	Surficial	Detection
GW-17 *	21609	Surficial	Detection
BGW-1 *	21610	Surficial	Background

\* = to be installed **within 90 days of permit issuance** in accordance with construction details presented in Figure M-2 of Part M of the document entitled "Application and Engineering Report for Renewal of Landfill Operation Permit", prepared by PBS&J, dated April 2004, revised September 7, 2004 and December 6, 2004 (**attached**); documentation of well construction shall be provided **within 30 days of installation** in accordance with SC #E.5.b., and #E.5.d.; initial sampling shall be conducted **within 7 days of well installation and development** in accordance with SC #E.4.b.; results of initial sampling shall be submitted **within 30 days of receipt from the analytical laboratory**.

All wells are to be clearly labeled and easily visible at all times. The permittee should keep all wells locked to minimize unauthorized access.

**SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements**

4. **Ground Water Sampling.** The locations, parameters, and frequencies specified herein represent the minimum requirements for ground water monitoring. Additional samples, wells, and parameters may be required based upon subsequent analysis. Method Detection Limits must be less than or equal to the Maximum Contaminant Levels established for the individual parameters to demonstrate compliance with Class G-II ground water standards referenced in Chapter 62-522, F.A.C. Compliance with ground water standards shall be based on the analysis of unfiltered samples.

a. Ground water levels shall be measured at all active wells listed in SC #E.3., and all piezometers listed in SC #E.10., during all sampling events described in SC #E.4.b., #E.4.c., and #E.9.c., to a precision of 0.01 foot. The ground water surface contour maps prepared for each sampling event shall also include ground water elevations (feet NGVD) calculated for each well and the staff gauges described in SC #E.9.a.

b. An initial sampling event shall be conducted at wells GW-1 through GW-17 and BGW-1 **within 7 days of installation and development** for the following parameters:

Field parameters

Static Water Level  
before purging  
Specific Conductivity  
pH  
Dissolved Oxygen  
Turbidity  
Temperature  
Colors and sheens  
(by observation)

Laboratory parameters

Total Ammonia - N	Iron
Chlorides	Mercury
Nitrate	Sodium
Total Dissolved Solids (TDS)	
<u>Those parameters listed in</u>	
<u>40 CFR Part 258, Appendix II</u>	

c. Wells GW-1 through GW-17 and BGW-1 shall be sampled **semi-annually**. In accordance with Rule 62-701.510(6)(d), F.A.C., samples collected from these wells shall be analyzed for the following parameters:

Field parameters

Static Water Level  
before purging  
Specific Conductivity  
pH  
Dissolved Oxygen  
Turbidity  
Temperature  
Colors and sheens  
(by observation)

Laboratory parameters

Total Ammonia - N	Iron
Chlorides	Mercury
Nitrate	Sodium
Total Dissolved Solids (TDS)	
<u>Those parameters listed in</u>	
<u>40 CFR Part 258, Appendix I</u>	

**SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements**

5. **Ground Water Monitor Well Construction.** The following information shall be submitted **within 90 days of installation of all new or replacement wells**, or as stated below:

a. Prior to construction of all new or replacement wells and piezometers (excluding the locations listed in SC #E.3., and #E.10., respectively) the permittee shall request and receive Department approval of a minor permit modification.

b. Construction details (record drawings) for all new or replacement wells and piezometers shall be provided to the Department's Southwest District Office on Department Form No. 62-522.900(3), Monitor Well Completion Form (**attached**).

c. **Within one week of well completion and development**, each new or replacement well shall be sampled for the parameters listed in Rules 62-701.510(8)(a) and (8)(d), F.A.C

d. A surveyed drawing shall be submitted in accordance with Rule 62-701.510(3)(d)(1), F.A.C., showing the location of all monitor wells and piezometers (active and abandoned) horizontally located in degrees, minutes and seconds of latitude and longitude, and the elevation of the top of the well casing and ground surface by the well casing to the nearest 0.01 foot, National Geodetic Vertical Datum. The surveyed drawing shall include the monitor well identification numbers, locations and elevations of all permanent benchmarks and/or corner monument markers at the site. The survey shall be conducted by a Florida Registered Surveyor.

6. **Well Abandonment.**

a. Existing monitor wells and piezometers shall be abandoned **within 90 days of permit issuance**, as follow:

- Surficial aquifer monitor wells - MW-1, MW-2, MW-3, MW-5, MW-6, LR11-1, LR11-2, LR11-3, LR11-4, LR11-5, CW-4, CW-5A, GC-1A, GC-2, GC-3, GC-4A, GC-5, GC-6 and SWR-1
- Confined aquifer monitor wells - SA-2, SA-3, SA-4, SA-5, SA-6, SA-7, SA-8 and SMR-2
- Piezometers - PZ-1, PZ-2, PZ-3A, PZ-4A, PZ-5, PZ-6, PZ-7, PZ-8, PZ-9, PZ-10, PZ-11, PZ-12A, PZ-13, PZ-14A, PZ-15A, PZ-15C, PZ-16A, PZ-16B, PZ-17, PZ-18 and PZ-19

b. All wells and piezometers listed in SC #E.6.a., and wells and piezometers not a part of the approved Water Quality Monitoring Plan (not listed in SC #E.3., and #E.10.), are to be plugged and abandoned in accordance with Rule 62-532.440, F.A.C., and the Southwest Florida Water Management District (SWFWMD). Documentation of abandonment shall include a map showing well/piezometer locations and SWFWMD abandonment records. The permittee shall submit a written report to the Department providing verification of the well/piezometer abandonment **within 30 days of abandonment**. A written request for exemption to the abandonment of a well must be submitted to the Department's Solid Waste Section for approval.



**SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements**

7. **Verification/Evaluation Monitoring.** If at any time monitoring parameters are detected at concentrations significantly above background water quality, or exceed the Department's water quality standards or criteria at the edge of the zone of discharge, the permittee has 30 days from receipt of the sampling results to resample the monitor well(s) to verify the original analysis. Should the permittee choose not to resample, the Department will consider the water quality analysis to be representative of current ground water conditions at the facility. If the data is confirmed, or if the permittee chooses not to resample, the permittee shall notify the Department within 14 days of this finding. Upon notification by the Department, the permittee shall initiate evaluation monitoring, prevention measures and corrective action as described in Rule 62-701.510(7), F.A.C.

8. **Leachate Sampling.** Individual grab samples of leachate (unfiltered) shall be collected from the each of the existing leachate pump stations in landfill Stages I and III (designated as Lift Station No. 1, WACS Testsite ID No. 21611; Lift Station No. 2, WACS Testsite ID No. 21612; and, Lift Station No. 3, WACS Testsite ID No. 21613) as shown on Figure M-1 prepared by PBS&J ("Water Quality and Elevation Monitoring Network") received December 15, 2004 (**attached**). Leachate sampling shall be conducted in accordance with the Department's SOPs to comply with the requirements of Rules 62-701.510(5) and 62-701.510(6)(c), F.A.C., for analysis of the following parameters:

a. **Annual** leachate sampling shall be conducted for analysis of the following parameters:

**Field parameters**

Specific conductivity  
pH  
Dissolved oxygen  
Colors and sheens  
(by observation)

**Laboratory parameters**

Total ammonia - N	Iron
Bicarbonate	Mercury
Chlorides	Sodium
Nitrate	
Total dissolved solids (TDS)	
Those parameters listed in	
40 CFR Part 258, Appendix II	

b. If the leachate analyses indicate that a contaminant listed in 40 CFR Part 261.24 exceeds the regulatory level listed therein, the permittee shall initiate **monthly** leachate sampling and analysis of the parameters listed in SC #E.8.a., and shall notify the Department in writing. Results of the monthly leachate sampling shall be submitted **within 30 days of receipt from the analytical laboratory.** If in any three consecutive months no listed contaminant is found to exceed the regulatory level, the permittee may discontinue the monthly sampling and analysis and return to a routine sampling schedule.

**SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements**

9. **Surface Water Sampling.** All surface water bodies that may be affected by a contaminant release at the facility shall be monitored, except bodies of water contained completely within the property boundaries of the site which do not discharge from the site to surface waters (Rule 62-701.510(4), F.A.C.). The locations, parameters, and frequencies specified herein represent the minimum requirements for surface water monitoring. Additional samples, sampling locations, and parameters may be required based upon subsequent analysis. Method Detection Limits must be less than or equal to the criteria for each parameter established in Chapter 62-302, F.A.C., to demonstrate compliance with Class III (predominantly fresh water) surface water standards. Compliance with surface water criteria will be based on analysis of unfiltered samples.

a. Staff gauges SG-1, SG-2 and SG-3 shall be installed **within 90 days of permit issuance** at the locations shown on Figure M-1 (**attached**). Surface water levels shall be measured at these staff gauges during all sampling events described in SC #E.9.b., #E.4.b., and #E.4.c., to a precision of 0.01 foot. Surface water body elevations (feet NGVD) recorded at these staff gauges shall be noted on ground water surface contour maps prepared for each sampling event.

b. Surface water samples shall be collected at downstream and upstream locations in Cypress Strand at SW-1 (WACS Testsite ID No. 1663) and SW-2 (WACS Testsite ID No. 1665), respectively, as located on Figure M-1 prepared by PBS&J ("Water Quality and Elevation Monitoring Network") received December 15, 2004 (**attached**). In accordance with Rule 62-701.510(4)(c), F.A.C., the monitoring stations shall be marked and their positions shall be determined by a registered Florida land surveyor in degrees, minutes and seconds of latitude and longitude.

c. **Semi-annual** surface water sampling shall be conducted at SW-1 and SW-2 in accordance with Rule 62-701.510(6)(e), F.A.C., for analysis of the following parameters:

**Field parameters**

Specific conductivity  
pH  
Dissolved oxygen  
Turbidity  
Temperature  
Colors and sheens  
(by observation)

**Laboratory parameters**

Unionized ammonia	Copper
Total hardness	Iron
Biochemical oxygen demand (BOD <sub>5</sub> )	Mercury
Nitrate	Zinc
Total dissolved solids (TDS)	
Total organic carbon (TOC)	
Fecal coliform	
Total phosphates	
Chlorophyll A	
Total nitrogen	
Chemical oxygen demand (COD)	
Total suspended solids (TSS)	
<u>Those parameters listed in</u>	
<u>40 CFR Part 258, Appendix I</u>	

**SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements**

10. **Gradient Monitoring.** Horizontal hydraulic gradient across the slurry wall shall be measured **monthly** at the following monitoring points ("P" denotes a piezometer located inside the slurry wall and "GW" denotes a monitor well located outside the slurry wall). Monitoring points are located on Figure M-1 prepared by PBS&J ("Water Quality and Elevation Monitoring Network") received December 15, 2004 (**attached**).

<u>Interior Monitoring Point</u>	<u>Exterior Monitoring Point</u>
P-1 *	GW-1
P-2 *	GW-2
P-3 *	GW-3
P-4 *	GW-4
P-5 *	GW-5
P-6 *	GW-6
P-7 *	GW-7
P-8 *	GW-8
P-9 *	GW-9
P-10 *	GW-10
P-11 *	GW-11
P-12 *	GW-12
P-13 *	GW-13
P-14 *	GW-14
P-15 *	GW-15
P-16 *	GW-16
P-17 *	GW-17

\* = to be installed **within 90 days of permit issuance** in accordance with construction details presented in Figure M-2 of Part M of the document entitled "Application and Engineering Report for Renewal of Landfill Operation Permit", prepared by PBS&J, dated April 2004, revised September 7, 2004 and December 6, 2004 (**attached**).

These points shall be monitored **monthly** for water levels to an accuracy of 0.01 feet. Results of the monthly monitoring shall be submitted by the **15th day of the following month**. An inward gradient shall be maintained across the slurry wall as described in Part M ("Water Quality and Leachate Monitoring Requirements") of the document entitled "Application and Engineering Report for Renewal of Landfill Operation Permit", prepared by PBS&J, dated April 30, 2004, revised September 7, 2004 and December 6, 2004 [ref. SC #A.2.a]. If an outward gradient exists, steps for correcting the gradient shall be included with the related monthly data. Damaged gradient monitoring points shall be replaced within thirty (30) days to ensure continuous monthly monitoring at all points.

**SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements**

11. **Water Quality and Leachate Reporting Requirements.** The permittee shall submit to the Department the results of the semi-annual ground water analyses (SC #E.4.c.) and surface water analyses (SC #E.9.c.) by **January 15<sup>th</sup>** and **July 15<sup>th</sup>** of each year for the semi-annual periods July-December and January-June, respectively. The permittee shall submit to the Department the results of the annual leachate analyses (SC #E.8.a.) by **January 15<sup>th</sup>** of each year. The submittals shall include the certified laboratory report of results, chain of custody sheets and field sampling logs. The reports that transmit the results of ground water analyses shall contain the information listed in Rule 62-701.510(9)(a), F.A.C., including a ground water contour map representing conditions at the time of ground water sampling and a summary of any water quality standards or criteria that are exceeded. The results shall be sent to: Solid Waste Section, Department of Environmental Protection, Southwest District Office, 3804 Coconut Palm Drive, Tampa, Florida 33619-1352. There are two options for reporting monitoring data:

a. Paper Reporting. If this option is selected, all ground water, leachate and surface water analytical results shall be reported on Department Form 62-522.900(2), Ground Water Monitoring Report (**attached**) to be consistent with the laboratory report of results. To facilitate entry into the Department's database (Water Assurance Compliance System [WACS]), this form, or an exact replica without change of content, shall be prepared for each sampling location for each sampling event.

b. Electronic Reporting. Alternatively, all ground water, leachate and surface water analytical results may be submitted as an electronic data deliverable (EDD) on floppy diskettes or compact disc media readable by Microsoft Windows. Software ("Validator") has been developed to evaluate and upload the monitoring data into the Department's database (WACS). A copy of this software can be downloaded from the Department's website at the following address: <http://www.dep.state.fl.us/labs/software/index.htm>. Electronic laboratory data must be submitted in a specific format called a tab delimited text file, with the first line of the file being the data field names (Microsoft Excel produces this file format when the "Save As" and "Text(Tab Delimited)" options are selected). Two copies of the EDD, one in tab delimited text format and one as an Adobe portable document format (PDF) must be submitted. A digitally "signed" PDF serves to maintain the integrity of the EDD. Examples of an acceptable text file and additional information are available at the web site listed above. The permittee is encouraged to download Validator and run all data sets to allow the necessary corrections to be completed prior to submittal of an EDD to the Department.

**SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements**

12. **Monitoring Plan Evaluation.** By May 11, 2007 and November 11, 2009, the permittee shall submit an evaluation of the water quality and leachate monitoring data. The periods of time to be covered by the evaluations are summarized below:

Water Quality Monitoring  
Data Evaluation Due Date  
May 11, 2007

Starting  
Sampling Event  
Second half 2004

Ending  
Sampling Event  
Second half 2006

November 11, 2009

First half 2006

First half 2009

The evaluations shall include the applicable information as listed in Rule 62-701.510(9)(b), F.A.C., and shall include assessment of the effectiveness of the existing facility design and operation as related to the prevention of ground water and surface water contamination. Any contamination that may exist shall be addressed as part of evaluation monitoring conducted at the facility in accordance with Rule 62-701.510(7), F.A.C. The evaluations shall be sent to: Solid Waste Section, Department of Environmental Protection, Southwest District Office, 3804 Coconut Palm Drive, Tampa, Florida 33619-1352.

**SPECIFIC CONDITIONS: PART F - Landfill Gas Management**

**1. Landfill Gas - NPs and Title V Air Requirements.**

a. This solid waste permit will meet the statutory requirement to obtain an air construction permit before modifying or constructing a source of air pollution, except for those landfills that are subject to the prevention of significant deterioration (PSD) requirements of Chapter 62-212, F.A.C. Facilities that are subject to the PSD requirements shall obtain an air construction permit from the Bureau of Air Regulation prior to beginning construction or modification pursuant to Rule 62-210.400, F.A.C.

b. The permittee shall comply with any applicable Title V air operation permit application requirements of Chapter 62-213, F.A.C., and 40 CFR 60, Subparts WWW and CC, as adopted by reference at Rule 62-204.800, F.A.C. Title V Permit applications shall be submitted to the District Air Program Administrator or County Air Program Administrator with air permitting authority for the landfill.

c. The permittee shall submit to the Division of Air Resources Management, Department of Environmental Protection, Mail Station 5500, 3900 Commonwealth Blvd., Tallahassee, FL 32399-3000, any amended design capacity report and any Non-Methane Organic Compound (NMOC) emission rate report, as applicable, pursuant to 40 CFR 60.757(a)(3) and (b).

**2. Gas Monitoring and Control.**

a. Landfills that receive degradable wastes shall have a gas management and control system designed to prevent explosions and fires, and to minimize off-site odors, lateral migration of gases and damage to vegetation. Landfill gas shall be monitored and controlled as required by Rule 62-701.530, F.A.C.

b. Landfill gas shall be monitored to demonstrate compliance with the criteria established in Rule 62-701.530(1)(a), F.A.C., (less than 25% of the lower explosive limit (LEL) for combustible gases in structures and less than 100% of the LEL for combustible gases at or beyond the property boundary).

c. The results of quarterly monitoring required by Rule 62-701.530(2)(c), F.A.C., shall be submitted to the Department by the following dates:

Measured During  
Quarter 1  
Quarter 2  
Quarter 3  
Quarter 4

Report Submitted By  
April 15<sup>th</sup> of each year  
July 15<sup>th</sup> of each year  
October 15<sup>th</sup> of each year  
January 15<sup>th</sup> of each year

**SPECIFIC CONDITIONS: PART F - Landfill Gas Management**

3. **Gas Monitoring Locations.** The landfill gas management system is designed and constructed in accordance with Part O ("Gas Management System Requirements") of the document entitled "Application and Engineering Report for Renewal of Landfill Operation Permit", prepared by PBS&J, dated April 30, 2004, revised December 8, 2004 [Ref. SC #A.2.a]. The ambient gas monitoring points and perimeter gas monitoring probes are located on Figure L-8 prepared by PBS&J ("Landfill Gas Migration Monitoring Locations") received September 10, 2004 (**attached**), and shall be sampled at least **quarterly** for concentrations of combustible gases determined as a percent of the LEL calibrated to methane, as described in Rule 62-701.530(2), F.A.C.

**Ambient Gas Monitoring**

**Points**

GMP-1 \*  
GMP-2 \*  
GMP-3 \*  
GMP-4 \*  
GMP-5 \*  
GMP-6 \*  
GMP-8 \*

**Location Description**

Gary Seeley office (former Litter Enforcement Office)  
Shed by soda machine  
Main office  
Vehicle maintenance area  
Hazardous waste area  
Equipment trailer  
Shed by weigh station

**Perimeter Gas  
Monitoring Probe**

GMW-1  
GMW-2  
GMW-3  
GMW-4  
GMW-5  
GMW-6  
GMW-7  
GMW-8  
GMW-9A  
GMW-10  
GMW-11A  
GMW-11B  
GMW-11C  
GMW-12 \*  
GMW-13 \*  
GMW-14 \*  
GMW-15 \*  
GMW-16 \*  
GMW-17 \*

**Location Description**

Stage III landfill perimeter - west  
Stage III landfill perimeter - south  
Stage I landfill perimeter - west  
Stage I landfill perimeter - south  
Stage I landfill perimeter - southeast corner  
Stage I landfill perimeter - east  
Stage II landfill perimeter - east  
Stage II landfill perimeter - north  
Stage II landfill perimeter - west  
Stage III landfill perimeter - north  
Stage III landfill perimeter - north  
Stage III landfill perimeter - north  
Stage III landfill - administration facility  
Stage III landfill - administration facility  
Stage III landfill - administration facility  
Stage III landfill - administration facility  
Stage III landfill - administration facility  
Stage III landfill - administration facility

\* = to be monitored until the structures located within the Stage III landfill area are removed, prior to the initiation of fill Sequence 3.

The gas probes are to be clearly labeled and easily visible at all times.

**SPECIFIC CONDITIONS: PART F - Landfill Gas Management**

4. **Gas Remediation.** If the results of gas monitoring show that combustible gas concentrations exceed 25% of the LEL calibrated to methane in structures or 100% of the LEL calibrated to methane at the property boundary, the permittee shall immediately take all necessary steps to ensure protection of human health and notify the Department. **Within 7 days** of detection, a gas remediation plan detailing the nature and extent of the problem and the proposed remedy shall be submitted to the Department for approval. The remedy shall be completed **within 60 days** of detection unless otherwise approved by the Department.

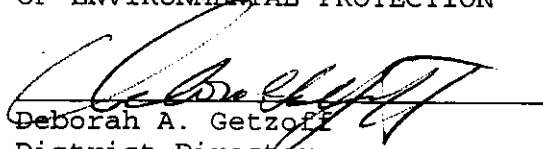


**SPECIFIC CONDITIONS: PART G - Closure and Long-Term Care Requirements**

1. **Closure Permit Requirements.** No later than ninety (90) days prior to the date when wastes will no longer be accepted for portions of the landfill which have reached closure design dimensions, the landfill owner or operator shall submit a closure permit application to the Department, in order to assure conformance with all applicable Department rules. A closure permit is required prior to implementing closure related activities.
2. **Final Cover.** Portions of the landfill which have been filled with waste to the extent of designed dimensions shall be closed (shall receive final cover) within 180 days after reaching design dimensions, in accordance with Rule 62-701.500(7)(g), F.A.C. and all applicable requirements of Department rules.

Executed in Tampa, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

  
Deborah A. Getzoff  
District Director  
Southwest District

**ATTACHMENT 1**

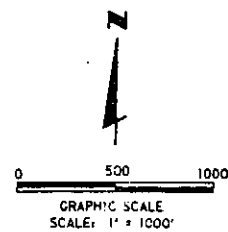
<b>Specific Condition</b>	<b>Submittal Due Date</b>	<b>Required Item</b>
A.4.	November 11, 2009	Submit permit renewal application
A.9.b., C.10.b.	Within 24 hours of discovery	Notification of: sinkholes, hazardous waste receipt, failure of landfill systems or equipment
	Within 7 days of verbal notification	Written notification & corrective action plan
B.1.b(3)	At least 30 days prior to initiation	Submit request to include sequenced construction and operation, and submit schedule
C.8.c(2)	180 days prior to permit expiration	Submit leachate collection system inspection report
C.8.d(2)	By the 15 <sup>th</sup> each month	Submit leachate generation reports
C.10.c.	Within 60 days of written notification	Complete corrective actions for gradient or groundwater monitoring system
C.10.d.	Within 30 days of written notification	Implement corrective actions for leachate management system
D.1.e.	Annually, by March 1 <sup>st</sup> each year	Submit topographic survey & capacity calculations, and certification
D.3.a.	Annually, by March 1 <sup>st</sup> each year	Submit revised cost estimates
D.3.b.	Annually	Submit proof of funding
E.4.c.	Semi-annually	Sample all background and compliance wells
E.11.	By January 15 <sup>th</sup> and July 15 <sup>th</sup> each year	Submit sampling results
E.5.b.	Within 90 days of installation	Submit well construction information
E.5.c.	Within 1 week of well completion and development	Sample for parameters in Rule 62-701.510(8)(a) and 62-70.510(8)(d), F.A.C.
E.5.d.	Within 90 days of new or replacement well installation	Submit survey
E.6.a.	Within 90 days of permit issuance	Abandon existing monitoring wells and piezometers identified in E.6.a

ATTACHMENT 1, cont'd		
Specific Condition	Submittal Due Date	Required Item
E.6.b	Within 30 days of abandonment	Submit report of well abandonment
E.9.c	Semi-annually	Sample/analyze surface water
E.11	By January 15 <sup>th</sup> and July 15 <sup>th</sup> each year	Submit sampling results
E.10.	Monthly  By the 15 <sup>th</sup> of the following month	Measure hydraulic gradient (horizontal and vertical)  Submit gradient results
E.12.	By May 11, 2007 and November 11, 2009	Submit water quality monitoring evaluation report
F.2.c.	Quarterly, by January 15 <sup>th</sup> , April 15 <sup>th</sup> , July 15 <sup>th</sup> and October 15 <sup>th</sup>	Submit gas monitoring results
G.1.	No later than 90 days prior to the date when wastes will no longer be received	Submit Closure Permit application

**LEGEND:**

- GW-2 MONITORING WELL LOCATIONS
- SW-1 SURFACE WATER SAMPLING POINT
- P-10 PIEZOMETER LOCATIONS
- SG-3 STAFF GAUGE LOCATION
- LEACHATE LIFT STATIONS
- SLURRY WALL
- PROPERTY BOUNDARY

PROPERTY LINE



**STAGE II  
LANDFILL  
(INACTIVE NO SOLID WASTE)**

LIFT STATION  
NO. 4

**STAGE III  
LANDFILL  
(ACTIVE)**

**STAGE I LANDFILL  
(INACTIVE WITH SOLID WASTE)**

GW-12

P-12



LIFT STATION  
NO. 2

P-14

GW-14

P-16

GW-16

SG-4

P-17

GW-17

P-15

GW-15

SG-3

SG-2

SG-1

SG-1

SG-1

SG-1

SG-1

SG-1

SG-1

SG-1

SG-1

SG-1

SG-1

SG-1

SG-1

SG-1

SG-1

SG-1

SG-1

SG-1

SG-1

SG-1

SG-1

NOTE:

SEE M-2 FOR MONITORING  
WELL AND PIEZOMETER  
INSTALLATION DETAILS.

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION

DEC 15 2004

SOUTHWEST DISTRICT  
TAMPA

REV. 12/06/04  
APRIL 30, 2004

**PBS&J**

LENA ROAD LANDFILL  
MANATEE COUNTY, FLORIDA

WATER QUALITY AND  
ELEVATION MONITORING  
NETWORK

FIG. M-1

U:\OLD\SVEN\CAD\WASTE\MANATEE\LENA\RD\PERMIT-RENEWAL-2004\MONITORING\WALL\LOCATION-FIG-M-1.DGN



CLIENT  
MANATEE COUNTY  
PROJECT MANAGEMENT  
DEPARTMENT  
4410 66TH STREET WEST  
BRADENTON, FLORIDA 34210

PROJECT  
LENA ROAD LANDFILL

TASK  
MONITORING WELL, GAS PROBE  
AND PIEZOMETER INSTALLATION DETAILS

ORIGINAL: 12/05/04  
REVISED:  
1. 12/05/04  
2. 12/05/04  
3. 12/05/04  
4. 12/05/04  
5. 12/05/04  
6. 12/05/04  
7. 12/05/04  
8. 12/05/04  
9. 12/05/04  
10. 12/05/04  
11. 12/05/04  
12. 12/05/04

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

PVC QUICK DISCONNECT

3 FEET

GRADE

1" SCHEDULE 40 PVC PIPE

THREADED COUPLING

NEAT CEMENT GROUT

6" FIBER REINFORCED CONCRETE PAD (2' x 2' x 4")

EL. 29 ±

EL. 25

BORE HOLE

1" PVC CAP

WASHED SAND PACKING, 20/30 GRADE

1" SCHEDULE 40 PVC SCREEN (0.01 SLOTS)

NATURAL GROUND

LANDFILL GAS MONITORING PROBE (GMW#)

N.T.S.

CONSTRUCTION NOTES:  
1. ALL WORK RELATED TO ABANDONMENT OR INSTALLATION OF MONITORING WELLS, GAS PROBES AND PIEZOMETERS SHALL BE DONE BY A FLORIDA CERTIFIED WATER WELL DRILLER.  
2. ALL MONITORING WELLS, GAS PROBES AND PIEZOMETERS INDICATED ON THE DRAWINGS SHALL BE PLUGGED AND ABANDONED IN ACCORDANCE WITH F.A.C. RULE 62-532.440, AND THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT (SWFWMD). THE DRILLER SHALL SUBMIT A WRITTEN REPORT TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, WITH COPIES TO THE OWNER AND ENGINEER, DOCUMENTING VERIFICATION OF THE WELL ABANDONMENT WITHIN 90 DAYS OF ABANDONMENT. INCLUDE A MAP SHOWING LOCATIONS AND SWFWMD ABANDONMENT RECORDS.  
3. NEW MONITORING WELLS AND PIEZOMETERS SHALL BE INSTALLED PER ASTM D-5092 (1993) E1-STANDARD PRACTICE FOR DESIGN AND INSTALLATION OF GROUND WATER MONITORING WELLS IN GRANULAR ACQUIERS, AND THE FOLLOWING DOCUMENTATION SUBMITTED TO FDP WITH COPIES TO THE OWNER AND ENGINEER.  
4. ALL REPORTS SHALL BE SENT TO: JOHN MORRIS, P.E., SOLID WASTE SECTION, DEPARTMENT OF ENVIRONMENTAL PROTECTION, SOUTHWEST DISTRICT OFFICE, 3804 COCONUT PALM DRIVE, TAMPA, FLORIDA 33619-1352; AND ALSO TO: SOLID WASTE SECTION, DEPARTMENT OF ENVIRONMENTAL PROTECTION, 3800 COMMUNITYWELL BOULEVARD, N.W., TALLAHASSEE, FL 32399-3000.

LEACHATE COLLECTION TRENCH

5'

GRADE

6" ALUMINUM CASING WITH LOCKED CAP AND WELL NUMBER STENCILED ON SIDE

LOCK

2" PVC CAP WITH HINGE

4" x 4" FIBER REINFORCED CONCRETE PAD

NEAT CEMENT GROUT

FINE SAND SEAL, 30/60 GRADE

WASHED SAND PACKING, 20/30 GRADE

3" PVC THREADED COUPLING

2" WALL SCREEN, 0.010" SLOT

2" PVC THREADED COUPLING

2" TAILPIPE

2" PVC THREADED CAP

EL. 25.0

10' SCREEN

0.5" TAILPIPE

6" (MIN)

RISE (VARIES)

10'

PIEZOMETER

5'

SLURRY WALL

50' MAX.

20' MIN.

GRADE

6" ALUMINUM CASING WITH LOCKED CAP AND WELL NUMBER STENCILED ON SIDE

LOCK

2" PVC CAP WITH HINGE

4" x 4" FIBER REINFORCED CONCRETE PAD

NEAT CEMENT GROUT

FINE SAND SEAL, 30/60 GRADE

WASHED SAND PACKING, 20/30 GRADE

3" PVC THREADED COUPLING

2" WALL SCREEN, 0.010" SLOT

2" PVC THREADED COUPLING

2" TAILPIPE

2" PVC THREADED CAP

EL. 25.0

15' SCREEN

0.5" TAILPIPE

6" (MIN)

RISE (VARIES)

10'

GROUNDWATER MONITORING WELL

TABLE 1

WELL	ELEVATION OF SCREEN (FEET-NGVD)
GW-1	23-40
GW-2	23-40
GW-3	23-40
GW-4	23-40
GW-5	23-40
GW-6	23-40
GW-7	23-40
GW-8	23-40
GW-9	23-40
GW-10	23-40
GW-11	23-40
GW-12	23-40
GW-13	23-40
GW-14	23-40
GW-15	23-40
GW-16	23-40
GW-17	23-40
GW-18	23-40
GW-19	23-40
GW-20	23-40
GW-21	23-40
GW-22	23-40
GW-23	23-40
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GW-100	23-40

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEC 15 2004

SOUTHWEST DISTRICT

TAMPA

GROUNDWATER MONITORING WELL DETAIL

N.T.S.

CONSTRUCTION NOTES:  
1. ALL WORK RELATED TO ABANDONMENT OR INSTALLATION OF MONITORING WELLS, GAS PROBES AND PIEZOMETERS SHALL BE DONE BY A FLORIDA CERTIFIED WATER WELL DRILLER.  
2. ALL MONITORING WELLS, GAS PROBES AND PIEZOMETERS INDICATED ON THE DRAWINGS SHALL BE PLUGGED AND ABANDONED IN ACCORDANCE WITH F.A.C. RULE 62-532.440, AND THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT (SWFWMD). THE DRILLER SHALL SUBMIT A WRITTEN REPORT TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, WITH COPIES TO THE OWNER AND ENGINEER, DOCUMENTING VERIFICATION OF THE WELL ABANDONMENT WITHIN 90 DAYS OF ABANDONMENT. INCLUDE A MAP SHOWING LOCATIONS AND SWFWMD ABANDONMENT RECORDS.  
3. NEW MONITORING WELLS AND PIEZOMETERS SHALL BE INSTALLED PER ASTM D-5092 (1993) E1-STANDARD PRACTICE FOR DESIGN AND INSTALLATION OF GROUND WATER MONITORING WELLS IN GRANULAR ACQUIERS, AND THE FOLLOWING DOCUMENTATION SUBMITTED TO FDP WITH COPIES TO THE OWNER AND ENGINEER.  
4. ALL REPORTS SHALL BE SENT TO: JOHN MORRIS, P.E., SOLID WASTE SECTION, DEPARTMENT OF ENVIRONMENTAL PROTECTION, SOUTHWEST DISTRICT OFFICE, 3804 COCONUT PALM DRIVE, TAMPA, FLORIDA 33619-1352; AND ALSO TO: SOLID WASTE SECTION, DEPARTMENT OF ENVIRONMENTAL PROTECTION, 3800 COMMUNITYWELL BOULEVARD, N.W., TALLAHASSEE, FL 32399-3000.

TABLE 1

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GW-100	23-40

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEC 15 2004

SOUTHWEST DISTRICT

TAMPA

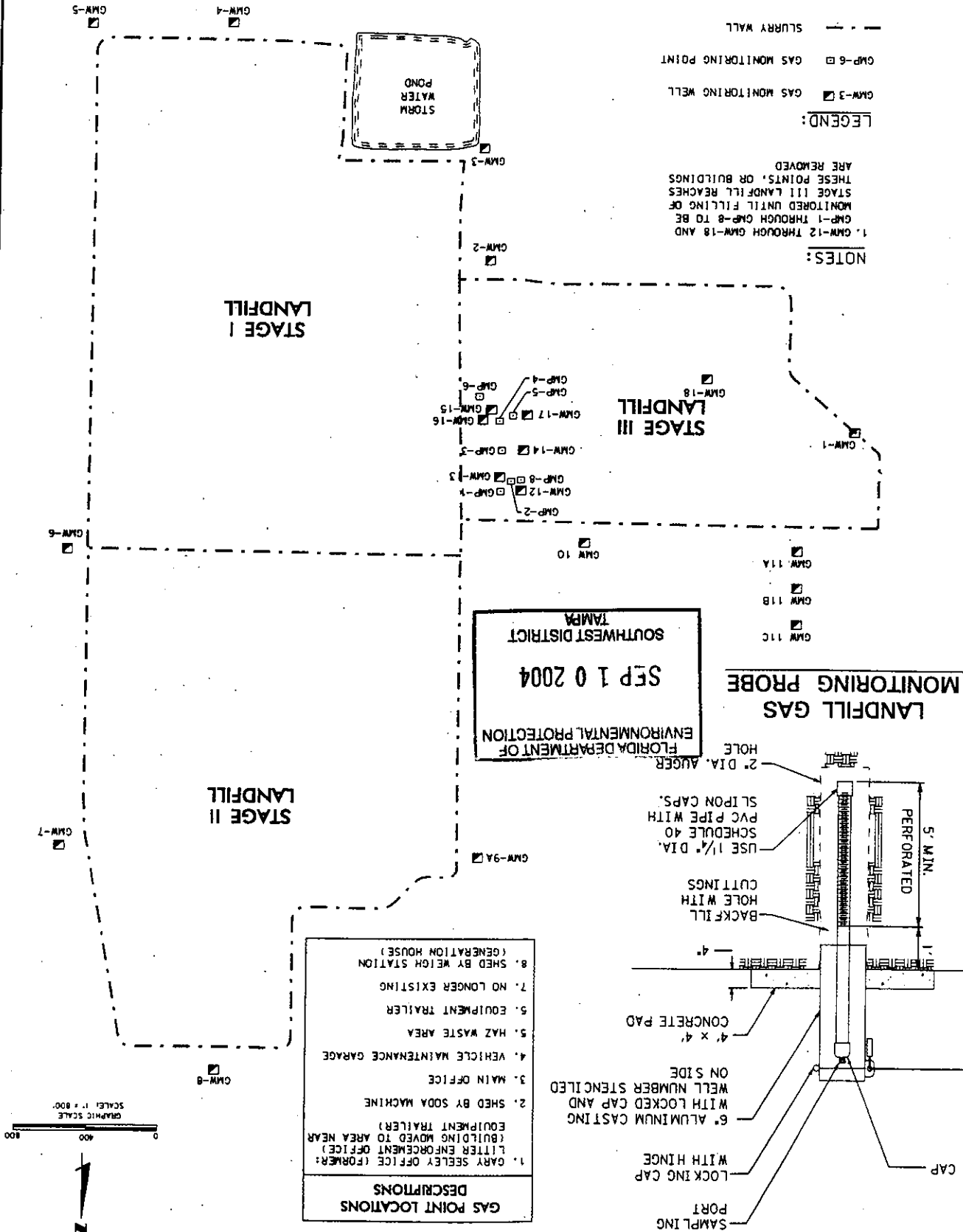
GROUNDWATER MONITORING WELL DETAIL

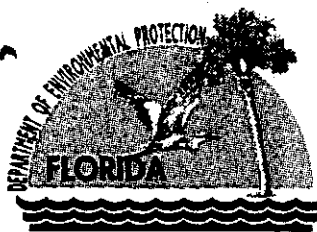
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FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DEC 15 2004  
SOUTHWEST DISTRICT  
TAMPA

REVISED 09/09/04  
APRIL 30, 2004





Jeb Bush  
Governor

# Department of Environmental Protection

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

October 11, 2005

RECEIVED

OCT 14 2005

Solid Waste Section

Colleen M. Castille  
Secretary

CERTIFIED MAIL 7002 3150 0003 8463 3667  
RETURN RECEIPT REQUESTED

## NOTICE OF PERMIT

Manatee County, Utility Operations  
Mr. Daniel T. Gray, Director  
4410 66<sup>th</sup> Street West  
Bradenton, Fl. 34210

RE: Lena Road Class I Landfill  
Leachate collection system modification  
Modification #39884-012-SO/MM to existing  
**Operation Permit 39884-010-SO/01**

Dear Mr. Gray:

Attached is modified Operation Permit 39884-010-SO/01, issued pursuant to Section(s) 403.087(1), Florida Statutes. The following Conditions have been revised in modification number 39884-012-SO/MM:

SPECIFIC CONDITIONS	FROM	TO	TYPE OF MODIFICATION
A.2.d.	N/A	New	New permit documentation
A.9.d.	Existing	Deleted	Condition satisfied per SWFWMD permit
B.1.b(3)	N/A	New	Submit revised drawings showing sequence and schedule for construction and filling
B.1.c	N/A	New	Conditions related to LCS modification construction
B.3.	N/A	New	Conditions specifying information needed in Record Documents
C.1.a.	Existing	Amended	Clarify Sequence of filling includes western part of Stage I
C.5.a(2)	Existing	Amended	Clarify street sweepings and dredge soils are acceptable for use as initial cover
C.10.e(2)	Existing	Amended	Clarify that erosions may be repaired within 24 hours of end of storm event

This letter and its attachments constitute a **complete permit** and **replace** all previous permits and permit modifications for the above referenced facility.

"More Protection, Less Process"

Printed on recycled paper.

The Department's proposed agency action shall become final unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, Florida Statutes (F.S.), before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000.

Petitions by the applicant or any of the parties listed below must be filed within 14 days of receipt of this written notice. Petitions filed by other persons must be filed within 14 days of publication of the notice or receipt of the written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of such notice, regardless of the date of publication. The petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Department's action is based must contain the following information:

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are or will be affected by the Department's action or proposed action;
- (d) A statement of all material facts disputed by petitioner or a statement that there are no disputed facts;
- (e) A statement of the ultimate facts alleged, including a statement of the specific facts, which the petitioner contends, warrant reversal or modification of the Department's action or proposed action;



(f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the Department's action or proposed action; and

(g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wants the Department to take with respect to the Department's action or proposed action.

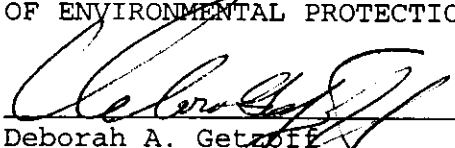
A petition that does not dispute the material facts on which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above. In accordance with Section 120.573, F.S., the Department advises that mediation is not available in this case under the provisions of that statute. This does not prevent any interested parties from agreeing to other forms of alternate dispute resolution.

Any party to this order has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110, Florida Rules of Appellate Procedure, with the clerk of the Department in the Office of General Counsel, Mail Station 35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice of appeal must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tampa, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

  
Deborah A. Getzoff  
District Director  
Southwest District

DAG/sjp  
Attachment

Copies furnished to:

Manatee County Board of County Commissioners  
Manatee County Notification List  
Gus DiFonzo, Manatee Co., 4410 66<sup>th</sup> St. West, Bradenton, Fl. 34210  
Joseph L. Miller, P.E., PBSJ, 482 South Keller Rd., Orlando, Fl. 32810  
Chris McGuire, OGC Tallahassee  
Fred Wick, FDEP Tallahassee  
Richard Tedder, P.E., FDEP Tallahassee  
(Permit Notebook)

**CERTIFICATE OF SERVICE**

This undersigned duly designated deputy clerk hereby certifies that this **NOTICE OF PERMIT** and all copies were mailed before the close of business on Oct. 11, 2005 to the listed persons.  
(date stamp)

FILING AND ACKNOWLEDGMENT  
FILED, on this date, pursuant to Section 120.52(10), Florida Statutes, with the designated Department, Clerk, receipt of which is hereby acknowledged.

Dana Black  
Clerk

10/11/05  
Date



# Department of Environmental Protection

Jeb Bush  
Governor

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

Colleen M. Castille  
Secretary

## PERMITTEE

Manatee County  
Daniel T. Gray  
Utility Operations Director  
4410 66<sup>th</sup> Street West  
Bradenton, FL 34210

## PERMIT/CERTIFICATION

WACS ID No: SWD-41-44795  
Permit No: 39884-010-SO/01  
Date of Issue: **06/13/2005**  
Expiration Date: **06/13/2010**  
County: Manatee  
Lat/Long: 27°28'10"N  
82°26'35"W  
Sec/Town/Rge: 1/35S/18E  
31/34S/19E  
6&7/35S/19E  
Project: Lena Road Class I  
Landfill

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 62-4, 62-302, 62-330, 62-522, 62-550, and 62-701. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or on file with the Department and made a part hereof and specifically described as follows:

To operate, monitor and maintain a landfill and related facilities (approximately 316 acres), referred to as the Lena Road Class I Landfill, subject to the specific and general conditions attached, for disposal of solid waste, located 3333 Lena Road, Bradenton, Manatee County, Florida. The specific conditions attached are for the operation, monitoring and maintenance of:

1. Lena Road Class I Landfill Facility and related appurtenances

Replaces Permit No.: 39884-001-SO (as modified)

**Includes modification #39884-012-SO/MM, issued 10/11/2005 .**

General Information:	
Disposal acres	316 acres
Bottom liner design	Natural Soils (approx. el. +29 ft. NGVD-see Sheet C-3, ref. SC#A.2.a(10)) w/perimeter slurry wall
LCS design	Underdrains and lift stations, slurry wall keyed into the underlying natural clay unit
LDS design	none
Final elevation	+136 feet NGVD [ref. SC#A.2.a(2)]
Slopes	5H:1V, top slope 1%, intermediate cover 2%

This permit contains compliance items summarized in **Attachment 1** that shall be complied with and submitted to the Department by the dates noted. If the compliance dates are not met and submittals are not received by the Department on the dates noted, enforcement action may be initiated to assure compliance with the conditions of this permit.

**GENERAL CONDITIONS:**

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.161, 403.727, or 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in subsections 403.087(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of rights, nor any infringement of federal, State, or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:

**GENERAL CONDITIONS:**

(General Condition #7, cont'd)

- (a) Have access to and copy any records that must be kept under conditions of the permit;
- (b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- (c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- (a) A description of and cause of noncompliance; and
- (b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Rule 62-4.120 and 62-730.300, Florida Administrative Code, as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

**GENERAL CONDITIONS:**

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- (a) Determination of Best Available Control Technology (BACT)
- (b) Determination of Prevention of Significant Deterioration (PSD)
- (c) Certification of compliance with State Water Quality Standards (Section 401, PL 92-500)
- (d) Compliance with New Source Performance Standards

14. The permittee shall comply with the following:

- (a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- (b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
- (c) Records of monitoring information shall include:
  - 1. the date, exact place, and time of sampling or measurements;
  - 2. the person responsible for performing the sampling or measurements;
  - 3. the dates analyses were performed;
  - 4. the person responsible for performing the analyses;
  - 5. the analytical techniques or methods used;
  - 6. the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

**SPECIFIC CONDITIONS: PART A -Solid Waste Facility General Requirements**

1. **Landfill Designation.** This site shall be classified as a Class I landfill and shall be operated in accordance with all applicable requirements of Chapters 62-4, 62-302, 62-330, 62-520, 62-522, 62-550, 62-701 and 62-703, Florida Administrative Code (F.A.C.) and all applicable requirements of Department rules.

2. **Permit Application Documentation.** This permit is valid for operation, monitoring and maintenance of the Class I landfill and related systems (including but not limited to: household hazardous waste collection and storage facility, community drop off center, yard waste processing area, gas management system and stormwater/leachate management system, etc.) in accordance with the reports, plans and other information prepared by PBS&J (unless otherwise specified) as follows:

a. Application and Engineering Report for Renewal of Landfill Operation Permit for Lena Road Landfill, (3-hole punched bound documents) dated April 30, 2004 (received May 14, 2004), as revised, replaced or amended (information inserted into original) dated September 9, 2004, October 6, 2004, December 14, 2004, February 7, 2005 and March 17, 2005 (received September 10, 2004, October 7, 2004, December 15, 2004, February 16, 2005 and March 18, 2005). This information includes, but is not limited to:

- 1) Lena Road Landfill Operations Plan, Part L;
- 2) Geotechnical Investigation Requirements, Part J;
- 3) Household Hazardous Waste Collection and Storage Facility Operation Plan, Attachment L-2;
- 4) Water Quality and Leachate Monitoring Requirements, Part M;
- 5) Gas Management System Requirements, Part O;
- 6) Landfill Closure Requirements, Part P;
- 7) Long Term Care Requirements, Part R;
- 8) Financial Responsibility Requirements, Part S;
- 9) Lena Road Landfill Leachate Collection System High Pressure Water Jetting and Video Pipeline Inspection, Appendix A.
- 10) Permit Renewal Drawings for Manatee County Lena Road Landfill Fill Sequence Plan Stage III Landfill from 2004 to 2014, dated September 2004 (received October 7, 2004);

**SPECIFIC CONDITIONS: PART A, Solid Waste Facility General Requirements**

(Specific Condition #A.2., cont'd)

- b. Response to DEP's First Request for Additional Information (permit file) dated September 9, 2004 and October 6, 2004 (received September 10, 2004 and October 7, 2004);
- c. Response to DEP's Second Request for Additional Information (permit file) dated December 14, 2004 and February 7, 2005 (received December 15, 2004 and February 7, 2005);
- d. Information regarding leachate collection system modifications, prepared by PBSJ (unless other wise noted) received June 22, 2005, August 15, 2005, September 20, 2005 (except plans, collated into spiral bound documents) including:
  - 1) Application form and transmittal letter received June 22, 2005;
  - 2) Progress Report Slurry Wall Construction, Lena Road Landfill, August 19, 1989 through September 22, 1989, prepared by Ardaman & Associates, received June 22, 2005;
  - 3) Construction Quality Assurance Plan, revised August 12, 2005 (received August 15, 2005);
  - 4) Manatee County Lena Road Landfill Pending Permit No. 39884-012-SO/MM Stage III Landfill Leachate Collection System Modification, August 5, 2005, Calculations,... (including revised calculations received September 20, 2005) received August 15, 2005; and
  - 5) Construction plans for Lena Road Landfill Stormwater System Improvements, September 2005 (22 sheets), received September 20, 2005.

New 10/11/2005.

and in accordance with Department rules.

**3. Permit Modifications.**

- a. Construction, operation, or other activities not previously approved as part of this permit shall require a separate Department permit unless the Department determines a permit modification to be more appropriate, or unless otherwise approved in writing by the Department.
- b. Any significant changes to the operations at the facility shall require a permit modification. Permits shall be modified in accordance with the requirements of Rule 62-4.080, F.A.C. A modification which is reasonably expected to lead to substantially different environmental impacts which require a detailed review by the Department is considered a substantial modification.



**SPECIFIC CONDITIONS: PART A, Solid Waste Facility General Requirements**

(Specific Condition #A.3, cont'd)

- c. Excavation plans for the proposed remaining portion of Stage III are included on Sheet C-3 of the Permit Renewal Drawings [ref. SC#A.2.a(10)]. However, operation in this area shall not be initiated until the certification of construction completion requirements of Specific Condition #B.2 have been completed and approved by the Department.
4. **Permit Renewal.** No later than **November 11, 2009**, the permittee shall apply for a renewal of a permit on forms and in a manner prescribed by the Department, in order to assure conformance with all applicable Department rules. Permits shall be renewed at least every five years as required by Rule 62-701.320(10), F.A.C. Operation permit renewal shall include, but not be limited to, an updated Operations Plan and Site Plans for sequence of filling with cross-sections of lifts.
5. **Professional Certification.** Where required by Chapter 471 (P.E.) or Chapter 492 (P.G.), Florida Statutes, applicable portions of permit applications and supporting documents which are submitted to the Department for public record shall be signed and sealed by the professional(s) who prepared or approved them.
6. **General Conditions.** The permittee shall be aware of and operate under the "General Conditions". General Conditions are binding upon the permittee and enforceable pursuant to Chapter 403, Florida Statutes.
7. **Permit Acceptance.** By acceptance of this Permit, the Permittee certifies that he/she has read and understands the obligations imposed by the Specific and General Conditions contained herein and also including date of permit expiration and renewal deadlines. It is a violation of this permit for failure to comply with all conditions and deadlines.
8. **Regulations.** Chapter 62-701, F.A.C., effective May 27, 2001, is incorporated into this permit by reference. In the event that the regulations governing this permitted operation are revised, the Department shall notify the permittee, and the permittee shall request modification of those specific conditions which are affected by the revision of regulations to incorporate those revisions.
9. **Prohibitions.**
  - a. The prohibitions of Rule 62-701.300, F.A.C., shall not be violated by the activities at this facility.

**SPECIFIC CONDITIONS: PART A, Solid Waste Facility General Requirements**

(Specific Condition #A.9, cont'd)

b. In the event that surface depressions or other occurrences which may be indicative of sinkhole activity or subsurface instability, are discovered onsite, or within 500 feet of the site, the Department shall be notified in accordance with Specific Condition #C.10.b, below. The written notification shall include a description of the incident, the location and size of the affected area shown on an appropriate plan sheet, and for incidents within or immediately adjacent to the slurry wall, a corrective action plan which describes the actions necessary to prevent the unimpeded discharge of waste or leachate into ground or surface water.

c. Waste Burning. Open burning of solid waste is prohibited except in accordance with Rule 62-701.300(3) and Chapter 62-256, F.A.C. All fires which require longer than one (1) hour to extinguish must be promptly reported to the Department in accordance with Specific Condition #C.10.b., below.

d. ~~Figure C 1 [ref. SC#A.2.a, Section G] indicates that portions of the western and southwestern part of Stage III are within areas subject to potential flooding. Pursuant to Rule 62-701.340(4)(a), F.A.C., a landfill shall not be located in the 100 year floodplain where it will reduce temporary water storage capacity of the floodplain unless compensating storage is provided. Therefore, disposal operations shall not be conducted in these areas unless documentation from the water management district (SWFWMD) or the Department's ERP Section indicates that compensating storage for the 100 year flood has been provided.~~  
**Deleted 10/11/2005** [this condition satisfied per SWFWMD permit].

**SPECIFIC CONDITIONS: PART B - Construction Requirements**

1. All significant construction activities shall be approved by the Department prior to initiating work, unless specifically authorized otherwise.

a. This permit **does not** authorize the construction of the final cover system for any portion of the landfill. Construction of the final cover and related systems shall require a separate permit or major modification of this permit in accordance with Specific Condition #A.3 above.

b. Stage III.

1) This permit authorizes construction (excavation) of the bottom of Stage III disposal area as shown on Sheet C-3 of the Permit Renewal drawings [ref.SC#A.2.a(10)].

2) **At least sixty (60) days prior to initiation** of any below grade excavation work (e.g., remaining Stage III disposal area), the permittee shall submit a sufficient number of boring logs with supporting calculations to confirm the elevation of the bottom clay layer and demonstrate that the clay layer will not be adversely affected by hydrostatic uplift. The calculations shall demonstrate a minimum safety factor of 1.5 against hydrostatic uplift of the bottom clay layer. In the event that the excavation activities reveal unexpected subsurface conditions (e.g., the absence of clay, the presence of sandy soils, etc.) additional borings with supporting calculations to demonstrate that the clay layer is adequately impervious and will not be adversely affected by hydrostatic uplift may be required.

3) **At least thirty (30) days prior to initiation** of any below grade excavation work (e.g., remaining Stage III disposal area), the permittee shall submit a request for modification that includes scaled drawings showing the phased construction of the remaining portions of Stage III and the expected schedule for completion of each phase.

New 10/11/2005.

c. **Leachate collection system modification.**

1) Leachate collection systems shall have a construction quality assurance plan to provide personnel with adequate information to achieve continuous compliance with the construction requirements. The Construction Quality Assurance Plan shall be in accordance with Rules 62-701.400(7) and (8), F.A.C., the CQA Plan [ref.SC#A.2.d(3)], and the conditions of this permit. The professional engineer or his designee shall be on-site at all times during leachate collection system construction (including manholes) to monitor construction activities. The leachate collection system modifications shall be constructed in accordance with the information listed in Specific Condition #A.2.d.

2) This permit **does not** authorize the installation, repair, or replacement of geosynthetic liner material.

**SPECIFIC CONDITIONS: PART B - Construction Requirements**

(Specific Condition #B.1.c., cont'd)

- 3) In the event that the slurry wall or the anchored edge of the closure liner in Stage I is impacted during construction, the Department shall be notified and corrective actions shall be detailed in accordance with Specific Condition #C.10.b. of this permit.
- 4) A complete set of construction drawings and shop drawings, which include daily additions, deletions and revisions, shall be maintained on-site at all times for reference. Drawings which show the locations of geomembrane panel seams and repairs shall be kept on-site at all times for reference.
- 5) Leachate shall not be deposited, injected, dumped, spilled, leaked, or discharged in any manner to the land, surface water or groundwater outside the liner system at any time during the construction activities.
- 6) Unsatisfactory, defective or non-conforming work shall be reported to the Engineer and shall be corrected, or the reasons for not correcting the work shall be recorded and maintained onsite for reference and inspections. Documentation of the corrections or reasons for not correcting the work shall be submitted with the Record Documents required by Specific Conditions #B.1 and #B.2.
- 7) Construction activities such as QA/QC testing of the geosynthetics or soil materials, surveying, etc. shall not be carried out in non-daylight hours without prior Department approval. If these activities will be conducted during nighttime hours, the Department shall be notified **at least 1 week** in advance to allow for Department observation. This notification shall include a description of the methods which will be used to provide adequate illumination to ensure that the quality of the construction is not compromised.
- 8) All excavations shall be maintained free from standing water. Except for the stormwater management system construction, no construction, including pipe laying, shall be allowed in water. Groundwater shall be maintained at least 12 inches below excavations. In the event that it appears that the excavation is being impacted by groundwater, the contractor shall take the corrective actions necessary to demonstrate that the groundwater is sufficiently below the bottom of the excavation.
- 9) The permeability of the clean granular material shall be at least  $1 \times 10^{-3}$  cm/sec. The frequency of testing shall be in accordance with Table 02220-A for "clean common fill." A minimum of three gradation tests on the "clean granular backfill" shall be conducted [ref. §4.2, CQAP].
- 10) In the event that the slurry wall is impacted by the construction activities, it shall be repaired in accordance with the Specifications and CQA Plan, Section 3.
- 11) The soils testing laboratory shall be independent of the contractor [see §02220-1.03.A].

**SPECIFIC CONDITIONS: PART B - Construction Requirements**

(Specific Condition #B.1.c., cont'd)

12) Soils and other materials excavated from inside the slurry wall shall not be stockpiled or stored outside the slurry wall, or in areas that drain outside the slurry wall [see §02220-2.01.A.2., ref. §02220-3.02.A.8.].

13) Water generated from dewatering activities within the slurry are considered to be leachate and shall be managed appropriately [ref. §02220-3.01.B.1 & 3, §02220-3.03.B.].

New 10/11/2005.

2. **Certification of Construction Completion.** All information required by this Specific Condition shall be signed and sealed by a registered professional engineer or land surveyor as appropriate. At the completion of construction, information listed below shall be provided to the Department as part of the Certification of Construction Completion.

a. **Within sixty (60) days** after any specified construction (e.g., excavation of the remaining portion of Stage III) has been completed, the following activities shall be completed and submitted by the permittee. This information shall be approved by the Department prior to operation in this area:

1) The owner or operator shall submit a Certification of Construction Completion, Form 62-701.900(2), signed and sealed by the professional engineer responsible for the construction to the Department for approval, and shall arrange for Department representatives to inspect the construction in the company of the permittee, the engineer, and the facility operator.

2) The owner or operator shall submit Record Drawings/Documents showing all changes (i.e. all additions, deletions, revisions to the plans previously approved by the Department including site grades and elevations). The Record Documents shall include as-built plans details and elevations (survey) as appropriate.

3) The owner or operator shall submit a narrative indicating all changes in plans and the cause of the deviations, and certification by the design engineer to the Department.

4) The engineer of record shall provide a report to verify conformance with the project specifications. The report including all related testing results shall be submitted to the Department along with the completion of construction documents.

**SPECIFIC CONDITIONS: PART B - Construction Requirements**

(Specific Condition #B.2.a, cont'd)

5) In the event that the slurry wall was impacted by the construction activities, documentation demonstrating that the integrity of the slurry wall was not adversely affected shall be submitted with the Certification of Construction Completion.

b. The as-built cell floor elevations shall correlate with the calculations required by Specific Condition #B.1.c. and demonstrate a minimum safety factor of 1.5 against hydrostatic uplift of the bottom clay layer at the as-built elevation.

3. **Record Drawings/Documents.**

a. The Record Drawings/Documents shall include, but not be limited to, the following information:

- 1) Location of all anchor trenches (if appropriate);
- 2) As-built elevations for the leachate collection pipes (including elevations in the trenches and inverts at the manholes) and ditch elevations;
- 3) Daily construction reports (CQA and/or general contractor);
- 6) Copies of photographs documenting all stages of the construction project;
- 8) Documentation that demonstrates that all leachate collection system piping has been video inspected and/or pressure cleaned. This documentation shall also detail all deficiencies discovered and corrective actions taken.

**New 10/11/2005.**

b. The as-built survey of the leachate collection system piping invert elevations shall demonstrate that the pipes were constructed at  $\pm 5\%$  of the design slope.

**New 10/11/2005.**

**SPECIFIC CONDITIONS: PART C - Operation Requirements**

**1. Facility Operation Requirements.**

a. The permittee shall operate this facility in accordance with Rule 62-701.500, F.A.C., the Permit Renewal Drawings [ref. SC#A.2.a(10)] and the Operations Plan [ref. SC#A.2.a(1)], and any other applicable requirements. This permit authorizes disposal operations in **Stage III and western portion of Stage I only (i.e. Sequences 3-6)**.  
**Amended 10/11/2005**.

b. Waste shall not be disposed (unloaded, spread, or compacted) during non-daylight hours, unless sufficient lighting is provided to adequately assess the materials and remove unacceptable wastes.

c. Sufficient personnel and equipment shall be utilized to adequately operate the facility.

d. Ponded Water/Leachate. All surface water at Lena Road Landfill within the area surrounded by the slurry wall is considered as "stormwater/leachate." In the event of stormwater control problems which allow prolonged (greater than 72 hours) contact of ponded water with waste, the disposal of waste in the affected area shall cease until the leachate has been collected and appropriate drainage has been restored.

e. In the event of equipment breakdown or scheduled maintenance of essential equipment (such as equipment required for spreading, compacting and covering waste), the owner or operator shall ensure that sufficient reserve equipment is operating at the site **within 24 hours** of the occurrence. In the event that sufficient reserve equipment is not obtained **within 24 hours**, the permittee shall notify the Department in accordance with Specific Condition #C.10.b., below and provide a schedule for corrective actions.

f. Unauthorized Wastes. A sufficient number of spotters and operators shall be utilized at the facility for removing unacceptable wastes (such as liquids, biomedical waste, hazardous and unknown wastes, etc.) from the working face. At a minimum, spotting shall occur at the working face from the ground (while off of the equipment) while waste is being disposed.

**SPECIFIC CONDITIONS: PART C - Operation Requirements**

(Specific Condition #C.1., cont'd)

g. Special Wastes. The design, operation, and monitoring of disposal or control of any "special wastes" shall be in accordance with the Operation Plan [ref.SC#A.2.a(1)] and with Rules 62-701.300(8) and 62-701.520, F.A.C., and any other applicable Department rules, to protect the public safety, health and welfare. The special wastes shall be stored and managed such that discharge of contaminants to the environment is prevented.

1) Wastes which may include residual contaminants (such as gasoline, oil, paint, antifreeze, PCBs, etc.) shall be stored and managed such that the residues or constituents thereof are not spilled, leaked, dumped, or otherwise discharged onto the soil or into surface or groundwaters.

2) Special wastes (such as lead acid batteries, white goods, etc.), found at the working face, shall be stored in locations which do not adversely affect the sequence of filling, and shall be managed as described in the Operations Plan. These wastes shall be removed from the site for proper recycling or disposal at the frequency described in the Operation Plan and this permit, unless another frequency for removal is approved in writing by the Department.

3) Asbestos. Asbestos shall be managed in accordance with Rule 62-701.520(4), F.A.C., the Operation Plan [ref. SC#A.2.a(1)], and all other applicable federal and Department rules. The location of asbestos disposal shall be recorded in accordance with 40 CFR Part 61.154.

4) Contaminated Soil. Contaminated soil (except dredge spoil) shall be disposed within the working area and shall have representative analytical results demonstrate that the material is not hazardous and that the material has been adequately dewatered prior to delivery so that the material passes the paint filter test.

5) White Goods and other scrap metal. White goods and lawnmowers which may contain liquids (such as oil or gasoline), chlorofluorocarbons (CFCs such as freon), or other gases shall be stored and managed in a manner such that the liquids are contained, and CFCs or other gases are not discharged to the atmosphere. White goods which have had the refrigerant appropriately removed and lawn mowers which have had liquids removed shall be clearly marked. White goods shall be removed at least **semi-annually (every 6 months)**.

6) Yard Trash. Yard trash (including clean wood) shall be managed according to Rule 62-709.320, F.A.C., and as described in the Operation Plan [ref.SC#A.2.a(1)].



**SPECIFIC CONDITIONS: PART C - Operation Requirements**

(Specific Condition #C.1.g., cont'd)

7) *Waste Tires.* Waste tires may be stored at the Citizen Drop-off Facility, designated waste tire container near the working face or the waste tire processing facility. The waste tire containers shall be emptied when full.

h. Household Hazardous Waste (HHW). Household hazardous waste shall be managed in accordance with the Household Hazardous Waste Collection and Storage Facility (HHWCSF) Operation Plan [ref. SC#A.2.a(3)], and stored at the HHWCSF.

1) HHW shall be identified, and then segregated for storage within the containment area of the HHWCSF by the end of each collection day. Waste received at the HHWCSF shall be stored within containment areas at all times.

2) Spillage shall be removed and properly packaged for disposal. Soils which have been contaminated by spills shall be removed and packaged for proper disposal on the same day as the spill occurred.

3) Liquids, including contaminated rainwater, shall not be discharged outside of the containment structures.

4) Incompatible materials shall not be stored in the same area and shall not be bulked together.

5) Records on the quantities of HHW collected and removed for disposal shall be compiled monthly and maintained at the facility for Department review upon request.

6) Miscellaneous household hazardous wastes (such as paint, fluorescent light bulbs, chemicals, etc.) shall be managed as described in the HHWCSF Operation Plan [ref. SC#A.2.a(3)].

7) *Lead acid batteries.* Lead acid batteries are accepted at HHWCSF. Any incidental lead acid batteries that are discovered in waste delivered to the site shall be stored in a manner which prevents the discharge of contaminants to the environment. Lead acid batteries shall be removed for appropriate disposal or recycling when a maximum quantity of 80 batteries is stored on-site. [ref. Op. Plan, page L-8]

8) *Used oil.* Used oil is accepted at the HHWCSF. Any used oil that is accepted shall be stored in a manner which prevents discharge to the environment. Used oil shall be removed at least quarterly (every 3 months) or when a maximum quantity of 1000 gallons is stored onsite, whichever occurs sooner. [ref. SC#A.2.a(1) and A.2.a(3)]

**SPECIFIC CONDITIONS: PART C - Operation Requirements**

(Specific Condition #C.1.h., cont'd)

9) *Paint.* Paint is accepted and bulked at the HHWCSF. Any paint that is accepted shall be managed and stored in a manner which prevents discharge to the environment, and shall be removed at least quarterly (every 3 months) or when a maximum quantity of 500 gallons is stored onsite, whichever occurs sooner. [ref. SC#A.2.a(1) and A.2.a(3)]

10) *Electronics.* Electronics to be recycled shall be stored in an undamaged condition, and removed at least quarterly (every 3 months). Electronics that have been damaged (such as broken into pieces) shall be removed and stored in a covered containment area to prevent contact with rainfall and related discharge, and removed at least quarterly (every 3 months). [ref. SC#A.2.a(1) and A.2.a(3)]

i. Site Inspections.

1) The owner or operator shall inspect the site for erosion and settlement (low spots and improperly graded areas) daily on operating days. Erosion and settlement shall be repaired in accordance with Specific Condition #C.10., below.

2) The owner or operator shall inspect the landfill facility for the presence of objectionable odors at the property boundary **daily on operating days**. In the event that objectionable odors are detected at the property boundary, the owner or operator shall abate the odors in accordance with Specific Condition #C.9., below.

3) Litter fences shall be installed near the active face to capture wind-blown litter. In addition, the owner or operator shall inspect the normal traffic areas of the facility for litter **daily on operating days**. The accessible property boundaries shall be inspected for litter **at least weekly**. Litter shall be collected and disposed of in the Class I landfill **at least once per day on operating days**, or more often as necessary. In the event that the litter control program is ineffective, the operator shall notify the Department, and implement additional litter control measures **within 30 days**.

j. The top edge of the slurry wall shall be clearly marked in as many locations as required to prevent waste disposal and stormwater/leachate runoff outside the slurry wall. The markers shall be of a sufficient size or design that effectively prevents waste disposal in unauthorized areas. The markers shall be maintained at all times throughout the operation of the facility to prevent waste disposal and leachate runoff outside the slurry wall.

**SPECIFIC CONDITIONS: PART C - Operation Requirements**

**2. Operating Personnel.**

a. The owner or operator shall be responsible for operating and maintaining the facility in an orderly, safe, and sanitary manner.

b. Sufficient trained personnel shall be available, to adequately operate the facility in compliance with this permit and Department rules. As required by Rule 62-701.500(1), F.A.C., at least one trained operator shall be at the site when either area receives waste. At least one trained spotter shall be at each working face when waste is received and unloaded, to inspect each load of waste from the ground (while off of the equipment), and to identify and properly manage prohibited materials.

c. The permittee shall notify the Department in writing of a change of the County's primary on-site supervisor within 7 days of the effective start date of this new responsible individual. Training documentation shall be maintained at the landfill site, and copies shall be provided to the Department upon request.

**3. Control of Access.** Access to, and use of, the facility shall be controlled as required by Rule 62-701.500(5), F.A.C. Adequate access to the working face shall be provided for all weather conditions while the facility is receiving waste for disposal.

**4. Monitoring of Waste.**

a. Wastes shall be monitored as required by Rule 62-701.500(6), F.A.C., including a load checking program and associated activities. The owner or operator shall conduct three random load checks per week at the active working face. Documentation of the three random load checks, including descriptions (type and quantity) of unacceptable wastes discovered, shall be maintained on-site, and copies provided to the Department upon request. Load checks shall document the occurrence, type of unacceptable wastes, removal and disposition of unauthorized wastes discovered in the loads.

b. The permittee shall not accept hazardous waste or any hazardous substance at this site. Hazardous wastes are wastes listed in 40 CFR 261 Subpart D as hazardous or are wastes characterized in 40 CFR 261 Subpart C as hazardous. Hazardous substances are those defined in Section 403.703, Florida Statute or in any other applicable state or federal law or administrative rule. Sludges or other wastes which may be hazardous should be disposed of in accordance with Rules 62-701.300(4) and 62-701.500(6)(b), F.A.C. In the event that hazardous wastes are discovered, the Department shall be notified in accordance with Specific Condition #C.10.

**SPECIFIC CONDITIONS: PART C - Operation Requirements**

(Specific Condition #C.4., cont'd)

c. The permittee shall maintain a program which prohibits the disposal of bulk industrial wastes which operating personnel reasonably believe to either be or contain hazardous waste, without first obtaining a chemical analysis of the material showing the waste to be non-hazardous. The chemical analysis of any such material so placed in the landfill, along with the customer's name and date of disposal, shall be kept on file by the operating authority on-site.

d. Sludges generated from stormwater/leachate system maintenance shall be dewatered and adequately characterized as non-hazardous prior to disposal.

5. **Waste Handling Requirements.** All disposed solid waste shall be covered as required by Rule 62-701.500(7), F.A.C.

a. Initial Cover. Initial cover shall be applied and maintained at the end of each working day in the Class I landfill area in accordance with Rule 62-701.500(7)(e), F.A.C., so as to protect the public health and welfare.

1) All solid waste disposed of in the Class I disposal area, must be covered with at least 6 inches of compacted earth or other suitable material as approved by the Department (in writing), at the end of each working day. Working areas which have received initial cover and exhibit erosion which results in exposed waste shall be repaired within three days of discovery.

2) The following alternate daily cover materials are acceptable for use at this facility: tarps, soil with up to 25% fines from the yard processing area, shredded tires, ground-up construction and demolition debris including asphalt roofing shingles, dredged soils that have been sufficiently dewatered, and street sweepings.

**Amended 10/11/2005** .

3) Alternate daily cover materials not listed in this Specific Condition are required to be approved by the Department prior to use at the facility

b. Intermediate Cover. Intermediate cover shall be applied and maintained in accordance with Rules 62-701.500(7)(a) and (f), F.A.C. Cover materials other than soil (unless identified herein) shall not be used for intermediate cover without prior written Department approval.

1) An intermediate cover of 12 inches of compacted soil in addition to the six (6) inch initial cover shall be applied within seven (7) days of cell completion if final cover or an additional lift is not to be applied within 180 days of cell completion.

**SPECIFIC CONDITIONS: PART C - Operation Requirements**

(Specific Condition #C.5., cont'd)

c. Cover materials which have been previously used for intermediate or initial cover, and which contain solid waste shall not be re-used on areas which discharge outside the slurry wall.

**6. Working Face.**

a. As required by Rule 62-701.500(7)(d), F.A.C., the permittee shall minimize the size of the working face to minimize leachate, and unnecessary use of cover material. The permittee shall maintain the working face of a cell only wide enough to efficiently accommodate the maximum quantity of vehicles discharging waste simultaneously and to minimize the exposed area.

b. Waste shall be spread and compacted in accordance with the Operation Plan. Slopes shall be maintained in accordance with the Operations Drawings [ref.SC#A.2.a(10)]. All waste slopes (including the working face) shall be no greater (steeper) than 5H:1V [ref.SC#A.2.a(2), Part J].

**7. Method and Sequence of Filling.** The method and sequence of filling shall be in accordance with Permit Renewal Drawings [ref. SC#A.2.a(10)], and as described in the Operation Plan, or as otherwise approved in writing by the Department.

**8. Leachate Management.**

a. Leachate shall be managed in accordance with the requirements of Rule 62-701.500(8), F.A.C., the Operation Plan [ref.SC#A.2.a(1)], the Water Quality and Leachate Monitoring Requirements [ref.SC#A.2.a(4)], and other applicable Department rules.

b. Leachate which has accumulated on the surface in low areas shall be collected and removed, or redirected away from the active disposal areas within 72 hours.

**c. Leachate Collection and Removal System (LCRS)  
Inspections/Maintenance.**

1) The Stormwater/Leachate Management System shall minimize stormwater from entering waste filled areas. All stormwater/leachate conveyances shall be inspected daily to verify adequate performance. Conveyances not performing adequately shall be repaired **within three days of discovery**. Documentation of all inspections and repairs shall be kept on file at the facility. [ref.SC#A.2.a(1)]

**SPECIFIC CONDITIONS: PART C - Operation Requirements**

(Specific Condition #C.8.c., cont'd)

- 2) The leachate collection and removal system underdrains and gravity pipelines shall be video inspected or water pressure cleaned to verify adequate performance at least once during this permit period. Force mains shall be video inspected or water pressure cleaned when the pump station performance indicates that the force mains may be obstructed. An inspection report shall be provided and shall include an evaluation of the effectiveness of the system, the locations of cleaning and video inspections (indicated on a Site Plan drawn to scale) with the locations and the cause of all obstructions encountered, proposed corrective actions, and schedule for implementation of corrective actions as appropriate. If the pipes are water-jet cleaned, the report shall include a description of the method of cleaning. Components not performing adequately shall be repaired as necessary. **No later than one hundred and eighty (180) days prior to permit expiration**, a final report summarizing the inspection results (with a copy of the inspection report) and describing the related corrective actions (repairs) when required (with photographic documentation for all repairs and a copy of the inspection videotape) shall be signed and sealed by a professional engineer, and shall be submitted to the Department to verify adequate performance of the leachate collection and removal system. The permittee shall retain a copy of the final report, each inspection report, and each inspection videotape at the facility for reference, and shall provide a copy to the Department upon request.
- 3) Each pump and pump station and related sensors and controller mechanisms shall be inspected on a semi-annual basis. Pump performance shall be verified and current draw recorded. Pumps showing reduced performance shall be removed for maintenance and repair, and a replacement pump installed if required for continued compliance. Documentation of all inspections shall be kept on file at the facility, and provided to the Department upon request.
- 4) Unless otherwise specified in this permit, the leachate collection and removal system components shall be inspected and maintained as described in the Operations Plan [ref. SC#A.2.a(1)].

**SPECIFIC CONDITIONS: PART C - Operation Requirements**

(Specific Condition #C.8.c, cont'd)

5) Upon the discovery of any defective (obstructed, separated, deformed) portion of the leachate collection system, the disposal of waste in the affected area shall cease in the affected area until the leachate collection system performance has been restored. Construction of improvements to any part of the LCRS, including significant repairs to the leachate collection system, may require a permit modification pursuant to Specific Condition #A.3. The design and related supporting documents for the construction of improvements shall be substantially equivalent to those required for new construction.

d. Leachate quantities.

1) In the event of a failure of leachate metering or pumping equipment which is not corrected **within 24 hours of detection**, the Department shall be notified, and corrective actions implemented in accordance with Specific Condition #C.10.

2) Leachate generation reports shall be compiled and submitted to the Department **monthly, by the 15<sup>th</sup> of the following month**. Leachate generation reports shall include the number of open, intermediate and closed acres, the quantities of stormwater/leachate collected, stored, recirculated and disposed off-site to a wastewater treatment facility, and daily precipitation amounts greater than one tenth of an inch.

9. **Control of Nuisance Conditions.**

a. The owner or operator shall control odors, vectors (mosquitoes, other insects, rodents), and fugitive particulates (dust, smoke) arising from the operation so as to protect the public health and welfare. Such control shall minimize the creation of nuisance conditions on adjoining property. Complaints received from the general public, and confirmed by Department personnel upon site inspection, shall constitute a nuisance condition, and the permittee must take immediate corrective action to abate the nuisance.

b. In the event that the odor control measures performed at the facility do not sufficiently abate objectionable odors offsite, the permittee shall submit an odor abatement plan to the Department **within sixty (60) days** of initial detection. The odor abatement plan shall include at a minimum, a description of the proposed corrective actions and a schedule for implementation.

**SPECIFIC CONDITIONS: PART C - Operation Requirements**

**10. Facility Maintenance and Repair.**

a. The site shall be properly maintained including maintenance of access roads to disposal areas, equipment, stormwater/leachate management systems, cover systems and berms, gas monitoring system, surface water monitoring system, and groundwater monitoring system. Erosion and ponded water in disposal areas shall be prevented.

b. In the event of damage to any portion of the landfill site facilities, unauthorized stormwater/leachate discharge outside the slurry wall, failure of any portion of the landfill systems (including damaged or dry groundwater monitoring wells), fire, explosion, the development of sinkhole(s) or other subsurface instability at the site, the permittee shall **immediately (within 24 hours)** notify the Department explaining such occurrence and remedial measures to be taken, method to prevent reoccurrence, and time needed for repairs. **Written, detailed notification shall be submitted to the Department within seven (7) days following the occurrence.** Routine maintenance does not require notification but shall be noted on daily reports.

c. In the event that any portion of the groundwater or gradient monitoring system is damaged or unable to be sampled, corrective actions shall be completed **within sixty (60) days** of the written notification specified in Specific Condition #C.10.b., unless otherwise approved by the Department. Corrective actions which include relocation or installation of new groundwater monitoring wells shall be in accordance with Specific Condition #E.5., or as otherwise approved by the Department.

d. In the event that the leachate management systems are damaged or are not operating effectively, corrective actions shall be initiated **within thirty (30) days** of the written notification specified in Specific Condition #C.10.b., unless otherwise approved by the Department.

e. Erosion. Intermediately covered disposal areas, or other disposal areas which exhibit significant erosion, shall be repaired according to the following schedule:

1) If the cover materials have eroded such that greater than 50% of the cover in that location has been eroded, then initiate repair of the affected area within three (3) days of discovery; and

2) If waste is exposed, then repair the affected area by the end of the next working day, or within 24 hours after the event that caused the waste to be exposed has ceased.

**Amended 10/11/2005.**

f. Settlement. Areas which exhibit settlement (low spots and improperly graded areas) that may cause ponding of water shall be repaired (additional soil placed, regraded, seeded and/or sodded) **within seven (7) days.**



**SPECIFIC CONDITIONS: PART D - Recordkeeping**

**1. Operation Plan and Operating Record.**

a. Each landfill owner or operator shall have an operational plan which meets the requirements of Rule 62-701.500(2), F.A.C. A copy of the Department approved permit, operational plan, construction reports and record drawings, and supporting information shall be kept at the facility at all times for reference and inspections. Operating records as required by Rule 62-701.500(3), F.A.C., are part of the operations plan, and shall also be maintained at the site.

b. Proposed changes to the current Department-approved **Operation Plan** [ref. SC#A.2.a(1)] shall be submitted in writing to the Department for review and may require a permit modification in accordance with Specific Condition #A.3. The **Operation Plan** shall be updated as operations change and for renewal of the permit. Revised pages shall be provided as replacement pages with revisions noted (deletions may be struckthrough (~~struckthrough~~) and additions may be shaded (shaded) or a similar method may be used) and each page numbered with the document title and date of revision.

c. Unless specified otherwise in this permit, all submittals, notifications, requests for permit modification, shall be provided to the Southwest District Solid Waste Section, 3804 Coconut Palm Drive, Tampa, FL 33619.

d. The following reports, documents and other information shall be maintained at the facility for reference, and copies shall be provided to the Department upon request:

- 1) Waste quantity reports required by Rule 62-701.500(4), F.A.C.;
- 2) A log of the facility operator's daily inspections, and any subsequent corrective actions;
- 3) Load checking records;
- 4) A list of incidents of disposal of unacceptable or prohibited wastes. This list should include the generator's name and address, and a description of the waste disposed;
- 5) Operator and spotter training certificates and other documentation;
- 6) Log of odor complaints and corrective action; and
- 7) Records as described in Rule 62-701.500(13). These records shall include all certifications for construction completion.

**SPECIFIC CONDITIONS: PART D - Recordkeeping**

(Specific Condition #D.1., cont'd)

e. Capacity Report. The owner or operator shall conduct a topographic survey of, and shall estimate the remaining disposal capacity and site life of each disposal area as required by Rule 62-701.500(13)(c), F.A.C. **Annually, no later than March 1<sup>st</sup> each year,** a copy of this survey, supporting capacity calculations, signed and sealed by a registered professional engineer and/or licensed professional land surveyor as appropriate shall be submitted to the Department. The survey shall demonstrate that the waste sideslopes are no greater than the design (5H:1V), that the top elevation does not exceed design elevation, and that all other design features and related improvements conform to the Department-approved Permit Renewal Drawings [ref.SC#A.2.a(10)] and other supporting information [ref.SC#A.2.a(2)].

**2. Waste Records.**

a. Waste records shall be maintained as required by Rule 62-701.500(4), F.A.C. The owner or operator of the facility shall weigh each load of waste as it is received (with scales at the facility) and record, in tons per day, the amount of waste debris and material received. This information shall be compiled **monthly** and submitted to the Department (Solid Waste Section, Department of Environmental Protection, 2600 Blair Stone Road, M.S. 4565, Tallahassee, Florida 32399-2400) **quarterly, by January 15<sup>th</sup>, April 15<sup>th</sup>, July 15<sup>th</sup> and October 15<sup>th</sup> of each year.** Waste shall not be accepted for disposal at the landfill unless weight scales are available at the facility and are in proper working condition.

b. Records shall be kept for all recycled electronics, including the quantities sent to each recycler, and related receipts with the name and address of each recycler.

**3. Financial Assurance.** The permittee shall provide financial assurance for this facility and related appurtenances in accordance with Rule 62-701.630, F.A.C.

a. All costs for closure shall be adjusted and submitted **annually, by March 1<sup>st</sup> each year** to: Solid Waste Manager, Solid Waste Section, Department of Environmental Protection, 3804 Coconut Palm Drive, Tampa, Florida 33619-1352.

b. Proof that the financial mechanism has been adequately funded shall be submitted **annually** to: Financial Coordinator, Solid Waste Section, Department of Environmental Protection, 2600 Blair Stone Road, MS#4565, Tallahassee, Florida 32399-2400.

**SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements**

**1. Water Quality Monitoring Quality Assurance.**

a. All field work done in connection with the facility's Water Quality Monitoring Plan shall be conducted in accordance with the Standard Operating Procedures (SOPs) described in DEP-SOP-001/01 (February 1, 2004), as referenced in Rule 62-160.210(1), F.A.C. All laboratory analyses done in connection with the facility's Water Quality Monitoring Plan shall be conducted by firms that hold certificates from the Department of Health Environmental Laboratory Certification Program under Chapter 64E-1, F.A.C., as referenced in Rule 62-160.300(1), F.A.C. The SOPs utilized and the laboratory's list of certified test methods and analytes must specifically address the types of sampling and analytical work that are required by the permit and shall be implemented by all persons performing sample collection or analysis related to this permit. Alternate field procedures and laboratory methods may be used if approved according to the requirements of Rules 62-160.220 and 62-160.330, F.A.C., respectively.

b. The field testing, sample collection and preservation and laboratory testing, including the collection of quality control samples, shall be in accordance with methods approved by the Department in accordance with Rule 62-4.246 and Chapter 62-160, F.A.C. Approved methods published by the Department or as published in Standard Methods, A.S.T.M., or EPA methods shall be used.

**2. Zone of Discharge.**

a. The zone of discharge for this landfill shall extend horizontally 100 feet from the limits of the landfill slurry wall (designated as Stage I, II and III landfill areas) or to the property boundary, whichever is less, and shall extend vertically to the bottom of the surficial aquifer.

b. The permittee shall ensure that the water quality standards and minimum criteria for Class G-II ground water will not be exceeded at the boundary of the zone of discharge according to Rule 62-520.420, F.A.C., and that the minimum criteria listed in Rule 62-520.400, F.A.C., will not be exceeded outside the footprint of the landfill slurry wall (designated as Stage I, II and III landfill areas).

**SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements**

3. **Ground Water Monitor Well Locations.** The ground water monitoring system is designed and constructed in accordance with Part M ("Water Quality and Leachate Monitoring Requirements") of the document entitled "Application and Engineering Report for Renewal of Landfill Operation Permit", prepared by PBS&J, dated April 30, 2004, revised September 7, 2004 and December 6, 2004 [ref. SC #A.2.a]. The ground water monitor wells are located on Figure M-1 prepared by PBS&J ("Water Quality and Elevation Monitoring Network") received December 15, 2004 (**attached**), as follows:

<u>Well Number</u>	<u>WACS Testsite ID No.</u>	<u>Aquifer</u>	<u>Designation</u>
GW-1 *	21593	Surficial	Detection
GW-2 *	21594	Surficial	Detection
GW-3 *	21595	Surficial	Detection
GW-4 *	21596	Surficial	Detection
GW-5 *	21597	Surficial	Detection
GW-6 *	21598	Surficial	Detection
GW-7 *	21599	Surficial	Detection
GW-8 *	21600	Surficial	Detection
GW-9 *	21601	Surficial	Detection
GW-10 *	21602	Surficial	Detection
GW-11 *	21603	Surficial	Detection
GW-12 *	21604	Surficial	Detection
GW-13 *	21605	Surficial	Detection
GW-14 *	21606	Surficial	Detection
GW-15 *	21607	Surficial	Detection
GW-16 *	21608	Surficial	Detection
GW-17 *	21609	Surficial	Detection
BGW-1 *	21610	Surficial	Background

\* = to be installed **within 90 days of permit issuance** in accordance with construction details presented in Figure M-2 of Part M of the document entitled "Application and Engineering Report for Renewal of Landfill Operation Permit", prepared by PBS&J, dated April 2004, revised September 7, 2004 and December 6, 2004 (**attached**); documentation of well construction shall be provided **within 30 days of installation** in accordance with SC #E.5.b., and #E.5.d.; initial sampling shall be conducted **within 7 days of well installation and development** in accordance with SC #E.4.b.; results of initial sampling shall be submitted **within 30 days of receipt from the analytical laboratory**.

All wells are to be clearly labeled and easily visible at all times. The permittee should keep all wells locked to minimize unauthorized access.

**SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements**

4. **Ground Water Sampling.** The locations, parameters, and frequencies specified herein represent the minimum requirements for ground water monitoring. Additional samples, wells, and parameters may be required based upon subsequent analysis. Method Detection Limits must be less than or equal to the Maximum Contaminant Levels established for the individual parameters to demonstrate compliance with Class G-II ground water standards referenced in Chapter 62-522, F.A.C. Compliance with ground water standards shall be based on the analysis of unfiltered samples.

a. Ground water levels shall be measured at all active wells listed in SC #E.3., and all piezometers listed in SC #E.10., during all sampling events described in SC #E.4.b., #E.4.c., and #E.9.c., to a precision of 0.01 foot. The ground water surface contour maps prepared for each sampling event shall also include ground water elevations (feet NGVD) calculated for each well and the staff gauges described in SC #E.9.a.

b. An initial sampling event shall be conducted at wells GW-1 through GW-17 and BGW-1 **within 7 days of installation and development** for the following parameters:

**Field parameters**

Static Water Level  
before purging  
Specific Conductivity  
pH  
Dissolved Oxygen  
Turbidity  
Temperature  
Colors and sheens  
(by observation)

**Laboratory parameters**

Total Ammonia - N  
Chlorides  
Nitrate  
Total Dissolved Solids (TDS)  
Those parameters listed in  
40 CFR Part 258, Appendix II

Iron  
Mercury  
Sodium

c. Wells GW-1 through GW-17 and BGW-1 shall be sampled **semi-annually**. In accordance with Rule 62-701.510(6)(d), F.A.C., samples collected from these wells shall be analyzed for the following parameters:

**Field parameters**

Static Water Level  
before purging  
Specific Conductivity  
pH  
Dissolved Oxygen  
Turbidity  
Temperature  
Colors and sheens  
(by observation)

**Laboratory parameters**

Total Ammonia - N  
Chlorides  
Nitrate  
Total Dissolved Solids (TDS)  
Those parameters listed in  
40 CFR Part 258, Appendix I

Iron  
Mercury  
Sodium

**SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements**

5. **Ground Water Monitor Well Construction.** The following information shall be submitted **within 90 days of installation** of all new or replacement wells, or as stated below:

a. Prior to construction of all new or replacement wells and piezometers (excluding the locations listed in SC #E.3., and #E.10., respectively) the permittee shall request and receive Department approval of a minor permit modification.

b. Construction details (record drawings) for all new or replacement wells and piezometers shall be provided to the Department's Southwest District Office on Department Form No. 62-522.900(3), Monitor Well Completion Form (**attached**).

c. **Within one week of well completion and development**, each new or replacement well shall be sampled for the parameters listed in Rules 62-701.510(8)(a) and (8)(d), F.A.C

d. A surveyed drawing shall be submitted in accordance with Rule 62-701.510(3)(d)(1), F.A.C., showing the location of all monitor wells and piezometers (active and abandoned) horizontally located in degrees, minutes and seconds of latitude and longitude, and the elevation of the top of the well casing and ground surface by the well casing to the nearest 0.01 foot, National Geodetic Vertical Datum. The surveyed drawing shall include the monitor well identification numbers, locations and elevations of all permanent benchmarks and/or corner monument markers at the site. The survey shall be conducted by a Florida Registered Surveyor.

6. **Well Abandonment.**

a. Existing monitor wells and piezometers shall be abandoned **within 90 days of permit issuance**, as follow:

- Surficial aquifer monitor wells - MW-1, MW-2, MW-3, MW-5, MW-6, LR11-1, LR11-2, LR11-3, LR11-4, LR11-5, CW-4, CW-5A, GC-1A, GC-2, GC-3, GC-4A, GC-5, GC-6 and SWR-1
- Confined aquifer monitor wells - SA-2, SA-3, SA-4, SA-5, SA-6, SA-7, SA-8 and SMR-2
- Piezometers - PZ-1, PZ-2, PZ-3A, PZ-4A, PZ-5, PZ-6, PZ-7, PZ-8, PZ-9, PZ-10, PZ-11, PZ-12A, PZ-13, PZ-14A, PZ-15A, PZ-15C, PZ-16A, PZ-16B, PZ-17, PZ-18 and PZ-19

b. All wells and piezometers listed in SC #E.6.a., and wells and piezometers not a part of the approved Water Quality Monitoring Plan (not listed in SC #E.3., and #E.10.), are to be plugged and abandoned in accordance with Rule 62-532.440, F.A.C., and the Southwest Florida Water Management District (SWFWMD). Documentation of abandonment shall include a map showing well/piezometer locations and SWFWMD abandonment records. The permittee shall submit a written report to the Department providing verification of the well/piezometer abandonment **within 30 days of abandonment**. A written request for exemption to the abandonment of a well must be submitted to the Department's Solid Waste Section for approval.

**SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements**

7. **Verification/Evaluation Monitoring.** If at any time monitoring parameters are detected at concentrations significantly above background water quality, or exceed the Department's water quality standards or criteria at the edge of the zone of discharge, the permittee has 30 days from receipt of the sampling results to resample the monitor well(s) to verify the original analysis. Should the permittee choose not to resample, the Department will consider the water quality analysis to be representative of current ground water conditions at the facility. If the data is confirmed, or if the permittee chooses not to resample, the permittee shall notify the Department within 14 days of this finding. Upon notification by the Department, the permittee shall initiate evaluation monitoring, prevention measures and corrective action as described in Rule 62-701.510(7), F.A.C.

8. **Leachate Sampling.** Individual grab samples of leachate (unfiltered) shall be collected from the each of the existing leachate pump stations in landfill Stages I and III (designated as Lift Station No. 1, WACS Testsite ID No. 21611; Lift Station No. 2, WACS Testsite ID No. 21612; and, Lift Station No. 3, WACS Testsite ID No. 21613) as shown on Figure M-1 prepared by PBS&J ("Water Quality and Elevation Monitoring Network") received December 15, 2004 (**attached**). Leachate sampling shall be conducted in accordance with the Department's SOPs to comply with the requirements of Rules 62-701.510(5) and 62-701.510(6)(c), F.A.C., for analysis of the following parameters:

a. **Annual** leachate sampling shall be conducted for analysis of the following parameters:

**Field parameters**

Specific conductivity  
pH  
Dissolved oxygen  
Colors and sheens  
(by observation)

**Laboratory parameters**

Total ammonia - N	Iron
Bicarbonate	Mercury
Chlorides	Sodium
Nitrate	
Total dissolved solids (TDS)	
<u>Those parameters listed in</u>	
40 CFR Part 258, <b>Appendix II</b>	

b. If the leachate analyses indicate that a contaminant listed in 40 CFR Part 261.24 exceeds the regulatory level listed therein, the permittee shall initiate **monthly** leachate sampling and analysis of the parameters listed in SC #E.8.a., and shall notify the Department in writing. Results of the monthly leachate sampling shall be submitted **within 30 days of receipt from the analytical laboratory**. If in any three consecutive months no listed contaminant is found to exceed the regulatory level, the permittee may discontinue the monthly sampling and analysis and return to a routine sampling schedule.

**SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements**

9. **Surface Water Sampling.** All surface water bodies that may be affected by a contaminant release at the facility shall be monitored, except bodies of water contained completely within the property boundaries of the site which do not discharge from the site to surface waters (Rule 62-701.510(4), F.A.C.). The locations, parameters, and frequencies specified herein represent the minimum requirements for surface water monitoring. Additional samples, sampling locations, and parameters may be required based upon subsequent analysis. Method Detection Limits must be less than or equal to the criteria for each parameter established in Chapter 62-302, F.A.C., to demonstrate compliance with Class III (predominantly fresh water) surface water standards. Compliance with surface water criteria will be based on analysis of unfiltered samples.

a. Staff gauges SG-1, SG-2 and SG-3 shall be installed **within 90 days of permit issuance** at the locations shown on Figure M-1 (**attached**). Surface water levels shall be measured at these staff gauges during all sampling events described in SC #E.9.b., #E.4.b., and #E.4.c., to a precision of 0.01 foot. Surface water body elevations (feet NGVD) recorded at these staff gauges shall be noted on ground water surface contour maps prepared for each sampling event.

b. Surface water samples shall be collected at downstream and upstream locations in Cypress Strand at SW-1 (WACS Testsite ID No. 1663) and SW-2 (WACS Testsite ID No. 1665), respectively, as located on Figure M-1 prepared by PBS&J ("Water Quality and Elevation Monitoring Network") received December 15, 2004 (**attached**). In accordance with Rule 62-701.510(4)(c), F.A.C., the monitoring stations shall be marked and their positions shall be determined by a registered Florida land surveyor in degrees, minutes and seconds of latitude and longitude.

c. **Semi-annual** surface water sampling shall be conducted at SW-1 and SW-2 in accordance with Rule 62-701.510(6)(e), F.A.C., for analysis of the following parameters:

**Field parameters**

Specific conductivity  
pH  
Dissolved oxygen  
Turbidity  
Temperature  
Colors and sheens  
(by observation)

**Laboratory parameters**

Unionized ammonia	Copper
Total hardness	Iron
Biochemical oxygen demand (BOD <sub>5</sub> )	Mercury
Nitrate	Zinc
Total dissolved solids (TDS)	
Total organic carbon (TOC)	
Fecal coliform	
Total phosphates	
Chlorophyll A	
Total nitrogen	
Chemical oxygen demand (COD)	
Total suspended solids (TSS)	
Those parameters listed in	
<u>40 CFR Part 258, Appendix I</u>	



**SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements**

10. **Gradient Monitoring.** Horizontal hydraulic gradient across the slurry wall shall be measured **monthly** at the following monitoring points ("P" denotes a piezometer located inside the slurry wall and "GW" denotes a monitor well located outside the slurry wall). Monitoring points are located on Figure M-1 prepared by PBS&J ("Water Quality and Elevation Monitoring Network") received December 15, 2004 (**attached**).

<u>Interior Monitoring Point</u>	<u>Exterior Monitoring Point</u>
P-1 *	GW-1
P-2 *	GW-2
P-3 *	GW-3
P-4 *	GW-4
P-5 *	GW-5
P-6 *	GW-6
P-7 *	GW-7
P-8 *	GW-8
P-9 *	GW-9
P-10 *	GW-10
P-11 *	GW-11
P-12 *	GW-12
P-13 *	GW-13
P-14 *	GW-14
P-15 *	GW-15
P-16 *	GW-16
P-17 *	GW-17

\* = to be installed **within 90 days of permit issuance** in accordance with construction details presented in Figure M-2 of Part M of the document entitled "Application and Engineering Report for Renewal of Landfill Operation Permit", prepared by PBS&J, dated April 2004, revised September 7, 2004 and December 6, 2004 (**attached**).

These points shall be monitored **monthly** for water levels to an accuracy of 0.01 feet. Results of the monthly monitoring shall be submitted by the **15th day of the following month**. An inward gradient shall be maintained across the slurry wall as described in Part M ("Water Quality and Leachate Monitoring Requirements") of the document entitled "Application and Engineering Report for Renewal of Landfill Operation Permit", prepared by PBS&J, dated April 30, 2004, revised September 7, 2004 and December 6, 2004 [ref. SC #A.2.a]. If an outward gradient exists, steps for correcting the gradient shall be included with the related monthly data. Damaged gradient monitoring points shall be replaced within thirty (30) days to ensure continuous monthly monitoring at all points.

**SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements**

11. **Water Quality and Leachate Reporting Requirements.** The permittee shall submit to the Department the results of the semi-annual ground water analyses (SC #E.4.c.) and surface water analyses (SC #E.9.c.) by **January 15<sup>th</sup>** and **July 15<sup>th</sup> of each year** for the semi-annual periods July-December and January-June, respectively. The permittee shall submit to the Department the results of the annual leachate analyses (SC #E.8.a.) by **January 15<sup>th</sup> of each year**. The submittals shall include the certified laboratory report of results, chain of custody sheets and field sampling logs. The reports that transmit the results of ground water analyses shall contain the information listed in Rule 62-701.510(9)(a), F.A.C., including a ground water contour map representing conditions at the time of ground water sampling and a summary of any water quality standards or criteria that are exceeded. The results shall be sent to: Solid Waste Section, Department of Environmental Protection, Southwest District Office, 3804 Coconut Palm Drive, Tampa, Florida 33619-1352. There are two options for reporting monitoring data:

a. Paper Reporting. If this option is selected, all ground water, leachate and surface water analytical results shall be reported on Department Form 62-522.900(2), Ground Water Monitoring Report (**attached**) to be consistent with the laboratory report of results. To facilitate entry into the Department's database (Water Assurance Compliance System [WACS]), this form, or an exact replica without change of content, shall be prepared for each sampling location for each sampling event.

b. Electronic Reporting. Alternatively, all ground water, leachate and surface water analytical results may be submitted as an electronic data deliverable (EDD) on floppy diskettes or compact disc media readable by Microsoft Windows. Software ("Validator") has been developed to evaluate and upload the monitoring data into the Department's database (WACS). A copy of this software can be downloaded from the Department's website at the following address: <http://www.dep.state.fl.us/labs/software/index.htm>. Electronic laboratory data must be submitted in a specific format called a tab delimited text file, with the first line of the file being the data field names (Microsoft Excel produces this file format when the "Save As" and "Text(Tab Delimited)" options are selected). Two copies of the EDD, one in tab delimited text format and one as an Adobe portable document format (PDF) must be submitted. A digitally "signed" PDF serves to maintain the integrity of the EDD. Examples of an acceptable text file and additional information are available at the web site listed above. The permittee is encouraged to download Validator and run all data sets to allow the necessary corrections to be completed prior to submittal of an EDD to the Department.

**SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements**

12. **Monitoring Plan Evaluation.** By May 11, 2007 and November 11, 2009, the permittee shall submit an evaluation of the water quality and leachate monitoring data. The periods of time to be covered by the evaluations are summarized below:

<u>Water Quality Monitoring Data Evaluation Due Date</u>	<u>Starting Sampling Event</u>	<u>Ending Sampling Event</u>
May 11, 2007	Second half 2004	Second half 2006
November 11, 2009	First half 2006	First half 2009

The evaluations shall include the applicable information as listed in Rule 62-701.510(9)(b), F.A.C., and shall include assessment of the effectiveness of the existing facility design and operation as related to the prevention of ground water and surface water contamination. Any contamination that may exist shall be addressed as part of evaluation monitoring conducted at the facility in accordance with Rule 62-701.510(7), F.A.C. The evaluations shall be sent to: Solid Waste Section, Department of Environmental Protection, Southwest District Office, 3804 Coconut Palm Drive, Tampa, Florida 33619-1352.

**SPECIFIC CONDITIONS: PART F - Landfill Gas Management**

**1. Landfill Gas - NPs and Title V Air Requirements.**

a. This solid waste permit will meet the statutory requirement to obtain an air construction permit before modifying or constructing a source of air pollution, except for those landfills that are subject to the prevention of significant deterioration (PSD) requirements of Chapter 62-212, F.A.C. Facilities that are subject to the PSD requirements shall obtain an air construction permit from the Bureau of Air Regulation prior to beginning construction or modification pursuant to Rule 62-210.400, F.A.C.

b. The permittee shall comply with any applicable Title V air operation permit application requirements of Chapter 62-213, F.A.C., and 40 CFR 60, Subparts WWW and CC, as adopted by reference at Rule 62-204.800, F.A.C. Title V Permit applications shall be submitted to the District Air Program Administrator or County Air Program Administrator with air permitting authority for the landfill.

c. The permittee shall submit to the Division of Air Resources Management, Department of Environmental Protection, Mail Station 5500, 3900 Commonwealth Blvd., Tallahassee, FL 32399-3000, any amended design capacity report and any Non-Methane Organic Compound (NMOC) emission rate report, as applicable, pursuant to 40 CFR 60.757(a)(3) and (b).

**2. Gas Monitoring and Control.**

a. Landfills that receive degradable wastes shall have a gas management and control system designed to prevent explosions and fires, and to minimize off-site odors, lateral migration of gases and damage to vegetation. Landfill gas shall be monitored and controlled as required by Rule 62-701.530, F.A.C.

b. Landfill gas shall be monitored to demonstrate compliance with the criteria established in Rule 62-701.530(1)(a), F.A.C., (less than 25% of the lower explosive limit (LEL) for combustible gases in structures and less than 100% of the LEL for combustible gases at or beyond the property boundary).

c. The results of quarterly monitoring required by Rule 62-701.530(2)(c), F.A.C., shall be submitted to the Department by the following dates:

**Measured During**

Quarter 1  
Quarter 2  
Quarter 3  
Quarter 4

**Report Submitted By**

April 15<sup>th</sup> of each year  
July 15<sup>th</sup> of each year  
October 15<sup>th</sup> of each year  
January 15<sup>th</sup> of each year

**SPECIFIC CONDITIONS: PART F - Landfill Gas Management**

3. **Gas Monitoring Locations.** The landfill gas management system is designed and constructed in accordance with Part O ("Gas Management System Requirements") of the document entitled "Application and Engineering Report for Renewal of Landfill Operation Permit", prepared by PBS&J, dated April 30, 2004, revised December 8, 2004 [Ref. SC #A.2.a]. The ambient gas monitoring points and perimeter gas monitoring probes are located on Figure L-8 prepared by PBS&J ("Landfill Gas Migration Monitoring Locations") received September 10, 2004 (**attached**), and shall be sampled at least **quarterly** for concentrations of combustible gases determined as a percent of the LEL calibrated to methane, as described in Rule 62-701.530(2), F.A.C.

**Ambient Gas Monitoring**

**Points**

GMP-1 \*  
GMP-2 \*  
GMP-3 \*  
GMP-4 \*  
GMP-5 \*  
GMP-6 \*  
GMP-8 \*

**Location Description**

Gary Seeley office (former Litter Enforcement Office)  
Shed by soda machine  
Main office  
Vehicle maintenance area  
Hazardous waste area  
Equipment trailer  
Shed by weigh station

**Perimeter Gas**

**Monitoring Probe**

GMW-1  
GMW-2  
GMW-3  
GMW-4  
GMW-5  
GMW-6  
GMW-7  
GMW-8  
GMW-9A  
GMW-10  
GMW-11A  
GMW-11B  
GMW-11C  
GMW-12 \*  
GMW-13 \*  
GMW-14 \*  
GMW-15 \*  
GMW-16 \*  
GMW-17 \*

**Location Description**

Stage III landfill perimeter - west  
Stage III landfill perimeter - south  
Stage I landfill perimeter - west  
Stage I landfill perimeter - south  
Stage I landfill perimeter - southeast corner  
Stage I landfill perimeter - east  
Stage II landfill perimeter - east  
Stage II landfill perimeter - north  
Stage II landfill perimeter - west  
Stage III landfill perimeter - north  
Stage III landfill perimeter - north  
Stage III landfill perimeter - north  
Stage III landfill perimeter - north  
Stage III landfill - administration facility  
Stage III landfill - administration facility  
Stage III landfill - administration facility  
Stage III landfill - administration facility  
Stage III landfill - administration facility  
Stage III landfill - administration facility

\* = to be monitored until the structures located within the Stage III landfill area are removed, prior to the initiation of fill Sequence 3.

The gas probes are to be clearly labeled and easily visible at all times.

**SPECIFIC CONDITIONS: PART F - Landfill Gas Management**

4. **Gas Remediation.** If the results of gas monitoring show that combustible gas concentrations exceed 25% of the LEL calibrated to methane in structures or 100% of the LEL calibrated to methane at the property boundary, the permittee shall immediately take all necessary steps to ensure protection of human health and notify the Department. **Within 7 days** of detection, a gas remediation plan detailing the nature and extent of the problem and the proposed remedy shall be submitted to the Department for approval. The remedy shall be completed **within 60 days** of detection unless otherwise approved by the Department.

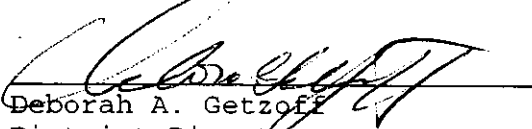
**SPECIFIC CONDITIONS: PART G - Closure and Long-Term Care Requirements**

1. **Closure Permit Requirements.** No later than ninety (90) days prior to the date when wastes will no longer be accepted for portions of the landfill which have reached closure design dimensions, the landfill owner or operator shall submit a closure permit application to the Department, in order to assure conformance with all applicable Department rules. A closure permit is required prior to implementing closure related activities.

2. **Final Cover.** Portions of the landfill which have been filled with waste to the extent of designed dimensions shall be closed (shall receive final cover) within 180 days after reaching design dimensions, in accordance with Rule 62-701.500(7)(g), F.A.C. and all applicable requirements of Department rules.

Executed in Tampa, Florida.

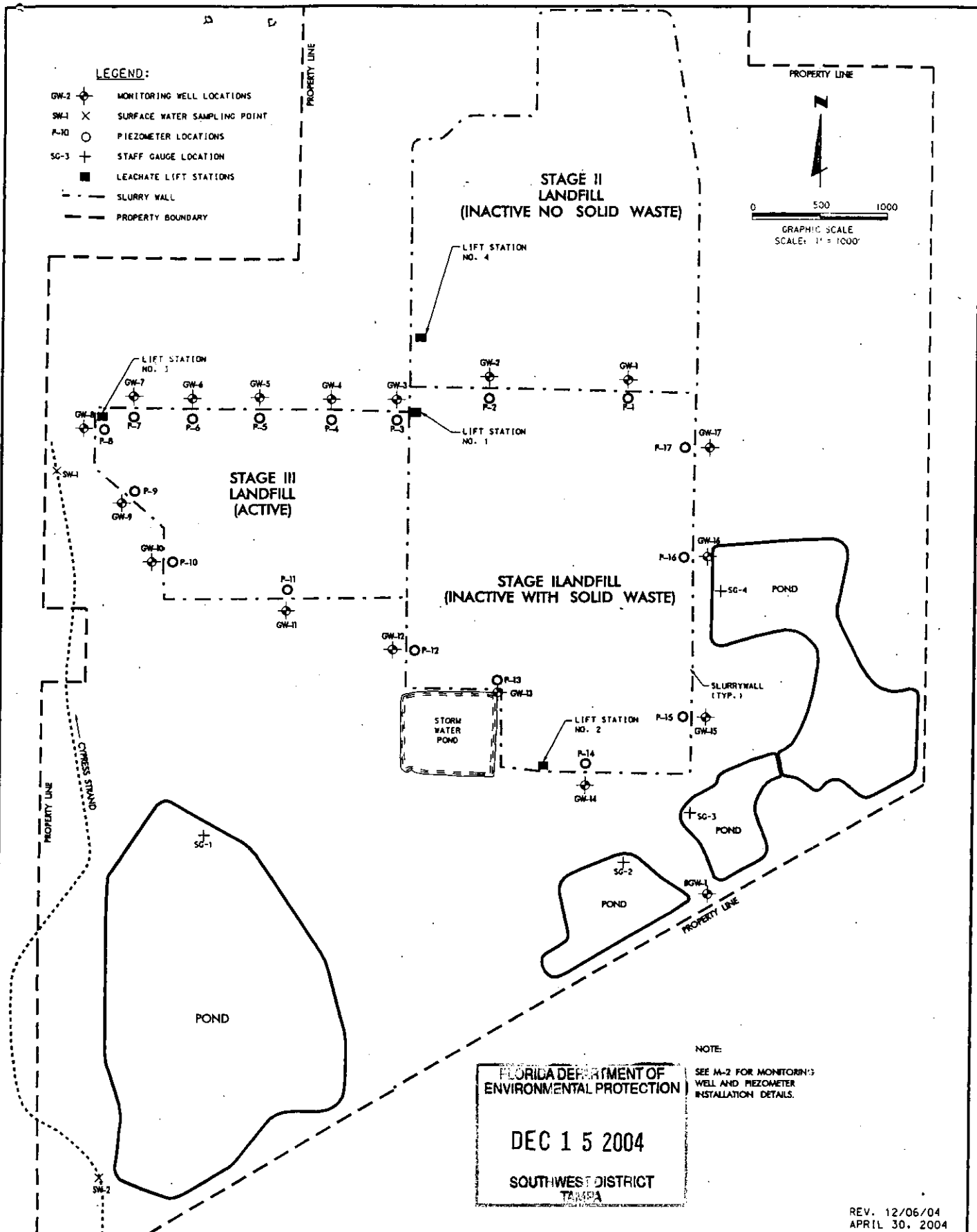
STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

  
Deborah A. Getzoff  
District Director  
Southwest District

ATTACHMENT 1		
Specific Condition	Submittal Due Date	Required Item
A.4.	November 11, 2009	Submit permit renewal application
A.9.b., C.10.b.	Within 24 hours of discovery	Notification of: sinkholes, hazardous waste receipt, failure of landfill systems or equipment
	Within 7 days of verbal notification	Written notification & corrective action plan
B.1.b(3)	At least 30 days prior to initiation	Submit request to include sequenced construction and operation, and submit schedule
C.8.c(2)	180 days prior to permit expiration	Submit leachate collection system inspection report
C.8.d(2)	By the 15 <sup>th</sup> each month	Submit leachate generation reports
C.10.c.	Within 60 days of written notification	Complete corrective actions for gradient or groundwater monitoring system
C.10.d.	Within 30 days of written notification	Implement corrective actions for leachate management system
D.1.e.	Annually, by March 1 <sup>st</sup> each year	Submit topographic survey & capacity calculations, and certification
D.3.a.	Annually, by March 1 <sup>st</sup> each year	Submit revised cost estimates
D.3.b.	Annually	Submit proof of funding
E.4.c.	Semi-annually	Sample all background and compliance wells
E.11.	By January 15 <sup>th</sup> and July 15 <sup>th</sup> each year	Submit sampling results
E.5.b.	Within 90 days of installation	Submit well construction information
E.5.c.	Within 1 week of well completion and development	Sample for parameters in Rule 62-701.510(8)(a) and 62-70.510(8)(d), F.A.C.
E.5.d.	Within 90 days of new or replacement well installation	Submit survey
E.6.a.	Within 90 days of permit issuance	Abandon existing monitoring wells and piezometers identified in E.6.a



ATTACHMENT 1, cont'd		
Specific Condition	Submittal Due Date	Required Item
E.6.b	Within 30 days of abandonment	Submit report of well abandonment
E.9.c	Semi-annually	Sample/analyze surface water
E.11	By January 15 <sup>th</sup> and July 15 <sup>th</sup> each year	Submit sampling results
E.10.	Monthly  By the 15 <sup>th</sup> of the following month	Measure hydraulic gradient (horizontal and vertical)  Submit gradient results
E.12.	By May 11, 2007 and November 11, 2009	Submit water quality monitoring evaluation report
F.2.c.	Quarterly, by January 15 <sup>th</sup> , April 15 <sup>th</sup> , July 15 <sup>th</sup> and October 15 <sup>th</sup>	Submit gas monitoring results
G.1.	No later than 90 days prior to the date when wastes will no longer be received	Submit Closure Permit application

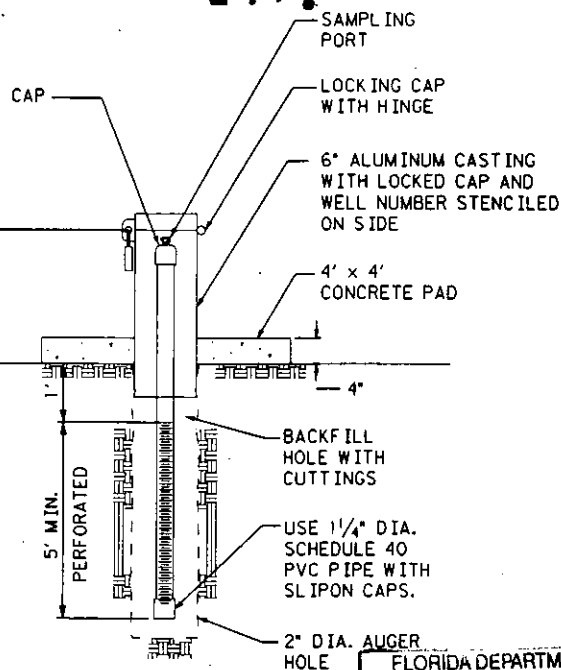


**PBS&J**

**LENA ROAD LANDFILL  
MANATEE COUNTY, FLORIDA**

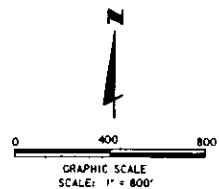
**WATER QUALITY AND  
ELEVATION MONITORING  
NETWORK**

**FIG. M-1**



#### GAS POINT LOCATIONS DESCRIPTIONS

1. GARY SEELEY OFFICE (FORMER: LITTER ENFORCEMENT OFFICE) (BUILDING MOVED TO AREA NEAR EQUIPMENT TRAILER)
2. SHED BY SODA MACHINE
3. MAIN OFFICE
4. VEHICLE MAINTENANCE GARAGE
5. HAZ WASTE AREA
5. EQUIPMENT TRAILER
7. NO LONGER EXISTING
8. SHED BY WEIGH STATION (GENERATION HOUSE)

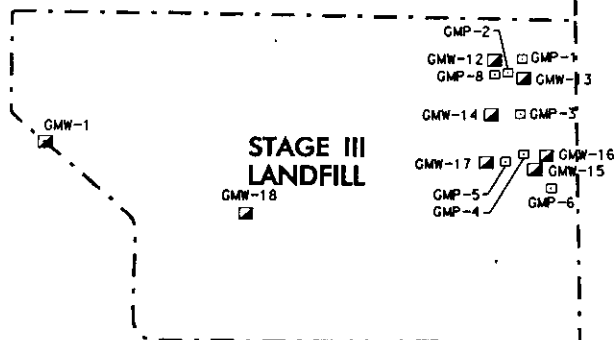


#### LANDFILL GAS MONITORING PROBE

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION  
  
SEP 10 2004  
  
SOUTHWEST DISTRICT  
TAMPA

GMW 11C  
GMW 11B  
GMW 11A

GMW 10



#### NOTES:

1. GMW-12 THROUGH GMW-18 AND GMP-1 THROUGH GMP-8 TO BE MONITORED UNTIL FILLING OF STAGE III LANDFILL REACHES THESE POINTS, OR BUILDINGS ARE REMOVED

#### LEGEND:

- GMW-3 GAS MONITORING WELL  
GMP-6 GAS MONITORING POINT  
--- SLURRY WALL

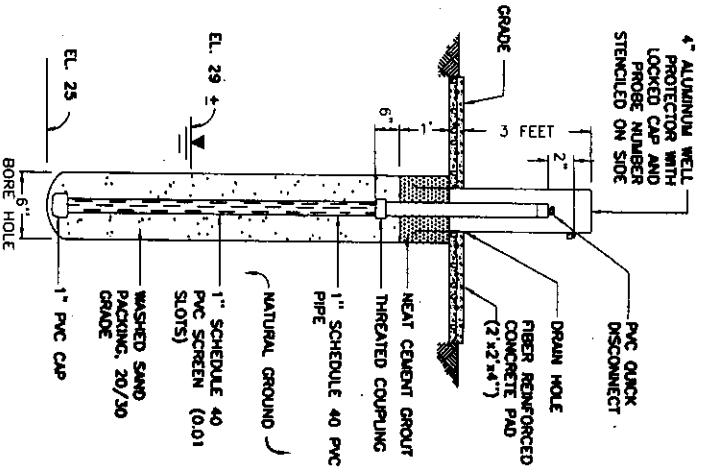
REVISED 09/09/04  
APRIL 30, 2004

**PBS**

LENA ROAD LANDFILL  
MANATEE COUNTY, FLORIDA

LANDFILL GAS MIGRATION  
MONITORING LOCATIONS

FIG. L-8



# LANDFILL GAS MONITORING PROBE (GMW#)

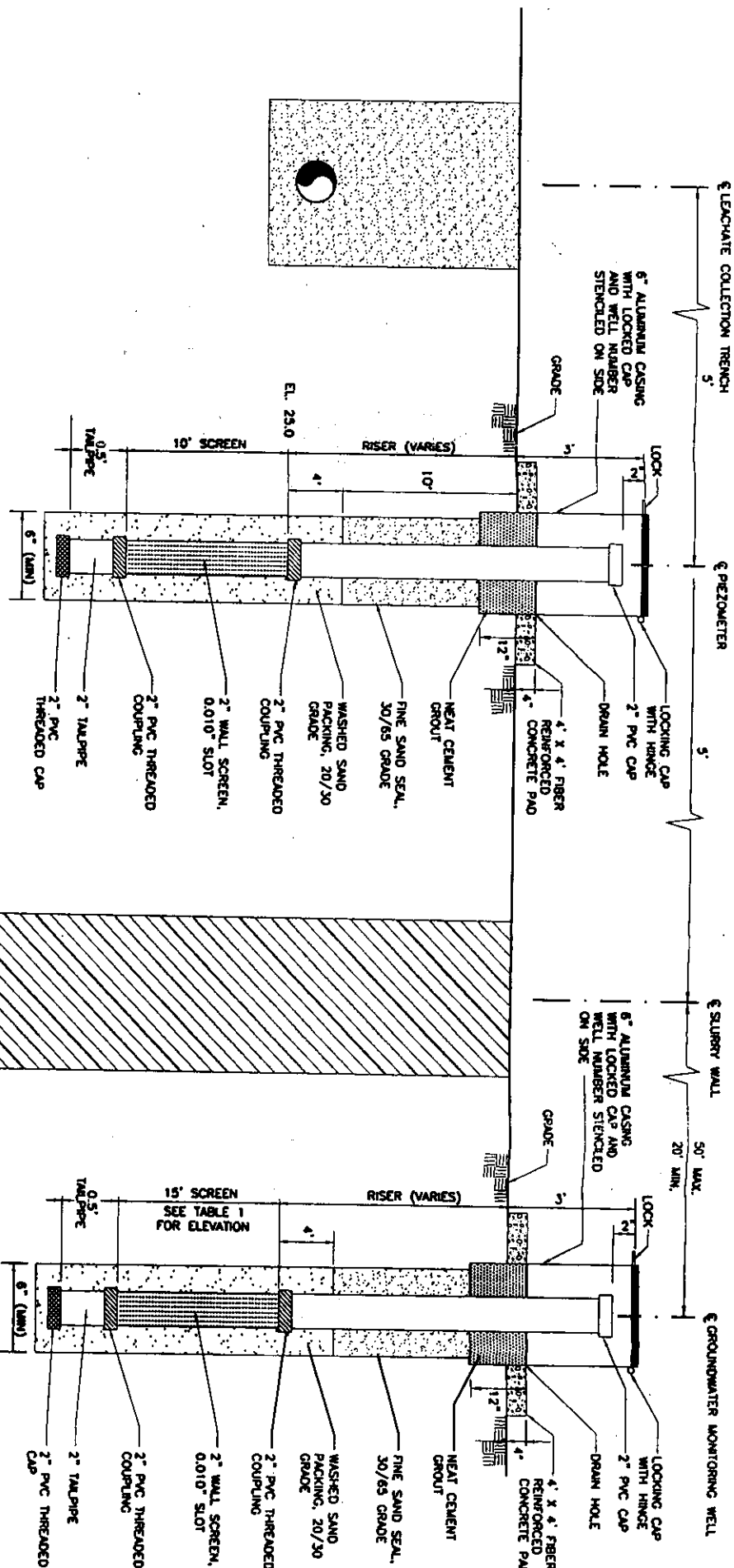
N.T.S.

## CONSTRUCTION NOTES:

1. ALL WORK RELATED TO ABANDONMENT OR INSTALLATION OF MONITORING WELLS GAS PROBES AND PIEZOMETERS SHALL BE DONE BY A FLORIDA CERTIFIED WATER WELL DRILLER.
2. ALL MONITORING WELLS GAS PROBES AND PIEZOMETERS INDICATED ON THE DRAWINGS SHALL BE PLUGGED AND ABANDONED IN ACCORDANCE WITH F.A.C. RULE 62-532.440 AND THE SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT (SWFWMD) THE DRILLER SHALL SUBMIT A WRITTEN REPORT TO THE FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION, WITH COPIES TO THE OWNER AND ENGINEER, DOCUMENTING VERIFICATION OF THE WELL ABANDONMENT WITHIN 90 DAYS OF ABANDONMENT. INCLUDE A MAP SHOWING LOCATIONS AND SWFWMD ABANDONMENT RECORDS.
3. NEW MONITORING WELLS AND PIEZOMETERS SHALL BE INSTALLED PER ASTM D-5092 (1995) STANDARD PRACTICE FOR DESIGN AND INSTALLATION OF GROUND WATER MONITORING WELLS IN GRANULAR MATERIALS, AND THE FOLLOWING DOCUMENTATION SUBMITTED TO FDP WITH COPIES TO THE OWNER AND ENGINEER.

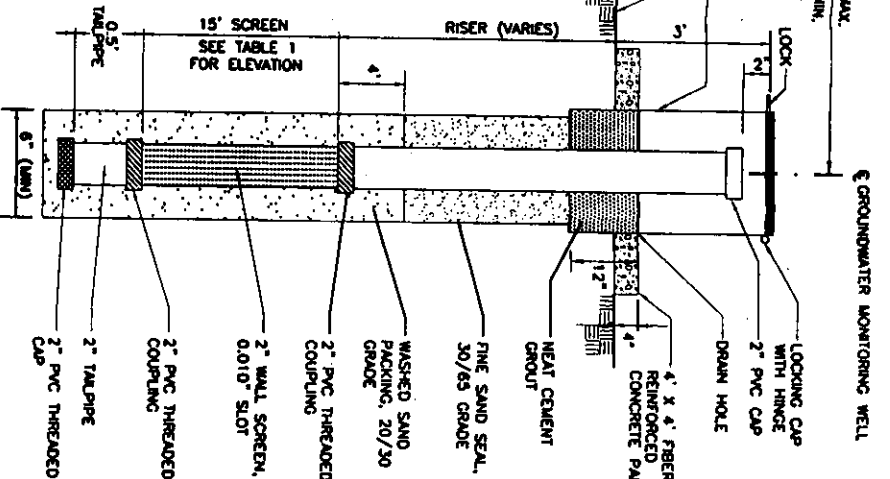
## A. FDP FORM 62-522.500(3) MONITORING WELL COMPLETION REPORT

B. A SURVEY DRAWING SHALL BE SUBMITTED IN ACCORDANCE WITH F.A.C. RULE 62-701.510(3) (D) (1), SHOWING THE LOCATION OF ALL MONITORING WELLS (ACTIVE AND ABANDONED) HORIZONTALLY LOCATED IN DEGREES, MINUTES AND SECONDS OF LATITUDE AND LONGITUDE, AND THE ELEVATION OF THE TOP OF THE WELL CASING TO THE NEAREST 0.01 FOOT. NATIONAL GEODETIC VERTICAL DATUM. THE SURVEY DRAWING SHALL INCLUDE THE MONITOR WELL IDENTIFICATION NUMBERS, LOCATIONS AND ELEVATIONS OF ALL PERMANENT BENCHMARKS AND /OR CORNER MONUMENT MARKER AT THE SITE. THE SURVEY SHALL BE CONDUCTED BY A FLORIDA REGISTERED SURVEYOR.



## PIEZOMETER DETAIL

N.T.S.



## GROUNDWATER MONITORING WELL DETAIL

N.T.S.

TABLE 1

WELL	ELEVATION OF SCREEN ANTENNA (FEET-MGD)
GW-1	23-40
GW-2	23-40
GW-3	23-40
GW-4	23-40
GW-5	23-40
GW-6	23-40
GW-7	23-40
GW-8	23-40
GW-9	23-40
GW-10	23-40
GW-11	23-40
GW-12	23-40
GW-13	23-40
GW-14	23-40
GW-15	23-40
GW-16	23-40
GW-17	23-40
GW-18	23-40
GW-19	23-40
GW-20	23-40
GW-21	23-40
GW-22	23-40
GW-23	23-40
GW-24	23-40
GW-25	23-40
GW-26	23-40
GW-27	23-40
GW-28	23-40
GW-29	23-40
GW-30	23-40
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GW-38	23-40
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GW-89	23-40
GW-90	23-40
GW-91	23-40
GW-92	23-40
GW-93	23-40
GW-94	23-40
GW-95	23-40
GW-96	23-40
GW-97	23-40
GW-98	23-40
GW-99	23-40
GW-100	23-40

\* ELEVATION MAY CHANGE DEPENDING UPON WATER TABLE ELEVATION AT THAT LOCATION AT THE TIME OF WELL INSTALLATION.

FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION  
DEC 15 2004  
SOUTHWEST DISTRICT  
TAMPA



330 SOUTH PINEAPPLE AVE.  
SUITE 113  
SARASOTA, FLORIDA 34236  
PH: (941) 554-4035  
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WWW.PBS-FL.COM

CLIENT: MANATEE COUNTY  
PROJECT: LENA ROAD LANDFILL  
DEPARTMENT: PROJECT MANAGEMENT  
4410 66TH STREET WEST  
BRADENTON, FLORIDA 34210



PROJECT: LENA ROAD LANDFILL

TASK: MONITORING WELL, GAS PROBE  
AND PIEZOMETER INSTALLATION DETAILS

ORIGINAL:	12/05/04
REVISIONS:	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	

DATE: 12/05/04  
BY: [Signature]

JOB NO.: 04-101  
DRAWN BY: [Signature]  
CHECKED BY: [Signature]  
DATE: 12/05/04  
SHEET: 1 OF 1

M-2