



# Florida Department of Environmental Protection

Southwest District Office  
13051 North Telecom Parkway  
Temple Terrace, Florida 33637-0926

Charlie Crist  
Governor

Jeff Kottkamp  
Lt. Governor

Michael W. Sole  
Secretary

March 12, 2007

CERTIFIED MAIL 7004 1350 0002 5571 4862  
RETURN RECEIPT REQUESTED

In the matter of an  
Application for Permit by:

DEP File No. 35435-011-SC/01,  
Hillsborough County

Hillsborough County Solid Waste Management Dept.  
Mr. Barry Boldissar, Director  
P.O. Box 1110  
Tampa, Fl. 33601

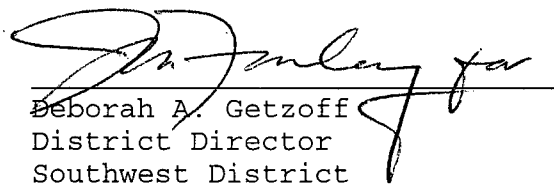
## NOTICE OF PERMIT

Enclosed is Permit Number **35435-011-SC/01**, issued pursuant to Section(s) 403.087(1), Florida Statutes, for construction of the lined, Class I landfill referred to as Section 9 of the Hillsborough Southeast County Landfill.

Any party to this Order (permit) has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Blvd., Mail Station 35, Tallahassee, 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 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Hillsborough County, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

  
Deborah A. Getzoff  
District Director  
Southwest District

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 March 12, 2007 to the listed persons.

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.

Anna Blawie  
Clerk

3-12-2007  
Date

DAG/sjp

Attachments

Copies furnished to:

Hillsborough County Notification List

Hillsborough County Elected Officials

Patty Berry, HCSWM, 601 E. Kennedy Blvd., 24<sup>th</sup> Floor, Tampa, Fl. 33602

Joe O'Neill, P.E., JEA, 324 S. Hyde Park Ave., Ste. 250, Tampa, Fl. 33606

Ron Cope, HCEPC

Patricia Comer, FDEP OGC Tallahassee

Fred Wick, FDEP Tallahassee

Richard Tedder, P.E., FDEP Tallahassee

Permit notebook



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## PERMITTEE

Hillsborough County  
Solid Waste Management Dept.  
Mr. Barry Boldissar, Director  
Post Office Box 1110  
Tampa, Florida 33601

## PERMIT/CERTIFICATION

WACS ID No: SWD/29/41193  
Permit No: **35435-011-SC/01**  
Date of Issue: **03/12/2007**  
Expiration Date: **03/12/2012**  
County: Hillsborough  
Lat/Long: 27°46'37"N  
82°10'43"W  
Sec/Town/Rge: 13, 14, 15, 18, 19,  
22, 23, 24, 31, 32S/21E  
Project: Southeast County  
Class I Landfill  
Section 9 construction

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 62-4, 62-302, 62-330, 62-520, 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 **construct** an expansion of a Class I landfill (approximately 15.2 acres), referred to as the **Hillsborough Southeast County Landfill (Section 9)**, subject to the specific and general conditions attached, **located approx. 8.8 miles east of US Highway 301 North on County Road 672, near Balm, Hillsborough County, Florida**. The specific conditions attached are for the construction of:

1. Class I Landfill, Section 9

and related appurtenances

**Replaces Permit No.: N/A, new**

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 Information:**

Disposal acres	Approx. 15.2 acres (Section 9 only) [ref. SC#A.2.a., Part A.]
Lowest Bottom elevation of cell (secondary liner leak detection sump)	+120.0 ft. NGVD [ref. SC#A.2.c., Sheet 14]  Geomembrane subliner directly below GCL and extending up to elevation +126.0 ft. NGVD [ref. SC#A.2.c., Sheet 7 and Section J/Sheet 12] to protect GCL from fluctuations in groundwater
Top elevation at final buildout (Sections 7/8/9)	max. +285.0 feet NGVD [ref. SC#A.2.d., Sheet 16]
Sideslopes max.	3H:1V [ref. SC#A.2.d.]
Liner system (bottom to top)	60 mil textured geomembrane subliner, geosynthetic clay liner (GCL) ( $5 \times 10^{-9}$ cm/sec), 60 mil textured HDPE geomembrane, 250 mil geocomposite (non-woven GT/geonet/non-woven GT), 60 mil textured HDPE geomembrane, 250 mil geocomposite (non-woven GT/geonet/non-woven GT), 1-foot drainage sand ( $1 \times 10^{-3}$ cm/sec), 1-foot tire chips [ref. SC#A.2.a., Part H.2.c., and SC#A.2.c., Detail 1/Sheet 13; SC#A.2.a(2), CQAP 4.5.2.]
LCS drainage system	Drainage/protective sand $\geq 1 \times 10^{-3}$ cm/sec [ref. SC#A.2.a., Part H.2.c.; SC#A.2.c., Detail 1/Sheet 12]  One trench draining from northeast to southwest. 8-inch SDR 11 HDPE perforated LCS piping. [ref. SC#A.2.a., Part H.2.c(2); A.2.c., Detail 4/Sheet 13] Slope=0.74% after settlement [ref. SC#A.2.a., Attachment H.2.c(2), Reference 4]  LCS pipe drain to sump on southwest perimeter, then pumped through sideslope risers through forcemain to onsite Leachate Treatment Facility [ref. SC#A.2.a., Part H.2.c(2); A.2.c., Sheet 14]
LDS drainage system	Geocomposite to center trench and sump, then same as LCS
Action leakage rate (ALR)	306 gal/ac/day [ref. SC#A.2.a., Attachment H.2.c(2), Reference 4, Exhibit A]
Leachate recirculation	LCS/LDS design includes capacity for up to 40,000 gallons per day. [ref. SC#A.2.a., Part H.4.] However, leachate recirculation is not authorized by this permit.
Design life	28 months (Section 7/8/9) w/o Phases I-VI [ref. SC#A.2.a., Part F.5.c.]
Interface friction angles	All interfaces=18.5° [ref. SC#A.2.a., Attachment J.1.d(3)].
Leachate storage tanks	Existing Leachate Treatment and Recovery Facility (LTRF). One 500,000 gallon storage tank. Approx. 70 ft. diameter x 20 ft. high, glass fused steel

**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:
  - (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.

**GENERAL CONDITIONS:**

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.

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

**GENERAL CONDITIONS:**

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. **Facility Designation.** This site shall be classified as a Class I landfill and shall be constructed, operated, closed, monitored and maintained in accordance with all applicable requirements of Chapters 62-4, 62-302, 62-330, 62-520, 62-522, 62-550, and 62-701, Florida Administrative Code (F.A.C.) and all applicable requirements of Department rules.
2. **Permit Application Documentation.** This permit is valid for **construction** of Section 9 of the Class I landfill and related systems (including bottom liner system, leachate collection and detection systems), at the Hillsborough County Southeast County Landfill in accordance with Department rules and the reports, plans and other information prepared by Jones, Edmunds & Associates (JEA) (unless otherwise specified) as follows:
  - a. Construction Permit Application Capacity Expansion, Section 9, Southeast County Landfill, Hillsborough County,... (two 3-ring binders) dated March 2006 (received March 22, 2006), as revised, replaced or amended (replacement pages inserted into original) dated June 8, 2006, September 12, 2006, November 16, 2006, and February 7, 2007 (received June 8, 2006, September 12, 2006, November 17, 2006, and February 7, 2007). This information includes, but is not limited to:
    - 1) *Technical Specifications*, Attachment H.6.a(1) [Specs.],
    - 2) *CQA Plan*, Attachment H.6.a(2) [CQAP],
    - 3) *Water Quality Monitoring Plan*, Attachment I.1.a.
  - b. Responses to DEP Requests for Additional Information,... June 8, 2006, September 12, 2006, and November 16, 2006, (received June 8, 2006, September 12, 2006, and November 17, 2006) (one 3-ring binder) this binder includes information not otherwise inserted into the documents listed in SC#A.2.a. above.
  - c. Plan Sheets titled, Southeast County Landfill Section 9 Capacity Expansion, March 2006,... (17 Sheets) dated March 2006, (signed/sealed and received September 12, 2006) including revised Drawing 12 received November 17, 2006.
  - d. Plan sheets titled, Southeast County Landfill Sections 7, 8 and 9 Fill Sequencing, March 2006,... (9 sheets), dated March 2006, signed/sealed September 11, 2006 and received September 12, 2006).
  - e. Topographic Surveys, prepared by Pickett Surveying & Photogrammetry, as follow: Sheet 1 of 1 dated January 18, 2005 (received September 13, 2006), and Sheets 1 through 8 of 8 dated July 5, 2005 (received June 8, 2006).
3. **Permit Modifications.**
  - a. Any construction or operation 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. Any significant changes to the construction or operation 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)

- b. This permit does not authorize landfill operation or closure. 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.
- c. This permit authorizes the construction of the bottom liner system, including leachate collection and detection systems and other related appurtenances for the Section 9 portion of the landfill, only.
4. **Permit Renewal.** No later than October 1, 2011, 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)(b), F.A.C.
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.** The prohibitions of Rule 62-701.300, F.A.C., shall not be violated by the activities at this facility.
  - a. In the event that limestone is encountered during excavation or construction activities, the excavation/construction activities shall cease and the Department shall be notified **within 24 hours of discovery**. Written notification shall be submitted **within 7 days of discovery**. The written notification shall include the location, elevation, and extent of limestone noted on a plan sheet, a description of the materials encountered, and a plan of action which ensures that groundwater will not be adversely affected by the continued construction and operation of the facility. Excavation or construction activities shall not resume in the affected area until the Department-approved plan of action has been completed.

**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 on-site, or within 500 feet of the site, the Department shall be notified in accordance with Specific Condition #C.6.b. 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 a corrective action plan which describes the actions necessary to prevent the unimpeded discharge of waste or leachate into ground or surface water.

c. 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.6.b.

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

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

a. This permit authorizes the construction of the Section 9 bottom liner system, including leachate collection and detection systems and related appurtenances.

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.

a. **Within sixty (60) days** after the specified construction has been completed, the following activities shall be completed and submitted by the permittee for Department approval:

1) The owner or operator shall submit a Certification of Construction Completion, Form 62-701.900(2), signed and sealed by the professional engineer in charge of construction and quality assurance 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, the cause of the deviations, and certification of the Record Drawings/Documents by the Engineer to the Department.

4) The professional engineer of record shall submit to the Department a final report to verify conformance with the plans and specifications in accordance with Rules 62-701.400(7) and (8), F.A.C.

5) The permittee shall submit an updated Leachate Management Plan (LMP) as described in Specific Condition #C.8.b.

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 and limits of liner;

2) Daily construction reports;

3) As-built drawings showing the geomembrane panel installation layout, locations of fabricated and field seams, type of seams, destructive sampling locations, locations of all repairs, panel designations, geomembrane booting and connection details;

4) All geomembrane destructive test results;

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

(Specific Condition #B.3.a., cont'd)

5) A compact disc or other electronic media that includes all available photographs documenting all stages of the construction project. Each photograph shall include the camera date stamp.

6) The information listed in CQAP 6.4.

**4. Pre-Construction Submittals.**

a. **At least thirty (30) days prior** to initiation of any construction activity, unless otherwise specified, the permittee shall submit the following information to the Department:

1) A **complete set** of Plans, Specifications and CQA Plan to be used for construction which includes all changes (i.e., all additions, deletions, revisions to the plans previously approved by the Department). All changes shall be noted using strikethrough (~~strikethrough~~) for deletions, and shading (~~shading~~) or underline (underline) for additions. All changes in the plans, specifications and CQA Plan shall be accompanied by a narrative indicating the change. Significant changes in the plans, as determined by the Department, shall require a permit modification. All changes in the plans shall be noted on the plans and the cause of the deviation and a re-certification of the alternate design by the design engineer shall be provided. These alternate designs shall be approved by the Department prior to construction. If **no** changes have been made to the construction plans, Specifications or CQA Plan, the permittee shall notify the Department in writing that no changes have been made, and re-submittal of these documents will not be required prior to construction;

2) The role and name of the specific company/organization for each of the parties in the Project team [CQAP Fig. 2-1];

b. **At least 30 days prior to initiation** of installation of the liner, the results of the interface friction testing using actual construction materials shall be submitted to the Department. The results must demonstrate that the all interfaces each exhibit a minimum safety factor of 1.5 against sliding. Placement of the geomembrane shall not proceed prior to the Engineer's receipt of the results of the interface friction testing which meet the requirements of this condition. The minimum specified interface friction angle is 18.5 degrees with no cohesion for all interfaces [ref. SC#A.2.a., Attachment J.1.d(3)].

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

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

c. **No later than 2 weeks** prior to construction of the following components of the project, the Department shall be notified of the initiation of construction of these components (for each phase of construction) to allow the Department to observe the construction of:

- 1) Seaming performed using a method other than double-fusion (wedge) or extrusion welding;
- 2) Bottom liner tie-in (with Section 7/8) areas;
- 3) Any liner penetrations/boots; and

d. **At least ten (10) days prior to** initiation of the following activities, the permittee shall submit the following information:

- 1) Initiation of any excavation activity - Submit the dewatering plan required by the Specifications [Spec. 0222-3.04.B.; 02310-1.03.A.];
- 2) Initiation of placing drainage sand - Submit permeability test results for the drainage sand [Spec. 02226-2.01.B.]; and
- 5) Initiation of placement of backfill - Submit SPLP test results for the backfill required by Specific Condition #B.10.k.

e. To allow for observation, at least 72 hours prior to initiation, the Department shall be notified of any spark testing.

5. **Pre-Construction Meeting Notification.** Department Solid Waste Permitting staff and Hillsborough County EPC shall be notified **at least one (1) week prior** to all pre-construction meetings. Prior to initiating construction activities, the permittee shall make arrangements for the Engineer of Record to meet on site and discuss all plan changes with Department Solid Waste Permitting Staff and Hillsborough County EPC. A copy of the minutes from the pre-construction conference shall be submitted to the Department and Hillsborough County EPC within two (2) weeks of the conference.

6. **Construction Schedule and Progress Report.**

a. **No later than one (1) week after** the pre-construction conference, the owner or operator shall submit a construction schedule which includes estimated dates for each portion of the construction to the Department. The Engineer of Record or another qualified professional engineer shall make periodic inspections during construction to ensure that design integrity is maintained.

b. An updated construction schedule and progress report shall be submitted to the Department **monthly, by the 15<sup>th</sup> of each month**. The monthly progress report should be submitted in an appropriately labeled three-ring binder of sufficient size to store the monthly progress reports for the entire project, or may be submitted electronically. The monthly progress reports shall include, but not be limited to:

- 1) A narrative explaining the status (and any delays) of major stages of the construction (i.e., liner, piping, etc.),
- 2) Weekly progress meeting minutes and

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

(Specific Condition #B.6., cont'd)

- 3) Color copies of photographs which are representative of the typical construction activities for the reporting period, and photographs which show overall views and details of major stages of construction (e.g., lift station construction, etc.). Photographs shall be date stamped.

**7. Construction Tolerances.**

- a. The construction tolerance for elevations shall be  $\pm 0.10$  ft. (vertical) [Spec. 02222-3.08.H, 3.09.D.]
- b. As-built topographic surveys shall demonstrate that the liner and protective soil cover were constructed within the tolerance required by the Drawings and Specifications. Grid spacing shall be no greater than a 50 ft. grid.
- c. All soil layers shall be constructed to the thicknesses listed in the Specifications and CQA Plan, which are minimum requirements.
- d. Leachate collection pipe invert elevations shall be surveyed/recorded every 50 linear feet along the pipe and at each change in direction [Spec. 01050-1.04.C.4].

**8. Laboratory and Field Testing Requirements.** Field and laboratory testing during the construction activities shall be conducted by a qualified testing laboratory, independent of the manufacturer or installer, representing the owner. A qualified field technician representing the owner shall provide full time, on-site inspection during construction. The field technician shall work under the supervision of a professional engineer registered in the State of Florida with experience in landfill liner construction.

**9. Construction Quality Assurance.**

- a. CQA Plan and Observation.
  - 1) Liner 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.a(2)], and the conditions of this permit.
  - 2) The professional engineer or his designee shall be on-site at all times during construction (including liner system and leachate collection/detection systems) to monitor construction activities.
  - 3) The CQA Consultant and Monitors shall evaluate contractor activities; review and evaluate submittals, and MQC and CQC results; perform and evaluate CQA tests; and notify the Engineer of defective or non-conforming work. [CQAP 2.1.4]
  - 4) The CQA Laboratories shall be independent of the Contractors, Installers, and Manufacturers. [CQAP 2.1.7] The CQA Laboratories are responsible for conducting interface friction angle testing and internal shear testing (GCL).

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

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

- b. Construction Documents. 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 [CQAP 2.3.2]. Drawings which show the locations of geomembrane panel seams and repairs shall be kept on-site at all times for reference. Work shall not be concealed until required information is recorded.
- c. Spills.
  - 1) 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.
  - 2) The Department shall be notified in accordance with Specific Condition #C.6.b. of all fuel, oils, greases, solvents, lubricants, etc., that are spilled or leaked in areas that may discharge outside the liner system. The permittee shall ensure that all personnel working on the landfill site (including contractors and subcontractors) shall utilize all appropriate measures to prevent spills and leaks of fuel, solvents, lubricants, oils, etc.
- d. Defective work. 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 on-site 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.2 and #B.3. All areas not meeting the requirements of the contract specifications and CQA Plan shall be reworked by the Contractor to meet the specifications, CQA Plan and requirements of this permit.
- e. Night work. Construction activities such as geomembrane seaming, 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 for schedule makeup, and 1 day for weather emergencies, 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.
- f. Dewatering. 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. The surface shall be graded such that there is no ponding of water.
- g. Where sod is used over lined areas, pegging of sod shall not damage the liner.
- h. All portions of the bottom liner system including leachate collection/detection system components, shall be observed and documented by the CQA Monitor [CQAM].
- i. CQA daily reports shall include weather conditions (e.g., precipitation, temperature).

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

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

- j. Runoff from stockpiled soils shall not discharge to surface water bodies or wetlands such that Department surface water standards are violated at the point of discharge.
  - k. No solid waste shall be used for backfill.
  - l. Monitoring wells shall be protected at all times during construction. In the event that a monitoring well is damaged, the Department shall be notified in accordance with Specific Condition C.6.b.
10. **Soil Materials.**
- a. The backfill (material under GCL and/or subliner) shall be compacted to a minimum of 90% Standard Proctor maximum dry density. [Spec. 02222-3.08.C.; CQAP 3.5., Table 3-2] The backfill material shall meet the requirements of Specification Part 02222-2.01.
  - b. Surfaces adjacent to geosynthetics shall be smooth and free of depressions, rocks/stones (greater than ¼ inch dia.), sticks, roots, sharp objects, or debris of any kind [Spec. 02222-3.01].
  - c. The protective cover soil shall have a minimum permeability of  $1 \times 10^{-3}$  cm/sec [Spec. 02226-2.01.B.] and shall be a minimum of 12-inches thick. A sufficient number of permeability tests shall be performed on the drainage sand material to demonstrate the required permeability.
  - d. The trench gravel shall be a well-graded gravel that meets the requirements of Specification Part 02226-2.02, and shall have a minimum unit weight of 92 lb/c.f. [ref. SC#A.2.b., Response 20.d., June 8, 2006].
  - e. All laboratory tests required for the borrow sources for backfill, sand and gravel shall be done by an independent soils testing agency retained by the Owner [Spec. 02222-1.05.B.; 02226-1.05.B.]
  - f. Soil CQA testing frequencies for the final subgrade lift shall be doubled for the first five acres of liner system construction [CQAP Table 3-2]. Earthwork shall be tested by the CQAM for the tests and frequencies specified in CQAP Table 3-2.
  - g. The conformance testing of the drainage sand shall demonstrate that coefficient of uniformity ( $C_u$ ) of the sand is between 1 and 3. ( $1 < C_u < 3$ ) [ref. SC#A.2.a., Attachment H.3.a(3), Sheet 1 of 5].
  - h. Soil cover material shall be placed over the geocomposite such that the geocomposite is not damaged and no tensile stress is induced in the materials.
  - i. Prior to placement of materials on the subgrade, an as-built topographic survey shall be provided to the Engineer to verify conformance with the Drawings and Specifications. The subgrade shall be accepted by the Liner Installer and Engineer in writing before placement of the next layer.



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

(Specific Condition #B.10., cont'd)

j. During the construction of, and until the GCL is placed on the subgrade, the subgrade shall be inspected daily for signs of desiccation, excessive moisture, or other damage. In the event that the condition of the subgrade deteriorates, corrective actions shall be implemented immediately. Washouts or erosion of the subgrade shall be repaired immediately. The CQAM shall observe the condition of the subgrade and note areas of inadequacy, erosion or other deterioration in the Daily Reports.

k. The CQA consultant shall conduct leaching (SPLP) test for arsenic on the backfill materials. The frequency shall be one test for each 50,000 c.y. (as received) of material. The results shall demonstrate that the backfill material will not leach arsenic in excess of Department groundwater standard (10 µg/l). The results shall be reported with Method Detection Limits (MDLs) that are equal to or below the Department's water quality standards or criteria.

**11. Geosynthetic Materials.**

**a. Conformance testing.**

1) The CQA Consultant or designee (independent from the Contractor) shall take conformance samples of the geosynthetics materials. In all cases, the test results shall meet or exceed the property values in the Specifications and CQA Plan.

2) The geosynthetic materials shall not be accepted for use on the project until the results of the CQA conformance testing that indicate that the geosynthetics meet the specifications have been received.

3) CQA conformance tests shall be taken from the geosynthetics received at the jobsite and used on the project.

4) The geosynthetic materials shall conform to the following:

a) Woven geotextile separator: Spec. 02771-2.01.D; CQAP 4.3.2.

b) Non-woven geotextile in geocomposite (CDN): Spec. 02771-2.02.E., CQAP 4.3.2.

c) Geocomposite: Spec. 02773-2.02, 2.03; CQAP 4.4.2.

d) GCL: Spec. 02775-2.01.D.; CQAP 4.5.2.

e) Geomembrane: Spec. 02778-2.02.G.; CQAP 4.2.3.

5) Certificates of Compliance from the Manufacturer are acceptable in lieu of CQA testing for the following properties: resin certificates for raw materials for geosynthetics, water vapor transmission rates through geomembranes, Oxidation Induction Time (OIT), general chemical compatibility ratings, environmental stress crack test results. [CQAP 2.6.3.]

**b. Seaming.**

1) Seaming processes other than fusion or extrusion welding shall be approved by the Engineer and submitted to the Department prior to implementation.

2) Trial welds shall meet the requirements of Spec. 02778-3.04. Seaming apparatus or personnel which have failed trial welds shall not be used for seaming until passing welds are achieved [Spec. 02778-3.04.K].

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

(Specific Condition #B.11.b., cont'd)

- 3) Geomembrane seaming activities shall only be conducted during daylight hours and within the weather requirements of the Specifications, unless otherwise specifically approved by the Department. Seaming shall only take place with the "master seamer" present. No geomembrane seaming shall be performed unless the CQA manager/inspector is on-site.
- 4) The full-time resident CQA inspector shall observe no more than two geosynthetics seaming crews at any given time.
- 5) The procedure used to temporarily bond adjacent geomembrane panels together shall not damage the geomembrane. Solvent or adhesive shall not be used to bond geomembrane panels.
- 6) All seaming operations shall cease upon the presence of any precipitation (drizzle, sprinkle, fog, dew, etc.).
- 7) Seams shall be oriented parallel to the line of maximum slope, i.e., oriented along, not across the slope.
- 8) Trial welds shall have peel strength=88 ppi (fusion) and 76 ppi (extrusion), and must exhibit an FTB failure. Shear strength shall be 90% of the sheet strength. [Spec. 02778-3.04.I]

c. Destructive testing.

- 1) Destructive tests of the geomembrane seams shall be taken at random locations, at a minimum frequency of one test location per 500 feet of seam. This frequency shall not be based on an average throughout the entire facility. [CQAP 4.2.10.; Spec. 02778-3.17.B.1.]
- 2) All geomembrane seams (including trial welds) shall meet the requirements of Geomembrane Specifications (02778-3.04.I) and in all cases destructive tests conducted on the geomembrane field seams shall demonstrate that the failure is outside of the seam area. Five specimens shall be tested for each test method (peel and shear) [Spec. 02778-3.19.C]. Four out of five of the samples shall meet the minimum strength requirements for each test method (peel and shear) listed in Geomembrane Specifications (02778-3.04.I). The strength results shall not be averaged and both sides of fusion welds shall be tested.
- 3) Work shall not proceed with any materials which will cover locations which have been destructively tested or repaired until laboratory test results which demonstrate passing values are provided to the on-site CQA manager/inspector [Spec. 02778-3.17.C.].
- 4) All areas that fail nondestructive testing shall be marked by the on-site CQA inspector.
- 5) All welds shall be tested in shear and peel. Geomembrane seams shall not be tested by "hand" exclusively.

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

(Specific Condition #B.11., cont'd)

d. Transmissivity.

- 1) The transmissivity test results required by the Specifications shall be submitted to the Engineer for review before the proposed materials are approved for use on the project.
- 2) The transmissivity of the geocomposite shall be a minimum of  $3 \times 10^{-3} \text{ m}^2/\text{sec}$  based upon a gradient of 0.01 and a normal load of 15000 psf. [Spec. 02773-1.04.D.2]. CQA conformance transmissivity testing shall be conducted on the actual materials that will be used in the project.

e. Interface friction angles.

- 1) The minimum interface friction angle (peak) for all interfaces shall be **18.5 degrees with no cohesion** [ref. SC#A.2.a., Attachment J.1.d(3); A.2.b., Response 36.m., September 12, 2006]. Deviation from this requirement shall require a permit modification and shall demonstrate that adequate slope stability will be achieved.
- 2) Interface friction angle (direct shear) testing [Spec. 02775-1.05.D.4.; 02778-1.04.D.4.] and internal strength (shear) [Spec. 02775-2.01.D.4.] testing shall be conducted on the GCL. Manufacturer's interface friction angle test results are not considered to be CQA testing.

f. Wrinkles. The construction methods used shall minimize wrinkles in the geomembrane and geocomposites [Spec. 02773-3.04.F., 02778-3.05.A.]. Excessive wrinkles are wrinkles that fold over when stepped on or are at least 12 inches high. Excessive wrinkles shall be removed, and the areas repaired. Areas where wrinkles are removed shall be repaired and re-tested in accordance with the Specifications and CQA Plan [Spec. 02778-3.05.P.].

g. The liner system shall not be damaged by excessive traffic [Spec. 02778-3.05.I.].

h. The geocomposite drainage net (CDN) material and geotextile shall be handled (stored, placed, etc.) in a manner which prevents the infiltration of dirt and protects the CDN and geotextile from abrasion, punctures and excessive moisture. Geocomposite that is clogged by dirt shall be cleaned prior to placement.

i. The geomembrane shall always be kept dry and protected from wind damage. Sandbags or other temporary anchoring devices shall be removed prior to subsequent placement of materials over the geosynthetics. Temporary loading and/or anchoring devices (such as sand bags) shall be removed prior to placing the next layer (i.e., geocomposite or soil) over the geomembrane [Spec. 02771-3.04.B.].

j. The CQA Monitor shall inspect the geomembrane for imperfections, faulty work and suspect areas [Spec. 02778-3.05.T.].

k. The geomembrane shall be clean at the time when it is examined for defects, and during testing of repairs [Spec. 02778-3.23.A.].

l. The GCL shall have a saturated hydraulic conductivity of no greater than  $5 \times 10^{-9} \text{ cm/sec}$  [CQAP 4.5.2.].

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

(Specific Condition #B.11., cont'd)

m. GCL that has become prematurely hydrated or has become hydrated with no confining pressure shall not be used on this project [CQAP 4.5.5.].

n. No geomembrane shall be placed in an area that has become softened by precipitation or desiccated and cracked due to lack of moisture. No standing water or excessive moisture shall be allowed on the area to be lined before the geomembrane installation.

**12. Leachate collection and removal system.**

a. HDPE pipe or fittings shall not be dropped during loading, unloading or placement.

b. Under no circumstances shall pipe be laid in water, and no pipe shall be laid when trench or weather conditions are unsuitable for such work [Spec. 02711-3.04.]. Heat fusion weld beads projecting into the interior of the piping shall be removed so that the internal weld is flush with the interior of the pipe [Spec. 02711-3.04.F.].

c. All non-pressurized (perforated and non-perforated) HDPE piping shall be jet cleaned and video inspected prior to final acceptance in accordance with Specification Section 02711. The cleaning report and videotapes shall be provided as part of the Record Documents required in Specific Condition #B.3. [Spec. 02711-3.05.B.]

d. There shall be three flow meters installed in the leachate discharge lines. Two for the primary pumps and one for the secondary pump [Spec. 11300-2.04.B.]. Quantities of leachate from the leakage detection system shall be recorded (metered) separately from the quantities of leachate recorded from the leachate collection system.

e. Tire chips shall be four square inches or smaller with no protruding wires that could pose a threat to the integrity of the liner [Spec. 02226-2.03.B.]. The tire chip layer shall be a minimum of 1 foot thick [Spec. 02226-3.01.J.].

f. Markers used to observe the depth of the protective soil cover and tire chips shall be removed after use and shall not be abandoned in place [Spec. 02226-3.02.A.].

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

**1. Facility Operation Requirements.**

- a. The permittee shall operate this facility in accordance with Chapter 62-701, F.A.C., and Operation Permit nos. 35435-006-SO (Phases I-VI) and 35435-007-SO (Sections 7/8) or their successors.
- b. Leachate shall not be deposited, injected, dumped, spilled, leaked, or discharged in any manner to soils, surface water or groundwater outside the liner and leachate management systems at any time during the construction or operation of this facility.
- c. **In no event** shall waste be accepted in the **Section 9** portion of the Southeast County landfill until the following requirements have been completed and submitted by the Permittee, and approved by the Department:

- 1) Certification of Construction Completion requirements of Specific Conditions #B.2. and #B.3.,
- 2) Financial assurance requirements of Specific Condition #D.4.c.,
- 3) Construction of groundwater monitoring wells as required by Specific Conditions #E.3.,
- 4) Completion of initial sampling of new monitoring wells as required by Specific Condition #E.3.
- 5) Construction of the stormwater management system,
- 6) Revised Leachate Management Plan required by Specific Condition #C.8.b., and
- 7) Issuance of a separate permit or modifications of Operation Permit nos. 35435-006-SO (Phases I-VI) and 35435-007-SO (Sections 7/8) or their successors that authorizes operation of **Section 9**. The separate permit or modification request shall include operational procedures for protecting the liner system particularly during the placement of the first layer of waste in Section 9.

**2. Facility Personnel.** The owner or operator shall provide adequate personnel for constructing, operating, monitoring and maintaining the facility in an orderly, safe, and sanitary manner.

**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.

**4. Monitoring of Waste.** 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.6.b. below.

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

5. **Control of Nuisance Conditions.** The owner or operator shall control odors, vectors (mosquitoes, other insects, rodents), and fugitive particulates (dust, smoke) arising from the construction 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.

6. **Facility Maintenance and Repair.**

a. The site shall be properly maintained including maintenance of access roads, equipment, stormwater and leachate management systems (including pumps and piping), cover systems and berms, gas venting and/or monitoring and management systems, surface water management system, and groundwater monitoring system. Erosion and ponded water within landfill footprint shall be prevented.

b. In the event of damage to any portion of the landfill site facilities, unauthorized leachate discharges, 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 recurrence, 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 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.6.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.a., 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.6.b., unless otherwise approved by the Department.

7. **Stormwater Management.** The site shall have a surface water management system designed, constructed, operated, and maintained to prevent surface water from running on to waste filled areas, and a stormwater runoff control system designed, constructed, operated, and maintained to collect and control stormwater to meet the requirements of Chapter 62-330, F.A.C., and the requirements for management and storage of surface water in accordance with Rule 62-701.500(10), F.A.C., to meet applicable standards of Chapters 62-3, 62-302, and 62-330, F.A.C. The stormwater management system shall be inspected for damage and proper operation daily.

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

**8. Leachate Management.**

a. Leachate shall be managed in accordance with the requirements of Operation Permit nos. 35435-006-SO (Phases I-VI) and 35435-007-SO (Sections 7/8) or their successors, Rule 62-701.500(8), F.A.C., and other applicable Department rules.

b. Leachate Management Plan for Operations. The permittee shall submit an undated Leachate Management Plan (LMP) that includes calculations and other information to demonstrate adequate capacity to manage the additional leachate expected to be generated from the Section 9 area. The leachate estimated by the HELP model for Section 9 in addition to the leachate from Phases I-VI and Sections 7/8 shall be included in the updated LMP. The evaluation should use actual leachate data for Phases I-VI and Section 7/8, and HELP Model estimated data for Section 9. The Section 9 leachate generation should include at least 3 days' (average annual) quantities or one day's (peak daily) quantity, whichever is greater. In the event that the site does not have adequate capacity, waste shall not be disposed in Section 9 until adequate capacity is provided.

**SPECIFIC CONDITIONS: PART D - Recordkeeping**

1. **Report submittals.** Unless otherwise specified, all submittals, notifications, requests for permit modification, reports for compliance with this permit, etc. shall be sent to: Solid Waste Section, Department of Environmental Protection, Southwest District Office, 13051 North Telecom Parkway, Temple Terrace, Fl. 33637-0926, and Environmental Protection Commission of Hillsborough County, Waste Division, 3629 Queen Palm Drive, Tampa, FL 33619-1309.
2. **Operation Plan and Operating Record.** Each landfill owner or operator shall have an operational (long-term care, monitoring and maintenance) plan. A copy of the Department approved permit, 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., shall be maintained at the site.
3. **Waste Records.** The permittee shall maintain all records required by the construction specifications, CQA Plan and this permit on-site during construction, and shall provide copies to the Department upon request, unless specified otherwise.
4. **Financial Assurance.** The permittee shall provide adequate 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 September 1<sup>st</sup> each year** to: Solid Waste Manager, Solid Waste Section, Department of Environmental Protection, 13051 North Telecom Parkway, Temple Terrace, Fl. 33637-0926.
  - 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.
  - c. Proof of the initial funding of the financial assurance mechanism shall be submitted **no later than 60 days prior to** receipt of waste in the Section 9 portion of the landfill.



**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 certification 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 site shall extend horizontally 100 feet from the limits of the landfill disposal 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 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 disposal areas.

**3. Ground Water Monitor Well Locations.** The ground water monitoring well network for Sections 7, 8 and 9 shall be located as shown on Figure 2-1, entitled "Location of Monitoring Wells, Piezometers, and Surface Water Sampling Plan," prepared by JEA, received February 7, 2007 (**attached**), as follow:

WACS				
Well #	Testsite #	Aquifer	Designation	Location
TH-36A	20329	Surficial	Background	See Figure 2-1
TH-61	20493	Surficial (deep)	Detection	↓
TH-61A *	22595	Surficial (shallow)	Detection	↓
TH-64	20494	Surficial	Detection	↓
TH-68	22039	Surficial	Detection	↓
TH-69 *	22596	Surficial	Detection	↓
TH-70 *	22597	Surficial	Detection	↓
TH-71 *	22598	Surficial	Detection	↓

\* = to be installed **within 210 days of the abandonment** of wells TH-59, TH-59C, TH-60, TH-60C, TH-62, TH-63, P-4S, and P-4D, or after completion of earthwork for the stormwater management system, whichever is sooner. The construction shall be in accordance with the details provided in Table 2-1 entitled "Monitoring Well Characteristics Summary," as referenced in the "Ground Water Monitoring Plan Phases I-VI and Sections 7, 8 and 9, Southeast County Landfill, Hillsborough County, Florida," prepared by JEA (Attachment I.1.a., of the Engineering Report), revised November 2006 [ref. SC#A.2(3)]; documentation of well construction shall be submitted **within 30 days of installation** in accordance with Specific Condition #E.5.b., and #E.5.d.; an initial sampling event shall be conducted **within 7 days of well installation and development** for the parameters listed in Specific Condition #E.4.b.; results of the initial sampling event shall be submitted **within 30 days of receipt** from the analytical laboratory. **The permittee shall not omit more than two quarterly water quality sampling events at wells TH-69, TH-70 and/or TH-71.**

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

(Specific Condition #E.3., continued)

Well #	WACS Testsite #	Aquifer	Designation	Location
TH-59 **	20491	Surficial	Abandoned	See Figure 2-1
TH-59C **	22035	Surficial	Abandoned	↓
TH-60 **	20492	Surficial	Abandoned	↓
TH-60C **	22036	Surficial	Abandoned	↓
TH-62 **	22037	Surficial	Abandoned	↓
TH-63 **	22038	Surficial	Abandoned	↓
P-4S **	N/A	Surficial	Abandoned	↓
P-4D **	N/A	Surficial	Abandoned	↓

\*\* = to be abandoned at least 15 days prior to the initiation of Section 9 construction activities; documentation of well abandonment shall be submitted in accordance with Specific Condition #E.6.

Existing monitor wells TH-19A, TH-20A, TH-20B, TH-24, TH-26, TH-30, TH-32, TH-35, TH-35A, TH-41, TH-42, and TH-56 shall be considered as inactive and reserved for future use. These inactive monitor wells and the existing piezometers P-5D, P-6D, P-7D, P-8D and P-11D shall be included in the monthly water level measurements conducted by Hillsborough County.

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

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 62-520.420, F.A.C., and with the ground water minimum criteria referenced in Chapter 62-520.400, F.A.C. Compliance with ground water standards and minimum criteria shall be based on the analysis of unfiltered samples.

a. Ground water levels shall be measured at all active and inactive monitor wells, and all piezometers listed in Specific Condition #E.3., during all sampling events described in Specific Condition #E.4.b., and #E.4.c., to a precision of 0.01 foot. The ground water surface contour maps prepared for each sampling event shall include ground water elevations (using an industry approved datum) calculated for each monitor well and piezometer.

b. An "initial sampling event" shall be conducted at wells TH-69, TH-70 and TH-71 prior to initiating disposal of waste in Section 9, and at all other new or replacement wells **within 7 days of well installation and development** for analysis of the following parameters:

**Field Parameters**

Static water levels  
before purging  
Specific conductivity  
pH  
Dissolved oxygen  
Temperature  
Turbidity  
Colors & sheens  
(by observation)

**Laboratory Parameters**

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

Results of initial sampling event shall be submitted **within 30 days of receipt** from the analytical laboratory.

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

(Specific Condition #E.4., continued)

c. Routine ground water sampling events shall be conducted **quarterly** for analysis of the following parameters:

**Field Parameters**

Static water levels  
before purging  
Specific conductivity  
pH  
Dissolved oxygen  
Temperature  
Turbidity  
Colors & sheens  
(by observation)

**Laboratory Parameters**

Total ammonia - N  
Chlorides  
Iron  
Mercury  
Nitrate  
Sodium  
Total dissolved solids(TDS)  
Parameters listed in 40 CFR Part 258,  
Appendix I

The quarterly ground water sampling events shall routinely be conducted at "shallow" well TH-61A. In the event that "shallow" well TH-61A is dry or contains insufficient water to allow collection of a representative ground water sample, the quarterly sampling event shall be conducted at adjacent "deep" well TH-61.

Proposed monitor wells TH-69, TH-70 and TH-71 shall be included in the routine ground water sampling events during the quarter following completion of the "initial sampling event" in accordance with the schedule provided in Specific Condition #E.3.

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

a. Prior to the construction of all new or replacement wells and piezometers (excluding proposed wells TH-61A, TH-69, TH-70 and TH-71) the permittee shall request and receive Department approval of a minor permit modification in accordance with Specific Condition #A.3.a.

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 #62-522.900(3), Monitor Well Completion Form (**attached**).

c. **Within 7 days of well completion and development**, each new or replacement well shall be sampled for the parameters listed in Specific Condition #E.4.b., to comply with the requirements of Rules 62-701.510(8)(a) and 62-701.510(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, using an industry approved 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.

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

6. **Well Abandonment.** All active and inactive monitor wells, and piezometers not listed in Specific Condition #E.3., and not a part of the approved Water Quality Monitoring Plan shall be plugged and abandoned in accordance with Rule 62-532.440, F.A.C., and the rules of 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.

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 minimum criteria in any detection well, 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 as 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 in writing within 14 days of this finding. Upon notification by the Department, the Permittee shall initiate evaluation monitoring as described in Rule 62-701.510(7)(a), F.A.C. If monitoring parameters are detected at concentrations significantly above background water quality, and exceed the Department's water quality standards or minimum criteria in any compliance well, the Permittee shall submit a preventive measures plan and initiate corrective action as described in Rule 62-701.510(7)(b), F.A.C.

8. **Surface Water Sampling.**

a. 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 meet or be lower than the criteria established for the individual parameters to demonstrate compliance with Class III (predominantly fresh water) surface water criteria presented in Chapter 62-302, F.A.C. Compliance with surface water criteria will be based on analysis of unfiltered samples.

b. Surface water sample collection points shall be located as shown on Figure 2-1, entitled "Location of Monitoring Wells, Piezometers, and Surface Water Sampling Plan," prepared by JEA, received February 7, 2007 (**attached**), as follow:

Surface Water #	WACS Testsite #	Location
1-A *	831	Northern portion of Smith Lake (staff gauge)
1-D	834	Western portion of Smith Lake
3A	836	Drainage ditch to Long Flat Creek at SW boundary
3B2B	837	Drainage ditch to Long Flat Creek, WNW of TH-30
3C2	838	Drainage ditch to Long Flat Creek at NW boundary

\* = water elevation measurement only at Station #1-A

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.

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

(Specific Condition #E.8., continued)

c. Surface water sampling shall be conducted **semi-annually** in accordance with the Department's SOPs to comply with the requirements of Rule 62-701.510(6)(e), F.A.C., for analysis of the following parameters:

<u>Field Parameters</u>	<u>Laboratory Parameters</u>	
Specific conductivity	Unionized ammonia	Total organic carbon (TOC)
pH	Total hardness	Fecal coliform
Dissolved oxygen	Biochemical oxygen demand (BOD <sub>5</sub> )	Total phosphates
Turbidity	Copper	Chlorophyll A
Temperature	Iron	Total nitrogen
Colors and sheens (by observation)	Mercury	Chemical oxygen demand (COD)
	Nitrate	Total suspended solids (TSS)
	Zinc	Those parameters listed in
	Total dissolved solids (TDS)	<u>40 CFR Part 258, Appendix I</u>

9. **Leachate Sampling.**

a. Individual grab samples of leachate influent (unfiltered) shall be collected from the each of the leachate sumps as described in Specific Condition #E.9.b., through #E.9.d., below, to comply with the Department's SOPs and the requirements of Rules 62-701.510(5) and 62-701.510(6)(c), F.A.C. Grab samples of leachate influent shall be collected through sampling ports that have the capability of reducing the flow to less than 500 milliliters per minute to minimize aeration of the sample.

b. Leachate samples shall be collected at the locations shown on Figure 2-1, entitled "Location of Monitoring Wells, Piezometers, and Surface Water Sampling Plan," prepared by JEA, received February 7, 2007 (**attached**), as follow:

<u>Leachate Sampling Location #</u>	<u>WACS Testsite #</u>	<u>Location</u>
007 (Section 7 and Section 8)	20495	See Figure 2-1
009 (Section 9)	22599	↓

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

<u>Field Parameters</u>	<u>Laboratory Parameters</u>
Specific conductivity	Total ammonia - N
pH	Bicarbonate
Dissolved oxygen	Chlorides
Colors & sheens (by observation)	Iron
	Mercury
	Nitrate
	Sodium
	Total dissolved solids (TDS)
	Those parameters listed in
	<u>40 CFR Part 258, Appendix II</u>

d. If the annual leachate influent analyses indicate that a contaminant listed in 40 CFR Part 261.24 exceeds the regulatory level listed therein, the permittee shall initiate monthly sampling and analysis of the parameters listed in Specific Condition #E.9.c., and shall notify the Department in writing. 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**

(Specific Condition #E.9., continued)

- e. The locations, parameters, and frequencies for leachate treatment plant effluent and sludge sample collection and analyses shall be conducted in accordance with the solid waste operation permit for SCLF, Phases I-VI (Specific Condition #32 of current permit #35435-006-SO, or of the appropriate Specific Condition of the successor operating permit).

10. **Water Quality and Leachate Reporting Requirements.** The permittee shall submit to the Department the results of the routine ground water sampling events (SC#E.4.c.), **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** for the quarterly periods October 1-December 31, January 1-March 31, April 1-June 30, and July 1-September 30, respectively. The permittee shall submit to the Department the results of routine surface water sampling events (S.C.#E.8.c.), **by January 15<sup>th</sup> and July 15<sup>th</sup> of each year** for the semi-annual periods July 1-December 31 and January 1-June 30, respectively. The permittee shall submit to the Department the results of the annual leachate influent sampling events (SC#E.9.c.) **by January 1<sup>st</sup> of each year.** The permittee shall submit to the Department the results of any initial ground water sampling events (SC#E.4.b.) or any monthly leachate influent sampling event (SC#E.9.d.) **within 30 days of receipt of results from the laboratory.** 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 ground water contour maps representing conditions at the time of ground water sampling, and a summary of any ground water quality standards or minimum criteria that are exceeded. The ground water surface contour maps shall include ground water elevations measured at all the active and inactive monitor wells, and piezometers listed in Specific Condition #E.3. The results shall be sent to: Solid Waste Section, Department of Environmental Protection, Southwest District Office, 13051 North Telecom Parkway, Temple Terrace, FL 33637-0926; and to: Environmental Protection Commission of Hillsborough County, Waste Division, 3629 Queen Palm Drive, Tampa, FL 33619-1309.

There are two options for reporting monitoring data:

- a. **Paper Reporting.** If this option is selected, all ground water, surface water and leachate influent sampling event analytical results shall be reported on Department Form 62-522.900(2), Ground Water Monitoring Report (**attached**) that is 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.

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

(Specific Condition #E.10., continued)

b. Electronic Reporting. Alternatively, all ground water, surface water and leachate influent sampling event analytical results may be submitted as an electronic data deliverable (EDD) on compact disc or flash drive 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.

11. **Monitoring Plan Evaluation.** The monitoring plan evaluations shall be conducted and submitted in accordance with the solid waste operation permit for SCLF, Phases I-VI (Specific Condition #42.b. of current permit #35435-006-SO) and for SCLF, Sections 7/8 (Specific Condition #42. of current permit #35435-007-SO), or of the appropriate Specific Condition of the successor operating permit. 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 closure 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, 13051 North Telecom Parkway, Temple Terrace, FL 33637-0926; and to: Environmental Protection Commission of Hillsborough County, Waste Division, 3629 Queen Palm Drive, Tampa, FL 33619-1309.

PERMITTEE: Hillsborough County Solid Waste Mgmt Dept.  
Mr. Barry Boldissar, Director

PERMIT NO: 35435-011-SC/01  
Southeast County Landfill

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

[Landfill gas requirements are listed in Operation Permit nos. 35435-006-SO (Phases I-VI) and 35435-007-SO (Sections 7/8) or their successors.]



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

**1. Closure Requirements.**

**a. Long-Term Care Requirements.**

1) The owner or operator shall perform long-term care for the site in accordance with Rule 62-701.620, F.A.C., and the conditions of Operation Permit nos. 35435-006-SO (Phases I-VI) and 35435-007-SO (Sections 7/8) or their successors.

2) Long-term care includes, but is not limited to, water quality, leachate and gas monitoring, maintenance of the final cover system, maintenance of the leachate collection and removal system, erosion control, and the prevention of ponding within disposal areas.

**b. Closing Requirements.**

1) **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. Use of Closed Landfill Areas.**

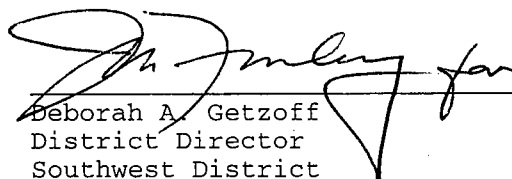
a. There are currently no closed portions of the Southeast County Landfill.

b. Use of closed landfill areas requires consultation with and approval by the Department prior to conducting these activities in accordance with Rules 62-701.610(7) and (8), F.A.C. The Department retains regulatory control over any activities which may affect the integrity of the environmental protection measures such as the landfill drainage systems; leachate collection, removal and storage systems; bottom liner system; final cover system (soil and vegetation); water quality monitoring systems; gas management and monitoring systems; and stormwater controls. **Prior to implementation**, the owner or operator shall submit a plan for any proposed uses of the closed portions of the landfill to the Department for approval. This plan shall include a description of the proposed use, and evaluation of the impact on the existing landfill systems (e.g. final cover, leachate collection, bottom liner), engineering designs, calculations and plans as appropriate, etc. The proposed activity shall not be initiated without prior Department approval, and may require a permit modification or separate permit.

**3. 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 Hillsborough County, 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.	October 1, 2011	Submit permit renewal application
A.9.a.	Within 24 hours of discovery  Within 7 days of verbal notification	Notification of sinkholes or subsurface instability  Written notification & corrective action plan
B.2.a.	Within 60 days of completion	Submit certification of construction completion, record drawings, updated LMP, etc.
B.4.a.	At least 30 days prior to construction	Submit complete plans, specification, CQA plan, or statement that no changes have occurred, org. chart with parties/roles,
B.4.b.	At least 30 days prior to installation of the liner	Submit interface friction testing results
B.4.c.	No later than 2 weeks prior to construction	Notify of tie-in construction, non-standard seaming methods, construction of penetrations/boots
B.4.d.	At least 10 days prior	Submit dewatering plan, SPLP test results for backfill, sand permeability tests
B.4.e.	At least 72 hours prior	Notify of spark testing
B.5.	At least 1 week prior	Notify of preconstruction meeting
B.6.a.	No later than 1 week after pre-construction meeting	Submit meeting minutes
B.6.b.	Monthly, by the 15 <sup>th</sup> each month	Submit monthly progress report & schedule
B.9.e.	At least 1 week prior for schedule makeup and 1 day prior for weather emergencies	Notify of night work
C.6.b.	Within 24 hours of discovery  Within 7 days of verbal notification	Notification of: sinkholes, failure of landfill systems or equipment, etc.  Written notification & corrective action plan
C.6.c.	Within 60 days of notification	Corrective actions completed for dry or damaged wells
C.6.d.	Within 30 days of notification	Corrective actions completed for leachate management system
D.4.a.	Annually, by September 1 <sup>st</sup> each year	Submit revised cost estimates
D.4.b.	Annually	Submit proof of funding
D.4.c.	No later than 60 days prior to receipt of waste	Submit proof of initial funding

**ATTACHMENT 1**

<b>Specific Condition</b>	<b>Submittal Due Date</b>	<b>Required Item</b>
E.3.	Within 210 days of permit issuance	Install monitoring wells TH-61A, TH-69, TH-70, TH-71
E.3., E.5.b.	Within 30 days of installation of new wells	Submit documentation of well construction
E.3., E.4.b.	Within 7 days of well installation & development	Conduct initial sampling event
E.3., E.10.	Within 30 days of receipt of results	Submit initial sampling results
E.3., E.6.	At least 15 days prior to initiation of Section 9 construction	Abandon Wells #TH-59, TH-59C, TH-60, TH-60C, TH-62, TH-63, P-4S, P-4D
E.10.	By January 15 <sup>th</sup> , April 15 <sup>th</sup> , July 15 <sup>th</sup> , and October 15 <sup>th</sup> each year	Submit groundwater monitoring results
	By January 15 <sup>th</sup> and July 15 <sup>th</sup> each year	Submit surface water monitoring results
	By January 1 <sup>st</sup> each year	Submit leachate influent sampling results

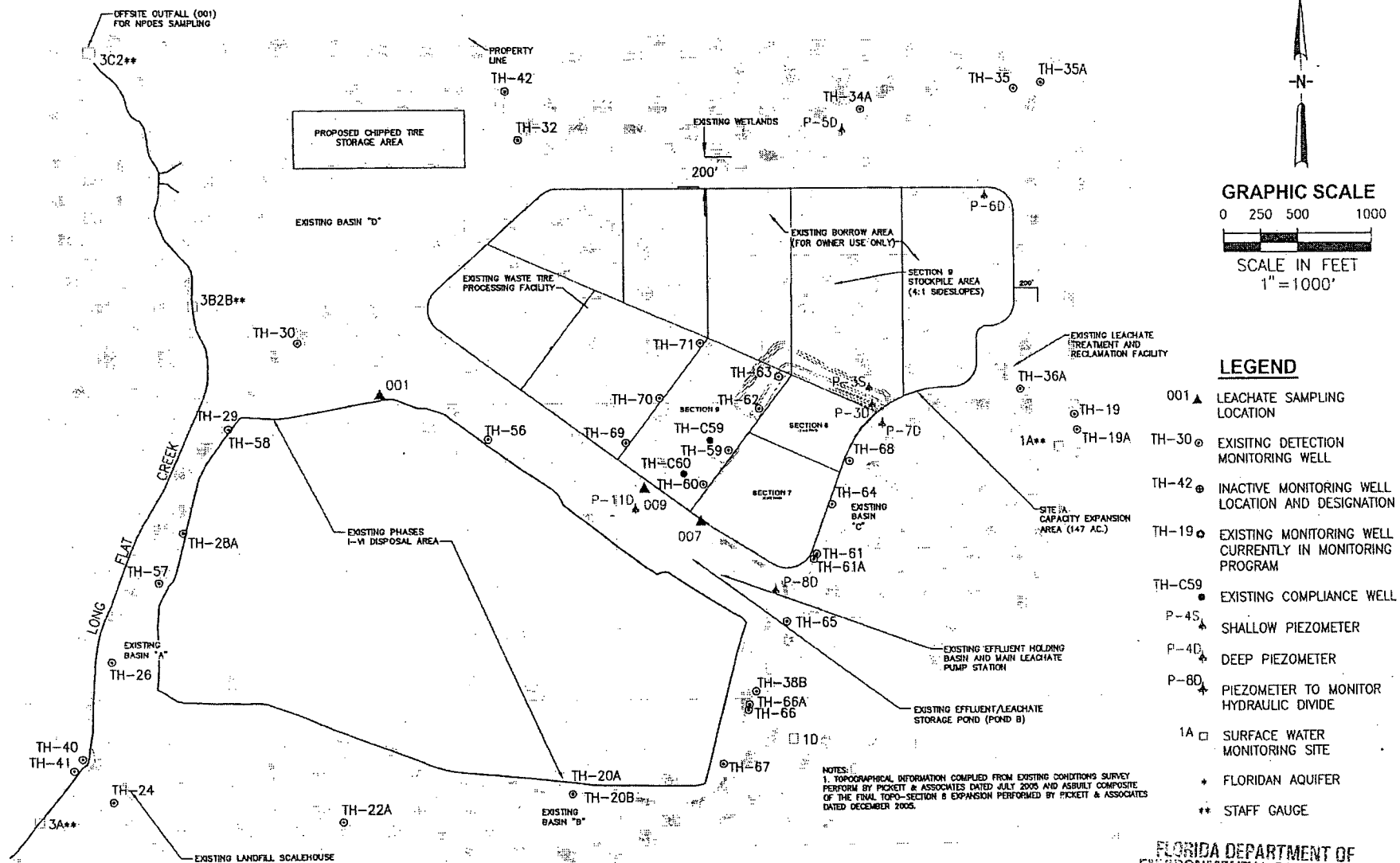


FIGURE 2-1  
 LOCATION OF MONITORING WELLS, PIEZOMETERS, AND SURFACE WATER SAMPLING PLAN  
 HILLSBOROUGH COUNTY, FLORIDA

FLORIDA DEPARTMENT OF  
 ENVIRONMENTAL PROTECTION

FEB - 7 2007

SOUTHWEST DISTRICT  
 TAMPA

**JONES  
 EDMUNDS**

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

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

## MONITOR WELL COMPLETION REPORT

DATE: \_\_\_\_\_

INSTALLATION NAME: \_\_\_\_\_

DEP PERMIT NUMBER: \_\_\_\_\_ GMS NUMBER: \_\_\_\_\_

WELL NUMBER: \_\_\_\_\_ WELL NAME: \_\_\_\_\_

DESIGNATION: Background \_\_\_\_\_ Immediate \_\_\_\_\_ Compliance \_\_\_\_\_

LATITUDE/LONGITUDE: \_\_\_\_\_

AQUIFER MONITORED: \_\_\_\_\_

INSTALLATION METHOD: \_\_\_\_\_

INSTALLED BY: \_\_\_\_\_

TOTAL DEPTH: \_\_\_\_\_ (bls) DEPTH OF SCREEN: \_\_\_\_\_ (bls)

SCREEN LENGTH: \_\_\_\_\_ SCREEN SLOT SIZE: \_\_\_\_\_ SCREEN TYPE: \_\_\_\_\_

CASING DIAMETER: \_\_\_\_\_ CASING TYPE: \_\_\_\_\_

LENGTH OF CASING: \_\_\_\_\_ FILTER PACK MATERIAL: \_\_\_\_\_

TOP OF CASING ELEVATION (MSL): \_\_\_\_\_

GROUND SURFACE ELEVATION (MSL): \_\_\_\_\_

COMPLETION DATE: \_\_\_\_\_

DESCRIBE WELL DEVELOPMENT: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

POST DEVELOPMENT WATER LEVER ELEVATION (MSL): \_\_\_\_\_

DATE AND TIME MEASURED: \_\_\_\_\_

REMARKS: (soils information, stratigraphy, etc.): \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

REPORT PREPARED BY: \_\_\_\_\_  
(name, company, phone number)

NOTE: PLEASE ATTACH BORING LOG.

(bls)= Below Land Surface

Florida Department of Environmental Protection

Twin Towers Office Bldg. 2600 Blair Stone Road Tallahassee, Florida 32399-2400

DEP Form # 62-522.900(2)

Form Title Ground Water Monitoring Report

Effective Date \_\_\_\_\_

DEP Application No. \_\_\_\_\_

GROUND WATER MONITORING REPORT

Rule 62-522.600(11)

PART I GENERAL INFORMATION

- (1) Facility Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ Zip \_\_\_\_\_  
Telephone Number ( ) \_\_\_\_\_
- (2) The GMS Identification Number \_\_\_\_\_
- (3) DEP Permit Number \_\_\_\_\_
- (4) Authorized Representative Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ Zip \_\_\_\_\_  
Telephone Number ( ) \_\_\_\_\_
- (5) Type of Discharge \_\_\_\_\_
- (6) Method of Discharge \_\_\_\_\_

Certification

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

Date: \_\_\_\_\_

Signature of Owner or Authorized Representative

PART II QUALITY ASSURANCE REQUIREMENTS

Sample Organization Comp QAP # \_\_\_\_\_

Analytical Lab Comp QAP # /HRS Certification # \_\_\_\_\_

\*Comp QAP # /HRS Certification # \_\_\_\_\_

Lab Name \_\_\_\_\_

Address \_\_\_\_\_

Phone Number ( ) \_\_\_\_\_



Permitting Application - Events

83 of 90

**Events Scheduled**

Site # 0035435 Site Name HILLSBOROUGH CO. SOUTHEAST LF (LF1)

Permit # 0035435-011-SC Type/Subtype SC / 01 Received 03/22/2006

Project # 011 Project Name SECTION 9 CLASS I LF

> ISSUE PERMIT: Issued

Event	Begin Date	Period	Due Date	Rmn	Status	End Date
Completeness Review	09/13/2006	30	10/13/2006		Incomplete	10/12/2006
RESET CLOCK	10/12/2006	1	10/13/2006		Done	10/12/2006
Awaiting Additional Information	10/12/2006	45	11/26/2006		Received	02/07/2007
Completeness Review	02/07/2007	30	03/09/2007		Complete	02/07/2007
Determine Agency Action	02/07/2007	90	05/08/2007		Issue	02/15/2007
Mail Public Notice of Intent to Applicant at	02/15/2007	10	02/25/2007		Done	02/15/2007
Date of Publication	02/15/2007	999	11/10/2009		Published	02/19/2007
Issue Final Permit	02/19/2007	14	03/05/2007		Issued	03/12/2007
ISSUE PERMIT	03/12/2007	1	03/13/2007		Issued	03/12/2007
STOP CLOCK	03/12/2007	1	03/13/2007		Done	03/12/2007
STOP CLOCK	02/15/2007	1	02/16/2007		Done	02/15/2007



Permitting Application - Permit Detail and Log Permit											
<b>SITE Permit</b>											
Site Name	HILLSBOROUGH CO. SOUTHEAST LF (LF1)						Site #	0035435			
County	HILLSBOROUGH		Comments	N		RPAs	N		# Cases	0	
<b>Project</b>											
Permit #	0035435	011	SC	Project #	011	Received	03/22/2006		CRA #	246936	
Permit Office	SWD (DISTRICT)					Agency Action	Issued				
Project Name	SECTION 9 CLASS I LF				Desc						
Type/Sub/Des	SC	01	SANI. LANDFILL CLASS I				COE #				
Logged	03/23/2006		Issued	03/12/2007		Expires	03/12/2012		OGC		
Fee	10000.00		Fee Recd	10000.00		Dele			Override	NONE	
<b>Related Party</b>											
Role	APPLICANT				Begin	03/23/2006		End			
Name	GOLDISSAR, BARRY M				Company	HILLSBOROUGH COUNTY RESOURCE RECOVERY					
Address	601 EAST KENNEDY BLVD										
City	TAMPA				State	FL	Zip	33602		Country	U.S.A.
Phone	813.272.2900		Fax			Email					
<b>Processors</b>											
Processor	PELZ_S				Y	Active	03/23/2006		Inactive		
<a href="#">Events</a>											

Permitting Application - Events

90 of 90

Site #  Site Name

Permit #  Type/Subtype  /  Received

Project #  Project Name

> Publish Notice of Application: Pending

Event	Begin Date	Period	Due Date	Rmn	Status	End Date
Receive Request	03/22/2006	1	03/23/2006		Done	03/22/2006
Fee Verification	03/22/2006	2	03/24/2006		Sufficient Fee	03/22/2006
Completeness Review	03/22/2006	30	04/21/2006		Incomplete	04/21/2006
RESET CLOCK	04/21/2006	1	04/22/2006		Done	04/21/2006
Awaiting Additional Information	04/21/2006	45	06/05/2006	45	Pending	
Publish Notice of Application	03/22/2006	75	06/05/2006	45	Pending	

Permitting Application - Permit Detail and Log Permit										
<b>SITE/Permit</b>										
Site Name	HILLSBOROUGH CO. SOUTHEAST LF (LF1)						Site #	0035435		
County	HILLSBOROUGH		Comments	N		RPAs	N		# Cases	0
<b>Project</b>										
Permit #			Project #	011		Received	03/22/2006		CRA #	246936
Permit Office	SWD (DISTRICT)				Agency Action	Pending				
Project Name	SECTION 9 CLASS I LF				Desc					
Type/Sub/Des	SC / 01		SANI LANDFILL CLASS I				COE #			
Logged	03/23/2006		Issued			Expires			OGC	
Fee	10000.00		Fee Recd	10000.00		Dele			Override	NONE
<b>Related Party</b>										
Role	APPLICANT				Begin	03/23/2006		End		
Name	BOLDISSAR, BARRY M				Company	HILLSBOROUGH COUNTY RESOURCE RECOVERY				
Address	601 EAST KENNEDY BLVD									
City	TAMPA			State	FL	Zip	33602		Country	U.S.A.
Phone	813-272-2900		Fax			Email				
<b>Processors</b>										
Processor	PELZ_S		Y	Active	03/23/2006		Inactive			Events

Florida Department of Environmental Protection - Enterprise Applications

Query Coll Rpts Find Exit CRA Window

ORACLE

Cash Receiving Application - Collection Point Log Remittance

Collection Point Log Remittance

AREA **SWD** Total **\$10,000.00**

Remittance **006711** Type **CP** Received Date **03/22/2006** Status **RECEIVED**

SYSRCPT **636723** PNR  Check # **02439984** Amount **10,000.00**

SSN/FEM  Name **HILLSBOROUGH COUNTY BOCC**

First  Middle  Title  Sur

Address1 **PO BOX 1110** Short Comments **SO 35435-011**

Address2

City **TAMPA** ST **FL** Zip **33601** Country

Distr

**PAYMENT(S)**

Payment#	Area	Object	Code/Description	Payment Amount	Reference#	Applic	Fund *	status
736732	SWD	002244	SOLID WASTE-CON	\$10,000.00		PA	PFTF	COMPLETE

COMMIT FREQUENTLY **\$10,000.00** Payment total

Press <TAB> to accept Collection Point or enter F&A

start

Florida Department of Environmental Protection - Enterprise Applications

Permits Events Payment DESTAR Data Entry Site Equality DE Party Affiliation Let Help Exit

ORACLE

Permitting Application - Permit Detail and Log Permit

**SITE Permit**

Site Name **HILLSBOROUGH CO. SOUTHEAST LF (LF1)** Site # **0035435**

County **HILLSBOROUGH** Comments **N** RPAs **N** # Cases **0**

**Project**

Permit #  Project # **011** Received **03/22/2006** CRA # **246936**

Permit Office **SWD (DISTRICT)** Agency Action **Pending**

Project Name **SECTION 9 CLASS I LF** Desc

Type/Sub/Des **SC / 01** SANI LANDFILL CLASS I COE #

Logged **03/23/2006** Issued  Expires  OGC

Fee **10000.00** Fee Recd **10000.00** Del  Override **NONE**

**Related Party**

Role **APPLICANT** Begin **03/23/2006** End

Name **BOLDISSAR, BARRY M** Company **HILLSBOROUGH COUNTY RESOURCE RECOVERY**

Address **601 EAST KENNEDY BLVD**

City **TAMPA** State **FL** Zip **33602** Country **U.S.A.**

Phone **813-272-2900** Fax  Email

**Processors**

Processor **MORGAN S** Active **03/23/2006** Inactive  Events

Enter Y if this is the PRIMARY processor

start