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

June 3, 2009

CERTIFIED MAIL #7008 0150 0003 4893 7568
RETURN RECEIPT REQUESTED

NOTICE OF PERMIT

Ms. Susan Metcalfe, P.G., Director
Citrus County Solid Waste Division
P.O. Box 340
Lecanto, Fl. 34460-0340

RE: Citrus County Central Class I Landfill 7-Acre Re-closure
Pending Permit No.: 21375-014-SF/01, Citrus County
WACS No.: SWD/09/39859

Dear Ms. Metcalfe:

Enclosed is permit number 21375-014-SF/01, issued pursuant to Section(s) 403.087(1), Florida Statutes.

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

The undersigned duly designated deputy agency clerk hereby certifies that this **NOTICE OF PERMIT** and all copies were mailed or transmitted electronically to the addressee and the listed persons before the close of business on June 3, 2009 to the listed persons.
Clerk Stamp

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

Ann Bailey 6/3/09
Clerk Date

DAG/sgm
Enclosures
Copies furnished to:
Citrus County Elected Officials Notification
Dan Cooper, P.E., SCS Engineers, dcooper@SCSEngineers.com
Patty Jefferson, Citrus County, patty.jefferson@bocc.citrus.fl.us
Frank Hornbrook, FDEP, Tallahassee (e-mail)
Ronni Moore, OGC Tallahassee (e-mail)
John Morris, P.G., FDEP Tampa (e-mail)
Susan Pelz, P.E., FDEP Tampa (e-mail)

Florida Department of Environmental Protection

Southwest District
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926
Telephone: 813-632-7600

Charlie Crist
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PERMITTEE
Citrus County Board of County
Commissioners
110 N. Apopka Avenue
Inverness, FL 34450

Attention:
Ms. Susan Metcalfe, P.G., Director
Citrus County Public Works,
Division of Solid Waste Mgmt.

PERMIT/CERTIFICATION
WACS ID No: SWD/09/39859
Permit No: **21375-014-SF/01**
Date of Issue: **06/03/2009**
Expiration Date: **06/03/2014**
County: Citrus
Lat/Long: 28°51'07"
82°26'12"
Sec/Town/Rge: 1/19S/18E
Project: Citrus County Central 7-Acre Closed Class I Landfill Re-closure 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, 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 referenced in Specific Condition #A.2., and made a part hereof and specifically described as follows:

To **construct** a final cover system for re-closure of a 7-acres portion of a closed Class I landfill, referred to as the **Citrus County Central 60-Acre Closed Class I Landfill** subject to the specific and general conditions attached, located near **S.R. 44, 3 miles east of Lecanto, Citrus County, Florida**. The specific conditions attached are for the construction of a:

1. Final cover system
2. Passive gas venting and flare system within 7-acre lined landfill area

General Information - 7-Acre Lined Closed Class I Disposal Area

Disposal acres	Approximate 7.0 acres
Bottom liner design & LCS design	Single, 60 mil PVC liner, sand drainage layer to 2 leachate collection risers
Bottom elevation of cell	Approximate +60.00 feet NGVD
Final top elevation at buildout (including cover)	max. +130.50 feet NGVD
Final Cover System	12” soil sub-base, 40-mil LLDPE, 24” protective soil layer
Slopes	max. 5H:1V side slopes, 3% top slope to 1% stormwater drainage swales

Replaces Permit No.: 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 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 Statues 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 Closed 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 the 7-Acre Lined Closed Class I Re-closure and related systems (including final cover and passive gas venting and flare system) at the Citrus County Central Landfill in accordance with Department rules and the reports, plans and other information prepared by SCS Engineers (SCS) (unless otherwise specified) as follows:

a. Citrus County Central Closed Landfill [7-Acre] Re-Closure Closure Construction Permit (one 3-ring binder and plan set) dated and received November 18, 2008, as revised, replaced or amended (information inserted into original*) dated and received February 5, 2009. This information includes, but is not limited to:

1) *Construction Quality Assurance Plan*, Attachment P-1 [CQAP], dated January 30, 2009

2) *Technical Specifications*, Attachment E-2, [Specs.], dated November 16, 2008 as revised February 5, 2009; and

3) Plan Sheets titled, Citrus County Solid Waste Management Division 7-Acre Closed Landfill Re-Closure Construction Drawings, February 2009 (10 Sheets) received February 5, 2009.

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.

b. This permit does not authorize landfill operation. 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 7-Acre Closed Class I Landfill Re-Closure final cover system and related passive gas venting and flare system and other related appurtenances, only.

*** see OCULUS for un-collated submittals**

SPECIFIC CONDITIONS: PART A –Solid Waste Facility General Requirements

4. **Permit Renewal. On or before November 15, 2013** the permittee shall notify the Department in writing or electronically of its intent to apply for renewal of this permit and of the anticipated date of submittal of the permit renewal application. **No later than March 15, 2014**, 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. In the event that the regulations governing this permitted construction are revised, the permit renewal shall include modification of those specific construction conditions which are affected by the revision of regulations to incorporate those revisions in accordance with Specific Condition A.8.

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 7-Acre Closed Class I Landfill Re-Closure final cover system and related passive gas venting and flare system and other 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.

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, i.e. limits of liner.

      2) As-built locations and details of liner tie-ins;

      3) Daily construction reports;

      4) 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;

      5) All geomembrane destructive test results;

      6) A compact disc or other electronic media that includes all available photographs documenting all stages of the construction project [ref. CQAP, Sec. 7.2];

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

7) Gas vent construction diagrams, including elevation at top of ground, total depth of vent, depth, thickness and description of soil or waste strata and the occurrences of any water-bearing zones.

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 qualified parties involved in CQA and CQC for the project [ref. CQAP, Sec.. 3];

3) A copy of the contractor's Excavation Plan [Spec. 01 30 10-1.01.B.2.].

b. **At least 30 days prior to initiation** of installation of the liner, the results of the interface friction testing [Spec. 33 05 20-2.03.D.] using actual construction materials shall be submitted to the Department. The results must demonstrate that the all interfaces exhibit a minimum interface friction angle of 25.5 degrees. [Spec. 33 05 20-2.03.D.]. 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.

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) bottom liner tie-in transition areas;

2) seaming performed using a method other than double-fusion (wedge) or extrusion welding; and

3) welding of top liner to leachate collection riser.

SPECIFIC CONDITIONS: PART B – Construction Requirements

5. **Pre-Construction Meeting Notification.** Department Solid Waste Permitting staff 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 of the Southwest District Office. A copy of the minutes from the pre-construction conference shall be submitted to the Department 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 15th 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. 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, gas system construction, etc.),

2) A summary of submittals and change order requests,

3) Weekly progress meeting minutes [Spec. 01 20 10-1.02] and

4) 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., liner penetrations, bottom liner tie-in, etc.).

7. **Construction Tolerances.**

a. The construction tolerance for elevations and grades shall be ±0.20 ft vertical and ±0.50 ft horizontal [Spec. 01 50 01-3.01.H.].

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.

c. All soil layer thicknesses are minimum requirements.

SPECIFIC CONDITIONS: PART B – Construction Requirements

8. **Construction Quality Assurance.**

a. 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(1)], and the conditions of this permit. The professional engineer or his designee shall be on-site at all times during construction (including liner system and gas management system) to monitor construction activities.

b. A complete set of construction drawings and shop drawings, which include daily additions, deletions and revisions, shall be maintained on-site at all times for reference. Drawings which show the locations of geomembrane panel seams and repairs shall be kept on-site at all times for reference. Work shall not be concealed until required information is recorded.

c. All liquid encountered during construction inside the landfill footprint is leachate and shall be managed appropriately. 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.

d. 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. 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 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. Where sod is used over lined areas, pegging of sod shall not be allowed.

g. All portions of the final cover system and gas management system construction, shall be observed and documented by the CQA Consultant.

h. CQA daily reports shall include weather conditions (e.g., precipitation, temperature).

i. All excavations shall be maintained free from standing water. The surface shall be graded such that there is no ponding of water.

j. Excavated material to be stockpiled in a location outside the lined 7-acre footprint shall be free of solid waste. Excavated materials used for earthfill shall meet the requirements of Specification Section 31 20 00. [ref. Spec. 31 20 00-2.05.A.]

SPECIFIC CONDITIONS: PART B – Construction Requirements

(Specific Condition #B.8., cont'd)

k. 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.

l. 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 landfill footprint. 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.

m. All waste exposed by excavations or other construction activity shall be covered or removed for disposal daily. All wastes generated during the construction shall be disposed of within the on-site permitted disposal areas or a permitted off-site Class I landfill. No solid waste shall be used for backfill [ref. Spec. 02 41 16-2.01].

n. Gas well drilling shall be in accordance with Technical Specification Section 33 21 70, the closure construction drawings [ref. SC#A.2.a.(3)], and the conditions of this permit. In the event that the gas well installation indicates that the bottom liner of landfill may have been encountered during gas well installation, the gas well drilling **shall cease** in the affected area and the Department shall be notified in accordance with Specific Condition #C.6.b. Gas well installation shall not resume until specifically approved by the Department.

9. **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.

10. **Soil Materials.**

a. The liner subgrade shall be placed and compacted in accordance with Technical Specification Section 31 20 00 [ref. Spec. 31 20 00-2.01]. Surfaces adjacent to geosynthetics shall be free of angular or sharp rocks and debris of any kind and free from particles greater than ½ inch in diameter [ref. Spec. 31 20 00-2.01.A.].

b. The protective cover soil layer shall be a minimum of 24-inches thick [ref. Spec. 33 05 20-3.07.B. & SC#A.2.a.(3), Sheet 10 of 10, Detail 3] .

c. Soil cover material shall be placed over the geomembrane such that the geomembrane is not damaged and no tensile stress is induced in the materials.

d. Earthwork shall be tested by the CQAM for the tests and frequencies specified in CQAP Section 5..

e. The gravel for the gas vent system shall be clean, washed FDOT No. 4 aggregate free from dirt, vegetation, or other objectionable matter [ref. Spec. 33 21 70-2.03].

SPECIFIC CONDITIONS: PART B – Construction Requirements

11. **Geosynthetic Materials.**

a. Conformance testing.

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

a) Geomembrane – properties listed Specification Section 33 05 20 – Table 33 05 20-1.

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.

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) Seaming apparatus or personnel which have failed trial welds shall not be used for seaming until passing welds are achieved. [ref. Spec 33 05 20-3.04.E.8.]

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 Consultant is on-site. [CQAP Sec. 6.1.7]

4) The full-time resident CQA inspector shall observe no more than four 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.). [see CQAP Sec. 6.1.7.5.; Spec. 33 05 20-3.04.F.]

7) Seams shall be oriented parallel to the line of maximum slope, i.e., oriented along, not across the slope. [ref Spec. 33 05 20-3.03.C.2.]

8) No more geomembrane panels shall be deployed than can be seamed on the same day.

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

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. [ref. CQAP Sec. 6.1.8.2.; Spec. 33 05 20-3.05.C.2.b.(1)]

2) Geomembrane seams shall meet the requirements of Geomembrane Specification Section 33 05 20-Table 33 05 20-2, and in all cases destructive tests conducted on the geomembrane field seams shall demonstrate that the failure is outside of the seam area. A minimum of 4 of 5 of the samples from each destructive test location shall meet the requirements for each test method (peel and shear) listed in Geomembrane Specification Section 33 05 20-Table 33 05 20-2. The strength results shall not be averaged and both sides of fusion welds shall be tested. [ref. Spec. 33 05 20-3.05.C.6.]

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.

4) All areas that fail nondestructive testing shall be marked by the on-site CQA inspector. [ref. Spec. 33 05 20-3.05.C.1.a.]

5) All welds shall be tested in shear and peel. Geomembrane seams shall not be tested by "hand" exclusively.

d. Interface friction. A minimum peak interface friction angle of 25.5 degrees tested at normal loads of 100 psf, 200 psf and 800 psf shall be achieved for all interfaces. [ref. Spec. 33 05 20-2.03.D.] Deviation from this requirement shall require a permit modification and shall demonstrate that adequate slope stability will be achieved.

e. The construction methods used shall minimize wrinkles. Excessive wrinkles are wrinkles higher than they are wide across their base, more than 6 inches high, or that fold over when stepped on. [ref. CQAP Sec. 6.1.8.6.] 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.

f. The liner system shall not be damaged by excessive traffic.

g. In areas where stakes are used, stakes shall not be of a type or used in a way that may damage the geosynthetics.

h. 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. [ref. Spec. 32 91 20-3.05.C.] The subgrade shall be accepted by the Liner Installer and Engineer in writing before placement of the next layer. [ref. CQAP 6.1.3.]

SPECIFIC CONDITIONS: PART B – Construction Requirements

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

i. During the construction of, and until the geomembrane are 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. [CQAP 6.1.4] Washouts or erosion of the geomembrane subgrade shall be repaired immediately. The CQA Consultant shall observe the condition of the subgrade and note areas of inadequacy, erosion or other deterioration in the Daily Reports.

j. 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.

k. The geomembrane shall always be kept dry and protected from wind damage. Temporary loading and/or anchoring devices (such as sand bags) shall be removed prior to placing the next layer (i.e., soil over the geomembrane).

SPECIFIC CONDITIONS: PART C – Operation Requirements

1. **Facility Operation Requirements.**
   a. 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, operation, monitoring or maintenance, or during the long-term care period of this facility.

   b. After issuance of this permit (including the time period during construction of the final cover until the certification of closure construction is approved by the Department), and throughout the long-term care period, the site shall be inspected and maintained in accordance with Chapter 62-701, F.A.C., and the long-term care provisions in Operation Permit No. 21375-008-SO/01 (including modifications, if any) or its successors.

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.** No wastes shall be disposed of in this disposal area without specific prior Department approval.

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 and operation so as to protect the public health and welfare. Such control shall minimize the creation of nuisance conditions on adjoining property. Complaints received from the general public, and confirmed by Department personnel upon site inspection, shall constitute a nuisance condition, and the permittee must take immediate corrective action to abate the nuisance.

6. **Facility Maintenance and Repair.**
   a. The site shall be properly maintained including maintenance of access roads, equipment, stormwater and leachate management systems, 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 reoccurrence, and time needed for repairs. **Written, detailed notification shall be submitted to the Department within seven (7) days following the occurrence.** Routine maintenance does not require notification but shall be noted on daily reports.

SPECIFIC CONDITIONS: PART C – Operation Requirements

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

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., 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.

8. **Leachate Management.** Leachate shall be managed in accordance with the requirements of Rule 62-701.500(8), F.A.C., Operation Permit No. 21375-008-SO/01 (including modifications, if any) or its successors, and other applicable Department rules.

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.

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

3. **Waste Records.** The permittee shall maintain all records required by the construction specifications, CQA Plan and this permit on-site 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. and Operation Permit No. 21375-008-SO/01 (including modifications, if any) or its successors.

SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements

1. **Water Quality Monitoring Requirements.** Water quality monitoring shall be conducted as required by Operation Permit No. 21375-008-SO/01 (including modifications, if any), or its successors.

SPECIFIC CONDITIONS: PART F - Landfill Gas Management

1. **Landfill Gas Management Requirements.** Landfill gas management and monitoring shall be conducted as required by Operation Permit No. 21375-008-SO/01 (including modifications, if any), or its successors.

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

1. **Closure and Long-Term Care.** Closure and long-term care of the facility shall be conducted as required by Operation Permit No. 21375-008-SO/01 (including modifications, if any), or its successors.

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.	On or before November 15, 2013 No later than March 15, 2014	Notification of date of permit renewal application submittal Submit application for permit renewal
A.9.a. A.9.b.	Within 24 hours of discovery Within 7 days of verbal notification	Notification of limestone encountered, sinkholes, or subsurface instability Written notification & corrective action plan
B.2.a.	Within 60 days of completion	Submit certification of construction completion, record drawings, 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, excavation plan
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 and non-standard seaming methods
B.5.	At least 1 week prior No later than 2 weeks after pre-construction meeting	Notify of preconstruction meeting Submit meeting minutes
B.6.a.	No later than 1 week after pre-construction meeting	Submit construction schedule
B.6.b.	Monthly, by the 15th each month	Submit monthly progress report & schedule
B.8.e.	At least 1 week prior	Notify of night work
C.6.b. C.6.c. C.6.d.	Within 24 hours of discovery Within 7 days of verbal notification Within 60 days of written notification Within 30 days of written notification	Notification of: hazardous waste receipt, failure of landfill systems or equipment Written notification & corrective action plan Complete corrective actions for gradient or groundwater monitoring system Implement corrective actions for stormwater management system