



Florida Department of Environmental Protection

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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: **21375-008-SO/01**
Date of Issue: **09/30/2005**
Expiration Date: **09/30/2010**
County: Citrus
Lat/Long: 28°51'07"
82°26'12"
Sec/Town/Rge: 1/19S/18E
Project: Citrus County Central
Class I Landfill

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Rule(s) 62-4, 62-302, 62-330, 62-520, 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 on file with the Department and made a part hereof and specifically described as follows:

To **operate** a Class I landfill with leachate storage and treatment, and related facilities (approx. 80.0 acres), and to provide long-term care, monitoring, and maintenance of a the closed Class I landfill (approx. 60.0 acres), referred to as the **Citrus County Central 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 operation and maintenance of:

1. Class I Landfill, Leachate Storage and Treatment Facility
2. Closed Class I Landfill and related appurtenances.

General Information - Phase I, Cells 1, 1A, & 2

Disposal acres	25.8 acres
Bottom liner design & LCS design	Phase 1 - 16.5 acres - Single, 60 mil HDPE, Primary LCS piping Phase 1A - 3.3 acres - Double, 60 mil HDPE, Primary LCS piping, Geonet LDS Phase 2 - 6 acres - Double, 60 mil HDPE, Primary LCS piping, Triplanar Geonet LDS
Bottom elevation of cell	Phase 1A - min. +35.35 feet NGVD at sump Phase 2 - min +35.00 feet NGVD
Final top elevation at buildout (including cover)	max. +215.00 feet NGVD
Slopes	max. 3H:1V side slopes, 4% top slope

Replaces Permit Nos.: 21375-003-SO, 21375-004-SC.
Includes modification No.: 21375-010-SO/MM, dated 04/26/2006.
Includes modification No.: 21375-009-SO/IM, dated 06/23/2006.
Includes modification No.: 21375-011-SO/MM, dated 04/24/2007.
Includes modification No.: 21375-012-SO/MM, dated 02/09/2009.
Includes modification No.: 21375-016-SO/MM, dated 04/30/2009.

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;

GENERAL CONDITIONS:

(b) Inspect the facility, equipment, practices, or operations regulated or required under this permit; and

(c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

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

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

(a) A description of and cause of noncompliance; and

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

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

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

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

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

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

GENERAL CONDITIONS:

13. This permit also constitutes:

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

14. The permittee shall comply with the following:

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

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

SPECIFIC CONDITIONS: PART A, Solid Waste Facility General Requirements

1. **Facility Designation.** This site shall be classified as a **Class I Landfill**, and shall be operated, monitored, and maintained in accordance with all applicable requirements of Chapters 62-4, 62-302, 62-330, 62-520, 62-522 and 62-701, Florida Administrative Code.

2. **Permit Application Documentation.** This permit is valid for **operation** of the Phases 1, 1A, and 2 of the Class I landfill and other related facilities, and long-term care, monitoring, and maintenance of the closed Class I landfill and related systems, in accordance with all applicable requirements of Department rules and in accordance with the reports, plans and information submitted by SCS Engineers (SCS) or Jones, Edmunds & Associates, Inc. [JEA], (unless otherwise noted), as follows:

a. Operations Permit Renewal Application Citrus County Central Landfill, (3-hole punched bound document, 3-hole punched Attachment L-1, spiral bound Attachment M-1) dated February 28, 2005 (received March 1, 2005), prepared by SCS Engineers (unless otherwise noted) as revised, replaced or amended (information inserted into original) dated and received April 29, 2005, dated and received June 16, 2005, dated and received July 15, 2005, dated and received July 21, 2005, and dated and received July 25, 2005. This information includes, but is not limited to:

- 1) "Operations Plan" (Attachment L-1) (replaced by Operations Plan referenced in Specific Condition #A.2.h.(1), below);
- 2) "Groundwater Monitoring Plan" (Attachment M-1, prepared by Jones Edmunds Associates);
- 3) "Slope Stability Analyses" (Attachment J-1);
- 4) "Closure Plan" (Attachment E-3) (replaced by Closure Plan referenced in Specific Condition. A.2.e.(3) below);
- 5) Plan Sheets titled, Citrus County Solid Waste Management Division Central Landfill Operations Permit Renewal Permit Drawings (9 sheets) dated April 2005 (received May 2, 2005) (replaced by Plan Sheets referenced in Specific Condition. A.2.e.(4) below); and
- 6) financial assurance information dated and received July 8, 2005.

Amended 06/23/2006, 02/09/2009, and 04/30/2009.

b. Emergency Incidents Plan for the Central Landfill and related facilities for Citrus County, Florida,... dated April 2005, received via email on September 29, 2005, prepared by Citrus County Department of Public Works (inserted into Operations Plan [ref. SC#A.2.a(1)]).

c. Consent Agreement #05-1078, executed September 20, 2005.

SPECIFIC CONDITIONS: PART A, Solid Waste Facility General Requirements

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

d. Application for permit modification and supporting information regarding the use of an approximately 6-acre area in the southwest corner of the 60-acre closed landfill for firearms training, received February 15, 2006. Submitted materials include: revised Parts A, B, E, Q and T of DEP Form 62-701.900(1), signed/sealed February 14, 2006; revised Section Q.6 ("Use of Closed Landfill Areas") of the Engineering Report; and, Drawings 1 of 3 through 3 of 3 ("Withlachoochee Tech, Central Landfill, Permit Modification"), prepared by SCS Engineers, dated January 2006 (inserted into Engineering Report [ref. SC#A.2.a.]).

New 04/26/06.

e. Permit Modification Request Citrus County Central Landfill, (3-hole punched bound document) dated and received January 13, 2006, prepared by SCS Engineers (unless otherwise noted) as revised, replaced or amended (information inserted into original) dated and received March 27, 2006 and dated May 3, 2006 (received May 4, 2006). This information includes, but is not limited to:

- 1) "Revised Sections 2.8.2 and 10 of Operations Plan" (replaced by Operations Plan referenced in Specific Condition #A.2.h.(1), below);
- 2) "Final Buildout Slope Stability Analyses" (Attachment J-1);
- 3) "Closure Plan" (Attachment E-3) (replaces Closure Plan referenced in Specific Condition. A.2.a.(4) above);
- 4) Plan Sheets titled, Citrus County Solid Waste Management Division Central Landfill Operations Permit Operations Drawings (8 sheets) dated January 2006 (received March 27, 2006); (replaces Plan Sheets referenced in Specific Condition. A.2.a.(5) above);
- 6) financial assurance information dated and received July 8, 2005.

New 06/23/2006. Amended 02/09/2009 and 04/30/2009.

f. Citrus County Central Landfill Operations Permit, Minor Permit Modification, prepared by JEA, dated November 2006 (received January 5, 2007) as revised, replaced or amended (information inserted into original) dated April 11, 2007 (received April 16, 2007), regarding modifications to the ground water monitor wells and landfill gas probes (inserted into Engineering Report [ref. SC#A.2.], including:

- 1) Application form pages 4 through 40, signed/sealed December 14, 2006,
- 2) Engineering Report, Part E, dated November 8, 2006
- 3) Engineering Report, Part I, dated December 8, 2006
- 4) Engineering Report, Part M, dated April 11, 2007
- 5) Engineering Report, Part O, dated December 8, 2006
- 6) Attachment 1 - Site Plan
- 7) Attachment 2 - Property Lease Agreement and Survey
- 8) Attachment 3 - Landfill Gas Monitoring Probe Locations

New 04/24/2007.

SPECIFIC CONDITIONS: PART A, Solid Waste Facility General Requirements

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

g. Citrus County Central Closed Landfill Re-Closure Operation Permit Minor Modification, (3-ring binder), prepared by SCS, dated May 13, 2008 (received May 28, 2008) as revised, replaced or amended (information inserted into original) dated and received July 24, 2008 [closed landfill re-closure portion withdrawn from application] dated and received September 29, 2008, and dated November 25, 2008 (received November 26, 2008), including:

- 1) Attachment 2 - "Operations Plan" dated July 2008 [Attachment L-1] (replaced by Operations Plan referenced in Specific Condition #A.2.h.(1), below)
- 2) Attachment 3 - Alternate Daily Cover Technical Information;
- 3) Attachment 4 - July 9, 2007 FDEP e-mail modifying Specific Condition # E.9.b.(2);
- 4) Engineering Report, Part Q.6, received November 26, 2008; and
- 5) Attachment B - Sheet 1 of 1 "Proposed Soil Storage Area Plan" signed and sealed November 25, 2008.

New 02/09/2009. Amended 04/30/2009.

h. Application for Solid Waste Operation Permit Minor Modification for Interim Gas Collection and Control System..., (3-ring binder), prepared by SCS, dated and received December 9, 2008, as revised, replaced or amended (information inserted into original*) dated and received February 5, 2009 and dated and received April 21, 2009, including:

- 1) Attachment L-1- "Operations Plan" dated February 5, 2009 (replaces Operation Plan referenced in Specific Conditions, #A.2.a.(1), #A.2.e.(1), and #A.2.g.(1), above);
- 2) Attachment E-1 - Plan Sheets titled, Citrus County Solid Waste Management Division Central Landfill Interim Gas Collection and Control System Design Drawings (6 sheets) dated December 2008 (received December 9, 2008) including Sheet 2 of 6, 4 of 6, and 6 of 6 received February 5, 2009 (inserted into original);
- 3) Attachment E-2 - " Gas Collection & Control System Technical Specifications", [Specs.], dated December 9, 2008 as revised February 5, 2009; and
- 4) ConCover, Posi-Shell, and FINN Waste Cover Alternate Daily Cover Technical Information, received April 21, 2009;

New 04/30/2009.

* see OCULUS for un-collated submittals

SPECIFIC CONDITIONS: PART A, Solid Waste Facility General Requirements

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

b. This permit authorizes the **operation** of the Phase 1, 1A, and 2, Class I disposal facility, the leachate storage and treatment facility, and related appurtenances.

c. This permit authorizes the **long-term care, monitoring, and maintenance** of the closed 60 acre Class I landfill, and related systems.

d. This permit authorizes the **construction** of an interim gas collection and control system in Phases 1 and 1A of the Class I disposal facility.

New 04/30/2009.

4. Permit Renewal. No later than February 1, 2010, the permittee shall apply for a renewal of a permit on forms and in a manner prescribed by the Department, in order to assure conformance with all applicable Department rules. Permits shall be renewed at least every five years as required by Rule 62-701.320(10), F.A.C. Operation permit renewal shall include, but not be limited to, an updated Operations Plan and Site Plans for sequence of filling with cross-sections of lifts, and revised (not inflation-adjusted) financial assurance cost estimates.

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.

SPECIFIC CONDITIONS: PART A, Solid Waste Facility General Requirements

8. **Regulations.** Chapter 62-701, F.A.C., effective May 27, 2001, is incorporated into this permit by reference. In the event that the regulations governing this permitted operation are revised, the Department shall notify the permittee, and the permittee shall request modification of those specific conditions, which are affected by the revision of regulations to incorporate those revisions.

9. **Prohibitions.**

a. The prohibitions of Rule 62-701.300, F.A.C., shall not be violated by the activities at this facility.

b. In the event that surface depressions which may be indicative of sinkhole activity, or subsurface instability, are discovered onsite, or within 500 feet of the site, the Department shall be notified in accordance with Specific Condition #C.6.b, below. Written notification shall be submitted **within 7 days of discovery**. The written notification shall include a description of the depression, the location and size of the depression 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. Waste Burning. Open burning of solid waste is prohibited except in accordance with Rule 62-701.300(3) and Chapter 62-256, F.A.C. All fires which require longer than one (1) hour to extinguish must be promptly reported to the Department in accordance with Specific Condition #C.6.b., below.

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 an interim gas collection and control system in Phases 1 and 1A of the Class I disposal facility.

New 04/30/2009.

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

a. **Within sixty (60) days** after any specified construction has been completed or as otherwise specified in this permit, the following activities shall be completed and submitted by the permittee to the Department. Operation of the constructed systems, structures, equipment, etc., shall not be initiated prior to Department approval of the information required by this Specific Condition.

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

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

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

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

SPECIFIC CONDITIONS: PART C – Operation Requirements

1. Facility Operation Requirements.

a. The permittee shall operate this facility in accordance with Rule 62-701.500, F.A.C., the **Operations Drawings** [ref.SC#A.2.e(4)] and the **Operations Plan** [ref.SC#A.2.h(1)], and any other applicable requirements.

1) The interim gas collection and control system shall not be operated, unless otherwise authorized by the Department, until the following requirements have been completed and submitted by the Permittee, and approved by the Department:

a) Certification of Construction Completion requirements of Specific Condition #B.2.,
Amended 06/23/2006, 02/09/2009, and 04/30/2009.

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

c. 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.

d. Top gradients of intermediate cover shall be designed to prevent ponding or low spots and minimize erosion. **Daily**, the owner or operator shall operate the facility, maintain grades, or utilize berms and swales, to prevent ponded water within the disposal areas.

e. The Class I disposal area shall be operated to limit the leachate head to one foot above the liner.

f. Unauthorized Wastes. A sufficient number of spotters shall be utilized at the facility for removing unacceptable wastes. Spotting may be conducted at the working face from the equipment (i.e., not from the ground) while waste is being disposed. However, in the event that the Department determines that spotting from the equipment is not effective in removing unacceptable wastes, then the authorization to spot the waste from equipment (exclusively) shall be withdrawn, and spotting shall then occur from the ground (i.e., while off the equipment) at a minimum. Unauthorized wastes shall be removed from the site for proper disposal in accordance with the **Operations Plan** [ref. SC#A.2.a(1)].

SPECIFIC CONDITIONS: PART C - Operation Requirements

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

g. Site Inspections.

1) The owner or operator shall inspect the site for erosion and settlement (low spots and improperly graded areas) daily on operating days. Erosion and settlement shall be repaired in accordance with Specific Condition #C.6.

2) The owner or operator shall inspect the landfill facility for the presence of objectionable odors at the property boundary **daily on operating days**. In the event that objectionable odors are detected at the property boundary, the owner or operator shall abate the odors in accordance with Specific Condition #C.5.

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

h. In the event of fire, hurricane or other severe natural event, inoperable equipment, lack of qualified personnel, or stormwater control problems which allow prolonged (**greater than 72 hours**) contact of ponded water with waste, the facility shall cease disposing waste in the affected area until appropriate drainage has been restored.

i. *Equipment*. In the event of equipment breakdown or scheduled maintenance, the owner or operator shall ensure that sufficient reserve equipment is operating at the site within 24 hours of the occurrence. In the event that sufficient reserve equipment is not obtained within 24 hours, the permittee shall notify the Department in accordance with Specific Condition #C.6.b., below and provide a schedule for corrective actions.

j. *Fires*. In the event of a fire which requires offsite assistance from the local fire protection authorities, the Department shall be notified pursuant to Specific Condition C.6.b. below, and the owner or operator shall cease disposal of waste in the affected area until the fire has been completely extinguished, or as otherwise specified by the Department. Trenches cut into the waste shall not be used to extinguish the fire without prior Department approval.

SPECIFIC CONDITIONS: PART C - Operation Requirements

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

k. *Temporary Transfer Operation.* In the event that the permittee elects to operate a temporary transfer station at the facility, the Department shall be notified at least 48 hours prior to operation. This notification shall specify the final disposal location for the transferred waste, and shall include a site plan (reduced size) that shows the location and configuration of the transfer station within the lined landfill area. Leachate from the temporary transfer station shall not be discharged outside the landfill liner or leachate collection system. The temporary transfer operation shall:

- 1) be operated as described in Section 2.3.5. of the Operation Plan;
- 2) be operated for a maximum of 30 days. In the event that the permittee elects to operate the temporary transfer station for greater than 30 days, then a separate permit or modification of this Operation Permit may be required.

2. Operating Personnel.

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

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

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

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

SPECIFIC CONDITIONS: PART C - Operation Requirements

4. Monitoring of Waste.

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

b. The permittee shall not accept hazardous waste or any hazardous substance for disposal 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.7.

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

d. Sludges generated from onsite processes (e.g., stormwater or leachate collection, removal or treatment system maintenance) shall be dewatered and adequately characterized as nonhazardous prior to disposal.

5. Control of Nuisance Conditions.

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

SPECIFIC CONDITIONS: PART C - Operation Requirements

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

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

6. Facility Maintenance and Repair.

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

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

c. In the event that any portion of the groundwater or gradient monitoring system is damaged or unable to be sampled, corrective actions shall be completed **within sixty (60) days** of the written notification specified in Specific Condition #C.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 stormwater or leachate management systems or liner system is damaged or is not operating effectively, corrective actions shall be implemented **within thirty (30) days** of the written notification specified in Specific Condition #C.6.b., unless otherwise approved by the Department.

SPECIFIC CONDITIONS: PART C – Operation Requirements

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

e. Intermediately covered areas, or areas which discharge to the stormwater management system, which exhibit significant erosion shall be repaired **within 48 hours of detection**, or by the close of the next business day, whichever occurs first. For the purposes of compliance with this Specific Condition, "significant" means that either:

- 1) the soil cover materials have eroded such that greater than 50% of the soil in that location has been eroded, or
- 2) waste or liner is exposed.

f. Areas which have received final cover, and which exhibit significant erosion as defined above, shall be repaired **within 72 hours of detection**.

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

7. Stormwater System Management.

a. 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 the mixing of stormwater with leachate, 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. All stormwater conveyances shall be inspected at least weekly to verify adequate performance. Conveyances not performing adequately shall be repaired within three (3) working days. Documentation of all inspections and repairs shall be kept on file at the facility.

8. Leachate Management.

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

b. The leachate storage tanks (including leachate storage, and treatment, tanks) shall be inspected as required by Rule 62-701.400(6)(c)9., F.A.C.

c. Leachate, which has accumulated in low areas within the disposal area, shall be removed **daily** for disposal.

SPECIFIC CONDITIONS: PART C – Operation Requirements

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

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

1) **No later than August 1, 2009**, the entire leachate collection and removal system shall be water pressure cleaned or video inspected to verify adequate performance. Components not performing adequately shall be cleaned and/or repaired. The inspection report shall include an evaluation of the effectiveness of the system, the location (indicated on a Site Plan) and cause of obstructions encountered, proposed corrective actions as appropriate. The results of the inspection and cleaning shall be submitted to the Solid Waste Section of the Southwest District Office **no later than February 1, 2010** to demonstrate adequate performance.

2) The leachate level indicators in the disposal cells, leachate storage tanks and leachate treatment tanks shall be inspected **at least once each business day**, or more frequently if needed, to ensure proper operation.

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

4) Unless otherwise specified in this permit, the leachate collection and removal system components shall be inspected and maintained as described in the **Operations Plan**.

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

e. Leachate quantities.

1) In the event of a failure of leachate metering or pumping equipment which is not corrected **within 24 hours of detection**, the Department shall be notified, and corrective actions implemented in accordance with Specific Condition #C.6.

SPECIFIC CONDITIONS: PART C – Operation Requirements

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

f. Leachate generation reports shall be compiled monthly and submitted to the Department **quarterly, by January 15th, April 15th, July 15th and October 15th each year.** Leachate generation reports shall include the number of open, intermediate and closed acres, and the quantities of leachate collected, recirculated, treated and disposed on-site, and hauled/piped off-site to a wastewater treatment facility, and daily precipitation amounts greater than one tenth of an inch. The reports shall include quantities for the leachate collection and leakage detection systems separately.

g. Leachate Leakage Action Rates. Leakage into the leakage detection systems (LDS) in Phases 1A and 2 should not exceed 930 gpd and 600 gpd respectively (9.3 acres and 6 acres @ 100 gal/acre/day, respectively) based on EPA recommended action leakage rates published in the Federal Register/Vol. 57 No. 19/ Wednesday January 29, 1992/Rules and Regulations. Exceedance of the leakage action rate indicates that deficiencies in the primary liner system may exist. In the event that the quantity of leachate that is removed from the LDS exceeds the action leakage rate, the Department shall be notified and a corrective action plan provided in accordance with Specific Condition C.6.b. The approved plan of action shall be implemented within 15 days of Department approval, or in accordance with an alternate schedule approved by the Department.

h. No later than **thirty (30) days** prior to the expiration of any contracts or agreements for the disposal of leachate at wastewater treatment facilities, the permittee shall provide a copy of the contract renewal or the issuance of a new contract for leachate disposal.

i. In the event that the primary leachate disposal facility becomes unable or unwilling to accept leachate for disposal, **within three (3) days** of the cessation of leachate acceptance by the POTW, the landfill owner or operator shall notify the Department and shall explain the contingency measures which will be implemented. The contingency measures shall be implemented **within seven (7) days** of the cessation of leachate acceptance at the POTW or in accordance with an alternate schedule approved by the Department.

SPECIFIC CONDITIONS: PART C - Operation Requirements

9. Special Wastes Handling Requirements.

a. Special Wastes. The design, operation, and monitoring of disposal or control of any "special wastes" shall be in accordance with Rules 62-701.300(8) and 62-701.520, F.A.C., and any other applicable Department rules, to protect the public safety, health and welfare. The special wastes shall be stored and managed such that discharge of contaminants to the environment is prevented. The special wastes shall be handled on a first-in, first-out basis. The special wastes shall be stored in a location, which does not interfere with the sequence of filling.

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

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

3) Asbestos. Asbestos shall be managed in accordance with Section N.3 or the Renewal Application documentation [ref. SC#A.2.a.], Rule 62-701.520(4), F.A.C., and all other applicable federal and Department rules.

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

5) White Goods. The white goods shall be removed from the site **at least every two months**, or when the container is full, whichever occurs first. White goods, which may contain chlorofluorocarbons (CFCs, such as freon), shall be stored and managed in a manner such that the CFCs are not discharged to the atmosphere. White goods which have had the refrigerant appropriately removed shall be clearly marked. A maximum of 100 c.y. of white goods may be stored at the site at any time.

SPECIFIC CONDITIONS: PART C – Operation Requirements

(Specific Condition #C.9.a., cont'd)

- 6) Scrap metals. The scrap metals shall be removed from the site **monthly**, or when the container is full, whichever occurs first. Scrap metals which may include residual contaminants such as gasoline, oil, paint, antifreeze, PCBs, etc., shall be stored and managed such that the residues or constituents thereof are not spilled, leaked, dumped, or otherwise discharged onto the soil or into surface or groundwaters. Scrap metals storage containers shall be tarped at the end of each working day and in the event of inclement weather. The maximum quantity of scrap metal which may be stored at the site is limited to 600 c.y.
- 7) Lead acid batteries. Lead acid batteries shall be removed from the site **at least monthly**. The batteries shall be stored in a manner which prevents the discharge of contaminants to the environment.
- 8) Yard Waste. Yard waste shall be managed in accordance with the Operations Plan. Bagged yard trash or land clearing debris shall not be mulched at the site unless the plastic bags are removed prior to mulching. Mulched yard trash shall be removed from the site when the storage area has reached its capacity or within 18 months of processing, whichever comes first. Mixtures of mulched yard trash/land clearing debris and soil may be used for sideslope stabilization and erosion control in the Class I Landfill. Yard trash shall not be disposed in the Class I Landfill or the C&D debris disposal facility.
- 9) Tires. Storage shall be limited to 115 tons of tires. The tires shall be removed from the site at **least monthly**, or when the container is full, whichever occurs first. The tires shall be stored in a container, and in a manner which prevents nuisance conditions and vectors (i.e. mosquitoes, rats, etc.).
- b. The household hazardous waste collection/storage ("HHW C/S") facility shall be operated in accordance with the March 2001 Facility Standards for the Citrus County Hazardous Waste Collection and Storage Facility [ref. SC#A.2.b.)], as follows:
 - 1) HHW received at the Citizen Convenience Center shall be identified, and then relocated for storage within the containment area of the HHW Collection/Storage Facility at the end of each collection day.
 - 2) Spillage shall be removed and properly packaged for disposal. Soils which have been contaminated by spills shall be removed and packaged for proper disposal on the same day as the spill occurred.

SPECIFIC CONDITIONS: PART C - Operation Requirements

(Specific Condition #C.9.b., cont'd)

- 3) Liquids, including contaminated rainwater, shall not be discharged outside of the containment structures.
- 4) Non-latex paints shall not be air dried.
- 5) Waste received at the HHW C/S Facility shall be stored within containment areas at all times.
- 6) Records on the quantities of HHW collected and removed for disposal shall be compiled monthly and maintained at the facility for Department review upon request.

c. The Used Oil Collection Center shall comply with FAC Chapter 62-710 and 40 Code of Federal Regulations (CFR) 280 and 281, and all applicable requirements of Department rules. Discharges are not allowed and are subject to Chapter 62-780, F.A.C., for cleanup.

d. Citizen Convenience Center [CCC] Facility: The operation of the citizen waste drop-off facility shall comply with the following procedures:

- 1) Only residential customers and self-haul businesses shall use the facilities, that is, no solid waste collectors or commercial haulers will be allowed usage.
- 2) An attendant shall be at the CCC when waste is being received. Operating hours shall be posted, and fencing and gates shall be used to prevent unauthorized access when the facility is closed.
- 3) Only roll-off containers and/or dumpsters shall be utilized for waste storage. No compactors of any type shall be used.
- 4) All processable and non-processable solid waste, with the exception of recyclables, shall be removed from the site at least daily or when a container is full. At the close of business each day, or in the event of inclement weather, all processable and non-processable waste shall be covered with a waterproof tarp until the facility is again receiving solid waste.
- 5) The CCC shall be inspected for unauthorized materials and household hazardous waste at least daily. Unauthorized wastes and household hazardous wastes shall be removed from the CCC daily on operating days.

SPECIFIC CONDITIONS: PART C – Operation Requirements

10. Waste Handling Requirements.

a. Unauthorized Wastes: A sufficient number of spotters and operators shall be utilized at the facility for removing unacceptable wastes (such as liquids, biomedical waste, hazardous and unknown wastes, tires, mercury containing devices, etc.) from the working face. Spotting may be conducted at the working face from the equipment (i.e., not from the ground) while waste is being disposed. However, in the event that the Department determines that spotting from the equipment is not effective in removing unacceptable wastes, then the authorization to spot the waste from equipment (exclusively) shall be withdrawn, and spotting shall then occur from the ground (i.e., while off the equipment) at a minimum.

b. A trained spotter shall be at the working face, the CCC, and other special waste management areas at all times that wastes are received.

11. Waste Covering Requirements. All solid waste disposed of in the Class I landfill shall be covered as required by Rule 62-701.500(7), F.A.C.

a. Initial Cover. Initial cover shall be applied and maintained at the end of each working day in the Class I landfill in accordance with Rule 62-701.500(7)(e), F.A.C., so as to protect the public health and welfare [ref. SC#A.2.a.(1), Section. 7.5].

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

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

1) An intermediate cover of 12 inches of compacted soil and 6 inches of mulch for erosion control and slope stabilization, in addition to the six (6) inch initial cover shall be applied within seven (7) days of cell completion if final cover or an additional lift is not to be applied within 180 days of cell completion. A 50/50 mixture of soil/mulch is approved for use as alternate intermediate cover [ref. SC#A.2.a.(1), Section. 2.8.2.].

Amended 06/23/2006.

SPECIFIC CONDITIONS: PART C – Operation Requirements

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

c. Alternate daily cover materials (ADCM) shall be approved by the Department prior to use at the facility. Tarps, ProGuard SB alternate daily cover material [ref. SC#A.2.g.(2)], ConCover, Posi-Shell and FINN Waste Cover alternate daily cover material [ref. SC#A.2.h.(4)], and 50/50 mixtures of soil/mulch are approved for use as alternate initial cover [ref. SC#A.2.a.(1), Section. 2.8.2.]. Other Department-approved ADCM may be used as initial cover only, but shall not be used outside of lined areas without specific prior Department approval.
Amended 02/09/2009 and 04/30/2009.

12. Working Face.

a. As required by Rule 62-701.500(7)(d), F.A.C., the permittee shall minimize the size of the working face to minimize leachate, and unnecessary use of cover material. The permittee shall maintain the working face of a cell only wide enough to efficiently accommodate the maximum quantity of vehicles discharging waste simultaneously and to minimize the exposed area [ref. Op. Plan, Sec. 7.4].

b. Interceptor berms shall be maintained around the active working area to prevent leachate runoff from the working face from entering the stormwater management system. Runoff from outside the working face area will not be considered stormwater if the flow passes over areas which have not been intermediately covered as defined by Rule 62-701.200(55), F.A.C., and stabilized to control erosion, or waste is exposed.

13. Method and Sequence of Filling.

a. The method and sequence of filling shall be in accordance with the Permit Drawings [ref. SC#A.2.e.(4), Sheet 6 of 9], and as described in the Operations Plan [ref. Op. Plan, Sec.2.7], or as otherwise approved in writing by the Department.
Amended 06/23/2006.

1) **No later than January 15, 2006**, the permittee shall submit a request for intermediate modification of this Permit, in accordance with Specific Condition #A.3., to revise fill sequence plans and stormwater management system design to address deviations in the method and sequence filling in Cells 1 and 1A.

b. Waste shall be spread in 2-4 feet thick layers and compacted to 1-2 feet thickness before applying the next layer of waste and in accordance with the method, procedures, and sequence described in the facility Operations Plan. Cells shall be filled in lifts no higher than 10 feet [ref. Op. Plan, Sec.2.7]. Slopes shall be maintained in accordance with the Permit Drawings.

SPECIFIC CONDITIONS: PART C - Operation Requirements

(Specific Condition #C.13., cont'd)

c. Initial Waste Placement.

1) No disposal vehicles shall be operated directly on the liner protective layer [ref. Op. Plan, Sec. 2.8.1].

2) The first lift of waste shall be a minimum of four(4) feet in compacted thickness and consist of selected wastes containing no large rigid objects that may damage the liner or leachate collection system [ref. Op. Plan, Sec. 2.8.1].

d. Waste shall not be placed within 5 feet of the inside top edge of the bottom liner.

e. Grade and location stakes or other markers shall be provided to guide filling operations and provide a visual landmark for the equipment operators as filling progresses.

f. The owner or operator shall conduct a topographic survey of, and shall estimate the remaining disposal capacity and site life of each disposal area as required by Rule 62-701.500(13)(c), F.A.C. **Annually, no later than January 15th each year**, a copy of this survey, supporting capacity calculations, signed and sealed by a registered professional engineer and/or licensed professional land surveyor as appropriate shall be submitted to the Department. The survey shall demonstrate that the above-grade sideslopes are no greater than the design slopes, that the top elevation does not exceed design elevation, and that all other design features and related improvements conform to the Department-approved permit drawings. The capacity estimate shall include updated design life calculations.

SPECIFIC CONDITIONS: PART D - Recordkeeping

1. Report Submittals.

a. Unless specified otherwise in this permit, all submittals, notifications, or requests for permit modification shall be provided to the Southwest District Solid Waste Section, 13051 North Telecom Parkway, Temple Terrace, Florida 33637-0926. Amended 06/23/2006.

2. Operation Plan and Operating Record.

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

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

3. Waste Records.

a. Waste records shall be maintained as required by Rule 62-701.500(4), F.A.C. The owner or operator of the facility shall weigh each load of waste as it is received (with scales at the facility) and record, in tons per day, the amount of waste debris and material received. This information shall be compiled **monthly** and submitted to the Department (Solid Waste Section, Department of Environmental Protection, 2600 Blair Stone Road, M.S. 4565, Tallahassee, Florida 32399-2400) **quarterly, by January 15th, April 15th, July 15th and October 15th of each year.** In the event that the scales become inoperable, waste may be received for disposal for a maximum time period of 24 hours or as otherwise approved by the Department, until normal operations resume.

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

1) Waste quantity reports required by Rule 62-701.500(4), F.A.C.

2) A log of the facility operator's daily and weekly inspections, and any subsequent corrective actions;

SPECIFIC CONDITIONS: PART D - Recordkeeping

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

- 3) Load checking records;
- 4) A list of incidents of disposal of contaminated soil or other industrial wastes or sludges. This list should include the generator's name and address, and a description of the waste disposed; and
- 5) Operator and spotter training certificates and other documentation;
- 6) Log of odor complaints and corrective action;
- 7) Records as described in Rule 62-701.500(13). These records shall include all certifications for construction completion;
- 8) Documentation of incidents reported pursuant to Specific Condition C.6.; and
- 9) Water quality and gas monitoring reports.

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 for approval **annually, by September 1st each year** to: Solid Waste Manager, Solid Waste Section, Department of Environmental Protection, 13051 North Telecom Parkway, Temple Terrace, Florida 33637-0926.
Amended 06/23/2006.

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, Tallahassee, Florida 32399-2400.

SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements

1. Water Quality Monitoring Quality Assurance.

a. All field work done in connection with the facility's Water Quality Monitoring Plan shall be conducted in accordance with the Standard Operating Procedures (SOPs) described in DEP-SOP-001/01 (February 1, 2004), as referenced in Rule 62-160.210(1), F.A.C. All laboratory analyses done in connection with the facility's Water Quality Monitoring Plan shall be conducted by firms that hold 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 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 first semi-confining unit within the upper Floridan aquifer.

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

SPECIFIC CONDITIONS: PART E – Water Quality Monitoring Requirements

3. Ground Water Monitor Well Locations. The ground water monitoring network is designed and constructed in accordance with Attachment 8 ("Part M, Water Quality and Leachate Monitoring Requirements," prepared by JEA, revised April 2007) [ref. SC#A.2.f.(4)] of the document entitled "Attachment M-1, Ground Water Monitoring Plan Evaluation," prepared by JEA, revised July 2005 [ref. SC#A.2.a.(2)]. The ground water monitor wells are located on the figure entitled "Site Plan," prepared by JEA, received April 16, 2007 **(attached)**, as follow:

<u>Well No.</u>	<u>WACS Testsite ID Number</u>	<u>Aquifer</u>	<u>Designation</u>	<u>Location</u>
MW-1R	165	Floridan	Background	See figure
MW-2	149	Floridan	Background	See figure
MW-3	150	Floridan	Background	See figure
MW-7	179	Floridan	Background	See figure
MW-10	22010	Floridan	Compliance	See figure
MW-11	22011	Floridan	Compliance	See figure
MW-12	22012	Floridan	Compliance	See figure
MW-13	22013	Floridan	Compliance	See figure
MW-14	22014	Floridan	Compliance	See figure
MW-15	22015	Floridan	Compliance	See figure
MW-17	22017	Floridan	Compliance	See figure
MW-18	22709	Floridan	Assessment	See figure
MW-19	22710	Floridan	Assessment	See figure
MW-6	168	Floridan	Intermediate	See figure
MW-4R	166	Floridan	Piezometer	See figure
MW-5	167	Floridan	Piezometer	See figure
MW-8R	180	Floridan	Piezometer	See figure
MW-9	181	Floridan	Piezometer	See figure
MW-16	22016	Floridan	Piezometer	See figure
MW-AA	169	Floridan	Piezometer	See figure
MW-B	65	Floridan	Piezometer	See figure
MW-E	171	Floridan	Piezometer	See figure
PZ-1	22711	Floridan	Piezometer	See figure
PZ-2	22712	Floridan	Piezometer	See figure
MW-C *	66	Floridan	Abandoned	See figure
MW-D *	27	Floridan	Abandoned	See figure

* = to be abandoned **within 90 days of permit modification #21375-011 issuance**; documentation of well abandonment as indicated in Specific Condition #E.6., shall be submitted **within 30 days of well abandonment**.

An updated survey drawing as described in Specific Condition #E.5.d., shall be submitted **within 90 days of permit modification #21375-011 issuance** to include the location and elevation information for MW-18, MW-19, PZ-1 and PZ-2.

All wells are to be clearly labeled and easily visible at all times. The permittee should keep all wells locked to minimize unauthorized access. Amended 04/24/2007.

SPECIFIC CONDITIONS: PART E – Water Quality Monitoring Requirements

4. Ground Water Sampling. The locations, parameters, and frequencies specified herein represent the minimum requirements for ground water monitoring. Additional samples, wells, and parameters may be required based upon subsequent analysis. Method Detection Limits must be less than or equal to the Maximum Contaminant Levels established for the individual parameters to demonstrate compliance with Class G-II ground water standards referenced in Chapter 62-522, F.A.C. Ground water samples for analysis of metals may be field-filtered if the criteria listed in the Department's 1994 technical document entitled *Determining Representative Ground Water Samples, Filtered or Unfiltered* are met, and shall be limited to the monitor wells that are screened in unconsolidated sandy sediments. Otherwise, compliance with ground water standards shall be based on the analysis of unfiltered samples.

a. Ground water levels shall be measured at all active wells and piezometers listed in Specific Condition No. E.3., during all sampling events described in Specific Condition Nos. E.4.b., E.4.c., and E.4.d., to a precision of 0.01 foot. The ground water surface contour maps prepared for each sampling event shall include ground water elevations (feet NGVD) calculated for each well and piezometer.
Amended 04/24/2007.

b. Background wells (MW-1R, MW-2, MW-3, and MW-7) and compliance wells (MW-10, MW-11, MW-12, MW-13, MW-14, MW-15 and MW-17) shall be sampled **semi-annually** for analysis of the following parameters:

Field Parameters
Static water levels
 before purging
Specific conductivity
pH
Dissolved oxygen
Temperature
Turbidity
Colors & sheens
 (by observation)
Amended 04/24/2007.

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

c. Intermediate well MW-6 shall be sampled **semi-annually** 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)
Those parameters listed in 40 CFR
Part 258, Appendix I
Fecal Coliform
Total Trihalomethanes

SPECIFIC CONDITIONS: PART E – Water Quality Monitoring Requirements

(Specific Condition #E.4., continued)

- d. Assessment wells MW-18 and MW-19 shall be sampled **semi-annually** for analysis of the following parameters:

Field Parameters
Static water levels
before purging
Specific conductivity
pH
Dissolved oxygen
Temperature
Turbidity
Colors & sheens
(by observation)
New 04/24/2007.

Laboratory Parameters
Benzene
Methylene chloride
Vinyl chloride

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

a. Prior to construction of all new or replacement wells and piezometers (excluding piezometer MW-16 and other wells installed in accordance with Consent Agreement #05-1078) the permittee shall request and receive Department approval of a minor permit modification in accordance with Specific Condition No. A.3.

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

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

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

6. **Well Abandonment.** All wells and piezometers not listed in Specific Condition No. E.3., and not a part of the approved Water Quality Monitoring Plan are to 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.

SPECIFIC CONDITIONS: PART E – Water Quality Monitoring Requirements

7. Verification/Evaluation Monitoring. If at any time monitoring parameters are detected at concentrations significantly above background water quality, or exceed the Department's water quality standards or 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, or 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. 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.). It is not anticipated that the existing stormwater management system will discharge from the property. However, in the event that surface water discharge occurs from the stormwater management system, representative samples of each discharge event shall be collected for analysis of the parameters listed in Specific Condition No. E.8.b. In the event that any modifications to the stormwater management system associated with future uses of the landfill result in periodic surface water discharges from the property, the Department may require the implementation of routine surface water monitoring.

a. The locations, parameters, and frequencies specified herein represent the minimum requirements for surface water monitoring. Additional sampling locations and parameters may be required based upon subsequent analysis. Method Detection Limits must be less than or equal to the surface water criteria established for the individual parameters to demonstrate compliance with Class III surface water (predominantly freshwater) referenced in Chapter 62-302, F.A.C. Compliance with surface water criteria will be based on analysis of unfiltered samples.

SPECIFIC CONDITIONS: PART E – Water Quality Monitoring Requirements

(Specific Condition #E.8., continued)

b. Surface water sampling shall be conducted **per discharge event** in accordance with the Department's SOPs to comply with the requirements of Rules 62-701.510(4) and 62-701.510(6) (e), F.A.C. The Solid Waste Section of the Department shall be notified of the occurrence of each discharge event **within 24 hours of discovery**. Surface water samples shall be analyzed for the following parameters:

<u>Field parameters</u>	<u>Laboratory parameters</u>	
Specific conductivity	Unionized ammonia	Total organic carbon (TOC)
pH	Total hardness	Total nitrogen
Dissolved oxygen	Total phosphates	Chemical oxygen demand (COD)
Turbidity	Chlorophyll A	Fecal coliform
Temperature	Copper	Biochemical oxygen demand (BOD5)
Colors and sheens	Iron	Total dissolved solids (TDS)
(by observation)	Mercury	Total suspended solids (TSS)
	Nitrate	Zinc
	<u>Parameters listed in 40 CFR Part 258, Appendix I</u>	

9. Leachate Sampling.

a. Leachate Influent Sampling. Grab samples of leachate influent (unfiltered) shall be collected from the master lift station for Phases 1/1A (WACS testsite ID No. 172) as shown on the figure entitled "Site Plan," prepared by JEA, received April 16, 2007 **(attached)**, and from the Phase 2 primary pump sampling port (WACS testsite ID No. 21790) to comply with the requirements of Rules 62-701.510(5) and 62-701.510(6) (c), F.A.C. The leachate influent samples collected from the master lift station and the Phase 2 primary pump may be composited except that individual samples shall be collected from each location for analysis of volatile organic compounds.

Amended 04/24/2007.

1) **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	Iron
(by observation)	Mercury
	Nitrate
	Sodium
	Total dissolved solids (TDS)
	<u>Those parameters listed in 40 CFR</u>
	<u>Part 258, Appendix II</u>

2) If the annual leachate influent analysis indicates 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 No. E.9.a.(1), and shall notify the Department in writing in accordance with Specific Condition No. C.6. 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)

b. Leachate Treatment Plant Effluent Sampling. Grab samples of treated leachate effluent (unfiltered) shall be collected at the discharge from the chlorine contact tank (WACS Testsite ID No. 175) as shown on the figure entitled "Site Plan," prepared by JEA, received April 16, 2007 (**attached**), to comply with the ground water standards and minimum criteria referenced in Rules 62-520.420 and 62-520.400, F.A.C., respectively, with the exception of sodium, chloride and total dissolved solids (TDS). These three parameters shall meet the standards listed in Rule 62-520.420, F.A.C., at the edge of the zone of discharge along the western property boundary (as described in SC#E.2.a.).
Amended 04/24/2007.

1) Leachate effluent shall be sampled at the frequency listed in Specific Condition No. E.9.b.(2), and the analytical results shall be submitted **quarterly**, as follows: Quarter 1 results shall be submitted by **April 15th**; Quarter 2 by **July 15th**; Quarter 3 by **October 15th**; and, Quarter 4 by **January 15th**.

2) Leachate effluent samples shall be collected for analysis of the following parameters [ref. SC#A.2.a.(2) & SC#A.2.g.(3)]:

Parameter	Unit	Minimum	Maximum	Frequency
Flow	gpd	N/A	30,000	Daily
pH	STD UNITS	6.00	8.50	Daily
CBOD ₅	mg/l	N/A	20	Monthly
TSS	mg/l	N/A	20	Monthly
Nitrate - N	mg/l	N/A	10	Monthly
Chloride	mg/l	N/A	N/A	Quarterly
Sodium	mg/l	N/A	N/A	Quarterly
TDS	mg/l	N/A	N/A	Quarterly
Total ammonia - N	mg/L	N/A	2.8	Quarterly
Benzene	µg/l	N/A	1	Quarterly
Toluene	µg/l	N/A	40	Quarterly
Ethylbenzene	µg/l	N/A	30	Quarterly
Total Xylenes	µg/l	N/A	20	Quarterly
Vinyl Chloride	µg/L	N/A	1	Quarterly
Ethylene dibromide (EDB)	µg/l	N/A	0.02	Quarterly
Total Trihalomethanes	µg/l	N/A	100	Semi-annually*
Arsenic	mg/l	N/A	0.01	Annually
Barium	mg/l	N/A	2	Annually
Cadmium	mg/l	N/A	0.005	Annually
Chromium	mg/l	N/A	0.1	Annually
Iron	mg/l	N/A	0.3	Annually
Mercury	mg/l	N/A	0.002	Annually
Lead	mg/l	N/A	0.015	Annually
Selenium	mg/l	N/A	0.05	Annually
Silver	mg/l	N/A	0.1	Annually

* =to be conducted concurrently with the semi-annual ground water sampling events described in Specific Condition Nos. E.4.b., and E.4.c.

If in any two consecutive months of leachate effluent sampling, the same listed parameter exceeds the regulatory level, the permittee shall immediately cease discharge into the percolation ponds and provide off-site disposal for its leachate and/or effluent, until acceptable leachate treatment is again demonstrated and until on-site discharge into the percolation ponds is again approved by the Department.
Amended 02/09/2009.

SPECIFIC CONDITIONS: PART E – Water Quality Monitoring Requirements

(Specific Condition #E.9.b., continued)

3) **Annually**, the leachate effluent shall be analyzed for the parameters listed in 40 CFR Part 258, Appendix I, however the effluent shall be analyzed for the parameters listed in 40 CFR Part 258, Appendix II during the annual sampling event conducted prior to permit renewal.

c. Leachate Treatment Plant Sludge Sampling. Waste sludge from the leachate treatment plant shall be sampled and analyzed **annually** using Department SOPs for the following parameters:

- Toxicity Characteristic Leaching Potential Test (TCLP) for the organics, metals and pesticides listed in 40 CFR Part 261.24, Table 1
- pH (standard units)
- Solids (percent)

Waste sludge that is not classified as hazardous waste (Rule 62-730.030, F.A.C.) may be disposed in the Class I landfill. Based upon the results of the analyses, the Department may require further testing and alternative disposal to assure compliance with all Department rules and regulations. The Department shall be notified within thirty (30) days of alternative sludge disposal activities.

10. Water Quality and Leachate Reporting Requirements. The results of each water quality sampling event conducted at the facility to comply with the Specific Conditions of this permit shall be included in Electronic Data Deliverable (EDD) reports that include:

a. Required water quality monitoring reports and all analytical results shall be submitted electronically on compact disk or flash drive media. Water quality monitoring reports shall be submitted in Adobe pdf file format. The water quality EDD shall be provided to the Department in an electronic format consistent with requirements for importing the data into the Department's databases as summarized on the Department's web site at: <ftp://ftp.dep.state.fl.us/pub/WACS-ADaPT>. Water quality monitoring reports shall be signed and sealed by a Florida registered professional geologist or professional engineer with experience in hydrogeological investigations and shall provide the information required by Rules 62-701.510(9)(a)1 through 62-701.510(9)(a)10, F.A.C., including:

1. Cover letter;
2. Summary of exceedances and recommendations;
3. Ground water contour maps;
4. Chain of custody forms;
5. Water levels, water elevation table;
6. Ground Water Monitoring Report Certification, using the appropriate Department form;
7. Appropriate sampling information on Form FD 9000-24 (DEP-SOP-001/01); and,
8. Laboratory and Field data and error logs, as applicable. [In addition to the Adobe pdf file format, this data and associated error logs shall be submitted in an ADaPT-compatible, comma separated text file format.]

SPECIFIC CONDITIONS: PART E – Water Quality Monitoring Requirements

(Specific Condition #E.10.a., continued)

The report of results shall be submitted to:

- Department of Environmental Protection, Southwest District Office, Solid Waste Section, 13051 North Telecom Parkway, Temple Terrace, FL 33637-0926; and,
- Department of Environmental Protection, Solid Waste Section 2600 Blair Stone Road, MS 4565, Tallahassee, FL 32399-2400.

b. The permittee shall submit to the Department the results of analyses reported for each sampling event conducted at the facility by the following due dates:

1. Specific Conditions #E.4.b., #E.4.c., #E.4.d. – results of ground water routine semi-annual sampling events shall be submitted **within 60 days from completion of laboratory analyses and no later than January 15th and July 15th of each year** for the periods July 1-Dec. 31, and Jan. 1-June 30, respectively;
2. Specific Condition #E.5.c. – results of ground water “initial sampling events” shall be submitted **within 60 days from completion of laboratory analyses;**
3. Specific Condition #E.7. – results of ground water verification events shall be submitted **within 60 days from completion of laboratory analyses;**
4. Specific Condition #E.8.b. – results of surface water “discharge sampling events” shall be submitted **within 60 days from completion of laboratory analyses;**
5. Specific Condition #E.9.a.(1) – results of leachate influent routine annual sampling events shall be submitted **within 60 days from completion of laboratory analyses and no later than January 15th of each year** for the periods Jan. 1-Dec. 31;
6. Specific Condition #E.9.a.(2) – results of leachate influent monthly sampling events shall be submitted **within 60 days from completion of laboratory analyses;**
7. Specific Condition #E.9.b.(1) – results of leachate effluent periodic sampling events [see SC #E.9.b.(2)] shall be submitted **within 60 days from completion of laboratory analyses and no later than January 15th, April 15th, July 15th and October 15th of each year** for the periods Oct. 1-Dec. 31, Jan. 1-Mar. 31, Apr. 1-June 30, and July 1-Sep. 30, respectively;
8. Specific Condition #E.9.b.(3) – results of leachate effluent routine annual sampling events shall be submitted **within 60 days from completion of laboratory analyses and no later than January 15th of each year** for the periods Jan. 1-Dec. 31; and,
9. Specific Condition #E.9.c. – results of leachate treatment plant sludge sampling events shall be submitted **within 60 days from completion of laboratory analyses and no later than January 15th of each year** for the periods Jan. 1-Dec. 31.

Amended 06/23/2006, 04/24/2007 and 04/30/2009.

SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements

11. Monitoring Plan Evaluation.

a. The permittee shall submit to the Department a report that evaluates ground water velocity in the vicinity of the proposed monitor wells to be installed in accordance with Consent Agreement OGC File No. 05-1078. This evaluation shall include the results of slug tests conducted at the proposed wells, revised ground water velocity calculations and recommendations regarding the appropriate routine ground water sampling frequency (semi-annually or quarterly). In the event that the evaluation report recommends routine ground water sampling be conducted at a quarterly frequency, submittal of an application for minor permit modification shall be required in accordance with Specific Condition No. A.3. The evaluation shall be sent to: Solid Waste Section, Department of Environmental Protection, Southwest District Office, 13051 North Telecom Parkway, Temple Terrace, Florida 33637-0926.
Amended 06/23/2006.

b. By October 1, 2007 and by February 1, 2010, the permittee shall submit an evaluation of the water quality and leachate monitoring data. The periods of time to be covered by the evaluations are summarized below:

<u>Water Quality Monitoring Data Evaluation Due Date</u>	<u>Starting Sampling Event</u>	<u>Ending Sampling Event</u>
October 1, 2007	Second half 2004	First half 2007
February 1, 2010	Second half 2007	Second half 2009

The evaluations shall include the applicable information as listed in Rule 62-701.510(9)(b), F.A.C., and shall include assessment of the effectiveness of the existing facility design and operation as related to the prevention of ground water and surface water contamination. Any contamination that may exist shall be addressed as part of evaluation monitoring conducted at the facility in accordance with Rule 62-701.510(7), F.A.C. The evaluations shall be sent to: Solid Waste Section, Department of Environmental Protection, Southwest District Office, 13051 North Telecom Parkway, Temple Terrace, Florida 33637-0926.
Amended 06/23/2006.

c. The permittee shall implement corrective actions at the facility to address exceedances of ground water standards reported for monitor wells at the south and west property boundaries in accordance with Consent Order OGC File No. 05-1078 [ref. SC#A.2.c.]. Any proposed changes to the monitoring plan (monitoring well locations, sampling frequency or monitoring parameters) that result from the implementation of these corrective actions shall require a modification to the permit in accordance with Specific Condition Nos. A.3., and E.5., prior to the implementation of the monitoring plan changes.

SPECIFIC CONDITIONS: PART F – Landfill Gas Management

1. Landfill Gas – NSPS and Title V Air Requirements.

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

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

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

2. Gas Monitoring and Control.

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

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

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

Measured During

Quarter 1
Quarter 2
Quarter 3
Quarter 4

Report Submitted By

April 15th of each year
July 15th of each year
October 15th of each year
January 15th of each year

SPECIFIC CONDITIONS: PART F – Landfill Gas Management

3. Gas Monitoring Locations.

a. The enclosed structures and existing gas monitoring probes shown on Attachment 3 ("Landfill Gas Monitoring Probe Locations, Central Landfill, Citrus County, Florida"), prepared by SCS Engineers, received January 5, 2007 (**attached**), shall be sampled at least **quarterly** for concentrations of combustible gases determined as a percent of the LEL calibrated to methane, as described in Rule 62-701.530(2), F.A.C.

Monitoring Probes

Active Landfill

Location Description

Existing GP-12, GP-13, GP-14, GP-15, GP-16, GP-17 and GP-18

Closed 60-acre Landfill

Existing GP-1, GP-2, GP-3, GP-4, GP-5, GP-6, GP-7, GP-8, GP-9, GP-10 and GP-11

Ambient

Monitoring Locations

Scale House

Location Description

Along baseboards, at cracks in concrete slab or flooring, ground-level cabinets, electrical outlets and panels

Administrative Building

Along baseboards, at cracks in concrete slab or flooring, ground-level cabinets, electrical outlets and panels

Leachate Treatment Plant

At cracks in concrete slab or flooring, ground-level cabinets, electrical outlet and panels

Gun Range

At cracks in concrete slabs, concrete slab penetrations, electrical outlets and switches

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

Amended 04/24/2007.

b. The existing "GS-series" gas probes located around the active landfill and the closed 60-acre landfill areas shall be abandoned **within 90 days of modification #21375-011 issuance, excluding:** gas probes GS-1E, GS-2E, GS-4E, GS-1W, GS-J3E, GS-N6E and GS-T6E, which shall remain in place. The existing "GS-series" gas probes shall be abandoned by removing the entire length of casing and backfilling the borehole with soil. In the event the entire length of casing of the gas probe cannot be removed, the probe bore shall be filled with grout (from the bottom to top, with surface returns), the casing shall be cut off below land surface, and backfilled with soil. Written documentation shall be submitted to the Department **within**

30 days of completion of "GS-series" gas probes abandonment.

New 04/24/2007.

SPECIFIC CONDITIONS: PART F - Landfill Gas Management

4. Gas Remediation.

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

b. In the event that the remediation activities required by Consent Agreement OGC File No. 05-1078 for landfill gas migration result in additional gas monitoring locations or gas management systems, the permittee shall request a modification of this permit pursuant to Specific Condition #A.3., above, to incorporate the new systems and monitoring locations.

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

1. Closure Permit Requirements. No later than ninety (90) days

prior to the date when wastes will no longer be accepted for portions of the landfill which have reached closure design dimensions, the landfill owner or operator shall submit a closure permit application to the Department, to assure conformance with all applicable Department rules. A closure permit is required prior to implementing closure related activities.

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

3. Long-Term Care Requirements.

a. The permittee shall perform long-term care for the facility in accordance with Rule 62-701.620, F.A.C., and the information submitted as part of this permit application. [ref. SC #A.2.a., Eng. Report, Section R].

b. 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.

4. Use of Closed Landfill Areas.

a. The use of an approximately six-acre area in the southwest corner of the closed 60-acre Class I landfill has been approved by the Department, as follows:

- **Firearms Training Facility (existing)** - the Citrus County School Board, Withlatchoochee Technical Institute (WTI) operates the Criminal Justice Academy (CJA) which includes firearms training. The existing firearms training facility includes five shooting ranges (3 pistol ranges, 1 rifle range, 1 tactical range), each of which contain earthen berms on 3 sides. The CJA provides firearms training for: law enforcement, correctional and correctional probation officer basic recruits and sworn officers; firearms instructors; retired law enforcement officers; hunter safety for the general public through the Florida Fish and Wildlife Conservation Commission (FWC); and, tactical training for specialty teams. Shooting shall be limited into the constructed earthen berms, no skeet or trap shooting shall be allowed.
- **Firearms Training Facility (proposed)** - construction and operation of an additional shooting range in accordance with Drawing Nos. 2 and 3 of 3 ("Proposed Range Modifications"), prepared by SCS Engineers, dated January 2006 [ref. SC#A.2.d.] to provide hunter safety training for the general public through the FWC. Shooting shall be limited into the constructed earthen berms, no skeet or trap shooting shall be allowed.

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

(Specific Condition #G.4.a., continued)

- **Firearms Training Facility Maintenance** - areas within the existing and proposed firearms training facilities shall be maintained to provide adequate surface slopes for drainage to the existing storm water retention area. No penetrations of the closed landfill cover system shall be allowed without first obtaining written approval from the Department. Lead removal shall be conducted at least yearly (or more often depending on soil testing results) by a Department-licensed company for proper treatment or disposal. Documentation of soil testing locations and results, lead removal, and subsequent soil treatments to maintain neutral pH shall be maintained by the WTI and made available to the Department upon request. Soil testing and lead removal shall be performed to comply with the Department's document entitled "Best Management Practices for Environmental Stewardship of Florida Shooting Ranges," dated 2004, or successor document.
- **Temporary Soil Stockpile Area** - Soils temporarily stockpiled on a portion of the closed landfill area, shall be stockpiled in the area and manner shown on plan sheet titled, "Proposed Soil Stockpile Area" [ref. SC#A.2.g.(5)], and in accordance with the procedures described in the Section Q.6 of the Engineering Report [ref. SC#A.2.g.(4)], or as otherwise approved in writing by the Department.

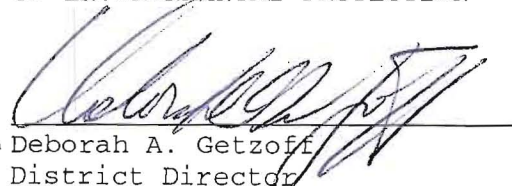
Amended 06/23/2006 and 02/09/2009.

b. Use of closed landfill areas requires consultation with and approval by the Department prior to conducting these activities in accordance with Rule 62-701.610(7), 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 cover, drainage, final cover materials (soil and vegetation), leachate collection system, bottom liner, monitoring systems or stormwater controls. A plan detailing the proposed activities and evaluation of the potential effects on the landfill systems (including engineering designs, calculation and plans, as appropriate) shall be submitted for Department review to comply with the requirements of the Department's document entitled "Guidance for Disturbance and Use of Old Closed Landfills or Waste Disposal Areas in Florida", dated May 3, 2001, or successor document. Authorization to use the Citrus County Central Landfill for activities not described in Specific Condition No. G.4.a., may require a modification of this permit to comply with Specific Condition No. A.3.

Amended 04/26/2006.

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.	No later than February 1, 2010	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, etc.
C.6.b.	Within 24 hours of discovery Within 7 days of verbal notification	Notification of: hazardous waste receipt, failure of landfill systems or equipment Written notification & corrective action plan
C.6.c.	Within 60 days of written notification	Complete corrective actions for gradient or groundwater monitoring system
C.6.d.	Within 30 days of written notification	Implement corrective actions for leachate management system
C.8.d.(1)	No later than February 1, 2010	Submit final leachate assessment report, videotape, inspection results, etc.
C.8.f.	Quarterly, by January 15 th	Submit leachate generation reports
F.2.c.	April 15 th July 15 th October 15 th each year	Submit gas monitoring results
C.13.a(1)	No later than January 15, 2006	Submit permit modification for sequence of filling and stormwater management system
C.13.f.	Annually, by January 15 th each year	Submit Topographic survey & remaining capacity calculations
D.4.a.	Annually, by September 1 st each year	Submit revised cost estimates
D.4.b.	Annually	Submit proof of funding
E.3.	Within 90 days of modification #21375-011 issuance	Abandon wells MW-C and MW-D
E.3.	Within 30 days of abandonment	Provide documentation of well abandonment
E.4.b.	Semi-annually	Sample background and compliance wells
E.4.c.	Semi-annually	Sample MW-6
E.4.d.	Semi-annually	Sample assessment wells

ATTACHMENT 1		
Specific Condition	Submittal Due Date	Required Item
E.5.a., E.5.b., E.5.d.	Within 90 days of installation of new wells	Request permit modification, provide construction details for wells, Submit survey
E.5.c.	Within 1 week of well development	Conduct initial sampling
E.6.	Within 30 days of abandonment	Submit documentation of abandonment
E.8.b.	Each discharge event	Conduct surface water sampling
E.9.b(1)	Quarterly, by Jan. 15 th , April 15 th , July 15 th , and Oct. 15 th each year	Submit results of routine leachate effluent sampling events
E.10.b.	Within 60 days from completion of laboratory analyses	Submit results of: - Ground water initial sampling - Ground water verification sampling - Surface water discharge sampling - Leachate influent monthly sampling
E.10.b.	Semi-annually, by Jan. 15 th and July 15 th each year Annually, by Jan. 15 th each year	Submit results of ground water routing sampling (SC#E.4.b., #E.4.c., #E.4.d.) Submit results of leachate influent, effluent and sludge analyses (SC#E.9.a(1), #E.9.b(3), #E.9.c.)
E.11.	By October 1, 2007 and by February 1, 2010	Submit water quality monitoring plan evaluations
F.3.b.	Within 90 days of modification 21375-011 issuance Within 30 days of completion of "GS-series" gas probes abandonment	Abandon existing gas probes Submit written documentation of gas probe abandonment
F.4.	Within 7 days of detection Within 60 days of detection	Submit gas remediation plan Complete corrective actions
G.1.	No later than 90 days prior to the date when wastes will no longer be received	Submit Closure Permit application

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: _____ 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 LEVEL 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 () _____

This topographic map depicts the Kilauea Iki Crater area, featuring the crater rim, surrounding terrain, and various landmarks. The map includes numerous survey points labeled GS (Geodetic Station) and GP (Geodetic Point). Key landmarks include the Administration Building, a Watch House, a Gun Range, and a Phase Landfill Area. The map also shows a road network and a railroad line. The terrain is characterized by contour lines indicating elevation. The map is overlaid with a grid system, with coordinates marked along the edges. The map is titled "KILAUEA IKI CRATER" and "KILAUEA IKI CRATER" in the top left corner. The map is dated "1962" in the top right corner. The map is drawn by "J. H. HARRIS" in the bottom right corner. The map is published by "U.S. GEOLOGICAL SURVEY" in the bottom left corner. The map is available in both English and Spanish versions.

LEGEND

GS-C3S		EXISTING LFG MONITORING PROBE TO BE REMOVED
GS-1W		EXISTING LFG MONITORING PROBE TO KEEP
GP-18		PERMANENT LFG MONITORING PROBE

FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION
JAN 05 2007
SOUTHWEST DISTRICT
TAMPA

— SGS ENGINEERS

Attachment 3. Landfill Gas Monitoring Probe Locations, Central Landfill, Citrus County, Florida