

SCS ENGINEERS

March 2, 2012
File No. 09211007.01

Steven G. Morgan
Florida Department of Environmental Protection
Southwest District, Solid Waste Section
13051 North Telecom Parkway
Temple Terrace, Florida 33637

Subject: Responses to RAI No. 1
CCSWDC Class I Landfill, Sarasota County
Phase II Stormwater Management System & Operations Permit Modifications to
Operation Permit No. 130542-007-SO/01
WACS ID No. SWD/58/51614

Dear Mr. Morgan:

On behalf of Sarasota County Solid Waste Division, SCS Engineers (SCS) submits the following responses to your request for additional information in a letter dated February 17, 2012.

If one response modifies a section of a Plan (e.g., the Operations Plan, Emergency Preparedness Manual, etc) the respective section(s) has been modified accordingly and the Plans provided. A revised, complete version of the Plans that includes all revisions made shall be provided. Additions have been underlined (e.g., added) and all deletions have been struck through (e.g., ~~deleted~~).

All responses that relate to engineering for design and operation, including plan sheets, have been signed and sealed by a professional engineer. All replacement pages are numbered with revision date. For ease of review, your comments are restated in **bold print**, followed by our response in normal print.

The following are included as attachments to this letter:

1. Revised Permit Application pages 4, 7, and 39
2. Revised Section A and Section G of the Engineering Report
3. Operations Permit No. 130542-007-SO/01
4. Revised Operation Plan (Attachments include only revised K-18)

The following information is needed in support of the solid waste application [Chapter 62-701, Florida Administrative Code (F.A.C.)]:



SECTION A - FDEP FORM 62-701.900(1)

- 1. Rule 62-701.320(7)(b), F.A.C. Application Form #62-701.900(1): Please address the following comments regarding the permit application form and provide a revised application form or replacement pages with the following information, where applicable:**

- a. §A.3. Since this application is for both a new construction other permit and operation permit minor modification, please revise this section to also check the "New" box.**

Response:

The "New" box has been checked in Section A.3 of the permit application. Please find the revised page 4 of 39 in Attachment 1

- b. §B.20. Phase II has a double geomembrane liner system. Please revise this section accordingly.**

Response:

The "Double geomembrane" box has been checked in Section B.20 of the permit application and the note below has been revised to "Phase I" and a note was added stating "A double geomembrane liner system is installed for Phase II"
Please find the revised page 7 of 39 in Attachment 1

SECTION A - GENERAL INFORMATION

- 2. As understood by the Department and indicated in Section D.5 of this application, this permit application is for a construction other permit for modification of the stormwater management system in Phase II and a minor permit modification of the facility's operation permit. Please verify and revise this section to refer to the modification of the facility's existing operation permit rather than the Phase I closure permit and revise Attachment A-I, as applicable.**

Response:

Section A and Attachment A-1 of the Engineering report has been modified to reference the existing operations plan. Please find these revisions in Attachment 2 of this letter. Also please find the current Operation Permit 130542-007-SO/01 issued November 18, 2008, modified March 15, 2011 in Attachment 3 of this letter.

SECTION G - LANDFILL CONSTRUCTION REQUIREMENTS

- 3. Section G.8.b: The Department believes that Cell 2 Alternate B is problematic for the following reasons. Please either revise this section and all other appropriate sections of**

application (e.g. Op. Plan, construction drawings, etc.) to address the following comments or preferably remove Alternate B from the permit application.

- a. Please provide a detailed explanation of how the 8" pipe will be installed through north berm. Please provide a CQA Plan for Alternate B and technical specification related to earthwork, directional drilling, and/or liner system installation and repair, as appropriate. The Department is concerned that either berm excavation or directional drilling through the berm will result in unwarranted damage to the installed liner system.

Response:

Cell 2 Alternate B has been removed. All appropriate sections of the application have been modified to remove reference to Cell 2 Alternate B.

- b. Please verify whether Alternate B was proposed to allow for simultaneous use of the leachate collection system in Cell 2 and the constructed Alternate B stormwater removal system. Under those circumstances, since Phase II has a double geomembrane liner system with and underlying GCL layer, an installed boot at the liner penetration appears to be inadequate to "seal the liner system". In particular, a boot on the primary liner would not seal the underlying leak detection geocomposite, secondary liner, or GCL layer at the pipe penetration and therefore will not prevent leachate leakage through the liner penetration from the leak detection system. Please verify and address this concern.

Response:

Cell 2 Alternate B has been removed. All appropriate sections of the application Engineering Report have been modified to remove reference to Cell 2 Alternate B. Please find a modified Section G of the Engineering Report in Attachment 3.

ATTACHMENT K.1 - MODIFIED OPERATIONS PLAN AND DRAWINGS (RULE 62-701.320(7)(E)1., F.A.C.)

Operations Plan:

4. Section Part K.2.h.:

- a. Please revise the second sentence in the third paragraph of this section to also indicate the stormwater may be pumped over the berm as further described later in this section.

Response:

Section Part K.2.h. has been revised to allow for stormwater to be pumped over the berm. Please find the revised pages in the documents in Attachment 4 of this response. The changes tracked indicate the changes for this RAI only. Also note: a few minor edits were

See attachment 4 for the modified Operations Plan.

Drawings:

5. **Please revise the construction drawings, as appropriate, based on your responses to Comments #3 and #4 above.**

Response:

The construction drawings have been modified based on the responses above. Drawing 5 from the original construction drawings has been removed. All other drawing numbers and detail call outs have been revised accordingly. Please find a revised set of Construction drawings in Attachment 5.

Please find attached 4 copies of our response to this letter as one complete package, as requested.

Sincerely,



Orion J. Holtey, P.E., MBA
Senior Project Professional



Daniel R. Cooper, P.E.
Project Manager
SCS ENGINEERS

DRC/OJH:hjm

Attachments

Attachment 1

Revised Permit Application Pages 4, 7, and 39

**STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
APPLICATION FOR A PERMIT TO CONSTRUCT, OPERATE, MODIFY OR CLOSE
A SOLID WASTE MANAGEMENT FACILITY**

Please Type or Print

PART A. GENERAL INFORMATION

1. Type of disposal facility (check all that apply):

- | | |
|--|--|
| <input checked="" type="checkbox"/> Class I Landfill | <input type="checkbox"/> Ash Monofill |
| <input type="checkbox"/> Class III Landfill | <input type="checkbox"/> Asbestos Monofill |
| <input type="checkbox"/> Industrial Solid Waste | |
| <input type="checkbox"/> Other Describe: | |

NOTE: Waste Processing Facilities should apply on Form 62-701.900(4), FAC;
Land Clearing Disposal Facilities should notify on Form 62-701.900(3), FAC;
Compost Facilities should apply on Form 62-701.900(10), FAC; and
C&D Disposal Facilities should apply on Form 62-701.900(6), FAC

2. Type of application:

- ☐ Construction
☐ Operation
☒ Construction/Operation
☐ Closure
☐ Long-term Care Only

3. Classification of application:

- | | |
|---|--|
| <input checked="" type="checkbox"/> New | <input type="checkbox"/> Substantial Modification |
| <input type="checkbox"/> Renewal | <input type="checkbox"/> Intermediate Modification |
| | <input checked="" type="checkbox"/> Minor Modification |

4. Facility name: Central County Solid Waste Disposal Complex

5. DEP ID number: SWD-58-51614 County: Sarasota

6. Facility location (main entrance):
North end Knights Trail Road

7. Location coordinates:

Section: 1-4 & 9-16 Township: 38S Range: 19E

Latitude: 27° 12' 11.5" Longitude: -82° 23' 35.4"

Datum: WGS84 Coordinate Method: Web Based Mapping

Collected by: SCS Engineers Company/Affiliation: SCS / Engineer

- ☐ Air treatment sludge ☒ Industrial sludge
☒ Agricultural ☒ Domestic sludge
☒ Asbestos ☐ Other Describe:

9. Salvaging permitted: ☐ Yes ☒ No

10. Attendant: ☒ Yes ☐ No Trained operator: ☒ Yes ☐ No

11. Trained spotters: ☒ Yes ☐ No Number of spotters used: 1

12. Site located in: ☐ Floodplain ☐ Wetlands ☒ Other:

Uplands

13. Days of operation: Monday through Saturday

14. Hours of operation: 8:00 am to 5:00 pm

15. Days Working Face covered: Monday through Saturday

16. Elevation of water table: 20.5 ft. Datum Used: NGVD

17. Number of monitoring wells: 10

18. Number of surface monitoring points: 2

19. Gas controls used: ☒ Yes ☐ No Type controls: ☒ Active ☐ Passive

Gas flaring: ☒ Yes ☐ No Gas recovery: ☒ Yes ☐ No

20. Landfill unit liner type:

- ☐ Natural soils ☒ Double geomembrane
☐ Single clay liner ☐ Geomembrane & composite
☐ Single geomembrane ☐ Double composite
☒ Single composite ☐ None
☐ Slurry wall ☐ Other Describe:

A single composite liner for Phase ~~I~~ landfill.

A double geocomposite liner system is installed for Phase II.

PART S. CERTIFICATION BY APPLICANT AND ENGINEER OR PUBLIC OFFICER

1. Applicant:

The undersigned applicant or authorized representative of Sarasota County

_____ is aware that statements made in this form and attached

information are an application for a Construction/Operation Permit from the Florida Department of Environmental Protection and certifies that the information in this application is true, correct and complete to the best of his/her knowledge and belief. Further, the undersigned agrees to comply with the provisions of Chapter 403, Florida Statutes, and all rules and regulations of the Department. It is understood that the Permit is not transferable, and the Department will be notified prior to the sale or legal transfer of the permitted facility.

Lang Rose

Signature of Applicant or Agent

Lois E. Rose, SWO Manager
Name and Title (please type)

lerose@scgov.net

E-Mail address (if available)

4000 Knights Trail Road

Mailing Address

Nokomis, FL 34275

City, State, Zip Code

(941) 861-1589

Telephone Number

Date:

Attach letter of authorization if agent is not a governmental official, owner, or corporate officer.

2. Professional Engineer registered in Florida (or Public Officer if authorized under Sections 403.707 and 403.7075, Florida Statutes):

This is to certify that the engineering features of this solid waste management facility have been designed/examined by me and found to conform to engineering principles applicable to such facilities. In my professional judgment, this facility, when properly maintained and operated, will comply with all applicable statutes of the State of Florida and rules of the Department. It is agreed that the undersigned will provide the applicant with a set of instructions of proper maintenance and operation of the facility.

Dalgar

Signature

Daniel R. Cooper, P.E., Project Manager
Name and Title (please type)

Florida Registration Number
(please affix seal)

4041 Park Oaks Blvd., Suite 100

Mailing Address

Tampa, Florida 33610

City, State, Zip Code

dcooper@scsengineers.com

E-Mail address (if available)

(813) 621-0080

Telephone Number

Date:

Attachment 2

Revised Section A and Section G of the Engineering Report

SECTION A

GENERAL INFORMATION

A complete FDEP Application form for a minor modification/construction permit to the CCSWDC Operations permit is attached.

The existing modified Operation Permit, FDEP Permit No. 130542-0714-SOF/01 Issued November 186, 200814 and last modified ~~October 7~~ March 15, 2011 appears in Attachment A-1. This permit is being modified with this application to allow for modified stormwater management that will allow County to avoid costs associated with the maintenance of the raintarp, costs now being incurred due to stormwater intrusion into the leachate collection layer, and pumping costs to remove stormwater from atop the rain tarp in Phase II Cells 2, 3 and 4.

All documentation referenced in Part A of the existing permit located in Attachment A-1 is included by reference as part of this permit application and represents the current documentation whenever no change is indicated on the FDEP application form.

ATTACHMENT A-1
EXISTING OPERATIONS PERMIT 130542-00714-SOF/01

SECTION G

LANDFILL CONSTRUCTION REQUIREMENTS

G.1 TO G.7 ARE NOT APPLICABLE TO THIS APPLICATION

G.8 SURFACE WATER MANAGEMENT SYSTEMS

G.8.a Permit for Stormwater control

Details of the permitted surface water management system can be found in the Southwest Florida Water Management District MSSW Permit No. 407932.01 as identified in the Environmental Resource Permit Number 58-0272622-001 in Attachment G-1.

G.8.b Design of Surface Water Management System

The existing operation plan allows for the surface water to be pumped from Cells 2, 3, and 4 to the existing perimeter stormwater swale north of those cells. Cells 2, 3, and 4 will be modified as follows to allow for the continued transfer of surface water from the cells to the perimeter swale without the pumping costs.

Cell 2

Construction of Cell 2 consists of ~~3~~2 alternatives and actual construction will be determined based on the bid cost and remaining life of Cell 1 at the time of construction.

Cell 2 Alternative A

Alternative A proposes installing two grate inlets into the existing leachate system at the northern end of Cell 2. A plug will be installed at the invert of the pump station preventing flow from the metering manhole to the pump station. A tee will be installed into the existing 8-inch connector pipe which connects the metering manhole to the pump station. An 8-inch outfall pipe will be attached to the tee and will direct flow to the perimeter stormwater channel. Grout filled fabric revetment shall be installed at the outfall location to prevent erosion of the perimeter channel bank. See Sheet 4 of Attachment K-18 for a detailed drawing of Alternative A.

~~Cell 2 Alternative B~~

~~Alternative B proposes installing two grate inlets at the northern end of Cell 2 offset from the center of the cell to avoid conflict with the existing leachate system piping. The grate inlets will extend through the liner to the north under the berm and outfall to the perimeter stormwater channel. A boot will be installed at the liner penetration to seal the liner system. Grout filled fabric revetment shall be installed at the outfall location to prevent erosion of the perimeter channel bank. See Sheet 5 of Attachment K-18 for a detailed drawing of Alternative B.~~

Cell 2 Alternative ~~C~~B

Alternative ~~C~~B for Cell 2 will be to make no changes to Cell 2. If the bid price is higher than anticipated and the life of Cell 1 does not make it feasible to make any changes Sarasota County reserves the right to perform no changes.

Cell 3 and 4

Construction proposed in Cells 3 and 4 are similar. Construction of these Cells proposes installing two grate inlets into the existing leachate system at the northern end of each Cell. The existing downstream valve to the leachate sump in the Collection manhole at each cell will be closed. An 8-inch outfall pipe will be connected to the existing HDPE collection manhole with an electrofusion saddle and the outfall pipe will be directed to the perimeter stormwater channel. Grout filled fabric revetment shall be installed at the outfall location to prevent erosion of the perimeter channel bank. Sheets ~~6~~5 and ~~7~~6 of Attachment K-18 show drawings of the improvements for Cells 3 and 4, respectively.

Additional description of the improvements can be found in Attachment K-1.

No changes in the design or operations will modify the existing isolation of surface water from liquids from waste filled areas.

G.8.c Details of Stormwater Control Design

Details of the permitted surface water management system can be found in the Southwest Florida Water Management District MSSW Permit No. 407932.01 as identified in the Environmental Resource Permit Number 58-0272622-001 in Attachment G-1.

G.9 IS NOT APPLICABLE TO THIS APPLICATION.

Attachment 3

Operations Permit No. 130542-007-SO/01



Florida Department of Environmental Protection

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

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

CERTIFIED MAIL 7009 1680 0000 2592 5910
RETURN RECEIPT REQUESTED

March 15, 2011

NOTICE OF PERMIT

Sarasota County
Solid Waste Operations
c/o Ms. Lois Rose, Manager
4000 Knights Trail Road
Nokomis, Florida 34275

Re: Sarasota Central County Solid Waste Disposal Complex Class I LF
Modification #130542-015-SO/MM to existing
Operation Permit #130542-007-SO/01, Sarasota County

Dear Ms. Rose:

Attached is modified **Operation Permit 130542-007-SO/01**, issued pursuant to Section(s) 403.087(1), Florida Statutes. The following Conditions have been revised in modification number 130542-015-SO/MM:

SPECIFIC CONDITIONS	FROM	TO	TYPE OF MODIFICATION
Multiple Specific Conditions	Existing	Amended	References to sections in Operations Plan revised based on change in section identification in plan from "L" to "K".
Page 1 of 38	Existing	Amended	Reference to Permit Modification No. 130542-015-SO/MM added
#A.2.a.(2) #A.2.a.(4) #A.2.c.	Existing	Amended	References revised Water Quality Monitoring Plan
#A.2.d.	Existing	Amended	Revised LFGCCS O&M Plan referenced.
#A.2.e.	Existing	Amended	Revised Operations Plan referenced.
#A.2.f.	-	New	Additional permitting documents referenced.
#A.4.	Existing	Amended	Revised permit renewal due date referenced.
#C.1.a.	Existing	Amended	Revised references to Operations Plan and LFGCCS O&M Plan.
#C.1.d.	Existing	Amended	Revised setbacks from edge of liner markers in Phase II.
#C.1.j. #C.8.g. #D.2.d.(7)	Existing	Amended	Revised references to section of Operations Plan based on reformatted plan.

SPECIFIC CONDITIONS	FROM	TO	TYPE OF MODIFICATION
#C.5.c.	-	New	Requires control of fugitive particulates (dust) in accordance with procedures in Operations Plan.
#C.8.a. #C.8.c.(3) #C.8.i.(1) #D.2.b.	Existing	Amended	Revised reference to Operations Plan.
#C.8.b.	Existing	Amended	Authorizes installation of temporary piping to drain ponded leachate from bermed working face area.
#C.8.i.	Existing	Amended	Specific Condition #C.9. "Reuse of Leachate for Dust Control" renumbered #C.8.i. to eliminate duplication with Specific Condition #C.9. "Special Wastes" and subsections renumbered accordingly.
#D.2.d.(9) #F.5.a. #F.5.b.	Existing	Amended	Revised references to LFGCCS O&M Plan.
#E.1.a.	Existing	Amended	Adds condensate to the list of sample types conducted in accordance with the Water Quality Monitoring Plan for the facility.
#E.3.	Existing	Amended	References revised Water Quality Monitoring Plan and Figure 1, deletes wells abandoned as part of Phase II construction, adds requirements to protect monitor wells in accordance with amendments to Rule 62-701.510, F.A.C.
#E.4.	Existing	Amended	References revised Water Quality Monitoring Plan referenced.
#E.6.	Existing	Amended	Referenced amended Rule 62-532.500(5), F.A.C., effective October 7, 2010, regarding well abandonment.
#E.8.a. #E.8.b. #E.8.c. #E.9. #E.9.a.	Existing	Amended	References revised Water Quality Monitoring Plan and Figure 1
#E.9.b.	Existing	Amended	Revised leachate parameter list referenced.
#E.10.	Existing	Amended	Condensate sampling event results required to be provided as Electronic Data Deliverable reports.
#E.10.b.7 #F.5.b.	Existing	Amended	Condensate sampling frequency amended from semi-annual to annual.
#E.11.	Existing	Amended	Due dates for Monitoring Plan Evaluation reports revised.
#F.3.	Existing	Amended	References revised Operations Plan and Figure 1, deletes gas probe abandoned as part of Phase II construction.
#G.4.b.	Existing	Amended	References revised Department document.

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

A person whose substantial interests are affected by this modification of permit may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Department's Office of General Counsel, 3900 Commonwealth Blvd., Mail Station 35, Tallahassee, 32399-3000, within fourteen (14) days of receipt of this notice. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within fourteen (14) days shall constitute a waiver of any right such person has to an administrative determination (hearing) pursuant to Section 120.57, Florida Statutes.

The petition shall contain the following information;

- (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of Department's action, or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends warrant reversal or modification of the Department's action or proposed action; and
- (g) A statement of the relief sought by petitioner, stating precisely the action petitioner wants the Department to take with respect to the Department's action or proposed action.

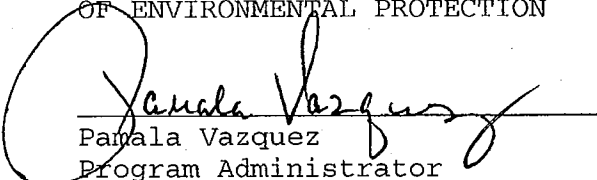
If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any decision of the Department with regard to the application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of publication of this notice in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C. Mediation is not available in this proceeding.

This modified permit is final and effective on the date filed with the Clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition and conforms to Rules 62-110 and 28-106, F.A.C. Upon timely filing of a petition or a request for an extension of time this transfer of permit will not be effective until further Order of the Department.

When the Order is final, any party to the Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Blvd., Mail Station 35, Tallahassee, 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date the Final Order is filed with the Clerk of the Department.

Executed in Hillsborough County, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION


Pamela Vazquez
Program Administrator
Southwest District

PV/sgm

Attachments

Copies furnished to:

Sarasota County Elected Officials Notification
Jason Timmons, P.E., HDR Engineering, Inc. jason.timmons@hdrinc.com
Richard Tedder, FDEP Tallahassee, (e-mail)
Frank Hornbrook, FDEP, Tallahassee, (e-mail)
John Morris, P.G., FDEP Tampa (e-mail)
Ronni Moore, OGC Tallahassee (e-mail)
Susan Pelz, P.E., FDEP Tampa (e-mail)

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this **NOTICE OF PERMIT** and all copies were mailed or transmitted electronically to the addressee and the listed persons before the close of business on March 15, 2011 to the listed persons.

Clerk Stamp

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


Clerk

3/15/2011
Date



Florida Department of Environmental Protection

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

Rick Scott
Governor

Jennifer Carroll
Lt. Governor

Herschel T. Vinyard Jr.
Secretary

PERMITTEE

Sarasota County
~~Solid Waste Operations~~
c/o Ms. Lois Rose, Manager
4000 Knights Trail Road
Nokomis, Florida 34275

PERMIT/CERTIFICATION

WACS ID No: SWD/58/51614
Permit No: **130542-007-SO/01**
Date of Issue: **11/18/2008**
Expiration Date: **11/18/2013**
County: Sarasota
Lat/Long: 27°12'11"N
82°23'16"W
Sec/Town/Rge: 1-4, 9-16/38S/19E
Project: Central County Solid Waste Disposal
Complex, Class I Landfill Operation

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-330, 62-520, 62-522, 62-550, and 62-701. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans and other documents, attached hereto or referenced in Specific Condition #A.2., and made a part hereof and specifically described as follows:

To operate, monitor and maintain a Class I landfill - **Phase I (approx. 55 acres) & Phase II (approx. 55.0 acres)**, and related facilities, referred to as the Central County Solid Waste Disposal Complex, subject to the specific and general conditions attached, for the management and disposal of solid waste, located at the north end of Knights Trail Road, 2 miles east of I-75, northeast of Venice, Sarasota County, Florida. The specific conditions attached are for the operation of a:

1. Class I Landfill
2. Leachate Storage Tank, and special waste management
3. Gas Collection and Control System

General Information:	Phase I
Disposal acres	55 acres (5 disposal units - "Cells")
Lowest elevation	+24 feet NGVD (Cell 5 sump)
Bottom liner design	Composite, 60 mil HDPE on one foot of clay
LCS design (sideslope risers)	Geonet/geotextile, rock/8-inch HDPE LCS piping, 24" sand
LDS design	none
Leachate storage tank	Single concrete tank, 1.8 MG, concrete secondary containment [ref. Operation Plan, §K8.b., Attachment K-7]
Final elevation (including cover)	+121 feet NGVD [ref. SC#A.2.b., Sheet 2]
Slopes	3H:1V sideslopes, 4% top slope [ref. SC#A.2.b., Sheet 3]
Gas collection and control system	See Construction Permit No. 130542-009-SC/08 or its successors
	Phase II (see Construction Permit No. 130542-006-SC/01 or its successors)

Replaces Permit No. 130542-002-SO/01

Includes Modification Nos. 130542-010-SO/MM, dated 06/24/2009, 130542-013-SO/MM, dated 04/08/2010 and 130542-015-SO/MM, dated 03/15/2011.

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

GENERAL CONDITIONS:

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

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

GENERAL CONDITIONS:

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

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

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

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

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

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

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

13. This permit also constitutes:

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

GENERAL CONDITIONS:

14. The permittee shall comply with the following:

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

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

(c) Records of monitoring information shall include:

1. the date, exact place, and time of sampling or measurements;
2. the person responsible for performing the sampling or measurements;
3. the dates analyses were performed;
4. the person responsible for performing the analyses;
5. the analytical techniques or methods used;
6. the results of such analyses.

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

SPECIFIC CONDITIONS: PART A, Solid Waste Facility General Requirements

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

2. **Permit Application Documentation.** This permit is valid for **operation** of the Class I landfill (Phases I & II) and related appurtenances in accordance with in accordance with all applicable requirements of Department rules and the reports, plans and information submitted by HDR Engineers, Inc. [HDR] (unless otherwise noted), as follows:

a. Central County Solid Waste Disposal Complex Class I Landfill Phase II Expansion Construction/Operation Permit Application (two 3-ring binder volumes and plan set) dated February 2007 (received February 20, 2007), as revised, replaced or amended (replacement pages inserted into original) dated and received June 22, 2007, dated September 21, 2007 (received September 27, 2007), dated January 11, 2008 (received January 16, 2008, dated March 18, 2008 (received March 19, 2008), dated April 24, 2008 (received April 25, 2008), dated June 5, 2008 (received June 6, 2008). This information includes, but is not limited to:

1) Operations Plan, dated March 2008 (Appendix A) [replaced by Op. Plan referenced in SC #A.2.d.(1), below];

2) Water Quality Monitoring Plan Addendum, revised April 2009 (received April 23, 2009) Appendix C [replaced by Water Quality Monitoring Plan referenced in SC #A.2.f.(2), below]; and

3) Plan Set titled, Phase II Class I Landfill Expansion Central County Solid Waste Disposal Complex (34 Sheets) dated March 2008 (received March 19, 2008) including Sheets G-02, G-05, C-04, C-05A through C-12 and C-14 through C-21 received January 16, 2008 (inserted into March 2008 plan set);

4) Document entitled "Ground Water Monitoring Plan Addendum," prepared by SCS Engineers, dated June 28, 2002, with revisions dated July 24, 2002 [Section 2 - Leachate Sampling Parameters] and September 16, 2002 [Appendix A], received June 28, 2002, July 29, 2002, and September 20, 2002; including revisions to Section 4 [Ground Water Sampling and Parameters], prepared by PBS&J dated February 22, 2007, received February 26, 2007 (copy inserted into Water Quality Monitoring Plan Addendum, Appendix C referenced in Specific Condition #A.2.a.(2), above) [replaced by Water Quality Monitoring Plan referenced in SC #A.2.f.(2), below].

Amended 06/24/2009 and 03/15/2011.

b. Plan Sheets titled, Sarasota County Phase I Class I Operations Drawings - Central County Solid Waste Disposal Complex ... (24" x 36" Sheets 1 through 9, 13C through 13R, and 14 through 17) dated January 2008, signed and sealed January 7, 2008 (received January 9, 2008).

c. Document entitled "Ground Water Monitoring Plan Addendum," prepared by SCS Engineers, dated June 28, 2002, with revisions dated July 24, 2002 [Section 2 - Leachate Sampling Parameters] and September 16, 2002 [Appendix A], received June 28, 2002 and July 29, 2002, and September 20, 2002; including revisions to Section 4 [Ground Water Sampling and Parameters], prepared by PBS&J dated February 22, 2007, received February 26, 2007 [replaced by Water Quality Monitoring Plan referenced in SC #A.2.f.(2), below].
Amended 03/15/2011.

SPECIFIC CONDITIONS: PART A, Solid Waste Facility General Requirements

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

d. Central County Solid Waste Disposal Complex Class I Landfill Phase I Gas Collection and Control System Construction and Operation Permit Application (3-ring binder & plan set) dated December 29, 2008 (received December 30, 2008), as revised, replaced or amended (information collated into originals*) dated March 13, 2009 (received March 26, 2009) and dated April 20, 2009 (received April 22, 2009). This information includes, but is not limited to:

~~1) CCSWDC Operation Plan, dated March 2008, as revised March 2009~~
[replaced by Op. Plan referenced in SC #A.2.e.(1), below];

2) Section 3 - LFGCCS Operation and Maintenance Plan, dated March 2009 [replaced by LFGCCS O&M Plan referenced in SC #A.2.f.(3), below];

3) Plan Sheets titled, Permit Drawings for Central County Solid Waste Disposal Complex, Sarasota County Phase I Gas Collection and Control System... (17 Sheets) signed and sealed April 20, 2009 (received April 22, 2009).

New 06/24/2009; Amended 04/08/2010 & 03/15/2011.

e. Central County Solid Waste Disposal Complex (CCSWDC) Phase II Expansion Minor Modification Permit Application... [for operation of a temporary gas vent system and rain cell cover and dewatering system in Cells 3 & 4] dated January 11, 2010 (received January 12, 2010), as revised, replaced or amended (information collated into information in Specific Condition #A.2.a., above) dated February 18, 2010 (received February 19, 2010). This information includes, but is not limited to:

1) CCSWDC Operation Plan, dated March 2009, as revised February 2010 [replaced by Op. Plan referenced in SC #A.2.f.(1), below].

New 04/08/2010; Amended 03/15/2011.

f. Central County Solid Waste Disposal Complex (CCSWDC) Class I Operations... Minor Modification Permit Application, dated and received July 2, 2010 (permit fee received August 24, 2010), as revised, replaced or amended (information collated into information in Specific Condition #A.2.a., above) dated and received December 30, 2010, and received via e-mail February 1, 2011 and March 8, 2011. This information includes, but is not limited to:

1) CCSWDC Operation Plan, dated December 2010 [replaces Op. Plan referenced in SC #A.2.e.(1), above];

2) Water Quality Monitoring Plan, Central County Solid Waste Disposal Complex, prepared by Sarasota County Solid Waste Operations, dated December 17, 2010, revised Section 5.1 received February 1, 2011, revised Section 4.2 received March 8, 2011 [replaces Water Quality Monitoring Plan Addendum referenced in SC #A.2.a.(2), and Ground Water Monitoring Plan Addendum referenced in SC #A.2.a.(4) and SC #A.2.c., above];

3) LFGCCS Operation and Maintenance Plan, [Op. Plan, Att. K-15] dated July 2010 [replaces LFGCCS O&M Plan referenced in SC #A.2.d.(2), above].

New 03/15/2011.

* see OCULUS for uncollated 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 Phases I & II Class I disposal facility, the leachate storage tank system and related appurtenances.

1) In the event that the Department or permittee determines that the operation of Phase II needs to be revised based on the conclusions of the SAR referenced in paragraph 10 of Consent Order #08-1728, the permittee shall request a modification of this permit, in accordance with Specific Condition A.3.a. above, to accommodate the appropriate operation changes.

2) In the event that the Department or permittee determines that the water quality monitoring plan for the facility needs to be revised based on the conclusions of the SAR referenced in paragraph 10 of Consent Order #08-1728, the permittee shall request and receive Department approval of a minor permit modification in accordance with Specific Condition #A.3.a. prior to implementation of changes to facility's water quality monitoring plan.

c. This permit does not authorize the **operation** of the Phase II portion of the landfill until the following requirements have been completed and submitted by the Permittee, and approved by the Department:

1) Certification of Construction Completion requirements of Specific Conditions #B.2. and #B.3. of Construction Permit No. 130542-006-SC/01 or its successors, for each phase of construction of Phase II.

2) Construction of groundwater monitoring wells as required by Specific Conditions #E.3.,

3) Completion of initial sampling of new monitoring wells as required by Specific Condition #E.3.

4) Construction of the stormwater management system,

5) Financial assurance requirements of Specific Condition #D.4.b.,

d. This permit does not authorize the **operation** of the Phase I gas collection and control system until the following requirements have been completed and submitted by the Permittee, and approved by the Department:

1) Certification of Construction Completion requirements of Specific Conditions #B.2. and #B.3. of Construction Permit No. 130542-009-SC/08 or its successors.

New 06/24/2009.

SPECIFIC CONDITIONS: PART A, Solid Waste Facility General Requirements

4. **Permit Renewal.** On or before April 15, 2013 the permittee shall notify the Department in writing or electronically of its intent to apply for renewal of this permit and of the anticipated date of submittal of the permit renewal application. No later than September 18, 2013, 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, a water quality monitoring plan evaluation, and revised (not inflation-adjusted) financial assurance cost estimates.
Amended 03/15/2011.

5. **Professional Certification.** Where required by Chapter 471 (P.E.) or Chapter 492 (P.G.), Florida Statutes, applicable portions of permit applications and supporting documents which are submitted to the Department for public record shall be signed and sealed by the professional(s) who prepared or approved them.

6. **General Conditions.** The permittee shall be aware of and operate under the "General Conditions". General Conditions are binding upon the permittee and enforceable pursuant to Chapter 403, Florida Statutes.

7. **Permit Acceptance.** By acceptance of this Permit, the Permittee certifies that he/she has read and understands the obligations imposed by the Specific and General Conditions contained herein and also including date of permit expiration and renewal deadlines. It is a violation of this permit for failure to comply with all conditions and deadlines.

8. **Regulations.** Chapter 62-701, F.A.C., effective January 6, 2010, 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.
Amended 04/08/2010.

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.

- a. All significant construction activities shall be approved by the Department prior to initiating work, unless specifically authorized otherwise.
- b. Construction of the Phase I landfill gas collection and control system and related appurtenances is authorized by Construction Permit 130542-009-SC/08, (including modifications, if any), or its successors. New 06/24/2009.

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:
 - 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 Phase I Operation Drawings [ref. SC#A.2.b. & Op. Plan, Attachment K-14], the Phase II Landfill Staging Plan [ref. SC#A.2.a.(3), Sheets C-07 through C-11], the Operations Plan [ref. SC#A.2.f(1)] , the LFGCCS Operations and Maintenance Plan [ref. SC#A.2.f(3)], and any other applicable requirements.
Amended 06/24/2009; 04/08/2010 ; and 03/15/2011.

1) Operation of the Materials Recovery Facility shall be in accordance with Chapter 62-701, F.A.C., and Operation Permit 134912-003-SO (including modifications, if any), or its successors.

2) Operation of the Waste Tire Processing Facility shall be in accordance with Chapters 62-701 and 62-711, F.A.C., and Operation Permit 126775-002-WT/02 (including modifications, if any), or its successors.

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. The permittee shall clearly stake/mark the location of the edge of the liner and maintain the locations as the landfill increases in elevation to prevent waste disposal and leachate runoff outside the geomembrane liner. The markers shall be of a sufficient size or design that effectively prevents waste disposal in unauthorized areas. The staking/markers shall be maintained at all times throughout the operation of the facility. Waste shall not be disposed within 10 feet of the edge of the liner in Phase I, within 7 feet of the edge of the north and west liner markers in Phase II, and within 14 feet of the edge of the south liner markers in Phase II. [ref. Op. Plan, Sec K.2.f].
Amended 03/15/2011.

e. 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. Ruts from traffic and heavy equipment that may cause ponding shall be regraded at the end of each working day.

f. The Class I disposal areas shall operate as designed to limit the leachate head to one foot above the liner.

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**. Portable fences will be utilized as needed to keep litter from leaving the working face area [ref. Op. Plan, Secs. K.7.j]. 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 [ref. Op. Plan, Secs. K.11.b]. 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 [ref. Op. Plan, Sec. K.2.b.(1)]. Trenches cut into the waste shall not be used to extinguish the fire without prior Department approval.
Amended 03/15/2011.

k. Waste streams generated by the operation or maintenance of the facility and equipment shall be managed such that any residual contaminants (such as gasoline, oil, paint, antifreeze, PCBs, etc.) shall be stored such that the residues or constituents thereof are not spilled, leaked, dumped, or otherwise discharged onto the ground or into surface or groundwaters.

SPECIFIC CONDITIONS: PART C - Operation Requirements

2. Operating Personnel.

a. A trained operator (trained in accordance with the facility Training Plan) [ref. Op. Plan, Attachment K-1] shall be on duty at the facility whenever the facility is operating and shall be responsible for operating and maintaining the facility in an orderly, safe, and sanitary manner.

b. A sufficient number of trained spotters (at least one trained spotter) shall be at the tipping areas at all times that waste is being ~~accepted at the facility to inspect each load of waste as it is unloaded~~ and spread, and shall remove prohibited materials prior to processing [ref. Op. Plan, Sec.K.2.c]. Training of spotters shall be in accordance with the facility Training Plan [ref. Op. Plan, Attachment K-1].

c. A sufficient number of trained personnel shall be available to adequately operate the facility. In the event that a trained operator or spotter is not available at the site, the facility shall be closed and shall not accept waste. In the event that unacceptable wastes are not adequately removed from the waste prior to disposal, additional trained spotters shall be required.

d. 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. [ref. Op. Plan, Sec. K.5]. Adequate access to the working face shall be provided for all weather conditions while the facility is receiving waste for disposal.

4. Monitoring of Waste.

a. Wastes shall be monitored as required by Rule 62-701.500(6), F.A.C., including a load checking program and associated activities. The owner or operator shall conduct three random load checks per week at the active working face [ref. Op. Plan, Sec. K.6]. 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 [ref. SC#D.3.b.(3)].

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

SPECIFIC CONDITIONS: PART C - Operation Requirements

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

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

~~d. Sludges generated from onsite processes (e.g., stormwater or leachate 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) arising from the operation so as to protect the public health and welfare. Such control shall minimize the creation of nuisance conditions on adjoining property. Complaints received from the general public, and confirmed by Department personnel upon site inspection, shall constitute a nuisance condition, and the permittee must take immediate corrective action to abate the nuisance.

b. In the event that the odor control measures performed at the facility, do not sufficiently abate objectionable odors offsite, the owner or operator shall submit an odor abatement plan to the Department **within thirty (30) days** of initial detection. The odor abatement plan shall include at a minimum, a description of the proposed corrective actions and a schedule for implementation.

c. The owner/operator shall control fugitive particulates (dust) from the operation of the facility in accordance with the procedures in Section K.11.d. of the Operations Plan.

New 03/15/2011.

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, landfill gas collection and control system, land gas monitoring system, surface water monitoring system, and groundwater monitoring system. Erosion and ponded water in disposal areas shall be prevented. Erosion in the stormwater management system shall be minimized.

Amended 06/24/2009.

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 (including damaged or dry groundwater monitoring wells), fire, explosion, the development of sinkhole(s) or other subsurface instability at the site, the permittee shall **immediately (within 24 hours)** notify the Department explaining such occurrence and remedial measures to be taken, method to prevent reoccurrence, and time needed for repairs. **Written, detailed notification shall be submitted to the Department within seven (7) days following the occurrence.** Routine maintenance does not require notification but shall be noted on daily reports.

SPECIFIC CONDITIONS: PART C - Operation Requirements

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

c. In the event that any portion of the groundwater monitoring system is damaged or unable to be sampled, corrective actions shall be completed **within sixty (60) days** of the written notification specified in Specific Condition #C.6.b., unless otherwise approved by the Department. Corrective actions which include relocation or installation of new groundwater monitoring wells shall be in accordance with Specific Condition #E.5., or as otherwise approved by the Department.

~~d. In the event that the stormwater or leachate management systems are~~ damaged or are 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.

e. Intermediately covered areas, or areas which discharge to the stormwater management system, which exhibit significant erosion shall be repaired as specified below [ref. Op. Plan, Sec. K.7.k]:

1) **Within 7 days** if the soil cover materials have eroded such that greater than 50% of the soil in that location has been eroded, or

2) **By the end of the next working day** if waste or liner is exposed.

f. In the event that the intermediately covered side slopes exhibit chronic, "significant" erosion as defined above, a corrective action plan shall be submitted to the Department **within thirty (30) days** of written notification and request from the Department and corrective actions shall be implemented in accordance with the Department approved corrective action plan.

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

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

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.

b. All stormwater conveyances shall be inspected weekly and after a greater than 0.5" rainfall events to verify adequate performance. Conveyances not performing adequately shall be repaired in accordance with the procedures specified in the Operations Plan [ref. Op. Plan, Sec. K.2.h.]. Documentation of all inspections and repairs shall be kept on file at the facility.

SPECIFIC CONDITIONS: PART C - Operation Requirements

(Specific Condition #C.7., cont'd)

c. Maintenance of the surface water management system shall be conducted in accordance with Section K.2.h. of the Operations Plan.

d. The permittee shall operate the facility, maintain grades, or utilize berms and swales, to prevent ponded water within the disposal areas.

8. Leachate Management.

~~a. Leachate shall be managed in accordance with the requirements of Rule 62-701.500(8), F.A.C., the information in Section K.8 of the Operations Plan [ref. SC#A.2.f(1)], and other applicable Department rules.~~
Amended 03/15/2011.

b. Leachate and potentially contaminated stormwater which has accumulated in low areas within the disposal area shall be removed **daily** for disposal. The operator may install piping which drains ponded leachate from the bermed working face area to the toe of the landfill and into the leachate collection system as described in Section K.2.h. of the Operations Plan.

Amended 03/15/2011.

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

1) **Between July 15, 2009 and December 15, 2009**, an inspection (videotape or other appropriate assessment as approved by the Department) of the leachate collection system (LCS) for Phase I shall be conducted. A *final report* for this inspection shall include an evaluation of the effectiveness of the system, the location (indicated on a Site Plan drawn to scale) and cause of all obstructions encountered, proposed corrective actions and schedule for implementation of corrective actions as appropriate. The permittee shall retain a copy of the videotape at the facility for reference. **No later than January 15, 2010**, a *final report* summarizing the inspection results (with a copy of the inspection report) and describing the related corrective actions (repairs) if required (with photographic documentation for all repairs and a copy of the inspection videotape) shall be submitted to the Department to verify adequate performance of the leachate collection and removal system. The *final report* shall be signed and sealed by a professional engineer. The permittee shall retain a copy of the final report, each inspection report and inspection videotape at the facility for reference, and shall provide a copy to the Department upon request.

2) **Between September 15, 2012 and March 15, 2013**, an inspection (videotape or other appropriate assessment as approved by the Department) of the leachate collection system (LCS) for Phases I & II shall be conducted. A *final report* for this inspection, prepared consistent with the procedures in Specific Condition #C.8.c.(1) shall be submitted to the Department **no later than April 15, 2013**.

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

Amended 03/15/2011.

SPECIFIC CONDITIONS: PART C - Operation Requirements

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

- 4) The leachate level indicators at the leachate storage tank shall be inspected **at least once each business day**, or more frequently if needed, to ensure proper operation. The electric actuated cutoff valve shall be tested on a weekly basis to ensure proper operation [ref. Op. Plan, Sec. K.8.b].
- 5) The operation of each pump, metering manholes, leak detection manholes, related sensors and controller mechanisms, and pump ~~station shall be verified on each operating day [ref. Op. Plan, Sec. K.8.h].~~ Pumps showing reduced performance shall be removed for maintenance and repair, and a replacement pump installed if required for continued compliance. Control panels shall be inspected and operational data recorded in accordance with Section K.8.f of the Operations Plan.
- 6) In the event that the pumps, pump stations or level sensors are not operating as designed, the Department shall be notified in accordance with Specific Condition #C.6.b. Otherwise, documentation of all inspections shall be kept on file at the facility, and provided to the Department upon request.
- 7) 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.
- 8) Leachate tank inspections.
 - a) The exposed exterior of the leachate storage tank shall be inspected **at least weekly** for defects, leaking and other deficiencies. The containment area, truck loadout area, and other leachate tank system appurtenances shall be inspected at least daily for leakage or other damage.
 - b) **Within sixty (60) days of the date of issuance of this permit**, the permittee shall provide a copy of the interior tank inspection report that was conducted in February 2007.
 - c) The leachate storage tank system shall be inspected as required by Rule 62-701.400(6)(c)9., F.A.C., and in accordance with the conditions of this permit. **No later than April 15, 2010 and April 15, 2013**, the interior of the tank shall be inspected. A copy of the inspection report shall be submitted to the Department **within 30 days** of the inspection. In the event that deficiencies are noted in the inspection report, **within fifteen (15) days** of the owner's receipt of the written inspection report, the owner or operator shall propose corrective measures (including a schedule for implementation) to the Department. The deficiencies shall be corrected in accordance with the schedule approved by the Department.
 - d) Liquids that accumulate in the tank secondary containment area shall be tested as described in Section K.8.b of the Operations Plan. Records of these test results shall be maintained onsite and provided to the Department upon request.

SPECIFIC CONDITIONS: PART C - Operation Requirements

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

d. Leachate quantities.

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

2) 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 precipitation amounts, the number of open, intermediate and closed acres, leachate levels (elevations) in the leachate piezometer, and the quantities of leachate collected, stored, and hauled off-site to a wastewater treatment facility.

e. 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.

f. Leachate Leakage Action Rate.

1) Leakage into the leakage detection systems (LDS) in Phase II, should not exceed 100 gal/ac/day [ref. Op. Plan, Sec. K.8.b.].

2) Exceedance of the leakage action rate indicates that deficiencies in the primary liner system may exist. In the event that the quantity of leachate which is removed from the LDS exceeds the action leakage rate, the Department shall be notified **within 48 hours** of discovery and the procedures specified in Section K.8.b. of the Operations Plan shall be initiated. A written plan for corrective action shall be submitted to the Department **within 7 days** of discovery. 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.

g. The primary leachate disposal method shall be pumping directly to City of Venice WWTP [ref. Op. Plan, Sec. K.8.b.]. However, leachate may be hauled to other disposal facilities as a contingency measure. 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.

Amended 03/15/2011.

h. Leachate shall not be discharged to the environment from leaks, spills or other unpermitted discharges from the forcemain piping or pumps. The concrete pad around the leachate forcemain piping and pumps does not include curbing or sumps to prevent leachate spills from discharging from the pad. In the event that the leaks, spills or other evidence of leachate discharge is observed at the facility, corrective actions shall be required to ensure that appropriate procedures and/or designs are used to prevent discharge of leachate to the environment.

SPECIFIC CONDITIONS: PART C - Operation Requirements

i. Reuse of Leachate for Dust Control.

1) Small quantities of leachate may be reused within the active cells as an alternate dust control measure in accordance with Section K.11.d., of the Operations Plan [ref.SC #A.2.f.(1)]. The landfill operator shall monitor the rate of leachate application, soil (cover material) moisture conditions, and the specific landfill areas used to prevent the generation of leachate runoff. Leachate shall only be reused for dust control under the following conditions:
Amended 03/15/2011.

a) Leachate may only be sprayed on active, bermed, disposal areas, including the working face and areas with the required six (6) inches of initial cover with a maximum slope of 10H:1V;

b) Leachate shall not be sprayed on areas with intermediate or final cover or within 150 feet of a side slope steeper than 4H:1V;

c) The areas receiving leachate shall be controlled at all times to prevent run-off from entering the stormwater system;

d) Leachate shall not be sprayed when the application area is in a saturated condition (as evidenced by ponding water or pumping soils) or during a rainfall event;

e) The application rate of leachate must be such that the leachate does not accumulate on the landfill surface but infiltrates quickly into the covered refuse;

f) Leachate shall not be sprayed at the end of the day on the initial cover of the working face or other areas. Spraying shall be initiated early in the morning after any dew evaporates and may continue until early afternoon or until all available areas have been utilized; and

g) Leachate shall not be reused or sprayed outside the lined disposal area.

2) The following shall be recorded each day leachate is reused for dust control:

a) Quantity of leachate sprayed (gal/day);

b) Rainfall onsite (inches/day and time/duration of rainfall occurrence); and

c) Observed runoff of leachate to retention area (yes/no, inspection time and quantity if yes).

Amended 03/15/2011.

SPECIFIC CONDITIONS: PART C - Operation Requirements

9. **Special Wastes.** The design, operation, and monitoring of disposal or control of any "special wastes" shall be in accordance with the Operations Plan [ref. Op. Plan, Sec. K.2.c & Landfill Recycling Plan, Attachment K-13]; 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.

a. 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.

b. The special wastes shall be handled on a first-in, first-out basis.

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

d. Asbestos. Asbestos shall be managed in accordance with Rule 62-701.520(3), F.A.C., the Operations Plan, and all other applicable federal and Department rules. The asbestos shall be covered by a minimum of six (6) inches of soil or a suitable thickness of other materials to prevent the rupture of the asbestos bags prior to additional loads of waste being disposed in the same location [ref. Op. Plan, Sec. K.2.c.].

e. Contaminated Soil. Contaminated soil accepted at the facility for disposal shall be disposed within the working area and shall have representative analytical results demonstrate that the material is not hazardous and that the material has been adequately dewatered prior to delivery so that the material passes the paint filter test [ref. Op. Plan, Sec. K.2.c. & Attachment K-4].

f. Used Oil. Used oil accepted at this facility, shall not be commingled with the incoming waste stream, or disposed of at this facility. Oily wastes, sorbents, or other materials used for maintenance or to clean up or contain used oil leaks, spills, or accidental releases may be accepted for disposal as a Class I waste at this facility. Used oil shall be accepted, stored, and managed at the contractor's maintenance building or the Citizen's Convenience Center in accordance with the procedures in the Operations Plan [ref. Op. Plan, Sec. K.2.c. & Attachment K-13]. A maximum of 20 gallons of used oil may be stored at the maintenance building at any time and two 480 gallon double containment tanks are provided at the Citizen Convenience Center. Waste oil shall be removed at least **quarterly (every 3 months)** [ref. Op. Plan, Sec. K.2.c. & Attachment K-13].

SPECIFIC CONDITIONS: PART C - Operation Requirements

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

g. White Goods and Lawn Mowers. The white goods and lawn mowers shall be stored within the designated area south of Phase I, as shown on Sheet G-03 of the Operation Drawings and managed as described in the Operations Plan [ref. Op. Plan, Sec. K.2.c. & Attachment K-13]. 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. Lawn mowers 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. White goods which have had the refrigerant appropriately removed shall be clearly marked. Lawn mowers shall not be accepted at the facility unless fuels and oils have been removed prior to delivery. A maximum of 1250 white goods and lawn mowers may be stored at the site at any time, and shall be removed from the site at least **monthly (every 30 days)** [ref. Op. Plan, Sec. K.2.c. & Attachment K-13].

h. Lead acid batteries. Lead acid batteries shall be removed from the site **at least monthly (every 30 days)**. The batteries shall be stored in the designated 30 ft x 45 ft covered concrete pad adjacent to the maintenance building and also in the designated location at the Citizen Convenience Center in a manner which prevents the discharge of contaminants to the environment. A maximum of 50 lead acid batteries may be stored onsite at any time [ref. Op. Plan, Sec. K.2.c. & Attachment K-13].

i. Yard Waste. Yard waste shall be managed in accordance with the Operations Plan, Rule 62-701.320, F.A.C., and the facility's yard trash processing Facility registration. Bagged yard trash or land clearing debris shall not be mulched at the site unless the bags are removed prior to mulching. Mixtures of mulched yard trash/land clearing debris and soil may be used for sideslope stabilization and erosion control in the Class I Landfill [ref. Op. Plan, Attachment K-13].

j. Electronics. Electronics to be recycled shall be stored in an undamaged condition, and removed at least **monthly (every 30 days)**. Electronics that have been damaged (i.e., broken) shall be removed and stored in a covered containment area to prevent contact with rainfall and related discharge, and removed at least **monthly (every 30 days)**. A maximum of 1000 electronic devices may be stored at the site at any time [ref. Op. Plan, Sec. K.2.c. & Attachment K-13].

k. Tires. Waste tires shall be removed from the working face and shall be stored in the area of the future Phase V as shown on Sheet G-03 of the Operation Drawings [ref. Op. Plan, Sec. K.2.c. & Attachment K-13]. Waste tires shall be managed in accordance with Operation Permit 126775-002-WT/02 (including modifications, if any), or its successors, and shall be stored in a manner which prevents nuisance conditions and vectors (i.e. mosquitoes, rats, etc.).

l. Construction & Demolition Debris. Construction and demolition debris delivered to the facility are managed at the Materials Recovery Facility in accordance with Chapter 62-701, F.A.C., and Operation Permit 134912-003-SO (including modifications, if any), or its successors.

SPECIFIC CONDITIONS: PART C - Operation Requirements

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

m. Household Hazardous Waste (HHW). Household hazardous waste shall be managed in accordance with the Operations Plan [ref. Op. Plan, Sec. K.2.c.] and shall be removed from the site for proper disposal **at least monthly**.

1) HHW shall be identified, and then segregated for storage within the containment areas by the end of each working 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.

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

4) HHW received at the facility shall be stored within containment areas at all times.

n. Citizen Convenience Center. The Citizen Convenience Center shall be constructed and operated as described in the Operations Plan [ref. Op. Plan, Sec. K.2.c.].

o. Liquids Restrictions. Liquids shall not be accepted at the facility for disposal except as specified in Rule 62-701.300(10), F.A.C.

10. Waste Handling Requirements

a. A sufficient number of spotters shall be utilized at the facility for removing unacceptable wastes. In the event that unacceptable wastes are not adequately removed due to inadequate personnel, additional trained spotters shall be required.

b. A trained spotter shall be positioned at the working face to inspect each load as it is being received, unloaded and as it is spread and compacted [ref. Op. Plan, Sec. K.2.c].

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.

1) All solid waste disposed of in the Class I disposal area must be covered with at least 6 inches of compacted earth or other approved materials identified in Attachment L-10 of the Operations Plan, at the end of each working day [ref. Op. Plan, Sec. K.7.e].

2) For those areas where solid waste will be deposited on the working face within 18 hours, initial cover may consist of a temporary tarpaulin cover [ref. Op. Plan, Sec. K.7.f].

SPECIFIC CONDITIONS: PART C - Operation Requirements

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

3) Alternate daily (initial) cover materials (ADCM) shall be approved by the Department prior to use at the facility. For those areas where solid waste will be deposited on the working face within 18 hours, the following materials are approved for use as alternate initial cover: tarps; tire chips; 50/50 mixtures of soil/mulch or soil/compost; 50/50 mixtures of shredded asphalt shingles and soil; shredded C&D debris or RSM [see Op. Plan, Secs. K.2.g., K.7., K.7.e., and Attachment K-10]. 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. Yard trash (compost or mulch), screened or unscreened, and then mixed in the ratio of 50% compost (or mulch) to 50% soil, and applied in a six (6) inch compacted layer, may be used as initial or intermediate cover. The processed yard trash shall not contain particles greater than six inches and shall not contain plastic.

4) A 2-inch layer of processed yard waste or clean wood may be spread over initial cover for stabilization and erosion control measures [ref. Op. Plan, Secs. K.7.e].

5) Runoff from areas with initial cover may be considered uncontaminated stormwater only if the area

- a) is adequately covered with a tarp or rain cell cover; OR
- b) has 6-inches of soil (not ADCM) cover with no visible waste exposed, AND
- c) has no evidence of leachate seepage, AND
- d) has no evidence of erosion.

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

1) An intermediate cover of 12 inches of compacted soil in addition to the six (6) inch initial cover shall be applied within seven (7) days if final cover or an additional lift is not to be applied within 180 days. **Sod shall be applied** to all intermediately covered (external) side slope areas that have reached designed dimensions [ref. Op. Plan, Sec. K.7.g].

2) Contaminated soils shall not be used for intermediate cover. These materials may be used for initial cover provided the runoff from these areas is managed as leachate. Analyses of the contaminated soils which demonstrate that the soils are not hazardous shall be maintained on-site, and copies provided to the Department upon request.

3) A mixture of soil and screened compost or mulch (1/2 inch screen, 25% soil, 75% compost/mulch) may be used for intermediate cover [ref. Op. Plan, Sec. K.7.g].

4. Materials that have been used for intermediate cover may be removed and reused only if the materials are free of waste [ref. Op. Plan, Sec. K.7.g].

SPECIFIC CONDITIONS: PART C - Operation Requirements

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.
- b. Waste shall be spread and compacted in accordance with the ~~Operations Plan [ref. Op. Plan, Sec. K.2.g.]~~. Slopes shall be maintained in accordance with the Operations Drawings. The working face and all above grade slopes shall be no greater (steeper) than **3H:1V** [ref. Op. Plan, Sec. K.2.g.].
- c. Berms and/or swales shall be maintained 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.

13. Method and Sequence of Filling.

- a. The method and sequence of filling shall be in accordance with the Phase I Operation Drawings [ref. SC#A.2.b & Op. Plan, Attachment K-14], the Phase II Landfill Staging Plan [ref. SC#A.2.a(3), Sheets C-07 through C-11], and as described in the Operations Plan [ref. Op. Plan, Secs. K.2.f. & K.7.], or as otherwise approved in writing by the Department.

b. Initial Waste Placement.

- 1) No disposal vehicles shall be operated directly on the liner protective layer. During the initial placement of waste in each cell, soil platforms or similar protective measures shall be placed adjacent to the working face to keep vehicles off the liner protective cover.
- 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 and shall be conducted in accordance with the procedures in Section K.7.b of the Operations Plan. At least 7 days prior to the initiation of waste placement in each cell, the Department shall be notified in order to allow Department observation of the select waste type and placement.
- c. 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. [ref. Op. Plan, Sec. K.3.]. **Annually, no later than April 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 side slopes 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 lifetime calculations.

SPECIFIC CONDITIONS: PART D - Recordkeeping

1. **Report Submittals.** Unless otherwise specified, all submittals, notifications, requests for permit modification, reports for compliance with this permit, etc. shall be sent to: Solid Waste Section, Department of Environmental Protection, Southwest District Office, 13051 North Telecom Parkway, Temple Terrace, Florida 33637-0926.

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

Amended 03/15/2011.

c. Unless specified otherwise in this permit, all submittals, notifications, requests for permit modification, etc. shall be provided to the Southwest District Solid Waste Section, 13051 North Telecom Parkway, Temple Terrace, Florida 33637-0926.

d. 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;
- 3) Load checking records;
- 4) Operator and spotter training certificates and other documentation;
- 5) Log of odor complaints and corrective action; and
- 6) Records as described in Rule 62-701.500(13). These records shall include all certifications for construction completion.
- 7) Log of discharges from leachate storage tank secondary containment area [ref. Op. Plan, Sec. K.8.b.].
- 8) Documentation of incidents reported pursuant to Specific Condition C.6.; and
- 9) gas collection/control system performance testing records [ref. SC #A.2.f(3), Sec. 3.3].

Amended 06/24/2009 and 03/15/2011.

SPECIFIC CONDITIONS: PART D - Recordkeeping

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.** ~~Waste shall not be accepted for disposal at the landfill unless weight scales are available at the facility and are in proper working condition.~~

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

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.

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 regarding the collection of ground water, surface water, leachate, and condensate samples shall be conducted in accordance with the Standard Operating Procedures (SOPs) described in DEP-SOP-001/01 dated March 31, 2008 [or as replaced by successor SOPs], as referenced in Rule 62-160.210(1), F.A.C. All laboratory analyses done in connection with the facility's Water Quality Monitoring Plan shall be conducted by firms that hold certificates from the Department of Health Environmental Laboratory Certification Program under Chapter 64E-1, F.A.C., as referenced in Rule 62-160.300(1), F.A.C. The SOPs utilized and the laboratory's list of certified test methods and analytes must specifically address the types of sampling and analytical work that are required by the permit and shall be implemented by all persons performing sample collection or analysis related to this permit. Alternate field procedures and laboratory methods may be used if approved according to the requirements of Rules 62-160.220 and 62-160.330, F.A.C., respectively.
Amended 06/24/2009 and 03/15/2011.

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

2. Zone of Discharge.

a. The zone of discharge for this site shall extend horizontally 100 feet from the limits of the landfill liner (all active, inactive and closed disposal areas), or to the property boundary, whichever is less, and shall extend vertically to the bottom of the surficial aquifer.

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

3. Ground Water Monitor Well Locations. The ground water monitoring system locations for the combined Phase I and Phase II footprint is designed and constructed in accordance with the document entitled "Water Quality Monitoring Plan, Central County Solid Waste Disposal Complex," prepared by Sarasota County Solid Waste Operations, dated December 17, 2010, revised February 1, 2011 and March 8, 2011 [ref.SC#A.2.f(2)]. The ground water monitor wells and piezometers are located on Figure 1, "Water Quality Monitoring Plan," prepared by HDR Engineering, Inc., received December 30, 2010 (attached), as follow:

SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements

(Specific Condition #E.3., continued)

WACS					
Well #	Testsite ID #	Scheduling Notes	Aquifer	Designation	Location
MW-1R	20585	A, X	Surficial	Background	See Figure 1
MW-8A	21453	A, X	Surficial	Detection	↓
MW-9	4509	A, X	Surficial	Detection	↓
MW-10R	4510	A, X	Surficial	Detection	↓
MW-15	23031	B, Y	Surficial	Detection	See Figure 1
MW-16	23032	B, Y	Surficial	Detection	↓
MW-17	23033	B, Y	Surficial	Detection	↓
MW-18	23034	B, Y	Surficial	Detection	↓
MW-19	23035	B, Y	Surficial	Detection	↓
MW-20	23036	B, Y	Surficial	Detection	↓
MW-11R	20588	A, Z	Surficial	Detection	See Figure 1
MW-12R	20589	A, Z	Surficial	Detection	↓
MW-3	4503	A	Surficial	Piezometer	See Figure 1
MW-5	4505	A	Surficial	Piezometer	↓

~~Proposed surficial aquifer monitor wells shall be constructed in accordance with the details provided in Table 2-2 ("Proposed Monitoring Well Construction Information") and Figure 2.0 ("Typical Proposed Ground Water Monitoring Well"), received April 23, 2009 as referenced in the document entitled "Central County Solid Waste Disposal Complex, Water Quality Monitoring Plan Addendum," prepared by HDR Engineering, Inc. [ref. SC#A.2.a(2)].~~

A = existing monitor well/piezometer

B = proposed monitor well to be installed at least 30 days prior to initiation of debris disposal in Phase II, Cell 1

X = construction details and results of initial sampling event previously provided

Y = documentation of well construction shall be submitted within 30 days of installation in accordance with Specific Condition #E.5.b., and #E.5.d.; an initial sampling event shall be conducted within 7 days of well installation and development for the parameters listed in Specific Condition #E.4.b.

~~Z = existing monitor well to be abandoned prior to initiation of construction activities for Phase II, Cell 1; documentation of monitor well abandonment shall be submitted in accordance with Specific Condition #E.6.~~

All monitor wells and piezometers are to be clearly labeled and easily visible at all times. Bollards or other devices shall be installed to protect the monitor wells located in areas of high traffic flow within the facility. The permittee shall keep all monitor wells and piezometers locked to minimize unauthorized access.

Amended 06/24/2009, 04/08/2010 and 03/15/2011.

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. The ground water monitoring system analytical parameter lists for initial and routine sampling events are described in Section 2.3 of the document entitled "Water Quality Monitoring Plan, Central County Solid Waste Disposal Complex," prepared by Sarasota County Solid Waste Operations, dated December 17, 2010, revised February 1, 2011 and March 8, 2011 [ref. SC#A.2.f.(2)] Additional samples, wells, and parameters may be required based upon subsequent analysis. Method Detection Limits must be reported at or below the Maximum Contaminant Levels established for the individual parameters to demonstrate compliance with the Class G-II ground water standards referenced in Chapter 62-520.420, F.A.C., and with the ground water minimum criteria referenced in Chapter 62-520.400, F.A.C. Compliance with ground water standards and minimum criteria shall be based on the analysis of unfiltered samples.

Amended 03/15/2011.

a. Ground water levels shall be measured at all active monitor wells and piezometers listed in Specific Condition #E.3., and surface water elevations shall be measured at staff gauges #STW-1 through #STW-4, #STW-5A, #STW-5B, #STW-6 and #STW-7 during all sampling events described in Specific Conditions #E.4.b., #E.4.c., and #E.8.c., to a precision of 0.01 foot. The water table surface elevation contour maps of the surficial aquifer shall be prepared for each set of water level measurements including the ground water surface elevation (using a consistent, nationally recognized datum) calculated for each monitor well and piezometer, and surface water elevations (using a consistent, nationally recognized datum) calculated for each staff gauge. The contour maps shall be submitted to the Department in the reports for the routine ground water sampling events (SC#E.10.) and the monitoring plan evaluation reports (SC#E.11.).

b. An "initial sampling event" shall be conducted within 7 days of installation and development of all new and replacement monitor wells for analysis of the following parameters:

<u>Field Parameters</u>	<u>Laboratory Parameters</u>	
Static water levels before purging	Total ammonia - N	Calcium
	Bicarbonate	Iron
Specific conductivity	Carbonate	Magnesium
pH	Chlorides	Mercury
Dissolved oxygen	Nitrate	Potassium
Temperature	Sulfate	Sodium
Turbidity	Total dissolved solids (TDS)	
Colors & sheen (by obs.)	Those parameters listed in 40 CFR Part 258, <u>Appendix II</u>	

c. All background and detection wells listed in Specific Condition #E.3., shall be sampled semi-annually (during the periods from January 1 to June 30, and from July 1 to December 31) for analysis of the following parameters:

<u>Field Parameters</u>	<u>Laboratory Parameters</u>	
Static water levels before purging	Total ammonia - N	Calcium
	Bicarbonate	Iron
Specific conductivity	Carbonate	Magnesium
pH	Chlorides	Mercury
Dissolved oxygen	Nitrate	Potassium
Temperature	Sulfate	Sodium
Turbidity	Total dissolved solids (TDS)	
Colors & sheen (by obs.)	Those parameters listed in 40 CFR Part 258, <u>Appendix I</u>	

Following the completion of the "initial sampling event" at proposed wells MW-15 through MW-20 in accordance with the schedule presented in Specific Condition #E.3., the new detection wells shall be included in subsequent routine ground water sampling events.

Amended 06/24/2009.

SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements

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

a. Prior to construction of all new or replacement wells (excluding proposed wells MW-15 through MW-20) or piezometers the permittee shall request and receive Department approval of a minor permit modification in accordance with Specific Condition #A.3.a.
Amended 06/24/2009.

b. ~~Construction details (record drawings) for all new or replacement wells and piezometers shall be provided to the Department's Southwest District Office on Department Form #62-701.900(30) [attached].~~
Amended 04/08/2010.

c. Within one week of well completion and development, each new or replacement monitor well shall be sampled for the parameters listed in Specific Condition #E.4.b., to comply with the requirements of Rules 62-701.510(8)(a) and (8)(d), F.A.C.

d. A surveyed drawing shall be submitted in accordance with Rule 62-701.510(3)(d)(1), F.A.C., showing the location of all monitor wells and piezometers (active and abandoned) horizontally located in degrees, minutes and seconds of latitude and longitude, and the elevation of the top of the well casing and ground surface by the well casing to the nearest 0.01 foot, using a consistent, nationally recognized datum. The surveyed drawing shall include the monitor well and piezometer 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 Licensed Professional Surveyor and Mapper.

6. **Well Abandonment.** All monitor wells and piezometers not a part of the approved Water Quality Monitoring Plan and not listed in Specific Condition #E.3., are to be plugged and abandoned in accordance with Rule 62-532.500(5), 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.
Amended 03/15/2011.

7. **Verification/Evaluation Monitoring.** If at any time monitoring parameters are detected at concentrations significantly above background water quality, or exceed the Department's ground 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 to be representative of current ground water conditions at the facility. If the data is confirmed, or if the permittee chooses not to resample, the permittee shall notify the Department within 14 days of this finding. Upon notification by the Department, the permittee shall initiate evaluation monitoring as described in Rules 62-701.510(7)(a) and 62-701.510(7)(b), F.A.C. If monitoring parameters are detected at concentrations significantly above background water quality, and exceed the Department's ground 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)(c), F.A.C.
Amended 04/08/2010.

SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements

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

a. Surface water levels shall be measured at staff gauges #STW-1 through #STW-4, #STW-5A, #STW-5B, #STW-6 and #STW-7 (located in stormwater ponds #1 through #7) as shown on Figure 1, "Water Quality Monitoring Plan," prepared by HDR Engineering, Inc., received December 30, 2010 (**attached**), during all sampling events described in Specific Conditions #E.4.b., #E.4.c., and #E.8.c., to a precision of 0.01 foot. The water table surface elevation contour maps of the surficial aquifer shall be prepared for each set of water level measurements including the ground water surface elevation (using a consistent, nationally recognized datum) calculated for each monitor well and piezometer, and surface water elevations (using a consistent, nationally recognized datum) calculated for each staff gauge. The contour maps shall be submitted to the Department in the reports for the routine ground water sampling events (SC#E.10.) and the monitoring plan evaluation reports (SC#E.11.).

Amended 06/24/2009 and 03/15/2011.

b. Surface water sample collection points shall be located as shown on Figure 1, "Water Quality Monitoring Plan," prepared by HDR Engineering, Inc., received December 30, 2010 (**attached**), as follow:

Amended 06/24/2009 and 03/15/2011.

Surface Water ID #	WACS Testsite ID #	Location
B2	4519	Old Cow Pen Slough, upstream location
B4R	20060	Old Cow Pen Slough, downstream location

In accordance with Rule 62-701.510(4)(c), F.A.C., the monitoring stations shall be marked and their positions shall be determined by a registered Florida land surveyor in degrees, minutes and seconds of latitude and longitude.

c. **Semi-annual** surface water sampling shall be conducted at the locations described in SC#E.8.b., in accordance with Rule 62-701.510(6)(e), F.A.C., for analysis of the parameter list for routine sampling events described in Section 3.2 of the document entitled "Water Quality Monitoring Plan, Central County Solid Waste Disposal Complex," prepared by Sarasota County Solid Waste Operations, dated December 17, 2010, revised February 1, 2011 and March 8, 2011 [ref. SC#A.2.f.(2)], including:

Field parameters	Laboratory parameters	
Specific conductivity	Chlorophyll A	Nitrate
pH	Total hardness (as mg/L of CaCO ₃)	
Dissolved oxygen	Total phosphorus	Total nitrogen
Turbidity	Calcium	Unionized ammonia
Temperature	Iron	Biochemical oxygen demand (BOD ₅)
Colors and sheens (by observation)	Magnesium	Chemical oxygen demand (COD)
Surface water	Mercury	Total organic carbon (TOC)
elevation	Potassium	Total dissolved solids (TDS)
	Sodium	Total suspended solids (TSS)
	Sulfate	Fecal coliform
	Bicarbonate	Carbonate
	Those parameters listed in 40 CFR Part 258, Appendix I	

Amended 04/08/2010 and 03/15/2011.

SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements

9. **Leachate Sampling.** Representative leachate samples (unfiltered) shall be collected from each of the locations described in Specific Condition #E.9.a., for the sampling events described in Specific Conditions #E.9.b., and #E.9.c. Leachate sampling shall be conducted in accordance with the Department's SOPs to comply with the requirements of Rules 62-701.510(5) and 62-701.510(6)(c), F.A.C., for analysis of the parameter list for the sampling events described in Section 4.2 of the document entitled "Water Quality Monitoring Plan, Central County Solid Waste Disposal Complex," prepared by Sarasota County Solid Waste Operations, dated December 17, 2010, revised February 1, 2011 and March 8, 2011 [ref. SC#A.2.f(2)]:

Amended 03/15/2011.

a. Representative leachate samples shall be collected from each of the sampling ports on the leachate pump valve boxes for the Phase I cells, and on the leachate pump station for the Phase II cells at the monitoring locations shown on Figure 1, "Water Quality Monitoring Plan," prepared by HDR Engineering, Inc., December 30, 2010 (attached), as follow:

<u>Leachate</u> <u>Sample ID #</u>	<u>Landfill Cell</u>	<u>WACS Testsite</u> <u>ID #</u>
C-1	Phase I, Cell #1	20580
C-2	Phase I, Cell #2	20581
C-3	Phase I, Cell #3	20582
C-4	Phase I, Cell #4	20583
C-5	Phase I, Cell #5	20584
P2-1	Phase II, Cells #1-#4	23037

A composite leachate sample may be prepared from the samples collected from the leachate sampling ports at the Phase I cells for analysis of the inorganic parameters only presented in Specific Condition #E.9.b., in accordance with the procedure described in Section 4.2 of the document entitled "Water Quality Monitoring Plan, Central County Solid Waste Disposal Complex," prepared by Sarasota County Solid Waste Operations, dated December 17, 2010, revised February 1, 2011 and March 8, 2011 [ref. SC#A.2.f(2)]. Otherwise, individual leachate samples shall be collected from each of the leachate sampling ports at the Phase I cells for analysis of the parameters presented in Specific Condition #E.9.b., and #E.9.c. Leachate samples collected from Phase I and Phase II cells shall not be composited.

Amended 06/24/2009 and 03/15/2011.

b. **Semi-annual** leachate sampling shall be conducted for analysis of the following parameters:

<u>Field Parameters</u>	<u>Laboratory Parameters</u>	
Specific conductivity	Total ammonia - N	Calcium
pH	Total alkalinity (as mg/L CaCO ₃)	Iron
Dissolved oxygen	Carbonate	Magnesium
Colors & sheens	Chlorides	Mercury
(by observation)	Nitrate	Potassium
	Sulfate	Sodium
	Total dissolved solids (TDS)	
	Biochemical oxygen demand (BOD ₅)	
	Chemical oxygen demand (COD)	

Amended 04/08/2010 and 03/15/2011.

c. **Annual** leachate sampling shall be conducted during the second half of each year for analysis of the parameters listed in Specific Condition #E.9.b., plus the parameters listed in 40 CFR Part 258, Appendix II.

SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements

(Specific Condition #E.9., continued)

d. If the leachate analyses indicate that a contaminant listed in 40 CFR Part 261.24 exceeds the regulatory level listed therein, the permittee shall provide notification to the Department in accordance with Specific Condition #C.6.b. In addition, the permittee shall initiate monthly leachate sampling at the locations listed in Specific Condition #E.9.a., for analysis of the parameters listed in Specific Condition #E.9.b. Results of the monthly leachate sampling shall be submitted to the Department within 30 days of receipt from the analytical laboratory. If in any three consecutive months ~~no listed contaminant is found to exceed the regulatory level, the permittee~~ may discontinue the monthly sampling and analysis and return to a routine sampling schedule.

10. **Water Quality and Leachate Reporting Requirements.** The results of each ground water, surface water, leachate, and condensate sampling event conducted at the Sarasota County Central Landfill to comply with the Specific Conditions of this permit shall be included in Electronic Data Deliverable (EDD) reports that include:
Amended 03/15/2011.

a. Required water quality, leachate, and condensate monitoring reports and all analytical results shall be submitted electronically on compact disk or flash drive media. Water quality, leachate, and condensate monitoring reports shall be submitted in Adobe pdf file format. The water quality, leachate, and condensate 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, leachate, and condensate 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 Department Form #62-701.900(31);
Amended 04/08/2010.
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.]

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.

SPECIFIC CONDITIONS: PART E - Water Quality Monitoring Requirements

(Specific Condition #E.10., continued)

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

1. Specific Condition #E.4.b. - results of ground water "initial sampling events" shall be submitted within 60 days from completion of laboratory analyses;

2. Specific Condition #E.4.c. - results of ground water 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 to December 31, and January 1 to June 30, respectively;

3. Specific Condition #E.8.c. - results of surface water 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 to December 31, and January 1 to June 30, respectively;

4. Specific Condition #E.9.b. - results of leachate 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 to December 31, and January 1 to June 30, respectively;

5. Specific Condition #E.9.c. - results of leachate annual sampling events shall be submitted within 60 days from completion of laboratory analyses and no later than January 15th of each year;

6. Specific Condition #E.9.d. - results of monthly leachate sampling events shall be submitted within 30 days from completion of laboratory analyses; and,

7. Specific Condition #F.5.b. - results of condensate 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 period July 1 to December 31.

Amended 06/24/2009 and 03/15/2011.

11. **Monitoring Plan Evaluation.** By May 18, 2011 and September 18, 2013, 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:

Amended 06/24/2009 and 03/15/2011.

**Water Quality Monitoring
Data Evaluation Due Date**
May 18, 2011

**Starting
Sampling Event**
First half 2007

**Ending
Sampling Event**
Second half 2010

September 18, 2013

First half 2011

Second half 2012

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, FL 33637-0926.

SPECIFIC CONDITIONS: PART F - Landfill Gas Management

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

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

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

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

2. Gas Monitoring and Control.

a. Landfills that receive degradable wastes shall have a gas management and control system designed to prevent explosions and fires, and to minimize off-site odors, lateral migration of gases and damage to vegetation. Landfill gas shall be monitored and controlled as required by Rules 62-701.500(9) and 62-701.530, F.A.C.

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

c. The results of quarterly monitoring required by Rule 62-701.530(2)(c), F.A.C., conducted at the locations listed in Specific Condition #F.3., shall be submitted to the Department by the following dates:

Measured During

Quarter 1 (Jan - Mar)
Quarter 2 (Apr - June)
Quarter 3 (July - Sep)
Quarter 4 (Oct - Dec)

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.** The enclosed structures and gas monitoring locations shown on Figure 1, "Water Quality Monitoring Plan," prepared by HDR Engineering, Inc., received December 30, 2010 (**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. Landfill gas monitoring shall be conducted in accordance with Section K.9.b. of the Operations Plan [ref. SC#A.2.f(1)], at the following locations:

Monitoring Point	Scheduling Notes	Location	Location Description
GP-1	A, X	Figure 1	West boundary of Phase I footprint
GP-2	A	Figure 1	North boundary of Phase I footprint
GP-3	A	↓	East boundary of Phase I footprint
GP-7	A	↓	North of C&D processing area
GP-9	B	↓	West boundary of Phase II, Cell 4
GM-1	A	↓	Contractor's maintenance building/yard
GM-2	A	↓	C&D processing area
GM-3	A	↓	County maintenance building
GM-4	A	↓	Administration building
GM-5	A	↓	Scale house
GM-7	A	↓	Control panel at leachate storage facility

~~Proposed gas probe GP-9 shall be constructed in accordance with the details provided in Figure 3.0 ("Typical Gas Monitoring Probe"), received April 23, 2009 as referenced in the document entitled "Central County Solid Waste Disposal Complex, Water Quality Monitoring Plan Addendum," prepared by HDR Engineering, Inc. [ref. SC#A.2.a(2)].~~

A = existing gas probe/gas monitoring location

B = proposed gas probe to be installed at least 30 days prior to initiation of debris disposal in Phase II, Cell 1

~~X = to be abandoned prior to initiation of construction activities for Phase II, Cell 1~~

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

Amended 06/24/2009 and 03/15/2011.

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

5. **Gas Collection and Control System.**

a. The permittee shall operate, monitor, and maintain the landfill gas collection and control system in accordance with the LFGCCS Operations and Maintenance Plan [ref. SC#A.2.f(3)] any other applicable requirements.
Amended 03/15/2011.

b. Annual condensate sampling shall be conducted at Condensate Sump S-4 [WACS Testsite ID #23346] for analysis of the leachate parameters listed in Specific Conditions #E.9.b. and #E.9.c. [ref. SC#A.2.f(3), Sec 8.2 & ref. SC #A.2.d(3), Sheet C-05]
Amended 03/15/2011.

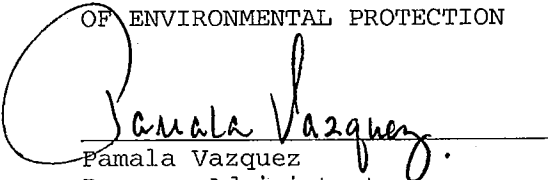
New 06/24/2009

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 referenced in Specific Condition #A.2.a.
 - 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. There are no currently closed areas of the Class I landfill.
 - 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, Final v.2.1", dated February 3, 2011, or successor document.
Amended 03/15/2011.

Executed in Hillsborough County, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

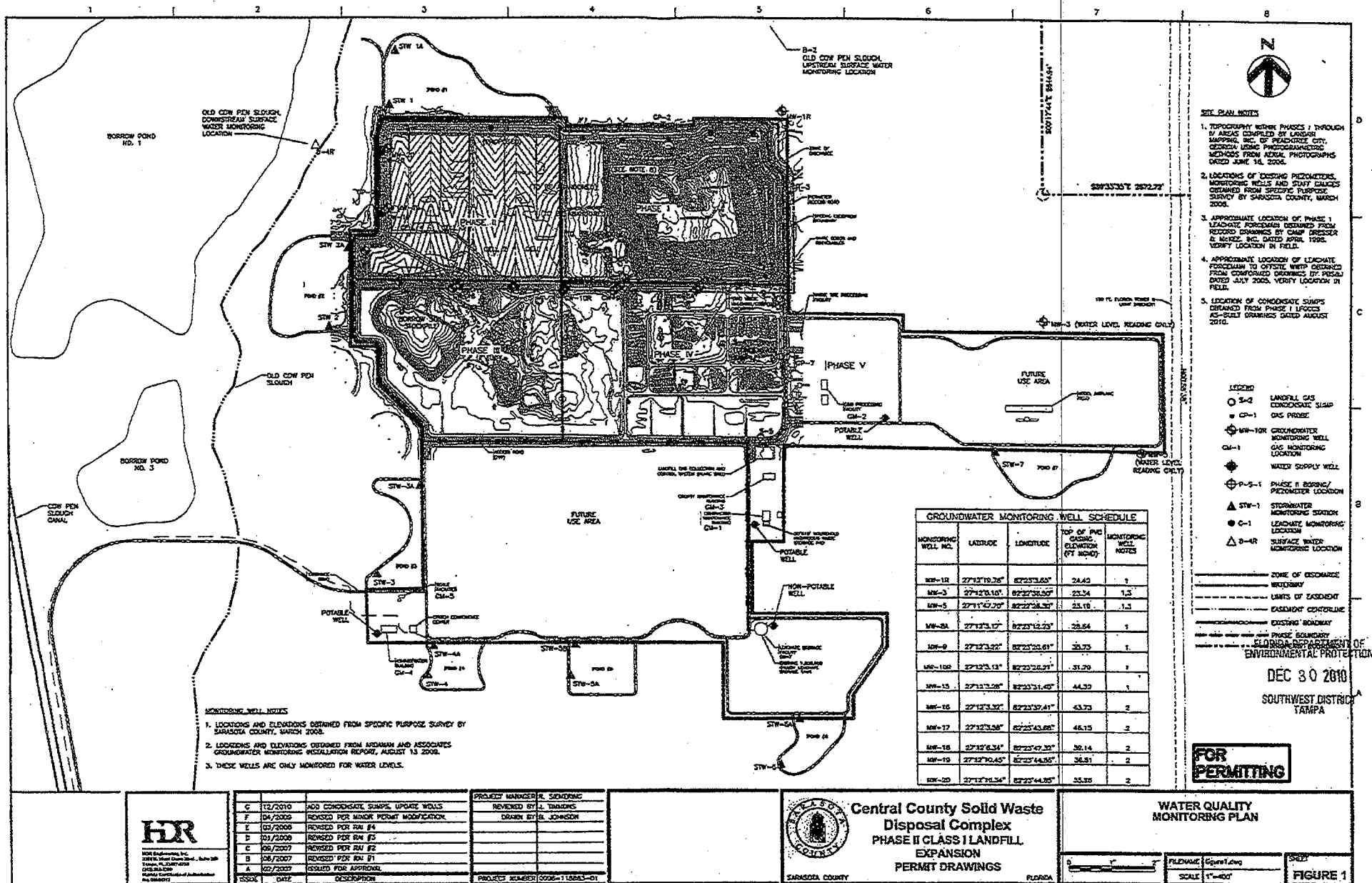

Pamala Vazquez
Program Administrator
Southwest District

ATTACHMENT 1

Specific Condition	Submittal Due Date	Required Item
A.4.	No later than September 18, 2013	Submit permit renewal application
A.9.b.	Within 24 hours of discovery	Notification of sinkholes or subsurface instability
	Within 7 days of verbal notification	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	Notification of: hazardous waste receipt, failure of landfill systems or equipment
	Within 7 days of verbal notification	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.c(1)	No later than January 15, 2010	Submit leachate assessment report, videotape, inspection results, etc. for Phase I
C.8.c(2)	No later than April 15, 2013	Submit leachate assessment report, videotape, inspection results, etc. for Phase I
C.8.c(8)(b)	Within 60 days of permit issuance	Submit copy of tank inspection report for 2007
C.8.c(8)(c)	By April 15, 2010 and April 15, 2010	Conduct inspection of interior of tank
C.8.d(2)	Quarterly, by January 15 th , April 15 th , July 15 th and October 15 th each year	Submit leachate generation reports
C.13.c.	Annually, by April 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

ATTACHMENT 1

Specific Condition	Submittal Due Date	Required Item
E.4.b.	Within 7 days of new well installation and development	Conduct initial sampling event
E.4.c.	Semi-annually	Sample background and detection wells
E.5.a.	Prior to installation of new wells	Request and received permit modification
E.5.b.	Within 90 days of installation of new wells	Provide construction details for wells
E.5.c.	Within 1 week of well development	Conduct initial sampling
E.5.d.	Within 90 days of installation of new wells	Provide survey drawing
E.6.	Within 30 days of well abandonment	Submit documentation of abandonment
E.7	Within 14 days of discovery	Notification of: monitoring parameters significantly above background water quality or exceeding ground water standards or minimum criteria
E.8.c.	Semi-annually	Sample surface water monitoring locations
E.9.b.	Semi-annually	Conduct leachate sampling
E.9.c.	Annually	Conduct leachate sampling
E.10.	Semiannually by January 15 th and July 15 th of each year	Submit results of routine ground water sampling events, routine surface water sampling events, and semi-annual leachate sampling events
E.10.	Annually, by January 15 th of each year	Submit results of annual leachate sampling events and annual condensate sampling events
E.11.	May 18, 2011 and September 18, 2013	Submit monitoring plan evaluation reports
F.2.c.	Quarterly, by January 15 th , April 15 th , July 15 th , and October 15 th of each year	Submit results of routine landfill gas monitoring events
G.1.	No later than 90 days prior to the date when wastes will no longer be received	Submit Closure Permit application



HR

HOR Engineering, Inc.
2000 West County Road, Suite 200
Tampa, FL 33607-4018
(813) 840-0000
www.hor-engineering.com

ISSUE	DATE	DESCRIPTION
C	12/2010	ADD CONDOGATE SHIMPS, UPDATE WELLS
F	04/2009	REVISED FOR MONITOR PERMIT MODIFICATION
E	03/2008	REVISED FOR SAN #4
D	03/2008	REVISED FOR SAN #3
C	06/2007	REVISED FOR SAN #2
B	06/2007	REVISED FOR SAN #1
A	02/2007	ISSUED FOR APPROVAL

PROJECT MANAGER	N. SIMONSON
REVIEWED BY	J. THOMAS
DRAWN BY	M. JOHNSON
PROJECT NUMBER	CCSW-115843-01



**Central County Solid Waste
Disposal Complex
PHASE II CLASS I LANDFILL
EXPANSION
PERMIT DRAWINGS**

FLORIDA

**WATER QUALITY
MONITORING PLAN**

FILENAME: C:\p\115843.dwg

SCALE: 1"=400'

FIGURE 1



Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

DEP Form # 62-701.900(30)

Form Title: Monitoring Well Completion Report

Effective Date: January 6, 2010

Incorporated in Rule 62-701.510(3)

MONITORING WELL COMPLETION REPORT

DATE: _____

FACILITY NAME: _____

DEP PERMIT NO.: _____ WACS_FACILITY: _____

WACS MONITORING SITE_NUM.: _____ WACS_WELL: _____

WELL_TYPE: BACKGROUND _____ DETECTION _____ COMPLIANCE _____

LATITUDE AND LONGITUDE (see back for requirements): _____

Coordinate Accuracy _____ Datum _____ Elevation Datum _____

Collection Method _____ Collection Date _____

Collector Name _____ Collector Affiliation _____

AQUIFER MONITORED: _____

DRILLING METHOD: _____ DATE INSTALLED: _____

INSTALLED BY: _____

BORE HOLE DIAMETER: _____ TOTAL DEPTH: _____ (BLS)

CASING TYPE: _____ CASING DIAMETER: _____ CASING LENGTH: _____

SCREEN TYPE: _____ SCREEN SLOT SIZE: _____ SCREEN LENGTH: _____

SCREEN DIAMETER: _____ SCREEN INTERVAL: _____ TO _____
(BLS)

FILTER PACK TYPE: _____ FILTER PACK GRAIN SIZE: _____

INTERVAL COVERED: _____ TO _____ (BLS)

SEALANT TYPE: _____ SEALANT INTERVAL: _____ TO _____ (BLS)

GROUT TYPE: _____ GROUT INTERVAL: _____ TO _____ (BLS)

TOP OF CASING ELEVATION (NGVD): _____ GROUND SURFACE ELEVATION (NGVD): _____

DESCRIBE WELL DEVELOPMENT: _____

POST DEVELOPMENT WATER LEVEL ELEVATION (NGVD): _____

DATE AND TIME MEASURED: _____

REMARKS: _____

NAME OF PERSON PREPARING REPORT: _____

(Name, Organization, Phone No., E-mail)

NOTE: ATTACH AS-BUILT MW CONSTRUCTION DIAGRAM AND LITHOLOGIC LOG.(NGVD) NATIONAL GEODETIC
VERTICAL DATUM OF 1988 (BLS) = BELOW LAND SURFACE

Latitude must be measured in degrees, minutes and seconds, to at least two (2) decimal places.

Longitude must be measured in degrees, minutes and seconds, to at least two (2) decimal places.

Eastings and northings (State Plane Coordinates) **must** be converted to latitude and longitude.

Coordinate Accuracy: the measured, estimated degree of correctness of the measurement. An accuracy of 15 feet or 5 meters is preferred.

Datum: the horizontal reference for measuring locations on the Earth's surface. NAD83- North American Datum of 1983 is preferred.

Elevation Datum: the reference datum from which elevation measurements are made. NGVD88 (National Geodetic Vertical Datum of 1988) is preferred.

Collection Method: the method or mechanism used to derive the measurements, e.g. GPS, map, aerial photo, etc.

Collection Date: the date and time on which the measurements were taken.

Collector Name: the name of the person taking the measurement.

Collector Affiliation: the agency or company for whom the collector works.

Attachment 4

Revised Operation Plan
(Attachments include only revised K-18)



Sarasota County
Solid Waste Operations

Central County Solid Waste Disposal Complex Operations Plan

December 2010 ([Revised January-March 2012](#))

Revisions:

Prepared by

SCS Engineers

File No. 09211007.01

Original:

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HDR Project No. 39017-87559-195

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SECTION K OPERATIONS PLAN

K.1 TRAINING

In accordance with Rule 62-701.500(1), Florida Administrative Code (F.A.C.), key supervisory staff at the Central County Solid Waste Disposal Complex (CCSWDC) has received Landfill Operator Certification training. The training plan can be found in Attachment K-1. Sarasota County staff or a qualified landfill operations contractor will operate the facility. Sarasota County will require the operating entity to provide at least one trained landfill operator certified in accordance with Chapter 62-701.320(15), F.A.C. and at least one trained spotter at each working face during operation when the landfill receives waste to detect unauthorized wastes from each load.

The spotters will be responsible for guiding vehicles and promoting an efficient operation during normal operation hours. The spotters shall also be responsible for enforcing provisions for controlling the waste received. These provisions are described in Section K.2.c.

The facility will be operated in compliance with all applicable regulations governing the operation of solid waste management facilities and surface water management facilities.

In addition, the equipment operators have sufficient training and knowledge to move waste and soil, and to develop the site in accordance with the design plans and operational standards.

Interim spotters, who do not have the formal spotter training, maybe employed at the CCSWDC provided that the interim spotter is under the direct supervision of a trained operator or trained spotter. The interim spotter must receive training as an operator or spotter within 3 months of employment.

An interim operator may be employed at the CCSWDC provided that the interim operator has had at least one year of experience at the facility or a similar facility. An interim operator must receive operator training within one year of employment as interim operator. An interim operator shall serve as the operator for the facility in lieu of a trained operator for no more than three consecutive months.

In the event the spotter is located on heavy equipment spreading waste at the working face, then the equipment operator must be a trained landfill operator or spotter. The equipment operator will remove unauthorized waste from the working face to a temporary area next to the working face for later removal/management or stop operations and notify another operator or ground personnel to assist with removal/management of the unauthorized waste before resuming operations.

K.2 LANDFILL OPERATIONS PLAN

K.2.a Designation of Responsible Persons

The CCSWDC is owned by Sarasota County and operated under the direction of the Sarasota County Solid Waste Operations Unit. Lois Rose, Manager Solid Waste, will be the designated responsible person for the operation of the CCSWDC.

A list of the landfill personnel is given below as well as typical training required for each position:

VEOLIA ENVIRONMENTAL SERVICES:

- General Manager (1) (Operator)
- Lead Equipment Operator (1) (Operator)
- Equipment Operator (7)
- Laborer/Spotter (1) (Spotter)
- Laborer (1) (Spotter)
- Mechanic (1)

SARASOTA COUNTY:

- Solid Waste Manager (1) (Operator)
- Compliance Specialist (3) (Operator)

K.2.b Contingency Operations for Emergencies

K.2.b.(1) Emergency Provisions

Emergency conditions at the landfill site may occur as a result of a natural disaster (hurricane, tornado, flooding, etc.) or fire. In the event emergency conditions will interrupt operations at the facility, the following contingency plan will be implemented (see Attachment K-2). In addition, staff shall review and implement the most current version of the Sarasota County Solid Waste Operations Emergency Plan on file at the CCSWDC. Refuse is not normally delivered to the site during emergency conditions; however, should a major storm occur, the following actions shall be taken:

- Daily cover shall be applied to all exposed refuse before a major storm arrives, if possible.
- All landfill equipment shall be parked near any natural wind screens such as earthen mounds and berms.
- All lightweight signs and equipment shall be secured.
- When operation resumes, work shall commence in dry areas only (up from the active face). Refuse shall not be deposited in standing water.
- Contract agreements with local contractors, equipment suppliers, or cooperative lending agreements with other County departments will be pursued for backup equipment, if necessary.

Small fires on the working face will be controlled by a bulldozer, landfill compactor and a water wagon and ample cover material to extinguish the fire. On-site stockpiles of soil cover material will always be available for suppressing fires. The large stormwater retention basins adjacent to the landfill will serve as the water source for fire fighting purposes.

In the event of a fire or other emergency, the solid waste operations manager or their designee will notify the FDEP within twenty-four (24) hours by telephone and within seven (7) days a written report will be submitted describing the origins of the emergency, actions taken, result of the actions taken, and an analysis of the success or failure of the actions. However, if the fire cannot be extinguished by CCSWDC personnel within 1 hour, the Department and the local

government will be notified of the fire and informed of the fire control measures taken at the facility. If the fire cannot be extinguished within 48 hours or Solid Waste Operations determines additional assistance is needed at anytime, the local fire control protection agency will be called.

In addition the local government and neighbors, which may be impacted by the fire, will be notified.

The Nokomis Fire Department presently maintains a fire station at 111 Pavonia Road in Nokomis, approximately 10.9 miles from the proposed facility. This station has equipment capable of obtaining water from surface sources for fire fighting. In addition, the City of Venice has a fire station located at 5300 Laurel Road in Venice, FL located approximately 7.6 miles from the facility

Waste will continue to be accepted and disposal operations will continue in the event of a fire. Operations will be moved a safe distance from the fire location so as not to pose a hazard to operating personnel or customers.

A hot load area will be provided within the lined disposal area in a location away from the working face to allow vehicles arriving at the landfill with a fire in their load to dump quickly in an area where the material can be spread out and quickly covered with soil. The location of the hot load area will change from time to time with the changing working face locations. Hot loads will not be dumped on the working face until sufficiently cool to avoid combustion.

As described in Sections K.11.a. and K.11.b, the Contractor will provide adequate equipment on-site to ensure proper operation of the landfill and for excavating, spreading, compacting, and covering waste. As part of an agreement with a maintenance contractor, the Contractor will receive loaner equipment within forty-eight (48) hours of equipment breakdown, if required. These basic emergency procedures should protect the landfill and equipment, and allow reactivation of the operation in an orderly and timely manner. Two mobile electrical generators are maintained on-site to provide power during outages for the administration building, scale house, and maintenance building.

In case of an accidental spill of oil, fuel, leachate or chemicals, the spill will be minimized by controlling the source immediately (e.g., by closing valve, turning-off switch, or taking any other necessary action). The affected area will be controlled by diverting vehicular traffic. Runoff from the affected area will be controlled by building a berm, plugging drain or ditch, or adding absorbent material. The affected area will be cleaned, and the effectiveness of the cleanup confirmed by sampling, as needed depending on the nature of the spilled material. For spill countermeasures of secondary containment at the Leachate Holding Tank refer to Section K.2.h.2, Leachate Management System. A list of emergency telephone numbers is provided below.

Ambulance Service	911
Police Department	911
Fire Department	911
Lois Rose, Solid Waste Operations Manager	(941) 861-1589 - office

Remember, if you are calling from a phone, which is connected to the County's switchboard, you must dial 9 then 911 to reach the emergency operator.

K.2.b.(2) Wet Weather Operations

Steps to be taken for accommodating wet weather solid waste disposal include: 1) set-aside elevated tipping areas with limestone or shell approaches or other acceptable base material as needed to allow uninhibited vehicular movement; 2) set-aside elevated sandy cover material, and 3) erect containment berms around wet weather tipping areas in accordance with Section K.2.h.3.

In order to avoid an excessive accumulation of standing water in the area of the working face, a small area of daily cover will be removed by grading to allow direct percolation to the underlying refuse and leachate collection system. Pumping equipment is available on-site, if required to remove ponded leachate by pumping it to either a tanker truck for proper treatment and disposal, or to a leachate collection manhole.

K.2.c Controlling the Type of Waste Received at the Site

The automated accounting system, clerks at the scalehouse, and the site security fence discourage unauthorized entry and disposal of unauthorized waste. A sign located at the entrance states the general regulations including the types of unauthorized solid waste.

A trained spotter at the working face will visually inspect the waste as it is deposited. If unauthorized waste (i.e., lead-acid batteries, used oil, yard trash, white goods, and whole tires) is found at the working face, as part of routine operations, the waste would be segregated and removed for recycling, as described in Attachment K-13.

White goods and electronic wastes are accepted at the facility for recycling but are not allowed at the working face for disposal. Special wastes not authorized for disposal are accepted for staging at the CCSWDC until they are removed from the site for offsite recycling. These materials shall be stored in the designated white goods and recyclables storage area located near the southeast corner of Phase I as shown on Sheet G-03, Overall Site Plan and Phasing Plan, provided with the Permit Drawings.

Electronic products that are discovered at the working face will be removed and stored in a safe area within the active working area (bermed area). At the end of the day, at a minimum, these materials will be transported directly to the designated storage area. Undamaged electronic wastes recovered for recycling shall be stored in an undamaged condition and records for all quantities received by each recycler shall be kept along with the receipts with the name and address of each recycler. Recovered electronic wastes that have been damaged and will not be recycled will be removed and stored in a designated 30-foot x 45-foot covered concrete pad area adjacent to the Contractor's maintenance building located as shown on Sheet G-03, Overall Site Plan and Phasing Plan, provided with the Permit Drawings. The damaged waste shall be placed inside a watertight container.

White goods will be removed from the working face and taken to the white goods storage area located south of Phase I as shown on Sheet G-03, Overall Site Plan and Phasing Plan, provided in the Permit Drawings. White goods shall be removed from the site at least monthly. Refrigeration units will be stored in an upright position until all liquids, CFCs and Freon are removed.

Other unauthorized waste and small quantity household hazardous waste such as lead-acid batteries, fluorescent tubes, pesticides, solvents, cadmium batteries, and thermometers, which are discovered at the working face, will be removed and stored in the designated 30 foot by 45 foot covered concrete pad adjacent to the maintenance building. This facility is only for temporary storage of material removed from the working face and is not a designated public household hazardous waste disposal facility or transfer station. These wastes will be placed on a 4-drum spill pallet. These pallets will be made up of 100 percent polyethylene with UV inhibitors and have spill reservoirs which meet the uniform fire code capacity requirements. Two pallets will be placed in the designated area. These materials will be collected each month by hazardous materials disposal companies or removed for alternate disposal or recycling. Unauthorized wastes will be removed from the site monthly. The maximum on-site storage for unauthorized wastes will be as follows:

- 1,000 electronic devices on e-waste slab.
- 30 batteries in a secondary containment covered tray.
- 2 - 250 gallon containers for used oil with double containment (at the Citizen Convenience Center).
- 20 gallons of used oil placed upright in undamaged container (at the Contractor's maintenance building).
- 1,250 white goods, and lawnmowers, will be placed upright until all liquids, CFCs, and Freon are removed.

Sarasota County will accept contaminated soil for the purpose of landfilling (disposal) at CCSWDC in accordance with the criteria included in Attachment K-4. Waste tires encountered during operations will be placed in a container at the working face that will be removed at the end of the working day and stored in the area designated for waste tire processing within the CCSWDC. The waste tire processing facility is located within the future Phase V landfill area as shown on Sheet G-03, Overall Site Plan and Phasing Plan, provided with the Permit Drawings.

At least one trained spotter will be at each working face when wastes are received at the landfill. Normally, one working face will be operating at the landfill. There may be occasions where two or more working faces are required such as when the first lift of waste is placed in a new cell, during high volume periods such as after a storm, or when the size of a working face is limited such as at the corner of a cell. The spotters will be trained in accordance with Rule 62-701.320(15) and in accordance with the training plan described in Attachment K-1 to recognize unauthorized waste. Each load of waste will be visually inspected at ground level by the spotter as well as by the equipment operators spreading the waste. The spotters and equipment operators will look for containers and other indicators of unauthorized waste. Upon detection of unauthorized waste, the spotters will require the hauler to remove the material for disposal at a proper facility. If the hauler has departed, the spotter will remove the material from the

working face for temporary storage at the designated 30 foot by 45 foot covered concrete pad adjacent to the maintenance building and ultimate removal from the site for proper disposal or recycling.

If any hazardous waste is detected in the load, the hauler shall be informed immediately of the violation. In the event of discovery of hazardous materials, the procedures outlined in Items 3, 4, 5, and 6 of Section K.6 will be followed if any unauthorized wastes are discovered.

If unauthorized waste (i.e., hazardous, PCBs, untreated biomedical, or free liquid) are found at the landfill working face, the waste will be isolated and the contractor's general manager or designee would be promptly notified. The contractor's general manager or designee is trained in the proper procedure to follow including notification to the FDEP. Similarly, if suspect waste is found the waste will be isolated, identified if possible, and the County's operation manager or designee will be notified. The County's operation manager or designee will prepare a suspect waste report and ensure that the waste is properly disposed. The waste load inspection form contained in Attachment K-5 is used for this purpose. Hazardous waste will be isolated and restricted from access until it is removed and properly disposed of from the CCSWC Landfill by a licensed hazardous waste contractor. Hazardous wastes will be removed from the site within 48 hours.

Special waste such as asbestos will be accepted and managed in accordance with the requirements of 62-701.520(3), F.A.C. The asbestos waste haulers will be required to notify the County who will notify the landfill contract operator in advance and provide information on the estimated volume and delivery date of the asbestos. All incoming asbestos material will be required to comply with all applicable permit conditions and be wet down and properly wrapped or bagged. The uncompacted asbestos material will be covered with a minimum 6-inch layer of soil upon disposal. If additional asbestos deliveries are scheduled on the same day, the asbestos may remain uncovered until the end of the work day. The disposal location will be recorded in accordance with 40 C.F.R., Part 61.154, and a record of the asbestos location will be maintained.

Waste oil that is collected for the purpose of recycling is accepted at the CCSWDC near the main entrance. Waste oil is stored in a secure container until removed from the site for recycling purposes. Lawn mowers are accepted at the CCSWDC as long as they are drained of all fluids and are managed as white goods. After inspection for fluids, lawn mowers are stored in the white goods area until collected by the scrap metal vendor who collects white goods. Waste oil, lawn mowers, and yard trash will be managed as described in the Landfill Recycling Plan, Attachment K-13. The yard waste processing facility location is south of Phase I as shown on Sheet G-03, Overall Site Plan and Phasing Plan, provided with the Permit Drawings. The facility is permitted under a separate yard waste processing facility registration.

The Citizen's Convenience Center is located near the entrance of the landfill and consists of spaces for two 20-cubic yard roll off containers for MSW, scrap metal, recyclables, tires, drop off for electronics, and a household chemical collection center. The roll off containers and electronics storage areas are located on concrete pads covered with permanent canopies that prevent the accumulation of water in the containers during inclement weather. Household chemicals are stored in a pre-manufactured hazardous waste storage unit. The Citizen's Convenience Center has a full time attendant and is in operation from 8:00 A.M. to 5:00 P.M. six days per week. The attendant meets customers at the entrance, directs them to the appropriate area of the facility, and monitors the waste for unacceptable materials. The roll-off containers are emptied daily.

The electronics drop off at the Citizen's Convenience Center is manned by a full time attendant who unloads all vehicles that come into the facility. The electronics are from residential curbside collection routes and may include, but are not limited to, televisions, computers, monitors, copiers, etc. The electronics are physically unloaded and placed on pallets or the concrete pad and wrapped in cellophane. Electronics typically will remain at the facility for less than one week but may remain for up to two weeks. Any debris from the operation is swept up and placed in a closed drum for disposal. A vendor will remove the electronics to a recycler by backing semi-trailers up to the slab and loading the pallets onto the truck with pallet jacks or fork lifts.

K.2.d Weighing or Measuring Incoming Wastes

All waste entering the landfill site will be weighed. A minimum of three (3) electronic 50-ton scales are installed at the entrance facility. An Information Management System (IMS) is linked to the scales to facilitate accurate data collection and measurement of incoming materials.

K.2.e Vehicle Traffic Control and Unloading

Directional signs will be placed to safely direct vehicles to the current waste unloading area. These signs will have large legible letters and will be cleaned when necessary. Signs will be strategically placed so that the route is clear to the drivers. Speed limit, safety, and prohibitive practice signs will be placed as necessary to encourage a safe, clean operating area. Unloading will be permitted only at the designated working face. On the fill area, temporary signs, barricades, and flagged stakes will be used to direct vehicles to the proper tipping area. Haulers will be responsible for unloading their own vehicles. Wastes requiring special handling will be coordinated with and unloaded under the direct supervision of landfill contract operation personnel.

K.2.f Method and Sequence of Filling Waste

The overall phasing plan for the facilities is depicted on Sheet G-03, Overall Site Plan and Phasing Plan, provided with the Permit Drawings. The layout for the five (5) cells (designated disposal units) constructed as part of Phase I is shown in Attachment K-14. Staging plans for the remainder of Phase I as previously approved by FDEP are also provided in Attachment K-14. The layout for the four (4) cells proposed for Phase II of the Class I landfill is shown on Sheet C-01, Basegrade Plan, provided with the Permit Drawings. A detailed staging plan for the fill sequencing within Phase II is provided on Sheets C-07, C-08, and C-09 provided with the Permit Drawings. Phase II will be constructed in stages with Cells 1 and 2 being constructed before Cells 3 and 4. Sheets C-01A, C-02A, and C-03A of the permit drawings show Phase II with only Cells 1 and 2 constructed. Sheet C-13A shows the temporary liner termination between Cells 2 and 3. The typical maximum height for each lift is 10 feet. The temporary roads and swales for access and surface water drainage will be phased in as the Phase II area is filled. The maximum width of the working face will be 200 feet. However, the landfill operations may be conducted with a working face width of less than 200 feet.

Temporary Gas Vent Removal

Four temporary gas vents were installed within the bottom liner system during Phase II construction. These gas vents were required when naturally occurring gas within the soil beneath Phase II began to collect beneath the liner and cause the liner system to lift off of the subgrade in several locations. The vents are located near the center of Cells 2 and 3 close to the ridge line between the two cells. Attachment K-15 contains information on the construction and locations of the gas vents.

Prior to the placement of waste within either Cell 2 or Cell 3, the temporary gas vents located in the cell will need to be removed and the liner system repaired. The County will notify the FDEP Southwest District office at least two (2) weeks prior to vent removal/liner repair. Vent removal and liner repair will be performed in accordance with the following procedures:

1. Remove rain cover in vicinity of vent and excavate protective cover soil near repair area;
2. Remove protective casing from standpipe;
3. Remove clamp from primary liner boot, cut primary liner outside of boot weld, and lift boot over standpipe;
4. Remove clamp from secondary liner boot, cut secondary liner outside of boot weld, and lift boot over standpipe;
5. Remove any hydrated or damaged geosynthetic clay liner (GCL) as necessary to allow removal of vent pipe;

6. Remove vent pipe, being careful not to damage in-place liner components or subgrade;
7. Inspect subgrade, replace any soft soil with material meeting requirements of Phase II project specifications, and provide smooth surface for placement of overlying geosynthetics;
8. Patch GCL, secondary liner, secondary geocomposite, primary liner, and primary geocomposite in accordance with the requirements of Phase II project specifications and CQA Plan with the exception that no laboratory or field testing beyond vacuum testing of liner welds will be required of the repair materials due to the limited extent of the repairs;
9. Replace protective cover material over repair; and,
10. Replace rain cover if needed.

All repairs shall be performed by a company approved by a liner manufacturer to perform liner installation. All repairs shall be observed by a third party inspector who will submit documentation to the FDEP Southwest District office that the repairs were performed in general accordance with the Phase II specifications and CQA Plan.

Filling in New Cell

The initial lift of solid waste shall be deposited in each new Phase II cell (designated disposal unit) beginning at the south end of the landfill cell.

Waste will be placed within the designated edge of waste shown on the Engineering Drawings. The edge of waste will be located by measuring 7 feet inward from the edge of liner markers on the north and west sides of Phase II including the temporary liner termination for Cell 2. The edge of waste will be located by measuring 14 feet inward from the edge of liner markers on the south side of Phase II. Periodic inspections will be made to ensure that the markers are in place and the edge of waste is located the required distance from the edge of the liner.

The initial lift of solid waste will progress to the north across the entire width of the landfill cell. The working face will primarily move in an east/west direction across the width of the landfill cell. Selected solid waste loads consisting of solid waste containing no rigid objects will be used for at least the first 4 feet of the first lift, and it will be filled to an elevation of approximately 40 feet NGVD within the Phase II cells.

The method of waste disposal for each lift is described as follows. All incoming solid waste will be directed to the working face and placed against the side slope of the previous day's refuse. The first row of waste in a new lift will be placed against the toe of a containment berm to provide a guide for the placement of refuse for the remaining rows. A slope of not more than 3 to 1 will be maintained. The working face shall be less than 200 feet wide. A maneuvering area shall be provided for large private and commercial vehicles. Depending on space limitation within the working face area, a section of the working face may also be designated for smaller loads and vehicles.

Solid waste will be placed at the working face and spread in 2-foot layers then compacted. The spreading of refuse will be a continuous operation.

In compliance with 62-701.500(10), F.A.C., the stormwater management systems will be operated and maintained as necessary to meet applicable standards of Chapters 62-701, 62-302, and 62-25, F.A.C. The stormwater management system at the CCSWDC Class I landfill is designed to avoid mixing of stormwater with leachate. Stormwater or other surface water which comes into contact with the landfilled solid waste or mixes with leachate will be considered leachate and subjected to applicable requirements.

The filling of the remaining disposal capacity within Phase I will generally follow the FDEP approved staging plans provided in Attachment K-14. The filling of each lined cell within the Phase II area will follow the sequence outlined below: (Refer to Sheets C-07 through C-09, Landfill Staging Plans, provided with the Permit Drawings).

The cell area initially will be filled with a minimum 4-foot lift to bring the daily cover grade to an elevation of approximately 40 feet NGVD which is higher than the cell's lined external containment berms in order to promote stormwater runoff. The lower lift thickness will be placed in the high end (south) of the cells and the greater lift thickness will be placed on the low end (north).

Filling of each cell will generally progress from the south end of the cell to the north end while providing a slope on the cover to allow storm water drainage as shown on the Staging Plans, Sheets C-07 through C-09, Landfill Staging Plans, provided with the Permit Drawings. Only select waste containing no rigid materials will be used within the first 4 feet of the initial lift in a cell.

Subsequent waste lifts will be added to a cell in accordance with the landfill staging plans before opening new cells to waste disposal.

The surface runoff from unused portions of cells will be directed away from solid waste by grading and using temporary diversion berms.

Areas on the top and sides of each lift will be adequately covered and stabilized to maximize surface runoff away from the bermed, sloped working area and towards the stormwater drainage areas to minimize leachate generation, as shown on Sheets C-07 through C-09, Landfill Staging Plans, provided with the Permit Drawings. Intermediate cover will be applied to internal top and side slopes and completed external slopes within seven (7) days if the area will not receive more waste within 180 days. The top of lifts will be sloped to promote storm water drainage. Intermediate covered areas that will not be landfilled or covered with final cover within 6 months will be sodded (external slopes) or seeded and mulched (internal and top slopes) to avoid slope erosion. Storm water collected within the bermed working area will be considered leachate and will be collected and disposed as such. Efficient use of these techniques will decrease leachate volumes.

K.2.g Waste Compaction and Application of Cover

Cover material for daily operations of the landfill will be obtained from the designated stockpile area, C&D Site, and/or compost generated from yard waste recycling. Compost used with soil for cover material shall be free of waste. Cover material will be deposited in the stockpile area location shown on Sheet G-03, Overall Site Plan and Phasing Plan, provided with the permit drawings. The designated stockpile area will have 3:1 side slopes in order to minimize erosion. Additional soil obtained from offsite borrow areas will be placed within the stockpile area during the operational life of the facility. A silt fence will be installed around the stockpile area and side slopes will be grassed to further reduce and control erosion.

Waste will be spread in layers approximately two feet thick on the working face and compacted to approximately one foot in thickness before application of the next layer. The solid waste will be compacted with a minimum of three to five passes of a compactor. Initial, intermediate and final cover will be applied as detailed in Sections K.2.f, K.7.f, K.7.g, and K.7.h., of this Operations Plan.

K.2.h Stormwater Controls

The stormwater management system for this project consists of a series of swales, culverts, and detention ponds. The system is designed to comply with all of the requirements of both Chapters 62-25 F.A.C. and 40 D-4 F.A.C. The stormwater management system for CCSWDC was constructed under a permit issued by the Southwest Florida Water Management District in 1993. All components of the system were installed during Phase I construction.

All cells within Phase II as well as the Phase I/Phase II overlay liner system were constructed with a rain cover to avoid erosion of the protective cover, limit plant growth, and assist with the management of stormwater until waste is deposited within the cells. The rain cover consists of a 20-mil scrim-reinforced polyethylene liner held in place with sand bags. Specifications for the rain cover installed during Phase II construction are provided in Attachment K-16.

Stormwater collected ~~on the rain cover on~~ sand layer will flow north to the sump areas within each cell. Any collected stormwater that has not been in contact with solid waste or otherwise contaminated by leachate will be collected in the temporary stormwater inlets and routed to the leachate collection manhole fitted with temporary stormwater piping that will outfall into the perimeter channel which is part of the permitted stormwater management system. Stormwater may also be pumped over the perimeter berm to the perimeter channel. Any stormwater collected in an open Cell that has been in contact with solid waste or which has received discharges will be considered leachate. The leachate will not be allowed to enter the stormwater collection system and will be pumped to the existing liftstation north of Cell 2 or to the nearest active Cell. If it is not clear whether stormwater has been impacted by leachate, the County will collect samples of the stormwater management system as contained within the current Environmental Resource Permit (ERP) prior to disposal as leachate or stormwater.

Stormwater collected from Cell 2 is directed to the existing metering manhole via the temporary stormwater inlets at the northern end of the Cell, or pumped over the existing northern berm, and into the perimeter channel. If stormwater is collected at the metering manhole the manhole will be modified with an 8-inch outfall that directs stormwater to the existing perimeter swale. The pipe from the metering manhole to the sump station will be plugged to prohibit stormwater from entering the leachate system. ~~If~~

~~stormwater is collected in inlets, the inlets will be installed at a northern lowpoint of Cell 2.~~ If no modifications are made stormwater removal will be accomplished with portable pumps that will be positioned on the north perimeter berm as needed. The pump discharge will be directed to a portion of the perimeter drainage channel lined with grout filled fabric reventment (GFFR) to avoid erosion of the channel.

Stormwater from Cells 3 and 4 will be collected utilizing the existing leachate system. Inlet structures will be installed in line with the existing 8 inch leachate collection pipe at the north end of each cell. Valves will be closed on the pipes from the leachate collection manholes to the leachate pump station. Stormwater will be directed to the leachate collection manhole, the collection manhole will be penetrated and an 8-inch outfall pipe will direct the captured stormwater to the existing perimeter channel. The discharge point into the channel will be lined with GFFR to avoid erosion of the channel.

One month prior to the acceptance of the waste into each cell, Sarasota County shall notify FDEP that the stormwater diversion modifications will be removed. Sarasota County shall provide FDEP a schedule of when the inlets are to be removed, the tee shall be capped, the 8-inch outfall pipe from the leachate collection system to the perimeter channel is to be plugged or grout filled, and the downstream valve will be opened. After the work has been complete, the County shall provide confirmation-construction certification to the FDEP for the decommissioning of the stormwater system. Detailed drawings of Cell 2, 3, and 4 collection system are included in Attachment K-18.

If the rain tarp system becomes irreparable, Sarasota County may elect to replace the rain tarp, place a sod layer or actively-simply maintain the ~~6-inch~~ protective sand layer cover in each cell. Prior to receiving waste the ~~624-inch~~ protective ~~cover-sand layer~~ will be restored to original design and permitted specifications for Cells 2, 3, and 4.

If need ~~t~~The rain cover or sod will be removed prior to the placement of waste within a cell. The rain cover or sod within a cell may be removed either all at once or in stages depending on how long it is anticipated it will take to place the first lift of waste within the cell. If the rain cover or sod is removed in stages, then stormwater may be collected ~~in the areas with remaining rain cover~~ and pumped over the top of the berm and into the perimeter drainage channel or inactive adjacent cell. If the rain cover is compromised, storm water will be segregated and pumped directly off the protective sand layer and pumped over the top of the pump into the perimeter channel. Best Management Practices shall be taken to minimize or eliminate particulate matter from entering the stormwater system.

All stormwater runoff will be conveyed via perimeter drainage channels to detention facilities. Ditch blocks located in the perimeter channels at strategic locations act as sediment traps and will require periodic maintenance.

The ultimate discharge of the detention facilities will be to Old Cow Pen Slough or isolated wetlands through fixed control weirs and spreader swales.

As the filling of the waste progresses, temporary stormwater letdown structures will be installed to facilitate drainage without erosion. Temporary stormwater diversion berms will be installed around the top perimeter of each lift and connected to the temporary letdown structures. The temporary letdowns will be located, in the approximate locations as shown on Sheets C-07 through C-09, Landfill Staging Plans,

provided with the Permit Drawings. Stormwater will be directed to these temporary letdown structures by sloping the top of each lift to promote drainage as shown on the staging plans.

Sediment collection provided by perimeter ditches and ditch blocks will minimize siltation of the main retention areas. In addition, the active fill area(s) will be surrounded by berms to capture stormwater that comes in contact with waste and to prevent run-on and mixing with the stormwater from outside the active fill area. Stormwater collected within the berms surrounding the active fill area(s) is considered to be leachate and will be allowed to percolate into the landfill for collection by the leachate collection system. This leachate may also be pumped to a leachate cleanout pipe or leachate manhole as a means of discharging it to the leachate collection system. This water will be filtered through a screen on the pump intake prior to discharge to a cleanout pipe or manhole.

During normal operations and rainfall events, rain water which becomes leachate at the working face will percolate into the waste to drain the area. However, in order for the operator to limit leachate ponding at the working face during intense rainfall events, the operator may install piping which drains excessive leachate to the toe of the landfill and into the leachate collection system as shown on the drawing sheet provided in Attachment K-19. At the pipe inlet, tires or sand with silt fence maybe used as a filter medium to limit sediment transport through the pipe, allow leachate to freely drain to the inlet of the pipe, and to prevent objects from blocking the pipe inlet. Leachate may accumulate while the pipe is draining the area; however, the operator will inspect the inlet area periodically to ensure that the pipe inlet is not clogged and is allowing free drainage of water to the pipe to keep the accumulation at the inlet to a minimum. As the working face moves, the piping used to assist in drainage of excessive leachate will be relocated and reinstalled in a location selected by the operator which best drains the area. The general setup and installation of the piping will be as shown on the drawing sheet provided in Attachment K-19.

If tires are used for the inlet and outlet areas, they will be temporary and before final disposal of the tire pieces, they will be reduced in size in accordance with the tire disposal requirements of Rule 62-711, F.A.C.

On areas of the landfill that is covered with intermediate cover, pipes may be used from the top of the landfill to the areas with rain cover on Phase II to shed stormwater off the landfill and reduce erosion. The pipes will be installed as shown on the drawing sheet provided in Attachment K-19.

Operation and Maintenance Procedures

The stormwater management system for the CCSWDC consists of a variety of treatment and conveyance methods. The treatment system for the main solid waste handling and disposal areas includes seven wet detention basins. Conveyance to these ponds is through a series of letdown structures, perimeter channels and swales, and culverts. Stormwater collection along the entrance road is provided by the roadside swales. All portions of the stormwater system will be visually inspected by the County weekly and immediately following a storm event of 0.5 inch or greater. The inspections will identify buildup of debris, surface sheen, erosion and sedimentation, and overgrown or exotic vegetation, and structural problems. Any problems identified by these inspections will be corrected within three (3) days. The wet detention basins will be inspected to estimate quantities of sediment within each pond. If the sediment occupies 30 percent of the volume below the normal pool elevation, the sediment will be removed and disposed of in the landfill. Vegetation in all portions of the conveyance systems will be removed on an as

needed basis to prevent blockage.

K.2.i Groundwater Monitoring Plan

Please refer to the Water Quality Monitoring Plan and addendums for the CCSWDC for information regarding the groundwater monitoring network and well locations.

K.2.j Maintaining Leachate Collection System

Leachate collection system maintenance will include daily inspection of all leachate pump stations, metering manholes and leak detection manholes. All pump running data as well as leachate level and flow data will be recorded and checked for irregularities. Pumps are pulled and checked for operational parameters at least once every two years. An example leachate pump data form is provided in Attachment K-8. The leachate collection system will be cleaned and inspected as described in part L.8.h of this Operations Plan.

K.3 LANDFILL OPERATION RECORD

The Administrative office located adjacent to the scale facilities at the entrance of the CCSWDC is shown on Sheet G-03, Overall Site Plan and Phasing Plan of the permit drawings. The office provides facilities for employees including a training/meeting room, sanitary facilities, and first aid equipment. Similar additional facilities are located at the Equipment Maintenance building. Files are located in the Administrative office to contain the operating record for the facilities as required by regulatory agencies/permits. Items that will be stored in the operation record include:

- This Operations Plan.
- All permits for the facility.
- All records and drawings used for developing permit applications.
- All monitoring information, calibration and maintenance records, and copies of reports required by permit (maintained for at least 10 years).
- Background water quality records.
- Annual estimates of the remaining life of the constructed landfill and other permitted landfill areas.
- All monthly waste records which shall include tonnages received for Class I, C&D, yard waste and recyclables.
- Asbestos location records.
- All monitoring reports for groundwater, stormwater, leachate and landfill gas.
- Waste tire processing records.
- Copies of all notifications required by 62-701 F.A.C.
- On-site precipitation record.
- DEP inspection reports.
- Load checking reports.
- Leachate storage tank inspection reports.

- All training verifications.
- All other reports related to the design, operation, monitoring and permitting for the facilities.

K.4 LANDFILL WASTE REPORTS

Each month, a summary report of waste tonnage received for Class I waste, C&D debris, yard waste, and recyclables will be compiled. Copies of the monthly reports will be submitted to FDEP annually or upon request.

K.5 EFFECTIVE BARRIER/ACCESS CONTROL

Access control at CCSWDC includes a perimeter fence with a locking access gate at the scalehouse, which is the only entrance/exit for the facility. The access gate normally will be kept open during hours of operations and an attendant will be at the scalehouse during those times. When CCSWDC is not in operation, this access gate normally will be kept closed and locked.

K.6 LOAD CHECKING PROGRAM

At least three random loads of Class I Municipal Solid Waste (MSW) delivered to the landfill each week will be examined in accordance with the following procedure:

Mechanism for Inspections

- (1) Specific locations within the active landfill cell are to be dedicated to load examination. The areas should be relatively free from extraneous debris and capable of maintaining isolation of the material for one calendar week.
- (2) The inspection of the load shall be controlled by a Contracting Operator employee. Training of contract personnel shall continue on an ongoing basis. In accordance with Rule 62-701.500(6)(a), FAC, a minimum of three random loads will be checked at the active working face(s) each week. The selected driver will be directed to discharge their load at a designated location adjacent to the working face. If any unauthorized waste (i.e., lead-acid batteries, used oil, yard trash, white goods, and whole tires) is found by the random inspection, or as part of routine operations, the waste will be segregated and removed from the site for recycling as described in Section K.2.c. These unauthorized wastes will be stored as described in Section K.2.c. and removed from the site within 30 days.
- (3) The inspection form (see Attachment K-5) shall be filled out and signed off by the inspector. The inspector will identify and note all unauthorized waste found during random load inspection, estimated quantity, and the action taken. The inspector will sign the inspection form that will be retained at the CCSWDC. It shall be the County's responsibility to file/store/distribute the reports.

- (4) The Sarasota County Solid Waste Operations Unit or the Solid Waste's Hazardous Waste Section will investigate violations found during the inspection process. The Contract Operator will remove or clean-up the disposed materials.
- (5) Violations involving hazardous waste dumping will be handled by the Sarasota County Solid Waste's Hazardous Waste Section. Every attempt will be exhausted to place responsibility on the generator relative to having the hazardous waste in question removed from the landfill at the expense of the generator. In the event that generator responsibility cannot be determined and that the waste appears to be from a commercial source, it will be the Contract Operator's responsibility to segregate and secure the waste and pay all costs relative to safely disposing of said waste.
- (6) A list of offenders will be compiled by the Solid Waste's Hazardous Waste Section and the list will be provided to the County with updates on a periodic basis.

K.7 PROCEDURES FOR SPREADING & COMPACTING WASTE AT THE LANDFILL

The following guidelines will provide an efficient and environmentally sound method of operation for the CCSWDC.

- Portable litter fencing will be placed at the working face where needed to reduce windblown litter.
- Cracks or eroded sections in the surface of any filled and covered area will be repaired and a regular maintenance program will be followed to eliminate pockets or depressions that may develop as waste settles.
- If 12 inches of intermediate cover (free of waste) has been placed over a partially filled area, it will be removed and either reused or stockpiled for later use prior to the placement of a new lift.
- The materials described in Attachment K-10 may be used for initial cover. Stormwater runoff will not be allowed from waste filled areas covered with tire chips or tarp. Runoff from outside of the bermed working face area will be considered stormwater only if the flow passes over areas that have no exposed waste and have been adequately covered with at least 6 inches of compacted soil (or a mixture of soil/mulch), free of waste and stabilized to control erosion.
- Sufficient cover material will be stockpiled near the working face to provide an adequate supply for initial cover operations. In some areas, daily stockpiling near the working face may not be necessary because of the proximity of the on-site soil stockpile area.

K.7.a Waste Layer Thickness and Compaction Frequencies

Waste will be spread in layers of approximately two feet thick on the working face and compacted to approximately one foot in thickness before application of the next layer. The solid waste will be compacted with a minimum of three to five passes of a compactor.

K.7.b First Layer of Waste

Selected solid waste loads consisting of solid waste containing no large rigid objects will be used for at least the first four feet of the first lift of a new cell in order to protect the liner and leachate collection system. The first lift will be a minimum of 4 feet deep to bring the daily cover grade to an elevation of approximately 40 feet NGVD which is higher than the cell's lined external containment berms in order to promote shedding of stormwater. Waste will be deposited at the inside toe of the cell's lined external containment berm on the south end of the cell and spread to the north. No solid waste will be placed beyond the litter fences. For the initial lift, hauling vehicles will reach the working face by traveling on top of the previously deposited waste and depositing the loads at the top of the working face. The fill will be spread and compacted "down slope" to prevent vehicles from traveling on the protective sand layer. Also see Section K.2.f. in this Operations Plan.

K.7.c Slopes, Side Grades, and Lift Height

The typical height for each lift is 10 feet. All incoming solid waste will be directed to the working face and placed against the toe of the side slope of the previous day's refuse. The first row of waste in a new lift will be placed against the toe of the containment berm to provide a guide for the placement of refuse for the remaining rows. A maximum slope of 3 to 1 will be maintained on the working face. All top slope areas will be sloped to drain stormwater off of the landfill.

Waste will be placed within the designated edge of waste shown on the Engineering Drawings. The edge of waste will be located by measuring 7 feet inward from the edge of liner markers on the north and west sides of Phase II including the temporary liner termination for Cell 2. The edge of waste will be located by measuring 14 feet inward from the edge of liner markers on the south side of Phase II. Periodic inspections will be made to ensure that the markers are in place and the edge of waste is located the required distance from the edge of the liner.

K.7.d Maximum Width of Working Face

Maximum width of the working face will be 200 feet. This will provide a sufficient area for maneuvering large private and commercial vehicles as well as minimize the exposed area and the unnecessary use of cover material.

K.7.e Initial Cover

For the Class I landfill, a minimum of six inches of compacted initial cover consisting of native sandy soils, top soil, soil-yard waste compost mixture, shredded tires, or other FDEP approved initial cover will be applied to the top of the lift and to the working face at the end of each day. Attachment K-10 provides a description and specification for initial cover materials previously approved for this facility.

A 2-inch layer of shredded yard waste may be applied when needed to the initial cover to minimize erosion during rainy weather. The application of initial cover over the landfilled waste will assure control of disease vector breeding/animal attraction, odors, waste combustion (fire), blowing litter, and moisture infiltration.

The initial cover material will be spread over the exposed waste and, with the exception of tarps, compacted by the equipment used to spread the cover (likely a bulldozer or scraper). The initial cover material will not be removed prior to placement of successive lifts of waste, with the exception of tarps,

which would be removed prior to placement of successive lifts. To enhance the infiltration of leachate through the waste, the initial cover material may be broken up in place by a dozer blade or equipment traffic immediately prior to the placement of the subsequent lift of waste. Any remaining litter and cleanings from equipment will be placed at the bottom of the completed cell and covered.

Before moving the working face, the area that will remain inactive will be covered with compacted cover soil (free of waste) or a mixture of 50 percent unscreened wood mulch and 50 percent soil, with sufficient thickness (minimum 6-inches) to prevent erosion and the mixing of leachate with stormwater.

K.7.f Application of Initial Cover

Initial cover will be applied at the end of each working day, except when solid waste will be placed on the working face within 18 hours, a temporary cover such as a tarpaulin may be used to cover the working face and removed before placement of additional waste. Initial cover alternative materials are listed in Attachment K-10.

K.7.g Intermediate Cover

Intermediate cover consisting of at least 1 foot of compacted native sandy soils or composted yard trash screened through ½-inch mesh mixed with 25 percent soil, by volume, will be applied within 7 days if final cover or an additional lift is not to be applied within 180 days. Intermediate covered areas that will not be landfilled or covered with final cover within 6 months will be sodded (external slopes) or seeded and mulched (internal and top slopes) to avoid slope erosion. Also see Section K.2.f. in this Operation Plan.

To conserve the intermediate cover material, a portion of the intermediate cover will be removed immediately before placement of additional solid waste on top of the lift or before placement of additional waste. The intermediate cover material (free of waste) will be stripped and reused as intermediate cover material. The stripped intermediate cover will be pushed ahead as needed for the perimeter containment berms constructed around the active working face area. The intermediate cover areas will be graded to promote drainage and seeded to prevent erosion.

Components of the landfill gas collection system may be installed in areas that receive intermediate cover. The locations of all underground piping associated with these systems will be marked to avoid damage to them during landfill operation and intermediate cover maintenance activities. Above ground structures such as well heads, and valves, will be kept readily visible by such measures as clearing vegetation, painting components bright colors, and installing protective posts and flagging. These measures should protect the above ground structures from damage during routine intermediate cover maintenance activities such as mowing, grass repair, and washout repair.

K.7.h Final Cover

Following the receipt of a closure permit, final cover will be applied to the Class I landfill on the completed portions of Phase I or Phase II of the landfill operation. The perimeter sideslopes of all completed cells will have a slope of 3:1.

The cap and final cover will consist of a minimum of 12 inches of intermediate cover soil, a geomembrane layer that complies with Department rules, a geocomposite drainage layer, and 24 inches of local common soil of which upper 6 inches will be capable of supporting vegetative cover. Specifications for the local common soil will be provided with the closure permit application.

Components of the landfill gas collection system may be installed in areas that receive final cover. The locations of all underground piping associated with these systems will be marked to avoid damage to them during landfill operation and final cover maintenance activities. Above ground structures such as well heads, and valves, will be kept readily visible by such measures as clearing vegetation, painting components bright colors, and installing protective posts and flagging. Protective posts shall be installed such that they do not damage the final cover system. These measures should protect the above ground structures from damage during routine final cover maintenance activities such as mowing, grass repair, and washout repair.

K.7.i Scavenging and Salvaging Control Devices

Scavenging and salvaging is not allowed on the working face at CCSWDC. In the event spotters working in this area observe scavenging or salvaging activities on the working face, the landfill manager will be notified.

K.7.j Litter Control Devices

Litter will be controlled by requiring covered loads, efficient unloading and cover operations, litter fences, perimeter fencing, and by routine clean-up. Litter outside the working area will be picked up within twenty-four (24) hours.

A small litter fence will be placed at the limit of each landfill cell area for the full length of the active working area of the cell.

K.7.k Erosion Control Procedures

Erosion control procedures at CCSWDC mainly consist of stormwater management for active cell areas and in areas surrounding the landfill cells. Stormwater management for used portions of active cells where initial or intermediate cover over the waste has been placed in accordance with FDEP requirements, is achieved by:

- Grading the waste-in-place with an adequate slope and adequately covering the waste to divert stormwater away from the working face.
- Use of terraces and letdown pipes.
- Maintaining internal and external berms.

The stormwater management system will be of critical importance during the filling sequence. As each lift is constructed, temporary stormwater diversion berms will be constructed.

A containment berm will isolate the working face from the remaining covered areas. Stormwater which accumulates behind the containment berm in the area of the working face is leachate and will be retained and allowed to percolate into the landfill where it will eventually be collected in the leachate collection system.

Other berms will divert stormwater from top slopes to let down structures and will serve as erosion control to protect recently covered side slopes. These external berms will be sodded to minimize erosion and will be directly connected to the temporary letdown structures to facilitate proper management of stormwater runoff.

Sediments that reach the perimeter channels will collect behind the ditch blocks and will require periodic removal. Within 30 days after applying intermediate cover to side slopes that have reached designed dimensions, sod shall be applied. As filling progresses above the proposed first drainage terrace, the first set of temporary letdown structures will be constructed. This operating procedure will minimize the amount of erosion and sediment accumulation that must periodically be removed from the perimeter ditches.

Areas provided with intermediate cover, or other areas that discharge to the stormwater management system that exhibit significant erosion, will be repaired as follows:

- If greater than 50 percent of the soil cover material has eroded, then the area will be repaired within 7 days.
- If waste or liner is exposed, then the area will be repaired by the end of the next working day.

K.8 PROCEDURE FOR LEACHATE MANAGEMENT

K.8.a Leachate Monitoring, Sampling, and Analysis

The sump pumps located in Cells 1 through 5 of Phase I will operate in an automatic mode based on the liquid level in the sump. Figure L-2 in Attachment K-3 shows the operation levels for the sump pumps. The pressure transducer located at the end of the pump housing accurately measures the level of liquid in the sump and provides a digital readout of this level at the control panel mounted on the valve box at the top of each cell's lined external containment berm. As shown on Figure L-2, the high water alarm will result if leachate levels rise to cause 12 inches of head on the liner system adjacent to the sump area.

Two additional pump units will be provided for backup of the Phase I sump pumps. This allows for removal of each pump on a regular scheduled basis to perform preventative maintenance. When a sump pump is removed for schedule maintenance, a spare pump will be reinstalled immediately while the maintenance is being performed. Each pump will receive preventive maintenance in accordance with the manufacturer's recommendations at a frequency based on run time.

Cells 1 through 4 of Phase II will drain by gravity to a duplex leachate pump station located north of Cell 2. The pump station will operate in an automatic mode based on the liquid level within the wet well. Sheet C-17, Leachate Collection System Details, of the Permit Drawings shows the operation levels for the pumps. The pressure transducers located at the end of the pump housing accurately measure the level of liquid within the wet well and provide a digital readout of this level at the control panel mounted adjacent to the pump station. As shown on Sheet C-17, Leachate Collection System Details, the duplex pumps will operate on a lead/lag basis.

Additional details on leachate sampling locations, sampling and analysis schedule, and data submission is provided in the Water Quality Monitoring Plan and Addendums.

K.8.b Leachate Collection and Removal System

Phase I Collection System

The existing Phase I Class I landfill leachate collection system consists of a geonet drainage layer and perforated collection pipe above the composite liner system to collect and convey leachate. The leachate that is conveyed to sumps will be pumped to an existing 1,800,000 gallon on-site leachate holding tank. A typical detail for the Phase I sumps is provided in Figure L-2 of Attachment K-3. The leachate collection piping system consists of 8-inch diameter perforated HDPE pipe sloped in such a manner that leachate flowing through the solid waste of the landfill will be collected and transported by gravity to a sump and leachate pump. The discharge line from the sump pump connects to a HDPE header line via a valve vault. Provisions for sampling the leachate as well as monitoring flows and pressure are provided in the valve boxes (locations shown in Attachment K-14).

Phase II Collection System

The proposed Phase II Class I landfill leachate collection system consists of a geonet composite drainage layer and perforated collection pipe above the double synthetic liner system to collect and convey leachate. The leachate that is collected within the Phase II cells will be pumped to the on-site leachate holding tank. The leachate collection piping system consists of 8-inch diameter perforated HDPE pipe sloped in such a manner that leachate flowing through the solid waste of the landfill will be collected and transported by gravity to a metering manhole located on the north perimeter berm of each cell. At the metering manhole, leachate flows from each cell are measured using a Parshall flume and an ultrasonic water level sensor. Each metering manhole drains by gravity to a duplex leachate pump station located adjacent to Cell No. 2. The discharge from the leachate pump station will be directed through a new HDPE leachate forcemain that will be installed along the north and west sides of Phase II, the west and south sides of future Phase III and the south side of future Phase IV. Provisions for sampling the Phase II leachate as well as monitoring flows and pressure are provided in the valve vault located adjacent to the leachate pump station as shown on the details provided on Sheet C-17, Leachate Collection System Details, of the Permit Drawings. Any stormwater accumulated in an unused cell will be pumped out from the cell using portable pumps and discharged to the stormwater system. Prior to waste disposal within a cell, the valve connecting the leachate collection pipe within the cell to the manhole will be in the closed position to prevent stormwater from draining to the leachate pump station. Immediately prior to solid waste being deposited into a new landfill cell, the valve at the manhole will be opened to allow the free flow of leachate to the pump station.

Leachate collected within the geocomposite drainage layer of the leak detection system of Phase II will be drained by gravity to a leak detection manhole located on the north perimeter berm of each cell. The discharge valve at the leak detection manhole will normally be closed to allow the quantity of leakage to be measured. An ultrasonic water level sensor calibrated to the storage volume within the manhole at a given level will be used to measure leakage rate. After the leakage rate has been determined, the leachate within the leak detection manholes will subsequently be drained by gravity to the leachate pump station and the valve closed for another

measurement. The leak detection system has been designed such that a leak developing within the most remote part of a cell will flow to the leak detection manhole within twelve hours. A Leakage Action Rate (LAR) of 100 gallons/acre/day has been established for the Phase II cells, which corresponds to the EPA Guidance and FDEP experience with facilities with similar liner systems. At this rate, the 470 gallon storage volume within the leak detection manhole will be exhausted within 8.75 hours. For leakage rates greater than 100 gallons/acre/day, measures should be initiated to find and repair or minimize leaks within the primary liner system.

The following procedures will be initiated if the LAR of 100 gallons/acre/day is exceeded:

1. Increase monitoring of the leakage quantity from the cell(s) affected. This consists of increasing the frequency of monitoring liquid levels within the leak detection manhole(s) to determine the time required to fill the five-foot storage volume in the manholes. It is anticipated that readings will be made at least daily after the LAR is exceeded and the calculated leakage rates will be recorded.
2. Immediately notify FDEP once it is ascertained that the LAR is being exceeded and provide a plan on how the County intends to address the exceedance.
3. Attempt to locate and fix sources of leaks to the extent practical. Measures to locate leaks could include inspecting the leak detection manhole to determine whether groundwater is leaking into it, observing the surface of the cell to determine if there are indications as to where leaks may be located such as large protrusions of waste that may have penetrated the liner system, and video taping the leak detection pipe to determine where large inflows are occurring. If the location of a leak can be identified and excavation of waste is practical, then the liner will be exposed and repaired.
4. Adjust operational practices as needed to reduce the likelihood of future damage to the liner such as increasing the thickness of the initial layer of select waste on the cell bottom.
5. If leaks can not be specifically located or if it is not practical to find them, adjust operations to try to reduce the leakage to below the LAR. This could include measures to reduce the generation of leachate such as grading the landfill to promote runoff, installing drains and berms to direct runoff away from the landfill, the installation of additional intermediate or temporary cover, installing temporary geomembrane rain covers, or accelerating the placement of final cover in areas that have reached final elevation.

Phase I/Phase II Overlay Liner System

An overlay liner system will be constructed over the west sideslope of Phase I prior to the placement of waste against this slope as a result of the construction of Phase II. The purpose of the overlay liner system is to reduce the quantity of leachate entering the Phase I leachate collection system from the Phase II expansion by directing it to the Phase II leachate collection system. This will be accomplished by hydraulically separating the newer waste above it from the older waste beneath the overlay liner system.

The overlay liner system will consist of (from the top down) 2 feet of protective cover material, a geonet composite drainage layer, a textured 60-mil HDPE liner, and a minimum of 12 inches of intermediate cover placed over the waste. The protective cover may be installed in stages as required by operations in order to avoid having the material washout during storms. Alternately, the protective cover may be placed all at once if a rain cover is installed over it to prevent washouts. The rain cover would be removed prior to the placement of waste against the overlay liner system.

The rain cover on the overlay liner system includes rain gutters to divert stormwater off the rain cover to temporary downdrains that will direct the stormwater to the perimeter drainage channel located north of Phase I. The locations of the rain gutters and temporary downdrains are shown on Sheets C-3 and C-3A of the Engineering Drawings. Details of these features are included on Sheet C-13B of the Engineering Drawings. Calculations demonstrating that the rain gutters and downdrains are capable of transmitting the flow generated from the 25-year design storm are included in Attachment H.2 of the Phase II Permit Application Engineering Report.

Leachate percolating through the newer waste located above the overlay liner system will be captured by the liner and directed to the base of the overlay liner system by means of the geonet composite drainage layer. A stone-filled trench drain with an 8-inch diameter perforated HDPE pipe located at the Phase I/Phase II divider berm will collect the leachate and direct it to the low point within Cell 1 of Phase II where it will flow out of the cell with the rest of the leachate collected within Cell 1. From there, the leachate will flow as previously described for the Phase II collection system.

Leachate Disposal System: General Description

Leachate that is generated from the landfill cells will be pumped to the existing 1,800,000 gallon leachate storage tank. The leachate accumulated in the storage tank will be removed by a leachate pumping station that will pump through a 4-inch PVC force main to a connection to the Sarasota County wastewater collection system south of the landfill on Knights Trail Road. The Sarasota County wastewater collection system in this area flows to the City of Venice Water Reclamation Facility (WRF) for treatment.

The leachate pumping and force main system is the primary disposal method for the CCSWDC leachate. Transfer pumps that discharge to tanker trucks for hauling to the Bee Ridge WRF will serve as a secondary emergency disposal location.

The following information provides a description of the above ground leachate storage tank in accordance with the requirements of 62-701.400(6)(c).

The existing leachate storage tank has a total capacity of 1.8 million gallons. The exposed plan area of the secondary containment system surrounding the existing leachate storage tank is 5,419 square feet. This will allow 27,000 gallons of water to accumulate after an 8-inch rainfall event. All liquid accumulating in the secondary containment system will be tested for specific conductance. Specific conductance of the stormwater in the secondary containment shall not be more than 50 percent above the specific conductance of water in the nearest downstream

stormwater pond (Stormwater Pond No. 6) or shall not exceed 1,275 $\mu\text{mhos/cm}$, whichever is greater. If the specific conductance is greater than these criteria or if a visible sheen is present, then the stormwater will be pumped directly into the leachate storage tank and managed as leachate.

A log of discharges from the secondary containment system will be maintained. The date, specific conductance measurements, and visual sheen observations shall be recorded.

An electronic water level sensor will automatically determine when the storage tank reaches 90 percent capacity (1.62 million gallons) and a high water alarm will be activated. An electric actuated shutoff valve in the fill line will be activated to prevent overfilling the tank when the capacity reaches 1.8 million gallons in the tank. The electric actuated shutoff valve will be tested by inducing a false signal from the level sensor and confirming proper operation on a weekly schedule. The exposed tank exterior will be inspected weekly by visual observation. The inspection will include looking for leaks, corrosion, or other maintenance deficiencies. This will be accomplished by inspection from platforms at the top of the 20-foot high secondary containment wall, positioned 120 degrees apart around the circumference of the tank. The tank interior will be inspected annually when the tank is empty or at least once every three years. If any failures are detected, the tank construction company shall be contacted immediately and appropriate repairs conducted based on the nature of the problem. Leachate will be managed in accordance with the Contingency Plan (Section K.8.e) when the tank is out of service. Reports of the above inspections will be maintained by the County (the most recent inspection report is included as Attachment K-7).

The leachate pumping station will have automatic controls with the following set points:

	<u>Elevation</u>
High water alarm	40
Lag pump on	28
Lead pump on	27
Pumps off	26
Tank bottom	22

The set points can be modified by adjusting the pump control system. The duplex pumps will automatically alternate operation each time the pump is stopped by the level control system. The pumping station is equipped with a data logger to record flow, pH, and conductivity on a continuous basis.

K.8.c If Leachate Becomes Regulated as Hazardous Waste

Sarasota County will evaluate options for pretreating the leachate and alternate disposal if it becomes regulated as a hazardous waste.

K.8.d Off-Site Treatment of Leachate

The primary disposal location for CCSWDC leachate and alternate disposal is the City of Venice WWTP. Facility commitment letters are provided in Attachment K-6. A secondary disposal location is the Bee Ridge Water Reclamation facility. CCSWDC may use other secondary facilities for the offsite treatment or disposal of leachate; however, the County will notify FDEP of the change prior to use.

The CCSWDC will dispose of leachate at the primary treatment location provided the leachate meets the disposal quality requirements. Should leachate quality change such that it is no longer acceptable at the primary treatment location, the CCSWDC will dispose of leachate at the secondary facility.

K.8.e Contingency Plan for Leachate Management

Should one of the following events occur, the leachate contingency management plan shall be implemented.

- Any mechanical failure of the leachate management system that would prevent operation of the landfill leachate collection system pumps or the leachate transfer pumps for more than three (3) consecutive days.
- Liquid accumulation in the holding tank leak detection system in amounts greater than expected from rainfall.
- Rise of leachate levels inside the holding tank greater than 52.6 (high water alarm elevation represented by 31 foot mark on the external tank gauge).

Implementation of the contingency plan includes the following actions.

- (1) The landfill manager shall notify the FDEP (within twenty-four (24) hours) and leachate disposal facilities of the emergency event.
- (2) If the problem is excess leachate in the detection system of the holding tank, remedial measures shall be taken immediately to eliminate the leak. The detection system of the concrete holding tank consists of a layer of gravel located between the bottom of the holding tank and the top of the secondary containment slab that enables the detection of leaks at the bottom of the holding tank. Additional tractor trailer tanker units and operators shall be called to the site to expedite transport of leachate to the receiving wastewater treatment plant or additional quantities shall be pumped through the forcemain to the City of Venice lift station. The holding tank shall be emptied completely, if required, to facilitate repairs. Leachate will be pumped to mobile tanks during periods the repairs.
- (3) If the problem is excessive levels of leachate in the holding tank (elevation exceeds the high water alarm level), the maximum amount of leachate shall be diverted from the tank by increasing the number of frequency or tanker trucks hauling leachate to the primary or secondary WWTPs, pumping additional quantities of leachate through the forcemain to the City of Venice lift station, or storing leachate in mobile tanks.

- (4) Once the problem causing the implementation of the contingency plan has been resolved to an acceptable degree, the landfill manager shall notify FDEP (within three (3) day) that the facility is ready to return to normal operating conditions.
- (5) Inspections and repairs to the leachate tank will be scheduled during winter months to the extent possible in order to minimize the quantity of leachate that must be removed. While the tank is out of service, leachate will be pumped directly to either tanker trucks or temporary storage tanks. If the tank will be out of service for an extended period, the temporary tanks will be plumbed to the leachate transfer station to allow direct pumping of the leachate to the WWTP.

K.8.f Recording Quantities of Leachate Generated

A control panel for each sump pump in Cell Nos. 1 through 5 of Phase I is mounted on the valve box at the top of each cell's lined external containment berm. Each control panel will be equipped with a pump hour meter.

A control panel for the Phase II duplex leachate pump station will be mounted adjacent to the pump station. The control panel will be equipped with a flow meter, water level indicator, and a pump hour meter.

The following information will be recorded once per operating day from each pump location.

Cell No. or Phase	_____
Flow Meter Reading	_____
Hour Meter Reading	_____
Sump or Wet Well Liquid Level	_____

The above information is recorded on the form provided in Attachment K-8.

A control panel for the Phase II metering manholes will be mounted adjacent to the manhole. The panel will be equipped with a water level indicator, instantaneous flow meter, and a flow totalizer.

The following information will be recorded once per operating day from each metering manhole location.

Cell No.	_____
Instantaneous Flow	_____
Totalized Flow	_____
Liquid Level	_____

The above information is recorded on the form provided in Attachment K-8.

K.8.g Precipitation and Leachate Generation Rates

Rainfall for each 24-hour period measured at an official gauge located on-site will be recorded and entered onto a spreadsheet (format included in Attachment K-11) to compare precipitation to leachate generation.

K.8.h Leachate Collection System Inspection and Cleaning

CCSWDC will conduct a video inspection of the leachate collection system at least once every five years in accordance with Rule 62-701.500 F.A.C. requirements, and cleaned as necessary. Leachate pumps, metering manholes, and leak detection manholes at CCSWDC will be inspected for operation failures at least daily. Control panels will be inspected and operational data recorded as described in K.8.f.

K.9 LANDFILL GAS MANAGEMENT AND MONITORING

K.9.a Landfill Gas Management

The CCSWDC is located near the center of a 6,000 acre site. The minimum distance from the Class I landfill to the nearest property line is 1,800 feet. This distance represents a substantial buffer to allow for dispersion of odors normally associated with MSW landfill operations. Therefore, it is not anticipated that collection of landfill gas will be necessary for odor control.

In order to comply with air quality requirements, a Non-Methane Organic Compound (NMOC) emission report will be submitted to the implementing authority on an annual basis following the requirements of New Source Performance Standards (NSPS). Within twelve (12) months after reporting NMOC emissions greater than or equal to 50 Mg/year (megagram per year), a detailed landfill gas collection and controls system design plan submittal shall be made to the NSPS implementing agency. Within eighteen (18) months after this submittal, the installation of the landfill gas collection and control system shall be completed. Based on current Tier 2 sampling and model projections, the CCSWDC Class I landfill has not exceeded the NMOC threshold at the time this report was and is not expected to exceed the threshold until 2015. Operation of the Landfill Gas System is provided in greater detail in Attachment K-15, LFGCCS Operation and Maintenance Plan.

K.9.b Landfill Gas Monitoring Program

A gas monitoring program will be implemented to prevent explosions and fires and to minimize off-site odors and damage to vegetation. The landfill gas monitoring program for CCSWDC will include monitoring of the landfill perimeter and enclosed on-site structures at the monitoring locations shown on Figure 1 in Attachment K-3. Monitoring will be conducted on a quarterly basis and a report submitted to FDEP within 15 days after the end of the quarter in which monitoring occurred. The outside monitoring locations, as shown on Figure 1 provided in Attachment K-3, (gas monitoring probes) will consist of a monitor probe as shown on Figure L-3 in Attachment K-3. All gas probes will be clearly labeled and easily visible at all times.

The CCSWDC gas monitoring locations for include four (4) gas monitoring probes as described above and numbered GP-2, GP-3, GP-7, and GP-9 and six (6) gas monitoring locations GM-1, GM-2, GM-3, GM-4, GM-5, and GM-7 in structures as shown on Figure 1 provided in Attachment K-3.

These locations are summarized in the table below:

CCSWDC Landfill Gas Monitoring Points

MONITORING POINT	TYPE OF MONITORING	LOCATION
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GP-2	Probe	North of Phase I
GP-3	Probe	East of Phase I
GP-7	Probe	North of C&D Processing Area
GP-9	Probe	West of Cell 4, Phase II
GM-1	Monitoring Location	Contractor's Maintenance Bldg.
GM-2	Monitoring Location	C&D Processing Area
GM-3	Monitoring Location	County Maintenance Bldg.
GM-4	Monitoring Location	Administrative Bldg.
GM-5	Monitoring Location	Scale House
GM-7	Monitoring Location	Control Panel at Leachate Storage Tank

Low areas, base boards, floor drains, and floor mounted cabinets shall be monitored inside the structures. Other structures on the site are not monitored because their great distance from the landfill (over 3,400 feet) and the shallow groundwater table (5 to 7 feet below surface) at the site would cause any migrating gas, if it existed, to purge to the atmosphere before it would travel to these structures through the ground. Also, there are no connections via conduit pipes, etc. between these structures and the landfill area.

Please note that gas monitoring probes north of Phase II are not necessary due to the presence of Stormwater Pond No. 1 that will effectively cut off the migration route of landfill gas in that direction. Also, gas monitoring probes south of Phase II are not necessary due to the long distance between the edge of waste and the property line and structures that can be adversely affected by migrating landfill gas. The high water table at the site also makes it unlikely that gas will migrate significant distances.

The landfill gas probes and monitoring locations shown on Figure 1 will be sampled at least quarterly for concentrations of combustible gases determined as a percent of the lower explosive limit (LEL) calibrated to methane as described in FAC 62-701.530.(2).

A methane/combustible gas detector (meter) will be used to measure the LEL at the monitoring locations. No purging of the probe will be allowed. Once the meter is connected to the sampling port, the valve will be opened and the meter pump will be engaged and meter reading observed. The highest value observed is recorded as well as the steady state value observed.

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

K.9.c Odor Reporting Procedures

The CCSWDC shall be operated to control objectionable odors in accordance with Rule 62-296.320(2), F.A.C. After being notified by the Department that objectionable odors have been confirmed beyond the landfill property boundary, the CCSWDC shall:

- (1) Immediately take steps to reduce the objectionable odors. Such steps may include applying or increasing initial cover, reducing the size of the working face, and ceasing operations in the areas where odors have been detected;
- (2) Submit to the Department for approval an odor remediation plan for the gas releases. The plan shall describe the nature and extent of the problem and the proposed long-term remedy. The remedy shall be initiated within 30 days of approval.
- (3) Implement a routine odor monitoring program to determine the timing and extent of any off-site odors, and to evaluate the effectiveness of the odor remediation plan.

K.10 STORMWATER MANAGEMENT SYSTEM

The landfill stormwater management system for CCSWDC is discussed in Section K.2.h.(3) – Stormwater System.

K.11 EQUIPMENT AND OPERATION FEATURE REQUIREMENTS

K.11.a Adequate In-Service Equipment

Equipment proposed for the CCSWDC will include the equipment listed in Table K-1 (on the next page). The exact equipment complement may vary from time to time and additional equipment will be acquired if needed. One roll-off container will be placed at the Class I landfill area.

Emergency Electrical Generation Equipment is of adequate size to assure complete operation of the Leachate Disposal and Collection Systems.

K.11.b Reserve Equipment

Cooperative lending agreements with the Contract Operator's company and standing agreements with local equipment suppliers will provide a means for procuring additional back-up equipment within 24 hours of a need being identified.

K.11.c Communication Facilities

Radios and cell phones will be the primary communications devices to provide safe conditions for landfill personnel.

K.11.d Dust Control Methods

Dust from unpaved haul roads and construction areas within the Class I landfill area will be controlled through the use of a water spray truck. An alternate dust control measure that may be used in active cells of the Class I landfill area is leachate reuse (see Attachment K-12 for FDEP approval letter). The reuse of

leachate involves spraying small quantities of leachate from a spray bar mounted on the rear of a

TABLE K-1. EQUIPMENT USED AT THE CCSWDC

NUMBER	EQUIPMENT
2	Bulldozer
2	Compactors
2	Dump Truck
1	Front-end Loader

NUMBER	EQUIPMENT
1	Grader
1	Hydraulic Excavator
1	Water Truck
1	Fuel Truck
2	Pick-up Trucks
2	UD Gators
1	Roll-off Truck
1	Compressor
1	Pressure Washer
1	Welder

truck onto active fill areas of the landfill. The landfill operation crew will monitor the rate of leachate application, soil moisture conditions, and the specific landfill areas used to prevent the generation of leachate runoff. Leachate will only be applied under the following conditions.

- Leachate may only be sprayed on active, bermed fill areas, including the working face, and areas with the required six (6) inches of initial cover.
- Leachate may not be sprayed on areas with intermediate or final cover.
- The maximum grade leachate will be sprayed on is a 10H:1V slope. Areas within 150 feet of a 4H:1V or steeper side slope will not be sprayed on. At all times areas receiving leachate must be controlled to prevent run-off from entering the stormwater system
- Leachate will not be sprayed during a rainfall event, and when the application area is in a saturated condition.
- The application rate of leachate should be such that leachate does not accumulate on the landfill surface, and infiltrates quickly into the covered refuse.
- Leachate will not be sprayed at the end of the day on the initial cover of the working face or other areas. Spraying should be done early in the morning after any dew evaporates and continue until early afternoon or until all available areas have been used.

The Site Manager will record daily the gallons of leachate sprayed per this method.

If needed, dust masks will be available to personnel working in excessively dusty areas.

In general the facility will employ multiple methods for dust control as described above; in addition many of the facility's roads are paved for all-weather conditions, as described in Section K.12 below.

Reasonable dust control precautions may include, but are not limited to, the following:

- Paving and maintenance of roads, parking areas and yards.
- Application of water to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing.
- Application of asphalt, water, or other Department-approved dust suppressants to unpaved roads, yards, open stock piles and similar activities.
- Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent re-entrainment, and from buildings or work areas to prevent particulate from becoming airborne.

- Landscaping or planting of vegetation.
- Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter.
- Confining abrasive blasting where possible.
- Enclosure or covering of conveyor systems.

K.11.e Litter Control Devices

See Section K.7.j. in this Operations Plan.

K.11.f Signs Indicating Name of Operating Authority, Traffic Flow, Hours of Operations, and Charges for Disposal

There is a permanent sign at the south property line along the access road to the facility identifying the Sarasota County Central County Solid Waste Disposal Facility and indicating hours of operation and charges for different types of loads. The sign indicates materials that are not accepted for disposal in the landfill. Signs indicating approach and exit routes and one-way roads are strategically placed so traffic at the landfill will move smoothly and efficiently to and from the working face area.

K.12 ALL WEATHER ACCESS ROADS

A paved entrance from Knights Trail Road terminates at the landfill perimeter roadway. In addition, paved perimeter roads around the landfill areas are shown on Sheet G-03, Overall Site Plan and Phasing Plan of the permit drawings. All weather access roads will be constructed within the Class I area to route traffic to the active working face. The all weather access roads will be constructed of earth, ground shingles, crushed rock, shell or any other stabilizing material, as appropriate.

K.13 ADDITIONAL RECORD KEEPING AND REPORTING

See Section K.3 of this Operations Plan for records and documents retained. Documents used for development, operations, construction, background water quality, and permitting of the CCSWDC will be kept for the design life of the CCSWDC. Weigh tickets shall be kept for 5 years. All monitoring information, including calibration and maintenance records, chart recordings, and all reports required by permit shall be kept for 10 years.

Records that are more than five years old may be archived at an off-site storage location. The archived records will be stored in a secure place where they will be protected from damage. Provisions will be made to retrieve records from storage as required within 7 days.

ATTACHMENT K-18

CELLS 2, 3 AND 4 ~~RAIN COVER~~STORMWATER COLLECTION SYSTEM