FLORIDA DEPARTMENT OF Environmental Protection

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

Ron DeSantis
Governor

Jeanette Nuñez
Lt. Governor

Shawn Hamilton
Secretary

October 31, 2022

NOTICE OF PERMIT MODIFICATION

By-Email
Ryan.Sonnenberg@hardeecounty.net

In the Matter of an
Application for Permit by:
Hardee County Solid Waste Department
685 Airport Road
Wauchula, Florida 33873
_____/

Hardee County
WACS #40612
Hardee County Class I Landfill

Attention: Mr. Ryan Sonnenberg

DEP File No: 38414-019-SO-IM

Pursuant to Sections 403.061(14) and 403.707, Florida Statutes, the Department hereby issues modification number 38414-019-SO-IM. The following conditions of permit number 38414-016-SO-01 are modified as follows:

SPECIFIC CONDITION	FROM	TO	TYPE OF MODIFICATION
Page 1 of 35	Existing	Amended	Updated contact person and added permit modification number
2.B.1	Existing	Amended	Updated to authorize construction of two above ground leachate storage tanks
2.B.3	New	New	Added to require submittal Certification of Construction Completion Report for the leachate storage tanks
2.B.4	New	New	Added to require approval of the Construction Certification prior to use of the leachate storage tanks
2.C.1	Existing	Amended	Updated reference to Appendix 2
2.C.12.a	Existing	Amended	Updated Appendix 2 document number
Appendix 2	Existing	Amended	Updated to include Documents 1- 4 relevant to this modification and renumbering of documents
Attachment 2	Existing	Amended	Updated to include current modification

Attached is Permit Number 38414-016-SO-01 as modified by this Order. The attached permit replaces all previous permits and permit modifications for this facility.

NOTICE OF RIGHTS

This action is final and effective on the date filed with the Clerk of the Department unless a petition for an administrative hearing is timely filed under Sections 120.569 and 120.57, F.S., before the deadline for filing a petition. On the filing of a timely and sufficient petition, this action will not be final and effective until further order of the Department. Because the administrative hearing process is designed to formulate final agency action, the hearing process may result in a modification of the agency action or even denial of the application.

Petition for Administrative Hearing

A person whose substantial interests are affected by the Department's action may petition for an administrative proceeding (hearing) under Sections 120.569 and 120.57, F.S. Pursuant to Rules 28-106.201 and 28-106.301, F.A.C., a petition for an administrative hearing must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;
(b) The name, address, and telephone number of the petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests are or will be affected by the agency determination;
(c) A statement of when and how the petitioner received notice of the agency decision;
(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;
(e) A concise statement of the ultimate facts alleged, including the specific facts that the petitioner contends warrant reversal or modification of the agency's proposed action;
(f) A statement of the specific rules or statutes that the petitioner contends require reversal or modification of the agency's proposed action, including an explanation of how the alleged facts relate to the specific rules or statutes; and
(g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wishes the agency to take with respect to the agency's proposed action.

The petition must be filed (received by the Clerk) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us. Also, a copy of the petition shall be mailed to the applicant at the address indicated above at the time of filing.

Time Period for Filing a Petition

In accordance with Rule 62-110.106(3), F.A.C., petitions for an administrative hearing by the applicant and persons entitled to written notice under Section 120.60(3), F.S., must be filed within **14** days of receipt of this written notice. Petitions filed by any persons other than the applicant, and other than those entitled to written notice under Section 120.60(3), F.S., must be filed within **14** days of publication of the notice or within **14** days of receipt of the written notice, whichever occurs first. The failure to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the discretion of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

Extension of Time

Under Rule 62-110.106(4), F.A.C., a person whose substantial interests are affected by the Department's action may also request an extension of time to file a petition for an administrative hearing. The

Department may, for good cause shown, grant the request for an extension of time. Requests for extension of time must be filed with the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, or via electronic correspondence at Agency_Clerk@dep.state.fl.us, before the deadline for filing a petition for an administrative hearing. A timely request for extension of time shall toll the running of the time period for filing a petition until the request is acted upon.

Mediation
Mediation is not available in this proceeding.

Judicial Review
Once this decision becomes final, any party to this action has the right to seek judicial review pursuant to Section 120.68, F.S., by filing a Notice of Appeal pursuant to Florida Rules of Appellate Procedure 9.110 and 9.190 with the Clerk of the Department in the Office of General Counsel (Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000) and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate district court of appeal. The notice must be filed within 30 days from the date this action is filed with the Clerk of the Department.

EXECUTION AND CLERKING
Executed in Tallahassee, Florida.
STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Kimberly A. Walker
Digitally signed by Kimberly A. Walker
Date: 2022.10.31 16:04:41 -04'00'

Kimberly A. Walker
Program Administrator, Permitting and Compliance Assistance Program

Attachment(s):
1. Permit No. 38414-019-SO-IM

CERTIFICATE OF SERVICE
The undersigned duly designated deputy clerk hereby certifies that this document and all attachments were sent on the filing date below to the following listed persons:

Shane Fischer, P.E., SCS Engineers	SFischer@SCSEngineers.com
El Kromhout, P.G. FDEP	Elizabeth.Kromhout@FloridaDEP.gov
Melissa Madden, FDEP	Melissa.Madden@FloridaDEP.gov

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to Section 120.52, F. S., with the designated Department Clerk, receipt of which is hereby acknowledged.

Tamela Starling
Clerk

10/31/2022
Date

Florida Department of Environmental Protection

Southwest District
13051 North Telecom Parkway
Temple Terrace, Florida 33637-0926
Telephone: 813-470-5700

Rick Scott
Governor

Herschel T. Vinyard Jr.
Secretary

Permit Issued to:

Hardee County Solid Waste Department
685 Airport Road
Wauchula, FL 33873
(863) 773-5089

WACS Facility ID No.: 40612
Facility Name: Hardee County Class I Landfill
685 Airport Road
Wauchula, FL 33873

Contact Person:
~~Marissa Alexander~~ Ryan Sonnenberg, Solid Waste Director
685 Airport Road
Wauchula, FL 33873
~~Marissa.Alexander~~ Ryan.Sonnenberg@hardeecounty.net
(863) 773-5089

Solid Waste Operation Permit – Hardee County Class I Landfill
Phase II Sections I & II Operation
Permit No.: 38414-016-SO/01
Replaces Permit No.: 38414-011-SO/01
Includes Minor Modification 38414-017-SO-MM
Includes Minor Modification 38414-018-SO-MM
Includes Intermediate Modification 38414-019-SO-IM

Permit Issued: November 8, 2013
Permit Renewal Application Due Date: September 8, 2033
Permit Expires: November 8, 2033

Permitting Authority
Florida Department of Environmental Protection
Permitting and Compliance Assistance Program
2600 Blair Stone Rd/MS45656
Tallahassee, Florida 32399
850-245-8707 (voice)
850-245-8811 (fax)

SECTION 1 - SUMMARY INFORMATION

A. Authorization

The permittee is hereby authorized to operate the facility described below in accordance with the specific and general conditions of this permit and any documents attached to this permit or specifically referenced in this permit and made a part of this permit.

This solid waste operation permit is issued under the provisions of Chapter 403, Florida Statutes, Florida Administrative Code Chapters 62-4 and 62-701.

This permit does not relieve the permittee from complying with any other appropriate local zoning or land use ordinances or with any other laws, rules or ordinances. Receipt of any permits from the Department does not relieve the applicant from obtaining other federal, state, and local permits and/or modifications required by law, including those from other Sections within the Department or of the Water Management District.

B. Facility Location

The facility location is latitude 27° 34' 17" Latitude and Longitude 82° 46'58" and the physical address is 685 Airport Road, Wauchula, Hardee County, Florida.

C. Facility Description

This facility is classified as a **Class I Landfill and related facilities**, 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. This permit authorizes operation of the Class I (Phase II, Sections I & II) including a Leachate Storage Tank System, Household Hazardous Waste Collection Center, Yard Trash Processing Facility, Scrap Metal and White Goods Storage Area, and related appurtenances. The primary design features of the landfills are described in the "General Information" table provided in Appendix 6.

D. Appendices Made Part of This Permit

APPENDIX 1 - General Conditions
APPENDIX 2 – Approved Application Documents
APPENDIX 3 – Water Quality Monitoring Plan
APPENDIX 4 – Project Specific Operation Conditions
APPENDIX 5 - Figure 2, Hardee County Solid Waste [Gas] Monitoring Locations
APPENDIX 6 – General Information

E. Attachments for Informational Purposes Only

ATTACHMENT 1 - Time Sensitive Action Chart

If any of the time deadlines in the Time Sensitive Action Chart are inconsistent with the time deadlines in the permit conditions, the time deadline in the permit condition shall be followed.

ATTACHMENT 2 - Facility Permit History

SECTION 2 - SPECIFIC CONDITIONS

A. Administrative Requirements

1. Documents Part of This Permit. The permit application **as revised in final form replaced or amended** in response to the Department's Request(s) for Additional Information are contained in the Department's files and are made a part of this permit. Those documents that make up the complete permit application are listed in APPENDIX 2. [APP-2]

2. Permit Modification. Any change to construction, operation, monitoring, or closure requirements of this permit may require a modification to this permit, in accordance with the provisions of Rule 62-701.320(4), F.A.C.

3. Permit Renewal. In order to ensure uninterrupted operation of this facility, a timely and sufficient permit renewal application must be submitted to the Department in accordance with Rule 62-701.320(10), F.A.C. A permit application submitted at least 61 days prior to the expiration of this permit is considered timely and sufficient.

4. Transfer of Permit or Name Change. In accordance with Rule 62-701.320(11), F.A.C., the Department must be notified by submitting Form 62-701.900(8) within 30 days: (a) of any sale or conveyance of the facility; (b) if a new or different person takes ownership or control of the facility; or (c) if the facility name or permittee's legal name is changed.

5. Air Construction Permit Requirements
   a. The landfill owner or operator is not required to obtain an air construction permit, unless landfill construction or any modification is subject to the prevention of significant deterioration (PSD) requirements of Chapter 62-212, F.A.C. A landfill for which construction or modification is subject to PSD requirements must make application to the Bureau of Air Regulation, Department of Environmental Protection, Mail Station 5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, for an air construction permit and must obtain such permit prior to beginning any construction or modification.
   b. The landfill owner or operator is not required to obtain an air operating permit, unless the landfill is required to obtain a Title V Air Operating Permit (Title V Permit) pursuant to Section 403.0872, F.S. A landfill is required to obtain a Title V Permit if the landfill (or the total facility, if the landfill is contiguous to or part of a larger facility) has the potential to emit 10 tons per year (TPY) or more of any hazardous air pollutant, 25 TPY or more of any combination of hazardous air pollutants, or 100 TPY or more of any other regulated air pollutant. A landfill is also required to obtain a Title V Permit if the maximum design capacity, as defined in 40 CFR 60, Subpart WWW, is equal to or greater than 2.5 million Megagrams or 2.5 million cubic meters. Title V Permits must be applied for in accordance with the timing and content requirements of Rule 62-204.800, F.A.C., and Chapter 62-213, F.A.C. Title V applications shall be submitted the Southwest District Air Program Administrator at 13051 N. Telecom Parkway, Temple Terrace, Florida 33637-0926.

A. Administrative Requirements (cont.)

c. The Permittee is required to comply with the requirements of 40 CFR 60, Subpart WWW and CC as adopted by reference in Rule 62-204.800, F.A.C. The Permittee may have to submit to the Division of Air Resource Management, Department of Environmental Protection, Mail Station 5500, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, any amended design capacity report and any Non-Methane Organic Compound (NMOC) emission rate report, as applicable, pursuant to 40 CFR 6-.757(a)(3) and (b).

6. Five Year Submittal. No later than November 1, 2018 and November 1st every five years thereafter for the duration of this permit, the permittee shall submit a report to the Department than contains the following:
   a. An updated closure plan to reflect changes in closure design, long-term care requirements, and financial assurance requirements.
   b. A revised closure cost estimate, made by recalculating the total cost of closure or long-term care, in current dollars.
   c. A demonstration that the leachate collection system and groundwater interceptor system have been water pressure cleaned or inspected by video recording.
   d. An updated operation plan, if operational information or procedures have changed.
   e. An updated site plan or topographic survey if current conditions at the facility are not reflected in the existing site plan.

B. Construction Requirements

1. Construction authorized. This Permit does not authorize any construction activities, except the construction of two above ground leachate storage tanks. The tanks will be constructed one at a time in accordance with approved application documents (APPENDIX 2 [APP-2]; Documents 1-4) and Rule 62-701.400(6)(c).

2. General Construction Requirements. All construction shall be done in accordance with the approved design, drawings, CQA plan, and specifications. The Department shall be notified before any changes, other than minor deviations, to the approved design are implemented in order to determine whether a permit modification is required.

3. Certification of Construction Completion. Upon completion of construction, the engineer of record shall certify to the Department in accordance with Rule 62-701.320(9)(b), F.A.C., that the permitted construction is complete and was done in substantial conformance with the approved construction plans except where minor deviations were necessary. All deviations shall be described in detail and the reasons therefore enumerated.

4. Approval of Certification. The permittee shall not begin using the newly constructed leachate storage tanks until one of the following has occurred: (1) the Department has stated in writing that it has no objection to the certification of construction completion; or (2) at least 30 days have passed since the certification was submitted and the Department has not responded in writing to the certification.

C. Operation Requirements

1. General Operating Requirements. The Permittee shall operate the landfill in accordance with the approved permit application documents as listed in ~~APPENDIX 2 [~~APP-2~~]~~; such as the, Operation, Monitoring, and Closure Plans, Permit Drawings, the project specific conditions provide in APPENDIX 4 [APP-4], and associated documents. The Department shall be notified before any changes, other than minor deviations, to the approved Operation Plan are implemented in order to determine whether a permit modification is required.
   a. Waste shall not be accepted in Phase II Section II of the Class I 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 #2.B.3. of Construction Permit #38414-015-SC/01 or its successors,
      2) Financial assurance requirements of Specific Condition #2.F.1.

2. Operation Plan. A copy of the approved Operation Plan, including the operating record as defined in Rule 62-701.500(3), F.A.C., shall be kept at the site and shall be accessible to landfill operators.

3. Authorized Waste Types. The facility is authorized to manage only the following waste types:
   a. Waste types defined in Rule 62-701.200, F.A.C.:
      1) Class I waste.
      2) Class III waste.
      3) Construction & demolition debris (residential only) [ref. Op. Plan , §K.2.c.6].
      4) Yard trash. Yard waste is prohibited from disposal in Phase II, Sections I & II of the Class I landfill [ref. Op. Plan , §K.2.c.7]. Yard trash/landclearing debris will be managed in the designated area of the facility in accordance with the procedures provided in the facility Operation Plan [ref. Op. Plan , §K.2.c.7 & Figure 1].
      5) White Goods & Scrap Metal. 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. Scrap metals which may include residual contaminants such as gasoline, oil, paint, antifreeze, PCBs, etc., shall be stored and managed such that the residues or constituents thereof are not spilled, leaked, dumped, or otherwise discharged onto the soil or into surface or groundwaters. [ref. Op. Plan, § K.2.c.6].
      6) Waste tires. Waste Tire are managed at the facility under Department Waste Tire Collection Center Permit #129318-004-WT/05 or its successors [ref. Op. Plan, § K.2.c.6 & Appendix A]
      7) Contaminated soils. [Op. Plan, § K.2.c.3].
   b. Other Wastes Specifically Authorized:
      1) Household hazardous waste (HHW). HHW shall be managed at the HHW Collection Center at the facility as described in the Operation Plan . [ref. Op. Plan, § K.1.h].
      2) Asbestos containing materials. [ref. Op. Plan, §K.2.c.2 & Appendix G].
      3) Contaminated Soil. [ref. Op. Plan, § K.2.c.3 & Appendix H].
      4) Electronic waste (E-waste). [ref. Op. Plan, § K.2.c.6].

5) Lawnmowers. Only lawnmowers or other lawn care equipment that has been drained of all the oil and gasoline, prior to delivery, shall be accepted at the facility [ref. Op. Plan, § K.2.c.6].
6) Agricultural pesticide containers. Only containers with no pesticide residue, having been thoroughly rinsed and inspected by landfill personnel shall be accepted at the facility. [ref. Op. Plan, § K.2.c.6].
7) Household Sharps. [ref. Op. Plan, § K.2.c.8 & Appendix I].

4. Unauthorized Waste Types. The facility is not authorized to accept, process, or dispose any waste types not listed in C.3. above. Any unauthorized waste inadvertently received by the facility shall be managed in accordance with the approved Operation Plan [ref. Op. Plan, § K.2.c.6].

5. Waste Management and Handling
   a. Solid waste shall be formed into cells to construct horizontal lifts. The working face of the cell, and side grades above land surface, shall be at a slope no greater than three feet horizontal to one-foot vertical rise or as authorized by this permit in accordance with the approved operation plan[ref. Op. Plan, § K.7.c].
   b. No solid waste shall be disposed of outside of the permitted footprint of the solid waste disposal units.
   c. The sequence of waste filling shall be as specified in the approved Operation Plan [ref. Op. Plan, § K.2.f.] and Fill Sequence Plans [ref. APP-2, Para. 1.b., Dwgs. 26-37].

6. Landfill Elevation. The final (maximum) elevation of the Phase II of the Class I Landfill, shall not exceed +173.2 feet NGVD feet as shown on Drawing 12 of the Operation Drawings [APP-2, Para. 1.b., Dwg. 12 of 37].

7. Initial Waste Placement. The first layer of waste placed above the liner and leachate collection system shall be a minimum of four feet in compacted thickness and consist of selected wastes containing no large rigid objects that may damage the liner or leachate collection system [ref. Op. Plan, § K.7.b].

8. Cover Requirements:
   a. Initial Cover. Initial cover consisting of six inches of a compacted soil shall be applied at the end of each working day. Processed yard trash or clean mulch may be spread over the initial soil cover for stabilization and erosion control measures [ref. Op. Plan, § K.7.f]. Soil materials, which have been previously used for intermediate or initial cover, may be re-used as initial cover within the bermed area around the working face [ref. Op. Plan, § K.7.g]. For those areas where solid waste will be deposited on the working face within 18 hours, initial cover may consist of tarps [ref. Op. Plan, § K.7.e].
   b. Intermediate Cover. Intermediate cover shall be applied and maintained in accordance with Rules 62-701.500(7)(a) and (f), F.A.C. Intermediate cover will be applied to areas not expected to receive wastes within 180 days. 12 inches of intermediate cover soil will be placed over areas with 6 inches of initial cover soil. Processed yard trash or clean mulch may be spread over the intermediate soil cover for stabilization and erosion control measures. Soil materials, which have been previously used for intermediate or initial cover, shall not be re-used for intermediate cover [ref. Op. Plan, § K.7.g].
   c. Alternate Cover Materials. No other Department-approved alternate initial or intermediate cover materials are proposed for this facility. Alternate initial or

intermediate cover materials not identified herein shall be approved by the Department prior to use at the facility.

9. Erosion Control: Erosion control measures shall be employed to correct any erosion which exposes waste or causes malfunction of the storm water management system. Such measures shall be implemented within three days of occurrence. If the erosion cannot be corrected within seven days of occurrence, the landfill operator shall notify the Department and propose a correction schedule [ref. Op. Plan, § K.7.k].

10. Contingency Plan and Notification of Emergencies. The Permittee shall notify the Department in accordance with the approved Contingency Plan [ref. Op. Plan, § K.2.b & Appendices D & E]. Notification shall be made to the DEP's Southwest District Office Compliance Assistance Program at (813) 470-5700 or SWD_Waste@dep.state.fl.us.
    a. In the event of damage to any portion of the landfill site facilities, unauthorized leachate discharge, failure of any portion of the landfill systems, damaged or dry groundwater monitoring wells, damage to the liner or leachate collection, removal or storage systems, fire, explosion, the development of sinkhole(s) or other subsurface instability at the site, landfill gas exceedances in onsite structures, etc., the permittee shall **immediately (within 24 hours)** notify the Department explaining such occurrence and remedial measures to be taken, method to prevent reoccurrence, and time needed for repairs. Written, detailed notification shall be submitted to the Department within seven (7) days following the occurrence.

11. Housekeeping. The facility shall be operated to control dust (and other fugitive particulate), vectors, litter and objectionable odors. If objectionable odors are confirmed beyond the landfill property boundary, the owner or operator shall comply with the gas management requirement in Section 2, Part E and the facility Operation Plan [ref. Op. Plan, §K.9, § K.11.d & § K.11.f].

12. Leachate Management.
    a. The permittee shall operate the leachate management system (including the collection, removal, and storage systems), and maintain the system as designed, so that leachate is not discharged from the system except as provided for in the Design Plan and Operation Plan [ref. Op. Plan, § K.8.b and the Standard Operating Procedure for the Leachate Collection and Removal System (SOP LCRS) (Appendix 2, Document ~~1~~ 5)]. The surface application of leachate for evaporation at the working face or within the bermed area around the working face shall be conducted in accordance with the facility Operation Plan [ref. Op. Plan, § K.8.a.1].

    b. Routine inspections and maintenance of the leachate management system and groundwater interceptor system shall be conducted in accordance with the schedule established in the Operation Plan and the SOP LCRS .
        1) The exterior of the leachate storage tanks will be inspected at least weekly and the interior of the tanks shall be inspected whenever the tanks are drained or at least **once every three years.** The tank containment area, truck loadout pump area, and other leachate tank system appurtenances will be inspected at least **weekly** for leakage or other damage [ref. Op. Plan, § K.8.b and SOP LCRS Section 8.2].

    c. The leachate collection pipes and groundwater interceptor system pipes shall be cleaned or video inspected at **least once every five years** during the 20-yr permit

period [ref. Op. Plan, § K.2.j & K.2.k. and SOP LCRS Section 8.2]. A summary which includes the method of cleaning, locations of all obstructions shown on a plan sheet, and a plan for corrective actions (if necessary) of the results shall be submitted with the Five-Year Submittal [ref. Sp. Cond. A.6.; Op. Plan, § K.2.j. & K.2.k.].

C. Operation Requirements (Condition 2.C.12. cont.)

d. Leachate quantities will be recorded daily in accordance with Section 7 of the SOP LCRS. The permittee shall record quantities of leachate generated on a daily basis in gal/acre/day, shall record precipitation at the facility, and shall compare these measurements. If measurements indicate a significant discrepancy between leachate generation rates and precipitation records, the permittee shall notify the Department and conduct an assessment to determine the cause of the discrepancy [ref. Op. Plan, § K.8.b; K.8.f.; K.8.g.]. Leachate generation reports should be compiled monthly and provided to the Department upon request. Alternatively, this information may be provided to the Department via email, quarterly.

e. The permittee shall compare the leachate flow rates in the leak detection system with the design action leakage rate (ALR) for the double liner. The leakage action rate is 260 gal/acre/day for Phase II Section I and 360 gal/acre/day for Phase II Section II [ref. APP-5]. If measurements indicate the ALR has been exceeded, the permittee shall notify the Department and conduct an assessment to determine the cause of the leak. This data shall be made available to the Department upon request.

13. Spotters and Operators. This facility shall have the minimum number of spotters present when waste is accepted as specified in the operation plan, to be located as specified in the operation plan [ref. Op. Plan, §K.2.c] . A trained operator shall be on duty at the facility at all times the facility is operating [ref. Op. Plan, §K.1.a]. Approved training courses can be found at the following web site: http://www.treeo.ufl.edu/sw/.

14. Record Keeping Requirements.

a. Waste Quantity Records. Waste records shall be compiled monthly, and copies shall be provided to the Department no less than annually by February 1. This information shall be reported to the Department through the DEP Business Portal located at: http://www.fldepportal.com/go.

b. Estimate of Remaining Life. The permittee shall submit the annual estimate of the remaining life and capacity by April 15th. The report is required by Rule 62-701.500(13) (c), F.A.C. and must be submitted to the District Office @ SWD_Waste@dep.state.fl.us. and to:

Florida Department of Environmental Protection
Solid Waste Section, MS 4565
2600 Blair Stone Road
Tallahassee, Florida, 32399-2400

C. Operation Requirements (cont.)

15. Hazardous Waste. If any regulated hazardous wastes are discovered to be deposited at the facility, the facility operator shall promptly notify the Department, the person responsible for shipping the wastes to the facility, and the generator of the wastes, if known. The area where the wastes are deposited shall immediately be cordoned off from public access. If the generator or hauler cannot be identified, the facility operator shall assure the cleanup, transportation, and disposal of the waste at a permitted hazardous waste management facility. In the event that hazardous wastes are discovered they shall be managed in accordance with the procedures provided in facility Operation Plan [Op. Plan, § K.2.b.1].

16. Stormwater. Leachate shall not be discharged into the stormwater management system. Stormwater or other surface water which comes into contact with or mixes with the solid waste or leachate shall be considered leachate and is subject to the requirements of Rule 62-701.500(8), F.A.C.

D. Water Quality Monitoring Requirements

1. Water Quality Monitoring Plan. The Water Quality Monitoring Plan for this permit is included in APPENDIX 3.

E. Gas Management System Requirements

1. Construction Requirements. The gas management system constructed at the Hardee County Class I Landfill is described in Section K.9 of the approved Operation Plan [ref. Op. Plan, § K.9]. The Department shall be notified before any changes, other than minor deviations, to the approved Gas Monitoring Plan are implemented in order to determine whether a permit modification is required.

   a. Four ambient monitoring points are specified for the Hardee County Class I Landfill at the following location as depicted on Figure 2 ["Hardee County Solid Waste, Monitoring Locations, Hardee County, Florida"], prepared by SCS Engineers, received June 28, 2013 [presented in APPENDIX 5]:

Ambient Monitoring Point	Location Description
Maintenance Building	Foundation penetrations; enclosed spaces; electrical control boxes, outlets and openings to conduits; and, ambient air within the structure
MRF building	⇩
Scale house/office building	⇩
Animal control building	⇩

   b. Existing and proposed soil monitoring probes are specified for the Hardee County Class I Landfill at the following locations as depicted on Figure 2 ["Hardee County Solid Waste, Monitoring Locations, Hardee County, Florida"], prepared by SCS Engineers, received June 28, 2013 [presented in APPENDIX 5]:

Probe Number	Location Description	Scheduling Notes
GP-1	NE corner of Phase I footprint [perimeter]	A
GP-2	North of Phase I footprint [perimeter]	A
GP-3	NW corner of Phase I footprint [perimeter]	A, B
GP-3R	NW corner of Phase I footprint [perimeter]	C
GP-4	West of Phase I footprint [perimeter]	A, B
GP-4R	West of Phase II/Section II footprint [perimeter]	C
GP-5	West of Phase I footprint [perimeter]	A, B
GP-5R	West of Phase II/Section II footprint [perimeter]	C
GP-6	West of Phase I footprint [perimeter]	A, B
GP-6R	West of Phase II/Section II footprint [perimeter]	C
GP-7R	West of Phase II/Section II footprint [perimeter]	C
GP-8R	SW of Phase II/Section II footprint [perimeter]	C
GP-9	SE corner of Phase I footprint [interior]	A
GP-10	East of Phase I footprint [interior]	A
GP-11	East of Phase I footprint [interior]	A
GP-12	South of Phase II/Section I footprint [interior]	A
GP-13	South of Phase II/Section I footprint [interior]	A

Scheduling Notes:
A = existing gas probe location.

B = **to be abandoned prior to initiation of construction activities for Phase II/Section II;** documentation of abandonment shall be submitted to the Department as part of the certification of construction completion prepared for Phase II/Section II.

C = proposed replacement gas probe location to be constructed **prior to waste placement in Phase II/Section II**: documentation of construction shall be submitted to the Department as part of the certification of construction completion prepared for Phase II/Section II.

E. Gas Management System Requirements (Condition 2.E.1.b., cont.)

c. Proposed gas probes shall be constructed in accordance with the schedule presented in Section K.9 of the approved Operation Plan [ref. Op. Plan, § K.9], and in accordance with the details presented on Drawing 20 of 37, Operation Drawings [APP-2, Para. 1.b.], prepared by SCS Engineers, revised June 28, 2013. Proposed gas probes shall be constructed in general accordance with Detail 2 ["Landfill Gas Monitoring Probe (GP)
Detail"], with gas probe depths and lengths of slotted pipe in accordance with the table titled "Landfill Gas Monitoring Probe Schedule" presented on Drawing 20 of 37.

Certification of Construction Completion. After construction is completed the engineer of record shall certify to the Department in accordance with Rule 62-701.320(9)(b), F.A.C., that the permitted construction is complete and was performed in substantial conformance with the approved construction plans except where minor deviations were necessary. All deviations shall be described and the reasons therefore enumerated.

2. Operational Requirements. Gas controls shall be operated and maintained so that they function as designed.

3. Monitoring Requirements. Monitoring for methane gas at the above-listed ambient monitoring points and soil monitoring probes shall be performed quarterly to determine the effectiveness of the gas migration controls. The gas monitoring results shall be reported as a percent of the lower explosive limit (LEL), calibrated to methane. The report shall be submitted to the Department under separate cover no later than 15 days after the end of the period in which the monitoring occurred.

4. Gas Remediation Plan. The facility landfill gas management system shall be operated to prevent the concentration of combustible gases from exceeding 25% of the lower explosive limit in structures, excluding gas control or recovery components, and from exceeding the lower explosive limit at or beyond the property boundary (as measured in the above-listed perimeter soil monitoring probe locations). If either of these limits is exceeded then a gas remediation plan shall be designed and implemented in accordance with Rule 62-701.530(3)(a), F.A.C., including:
   a. Immediately take all necessary steps to ensure protection of human health and notify the Department,
   b. Within seven (7) days of detection, submit to the Department for approval a gas remediation plan for the gas releases. The plan shall describe the nature and extent of the problem and the proposed remedy. The remedy may include some or all of the gas management system design contained in Rule 62-701.530(1)(a), F.A.C.,
   c. The remedy shall be completed within 60 days of detection unless otherwise approved by the Department.

5. Odor Remediation Plan. The facility shall be operated to control objectionable odors. If objectionable odors are confirmed beyond the property boundary then upon notification by the Department the permittee shall develop and implement an odor remediation plan in accordance with the requirements of Rule 62-701.530(3)(b), F.A.C. and the facility Operation Plan [ref. Op. Plan, §K.9].

F. Financial Assurance and Cost Estimates

1. Financial Assurance Mechanism. The permittee may not receive waste for disposal or storage in any disposal unit for which financial assurance has not been approved. Proof that the financial mechanisms are established and funded in accordance with Rule 62-701.630, F.A.C. shall be submitted to the Department at least sixty (60) days prior to the planned acceptance of solid waste in any disposal unit. When established, the permittee shall maintain, in good standing, the financial assurance mechanisms. Supporting documentation and evidence of increases associated with cost estimate increases shall be submitted within the time frames specified in Rule 62-701.630, F.A.C. All submittals in response to this specific condition shall be sent to:

   Florida Department of Environmental Protection
   Financial Coordinator - Solid Waste Section
   2600 Blair Stone Road, MS 4565
   Tallahassee, Florida 32399-2400
   Financial.Assurance.Working.Group@FloridaDEP.gov

2. Cost Estimates.
   a. The permittee shall submit closure cost estimates, including annual adjustments for inflation, in accordance with the requirements of Rule 62-701.630(3) and (4), F.A.C., and 40 CFR Part 264.142(a) and .144(a) using Form 62-701.900(28).
   b. An owner or operator using an escrow account shall submit the annual inflation adjusted estimate(s) between July 1 and September 1. An owner or operator using a letter of credit, guarantee bond, performance bond, financial test, corporate guarantee, trust fund or insurance shall submit the inflation adjusted cost estimate(s) between January 1 and March 1.
   c. A cost estimate covering disposal units not previously covered by financial assurance mechanisms must be submitted prior to submitting financial assurance for such disposal units.
   d. All submittals in response to this specific condition shall be sent to the District Office @ SWD_Waste@dep.state.fl.us. and a copy to the address identified in Specific Condition F.1.

G. Closure Requirements

1. Closure Permit Requirements. Prior to initiating closure of a solid waste disposal unit, or part of a solid waste disposal unit, the Permittee must receive authorization from the Department in one of the following manners. The Permittee may submit an application to the Department for a closure permit on Form 62-701.900(1), which application shall include a closure plan. If the landfill is operating under a Department permit, the Permittee may request a modification of the permit to address substantive changes in the closure plan, or the Permittee may demonstrate that the closure plan in the existing operation permit includes sufficient detail to provide reasonable assurance of compliance with the provisions for closure. The application or request for modification shall include an updated closure plan which is made up of the following:
   a. A closure design plan;
   b. A closure operation plan;
   c. A plan for long-term care; and,
   d. A demonstration that proof of financial assurance for long-term care will be provided.

2. Closure Design. All closure construction shall be done in accordance with the approved closure design plan. The Department shall be notified before any changes, other than minor deviations, to the approved closure design are implemented in order to determine whether a permit modification is required.

3. Closure Operation Plan. All closure shall be done in accordance with the approved closure operation plan.

4. Certification of closure construction completion. After closure construction has been completed, the engineer of record shall certify to the Department on Form 62-701.900(2) that the closure is complete and that it was done in accordance with the plans submitted to the Department except where minor deviation was necessary. All deviations shall be described in detail and the reasons therefore enumerated.

5. List of Closed Units Not in Long-Term Care. Phase I of the Class I landfill has been closed as of the issuance date of this permit. The final cover system for the south and west side slopes of the closed Phase I are the overlay bottom liner system for the north slope of Phase II Section I and the east slope of Phase II Section II respectively.

H. Long-Term Care Requirements

1. No portion of the Hardee County Class I Landfill is in the long-term period for the facility.

Permit originally executed in Hillsborough County, Florida By Jeffry S. Greenwell, Environmental Services Administrator, Southwest District, State of Florida Department of Environmental Protection on November 8, 2013.

APPENDIX 1 – 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.

GENERAL CONDITIONS: (cont.)

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.

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

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

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

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

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

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

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

GENERAL CONDITIONS: (cont.)

12. 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.

13. 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.

APPENDIX 2 – Approved Application Documents

1. Application to Modify Permit No. 38414-016-SO-01. Prepared by SCS Engineers. Dated June 29, 2022 and received by the Tallahassee Solid Waste Section July 5, 2022.
   Oculus Link:
   https://depedms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntity&[guid=8.344885.1]&[profile=Permitting_Authorization]

2. Operation Plan prepared by SCS Engineers. Dated June 29, 2022 and received by the Tallahassee Solid Waste Section July 5, 2022.
   Oculus Link:
   https://depedms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntity&[guid=8.349007.1]&[profile=Permitting_Authorization]

3. Request for Additional Information No. 1. Dated August 3, 2022
   Oculus Link:
   https://depedms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntity&[guid=8.345955.1]&[profile=Permitting_Authorization]

4. Response to Request for Additional Information No 1. Prepared by SCS Engineers. Dated and received by the Tallahassee Solid Waste Section August 30, 2022.
   Oculus Link:
   https://depedms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntity&[guid=8.348960.1]&[profile=Permitting_Authorization]

5. Standard Operating Procedures for the Leachate Collection and Removal System, Hardee County Landfill prepared by SCS Engineers dated July 15, 2020. Received by the Tallahassee Solid Waste Section July 20, 2020.
   Oculus Link:
   https://depedms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntity&[guid=8.315218.1]&[profile=Permitting_Authorization]

6. Operation Plan prepared by SCS Engineers dated September 25, 2019. Received by the Tallahassee Solid Waste Section September 25, 2019.
   Oculus Link:
   https://depedms.dep.state.fl.us:443/Oculus/servlet/shell?command=getEntity&[guid=8.303513.1]&[profile=Permitting_Authorization]

7. Hardee County Landfill Operation Permit Renewal Application, dated and received March 12, 2013, prepared by SCS Engineers, as revised, replaced or amended by information received June 28, 2013, July 22, 2013, and July 25, 2013. This information includes, but is not limited to:

   a. *Operation Plan* [Attachment K], dated March 12, 2013, as revised June 28, 2013;

   b. Plan set titled, Hardee County Landfill Phase II Section II Construction/Operation Drawings… (37 sheets) [Attachment E] dated April 2013 (rec'd June 28, 2013); and

   c. *Hardee County Landfill Groundwater Water Monitoring Plan* (Attachment J), dated March 12, 2013, including revisions dated June 28, 2013.

APPENDIX 3 – Water Quality Monitoring Plan

1. Water Quality Monitoring Quality Assurance.

a. All field work done in connection with the facility's Water Quality Monitoring Plan shall be conducted in accordance with the Standard Operating Procedures (SOPs) described in DEP-SOP-001/01 (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.

b. The field testing, sample collection and preservation, and laboratory testing, including the collection of quality control samples, shall be in accordance with the requirements of and 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, or by A.S.T.M., or EPA methods shall be used.

2. Zone of Discharge.

a. The zone of discharge for this facility shall extend horizontally 100 feet from the limits of the landfill liner (all active, inactive and closed waste 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 waters will not be exceeded at the boundary of the zone of discharge according to Rule 62-520.420(1), F.A.C., and that the ground water minimum criteria referenced in Rule 62-520.400(1), F.A.C., will not be exceeded outside the footprint of the landfill disposal areas.

3. Ground Water Monitor Well Locations. The ground water monitor system for Phase I, Phase II/Section I, and Phase II/Section II at the Hardee County Class I Landfill shall be constructed in accordance with the document titled "Hardee County Landfill Groundwater Monitoring Plan," prepared by SCS Engineers, dated March 12, 2013 (received March 12, 2013), with revisions received June 28, 2013 [ref. APPENDIX 2, Para. 1.c.]. The monitor well and piezometer locations are shown on Figure L-1 [titled "Hardee County Solid Waste, Groundwater and Surface Water Monitoring Location Points, Hardee County, Florida"], prepared by SCS Engineers, received March 12, 2013 **[attached]**, as follow:

APPENDIX 3 – Water Quality Monitoring Plan (cont.)

3. Ground Water Monitor Well Locations. (cont.)

Wells Associated with Phase I and Phase II/Section I:

Well #	Scheduling Notes	WACS Testsite #	Aquifer Monitored	Well Designation	Location
MW-1	A	296	Surficial	Background	See Figure L-1
MW-2	A	297	Surficial	Detection	⇩
MW-4	A	299	Surficial	Background	⇩
MW-5	A, Y	300	Surficial	Detection	⇩
MW-8	A, Y	19255	Surficial	Detection	⇩
MW-10R	A	22930	Surficial	Detection	⇩
MW-11	A	21882	Surficial	Detection	⇩
MW-12R	A	22931	Surficial	Detection	⇩
MW-3	A, Y	298	Surficial	Piezometer	See Figure L-1
MW-6	A	301	Surficial	Piezometer	⇩
MW-7	A	302	Surficial	Piezometer	⇩
P-7	A	N/A	Surficial	Piezometer	⇩
P-8	A	N/A	Surficial	Piezometer	⇩
P-11	A	N/A	Surficial	Piezometer	⇩
P-13	A	N/A	Surficial	Piezometer	⇩
P-14	A	N/A	Surficial	Piezometer	⇩
P-17	A	N/A	Surficial	Piezometer	⇩
P-18	A	N/A	Surficial	Piezometer	⇩
P-19	A	N/A	Surficial	Piezometer	⇩
P-20	A	N/A	Surficial	Piezometer	⇩
P-21	A	N/A	Surficial	Piezometer	⇩
P-22	A	N/A	Surficial	Piezometer	⇩
P-23	A	N/A	Surficial	Piezometer	⇩

Wells Associated with Phase II/Section II:

Well #	Scheduling Notes	WACS Testsite #	Aquifer Monitored	Well Designation	Location
MW-13	B, Z	29063	Surficial	Detection	See Figure L-1
MW-14	B, Z	29064	Surficial	Detection	⇩

Scheduling Notes:
A = existing well/piezometer; construction details previously provided; results of the ground water "initial sampling event" previously provided for monitor wells.

B = proposed monitor well **to be installed at least 30 days prior to waste disposal in Phase II/Section II.**

Y = **to be abandoned prior to initiation of construction activities for Phase II/Section II;** documentation of abandonment in accordance with APPENDIX 3, Condition #6., shall be submitted to the Department as part of the certification of construction completion prepared for **Phase II/Section II**.

Z = documentation of well construction details shall be prepared in accordance with APPENDIX 3, Conditions #5.b., and #5.d.; a ground water "initial sampling event" shall be conducted on the new wells **prior to waste placement in Phase II/Section II** for analysis of the parameters listed in APPENDIX 3, Condition #4.b.; well construction details and the results of the ground water "initial sampling event" shall be submitted to the Department as part of the certification of construction completion prepared for **Phase II/Section II**.

APPENDIX 3 – Water Quality Monitoring Plan (cont.)

3. Ground Water Monitor Well Locations. (cont.)
Proposed monitor wells shall be constructed in accordance with the details referenced in §A.6. ["Groundwater Monitoring Well Construction/Abandonment"], and as provided in Table L-2 ["Well Construction Details"] and Figure L-3 ["Typical Monitoring Well Construction Detail"] provided in the document titled "Hardee County Landfill Groundwater Monitoring Plan," prepared by SCS Engineers, dated March 12, 2013 (received March 12, 2013), with revisions received June 28, 2013 [ref. APPENDIX 2, Para. 1.c.].

All 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 wells and piezometers locked to minimize unauthorized access.

4. Ground Water Sampling. The locations, parameters, and frequencies specified herein represent the minimum requirements for ground water monitoring. Additional samples, wells, and parameters may be required based upon subsequent analysis. Method Detection Limits must be 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(1), F.A.C., and with the ground water minimum criteria referenced in Chapter 62-520.400(1), F.A.C. Compliance with ground water standards will be based on analysis of unfiltered samples.

a. Ground water levels shall be measured **semi-annually** (during the periods from Jan. 1 - June 30, and July 1 – Dec. 31 of each year) at a minimum, including all sampling events described in APPENDIX 3, Conditions #4.b., and #4.c., below, at all active monitor wells and piezometers, as listed in APPENDIX 3, Condition #3., above, to a precision of 0.01 foot. Ground water surface contour maps shall be prepared for each sampling event to include water elevations (using an industry approved datum) calculated for each monitor well and piezometer.

b. An "initial sampling event" shall be conducted on all new monitor wells **within 7 days of installation and development** for analysis of the parameters listed in Rules 62-701.510(7)(a) and 62-701.510(7)(c), F.A.C., including:

Field Parameters	Laboratory Parameters	
Static Water Level before purging	Total Ammonia – N	Iron
Specific Conductivity	Chlorides	Mercury
pH	Nitrate	Sodium
Dissolved Oxygen	Total Dissolved Solids (TDS)	
Turbidity	Those parameters listed in 40 CFR Part 258, **Appendix II**	
Temperature		
Color/sheen (by obs.)		

Results of "initial sampling events" shall be submitted **within 60 days of receipt from the analytical laboratory.** Following the completion of the "initial sampling event" at the proposed monitor wells in accordance with the schedule presented in APPENDIX 3, Condition #3., above, these new wells shall be included in subsequent routine ground water sampling events.

APPENDIX 3 – Water Quality Monitoring Plan (cont.)

4. Ground Water Sampling. (cont.)

c. Routine sampling events shall be conducted **semi-annually** (during the periods from Jan. 1 - June 30, and July 1 – Dec. 31 of each year) at the background wells and detection wells listed in APPENDIX 3, Condition #3., above. These ground water "routine sampling events" shall be conducted for analysis of the parameters listed in Rule 62-701.510(7)(a), F.A.C., including:

Field Parameters	**Laboratory Parameters**	
Static Water Level before purging	Total Ammonia – N	Iron
Specific Conductivity	Chlorides	Mercury
pH	Nitrate	Sodium
Dissolved Oxygen	Total Dissolved Solids (TDS)	
Turbidity	Those parameters listed in 40 CFR Part 258, **Appendix I**	
Temperature		
Color/sheen (by obs.)		

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

a. Prior to construction of any new or replacement monitor wells or piezometers not listed in APPENDIX 3, Condition #3., above, and not part of the approved Water Quality Monitoring Plan, the permittee shall request and receive Department approval of a minor permit modification in accordance with Specific Condition #2.A.2., of this permit.

b. Construction details for all new or replacement wells and piezometers shall be provided to the Department's Southwest District Office, Compliance Assurance Program on Department Form #62-701.900(30), Monitoring Well Completion Report **[attached]**.

c. Within 7 days of installation and development, each new monitor well shall be sampled for the parameters listed in APPENDIX 3, Condition #4.b., above, to comply with the requirements of Rules 62-701.510(7)(a), and 62-701.510(7)(c), F.A.C., to establish initial ground water quality for that well location. The results of this "initial sampling event" shall be submitted to the Department's Southwest District Office, Compliance Assurance Program **within 60 days of receipt from the laboratory.**

d. A surveyed drawing shall be submitted in accordance with Rule 62-701.510(3)(d)1, F.A.C., showing the location of all monitor wells and piezometers (active and abandoned) horizontally located in degrees, minutes and seconds of latitude and longitude, and the elevation of the top of the well casing and ground surface by the well casing to the nearest 0.01 foot, using an industry approved datum. The surveyed drawing shall include the monitor well and piezometer identification number, 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, and submitted to the Department's Southwest District Office, Compliance Assurance Program.

APPENDIX 3 – Water Quality Monitoring Plan (cont.)

6. **Well Abandonment.** All monitor wells and piezometers not listed in APPENDIX 3, Condition #3., above, and not a part of the approved Water Quality Monitoring Plan shall 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. The permittee shall submit a written report to the Department **within 30 days of well/piezometer abandonment** verifying proper abandonment. A written request for exemption to the abandonment of a well/piezometer must be submitted to the Department's Southwest District Office, Waste Permitting Section for approval.

7. **Verification/Evaluation Monitoring.** If at any time monitoring parameters are detected at concentrations significantly above background water quality, or exceed the Department's ground water quality standards or minimum criteria specified in Chapter 62-520, F.A.C., in any detection well, the permittee has 30 days from receipt of the sampling results to resample the monitor well(s) to verify the original analysis. Should the permittee choose not to resample, the Department will consider the water quality analysis as representative of current ground water conditions at the facility. If the data is confirmed, or if the permittee chooses not to resample, the permittee shall notify the Department in writing within 14 days of this finding. Upon notification by the Department, the permittee shall initiate evaluation monitoring as described in Rules 62-701.510(6)(a) and 62-701.510(6)(b), F.A.C. If monitoring parameters are detected and confirmed at concentrations significantly above background water quality, and exceed the Department's water quality standards or minimum criteria in any compliance well, the Permittee shall notify the Department in writing within 14 days of this finding and shall initiate corrective actions as described in Rule 62-701.510(6)(c), F.A.C.

8. **Surface Water Sampling.** All surface water bodies that may be affected by a contaminant release at the facility shall be monitored, except bodies of water contained completely within the property boundaries of the site which do not discharge from the site to surface waters (Rule 62-701.510(4), F.A.C.). 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 surface water criteria established for the individual parameters to demonstrate compliance with Class III surface water (predominantly freshwater) referenced in Chapter 62-302, F.A.C. Compliance with surface water criteria will be based on analysis of unfiltered samples.
   a. Surface water levels shall be measured at staff gauges #SG-1 and #SG-2 (located in the ponds east of the Phase I footprint) **semi-annually** (during the periods from Jan. 1 – June 30, and July 1 – Dec. 31 of each year) at a minimum, including all sampling events described in APPENDIX 3, Conditions #4.b., and #4.c., above, and APPENDIX 3, Condition #8.c., below. Water table surface elevation contour maps of the surficial aquifer shall be prepared for each set of water level measurements using data reported for each monitor well, piezometer, and these staff gauges.

APPENDIX 3 – Water Quality Monitoring Plan (cont.)

8. Surface Water Sampling. (cont.)

b. Surface water sampling activities shall be conducted in accordance with the details presented in §A.7. ["Surface Water Monitoring"], §A.8. ["Field Parameters"], and §A.9. ["Laboratory Parameters (Unfiltered)"], provided in the document titled "Hardee County Landfill Groundwater Monitoring Plan," prepared by SCS Engineers, dated March 12, 2013 (received March 12, 2013), with revisions received June 28, 2013 [ref. APPENDIX 2, Para. 1.c.]. Surface water samples shall be collected in the storm water pond in proximity to location #SW-2 [WACS testsite #21062] as shown on Figure L-1 [titled "Hardee County Solid Waste, Groundwater and Surface Water Monitoring Location Points, Hardee County, Florida"], prepared by SCS Engineers, received March 12, 2013 **[attached]**. During periods of discharge from the storm water pond, surface water samples shall be collected at the discharge structure; during period of no discharge from the storm water pond, surface water samples shall be collected as close as possible to the discharge structure within the pond. In accordance with Rule 62-701.510(4)(c), F.A.C., this monitoring station (i.e., the discharge structure) shall be marked and its position shall be determined by a Florida Licensed Professional Surveyor and Mapper in degrees, minutes and seconds of latitude and longitude.

c. Routine sampling events shall be conducted **semi-annually** (during the periods from Jan. 1 - June 30, and July 1 – Dec. 31 of each year) at location #SW-2 in accordance with the Department's SOPs to comply with the requirements of Rule 62-701.510(4), F.A.C. In the event that the storm water pond is dry for an entire semi-annual period, the report submitted for that period shall include a copy of the daily log (excluding Sundays) maintained by Hardee County of observations at location #SW-2 to document the absence of water in the storm water pond and the inability to collect a surface water sample. The surface water semi-annual sampling events shall be conducted for analysis of the parameters listed in Rule 62-701.510(7)(b), F.A.C., including:

Field Parameters	**Laboratory Parameters**	
Specific conductivity	Unionized ammonia	Total organic carbon (TOC)
pH	Total hardness (as mg/L $CaCO_3$)	Total nitrogen
Dissolved oxygen	Total phosphorus (as mg/L P)	Chemical oxygen demand (COD)
Turbidity	Chlorophyll A	Fecal coliform
Temperature	Nitrate	Biochemical oxygen demand (BOD_5)
Color/sheen (by obs.)	Iron	Total dissolved solids (TDS)
	Mercury	Total suspended solids (TSS)
	Those parameters listed in 40 CFR Part 258, **Appendix I**	

9. Leachate Sampling. In accordance with the amendments to Chapter 62-701, F.A.C., that are effective on August 12, 2012, the collection of leachate samples for laboratory analyses is not required.

APPENDIX 3 – Water Quality Monitoring Plan (cont.)

10. Water Quality Reporting Requirements. Required water quality monitoring reports and all ground water and surface water analytical results for sampling events conducted at the Hardee County Class I Landfill shall be submitted electronically (via e-mail, CD, DVD, etc.). Water quality monitoring reports shall be submitted in Adobe pdf format.

a. The water quality data Electronic Data Deliverable (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: http://www.dep.state.fl.us/waste/categories/shw/pages/ADaPT.htm.

Water quality monitoring reports shall be signed and sealed by a Florida registered professional geologist or professional engineer with experience in hydrogeological investigations and shall include the following:

1) Cover letter;
2) Summary of exceedances and sampling problems, if any (e.g., variation from SOP field criteria);
3) Conclusions and recommendations;
4) Ground water contour maps;
5) Chain of custody forms;
6) Water levels, water elevation table;
7) Ground Water Monitoring Certification, using Department Form #62-701.900(31);
8) Appropriate sampling information on Form #FD 9000-24 (DEP-SOP-001/01); and,
9) Laboratory and Field EDDs and error logs, as applicable.

All water quality reports shall be submitted to:

Florida Department of Environmental Protection
Southwest District Office, Compliance Assurance Program
13051 North Telecom Parkway
Temple Terrace, FL 33637-0926
SWD_Waste@dep.state.fl.us

and to,

Florida Department of Environmental Protection
Solid Waste Section, MS 4565
2600 Blair Stone Road
Tallahassee, Florida, 32399-2400
ADaPT.EDDs.and.Reports@dep.state.fl.us

APPENDIX 3 – Water Quality Monitoring Plan (cont.)

10. Water Quality Reporting Requirements. (cont.)

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

1) APPENDIX 3, Condition #4.b. – results of ground water "initial sampling events" shall be submitted **within 60 days from completion of laboratory analyses**;

2) APPENDIX 3, Condition #4.c. – results of ground water routine semi-annual sampling events shall be submitted **within 60 days from completion of laboratory analyses and no later than Jan. 15th, and July 15th of each year for the time periods July 1-Dec. 31, and Jan. 1-June 30, respectively**;

3) APPENDIX 3, Condition #7 – results of ground water verification events shall be submitted **within 60 days from completion of laboratory analyses**; and,

4) APPENDIX 3, Condition #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 Jan. 15th, and July 15th of each year for the time periods July 1-Dec. 31, and Jan. 1-June 30, respectively**.

11. Monitoring Plan Evaluation. The permittee shall submit an evaluation of the water quality monitoring data (ground water analyses, ground water flow direction and velocity, and surface water analyses) every two and one-half years as required by Rule 62-701.510(8)(b), F.A.C. The due dates and time periods to be covered by the evaluations are summarized below:

Monitoring Plan Evaluation Due Date	Starting Sampling Event	Ending Sampling Event
May 1, 2016	First half 2013	Second half 2015
Nov. 1, 2018	First half 2016	First half 2018
May 1, 2021	Second half 2018	Second half 2020
Nov. 1 2023	First half 2021	First half 2023
May 1, 2026	Second half 2023	Second half 2025
Nov. 1, 2028	First half 2026	First half 2028
May 1, 2031	Second half 2028	Second half 2030
Sep. 1, 2033	First half 2031	First half 2033

The evaluations shall include the applicable information as listed in Rule 62-701.510(8)(b), F.A.C., and shall include assessment of the effectiveness of the landfill design and operation as related to the prevention of ground water and surface water contamination. Any ground water contamination that may exist shall be addressed as part of evaluation monitoring conducted at the facility in accordance with Rule 62-701.510(6), F.A.C. The monitoring plan evaluations shall be sent to:

Florida Department of Environmental Protection
Permitting and Compliance Assistance Program
2600 Blair Stone Rd/MS45656
Tallahassee, Florida 32399

APPENDIX 3 – Water Quality Monitoring Plan (cont.)

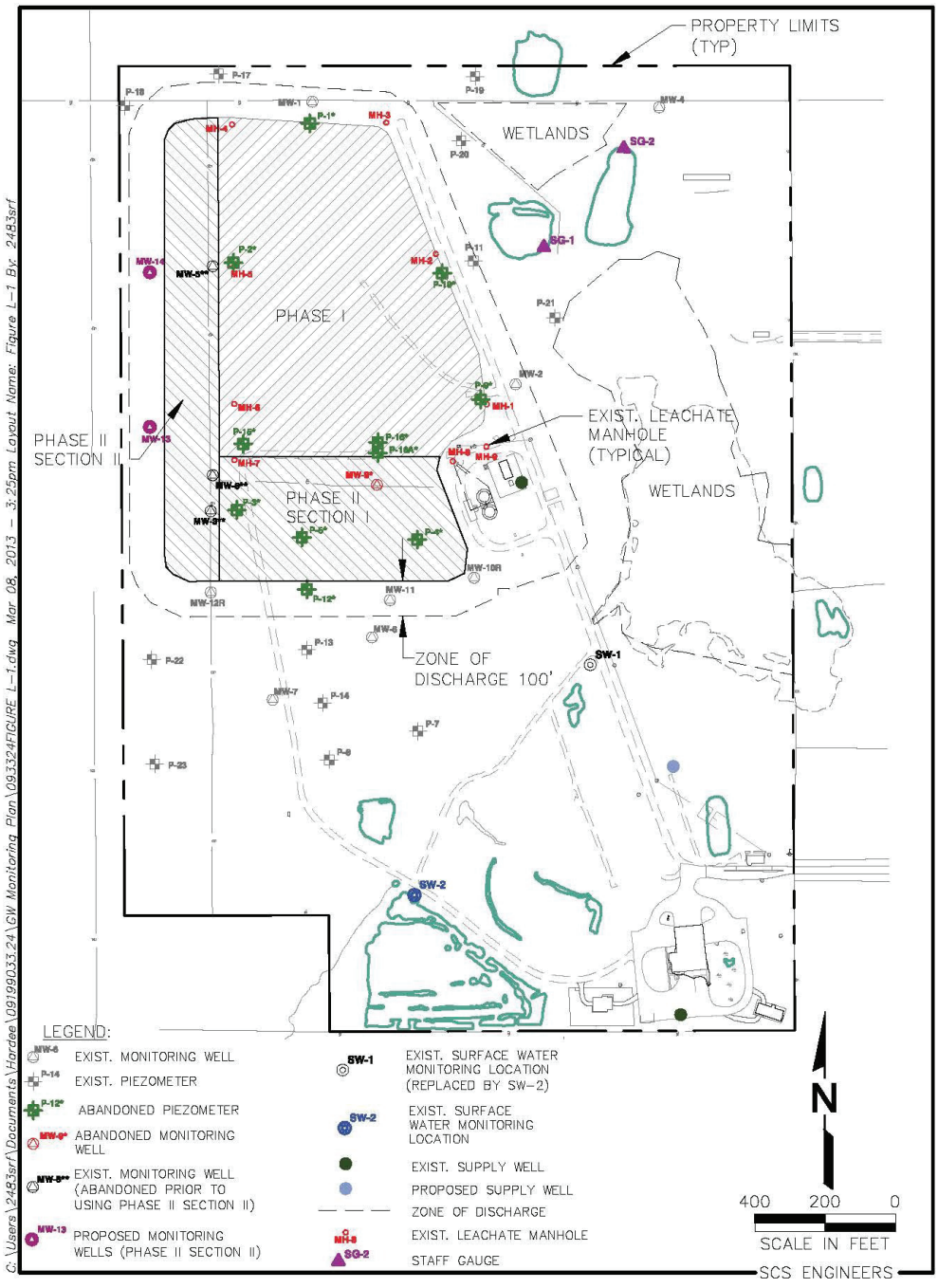


Figure L–1. Hardee County Solid Waste, Groundwater and Surface Water Monitoring Location Points, Hardee County, Florida.

APPENDIX 3 – Water Quality Monitoring Plan (cont.)

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

APPENDIX 3 – Water Quality Monitoring Plan (cont.)

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.

APPENDIX 4 – Project Specific Operation Conditions

1. Waste Placement Against Phase I Side Slope. Prior to placement of waste against the western side slopes of Phase I, the permittee shall remove only as much rain tarp and sod as needed for disposal in the select area. Upon rain tarp and sod removal, the permittee shall conduct depth check on the protective cover material to confirm that a minimum 24-inch protective layer remains. If the depth check indicates less than a 24-inch layer remains, the permittee shall place additional protective cover soil within the area prior to waste placement as need to meet the required layer depth [ref. Op. Plan , §K.2.f.5] . The additional protective cover soil shall be obtained from the designated soil stockpile prepared during Phase II Section II construction [ref. Op. Plan , §K.2.f.6]. Prior to waste placement, the permittee shall provide confirmation documentation of adequate remaining protective cover material after rain tarp and sod removal in accordance with the procedures in the facility Operation Plan [ref. Op. Plan, §K.2.f.7] .

2. Fill Sequence Monitoring. To ensure compliance with the permitted facility filling sequence, the permittee will survey waste filling approximately monthly, or as needed during operations, to confirm and monitor waste filling elevations, slopes, and dimensions) [ref. Op. Plan , §K.2.f].

3. Phase I Leachate Levels. Leachate levels in Phase I shall be maintained lower than the top of the perimeter liner and an inward gradient shall be maintained between the groundwater levels outside the lined area and the leachate levels inside the lined area). [ref. Op. Plan , §K.8.a.1].

4. Groundwater Interceptor System.
   a. The groundwater interceptor system shall be operated in accordance with the facility Operation Plan [ref. Op. Plan, §K.8.b]. The groundwater interceptor system, including the pump station, pump on/off levels, and the stormwater swale adjacent to the groundwater interceptor system pump station shall be opened and/or inspected **at least monthly** to evaluate the function of the system [ref. Op. Plan, §K.2.k].

   b. In the event that the pumps in the groundwater interceptor system pump station (Manhole #10) become inoperable, temporary submersible pumps shall be operated to pump groundwater from the pump station to the rip rap lined discharge point adjacent to the pump station [ref. Op. Plan, §K.8.b].

APPENDIX 5 – Hardee County Solid Waste, [Gas] Monitoring Locations, Hardee County Florida (Figure 2)

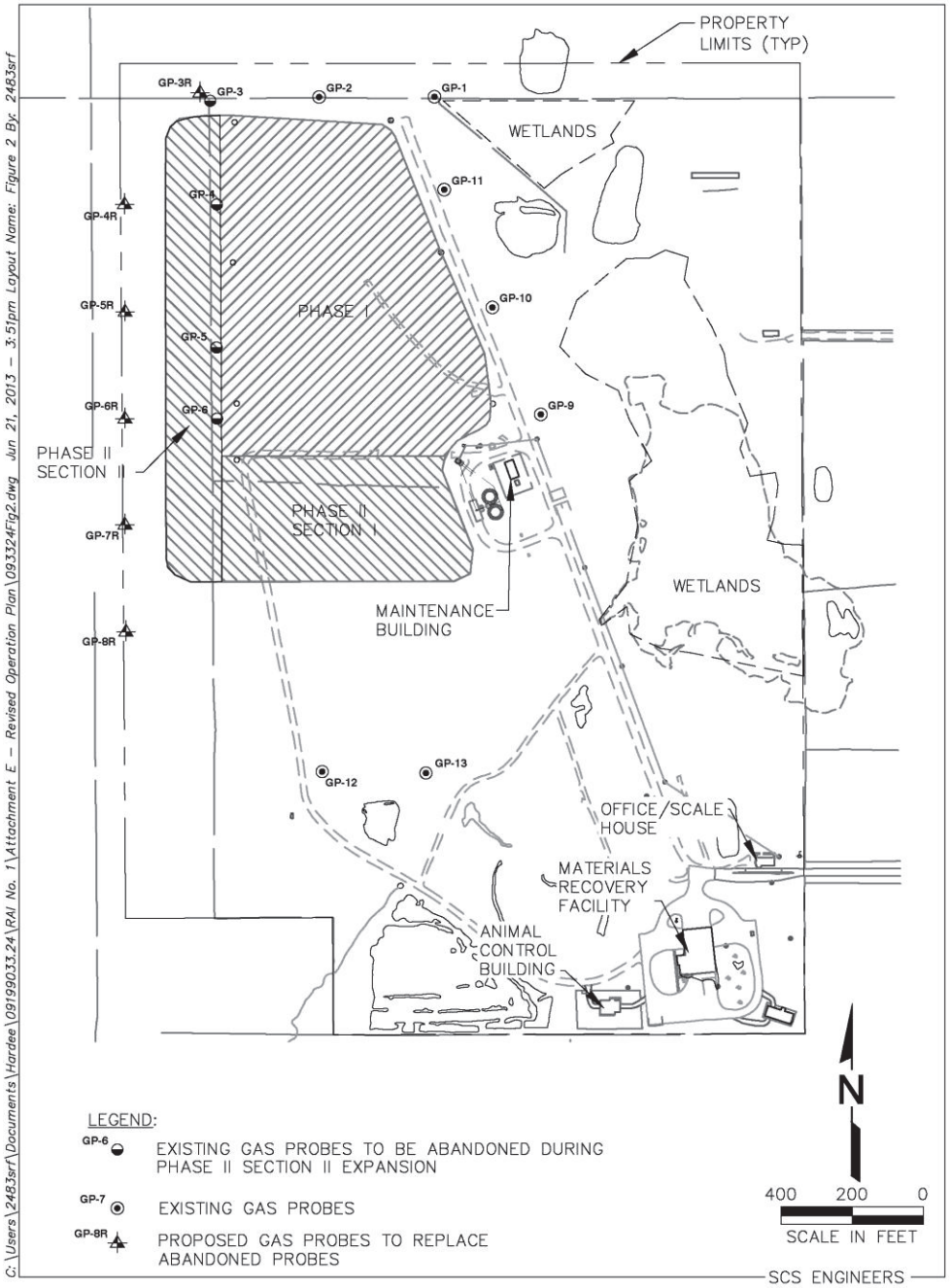


Figure 2. Hardee County Solid Waste, Monitoring Locations Hardee County, Florida.

APPENDIX 6 – General Information

General Information:	Phase II Section I [Constructed]
Disposal acres	Approx. 6.29 acres (including overlay liner area on Phase I south slope)
Lowest Bottom elevation of cell - NE corner of Phase II, Section I (Point 9C)	+79.2 ft. NGVD (pipe, pre-settlement), +78.66 ft. NGVD (pipe, post settlement) [ref. Gen. Info Table; Permit #38414-008-SC/01] Bottom of GCL = +78.5 ft. NGVD [ref. Gen. Info Table; Permit #38414-008-SC/01]
Top elevation at final buildout (entire landfill-including cover)	max. +173.2 feet NGVD [ref. APP-2, Para. 1., Section G.1.b. & Para. 1.b. (Plan Set), Dwg. 12 of 37]
Sideslopes max.	3H:1V [ref. Plan Set, Dwg 12]
Phase II Section I Liner system (bottom to top) Phase I Overlay Liner System	Groundwater interceptor layer; 12-inch compacted subgrade, geosynthetic clay liner (GCL)(5 x 10-9 cm/sec), 60 mil textured HDPE geomembrane, triplanar geocomposite (geotextile/geonet/geotextile), 60 mil textured HDPE geomembrane, biplanar geocomposite (geotextile/geonet/geotextile), 2-foot drainage sand [ref. Gen. Info Table; Permit #38414-008-SC/01] 24-inch soil subgrade, 60 mil HDPE textured geomembrane, 330-mil bi-planar geocomposite drainage layer, 24-inch drainage soil layer (min. 1 x 10^{-3} cm/sec) [ref. Gen. Info Table; Permit #38414-012-SF/01; APP-2, Para. 1., Section G.2.]
LCS drainage system	Drainage/protective sand ≥ 1 x 10-3 cm/sec [ref. Gen. Info Table; Permit #38414-008-SC/01] Two trenches draining from west to east. 8-inch SDR 11 HDPE perforated LCS piping. One perimeter 8-inch SDR Perforated LCS piping draining west to east along south perimeter. [ref. Gen. Info Table; Permit #38414-008-SC/01] LCS pipes drain to sump on east side, then pumped through sideslope risers through forcemain to lift station; from lift station through existing HDPE force main to tanks [ref. Gen. Info Table; Permit #38414-012-SF/01]
LDS drainage system Action leakage rate (ALR)	Triplanar geocomposite to sump, then same as LCS 260 gal/ac/day [ref. Gen. Info Table; Permit #38414-008-SC/01]

General Information:	Phase II Section II [References below from Construction Permit #38414-015-SC/01]
Disposal acres	Approx.6.20 acres (including overlay liner area on Phase I west slope)
Lowest Bottom elevation of cell (in leachate sump)	+77.25 ft. NGVD [ref. Plan Set, Dwg 17, Sec. B & Dwg. 18, Sec. B]
Top elevation at final buildout	max. +173.2 feet NGVD [ref. APP-2, Para. 1., Section G.1.b. & Para. 1.b., Dwg. 12 of 37]
Sideslopes max.	3H:1V [ref. APP-2, Para. 1.b., Sheet 12 of 37]
Phase II Section II Liner system (bottom to top) [Plan Set, Dwg. 14, Details 5 & 6] Phase I Overlay Liner System	- 12-inch subgrade of compacted soil [Spec. 02220-2.03] - 60 mil textured (both sides) HDPE encapsulating geomembrane [GM] [Spec. 02776-Table 02776-1 (under GCL in areas of where GCL is in fluctuating water table) [Plan Set, Dwg 14, Detail 6] - Geosynthetic clay liner [GCL] [5 x 10^{-9} cm/sec] [Spec. 02077-Table 02077-1] - 60 mil textured (both sides) HDPE geomembrane secondary liner (SGM) [Spec. 02776-Table 02776-1] - 300 mil triplanar geocomposite leak detection layer (non-woven GT/geonet/non-woven GT)[TGC] (2 layers along leak detection header trench) [Spec. 02930-Tables 02930-1 thru 02930-3] - 60 mil textured (both sides) HDPE geomembrane primary liner(PGM) [Spec. 02776-Table 02776-1] - 300 mil biplanar geocomposite leachate collection layer (non-woven GT/geonet/non-woven GT)[BGC], [Spec. 02931-Tables 02931-1 thru 02931-3] - 2-foot protective cover soil layer [Spec. 02220-2.04] 24-inch soil subgrade, 60 mil HDPE textured geomembrane, 330-mil bi-planar geocomposite drainage layer, 24-inch drainage soil layer (min. 1 x 10^{-3} cm/sec) [ref. Gen. Info Table; Permit #38414-012-SF/01; APP-2, Para. 1., Section G.2.]

APPENDIX 6 – General Information (cont.)

General Information:	Phase II Section II[References below from Construction Permit #38414-015-SC/01]
LCS drainage system	North and Central Portions - 2-foot drainage/protective sand layer [Spec. 02220-2.04] - 300 mil biplanar geocomposite sloped to one central and two perimeter lateral leachate collection trenches and piping, w/8-inch SDR 11 HDPE perforated pipe in central and western lateral trenches and 10-inch SDR 11 HDPE perforated pipe in the eastern perimeter lateral trench [Plan Set, Dwg 9 & Details 6 & 7, Dwg 16] - One central and two perimeter leachate collection trenches and piping sloped to central leachate header trench & piping w/12-inch SDR 11 HDPE leachate collection header pipe sloped east to west to leachate collection sump [ref. Plan Set, Dwg 9 & Detail 3, Dwg 16] - Leachate collected in the leachate collection sump is pumped via pump & 3-inch discharge hose within an 24–inch SDR 11 HDPE side slope riser pipe [ref. Plan Set, Details1, Dwg 18], thru a flow meter to a leachate force main (a 4-inch HDPE leachate force main line within an 8-inch HDPE containment pipe) to one of the three 8-inch leachate collection cleanout riser pipes in the South Portion of Phase II Section II [ref. Plan Set, Section A, Dwg 25]. South Portion: - 2-foot drainage/protective sand layer [Spec. 02200-2.04] - 300 mil biplanar geocomposite sloped to three leachate collection trenches and piping, w/8-inch SDR 11 HDPE perforated pipe sloped west to east and connected to leachate collection system piping for Phase II Section I [Plan Set, Dwg 9 & Detail 2, Dwg 14].
Leak Detection system	North and Central Portions - 2-foot drainage/protective sand layer [Spec. 02220-2.04] - 300 mil triplanar geocomposite sloped to one central and two perimeter lateral leachate collection trenches and sloped to a central leak detection header trench (additional 300 mil triplaner geocomposite along leak detection header trench) & piping w/8-inch SDR 11 HDPE leachate detection header pipe sloped east to west to leak detection sump [Plan Set, Dwg 9 & Detail 5, Dwg 16] - Leachate collected in the leak detection sump is pumped via pump & 2-inch discharge hose within an 24–inch SDR 11 HDPE side slope riser pipe [Plan Set, Detail 1, Dwg 18] thru a flow meter to the leachate collection system force main (a 4-inch HDPE leachate force main line in an 8-inch HDPE containment pipe). [Plan Set, Section A, Dwg 25]. South Portion: - 2-foot drainage/protective sand layer [Spec. 02220-2.04] - 300 mil biplanar geocomposite sloped west to east and connected to leak detection geocomposite for Phase II Section I [Plan Set, Dwg 9 & Detail 2, Dwg 14].
Action leakage rate (ALR)	346 gal/ac/day [ref. APP-2, Para. 1, Tables G-2, G-6, & G-10]
Soil Material Specifications	Subgrade Layer - Spec. 02220-2.03, 3.08, 3.09, and Tables 02220-1 & 02220-2 Protective Soil Layer - Spec. 02220-2.04, 3.12, and Tables 02220-1 & 02220-2 Leachate Trench Gravel - Spec. 02220-2.05, 3.11, and Tables 02220-1 & 02220-2 GW Collection System Gravel - Spec. 02220-2.06, 3.10, and Tables 02220-1 & 02220-2
Geosynthetics Material Specifications	60-mil HDPE - Spec. 02776-2.01, Part 3 and Tables 02776-1 & 02776-2 Geosynthetic Clay Layer [GCL] - Spec. 02077-2.01, 2.02 & Part 3 300 mil Triplanar Geocomposite - Spec. 02930-2.01 to 2.03, Part 3 and Tables 02930-1 thru 02930-4 300 mil Biplanar Geocomposite - Spec. 02931-2.01 to 2.03, Part 3 and Tables 02931-1 thru 02931-4 Geotextiles - Spec. 02940-2.01 & Part 3 Geosynthetic Rain Tarp - Spec. 02941-2.01 & Part 3
LCS Pipe Material Specifications	HDPE Pipes & Fittings - Spec.15060-2.01 & Part 3; Spec. 15080-2.01, 2.02, & Part 3
Interface friction angles	All cell bottom and side slope interfaces - $\geq$ 20.5° effective friction angle for peak interface shear strength envelope with no adhesion [Spec. 02776-2.01.F. & G.]
Geocomposite Transmissivity	Primary Biplanar Geocomposite - 1.9×10^{-3} m²/s @ 0.02 gradient & normal stress of 4,000 psf - Spec. 02931- Table 02931-3 Secondary Triplanar Geocomposite - 4.8×10^{-3} m²/s @ 0.02 gradient & normal stress of 4,000 psf - Spec. 02930- Table 02930-3

ATTACHMENT 1 – Time Sensitive Action Chart		
Specific Condition	**Submittal Due Date**	**Required Item**
Cover page	No later than 61 days prior to permit expiration	Submit permit renewal application
A.6.	No later than November 1, 2018 and November 1st every five years thereafter	Submit Five-Year Submittal Report
C.12.d. E.3.	Quarterly, by January 15th, April 15th, July 15th and October 15th each year	Submit leachate generation reports Submit gas monitoring results
C.12.c.	No later than November 1, 2018 and November 1st every five years thereafter	Submit report/video of jet cleaning inspection of LCS and LDS piping and Groundwater Control System in Phases I and Phase II Sections I & II
F.2	Annually, by September 1st each year Annually	Submit updated cost estimates Submit proof of funding
APP-3; 4.b. APP-3; 4.c.	Within 7 days of new well installation/development Semi-annually	Conduct ground water sampling for "initial parameter list." Conduct ground water sampling for "routine parameter list."
APP-3; 5.b. APP-3; 5.d.	Within 90 days of installation Within 90 days of new or replacement well installation	Submit well construction information. Submit survey drawing.
APP-3; 6.	Within 30 days of well abandonment	Submit documentation of well abandonment.
APP-3; 7.	Within 14 days of discovery	Submit notification of monitoring parameters significantly above background water quality, or exceeding ground water standards or minimum criteria.
APP-3; 8.c.	Semi-annually	Conduct surface water sampling at location SW-2.
APP-3 10.b.1., 10.b.3.	Within 60 days from completion of laboratory analyses	Submit results of: - ground water initial sampling; and, - ground water verification sampling.
APP-3 10.b.2., 10.b.4.	Semi-annually by January 15th and July 15th of each year	Submit results of - ground water routine sampling; and, - surface water routine sampling.
APP-3; 11.	By May 1, 2016, Nov. 1, 2018, May 1, 2021, Nov. 1, 2023, May 1, 2026, Nov. 1, 2028, May 1, 2031, and Sep. 1, 2033	Submit monitoring plan evaluation report.
APP-4;1.	Prior to waste placement in a given area of the Phase I side slope.	Submit documentation of adequate protective cover material after rain tarp and sod removal.

ATTACHMENT 2 – Facility Permit History

Permit Number 38414-016-SO-01 dated 11/8/2013
Replaces Permit No.: 38414-011-SO/01 dated 05/12/2008
Including Modification Nos.:
38414-013-SO/MM, dated 04/23/2010
38414-014-SO/MM, dated 04/15/2011
Including Modification No.
38414-017-SO-MM dated 10/012019
38414-018-SO-MM dated 07/31/2020
38414-019-SO-MM dated 10/31/2022

Permit No.: 38414-007-SO/01 dated 07/15/2004

Permit No.: 38414-002-SO/01 dated 11/19/1998
Including Modification Nos.:
38414-004-SO/MM, dated 08/01/2001
38414-005-SO/MM, dated 10/22/2001
38414-006-SO/MM, dated 11/22/2002