



FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

BOB MARTINEZ CENTER
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

RICK SCOTT GOVERNOR

CARLOS LOPEZ-CANTERA LT. GOVERNOR

HERSCHEL T. VINYARD JR. SECRETARY

April 7, 2014

NOTICE OF PERMIT MODIFICATION

By-Email
lerose@scgov.net

In the Matter of an
Application for Permit by:
Lois Rose, Solid Waste Operations Manager
4000 Knights Trail Road
Nokomis, FL 34275

Sarasota County
WACS # 51614
Sarasota County Central County
Solid Waste Disposal Complex

Attention: Lois Rose

DEP File No: 0130542-023-SO/IM

Pursuant to Sections 403.061(14) and 403.707, Florida Statutes, the Department hereby issues modification number 0130542-023-SO/IM. The following conditions of permit number 0130542-022-SO/01 are modified as follows:

Table with 4 columns: SPECIFIC CONDITIONS, FROM, TO, TYPE OF MODIFICATION. Rows include Facility Description, Air Permit Requirements, APPENDIX 2, and ATTACHMENT 2.

Attached is Permit Number 0130542-022-SO/01 as modified by this Order. The attached permit replaces all previous permits and permit modifications for this facility.

Any party to this order (permit) has the right to seek judicial review of the permit under Section 120.68, Florida Statutes, by the filing of a Notice of Appeal under rule 9.110 of the Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection, Office of General Counsel, Mail 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 of Appeal must be filed within thirty days after this Notice is filed with the Clerk of the Department.

Executed in Leon County, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



_____ for
Charles F. Goddard, Program Administrator
Permitting & Compliance Assistance Program

FILING AND ACKNOWLEDGEMENT

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



Clerk

04/07/2014
Date

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this NOTICE OF PERMIT MODIFICATION and all copies were sent before the close of business on April 7, 2014 to the listed persons.



Clerk

Page 3 of 3

Ms. Lois Rose

April 7, 2014

Enclosure: Permit No. 0130542-022-SO/01

Copies furnished to:

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**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION**

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TALLAHASSEE, FLORIDA 32399-2400

RICK SCOTT
GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

Permit Issued to:

Sarasota County
Solid Waste Operations
4000 Knights Trail Road
Nokomis, Florida 34275
(941)861-1589

WACS Facility ID No.: 51614

Facility Name: Sarasota Central County Solid Waste Disposal Complex
4000 Knights Trail Road
Nokomis, Florida 34275

Contact Person:

Lois Rose, Solid Waste Operations Manager
4000 Knights Trail Road
Nokomis, Florida 34275
lerose@scgov.net
(941)861-1589

Solid Waste Operations Renewal Permit – Landfill
Permit No.: 0130542-022-SO/01
Permit Modification No.: 0130542-023-SO/IM
Replaces Permit No.: 0130542-007-SO/01

Permit Issued: January 6, 2014
Permit Renewal Application Due Date: November 6, 2034
Permit Expires: January 6, 2034

Permitting Authority
Florida Department of Environmental Protection
Tallahassee Solid Waste Program & Permitting
2600 Blair Stone Road, MS 4565
Tallahassee, Florida 32399-2400
(850) 245-8707
Fax (850) 245-8811

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

4000 Knights Trail Road
Nokomis, Florida 34275
Latitude: 27° 12' 11" N Longitude: 82° 23' 16' W

C. Facility Description

This permit is for the operation and maintenance of a Class I landfill with leachate storage and related facilities (approximately 63 acres of disposal area in Phase II), and provide monitoring and maintenance for closed portions (approximately 55 acres in Phase I) subject to the specific and general conditions attached. The site also includes the closed Class I Phase I Landfill with associated gas collection and flare system, maintenance building, scale house, and administration building. The Sarasota County CCSWDC facility also includes a yard waste processing facility, a C&D processing facility (DEP Permit #134912-004-SO), a Household Hazardous Waste and Citizen's Convenience Center (operation exempted from permitting), and a waste tire processing facility (DEP Permit #126775-003-WT/02).

A landfill gas recovery facility will be constructed (in accordance with Air Permit No. 1150089-008-AC / PSD-FL-422), owned, and operated by Landfill Energy Systems Florida, LLC. to convert the landfill gas collected into electricity. This permit authorizes the connection of the landfill gas recovery facility to the landfill's existing landfill gas collection system and leachate collection system. The landfill gas recovery facility will tie-in to the landfill gas collection system in accordance with drawings G-4 and G-5 (see APPENDIX 2 Item 5), and collected condensate from the facility will be discharged into the landfill leachate collection system. The facility has a current Title V (NSPS) Air

Permit No.1150089-007-AV, which expires on March 8, 2016. The facility must comply with its air permit and all applicable air requirements.

General Information

Disposal acres	Phase II: 63 acres Phase I: 55 acres (closed)
Lowest elevation	Phase II: +22 feet NGVD (secondary liner leak detection at north pipe penetration) Phase I: +24 feet NGVD (Cell 5 sump)
Bottom liner design	Phase II: Double 60 mil HDPE geomembrane and drainage composite with a geosynthetic clay liner Phase I: Composite, 60 mil HDPE on one foot of clay
LCS Design	Phase II: Double sided leachate collection geosynthetic drainage layer, 24" drainage sand, 8-inch HDPE LCS piping Phase I: Geonet/geotextile, rock/8-inch HDPE LCS piping, 24" sand
LDS Design	Phase II: Double-sided leak detection geosynthetic drainage layer, 6-inch HDPE LDS piping Phase I: none
Leachate storage	Pre-stressed concrete leachate storage tank and secondary containment tank, capacity 1.8 million gallons
Final elevation (including cover)	+121 feet NGVD
Slopes	Phase II: 3H:1V Phase I: 3H:1V side slopes, 4% top slope

D. Appendices Made Part of This Permit

APPENDIX 1 - General Conditions

APPENDIX 2 – List of Approved Documents Incorporated into the Permit

APPENDIX 3 –Monitoring Plan Implementation Schedule

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.
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 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 Department of Environmental Protection, Division of Air Resource Management, Office of Permitting and Compliance, 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 to the DEP's Division of Air Resource Management, Office of Permitting and Compliance at 2600 Blair Stone Road, Mail Station 5505, Tallahassee, FL 32399-2400, (850) 717-9000.~~

~~e. The Permittee is required to comply with the requirements of 40 CFR 60, Subpart WWW and GC as adopted by reference in Rule 62-204.800, F.A.C. The Permittee may have to submit to the Department of Environmental Protection, Division of Air Resource Management, 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).~~

5. No later than 1/6/2019, 1/6/2024, and 1/6/2029 the permittee shall submit an report to the Department that 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 has been water pressure cleaned or inspected by video recording.
 - d. An updated operation plan, if operational procedures have changed.
6. The total permit fee required for this permit is \$40,000. The applicant has elected to pay this fee in installments in accordance with Rule 62-701.315(13), F.A.C., and submitted a fee of \$10,000 with this application. No later than 1/6/2019, 1/6/2024, and 1/6/2029 the permittee shall submit to the Department an installment payment of this fee in the amount of \$10,000. This fee is due the State regardless of whether the permittee closes the facility, surrenders the permit, has the permit revoked, or transfers the permit before it expires. If the permittee elects to transfer the permit, it must either pay the entirety of the fee due before submitting the application for transfer, or it must include with the transfer application a signed agreement from the proposed transferee to accept responsibility for the remainder of the permit fee due.

B. Construction Requirements

1. Construction authorized. This Permit does not authorize any construction activities.

C. Operation Requirements

1. General Operating Requirements. The Permittee shall operate the landfill in accordance with Rule 62-701.500, F.A.C., and the Approved Operation Plan dated

September 2013 as listed in APPENDIX 2. 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. 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.
 - b. 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.
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 facility 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.
 - a. Household
 - b. Commercial
 - 2) Class III waste.
 - 3) Construction and demolition debris.
 - 4) Yard trash.
 - 5) Waste tires (shredded/cut tires).
 - 6) Agricultural.
 - 7) Sludge (domestic, industrial).
 - 8) Industrial.
 - b. Other Wastes Specifically Authorized:
 - 1) Biological Wastes.
 - a. Bodies of domestic animals upon death by disease shall be disposed of pursuant to Section 823.041(1), F.S.
 - b. Bodies of captive wildlife, as well as bodies of domestic animals that have not died due to disease.
 - c. Treated Biomedical may only be accepted in accordance with Rule 62-701.300(6).
 - 2) Asbestos. Asbestos may be accepted and managed in accordance with the requirements of 62-701.520(3), F.A.C.
 - 3) Contaminated Soil. Contaminated soil acceptance is conducted on a case-by-case basis in accordance with 62-713, F.A.C.
 - c. Special Wastes: The disposal or control of special wastes shall be in accordance with the Approved Operation Plan dated September 2013 as listed in APPENDIX 2, Rules 62-701.300(8) and 62-701.520, F.A.C., and any other Department rules, to protect the public safety, health and welfare. The special wastes shall be handled on a first-in, first-out basis.

4. Unauthorized Waste Types. The facility is not authorized to process or dispose any waste types not listed in C.3. above. In addition, the facility is not authorized to process or dispose the following wastes in the Class I Landfill in accordance with Rule 62-701.300(8), F.A.C.
- Lead-acid batteries;
 - Used oil, except as provided in Chapter 62-710, F.A.C.;
 - Yard trash, unless mulched and mixed with cover;
 - White goods and lawn mowers;
 - Whole waste tires, except as provided in Chapter 72-711, F.A.C.

Any unauthorized waste inadvertently received by the facility shall be managed in accordance with the approved Operation Plan.

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.
 - 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.
6. Landfill Elevation. The final (maximum) elevation of the Landfill, Phase II, shall not exceed +121 feet NGVD as shown on Sheet C-04 and C-05 Landfill Staging Sections submitted with the application.
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.
8. Cover 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), F.A.C., so as to protect the public health and welfare.
 - b. Alternate initial cover material not identified herein 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, initial cover may consist of a temporary cover or tarpaulin. The following have been approved as alternate initial cover materials:

- Waste tires that have been cut into sufficiently small parts, which means that 70 percent of the waste tire materials cut into pieces of 4 square inches or less and 100 percent of the waste tire material is 32 square inches or less, and applied in a six (6) inch compacted layer, may be used as initial cover within the bermed working area.
 - Processed yard waste, unscreened, and then mixed with soil provided that soil makes up at least 50 percent by volume of the mixture, and applied in a six inch compacted layer may be used as initial cover within the bermed working area.
 - Shredded asphalt roofing shingles, screened through a 1 inch mesh, and then mixed in the ratio of 50 percent shredded shingles to 50 percent soil, and applied in a six inch compacted layer may be used as initial cover within the bermed working area.
 - Ground-up construction and demolition debris, unscreened, and applied in a six inch compacted layer, may be used as initial cover within the bermed working area. Ninety percent of the unscreened ground-up debris shall pass a 2-inch screen and 50 percent shall pass a ¼ inch screen.
 - Processed yard waste, screened through a ½ mesh, and then mixed in the ratio of 75 percent screened compost to 25 percent soil, and applied in a 6 inch compacted layer may be used as initial cover, or applied in a one foot compacted layer in addition to the six inch initial cover may be used as intermediate cover.
 - Street sweeping which is material consisting primarily of soil, rocks, asphalt, leaves, and other vegetative matter generated during cleaning of roads and is not mixed with any Class I waste. It does not include material generated during the cleanup of an oil or hazardous chemical spill or material that is believed to be contaminated.
- c. Intermediate Cover: Intermediate cover shall be applied and maintained in accordance with F.A.C. 62-701.500(7)(g). An intermediate cover of one (1) foot of compacted earth in addition to the six (6) inch layer of initial cover shall be applied within seven (7) days of cell completion at all landfills if final cover or an additional lift is not to be applied within 180 days of cell completion.
- d. Materials that have been used for intermediate cover may be removed and reused only if the materials are substantially free of waste.
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.

10. Contingency Plan and Notification of Emergencies. The Permittee shall notify the Department in accordance with the approved Contingency Plan. Notification shall be made to DEP's South District Office at (239) 344-5600.
11. Housekeeping. The facility shall be operated to control dust, 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.
12. Leachate Management.
 - a. The permittee shall operate the leachate management system (including the collection, removal, storage, and on-site treatment systems), and maintain the system as designed in accordance with the Operation Plan, so that leachate is not discharged from the system except as provided for in the Design Plan and Operation Plan.
 - b. Routine inspections and maintenance of the leachate management system shall be conducted in accordance with the schedule established in the Operation Plan.
 - c. The leachate collection pipes shall be cleaned or video inspected at least once every five years. A summary of the results shall be submitted with the permit renewal application.
 - d. The permittee shall record quantities of leachate generated on a daily basis in gallons per day, shall record precipitation in inches per day 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.
 - 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 as provided for in the Operation Plan. 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.
 - f. The permittee shall notify the Department of changes of the off-site leachate treatment facilities prior to use.
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. A trained operator shall be on duty at the facility at all times the facility is operating. 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 January

15th. 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 each year. The report is required by Rule 62-701.500(13)(c), F.A.C. and must be submitted to the District Office and to:

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

15. Hazardous Waste. No hazardous waste shall be disposed of in a solid waste management facility unless such facility is permitted pursuant to Chapter 62-730, F.A.C. 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.
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. Primary Zone of Discharge. In accordance with Rule 62-520.465(2), F.A.C., and unless site specific conditions make monitoring well placement impractical, the primary zone of discharge for this facility shall be a three dimensional volume described as horizontally 100 feet from the limits of the landfill (all active, inactive and closed disposal areas) or from the leachate storage basins, or to the property boundary, whichever is less, and shall extend vertically to the bottom of the surficial aquifer. The limits of the horizontal boundary of the primary zone of discharge for landfill Phases I and II are approximately shown on Figure 1 in Appendix 3 and include background well MW-1R and the downgradient compliance well locations for detection wells MW-8A, MW-9, MW-10R, MW-15, MW-16, MW-17, MW-18R, MW-19A, and MW-20A. Except for the parameters listed in Specific Condition D.2, the permittee shall ensure that Class G-II water quality standards and background water quality concentrations for selected parameters provided in Specific Condition D.3. will not be exceeded at the

boundary of the primary zone of discharge, per Rule 62-520.420, F.A.C., and that ground water minimum criteria will not be exceeded outside the boundary of the primary zone of discharge, per Rule 62-701.320(17), F.A.C.

2. Secondary Zone of Discharge. In accordance with Rule 62-520.470, F.A.C., this facility shall also have a secondary zone of discharge consisting of a three dimensional volume as described for the primary zone of discharge except that the downgradient horizontal boundary shall extend to an imaginary line intersecting wells NAM-1, NAM-2, NAM-3 and NAM-4 as shown on Figure 1 in Appendix 3. This secondary zone of discharge shall only apply to the following parameters: ammonia-N, arsenic, iron, TDS, and manganese. The permittee shall ensure that for these parameters the Class G-II water quality standards and background water quality concentrations for selected parameters provided in Specific Condition D.3. will not be exceeded at the boundary of the secondary zone of discharge, per Rule 62-520.420, F.A.C.
3. Background Water Quality for Selected Parameters. Based on water quality data from background wells MW-1 and MW-1R for April 1999 to May 2010 and the Department's UCL (Upper Confidence Limits) Calculator, version 1.1, the background water quality concentrations for iron, TDS, sodium and chloride at this facility shall be established as shown below:

Parameter	Background Concentration, mg/L
Iron	6.3
TDS	1924
Sodium	456
Chloride	643

4. Evaluation Monitoring. The permittee shall perform the evaluation monitoring as required by Rule 62-701.510(8)(b), F.A.C. A technical report shall be submitted every two and one-half years.
5. Ground Water Monitoring 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 MW-18R, MW-19A and MW-20A proposed) or piezometers, the permittee shall request and receive Department approval of a minor permit modification in accordance with Specific Condition A.2.
 - b. Within one week of well completion and development, each new or replacement monitor well shall be sampled for the parameters listed in

APPENDIX 3 to comply with the requirements of Rules 62-701.510(7)(a) and (7)(b), F.A.C.

- c. 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.

E. Gas Management System Requirements

- 1. Construction Requirements. All construction shall be done in accordance with the approved gas management system design, drawings, 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. Gas monitoring points are specified in the table below and shown graphically in the approved Operation Plan, Figure 1 Attachment K-3: Monitoring Well Locations (see Approved Operation Plan dated September 2013 as listed in APPENDIX 2).

Monitoring Point	Type of Monitoring	Location
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 Subcell4, Phase II
GM-1	Monitoring Location	Contractor's Maintenance Building
GM-2	Monitoring Location	C&D Processing Area
GM-3	Monitoring Location	County Maintenance Building
GM-4	Monitoring Location	Administrative Building
GM-5	Monitoring Location	Scale House
GM-7	Monitoring Location	Control Panel at Leachate Storage Tank

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

- 2. 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.

3. Operational Requirements. Gas controls shall be operated and maintained so that they function as designed.
4. Monitoring Requirements. Monitoring for methane gas at the property boundary and within structures on the property shall be performed quarterly to determine the effectiveness of the gas migration controls. Quarterly reports shall be due January 15th, April 15th, July 15th, and October 15th of each year. 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, South District Office under separate cover no later than 15 days after the end of the period in which the monitoring occurred.
5. 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. 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.
6. 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.

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
2600 Blair Stone Road, MS 4565
Tallahassee, Florida 32399-2400

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 a letter of credit, guarantee bond, performance bond, financial test, corporate guarantee, trust fund or insurance shall submit the inflation adjusted cost estimate(s) by 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 and a copy to the address identified in Specific Condition F.1. or to the following email address: Solid.Waste.Financial.Coordinator@dep.state.fl.us.

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. The facility includes a previously closed 55 acre Phase I disposal unit which closed with portions of final cover and the Phase I/II overlay liner system in March 2013.

H. Long Term Care Requirements

1. Long-Term Care Period. The Permittee shall continue to monitor and maintain the integrity and effectiveness of the final cover as well as other appurtenances of the facility, control erosion, fill subsidences, comply with the ground water monitoring plan and gas monitoring program, and maintain the stormwater system, in accordance with an approved closure plan. The long-term care period is scheduled to end 30 years from the date of final closure in accordance with the facility's financial assurance documents.
2. Every five years after issuance of a permit for long-term care, the permittee shall submit a report to the Department that addresses stabilization of the landfill. The submittal shall include the technical report required in Rule 62-701.510(9)(b), F.A.C., and shall also address subsidence, barrier layer effectiveness, storm water management, and gas production and management. For lined landfills, the submittal shall also address leachate collection and removal system effectiveness, leachate quality (if data is available), and leachate quantity.
3. Following completion of the long-term care period for each solid waste management unit, the owner or operator shall submit to the Department a certification, signed and sealed by a professional engineer, verifying that long-term care has been completed in accordance with the closure plan, and has been placed in the operating record.

Permit originally executed in Leon County, Florida, by Charles F. Goddard, Program Administrator for the Permitting & Compliance Assistance Program, State of Florida Department of Environmental Protection on January 7, 2014.

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, as 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.
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 or a copy thereof shall be kept at the work site of the permitted activity.
- 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 Documents Incorporated Into the Permit

The approved application documents for Sarasota Central County Solid Waste Disposal Complex Operations Permit Renewal consist of the following:

1. Initial permit renewal application and staging plans prepared by Sarasota County dated September 16, 2013 stamped received by the Tallahassee Solid Waste Section on September 18, 2013. Consisting of one three ring binder and electronic copy on disk.

Renewal Application:

[http://depedms.dep.state.fl.us:80/Oculus/servlet/shell?command=getEntity&\[guid=8.185528.1\]&\[profile=Permitting_Authorization](http://depedms.dep.state.fl.us:80/Oculus/servlet/shell?command=getEntity&[guid=8.185528.1]&[profile=Permitting_Authorization)

Staging Plans:

[http://depedms.dep.state.fl.us:80/Oculus/servlet/shell?command=getEntity&\[guid=8.185529.1\]&\[profile=Permitting_Authorization](http://depedms.dep.state.fl.us:80/Oculus/servlet/shell?command=getEntity&[guid=8.185529.1]&[profile=Permitting_Authorization)

2. Supplemental information provided by Sarasota County dated October 16, 2013 stamped received by the Tallahassee Solid Waste Section on October 17, 2013. Consisting of an electronic copy.

[http://depedms.dep.state.fl.us/Oculus/servlet/shell?command=getEntity&\[guid=8.188650.1](http://depedms.dep.state.fl.us/Oculus/servlet/shell?command=getEntity&[guid=8.188650.1)

3. Supplemental information consisting of a revised Water Quality Monitoring Plan provided by Sarasota County dated December 9, 2013 received by the Tallahassee Solid Waste Section on December 10, 2013. Consisting of an electronic copy.

[http://depedms.dep.state.fl.us:80/Oculus/servlet/shell?command=getEntity&\[guid=8.189301.1\]&\[profile=Permitting_Authorization](http://depedms.dep.state.fl.us:80/Oculus/servlet/shell?command=getEntity&[guid=8.189301.1]&[profile=Permitting_Authorization)

4. Approved Operations Plan dated ~~September 2013~~ March 2014 provided by the applicant including all attachments.

[http://depedms.dep.state.fl.us:80/Oculus/servlet/shell?command=getEntity&\[guid=8.198035.1\]&\[profile=Permitting_Authorization](http://depedms.dep.state.fl.us:80/Oculus/servlet/shell?command=getEntity&[guid=8.198035.1]&[profile=Permitting_Authorization)

5. Application for intermediate modification to permit 0130542-022-SO/01 for the construction and operation of a landfill gas recovery facility.

[http://depedms.dep.state.fl.us:80/Oculus/servlet/shell?command=getEntity&\[guid=8.195267.1\]&\[profile=Permitting_Authorization](http://depedms.dep.state.fl.us:80/Oculus/servlet/shell?command=getEntity&[guid=8.195267.1]&[profile=Permitting_Authorization)

APPENDIX 3 MONITORING PLAN IMPLEMENTATION SCHEDULE

I. GENERAL

1. The field testing, sample collection and preservation and laboratory testing, including quality control procedures, shall be in accordance with Chapter 62-160, F.A.C. Approved methods as published by the Department or as published in Standard Methods, ASTM, or EPA Methods shall be used. **[62-701.510(2)(b), F.A.C.]**
2. The organization collecting samples at this site must use the Field and Laboratory Standard Operating Procedures (DEP-SOP-001/01) referenced in Chapter 62-160, F.A.C. The laboratory designated to conduct the chemical analyses must be certified by the Florida Department of Health Environmental Laboratory Certification Program (DOH ELCP). This Certification must be for the test method and analyte(s) that are reported. **[62-160.210(1), 62-160.300(1), 62-701.510(2)(b), F.A.C. and DEP SOP FS 1008.]**

NOTE: DEP-SOP-001/01 can be accessed at:
<http://www.dep.state.fl.us/water/sas/sop/sops.htm>

3. The permittee must ensure that the analytical laboratory conducting the analyses uses analytical methods capable of achieving detection limits at or below the Groundwater Cleanup Target Levels (GCTLs) or the Freshwater Surface Water Cleanup Target Levels (SWCTLs) in Table I, Chapter 62-777, F.A.C. except those listed in Table C of the "FDEP Guidance for the Selection of Analytical Methods and for the Evaluation of Practical Quantitation Limits dated 10/12/2004". GCTLs and SWCTLs that are not water quality standards are used as screening tools and interim guidelines for ground water minimum criteria until standards are promulgated. **[DEP SOP FM 1000]**
4. If, at any time, analyses detect parameters which are significantly above background water quality, significantly above Background Water Quality for Selected Parameters listed in Specific Permit Condition D.3., or which are at levels above the Department's water quality standards or criteria specified in Chapter 62-520, F.A.C., in the detection wells or at the edge of the Primary Zone of Discharge, the Permittee may confirm the data by resampling the affected wells within thirty (30) days of receipt of the sampling data. 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 within 14 days of this finding. **[62-701.510(6)(a), F.A.C.]**

If the resampling event detects parameters which are significantly above background water quality, significantly above Background Water Quality for Selected Parameters listed in Specific Permit Condition D.3., or which are at levels above the Department’s water quality standards or criteria specified in Chapter 62-520, F.A.C., the Permittee shall notify the Department in writing within 14 days of receipt of the sampling data. Confirmed data must be submitted to the Department within 60 days from completion of lab analyses, unless a different due date is approved. Use “CONF” (for confirmation data) in the report type column. **[62-701.510(8)(a), F.A.C.]**

Upon notification by the Department, the permittee shall initiate evaluation monitoring in accordance with Rule 62-701.510(6)(a), F.A.C.

II. GROUND WATER QUALITY MONITORING

1. The twelve (12) ground water monitoring wells/piezometers included in this monitoring plan and designated for water quality testing and water level measurements are listed in Table 1 and shown on Figure 1. **[62-701.510(3)(d)2 & 3, F.A.C.]**
2. Any initial sample collected from a new ground water monitoring well, unless the new monitoring well is installed to replace an existing well within the monitoring network, shall be analyzed for the following Initial Ground Water Monitoring Parameters. **[62-701.510(5)(b), F.A.C.]**

Field Parameters	Laboratory Parameters
1. Static water level in wells before purging	1. Ammonia – N, Total
2. Dissolved oxygen	2. Chlorides
3. pH	3. Iron
4. Specific conductivity	4. Nitrate
5. Temperature	5. Sodium
6. Turbidity	6. Total dissolved solids (TDS)
7. Colors and sheens (by observation)	7. Those parameters listed in 40 CFR Part 136, Appendix II.*

* Mercury not listed because it is included in Appendix II.
 * Appendix I is not listed because it is a subset of Appendix II

3. The ten (10) active monitoring wells for the landfill (1 background and 9 detection wells listed in Table 1) shall be routinely sampled and analyzed semi-annually between March and May and between September and November for the following Ground Water Monitoring Parameters. **[62-701.510(5)(c) & (7)(a), F.A.C.]**

Field Parameters	Laboratory Parameters
1. Static water level in wells before purging	1. Ammonia – N, Total
2. Dissolved oxygen	2. Chlorides
3. pH	3. Iron
4. Specific conductivity	4. Mercury
5. Temperature	5. Nitrate
6. Turbidity	6. Sodium
7. Colors and sheens (by observation)	7. Total dissolved solids (TDS)
	8. Those parameters listed in 40 CFR Part 136, Appendix I

4. The four (4) active Natural Attenuation Monitoring Wells for the landfill (listed in Table 2) shall be routinely sampled and analyzed semi-annually between March and May and between September and November for the following Ground Water Monitoring Parameters. **[62-701.510(5)(c) & (7)(a), F.A.C.]**

Field Parameters	Laboratory Parameters
1. Static water level in wells before purging	1. Ammonia – N, Total
2. Dissolved oxygen	2. Iron
3. pH	3. Manganese
4. Specific conductivity	4. Arsenic
5. Temperature	5. TDS
6. Turbidity	
7. Colors and sheens (by observation)	

5. All water quality analyses will be performed on unfiltered samples unless approved by the Department.

III. SURFACE WATER MONITORING

1. The two (2) surface water sites included in this monitoring plan are listed on Table 1 and shown on Figure 1. **[62-701.510(4)(c), F.A.C.]**
2. Semi-annual samples from the two (2) surface water monitoring sites shall be collected between March and May and between September and November. The samples shall be analyzed for the following Surface Water Monitoring Parameters. **[62-701.510(5)(d) & (7)(b), F.A.C.]**

Field Parameters	Laboratory Parameters
1. Surface Water Elevation	1. Unionized ammonia as N
2. Specific Conductivity	2. Total hardness as CaCO3
3. pH	3. Biochemical oxygen demand (BOD ₅)
4. Dissolved oxygen	4. Iron
5. Turbidity	5. Mercury
6. Temperature	6. Nitrate
7. Colors and sheens (by observation)	7. Total Dissolved Solids (TDS)

Field Parameters	Laboratory Parameters
	8. Total Organic Carbon (TOC)
	9. Fecal Coliform
	10. Total Phosphorus as P
	11. Chlorophyll A
	12. Total nitrogen
	13. Chemical Oxygen Demand (COD)
	14. Total Suspended Solids (TSS)
	15. Those parameters listed in 40 CFR Part 258 Appendix I

IV. MONITORING WELL REQUIREMENTS

1. If a monitoring well or piezometer becomes damaged or inoperable, the Permittee shall notify the Department within two (2) days of discovery with a written report within ten (10) days of notice. The written report shall describe what problem has occurred and the remedial measures that have been taken to prevent a recurrence. The Department can require the replacement of inoperable monitoring wells or piezometers. **[62-520.600(6)(I), F.A.C.]**

2. New or replacement monitoring well design or placement must be approved by the Department. The design and construction of these wells must be based on site-specific borings with appropriate supporting data such as grain size distribution analyses, in-situ hydraulic conductivity testing, and depth to water. Wells shall be installed using standard, accepted practices for well construction. **[62-701.510(3), F.A.C. and 62-520.600(3) and (6), F.A.C.]**

3. All wells and piezometers shall be clearly and permanently labeled and the well site maintained so that the well is visible at all times. Unless otherwise authorized in a Department permit, new monitoring wells, and existing monitoring wells at the time of permit renewal, shall have protective bollards or other devices installed around them if they are located in areas of high traffic flow to prevent damage from passing vehicles. **[62-701.510(3)(d)5, F.A.C.]**

4. The Department shall be notified in writing before any monitoring wells are abandoned or plugged. Wells shall be abandoned using standard, accepted practices for well abandonment. **[62-701.510(3)(d)6, F.A.C.]**

V. REPORTING REQUIREMENTS

A. FIELD ACTIVITIES

1. The Department must be notified in writing, hard copy or e-mail, at least fourteen (14) days prior to the installation and/or sampling of any monitoring well(s) so that the Department may collect split samples. **[62-701.510(8)(a), F.A.C.]**

B. MONITORING WELL COMPLETION REPORT

2. One (1) paper copy and one (1) electronic copy (Adobe pdf format) of the Monitoring Well Completion Report, Form 62-701.900(30), F.A.C., must be submitted to the Department within thirty (30) days after installation of any new or replacement monitoring well(s). In addition, as-built well construction diagrams and soil boring logs that cover the entire depth of the monitoring well(s) must be submitted to the Department. **[62-520.600(6)(j), F.A.C.]**

NOTE: The top of casing elevation of each well, to the nearest 0.01 feet, and the latitude and longitude of each well in degrees, minutes and seconds, to two (2) decimal places, must be determined and certified by a Florida Licensed Surveyor and Mapper and provided on the form. **[62-701.510(3)(d)1 & 62-520.600(6)(i), F.A.C.]**

C. SURVEYING

3. One (1) paper copy and one (1) electronic copy (Adobe pdf format) of a drawing must be submitted within sixty (60) days following monitoring well installation showing the location of all monitoring sites (active, abandoned, and Evaluation Monitoring), piezometers, water bodies and waste filled areas. The location of features on the drawing must be horizontally and vertically located by standard surveying techniques. The drawing shall include all monitoring well locations, each monitoring well name and identification (WACS) number, the top of casing, pad elevation, permanent benchmark(s) and/or corner monument marker(s) referenced to a nationally recognized datum (such as NGVD 1929 or NAVD 1988) to the nearest 0.01 feet. The latitude and longitude of each well in degrees, minutes and seconds, to two (2) decimal places, must be determined and provided on the drawing. The survey shall be conducted and certified by a Florida Licensed Surveyor and Mapper. **[62-701.510(1)(c)&(3)(d)1, and 62-520.600(6)(i), F.A.C.]**
4. If a monitoring well is being replaced or new wells are being added to an existing ground water monitoring plan, only the new wells need to be surveyed as long as all other monitoring wells in the monitoring plan have been surveyed and certified by a Florida Licensed Surveyor and Mapper and there is no reason to believe that the elevations have changed. The location and elevation determinations and the certification must be provided with the Monitoring Well Completion Report upon completion of each new well. **[62-701.510(3)(d)1, F.A.C.]**

D. DEPTH MEASUREMENTS

5. A total depth measurement must be made on each well at time of the Technical Report or every five years. This measurement is to be reported as total apparent

depth below ground surface and should be compared to the original total depth of the well.

E. INITIAL AND SEMI-ANNUAL SAMPLING AND SUBMITTING ELECTRONIC DATA

6. Required monitoring reports must be submitted to the Department within sixty (60) days from completion of laboratory analyses and shall follow the Department's electronic reporting requirements using the ADaPT software. **[Rule 62-701.510(8)(a), F.A.C.]**
7. Required water quality monitoring reports and analytical results shall be submitted electronically. Water quality monitoring reports shall be submitted in Adobe pdf format. The water quality data Electronic Data Deliverable (EDD) shall be provided to the Department in a comma separated text file electronic format consistent with requirements for importing the data into the Department's databases as summarized at:

<http://www.dep.state.fl.us/waste/categories/shw/pages/ADaPT.htm>

Water quality monitoring reports shall include the following:

- a) Cover letter;
- b) Facility name and identification number, sample collection dates, and analysis dates;
- c) All analytical results, including all peaks even if below maximum contaminant levels;
- d) Identification number and designation of all surface water and ground water monitoring points;
- e) Applicable water quality standards;
- f) Quality assurance, quality control notations;
- g) Method detection limits;
- h) STORET code numbers for all parameters;
- i) Water levels recorded prior to evaluating wells or sample collection; Updated ground water contour map signed and sealed by a professional geologist or professional engineer with experience in hydrogeologic investigations, which indicates ground water elevations and flow direction;
- j) A summary of any water quality standards or criteria that are exceeded;
- k) Chain of custody forms;
- l) Water Quality Monitoring Certification using Form Rule 62-701.900(31), F.A.C.;
- m) Appropriate information using the Groundwater Sampling Log, Form FD 9000-24 (DEP-SOP-001/01); and,
- n) Laboratory and Field EDDs and error logs, as applicable.

All submittals in response to this specific condition shall be sent both to:

Florida Department of Environmental Protection South District Office P.O. Box 2549 Fort Myers, Florida 33902-2549	Florida Department of Environmental Protection Solid Waste Section 2600 Blair Stone Road, MS 4565 Tallahassee, Florida, 32399-2400 ADaPT.EDDs.and.Reports@dep.state.fl.us
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F. WATER ELEVATIONS

8. Water levels in all monitoring wells, whether sampled or not, all piezometers and all surface water sites including staff gauge locations must be measured to the nearest 0.01 foot and reported semi-annually. Surface water elevations at sampling locations must be measured to the nearest 0.01 foot on the same day as ground water levels in the wells and piezometers and reported semiannually. All water level measurements must be made within a one-day period. These measurements should be reported in a table that includes well or surface water point name, date water level measured, measuring point elevation referenced to a nationally recognized datum (such as NGVD 1929 or NAVD 1988), depth to water and calculated water level elevation referenced to the same nationally recognized datum. The ground water elevations shall be reported in the ADaPT data for the upload into WACS. **[62-701.510(8)(a)8, F.A.C.]**

Gauge Name	Location
STW-1	Storm Pond 1
STW-2	Storm Pond 2
STW-3	Storm Pond 3
STW-4	Storm Pond 4
STW-5A	Storm Pond 5, west side
STW-5B	Storm Pond 5, east side
STW-6	Storm Pond 6
STW-7	Storm Pond 7

G. GROUND WATER CONTOUR MAPS

9. Ground water elevation contour maps for each monitored aquifer zone must be submitted with the water quality monitoring reports semi-annually to the Department, with contours at no greater than one foot intervals unless site specific conditions dictate otherwise. Ground water elevation contour map(s) should include monitoring well and piezometer locations, ground water elevation at each monitoring well or piezometer location referenced to a nationally recognized datum (such as NGVD 1929 or NAVD 1988), a bar scale, north arrow, ground water contour interval, date of measurement and ground water flow direction. The map(s) must incorporate adjacent and on-site surface water elevations where appropriate. These maps shall be signed and sealed pursuant

to Florida Statutes (F.S.) Chapters 471 and 492 which require that documents requiring the practice of professional engineering or professional geology, as described in Chapter 471 or 492, F.S., be signed and sealed by the professional(s) who prepared or approved them. This certification must be made by a licensed professional who is able to demonstrate competence in this subject area. **[62-701.510(8)(a)9, F.A.C.]**

H. TECHNICAL REPORT

10. A technical report, signed and sealed by a professional geologist or professional engineer with experience in hydrogeologic investigations, shall be submitted to the Department approximately every two and one-half years during the active life of the facility, and every five years during the long-term care period. The report shall summarize and interpret the water quality monitoring results and water level measurements collected since the last Technical Report. The report shall contain, at a minimum, the following **[62-701.510(8)(b), F.A.C.]**:
- a) Tabular displays of any data which shows that a monitoring parameter has been detected, and graphical displays of any leachate key indicator parameters detected (such as pH, specific conductance, TDS, TOC, sulfate, chloride, sodium and iron), including hydrographs for all monitor wells;
 - b) Trend analyses of any monitoring parameters consistently detected;
 - c) Comparisons among shallow, middle, and deep zone wells;
 - d) Comparisons between background water quality and the water quality in detection and compliance wells;
 - e) Correlations between related parameters such as total dissolved solids and specific conductance;
 - f) Discussion of erratic and/or poorly correlated data;
 - g) An interpretation of the ground water contour maps, including an evaluation of ground water flow rates; and
 - h) An evaluation of the adequacy of the water quality monitoring frequency and sampling locations based upon site conditions.
11. One (1) paper and one (1) electronic copy (Adobe pdf format) of the Technical Report shall be submitted to the Department on the following schedule: **[62-701.510(8)(b), F.A.C.]**

Report	Sampling Periods Covered	Number Of Semi-Annual Sampling Events in Report	Date Technical Report Due
Mid-Phase 1 Report	First Semi-Annual 2013 through Second Semi-Annual 2016	5	6/15/2016
Final Phase 1 Report	Second Semi-Annual 2016 through First Semi-Annual 2018	5	12/15/2018
Mid-Phase 2 Report	First Semi-Annual 2019 through Second Semi-Annual 2021	5	6/15/2021
Final Phase 2 Report	Second Semi-Annual 2021 through Second Semi-Annual 2023	5	12/15/2023
Mid-Phase 3 Report	First Semi-Annual 2024 through First Semi-Annual 2026	5	6/15/2026
Final Phase 3 Report	Second Semi-Annual 2026 through Second Semi-Annual 2028	5	12/15/2028
Mid-Phase 4 Report	First Semi-Annual 2029 through First Semi-Annual 2031	5	6/15/2031
Final Phase 4 Report	Second Semi-Annual 2031 through Second Semi-Annual 2033	5	12/15/2033

12. Required water quality monitoring reports and water quality data for the Technical Report shall be submitted in electronic format as described in Specific Conditions V. 6 and 7 of this Appendix. **[62-160.240 , and 62-701.510(8)(a), F.A.C.]**

PERMITTEE NAME: Sarasota County Solid Waste Operations

PERMIT NO: 130542-022-SO/01

FACILITY NAME: Sarasota Central County Solid Waste Disposal Complex

WACS Facility ID: 51614

List of Attachments

Table 1 – Water Quality Sampling Testsite Information

Table 2 – Natural Attenuation Monitoring Wells

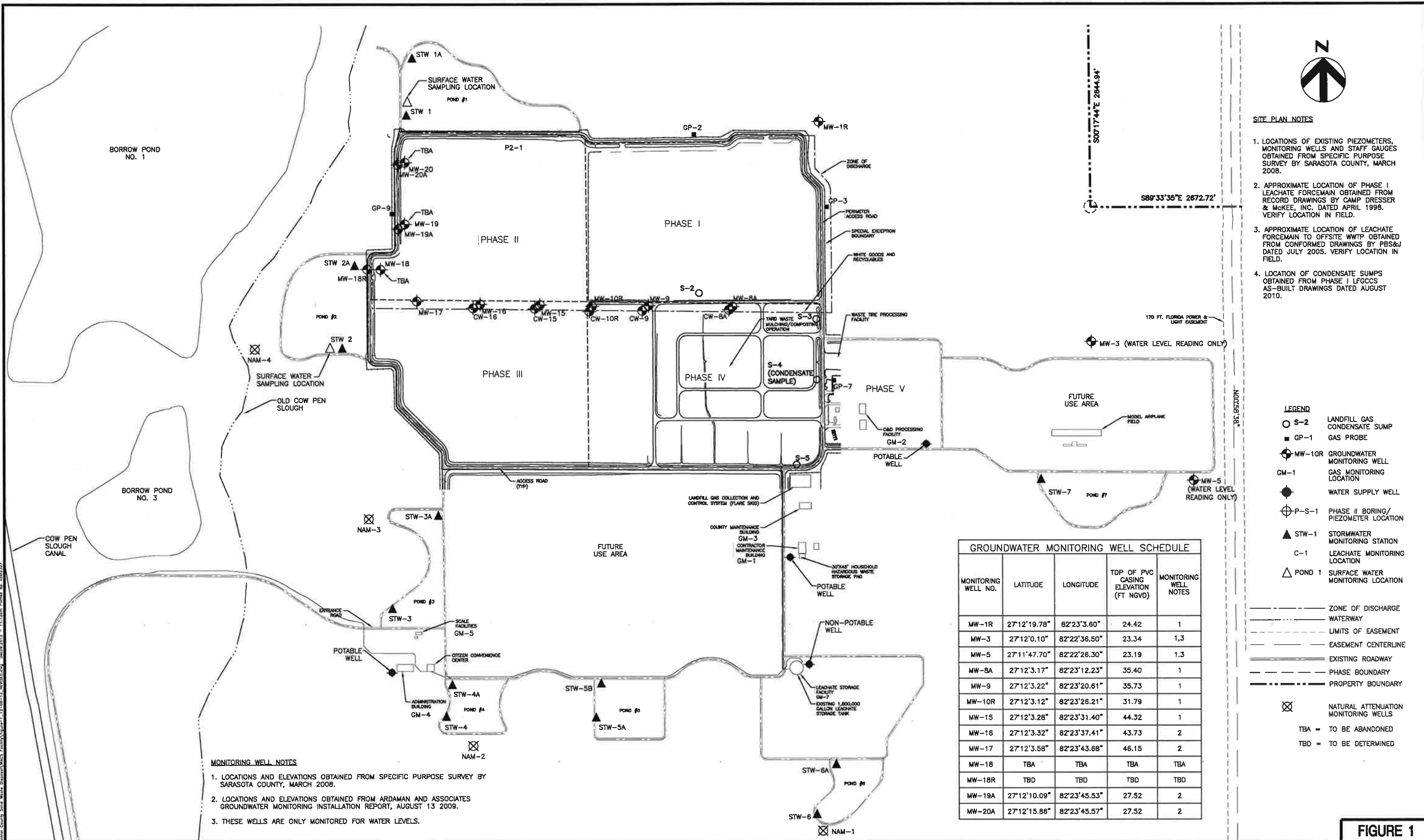
Figure 1 – Ground and Surface Water Monitoring Locations Map

Table 1 – Water Quality Sampling Testsite Information

Testsite Name	Testsite WACS No.	Designation	Aquifer
MW-1R	20585	Background	Surficial
MW-3***	4503	Piezometer	Surficial
MW-5***	4505	Piezometer	Surficial
MW-8A	21453	Detection	Surficial
MW-9	4509	Detection	Surficial
MW-10R	4510	Detection	Surficial
MW-15	23031	Detection	Surficial
MW-16	23032	Detection	Surficial
MW-17	23033	Detection	Surficial
MW-18R*	29095	Detection	Surficial
MW-19A**	27140	Detection	Surficial
MW-20A**	27141	Detection	Surficial
Pond 1 (at STW-1)	28824	Surface Water	Surface Water
Pond 2 (at STW-2)	28825	Surface Water	Surface Water
*MW-18R will replace MW-18 due to poor siting and access issues **MW-19 and MW-20 are being replaced with wells CW-19 and CW-20 due to poor siting and access issues. These wells will be renamed MW-19A and MW-20A respectively. *** Used for water level measurements only.			

Table 2 – Natural Attenuation Monitoring Wells

Testsite Name	Testsite WACS No.	Purpose	Aquifer
NAM-1	29091	Natural Attenuation Monitoring	Surficial
NAM-2	29092	Natural Attenuation Monitoring	Surficial
NAM-3	29093	Natural Attenuation Monitoring	Surficial
NAM-4*	29094	Natural Attenuation Monitoring	Surficial
*NAM-4 is a proposed well.			



- SITE PLAN NOTES**
1. LOCATIONS OF EXISTING PIEZOMETERS, MONITORING WELLS AND STAFF GAUGES OBTAINED FROM SPECIFIC PURPOSE SURVEY BY SARASOTA COUNTY, MARCH 2008.
 2. APPROXIMATE LOCATION OF PHASE I LEACHATE FORCEMAIN OBTAINED FROM RECORD DRAWINGS BY CAMP DRESSER & McKEE, INC. DATED APRIL 1998. VERIFY LOCATION IN FIELD.
 3. APPROXIMATE LOCATION OF LEACHATE FORCEMAIN TO OFFSITE WWTP OBTAINED FROM CONFORMED DRAWINGS BY PBS&J DATED JULY 2005. VERIFY LOCATION IN FIELD.
 4. LOCATION OF CONDENSATE SUMPS OBTAINED FROM PHASE I LFGCCS AS-BUILT DRAWINGS DATED AUGUST 2010.

- LEGEND**
- S-2 LANDFILL GAS CONDENSATE SUMP
 - GP-1 GAS PROBE
 - ⊕ MW-10R GROUNDWATER MONITORING WELL
 - ⊕ GM-1 GAS MONITORING LOCATION
 - WATER SUPPLY WELL
 - ⊕ P-S-1 PHASE II BORING/PIEZOMETER LOCATION
 - ▲ STW-1 STORMWATER MONITORING STATION
 - C-1 LEACHATE MONITORING LOCATION
 - △ POND 1 SURFACE WATER MONITORING LOCATION

- ZONE OF DISCHARGE
- WATERWAY
- LIMITS OF EASEMENT
- EASEMENT CENTERLINE
- EXISTING ROADWAY
- PHASE BOUNDARY
- PROPERTY BOUNDARY
- ⊗ NATURAL ATTENUATION MONITORING WELLS
- TBA = TO BE ABANDONED
- TBD = TO BE DETERMINED

GROUNDWATER MONITORING WELL SCHEDULE				
MONITORING WELL NO.	LATITUDE	LONGITUDE	TOP OF PVC CASING ELEVATION (FT NGVD)	MONITORING WELL NOTES
MW-1R	27°12'19.78"	82°23'3.60"	24.42	1
MW-3	27°12'0.10"	82°22'36.50"	23.34	1,3
MW-5	27°11'47.70"	82°22'26.30"	23.19	1,3
MW-8A	27°12'3.17"	82°23'12.23"	35.40	1
MW-9	27°12'3.22"	82°23'20.61"	35.73	1
MW-10R	27°12'3.12"	82°23'26.21"	31.79	1
MW-15	27°12'3.28"	82°23'31.40"	44.32	1
MW-16	27°12'3.32"	82°23'37.41"	43.73	2
MW-17	27°12'3.58"	82°23'43.68"	46.15	2
MW-18	TBA	TBA	TBA	TBA
MW-18R	TBD	TBD	TBD	TBD
MW-19A	27°12'10.09"	82°23'45.53"	27.52	2
MW-20A	27°12'15.86"	82°23'45.57"	27.52	2

- MONITORING WELL NOTES**
1. LOCATIONS AND ELEVATIONS OBTAINED FROM SPECIFIC PURPOSE SURVEY BY SARASOTA COUNTY, MARCH 2008.
 2. LOCATIONS AND ELEVATIONS OBTAINED FROM ARDAMAN AND ASSOCIATES GROUNDWATER MONITORING INSTALLATION REPORT, AUGUST 13 2009.
 3. THESE WELLS ARE ONLY MONITORED FOR WATER LEVELS.

FIGURE 1

<p>482 SOUTH KELLER ROAD Orlando, FL 32810-6101 TEL. (407) 647-7275 FAX. (407) 647-0624 www.atkinsglobal.com</p> <p>5300 W. BOY SCOUT BOULEVARD TAMPA, FLORIDA 33607 FBPR CERTIFICATE OF AUTHORIZATION NO.24</p>	<p>CLIENT</p> <p>SARASOTA COUNTY</p>	<p>PROJECT</p> <p>CENTRAL COUNTY SOLID WASTE DISPOSAL COMPLEX CLASS I LANDFILL</p>	<p>TASK</p> <p>WATER QUALITY MONITORING PLAN</p>	<p>ORIGINAL 8/01/2012</p> <p>REVISIONS:</p> <p>1. 8/19/2013</p> <p>2. _____</p> <p>3. _____</p> <p>4. _____</p> <p>5. _____</p>	<p>6. _____</p> <p>7. _____</p> <p>8. _____</p> <p>9. _____</p> <p>10. _____</p> <p>11. _____</p> <p>12. _____</p>	<p>Name: _____</p> <p>Florida P.E. No.: _____</p> <p>Address: ATKINS 482 S. Keller Road Orlando, FL 32810-6101</p> <p>Signature _____ Date _____</p>	<p>JOB NO. 00-000.00</p> <p>DRAWN GG</p> <p>DESIGN RS</p> <p>CHECKED _____</p> <p>Q.C. _____</p> <p>SHEET 1/1</p>
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ATTACHMENT 1 Time Sensitive Action Chart		
Specific Condition	Submittal Due Date	Required Item
A.3.	No later than November 6, 2034	Submit permit renewal application
A.6.a,b,c,d	January 6, 2019, January 6, 2024, January 6, 2029	Report containing an updated closure plan, revised closure cost estimate, demonstration the LCS has been water pressure cleaned or inspected by video recording, and an updated operation plan, if procedures have changed
A.7.	January 6, 2019, January 6, 2024, January 6, 2029	Permit fee of \$10,000
C.12.c.	No later than January 6, 2019, January 6, 2024, January 6, 2029 With the permit renewal application	Submit report of jet cleaning and video inspection of LCS piping A summary of the results from all cleaning and inspections during the life of the permit
C.12.f.	Prior to use	Notification of changes of off-site leachate treatment facilities.
C.14.a.	Annually, by January 15th	Submit waste quantity records
C.14.b	Annually, by April 15 th each year	Annual estimate of remaining life and capacity calculations
D.4. and APPENDIX 3 V.H.11.	June 15, 2016, December 15, 2018, June 15, 2021, December 15, 2023, June 15, 2026, December 15, 2028, June 15, 2031, December 15, 2033	Submit water quality monitoring plan evaluation technical reports
D.5.a D.5.b APPENDIX 3 Section V.B.2. D.5.c.	Prior to installation of new wells Within 1 week of well completion and development Upon completion of well installation Within 90 days of installation	Request and receive permit modification Conduct initial sampling Submit Monitoring Well Completion Report for each new or replacement monitoring well Provide survey drawing
E.4.	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
F.1.	Annually	Submit proof financial mechanisms are established and funded
F.2.a. and b.	Annually, by March 1 st each year	Submit revised cost estimate and financial test

PERMITTEE NAME: Sarasota County Solid Waste Operations
 FACILITY NAME: Sarasota Central County Solid Waste Disposal Complex

PERMIT NO: 130542-022-SO/01
 WACS Facility ID: 51614

ATTACHMENT 2
 Facility Permit History

<u>Permit #</u>	<u>Name</u>	<u>Received Date</u>	<u>Issued Date</u>	<u>Description</u>
0130542-007-SO/01	Sarasota Central County Complex Class I LF	2/20/2007	11/18/2008	Phase II Operation permit 5-year duration replaced permit #0130542-002-SO/01
0130542-010-SO/MM	Sarasota CCSWDC Gas System	3/26/2009	6/18/2009	Modification of permit 0130542-007-SO/01 for gas collection system
0130542-013-SO-MM	Sarasota CCSWDC Operation Modification	1/12/10	4/8/2010	
0130542-015-SO/MM	CCSWDC CL I 62-701 Update Modification	8/24/2010	3/15/2011	Modification to Specific Permit Conditions A.2, A.4, C.1, C.5, C.8, D.2, E.1, E.3, E.4, E.6, E.8, E.9, E.10, E.11, F.3, F.5, G.4
0130542-018-SO/MM	Sarasota CCSWDC CCI OP Modification	1/23/2012	5/4/2012	Stormwater discharge operations modification of permit 0130542-007-SO/01
0130542-019-SO/MM	Sarasota Central Ops Modification	6/18/2012	9/14/2012	Modification of permit 0130542-007-SO/01 for surface water monitoring changes
0130542-020-SO/MM	Sarasota CCSWDC Class I	12/13/2012	2/4/2013	Land Operations modification of permit 0130542-007-SO/01
0130542-022-SO/01	Sarasota CCSWDC Class I Operations Renewal	9/18/13	1/6/2014	20-year Operations Renewal permit replaces permit #0130542-007-SO/01
<u>0130542-023-SO/IM</u>	<u>Sarasota CCSWDC Landfill Gas Recovery Facility Modification</u>	<u>2/17/2014</u>	<u>4/3/2014</u>	<u>Intermediate Modification to permit #0130542-022-SO/01</u>