



**FLORIDA DEPARTMENT OF  
ENVIRONMENTAL PROTECTION**

CENTRAL DISTRICT  
3319 MAGUIRE BOULEVARD, SUITE 232  
ORLANDO, FLORIDA 32803-3767

RICK SCOTT  
GOVERNOR

JENNIFER CARROLL  
LT. GOVERNOR

HERSCHEL T. VINYARD JR.  
SECRETARY

February 26, 2013

NOTICE OF PERMIT

Electronic Mail  
[thawkins@wm.com](mailto:thawkins@wm.com)

In the matter of an  
Application for Permit By:

Timothy Hawkins  
Vista Landfill, LLC  
242 West Keene Road  
Apopka, FL 32703

OCD-SW-13-061

Orange County – SW WACS # 87081  
Vista Landfill Class III  
Issue DEP Permit No. SO48-0165969-020 (Incorporates -18, -21, and -22)

Dear Mr. Hawkins:

Enclosed is Permit Number SO48-0165969-020 to modify the Vista Landfill Class III, issued under Sections 403.061(14) and 403.707, of the Florida Statutes.

In response to Permit Application No. SO48-0165969-020 submitted on October 4, 2012, Permit No. SO48-0165969-018 is modified for landfill gas collection system modifications. The landfill gas collection system (LGCS) is an active system designed to be constructed in phases and adjusted on an on-going basis to achieve gas control at the Vista Landfill Class III. The following actions are approved:

- Phased construction of the active gas collection system which includes installation of additional horizontal collectors, vertical wells, tie-ins and associated piping.
- On-going maintenance and modifications to the gas system as needed including: replacement, re-drilling, relocation, raising and decommissioning of existing wells as needed to achieve overall gas control.

Permit No. SO48-0165969-018 is modified by adding Specific Conditions E.2, E.3 and E.4 (below) which are applicable for each future LGCS phase of construction and on-going maintenance of the gas system.

The permit has also been rewritten into the new format used by the Solid Waste Program and includes an updated water quality monitoring implementation schedule (MPIS) to reflect correct Rule references.

Also, permit SO48-0165969-020 incorporates the following modifications previously made to SO48-0165969-018:

SO48-0165969-021

- clarification of materials acceptable for composting
- issued November 4, 2012
- included a revision to Section C. Yard Trash and Organic Processing and Recycling Facility

SO48-0165969-022

- removal of requirement for annual leachate sampling
- issued October 23, 2012
- included a revised MPIS

Any party to this order (permit) has the right to seek judicial review of the permit under section 120.68 of the 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 Orlando, Florida.


STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION



Jeff Prather  
Director, Central District

FILING AND ACKNOWLEDGMENT

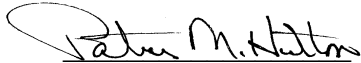
FILED, on this date, pursuant to Section 120.52, F. S., with the designated Department Clerk, receipt of which is hereby acknowledged.

  
Clerk

February 26, 2013  
Date

# CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT and all copies were sent before the close of business on February 26, 2013 to the listed persons.



Clerk

JP/ftl/kr

Enclosure

1. Permit No. SO48-0165969-020

Copies furnished to:

Richard Tedder, P.E. – DEP – Tallahassee, [Richard.Tedder@dep.state.fl.us](mailto:Richard.Tedder@dep.state.fl.us)

FDEP Solid Waste Financial Coordinator – [Soild.waste.financial.coordinator@dep.state.fl.us](mailto:Soild.waste.financial.coordinator@dep.state.fl.us)

Sheree Grant, Waste Management Inc. of Florida, [sgrant@wm.com](mailto:sgrant@wm.com)

Paul Bermillo, Waste Management Inc. of Florida, [pbermillo@wm.com](mailto:pbermillo@wm.com)

Jay Davoll, P.E., City of Apopka, [jdavoll@apopka.net](mailto:jdavoll@apopka.net)

Seth A. Nunes, P.E. – Carlson Environmental Consultants, PC, [snunes@cecenv.com](mailto:snunes@cecenv.com)

Lori Cunniff, OCEPD, [lori.cunniff@ocfl.net](mailto:lori.cunniff@ocfl.net)

David Bromfeld, P.E., OCEPD, [david.bromfeld@ocfl.net](mailto:david.bromfeld@ocfl.net)



**FLORIDA DEPARTMENT OF  
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RICK SCOTT  
GOVERNOR

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LT. GOVERNOR

HERSCHEL T. VINYARD JR.  
SECRETARY

Permit Issued to:

Vista Landfill, LLC  
242 West Keene Road  
Apopka, Florida 32703  
(352) 368-1890

Facility WACS ID No.: 87081  
Vista Landfill Class III  
242 West Keene Road  
Apopka, Florida 32703

Contact Person:

Mr. Timothy Hawkins, Vice President  
[thawkins@wm.com](mailto:thawkins@wm.com)

**Solid Waste Operation Permit – Class III Intermediate Modification**

Permit Modification No. SO48-0165969-020  
Replaces Permit No. SO48-0165969-018  
Incorporates Permit Nos. SO48-0165969-021 & -022

Permit Issued: 02/26/2013  
Permit Renewal Application Due Date: 02/18/2016  
Permit Expires: 04/19/2016

**Permitting Authority**

Florida Department of Environmental Protection  
Central District Office  
3319 Maguire Boulevard, Suite 232  
Orlando, FL 32803  
(407) 897-4100

## **SECTION 1 - SUMMARY INFORMATION**

### **A. Authorization**

The permittee is hereby authorized to operate a solid waste disposal facility (Class III Landfill) 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, and Florida Administrative Code Chapters 62-4, 62-701, 62-709, and 62-711.

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 permit 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 is located at 242 W. Keene Road, Apopka, Orange County, Florida in Section 28, Township 21 South, Range 28 East (Latitude 28° 38' 24.5" N and Longitude 81° 30' 41.7" W).

### **C. Facility Description**

The above named permittee is hereby authorized to operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

#### **Disposal Facility**

- The Vista Class III Landfill consists of 12 cells (Cells 1 through 12); the cells will be constructed in 3 Phases. The total disposal area is approximately 102 acres.
  - Phase 1 consists of Cells 1 through 4 (35.5 acres). Cells 1, 2 and 3 have been constructed and are being used for disposal.
  - Phase 2 consists of Cells 5 through 8. The cells have not been constructed.
  - Phase 3 consists of Cells 9 through 12. The cells have not been constructed.
  - Property Boundary Setback Variance. On November 2, 2000, the Department issued an order granting a variance, SWVA No. 00-02, allowing a reduction of the waste disposal setback from 100 feet to 50 feet of the boundary on the west, south and east sides of Cells 1 through 4.

- Potable Water Well setback. There was a potable water well less than 500 feet from the eastern edge of the landfill footprint that was in existence before the landfill was permitted to expand into that area. It supplied drinking water for 138, 146, and 166 West Keene Road. A report that was signed and sealed by Andrew J. Schier, P.E., states that the residences affected (138, 146 and 166 West Keene Road) that are owned by Bennie Brown have been connected to public water supply system. A letter from Bennie Brown acknowledges that the wells located on the affected properties are not used for potable water supply, and that the drinking water is supplied by the City of Apopka. Therefore, there is no disposal area setback restriction due to potable wells on the east side of the facility.
- Permit SO48-0165969-018 renewed operation permit SO48-0165969-015. It authorizes the continued operation of the Vista Class III Landfill and adds the operation of the organics processing and recycling facility.
- The construction permit SC48-0165969-019 for construction of Phases I and II, cells 3-8 was issued 10/30/2012
  - Cell 1 (7.39 acres) DEP approved Certification of Construction Completion for liner system and leachate on 12/12/2008.
  - Cell 2 (9.54 acres) DEP approved Certification of Construction Completion for liner system and leachate on 1/20/2010.
  - Cell 3 (7.6 acres) DEP approved Certification of Construction Completion for liner system and leachate on December 4, 2012.
  - Cells 1, 2 and 3 have a geomembrane liner with a leachate collection system. Leachate is collected in sump and is pumped to a 160,000 gallons storage tank. Leachate from the tank is conveyed to a municipal sanitary sewer line to be disposed of at the City of Apopka Wastewater Treatment Plant.
- The landfill is designed with an active gas control system. This permit approves the following actions for the gas control system:
  - Phased construction of the active gas collection system which includes installation of additional horizontal collectors, vertical wells, tie-ins and associated piping.
  - On-going maintenance and modifications to the gas system as needed including: replacement, re-drilling, relocation, raising and decommissioning of existing wells as needed to achieve overall gas control.

#### **Waste Tire Processing Facility**

- Permit No. WT48-0165969-016 was issued to operate a small waste tire processing facility. The permit expires 9/16/2014. The facility will receive tires and store them

in 30-cubic yard metal storage containers. Utilizing a mobile shredder, a tire shredding contractor will process the whole waste tires into smaller fragments. The shredder will be used less than 120 days each time it is mobilized to Vista Landfill. The contractor needs have a current General Permit prior to mobilization and processing tires at the facility. The processed waste tires will be beneficially re-used within the landfill as either daily cover material or temporary road base within the lined disposal area.

#### **Material Recovery Facility**

- Permit No. SO48-0165969-017 was issued to construct and operate a Waste Processing Facility at the property. The permit expires 05/05/2015. According to that permit, Vista Materials Recovery Facility will recover recyclable materials from Class III and Construction and Demolition Debris (C&DD) waste including concrete, roofing materials, wood, metal, plastic, glass, and others, recyclable and reusable construction materials. Recyclables and residual waste will be sorted and removed on a first in, first out basis. All residual waste, Class III and C&DD shall be disposed of at the Vista Landfill, LLC, Class III.

#### **Yard Trash and Organic Processing and Recycling Facility**

- The active compost area (including the pre-consumer vegetative waste [PVW] delivery and mixing areas) is approximately 13,000 square feet. It is constructed with a foundation and surface pavement to support the composting equipment and facilitate proper site cleanup. The pavement surface is included in the Environmental Resource Permit (ERP) Number ERP48-0111044-006 EM. The ERP permit was issued 4/2/2009 and expired 3/31/2011 (for construction). There is no expiration date for operation of the stormwater system.
- The facility is capable of processing 45,000 tons of PVW per year or 173 tons per days. The yard trash delivery and processing (size reduction) are is approximately 75,000 square feet. It is an aerobic composting system. Expected retention time for the active composting phase is approximately 45 days. During the active composting process, the compost piles are turned over and reformed up to three times. The piles are covered between turns. Once cured, the finished product will be shipped to landscapers, and horticultural and agricultural users.
- The expected sources of the material are the following:
  - Yard Trash (including clean wood)
  - Manure
  - Animal byproducts
  - Vegetative wastes
  - Pre-consumer vegetative wastes
- The landfill expects to receive approximately 2,500 tons of waste per day.

- Environmental Resource Permit (ERP) Number ERP48-0817635-008 EM for the stormwater collection and treatment system was issued 06/10/2011; it expires 6/10/2016.

#### **D. Appendices Made Part of This Permit**

APPENDIX 1 - General Conditions

APPENDIX 2 – List of Documents Incorporated into this combined Permit

APPENDIX 3 – Water Quality Monitoring Plan Implementation Schedule (MPIS) dated “10/1/2012 updated 2/4/2013”

### **SECTION 2 - SPECIFIC CONDITIONS**

#### **A. Administrative Requirements**

1. Documents Part of This Permit. The permit application as finally revised, replaced or amended in responses to the Department's Requests 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 or monitoring 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 in writing within 30 days: (1) of any sale or conveyance of the facility; (2) if a new or different person takes ownership or control of the facility; or (3) if the facility name is changed.
5. Air Construction Permit Requirements
  - a. 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 Vista Landfill is included as part of the Facility's Title V permit (included with the Keene Road closed landfill). 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.



### **B. Construction Requirements**

[Other than the construction of a landfill gas collection system as described in Section 2.E below, no construction is authorized by this permit.]

### **C. Operation Requirements**

1. General Operating Requirements. The Permittee shall operate the facility in accordance with the approved Operation Plan. 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. (As of the issued date of this permit, the latest approved Operation Plan was dated November 2012 and received by the Department on November 21, 2012.)
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 and Material 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 III waste
    - 2) Yard trash / organic materials (as outlined above)
    - 3) Waste tires (Permit No. WT48-0165969-016)
    - 4) Recovered materials (Permit No. SO48-0165969-017)
  - b. Other Wastes Specifically Authorized:
    - 1) Asbestos
    - 2) CCA treated wood
  - c. The composting operation at Vista Class III Landfill is hereby authorized to operate as a vegetative, animal byproducts and/or manure composting facility and may process the following:
    - 1) Yard Trash (including clean wood)
    - 2) Manure
    - 3) Animal byproducts
    - 4) Vegetative wastes
    - 5) Pre-consumer vegetative wastes
4. Unauthorized Waste Types. The facility is not authorized to accept or manage any waste types not listed in C.2 above. 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 shall not exceed 156 feet NGVD. The final contours are depicted on Figure 3 of 4, LFG Final Buildout Plan, dated August 2012 (reference 5, APPENDIX 2).
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 Cover shall be applied as follows:
  - a. Initial Cover: Initial cover shall be applied at least once per week, Rule 62-701.500(7)(e)2, F.A.C. A mixture of clean soil and vegetative waste (mulched yard trash and land clearing debris) may be used for initial cover, when available. This mixture may contain no more than 50% by volume of mulched vegetative waste.
  - b. Intermediate Cover: Stabilization of the fill areas using intermediate cover of one (1) foot of compacted earth in addition to the six (6) inch initial cover shall be applied within seven (7) days of cell completion if additional solid waste will not be deposited within 180 days of cell completion. All or part of the intermediate cover may be removed prior to placing additional waste or installing final cover, Rule 62-701.500(7)(f), F.A.C.
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 the Solid Waste Section of DEP's Central District at (407)897-4304.
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, 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 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.
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 20<sup>th</sup>. 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. 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 Section, MS 4565  
2600 Blair Stone Road  
Tallahassee, Florida, 32399-2400
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.
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. Zone of Discharge. The zone of discharge for the facility shall be a three dimensional volume, defined in the horizontal plane as extending 100 feet from the edge of the solid waste deposit, or to the property boundary, whichever is less, as depicted in Attachment B of the MPIS, and defined in the vertical plane as extending from the top of the ground to the bottom of the screen of the lower surficial monitoring wells. Class G-II water quality standards must be met at the boundary of the zone of discharge in accordance with Chapter 62-520.420, F.A.C.
2. Electronic Reporting. Required water quality monitoring reports and all ground water, surface water and leachate 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 an electronic format consistent with requirements for importing the data into the Department's databases. 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:
  - a. Cover letter;
  - b. Summary of exceedances and sampling problems, if any (e.g., variation from SOP field criteria);
  - c. Conclusions and recommendations;
  - d. Ground water contour maps;
  - e. Chain of custody forms;
  - f. Water levels, water elevation table;
  - g. Ground Water Monitoring Report Certification, using the appropriate Department form;
  - h. Appropriate sampling information on Form FD 9000-24 (DEP-SOP-001/01); and,
  - i. Laboratory and Field EDDs and error logs, as applicable.

All submittals in response to this specific condition shall be sent to the District Office and to:

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

3. Water Quality Monitoring Plan. The Water Quality Monitoring Plan Implementation Schedule (MPIS) for this permit is included in APPENDIX 3.

### **E. Gas Management System Requirements**

1. Gas System 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 each construction event and before any changes, other than minor deviations, to the approved design are implemented in order to determine whether a permit modification is required.
2. Gas System Construction Disturbed Waste: Any waste disturbed during construction or maintenance of the gas system control devices shall be handled as described in APPENDIX 2, reference 7 (Tab: Intermediate Class III Operation Permit Modification Application Gas Management System, section 1.3.2 Excavated Waste Handling).
3. Gas System Certification of Construction Completion: After each gas system construction event 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 event 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.
4. Operational Requirements. Gas controls shall be operated and maintained so that they function as designed.
5. 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. 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 monitoring event.
6. 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.
7. 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 - Solid Waste Section  
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 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 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](mailto: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.

**H. Long Term Care Requirements**  
[Not Applicable]

Executed in Orange County, Florida.

STATE OF FLORIDA DEPARTMENT  
OF ENVIRONMENTAL PROTECTION

\_\_\_\_\_  
for Jeff Prather  
District Director, Central District

FILED, February 13, 2013, pursuant to Section 120.52, F.S. with the designated Department Clerk, receipt of which is hereby acknowledged.

\_\_\_\_\_  
Clerk

\_\_\_\_\_  
Date

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, 403.727, or 403.859 through 403.861, Florida Statutes (F.S.) 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 personal 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 and 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 this 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.

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 Section 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
11. This permit is transferable only upon Department approval in accordance with Rule 62-4.120 and 62-730.300, Florida Administrative Code (F.A.C.), as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. 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 information) 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

PERMITTEE NAME: Waste Management Inc. of Florida  
FACILITY NAME: Vista Landfill Class III

PERMIT NO.: SO48-0165969-020  
WACS Facility ID: 87081

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.

14. 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: List of Documents Incorporated into this Combined Permit

List of Documents Associated with Permit Modification SO48-0165969-018

1. Permit Renewal Application to Operate Vista Class III Landfill Facility, prepared by HSA Golden, Orlando, Florida, dated February 17, 2011. Received and stamped February 18, 2011, DEP – Central District.
2. Response to FDEP First Request for Additional Information from HSA Golden, dated April 15, 2011. Received and stamped April 15, 2011, DEP – Central District.
3. Response to FDEP Second Request for Additional Information from HSA Golden, dated June 3, 2011. Received and stamped June 13, 2011, DEP – Central District.
4. Financial Assurance Compliance Letter from DEP – Tallahassee dated July 7, 2011 for closure and long-term care.

List of Documents Associated with Permit Modification SO48-0165969-020

5. Intermediate Class III Operation Permit Modification Application, Gas Management System, prepared by Carlson Environmental Consultants, PC, dated October 4, 2012. Received and stamped October 4, 2012, DEP – Central District.
6. First Request for Additional Information from DEP – Central District dated October 30, 2012.
7. Response to First Request for Additional Information from Waste Management Inc. of Florida dated November 19, 2012. Received and stamped November 20, 2012, DEP – Central District.
8. Permit Application Complete Letter from DEP – Central District dated November 29, 2012.

List of Documents Associated with Permit Modification SO48-0165969-021

9. Vista Landfill, Organic Composting Operations Update from Paul Bermillo of Vista Landfill, dated and received June 27, 2012. (The information submitted included a revised Operation Plan received June 27, 2012.)

List of Documents Associated with Permit Modification SO48-0165969-022:

10. Updated Rule Changes (62-701, FAC) received from Paul Bermillo of Vista Landfill dated and received September 21, 2012. (Request for the removal of the requirement for annual leachate sampling.)

**ATTACHMENT A**  
**VISTA CLASS III LANDFILL**  
WACS\_FACILITY: 87081  
**MONITORING SITES**

**Attachment A Table 1--Sorted by Monitoring Site Number**

	<b>Phase</b>	<b>Monitoring Site Number</b>	<b>WACS Well</b>	<b>Well Type</b>	<b>Zone/ Screen</b>	<b>GW Class</b>	<b>WACS Report Type</b>
<b>Ground Water</b>							
1.	1	MW-1A	19335	BG	SHALLOW SURFICIAL	G-II	SEMGW
2.	1	MW-1B	19336	BG	LOWER SURFICIAL	G-II	SEMGW
3.	1	MW-2AR	19337	BG	SHALLOW SURFICIAL	G-II	SEMGW
4.	1	MW-2B	19338	BG	LOWER SURFICIAL	G-II	SEMGW
5.	1	MW-3A	19339	CO	SHALLOW SURFICIAL	G-II	SEMGW
6.	1	MW-3B	19340	CO	LOWER SURFICIAL	G-II	SEMGW
7.	1	MW-4A	19341	CO	SHALLOW SURFICIAL	G-II	SEMGW
8.	1	MW-4B	19342	CO	LOWER SURFICIAL	G-II	SEMGW
9.	1	MW-5A	19343	CO	SHALLOW SURFICIAL	G-II	SEMGW
10.	1	MW-5B	19344	CO	LOWER SURFICIAL	G-II	SEMGW
11.	1	MW-6AR	19345	BG	SHALLOW SURFICIAL	G-II	SEMGW
12.	1	MW-6BR	19346	BG	LOWER SURFICIAL	G-II	SEMGW
13.	1	MW-7A	19347	BG	SHALLOW SURFICIAL	G-II	SEMGW
14.	1	MW-7B	19348	CO	LOWER SURFICIAL	G-II	SEMGW
15.	1	MW-8R	19868	BG	SHALLOW SURFICIAL	G-II	SEMGW
16.	2	*MW-9A	19869	CO	SHALLOW SURFICIAL	G-II	SEMGW
17.	2	*MW-9B	19870	CO	LOWER SURFICIAL	G-II	SEMGW
18.	3	**MW-10A	19871	DE	SHALLOW SURFICIAL	G-II	SEMGW
19.	3	**MW-10B	19782	DE	LOWER SURFICIAL	G-II	SEMGW
20.	2	*MW-11A	19873	DE	SHALLOW SURFICIAL	G-II	SEMGW
21.	2	*MW-11B	19874	DE	LOWER SURFICIAL	G-II	SEMGW
22.	3	**MW-12A	19875	CO	SHALLOW SURFICIAL	G-II	SEMGW
23.	3	**MW-12B	19876	CO	LOWER SURFICIAL	G-II	SEMGW
24.	3	**MW-13A	19877	CO	SHALLOW SURFICIAL	G-II	SEMGW
25.	3	**MW-13B	19878	CO	LOWER SURFICIAL	G-II	SEMGW
26.	2	*MW-14A	21926	CO	SHALLOW SURFICIAL	G-II	SEMGW
27.	2	*MW-14B	21927	CO	LOWER SURFICIAL	G-II	SEMGW
28.	2	*MW-15A	21928	CO	SHALLOW SURFICIAL	G-II	SEMGW
29.	2	*MW-15B	21929	CO	LOWER SURFICIAL	G-II	SEMGW
30.	3	**MW-16A	21930	CO	SHALLOW SURFICIAL	G-II	SEMGW
31.	3	**MW-16B	21931	CO	LOWER SURFICIAL	G-II	SEMGW
32.	3	**MW-17A	21932	BG	SHALLOW SURFICIAL	G-II	SEMGW
33.	3	**MW-17B	21933	BG	LOWER SURFICIAL	G-II	SEMGW
34.	3	**MW-18A	21934	CO	SHALLOW SURFICIAL	G-II	SEMGW
35.	3	**MW-18B	21935	CO	LOWER SURFICIAL	G-II	SEMGW

**ATTACHMENT A**  
**VISTA CLASS III LANDFILL**  
WACS\_FACILITY: 87081  
**MONITORING SITES**

36.	3	**MW-19A	21936	CO	SHALLOW SURFICIAL	G-II	SEMGW
37.	3	**MW-19B	21937	CO	LOWER SURFICIAL	G-II	SEMGW
38.	3	**MW-20A	21938	CO	SHALLOW SURFICIAL	G-II	SEMGW
39.	3	**MW-20B	21939	CO	LOWER SURFICIAL	G-II	SEMGW
40.	3	**MW-21A	21940	CO	SHALLOW SURFICIAL	G-II	SEMGW
41.	3	**MW-21B	21941	CO	LOWER SURFICIAL	G-II	SEMGW
42.	1	MW-FL1	19879	CO	UPPER FLORIDAN	G-II	SEMGW
43.	1	MW-FL2R	19880	CO	UPPER FLORIDAN	G-II	SEMGW
44.	1	MW-FL3	19881	CO	UPPER FLORIDAN	G-II	SEMGW
45.	3	**MW-FL4	19882	BG	UPPER FLORIDAN	G-II	SEMGW
46.	2	*MW-FL5	21942	BG	UPPER FLORIDAN	G-II	SEMGW
47.	2	*MW-FL6	21943	BG	UPPER FLORIDAN	G-II	SEMGW
48.	3	**MW-FL7	21944	BG	UPPER FLORIDAN	G-II	SEMGW
49.	3	**MW-FL8	21945	CO	UPPER FLORIDAN	G-II	SEMGW
50.	3	**MW-FL9	21979	BG	UPPER FLORIDAN	G-II	SEMGW

\*Phase 2-Proposed wells to be installed and sampled before Cells 5-8 are opened.

\*\* Phase 3-Proposed wells to be installed and sampled before Cells 9-12 are opened.

Well Type Codes: (BG) Background    (DE) Detection    (CO) Compliance

**ATTACHMENT A**  
**VISTA CLASS III LANDFILL**  
WACS\_FACILITY: 87081  
**MONITORING SITES**

**Attachment A Table 2—Monitoring Wells Sorted by Phase**

	Phase	Monitoring Site Number	WACS Well	Well Type	Zone/ Screen	GW Class	WACS Report Type
<b>Phase I Monitoring Wells Cells 1-4</b>							
1.	1	MW-1A	19335	BG	SHALLOW SURFICIAL	G-II	SEMGW
2.	1	MW-1B	19336	BG	LOWER SURFICIAL	G-II	SEMGW
3.	1	MW-2AR	19337	BG	SHALLOW SURFICIAL	G-II	SEMGW
4.	1	MW-2B	19338	BG	LOWER SURFICIAL	G-II	SEMGW
5.	1	MW-3A	19339	CO	SHALLOW SURFICIAL	G-II	SEMGW
6.	1	MW-3B	19340	CO	LOWER SURFICIAL	G-II	SEMGW
7.	1	MW-4A	19341	CO	SHALLOW SURFICIAL	G-II	SEMGW
8.	1	MW-4B	19342	CO	LOWER SURFICIAL	G-II	SEMGW
9.	1	MW-5A	19343	CO	SHALLOW SURFICIAL	G-II	SEMGW
10.	1	MW-5B	19344	CO	LOWER SURFICIAL	G-II	SEMGW
11.	1	MW-6AR	19345	BG	SHALLOW SURFICIAL	G-II	SEMGW
12.	1	MW-6BR	19346	BG	LOWER SURFICIAL	G-II	SEMGW
13.	1	MW-7A	19347	BG	SHALLOW SURFICIAL	G-II	SEMGW
14.	1	MW-7B	19348	CO	LOWER SURFICIAL	G-II	SEMGW
15.	1	MW-8R	19868	BG	SHALLOW SURFICIAL	G-II	SEMGW
16.	1	MW-FL1	19879	CO	UPPER FLORIDAN	G-II	SEMGW
17.	1	MW-FL2R	19880	CO	UPPER FLORIDAN	G-II	SEMGW
18.	1	MW-FL3	19881	CO	UPPER FLORIDAN	G-II	SEMGW
<b>*Phase II Monitoring Wells Cells 5-9</b>							
19.	2	*MW-9A	19869	CO	SHALLOW SURFICIAL	G-II	SEMGW
20.	2	*MW-9B	19870	CO	LOWER SURFICIAL	G-II	SEMGW
21.	2	*MW-11A	19873	DE	SHALLOW SURFICIAL	G-II	SEMGW
22.	2	*MW-11B	19874	DE	LOWER SURFICIAL	G-II	SEMGW
23.	2	*MW-14A	21926	CO	SHALLOW SURFICIAL	G-II	SEMGW
24.	2	*MW-14B	21927	CO	LOWER SURFICIAL	G-II	SEMGW
25.	2	*MW-15A	21928	CO	SHALLOW SURFICIAL	G-II	SEMGW
26.	2	*MW-15B	21929	CO	LOWER SURFICIAL	G-II	SEMGW
27.	2	*MW-FL5	21942	BG	UPPER FLORIDAN	G-II	SEMGW
28.	2	*MW-FL6	21943	BG	UPPER FLORIDAN	G-II	SEMGW
<b>**Phase III Monitoring Wells Cells 9-12</b>							
29.	3	**MW-10A	19871	DE	SHALLOW SURFICIAL	G-II	SEMGW
30.	3	**MW-10B	19782	DE	LOWER SURFICIAL	G-II	SEMGW
31.	3	**MW-12A	19875	CO	SHALLOW SURFICIAL	G-II	SEMGW

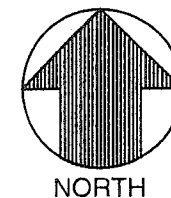
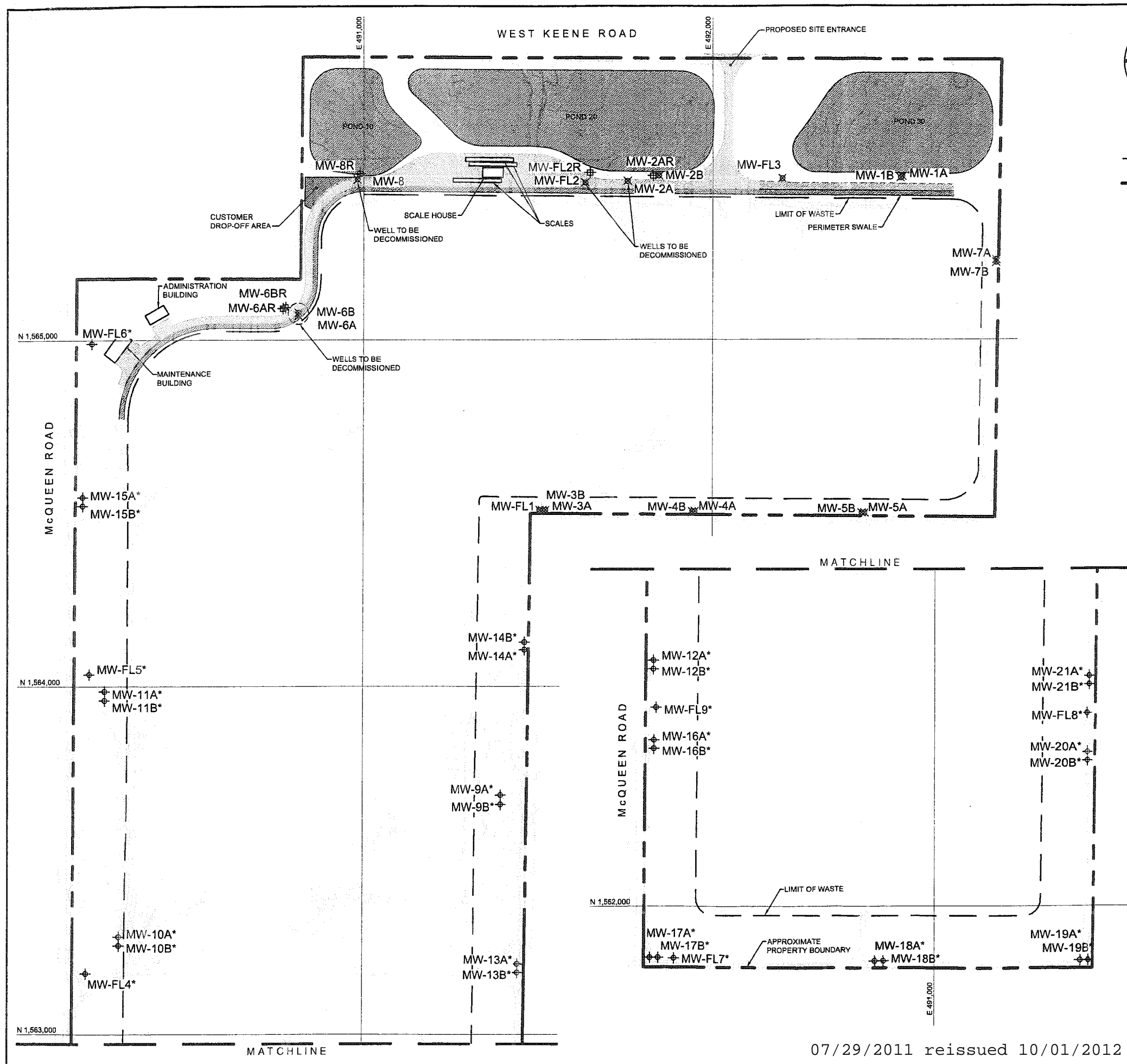
**ATTACHMENT A**  
**VISTA CLASS III LANDFILL**  
WACS\_FACILITY: 87081  
**MONITORING SITES**

32.	3	**MW-12B	19876	CO	LOWER SURFICIAL	G-II	SEMGW
33.	3	**MW-13A	19877	CO	SHALLOW SURFICIAL	G-II	SEMGW
34.	3	**MW-13B	19878	CO	LOWER SURFICIAL	G-II	SEMGW
35.	3	**MW-16A	21930	CO	SHALLOW SURFICIAL	G-II	SEMGW
36.	3	**MW-16B	21931	CO	LOWER SURFICIAL	G-II	SEMGW
37.	3	**MW-17A	21932	BG	SHALLOW SURFICIAL	G-II	SEMGW
38.	3	**MW-17B	21933	BG	LOWER SURFICIAL	G-II	SEMGW
39.	3	**MW-18A	21934	CO	SHALLOW SURFICIAL	G-II	SEMGW
40.	3	**MW-18B	21935	CO	LOWER SURFICIAL	G-II	SEMGW
41.	3	**MW-19A	21936	CO	SHALLOW SURFICIAL	G-II	SEMGW
42.	3	**MW-19B	21937	CO	LOWER SURFICIAL	G-II	SEMGW
43.	3	**MW-20A	21938	CO	SHALLOW SURFICIAL	G-II	SEMGW
44.	3	**MW-20B	21939	CO	LOWER SURFICIAL	G-II	SEMGW
45.	3	**MW-21A	21940	CO	SHALLOW SURFICIAL	G-II	SEMGW
46.	3	**MW-21B	21941	CO	LOWER SURFICIAL	G-II	SEMGW
47.	3	**MW-FL4	19882	BG	UPPER FLORIDAN	G-II	SEMGW
48.	3	**MW-FL7	21944	BG	UPPER FLORIDAN	G-II	SEMGW
49.	3	**MW-FL8	21945	CO	UPPER FLORIDAN	G-II	SEMGW
50.	3	**MW-FL9	21979	BG	UPPER FLORIDAN	G-II	SEMGW

\*Phase 2-Proposed wells to be installed and sampled before Cells 5-8 are opened.

\*\* Phase 3-Proposed wells to be installed and sampled before Cells 9-12 are opened.

Well Type Codes: (BG) Background    (DE) Detection    (CO) Compliance



300 150 0 300  
SCALE IN FEET

#### LEGEND

- APPROXIMATE PROPERTY BOUNDARY
- - - EXISTING GROUND CONTOUR (SEE NOTE 1)
- TREE LINE
- UNIMPROVED / DIRT ROAD
- IMPROVED / PAVED ROAD
- FENCE
- SPOT ELEVATION
- ✕ MW-8 EXISTING MONITORING WELL
- ✕ MW-FL2 EXISTING FLORIDAN AQUIFER MONITORING WELL
- ⊕ MW-8R RELOCATED MONITORING WELL
- ⊕ MW-FL2R RELOCATED FLORIDAN AQUIFER MONITORING WELL
- ⊕ MW-9\* PROPOSED MONITORING WELL
- ⊕ MW-FL5\* PROPOSED FLORIDAN AQUIFER MONITORING WELL

#### NOTES:

1. AERIAL TOPOGRAPHIC MAP PREPARED BY LANDAIR MAPPING, INC. AND COMPILED FROM PHOTOGRAPH DATED JUNE 2006. CONTOURS PORTRAYED AS DASHED OR BROKEN LINES REPRESENT AREAS OF DENSE VEGETATION AND SHOULD BE CONSIDERED APPROXIMATE. THIS MAP HAS NOT BEEN FIELD VERIFIED. THIS MAP SHOULD BE FIELD VERIFIED PRIOR TO USE AS A BASIS FOR CONSTRUCTION.
2. HORIZONTAL AND VERTICAL CONTROL WAS ESTABLISHED BY LANDAIR MAPPING, INC. HORIZONTAL COORDINATE VALUES ARE BASED UPON THE NORTH AMERICAN DATUM OF 1983 (NAD83), FLORIDA EAST ZONE. CONTOURS AND SPOT ELEVATIONS ARE BASED ON THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 (NGVD29).

GROUND WATER MONITORING NETWORK

KEENE ROAD SOUTH CLASS III LANDFILL



**GeoSyntec Consultants**

TAMPA, FLORIDA

PROJECT NO. FL1066.01	FIGURE NO. 1
DATE. JANUARY 2007	FILE NO. FL1066.01F002

07/29/2011 reissued 10/01/2012 MPIS

RECEIVED  
JAN 08 2007  
Central Dist. - DEP

ATTACHMENT B



# ATTACHMENT C

## Florida Department of Environmental Protection

3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-3767

### MONITORING WELL COMPLETION REPORT FORM

Facility Name: <b>Vista Class III Landfill</b>		Date:
DEP Permit No.:	WACS Facility ID #: <b>87081</b>	
WACS Monitoring Site ID #:	WACS Monitoring Site Name:	
Well Type: <input type="checkbox"/> Background <input type="checkbox"/> Detection <input type="checkbox"/> Compliance <input type="checkbox"/> Other _____		
LATITUDE AND LONGITUDE (See Next Page 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:	
Filter Interval Covered:	Filter Interval: _____ To _____ (BLS)	
Sealant Type:	Sealant Interval: _____ To _____ (BLS)	
Grout Type:	Grout Interval: _____ To _____ (BLS)	
Top Of Casing Elev. (NGVD):	Ground Surface Elev. (NGVD):	
Post Development Water Level Elev. (NGVD):	Date And Time Measured:	
Describe Well Development:		
Remarks:		
Name Of Person Preparing Report:		
Organization:	Phone Number:	

**NOTE** Attach As-Built Mw Construction Diagram, Lithologic Log, And Survey Drawing (See Next Page).  
(NGVD)=National Geodetic Vertical Datum Of 1929 (BLS) = Below Land Surface

DEP Form 62-520.900(3) Effective April 14, 1994

### Additional Survey Notes:

1. Latitude and Longitude Requirements and Definitions:
  - a. **Latitude** must be measured in degrees, minutes and seconds, to at least two (2) decimal places.
  - b. **Longitude** must be measured in degrees, minutes and seconds, to at least two (2) decimal places.
  - c. **Eastings and northings** (State Plane Coordinates) **must** be converted to latitude and longitude.
  - d. **Coordinate Accuracy:** the measured, estimated degree of correctness of the measurement. An accuracy of 15 feet or 5 meters is required.
  - e. **Datum:** the horizontal reference for measuring locations on the Earth's surface. NAD83-North American Datum of 1983 is preferred.
  - f. **Elevation Datum:** the reference datum from which elevation measurements are made. NGVD29 (National Geodetic Vertical Datum of 1929 is required).
  - g. **Collection Method:** the method or mechanism used to derive the measurements, e.g. GPS, map, aerial photo, etc.
  - h. **Collection Date:** the date and time on which the measurements were taken.
  - i. **Collector Name:** the name of the person taking the measurement.
  - j. **Collector Affiliation:** the agency or company for whom the collector works.
2. As specified in the MPIS, One (1) paper copy and one (1) electronic copy of a drawing must be submitted within thirty (30) days following monitoring well installation showing the location of all monitoring wells (active and abandoned), 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 NGVD with an accuracy of 0.01 feet. The latitude and longitude of each well in degrees, minutes and seconds, to two (2) decimal places, with an accuracy of 15 feet, 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, F.A.C.]
3. If a monitoring well is being replaced or new wells are being added to an existing ground water monitoring plan, only the new wells needs to be surveyed as long as all other monitoring wells in the MPIS have been surveyed and certified by a Florida Licensed Surveyor and Mapper and there is no reason to believe that the elevations have changed. This location and elevation determinations and the certification must be provided with the Monitoring Well Completion Form for the new well,.

**Attachment D**  
**REQUIREMENT FOR SUBMITTING**  
**ELECTRONIC WATER QUALITY DATA**  
**TO THE FDEP CENTRAL DISTRICT SOLID WASTE PROGRAM**

**2/4/2013**

**I. General Information**

Electronic versions of monitoring reports and all ground water, surface water and leachate analytical results for the Solid Waste Program shall be submitted to the Department on compact disc, DVD, or flash drive media readable by Microsoft Windows. Water quality monitoring reports shall be submitted in Adobe pdf format.

Unless otherwise approved by the Department, the water quality Electronic Data Deliverable (EDD) shall be compatible with software called Florida DEP Automated Data Processing Tool (ADaPT). ADaPT has been developed to evaluate and upload water quality data into the Department's Water Assurance Compliance System (WACS) database. A copy of this ADaPT software with installation instructions and EDD specifications can be downloaded from the following website address: **<ftp://ftp.dep.state.fl.us/pub/WACS-ADaPT/>** (Rules 62-160.240 and 62-160.340, F.A.C.)

**II. Monitoring Report**

Two electronic copies of the water quality monitoring report shall be submitted. The electronic version of the monitoring report shall be submitted in Adobe pdf format, with the EDDs as separate files on the electronic media.

The Monitoring Report shall include the following items:

1. Cover letter;
2. Summary of exceedances and sampling issues (if any, for example, 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 Report Certification, using the appropriate Department form (**Attachment E**);
8. Required sampling information on Form FD 9000-24 (DEP-SOP-001/01) (**Attachment F**);
9. Laboratory and Field EDDs that are compatible with ADaPT software and the ADaPT error log(s).

(NOTE: You no longer have to complete or submit the DEP Form 62-522.900(2), Parameter Monitoring Report.)

One copy of the Monitoring Report shall be sent to each:

Florida Department of Environmental Protection  
Central District Solid Waste Program  
3319 Maguire Boulevard, Suite 232  
Orlando, Florida 32803

And to:

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

### III. ADaPT EDDs

The ADaPT EDD consists of two electronic deliverables: (1) a Laboratory EDD, identified as swldd.txt; and (2) a Field EDD identified as swfdd.txt. The Laboratory EDD shall be submitted in a comma separated (.csv format) text file which can be produced through Excel. The Laboratory EDD file name format shall be: WACS Facility I.D. underscore Begin Sampling Date (yyyymm) underscore swldd.txt. The period at the end would not be included. For example, with WACS Facility I.D. # 12345 where sampling started in November and ended in December of 2008, the Laboratory EDD file name should be: 12345\_200811\_swldd.txt

The Field EDD shall be submitted in the same comma separated (.csv format) text file as the Laboratory EDD. The Field EDD file name format shall be: WACS Facility I.D. underscore Begin Sampling Date (yyyymm) underscore swfdd.txt. Again, the period at the end is not included. For example, with WACS Facility I.D. # 12345 where sampling started in November and ended in December of 2008, the file name should be: 12345\_200811\_swfdd.txt

For confirmation sampling, add the term \_conf to the EDD filenames as follows:  
12345\_200811\_conf\_swldd.txt for the Laboratory EDD or 12345\_200811\_conf\_swfdd.txt for the Field EDD.

For data that is resubmitted, add \_#, where # is the number of data submittals (greater than 1). For example, if the data was resubmitted for the first time, and was thus submittal number 2, then the EDD filenames would be as follows: 12345\_200811\_2\_swldd.txt for the Laboratory EDD and 12345\_200811\_2\_swfdd.txt for the Field EDD.

Finally, taking this to an extreme, if confirmation data was resubmitted for say the 10<sup>th</sup> time, then the EDD filenames would be: 12345\_200811\_conf\_10\_swldd.txt for the Laboratory EDD or 12345\_200811\_conf\_10\_swfdd.txt for the Field EDD.

#### IV. Signatures Required

Water quality monitoring reports and interpretative documents (such as recommendations about exceedances and/or contour maps) shall be signed and sealed by a Florida registered professional geologist or professional engineer with experience in hydrogeological investigations. A sealed signature page may be submitted with the electronic copy of the report provided that the seal is legible (gray the embossed seal and scan). Otherwise, you must separately mail the sealed and signed page.

#### V. Process Required

Three steps are generally required. First, two copies of the Laboratory EDD, one in comma separated text format and one as a PDF file, must be submitted by the laboratory. A digitally "signed" PDF copy (read-only file) by the laboratory serves to maintain the integrity of the Laboratory EDD. In order to validate the QA/QC aspects of the Laboratory EDD, the permittee shall ensure the laboratory processes the Laboratory EDD through ADaPT using both their laboratory specific library and the Department's Solid Waste Master library and corrects all critical errors and explains all non-critical errors prior to submittal. Second, the appropriate entity (laboratory, consultant, or permittee) shall process the Field EDD through ADaPT using the Department's Solid Waste Master library and correct all critical errors and explain all non-critical errors prior to submittal. Finally, as a completeness check, the permittee or consultant shall process both the Laboratory EDD and the Field EDD through ADaPT and confirm a successful export to disk prior to submitting the Laboratory EDD, Field EDD and ADaPT error log(s) to the Department.

#### VI. Resources

In the event help is needed to prepare these EDDs, you can contact the Central District Solid Waste staff, especially Ms. Marjorie Heidorn, (407) 897-4302 or by e-mail at [Marjorie.Heidorn@dep.state.fl.us](mailto:Marjorie.Heidorn@dep.state.fl.us)

You can also receive assistance by contacting Mr. Clark Moore (850-245-8739 or by e-mail at [clark.b.moore@dep.state.fl.us](mailto:clark.b.moore@dep.state.fl.us)) or Mr. Lee Martin (850-245-8734 or by e-mail at [lee.martin@dep.state.fl.us](mailto:lee.martin@dep.state.fl.us)) in FDEP Tallahassee.

ATTACHMENT E

# Florida Department of Environmental Protection

3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-3767

## GROUND WATER MONITORING REPORT

Rule 62-522.600(11)

### PART I GENERAL INFORMATION

- (1) Facility Name Vista Class III Landfill  
Address \_\_\_\_\_  
City \_\_\_\_\_ Zip \_\_\_\_\_ County \_\_\_\_\_  
Telephone Number ( ) \_\_\_\_\_ E-mail address \_\_\_\_\_
- (2) WACS\_Facility 87081
- (3) DEP Permit Number \_\_\_\_\_
- (4) Authorized Representative's Name \_\_\_\_\_ Title \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ Zip \_\_\_\_\_ County \_\_\_\_\_  
Telephone Number ( ) \_\_\_\_\_ E-mail address \_\_\_\_\_
- (5) Type of Discharge \_\_\_\_\_
- (6) Method of Discharge \_\_\_\_\_

### CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submission of false information including the possibility of fine and imprisonment.

\_\_\_\_\_  
Date Owner or Authorized Representative's Signature

### PART II QUALITY ASSURANCE REQUIREMENTS

Sampling Organization Comp QAP # \_\_\_\_\_  
Analytical Lab NELAC #/ HRS Certification \_\_\_\_\_  
Lab Name \_\_\_\_\_  
Address \_\_\_\_\_  
Phone Number ( ) \_\_\_\_\_  
E-mail Address \_\_\_\_\_



**Attachment F**  
**WATER SAMPLING LOG**  
 DEP-SOP-001/01 FS 2200 Groundwater Sampling  
**Form FD 9000-24**

FACILITY NAME: <b>Vista Class III Landfill WACS# 87081</b>		FACILITY LOCATION:	
MONITORING_SITE_NUM:		WACS_WELL:	
DATE:			

**PURGING DATA**

WELL DIAMETER (inches):	TUBING DIAMETER (inches):	WELL SCREEN INTERVAL DEPTH:      feet to      feet	STATIC DEPTH TO WATER (feet):	PURGE PUMP TYPE OR BAILER:
<b>WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY</b> only fill out if applicable <div style="text-align: right; margin-right: 50px;">= (      feet –      feet) X      gallons/foot =      gallons</div>				
<b>EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME</b> (only fill out if applicable) <div style="text-align: right; margin-right: 50px;">=      gallons + (      gallons/foot X      feet) +      gallons =      gallons</div>				
INITIAL PUMP OR TUBING DEPTH IN WELL (feet):		FINAL PUMP OR TUBING DEPTH IN WELL (feet):		PURGING INITIATED AT:
				PURGING ENDED AT:
TOTAL VOLUME PURGED (gallons):				

TIME	VOLUME PURGED (gallons)	CUMUL. VOLUME PURGED (gallons)	PURGE RATE (gpm)	DEPTH TO WATER (feet)	pH (standard units)	TEMP. (°C)	COND. (µmhos/c m or µS/cm)	DISSOLVED OXYGEN (circle mg/L or % saturation)	TURBIDITY (NTUs)	COLOR (describe)	ODOR (describe)

**WELL CAPACITY (Gallons Per Foot):** 0.75" = 0.02; 1" = 0.04; 1.25" = 0.06; 2" = 0.16; 3" = 0.37; 4" = 0.65; 5" = 1.02; 6" = 1.47; 12" = 5.88  
**TUBING INSIDE DIA. CAPACITY (Gal./Ft.):** 1/8" = 0.0006; 3/16" = 0.0014; 1/4" = 0.0026; 5/16" = 0.004; 3/8" = 0.006; 1/2" = 0.010; 5/8" = 0.016

**SAMPLING DATA**

SAMPLED BY (PRINT) / AFFILIATION:				SAMPLER(S) SIGNATURES:				SAMPLING INITIATED AT:		SAMPLING ENDED AT:	
PUMP OR TUBING DEPTH IN WELL (feet):				SAMPLE PUMP FLOW RATE (mL per minute):				TUBING MATERIAL CODE:			
FIELD DECONTAMINATION:    Y    N				FIELD-FILTERED:    Y    N      FILTER SIZE:      µm Filtration Equipment Type: _____				DUPLICATE:      Y      N			
SAMPLE CONTAINER SPECIFICATION				SAMPLE PRESERVATION				INTENDED ANALYSIS AND/OR METHOD		SAMPLING EQUIPMENT CODE	
SAMPLE ID CODE	# CONTAINERS	MATERIAL CODE	VOLUME	PRESERVATIVE USED	TOTAL VOL ADDED IN FIELD (mL)	FINAL pH					

REMARKS:

**MATERIAL CODES:**    AG = Amber Glass;    CG = Clear Glass;    PE = Polyethylene;    PP = Polypropylene;    S = Silicone;    T = Teflon;    O = Other (Specify)

**SAMPLING/PURGING EQUIPMENT CODES:**    APP = After Peristaltic Pump;    B = Bailer;    BP = Bladder Pump;    ESP = Electric Submersible Pump;    PP = Peristaltic Pump  
    RFPP = Reverse Flow Peristaltic Pump;    SM = Straw Method (Tubing Gravity Drain);    VT = Vacuum Trap;    O = Other (Specify)

**NOTES: 1. The above do not constitute all of the information required by Chapter 62-160, F.A.C.**  
**2. STABILIZATION CRITERIA FOR RANGE OF VARIATION OF LAST THREE CONSECUTIVE READINGS (SEE FS 2212, SECTION 3)**  
**pH:** ± 0.2 units **Temperature:** ± 0.2 °C **Specific Conductance:** ± 5% **Dissolved Oxygen:** all readings ≤ 20% saturation (see Table FS 2200-2); optionally, ± 0.2 mg/L or ± 10% (whichever is greater) **Turbidity:** all readings ≤ 20 NTU; optionally ± 5 NTU or ± 10% (whichever is greater)



## **Appendix 3**

### **VISTA Class III Landfill**

**WACS\_FACILITY: 87081**

### **MONITORING PLAN IMPLEMENTATION SCHEDULE (MPIS)**

**10/1/2012 updated 2/4/2013**

#### **GENERAL**

1. This MPIS is becomes part of permit SO48-0165969-018 and is effective from the date of the attached letter. [**62-701.510(1)(b)&(c), 62-520.600(5),(F.A.C.)**]
2. 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.**]
3. 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. Sampling personnel must have a copy of the SOP for purging and sampling in the field when sampling and must be knowledgeable of its contents, procedures, and forms. 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), F.A.C.**]

**NOTE:** DEP-SOP-001/01 can be accessed at:

<http://www.dep.state.fl.us/water/sas/sop/sops.htm>

4. If, at any time, analyses detect parameters which are significantly above background water quality, 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 Zone of Discharge, the Permittee, to confirm the data, shall resample the 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. The permittee must notify the Department within 14 days of receipt of the sampling data whether the original data will be accepted as representative of current ground water conditions or whether resampling will be accomplished to confirm the data.

If the resampling event detects parameters which are significantly above background water quality, 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. Use "CONF" (for confirmation data) in the report type column. [**62-701.510(6)(a), F.A.C.**]

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

### GROUND WATER QUALITY MONITORING

5. The fifty (50) ground water monitoring wells designated for water quality testing and water level measurements are listed on **Attachment A** and are shown on **Attachment B**. [62-701.510(3)(d)2 & 3, F.A.C.]
6. Any initial sample collected from a ground water monitoring well shall be analyzed for the following Initial Sample Ground Water Monitoring Parameters. [62-701.510(5)(b)2, F.A.C.]

Field Parameters	Laboratory Parameters
1. Static water level in wells before purging	1. Chlorides
2. Dissolved oxygen	2. Iron
3. pH	3. Sodium
4. Specific conductivity	4. Nitrate
5. Temperature	5. Total ammonia as N
6. Turbidity	6. Total Dissolved Solids
7. Colors and sheens (by observation)	7. Those parameters listed in 40 CFR Part 258 Appendix II

\* Mercury not on list because it is included in Appendix II

7. Semi-annual samples from the fifty (50) ground water monitoring wells shall be collected in June and December. The samples shall be analyzed 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. Total ammonia as N
2. Dissolved oxygen	2. Chloride
3. pH	3. Iron
4. Specific conductivity	4. Mercury
5. Temperature	5. Nitrate
6. Turbidity	6. Sodium
	7. Total dissolved solids
	8. Those parameters listed in 40 CFR Part 258 Appendix I

8. Unless otherwise approved by the Department, wells with high turbidities must be remediated or reinstalled to reduce the turbidity value to less than 20 NTU prior to sample collection. Should any ground water sample exhibit dissolved oxygen concentrations greater than 20% of oxygen saturation at the field measured temperature, the sampled well must be repurged then resampled as soon as an acceptable dissolved oxygen value has been attained unless it can be demonstrated that in situ ground water contains higher levels of dissolved oxygen. All water quality analyses will be performed on unfiltered samples unless approved by the Department.
9. Please confer with your consultant and analytical laboratory prior to sampling to ensure the analytical method is capable of achieving detection limits at or below the

Groundwater Cleanup Target Levels (GCTLs) 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 that are not water quality standards are used as screening tools and interim guidelines for ground water minimum criteria until standards are promulgated.

### **MONITORING WELL REQUIREMENTS**

10. If a monitoring well or piezometer becomes damaged or inoperable, the Permittee shall notify the Department in writing within seven (7) days. 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. **[62-4.070(3), F.A.C.]**
11. New or replacement monitoring well design or placement must be approved by the Department. Either:
  - a. Proposed well construction details based on site-specific borings must be submitted with all supporting data (grain size distribution analyses, in-situ hydraulic conductivity testing, depth to water, etc.) for the Department's approval prior to well installation. or
  - b. The Department approves in advance of installation that the anticipated lithology and the proposed well construction is similar to close wells in the MPIS and that the final determination of this information (grain size distribution analyses, in-situ hydraulic conductivity testing, depth to water, etc.) can be evaluated by an engineer or geologist at the time of well installation and submitted with the well completion information. (This condition is satisfied for the 17 new wells specified in this MPIS.)
12. Use of hollow stem auger equipment is recommended. Other drilling methods must be approved by the Department prior to well installation. **[62-520.600(3), F.A.C.]**
13. 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.]**
14. An abandonment plan for abandoning any well that is unsuitable for ground water monitoring or for any piezometer must be approved by the Department prior to abandonment. **[62-701.510(3)(d)6, F.A.C.]**

## REPORTING REQUIREMENTS

### FIELD ACTIVITIES

15. 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). **[62-701.510(8)(a), F.A.C.]**

### MONITORING WELL COMPLETION

16. One (1) paper copy and one (1) electronic copy (Adobe pdf format) of **Attachment C Monitoring Well Completion Report** (as modified by the Central District) and required Attachments (for example, construction diagram and lithologic log), 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.

**NOTE:** The top of casing elevation of each well, to an accuracy of 0.01 feet, and the latitude and longitude of each well in degrees, minutes and seconds, to two (2) decimal places, with an accuracy of 15 feet, must be determined and certified by a Florida Licensed Surveyor and Mapper and provided on the form. **[62-701.510(3)(d)1 & 62-532.410, F.A.C.]**

### SURVEYING

17. One (1) paper copy and one (1) electronic copy (Adobe pdf format) of a drawing must be submitted within thirty (30) 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 NGVD 1929 with an accuracy of 0.01 feet. The latitude and longitude of each well in degrees, minutes and seconds, to two (2) decimal places, with an accuracy of 15 feet, 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, F.A.C.]**
18. 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 MPIS 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 Form for the new well,

### DEPTH MEASUREMENTS

19. A total depth measurement must be made on each well at time of permit renewal. This information must be provided as part of permit renewal application. 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.

### INITIAL AND SEMI-ANNUAL SAMPLING

20. Required monitoring reports must be submitted to the Department within sixty (60) days from completion of laboratory analyses. Requirement for submitting the report is outlined in **Attachment D (ADaPT Electronic Reporting Requirement) [Rule 62-701.510(8), F.A.C.]**

### WATER ELEVATIONS

21. Water levels in all monitoring wells, whether sampled or not, all piezometers and all surface water sites must be measured to the nearest 0.01 foot and reported semi-annually.
22. 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.
23. All water level measurements must be made within a one-day period.
24. 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 NGVD 1929, depth to water and calculated water level elevation referenced to NGVD 1929. 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.]**

### GROUND WATER CONTOUR MAPS

25. Ground water elevation contour maps for each monitored aquifer zone must be submitted semi-annually to the Department. 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 NGVD 1929, 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.]**

### **MPIS Technical Report (formerly Biennial Report)**

26. 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 exceeded .
  - c Comparisons among shallow, middle, and deep zone wells;
  - d Comparisons between the corresponding background well 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.
27. One (1) paper and one (1) electronic copy (Adobe pdf format) of the MPIS Technical Report shall be submitted to the Department:

<b>Report</b>	<b>Sampling Periods Covered</b>	<b>Number Of Semi-annual Sampling Events in Report</b>	<b>MPIS Technical Report Due</b>
<b>Mid-Permit Report</b>	June 2011 thru June 2013	5	October 30, 2013
<b>Permit Renewal Report</b>	December 2013-thru December 2015	5	With the Permit SO48-0165969-018 Renewal Application (Due 07/11/2016)

### **Requirements for Electronic Reporting of Water Quality Data**

28. Required water quality monitoring reports and all ground water, and surface water analytical results shall be submitted as described in Attachment **D (ADaPT electronic reporting requirement)**. Required monitoring reports must be submitted to the Department within sixty (60) days from completion of laboratory analyses. **(62-160.240 and 62-160.340, F.A.C.)**
29. Monitoring Plan Implementation Schedule Tracking J.E.D. MPIS for current permit period:

Date	Type	Notation
7/29/2011	Update with Permit Renewal	<ul style="list-style-type: none"><li>• Added ADaPT electronic reporting requirement language.</li><li>• Changed Biennial Report to MPIS Technical Report per Chapter 62-701 F.A.C revision.</li><li>• Revised MW classifications per facility proposed designations 2007/2011.</li></ul>
10/1/2012	Update	<ul style="list-style-type: none"><li>• Removed Leachate Sampling</li></ul>
2/4/2013	Update	<ul style="list-style-type: none"><li>• Updated MPIS document for 8/12/2012 Rule references</li><li>• Attachment D was revised for contact person. No other attachments were changed</li></ul>

### **List of Attachments**

**Attachment A** – Monitoring Well, Surface Water Sampling Point Lists

**Attachment B** – Monitoring Locations Map

**Attachment C** – Monitoring Well Completion Report Form

**Attachment D** – ADaPT Electronic Reporting Requirements

**Attachment E** – Ground Water Monitoring Report Certification Form

**Attachment F** – Water Sampling Log