



Florida Department of Environmental Protection

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

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Jonathan P. Steverson
Secretary

July 7, 2016

NOTICE OF PERMIT

By E-Mail
thawkins@wm.com

In the matter of an
Application for Permit
By:

Mr. Timothy Hawkins, Vice President
Vista Landfill, LLC
242 West Keene Road
Apopka, FL 32703

Orange County – SW WACS I.D.: 87081
Vista Landfill Class III
DEP File No. 0165969-029-SO-MM
(Modification of Permit No. 0165969-028-SO-T3)

Dear Mr. Hawkins:

Enclosed is Permit Number 0165969-029-SO-MM 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. 0165969-029-SO-MM submitted on June 24, 2016, Permit No. 0165969-028-SO-T3 is modified to incorporate a 1,500 standard cubic feet per minute (scfm) utility flare at the facility in addition to the existing two flares located at Keene Road Landfill.

A revised permit is attached. The permit expiration date is not changed; it is June 1, 2036.

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.

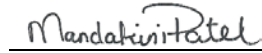
STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



F. Thomas Lubozynski, P.E.
Environmental Administrator
Waste, Air & Stormwater Permitting

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

July 7, 2016
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 July 7, 2016 to the listed persons.


Clerk

FTL/ll

Enclosure: Permit No. 0165969-029-SO-MM

cc:

Deborah Perez, WMIF, dperez@wm.com

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Permit Issued to:

Mr. Tim Hawkins, President
Waste Management Inc. of Florida
2700 Wiles Road
Pompano Beach, FL 33073
(954) 984-2000

WACS Facility ID No.: 87081
Facility Name: Vista Landfill, Class III
Facility Address: 242 West Keene Road
Apopka, Orange County, Florida

Contact Person:
Deborah Perez, District Manager
Vista Landfill, LLC
242 West Keene Road, Apopka, FL 32703
dperez@wm.com
(407) 886-2920

Solid Waste Operation Renewal Permit – Class III Landfill

Permit No.: 0165969-029-SO-MM
Replaces Permit Nos.: 0165969-028-SO-T3

Permit Issued: July 07, 2016
Permit Renewal Application Due Date: April 1, 2036
Permit Expires: June 1, 2036

Permitting Authority

Florida Department of Environmental Protection
Central District Office
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767
(407) 897-4100
DEP_CD@dep.state.fl.us

Changes based on Permit 0165969-029-SO-MM and
necessary updates are shown as ~~strike-through~~ and **blue font**

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, and Florida Administrative Code Chapters 62-4 and 62-701.

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

B. Facility Location

The facility 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 are constructed in 3 Phases. The total disposal area is approximately 102 acres. The landfill has an active landfill gas collection system (LGCS) with on-going phase installation, construction/modification, and maintenance as needed. [There are three utility flares serving both Vista Landfill Class III \(active\) and Keene Road Landfill Class III \(closed\). The existing two flares are located at Keene Road Landfill. The third flare \(which is the reason for the permit modification\) is located at Vista Landfill as shown on sheet F1 of permit modification application \(Appendix 2, Reference 13\)](#)

- Phase 1 consists of Cells 1 through 4 (35.5 acres). Cells 1, 2, 3 and 4 have been constructed and are being used for disposal.
 - 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 12/4/2012.
 - Cell 4 (7.5 acres): DEP approved Certification of Construction Completion for liner system and leachate on 8/20/2015.

Cells 1, 2, 3 and 4 have a geomembrane liner with a leachate collection system. Leachate is collected in a sump and pumped to an 80,000 gallon storage tank. Leachate from the tank is conveyed to a municipal sanitary sewer line to be disposed at the City of Apopka Wastewater Treatment Plant. The leachate may also be used for dust control on the lined portion of the landfill as described in the Operation Plan (Appendix 2, Reference 44 13)

- 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.
- Construction permit SC48-0165969-019 was issued 10/30/2012 and will expire 8/28/2017 for the construction of Phases I and II, cells 3-8. The cell construction remaining is cells 5-8.
- The landfill expects to receive approximately 2,500 tons of waste per day.

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 4 acres. 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) ERP48-0187635-008 EM. The ERP permit was issued 6/10/11.

- The facility is capable of processing 45,000 tons of PVW per year or 173 tons per day. The yard trash delivery and processing (size reduction) area 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 is shipped to landscapers, and horticultural and agricultural users.
- The expected sources of the material are yard trash (including clean wood), manure, animal byproducts, vegetative wastes, and pre-consumer vegetative wastes.

Waste Tire Processing Facility. Permit No. 0165969-023-WT-06 was issued August 12, 2014 for the operation of a small waste tire processing facility. The permit expires 9/16/2019. The facility will receive tires and store them in 30-cubic yard metal storage containers. Utilizing a mobile shredder, a tire shredding contractor processes 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 must 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. 0165969-025-SO-31 was issued to construct and operate a Waste Processing Facility at the property. The permit expires 3/27/2020. According to that permit, Vista Materials Recovery Facility will recover recyclable materials from Class III waste and Construction and Demolition debris (C&D) including concrete, roofing materials, wood, metal, plastic, glass, and other recyclable and reusable construction materials. Waste will be sorted and removed on a first in, first out basis. All residual waste, Class III waste, and C&D debris shall be disposed of at the Vista Landfill, LLC, Class III.

Environmental Resource Permit (ERP) Number ERP48-0187635-008 EM for the stormwater collection and treatment system was issued 06/10/2011. An application to renew the permit (48-0187635-009) is being processed at this time.

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.

Geotechnical and Hydrogeological Investigations were included in the following applications

- Permit Renewal Application (Appendix 2, Reference 5)
- Permit Modification Application (Appendix 2, Reference 6)
- Permit Modification Application (Appendix 2, Reference 7)

Potable Well Surveys were included in the following applications

- Permit Renewal Application (Appendix 2, Reference 5)
- Permit Modification Application (Appendix 2, Reference 6)
- Permit Modification Application (Appendix 2, Reference 7)
- Permit Renewal Application (Appendix 2, Reference 8)

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 the 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.

A Boundary Survey was included in the Permit Renewal Application (Appendix 2, Reference 8)

A Closure Plan was included in the Permit Renewal Application (Appendix 2, Reference 8)

Vista Landfill, Class III has applied for a 20-year permit. The permit application fee is \$16,000 (\$4,000 for each 5 years). The fee for the first 5-year period was paid. The remaining three 5-year installments of \$4,000 will be made on or before each of the five-year due dates. (See Condition 2.A.6.)

D. Appendices Made Part of This Permit

APPENDIX 1 – General Conditions

APPENDIX 2 – Approved Application Documents

APPENDIX 3 – Water Quality Monitoring Plan, dated June 1, 2016

APPENDIX 4 – Site Plan

E. Attachments for Informational Purposes Only

ATTACHMENT 1 - 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. Submittals Required Every Five Years. No later than June 10, 2021, June 10, 2026, and June 10, 2031, the permittee shall submit a 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. (Condition 2.G.3)
 - b. A revised, detailed closure cost estimate, made by recalculating the total cost of closure or long-term care, in current dollars. (Condition 2.F.2.c)
 - c. An updated operation plan. If operational procedures have not changed, submit a statement asserting that. (Condition 2.C.2)
 - d. A demonstration that the leachate collection system has been water pressure cleaned or inspected by video recording. (Condition 2.C.12.c)
 - e. There is no requirement that the site plan or topographic survey be updated at five-year intervals. However, the permittee is encouraged to update its plan to reflect current site conditions, height of disposal units, extent of waste disposal areas, etc.
6. Permit Fee Payments. The total permit fee required for this permit is \$16,000 for a 20-year permit (\$4,000 for each 5 years). The applicant has elected to pay this fee in installments in accordance with Rule 62-701.315(14), F.A.C., and submitted a fee of \$4,000 with this application. No later than June 10, 2021, June 10, 2026, and June 10, 2031, the permittee shall

submit to the Department an installment payment of this fee in the amount of \$4,000. 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

(There is no construction authorized by this permit)

C. Operation Requirements

1. General Operating Requirements. The Permittee shall operate the landfill in accordance with the approved Operation Plan as listed in Appendix 2, Reference ~~H~~ 13. 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.
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 Vista Landfill, Class III and shall be accessible to landfill operators. The Plan shall be updated as operations change but no less frequently than every five years. (See Condition 2.A.5 for due dates.)
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 III waste.
 - 2) Yard trash/organic materials (as outlined below).
 - 3) Waste tires (Permit No. 0165969-023-WT-06).
 - 4) Recovered materials (Permit No. 0165969-025-SO-31).
 - b. Other Wastes Specifically Authorized:
 - 1) Asbestos
 - 2) CCA treated wood
 - c. Composting Operation: The composting operation at Vista Class III Landfill is hereby authorized to operate as a vegetative, animal byproducts, and/or manure composting facility.
 - 1) It may process the following materials:
 - i. Yard Trash (including clean wood)
 - ii. Manure
 - iii. Animal byproducts
 - iv. Vegetative wastes
 - v. Pre-consumer vegetative wastes
 - 2) The composting operation shall meet all applicable requirements in Chapter 62-709, F.A.C., especially the following:
 - i. 62-709.300(8), F.A.C.
 - ii. 62-709.320(2), F.A.C.
 - iii. 62-709.320(4), F.A.C.

- iv. 62-709.350, F.A.C.
- v. 62-709.500(3), (4) & (7), F.A.C.
- vi. 62-709.510, F.A.C.
- vii. 62-709.530, F.A.C.

4. Unauthorized Waste Types. The facility is not authorized to accept, process or dispose any waste types not listed in C.3. above. Any unauthorized waste inadvertently received by the facility shall be managed in accordance with the approved Operation Plan.
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 Drawing Nos. 7 & 8 of 22 (Appendix 2, References 9&10).
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)(f)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)(g), 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 DEP's Central District Office at (407) 897-4100.
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 within 60 days of the activity. (See Condition 2.A.5 for due dates.)
 - 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.
 - e. The exposed exterior of all aboveground tanks shall be inspected weekly by the facility operator for adequacy of the cathodic protection system, leaks, corrosion, and maintenance deficiencies. Interior inspection of tanks shall be performed whenever the tank is drained or at a minimum of every three years. If the inspection reveals a tank or equipment deficiency, leak, or any other deficiency which could result in failure of the tank to contain the leachate, remedial measures shall be taken immediately to eliminate the leak or correct the deficiency. Inspection reports shall be maintained and made available to the Department upon request for the lifetime of the liquid storage system. Rule 62-701.400(6)(c)(9), F.A.C.
 - f. Leachate may be applied to control or prevent dust using a water truck on the active face, top deck cover areas, and on haul roads located within the lined footprint of the landfill. The maximum quantity of leachate shall be limited to no more than four water loads or 20,000 gallon per day. The water trucks that are used to transport leachate shall be rinsed with fresh water prior to dust control use outside the lined area of the landfill.
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. A waste report shall be submitted to the Department annually, no later than the 20th day of January, Rule 62-701.500(4), F.A.C. Waste reports shall include the quantity of the following: types of solid waste received as listed in Rule 62-701.500(4)(b), F.A.C., and quantities of each solid waste type received. Waste records shall be compiled monthly, and copies shall be provided to the Department no less than annually by February 1. This information shall be reported to the Department through the DEP Business Portal located at: <http://www.fldepportal.com/go>.
 - b. Estimate of Remaining Life. The permittee shall submit the annual estimate of the remaining life and capacity by March 1. The report is required by Rule 62-701.500(13)(c), F.A.C. and must be submitted to the District Office at DEP_CD@dep.state.fl.us and to:
Florida Department of Environmental Protection
Solid Waste Section, MS 4565
2600 Blair Stone Road
Tallahassee, Florida, 32399-2400
 - c. Yard Trash and Organic Processing and Recycling Facility. Monthly records of incoming and outgoing material shall be kept on site for at least three years. An annual report, based on the preceding calendar year, shall summarize the monthly records and shall be submitted by July 1 to the Department using Form 62-709.901(3) as required in Rules 62-709.320(1)(c) and (4)(a), F.A.C. The report shall be submitted electronically at DEP_CD@dep.state.fl.us
 - d. Dedicated Loads of C&D. Landfills that knowingly accept dedicated loads of construction and demolition (C&D) debris must submit an annual C&D debris report (Form 62-701.900(7), required by Rule 62-701.730(12), F.A.C.). It must be submitted not later than February 1 of each year and shall cover the preceding calendar year.
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. Any incidental hazardous wastes received in connection with operation of this facility must be disposed of in accordance with Chapter 62-730, F.A.C.
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.
17. Equipment Breakdown. In the event of equipment malfunction, destruction, breakdown or other problems resulting in the permittee being temporarily unable to comply with any of the

conditions of this permit, the permittee shall immediately notify the Department. The notification shall address the cause of the problem, corrective action, and what steps are being taken to prevent a recurrence, as required by Rule 62-4.130, F.A.C.

18. Reserve Equipment. The landfill shall have sufficient reserve equipment available to continue operations, or shall have the ability to obtain additional equipment within 24 hours of equipment breakdown, Rule 62-701.500(11)(b), F.A.C.
19. Effluent Discharge. There shall be no discharge of liquid effluents or contaminated runoff to surface or ground water without prior approval from the Department.
20. Solid Waste Burning. Burning of solid waste is prohibited except in accordance with Rule 62-701.300(3), F.A.C. Any fires at the facility must be reported to the Department in accordance with the operation plan. Also, within five (5) days, a letter explaining the cause, remedial action, and measures taken to prevent a recurrence must be sent to the Department.
21. Improper Operations. When the Department has good reason (such as complaints, questionable maintenance of equipment, or improper operations) to believe that any applicable standard contained in Chapter 62-701, F.A.C. or in this permit is being violated, it may require the landfill owner or operator of the source to identify the nature of the problem and to submit a report to the Department on the results of the investigation and corrective action taken to prevent its recurrence.
22. Control of Nuisance Conditions. The permittee shall be responsible for the control of odors and fugitive particulates from the landfill. Such controls shall prevent the creation of nuisance conditions caused by adverse odors and fugitive particulates, and their effect on adjacent or nearby properties and users. The permittee shall immediately investigate any complaints received from the general public and, where warranted, take corrective action taken to abate the adverse odor or nuisance condition.

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 water quality analytical results shall be submitted electronically as described in Attachment D to the Water Quality Monitoring Plan implementation Schedule (MPIS). 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.
3. Water Quality Monitoring Plan. The Water Quality Monitoring Plan for this permit is called the Monitoring Plan Implementation Schedule (MPIS). The newest version of the MPIS is dated 6/1/2016. It is included as APPENDIX 3. It is made part of this permit. The MPIS or its attachments may be revised or updated at any time. The revised/updated documents will be issued with a new date and will be effective for the next sampling event.

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.
2. Gas System Construction that Disturbs Waste. Any waste disturbed during construction or maintenance of the gas system control devices shall be handled as described in Tab: Intermediate Class III Operation Permit Modification Application Gas Management System, section 1.3.2 Excavated Waste Handling (Appendix 2, Reference 12).
3. Gas System 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.
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 Central District at DEP_CD@dep.state.fl.us under separate cover no later than 15 days after the end of the quarter in which the monitoring occurred.

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 mechanism(s). 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
Solid.Waste.Financial.Coordinator@dep.state.fl.us

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) between January 1 and March 1.
 - c. At the time of permit renewal, and every fifth year because the permit is being issued with a duration greater than five years, the owner or operator shall revise the cost estimate. Revisions shall be made by recalculating the total cost of closure or long-term care, in current dollars. (See Condition 2.A.5 for due dates.)

- d. A revised cost estimate shall be submitted within 30 days of discovery that any of the anticipated costs that formed the basis of the current approved closure cost estimate have changed significantly.
- e. 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.
- f. All submittals in response to this specific condition shall be sent to the District Office at DEP_CD@dep.state.fl.us 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 application (Appendix 2, Reference 8) 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. Closure plans shall be updated at least once every five years (See Condition 2.A.5 for due dates.) to reflect changes in closure design, long-term care requirements, and financial assurance requirements in accordance with the requirements of Rule 62-701.320(10)(b), F.A.C.
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 Central District at DEP_CD@dep.state.fl.us except where minor deviation was necessary. All deviations shall be described in detail and the reasons therefore enumerated.

H. Long Term Care Requirements


(There are currently no closed disposal units in long-term care)

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

PERMIT NO.: 0165969-029-SO-MM
WACS Facility ID: 87081

Executed in Orlando, Florida.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION


F. Thomas Lubozynski, P.E.
Environmental Administrator
Waste, Air & Stormwater Permitting

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


Clerk

July 07, 2016
Date

Enclosures:

1. Appendix 1 – General Conditions
2. Appendix 2 – List of Documents Incorporated into Permit
3. Appendix 3 – Monitoring Plan Implementation Schedule (MPIS)
4. Appendix 4 – Site Plan
5. Attachment – Permit History

APPENDIX 1

General Conditions

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

List of Documents Associated with Permit 0165969-028-SO-T3

1. Application for Renewal of a Solid Waste Operation Permit Vista Landfill, Class III Apopka, Florida. The application was dated February 16, 2016 and received on February 18, 2016 at DEP – Central District. Vista Landfill, LLC has applied for a 20-year permit. Ravi Kadambala, P.E., of SCS Engineers signed and sealed the application as the Engineer of Record. The partial permit application fee of \$4000 (\$16,000.00 for 20 years) was received on February 19, 2016.
2. First Request for Additional Information (RAI) dated February 29, 2016.
3. Response to DEP's RAI dated April 26, 2016 was received on April 27, 2016.
4. Permit Application Complete Letter from Central District – DEP dated May 3, 2016.

Referenced Historical Documents:

5. Application for Keene Road Disposal Class III Landfill Apopka Florida. The application was dated and received on February 14, 2000 at DEP – Central District. Ed Chesney, P.E. of Bishop & Buttrey, Inc. signed and sealed the application as the Engineer of Record.
6. Modification application Keene Road Disposal Class III Landfill Expansion Apopka Florida. The application was dated and received on May 16, 2002 at DEP – Central District. Ed Chesney, P.E. of Bishop & Buttrey, Inc. signed and sealed the application as the Engineer of Record.
7. Application for Keene Road Disposal Class III Landfill Expansion Apopka Florida. The application was dated May 2004 and received on June 17, 2004 at DEP – Central District. Ed Chesney, P.E. of Bishop & Buttrey, Inc. signed and sealed the application as the Engineer of Record.
8. Permit Renewal Application Vista Landfill Class III Facility Apopka Florida. The application was dated February 17, 2011 and received on June 18, 2011 at DEP – Central District. David L. Leggett, P.E. of HSA Golden signed and sealed the application as the Engineer of Record.
9. Substantial Permit Modification Application For A Class III Landfill, Vista Landfill, Class III, Apopka, Florida, Vol. 1 and 2 of 2, Prepared by Geosyntec Consultants, Tampa, Florida dated July 2007. Received and stamped July 30, 2007, Central District – DEP.
10. Full size set of Permit Modification Drawings, Vista Class III Landfill, Apopka, Florida, Prepared by: Geosyntec Consultants, Tampa, Florida, dated July 2007. Received and stamped April 1, 2007, Central District – DEP.
11. Minor Modification Application Vista Landfill, Class III Apopka Florida. The application was dated and received September 29, 2015 at DEP – Central District. Charles Orcutt, P.E., of Waste Management Incorporated signed and sealed the application as the Engineer of Record.
12. Response to First Request for Additional Information of Intermediate Class III Operation Permit Modification Application, Gas Management System, prepared by Carlson Environmental Consultants, PC dated November 19, 2012. Received and stamped November 20, 2012, DEP – Central District.

List of Documents Associated with Permit 0165969-029-SO-MM

13. Minor Permit Modification Application for Gas Management System Vista Landfill Class III Apopka Florida, Prepared by: Carlson Environmental Consultants, PG, Jupiter, Florida, dated June 21, 2016. Received June 24, 2016, Central District – DEP.

Appendix 3

VISTA Class III Landfill

WACS_FACILITY: 87081

MONITORING PLAN IMPLEMENTATION SCHEDULE (MPIS)

06/01/2016

GENERAL

1. This MPIS is part of Permit No. 0165969-028-SO-T3 and is effective from the date of permit. **(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/index.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.

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

GROUND WATER QUALITY MONITORING

5. The fifty (50) ground water monitoring wells (current and proposed) designated for water quality testing and water level measurements are listed on **Attachment A1** 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. Current Phase I monitoring wells (18 wells) are listed on Attachment A2 and shall be sampled as follows:
 - a. Semi-annual samples from the 8 (eight) existing “A” Zone 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.)**

A Zone-Shallow Surficial:

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

- b. Annual samples from the 7 (seven) existing “B” Zone-Lower Surficial ground water monitoring wells shall be collected in **December**. The samples shall be

analyzed for the following Ground Water Monitoring Parameters. **(62-701.510(5)(c) & (7)(a), F.A.C.)**

B Zone-Lower Surficial

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. Sodium
4. Specific conductivity	
5. Temperature	
6. Turbidity	

*The "B" Zone well(s) shall be sampled for the full list of parameters (see "A" Zone list above) if:

- The shallow well for the well cluster(s) shows a verified landfill impact; or
- The indicator data suggests through an increasing trend (or verified sudden jump far above background) that there is a landfill impact to the intermediate well(s);

- c. Deep Zone: The 3 (three) existing Upper Floridan wells shall be used as piezometers with no routine parameter sampling unless there are verified landfill impacts in the intermediate water unit.
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 via e-mail, at least fourteen (14) days prior to the installation and/or sampling of any monitoring well(s). The notification must be submitted in electronic format to DEP_CD@dep.state.fl.us **(62-701.510(8)(a), F.A.C.)**

MONITORING WELL COMPLETION

16. 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 (DEP_CD@dep.state.fl.us) 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) electronic copy (Adobe pdf format) of a drawing must be submitted to DEP_CD@dep.state.fl.us 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 and all piezometers 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 the shallow and intermediate zones only are required to be submitted semi-annually to the Department as part of the Monitoring Report (see Attachment D, Item II.4). 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 and leachate 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 (rather than detected) Comparisons among shallow, middle, and deep zone wells;
 - c Comparisons between the corresponding background well and the water quality in detection and compliance wells;
 - d Correlations between related parameters such as total dissolved solids and specific conductance;
 - e Discussion of erratic and/or poorly correlated data;

- f An interpretation of the ground water contour maps, including an evaluation of ground water flow rates; and
- g An evaluation of the adequacy of the water quality monitoring frequency and sampling locations based upon site conditions.

27. One (1) electronic copy (Adobe pdf format) of the MPIS Technical Report shall be submitted to the Department at DEP_CD@dep.state.fl.us:

Report	Number Of Semi-annual Sampling Events in Report	Sampling Events Covered	MPIS Technical Report Due
1 st 2.5 year Technical Report	5	December 2015 through December 2017	May 31, 2018
2 nd 2.5 year Technical Report	5	June 2018 through June 2020	November 30, 2020
3 rd 2.5 year Technical Report	5	December 2020 through December 2022	May 31, 2023
4 th 2.5 year Technical Report	5	June 2023 through June 2025	November 30, 2025
5 th 2.5 year Technical Report	5	December 2025 through December 2027	May 31, 2028
6 th 2.5 year Technical Report	5	June 2028 through June 2030	November 30, 2030
7 th 2.5 year Technical Report	5	December 2030 through December 2032	May 31, 2033
Permit Renewal Report	6	June 2033 through December 2035	At the time of the Permit Renewal Submittal Due April 1, 2036

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 versions for current permit period:

Date	Type	Notation
7/29/2011	Update with Permit Renewal	<ul style="list-style-type: none"> Added ADaPT electronic reporting requirement language. Changed Biennial Report to MPIS Technical Report per Chapter 62-701 F.A.C revision. Revised MW classifications per facility proposed designations 2007/2011.
10/1/2012	Update	<ul style="list-style-type: none"> Removed Leachate Sampling
2/4/2013	Update	<ul style="list-style-type: none"> Updated MPIS document for 8/12/2012 Rule references Attachment D was revised for contact person. No other attachments were changed
12/2/2014	Update	<ul style="list-style-type: none"> Parameter and Sampling reductions Attachment D updated Attachment E updated Updated Technical Report renewal due date
1/12/2015	Corrected	<ul style="list-style-type: none"> The MPIS document has been corrected to show the “B” zone wells to be sampled annually as previously approved. Attachment “A” has been changed to “A1” and the report names for the “B” zone have been corrected from “SEMGW” to “ANNGW” Attachment A2 has been added to provide a simple list of the wells currently sampled in Phase I Dates have been updated from 12/2/2014 on all documents. If a document date is written “12/2/2014 & 1/12/2015” then there were no changes made to the 12/2/2014 version. A couple of dates (11/24/2014-original draft date) were corrected.
6/1/2016	Update with Permit Renewal	<ul style="list-style-type: none"> Electronic submittal only (of semi-annual ground water monitoring report and technical report). Hard copy submittal is discouraged.

List of Attachments

Attachments A1 and A2 – Monitoring Well 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

ATTACHMENT A1
VISTA CLASS III LANDFILL
WACS_FACILITY: 87081
MONITORING SITES

Attachment A1 Table 1--Sorted by Monitoring Site Number

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

ATTACHMENT A1
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	ANNGW
38.	3	**MW-20A	21938	CO	SHALLOW SURFICIAL	G-II	SEMGW
39.	3	**MW-20B	21939	CO	LOWER SURFICIAL	G-II	ANNGW
40.	3	**MW-21A	21940	CO	SHALLOW SURFICIAL	G-II	SEMGW
41.	3	**MW-21B	21941	CO	LOWER SURFICIAL	G-II	ANNGW
42.	1	MW-FL1	19879	PZ / CO	UPPER FLORIDAN	G-II	SEMGW
43.	1	MW-FL2R	19880	PZ / CO	UPPER FLORIDAN	G-II	SEMGW
44.	1	MW-FL3	19881	PZ / CO	UPPER FLORIDAN	G-II	SEMGW
45.	3	**MW-FL4	19882	PZ / BG	UPPER FLORIDAN	G-II	SEMGW
46.	2	*MW-FL5	21942	PZ / BG	UPPER FLORIDAN	G-II	SEMGW
47.	2	*MW-FL6	21943	PZ / BG	UPPER FLORIDAN	G-II	SEMGW
48.	3	**MW-FL7	21944	PZ / BG	UPPER FLORIDAN	G-II	SEMGW
49.	3	**MW-FL8	21945	PZ / CO	UPPER FLORIDAN	G-II	SEMGW
50.	3	**MW-FL9	21979	PZ / 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 (PZ) Piezometer

ATTACHMENT A1
VISTA CLASS III LANDFILL
WACS_FACILITY: 87081
MONITORING SITES

Attachment A1 Table 2—Monitoring Wells Sorted by Phase

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

ATTACHMENT A1
VISTA CLASS III LANDFILL
WACS_FACILITY: 87081

MONITORING SITES

32.	3	**MW-12B	19876	CO	LOWER SURFICIAL	G-II	ANNGW
33.	3	**MW-13A	19877	CO	SHALLOW SURFICIAL	G-II	SEMGW
34.	3	**MW-13B	19878	CO	LOWER SURFICIAL	G-II	ANNGW
35.	3	**MW-16A	21930	CO	SHALLOW SURFICIAL	G-II	SEMGW
36.	3	**MW-16B	21931	CO	LOWER SURFICIAL	G-II	ANNGW
37.	3	**MW-17A	21932	BG	SHALLOW SURFICIAL	G-II	SEMGW
38.	3	**MW-17B	21933	BG	LOWER SURFICIAL	G-II	ANNGW
39.	3	**MW-18A	21934	CO	SHALLOW SURFICIAL	G-II	SEMGW
40.	3	**MW-18B	21935	CO	LOWER SURFICIAL	G-II	ANNGW
41.	3	**MW-19A	21936	CO	SHALLOW SURFICIAL	G-II	SEMGW
42.	3	**MW-19B	21937	CO	LOWER SURFICIAL	G-II	ANNGW
43.	3	**MW-20A	21938	CO	SHALLOW SURFICIAL	G-II	SEMGW
44.	3	**MW-20B	21939	CO	LOWER SURFICIAL	G-II	ANNGW
45.	3	**MW-21A	21940	CO	SHALLOW SURFICIAL	G-II	SEMGW
46.	3	**MW-21B	21941	CO	LOWER SURFICIAL	G-II	ANNGW
47.	3	**MW-FL4	19882	PZ / BG	UPPER FLORIDAN	G-II	SEMGW
48.	3	**MW-FL7	21944	PZ / BG	UPPER FLORIDAN	G-II	SEMGW
49.	3	**MW-FL8	21945	PZ / CO	UPPER FLORIDAN	G-II	SEMGW
50.	3	**MW-FL9	21979	PZ / 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 A2
VISTA CLASS III LANDFILL
WACS_FACILITY: 87081
MONITORING SITES

Attachment A2 Current Monitoring Wells (Phase I)

Count	Count Zone	MW	WACS #	Well Type	Zone	Report Names
1	1	MW-1A	19335	BG	SHALLOW SURFICIAL	SEMGW
2	2	MW-2AR	19337	BG	SHALLOW SURFICIAL	SEMGW
3	3	MW-3A	19339	CO	SHALLOW SURFICIAL	SEMGW
4	4	MW-4A	19341	CO	SHALLOW SURFICIAL	SEMGW
5	5	MW-5A	19343	CO	SHALLOW SURFICIAL	SEMGW
6	6	MW-6AR	19345	BG	SHALLOW SURFICIAL	SEMGW
7	7	MW-7A	19347	BG	SHALLOW SURFICIAL	SEMGW
8	8	MW-8R	19868	BG	SHALLOW SURFICIAL	SEMGW
9	1	MW-1B	19336	BG	LOWER SURFICIAL	ANNGW / SEMGW
10	2	MW-2B	19338	BG	LOWER SURFICIAL	ANNGW / SEMGW
11	3	MW-3B	19340	CO	LOWER SURFICIAL	ANNGW / SEMGW
12	4	MW-4B	19342	CO	LOWER SURFICIAL	ANNGW / SEMGW
13	5	MW-5B	19344	CO	LOWER SURFICIAL	ANNGW / SEMGW
14	6	MW-6BR	19346	BG	LOWER SURFICIAL	ANNGW / SEMGW
15	7	MW-7B	19348	CO	LOWER SURFICIAL	ANNGW / SEMGW
16	1	MW-FL1	19879	PZ / CO	UPPER FLORIDAN	SEMGW
17	2	MW-FL2R	19880	PZ / CO	UPPER FLORIDAN	SEMGW
18	3	MW-FL3	19881	PZ / CO	UPPER FLORIDAN	SEMGW

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

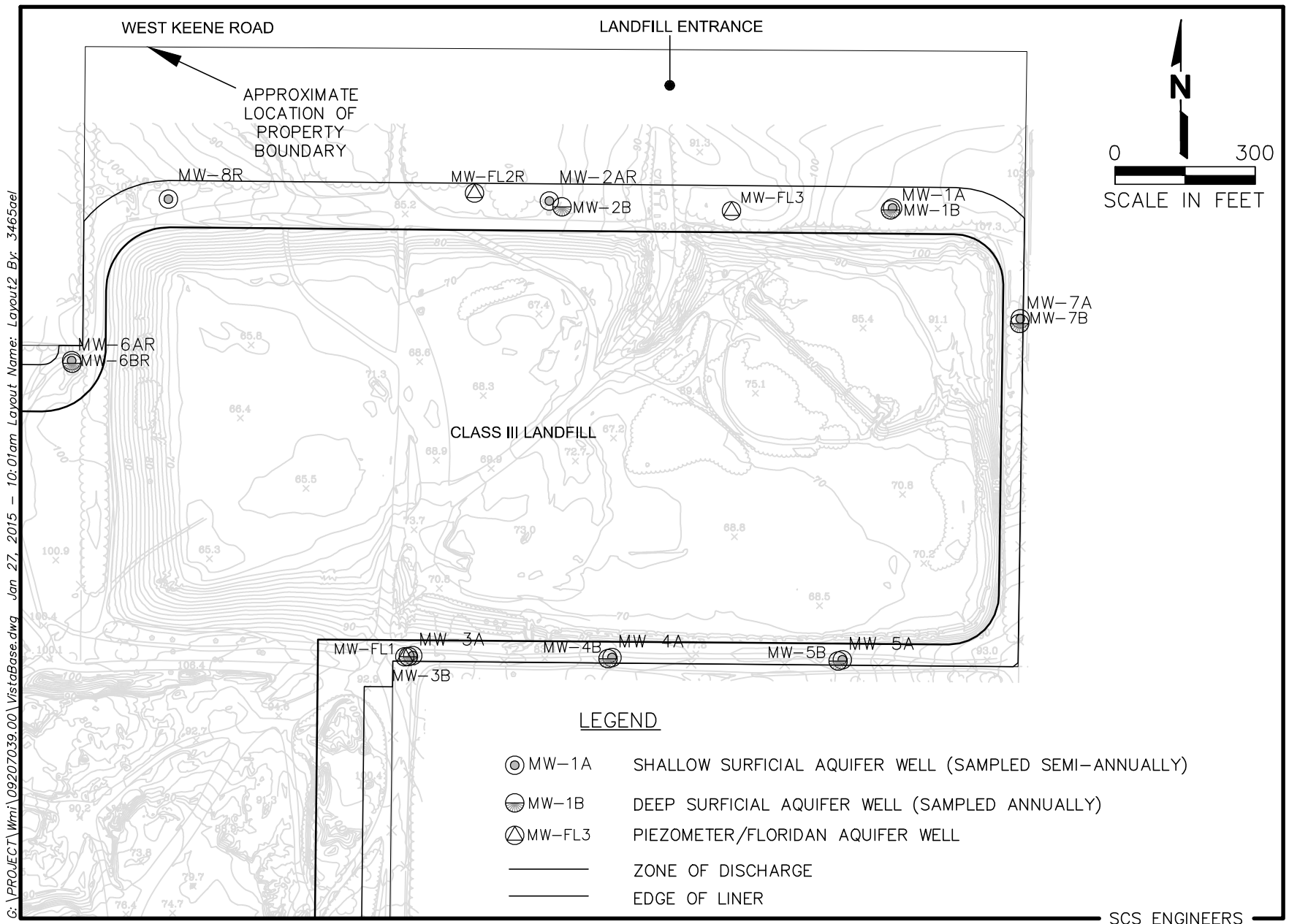
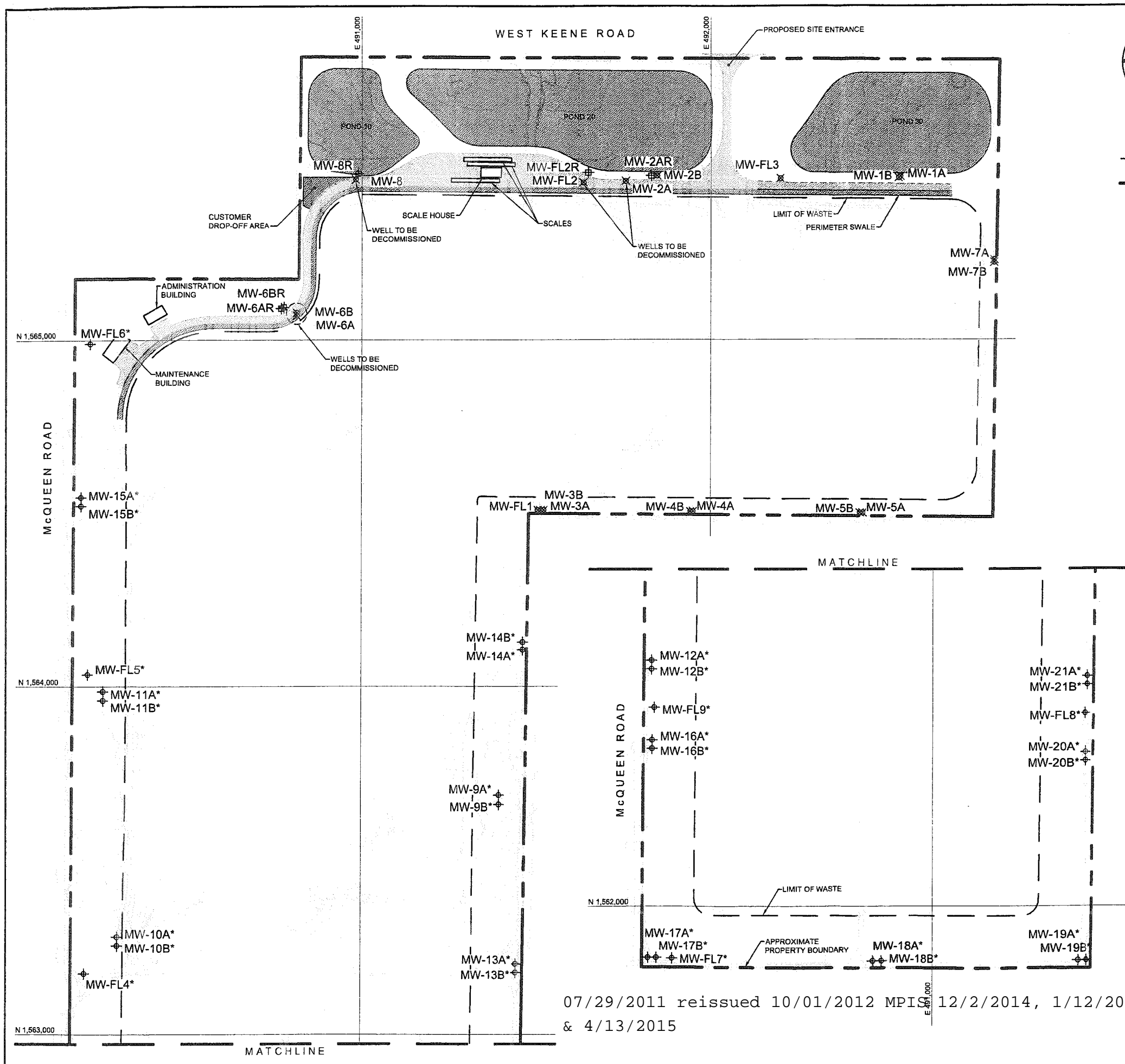


Figure 1-2. Site Map, Vista Landfill, Apopka, Florida.



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 LANDAIRMAPPING, 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 12/2/2014, 1/12/2015,
& 4/13/2015

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: Vista Class III Landfill		Date:
DEP Permit No.:	WACS Facility ID #: 87081	
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

6/1/2016

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, a drawing must be submitted within thirty (30) days following monitoring well installation in electronic format to DEP_CD@dep.state.fl.us. The drawing must show 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
Guidance for Submitting Electronic Water Quality Data
June 1, 2016

I. General Information

Water quality monitoring reports and all groundwater, surface water, and leachate (when required) analytical results for the Solid Waste Program shall be submitted to the Department electronically via email, FTP site, compact disc, or flash drive media readable by Microsoft Windows.

(Rules 62-160.240 and 62-160.340, F.A.C.)

Water quality monitoring reports shall be submitted in Adobe pdf format. The water quality Electronic Data Deliverable (EDD) shall be compatible with software called Florida DEP Automated Data Processing Tool (ADaPT) --unless otherwise approved by the Department.

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:

<http://www.dep.state.fl.us/waste/ADaPT/>

II. Monitoring Report

The groundwater monitoring report shall be submitted in Adobe PDF format, with the EDDs as an attachment. The 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. Groundwater contour maps;
5. Chain of custody forms;
6. Water levels, water elevation table;
7. Groundwater Monitoring Report Certification, using the appropriate Department form **(Attachment E)**;
8. Appropriate sampling information on Form FD 9000-24 (DEP-SOP-001/01) **(Attachment F)**;
9. Laboratory EDDs and associated Lab EDD Error Logs, Field EDDs that are compatible with ADaPT software and ADaPT export file(s).

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

The monitoring report (including ADaPT EDDs) should be emailed to Tallahassee using the following email address: ADaPT.EDDs.and.Reports@dep.state.fl.us.

Submit all ADaPT files in a single zip file named as follows:

12345_200811_swldd.zip

Submit the monitoring report in a single (text, no scanned content) PDF file named as follows:

12345_200811_swgwmr.pdf

Please do not submit multiple documents for the monitoring report; combine all documents in a single PDF document. Less preferable, zip these documents into a single zip file named as follows:

12345_200811_swgwmr.zip

(Note: refer to Section III below for details of file nomenclature.)

If attachments are too large to email, monitoring reports may also be transmitted to the FDEP Solid Waste program in Tallahassee using the following FTP site: ftp://ftp.dep.state.fl.us/pub/WACS-ADaPT/EDDS_and_Reports

Note: When submitting files to the FTP site, please combine all ADaPT EDDs and the groundwater monitoring report into a single zip file (sw_12345_200811_gwmr.zip).

Please email us at ADaPT.EDDs.and.Reports@dep.state.fl.us informing us of what files were transmitted via FTP for which facility sampling event.

If you are unable to submit the groundwater monitoring report electronically via email or FTP, it can also be sent by regular mail to:

Florida Department of Environmental Protection
Solid Waste Section, MS 4565
2600 Blair Stone Road
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 using the .txt filename extension. The Laboratory EDD file name format shall be:
[WACS Facility I.D.] underscore [Begin Sampling Year and Month (yyyymm)] underscore SWldd.txt

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 Year and Month (yyyymm)] underscore swfdd.txt

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 radiochemistry results, add the term “_rad” similar to confirmation sampling indicated above.

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.

An electronic signed and sealed signature page may be submitted with the report provided a stamped seal is used. If a raised seal is used, ensure that the seal is legible (gray the embossed seal and scan). Otherwise, you must separately mail the signed and sealed page.

V. Process Required

Three steps are generally required.

First, the Laboratory EDD, in comma separated text format, must be submitted by the laboratory. 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 Division of Waste Management 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 and correct all Field EDD errors prior to submittal.

Third, as a completeness check, the laboratory, permittee or consultant shall process both the Laboratory EDD and the Field EDD through ADaPT and confirm a successful export to disk and submit the ADaPT generated export file (ADaPTYYYMMDDHHMMSS.txt).

VI. Resources

In the event help is needed to prepare these EDDs, or monitoring test site information needs updating in the WACS Oracle database, or if you need help in submitting the groundwater monitoring report, please contact the Laxsabee Levin (407-897-4313) at the Central District office:

Florida Department of Environmental Protection
Central District Office
Waste and Air Resource Programs
3319 Maguire Blvd., Ste. 232
Orlando, FL 32803-3767
DEP_CD@dep.state.fl.us

You can also receive assistance by contacting Clark Moore, clark.b.moore@dep.state.fl.us, (850) 245-8739 or by emailing ADaPT.EDDs.and.Reports@dep.state.fl.us.

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 Landfill, Class III
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 _____ N/A
- (6) Method of Discharge _____ N/A

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 _____
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: Vista Landfill, Class III WACS# 87081		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:
WELL VOLUME PURGE: 1 WELL VOLUME = (TOTAL WELL DEPTH – STATIC DEPTH TO WATER) X WELL CAPACITY only fill out if applicable) <div style="text-align: right; margin-right: 50px;">= (feet – feet) X gallons/foot = gallons</div>				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (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 4 - Site Plan

09216002F002.DWG 201601111058RLC

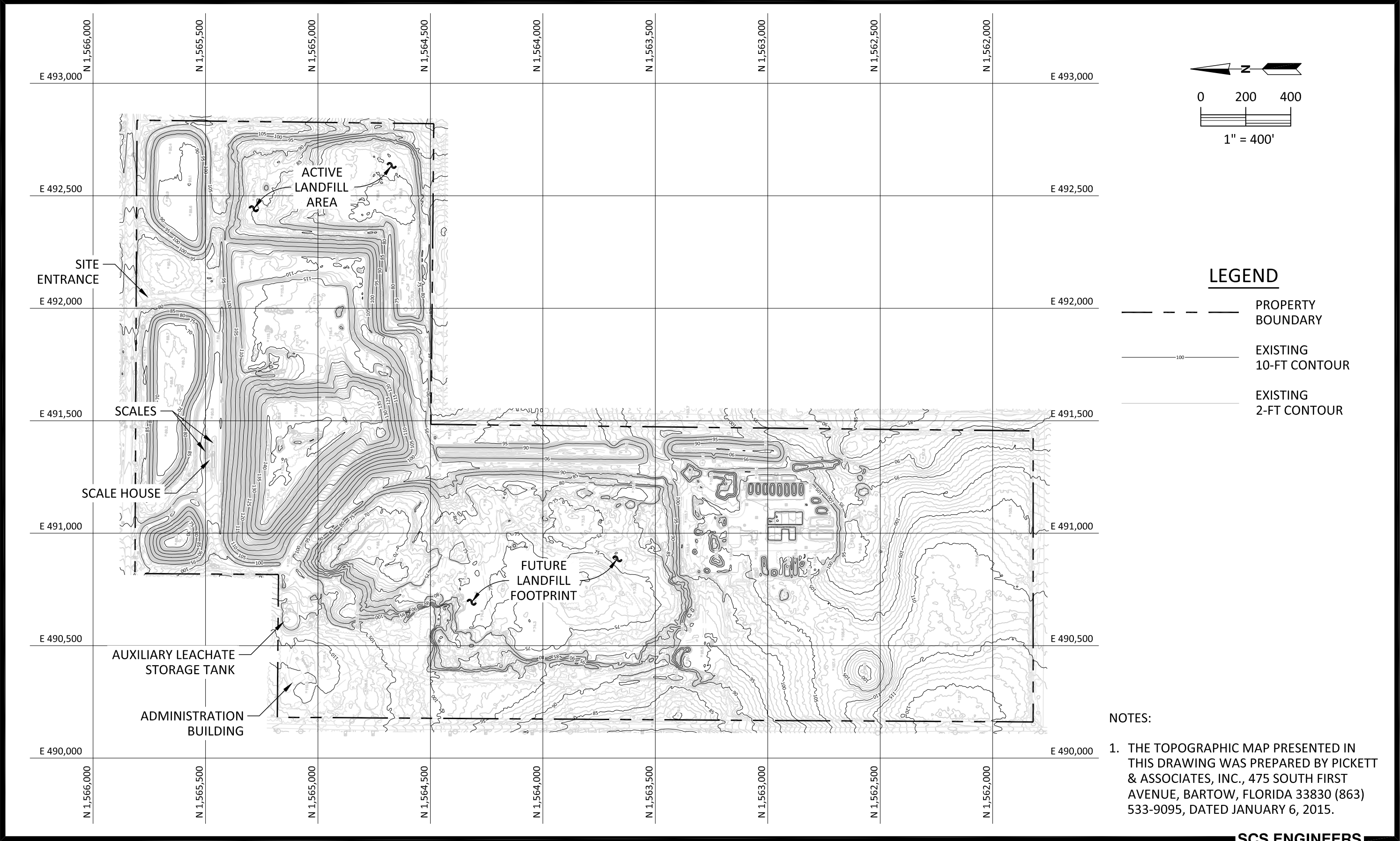


FIGURE 2. SITE PLAN, VISTA LANDFILL, APOPKA, FLORIDA

Attachment 1: Facility Permit History

Vista Class III LF (was Buttrey Landfill Class III) Facility ID #: 87081

Class III Permits including Yard Trash and Composting

Permit Type	Permit Number	Issued & Expiration Dates	Summary
Construct Operation	165969-001 165969-002	03/05/2001 01/22/2006	Application received 2/14/2000. Disposal acreage 37 (Cells 1 to 4) of a 60.53-acre site. Bottom liner: 60-mil HDPE. Max. Height 150 feet NGVD.
Modification	165969-003	01/29/2002 01/22/2006	Base grade elevation at 66' NGVD on the west half.
Construct Operation	165969-004 165969-005	01/16/2003 01/22/2006	Application received 5/16/2002. Disposal area increase: 33 acres (Cells 5 to 8). Total disposal acreage: 70 (Cells 1 to 8) of a 110-acres site.
Modification	165969-006	12/03/2002 01/22/2006	Monitoring Plan Implementation Schedule (MPIS)
Ownership Transfer	165969-007	03/08/2004 01/22/2006	From John Buttrey to Waste Management, Inc.
Construct Operation	165969-008 165969-009	08/03/2005 01/22/2006	Application received Disposal area increase: 40 acres (Cells 9-12). Total disposal acreage: 110 (Cells 1 to 12) of a 150-acre site.
Renewal	165969-010 165969-011	07/25/2006 04/19/2011	Application received 1/20/2006. Disposal area decrease: 8 acres. Total disposal acreage: 102 (Cells 1 to 12) of a 142-acre site.
Modification	165969-012	02/20/2007 04/19/2011	Infrastructural layout changes
Permittee Name Change	165969-013	03/26/2007 04/19/2011	From Waste Management, Inc. to Vista Landfill, LLC
Modification	165969-014 165969-015	02/22/2008 04/19/2011	Application received 7/30/2007. Construction & operation of Class III lined landfill. Max. Height 156 feet NGVD.
Renewal	165969-018	11/09/2011 04/19/2016	Permitted a total of 12 cells. 102 acres of disposal area. Phase I - Cells 1 to 4; Phase 2 - Cells 5 to 8; Phase III - Cells 9 to 12.
Construction	165969-019	10/30/2012 08/28/2017	Construction of Phase I & II. Reduce disposal area from 102 to 94 acres to accommodate storm pond. Construction of Cells 3 to 8.
Modification	165969-020	02/26/2013 04/19/2016	Application received 10/4/2012 Construction of active gas collection system in phases.
Modification	165969-021	11/14/2012 04/19/2016	Application received 10/19/2012 Clarification of materials for composting.
Modification	165969-022	10/23/2012 04/19/2016	Application received 10/19/2012 Removal of annual leachate sampling & testing requirement.
Modification	165969-024	12/03/2014 04/19/2016	Application received Monitoring Plan Implementation Schedule (MPIS)
Modification	165969-026	04/14/2015 04/19/2016	Generated by DEP: MPIS update
Modification	165969-027	10/08/2015 04/19/2016	Application received 9/29/2015. Operation Plan update - use of leachate for dust control

Permit Type	Permit Number	Issued & Expiration Dates	Summary
Renewal	165969-028	06/10/2016 06/01/2036	Permitted a total of 12 cells. 102 acres of disposal area. Phase I - Cells 1 to 4; Phase 2 - Cells 5 to 8; Phase III - Cells 9 to 12.
Modification	165969-029	This action 06/01/2036	Minor modification to add a landfill gas flare

Material Recovery Facility (MRF)

Permit Type	Permit Number	Issued Expiration Dates	Summary
Construct Operation	165969-017	06/11/2010 05/05/2015	Application received 12/07/2009 Indoor with leachate collection system
Renewal	165969-025	04/09/2015 03/27/2020	Application received 3/4/2015 Indoor with leachate collection system

Waste Tire Permit

Permit Type	Permit Number	Issued Expiration Dates	Summary
Waste Tire Processing	165969-016	09/18/2009 09/16/2014	Small Waste Tire Processing Facility
Renewal	165969-023	08/12/2014 09/16/2019	Small Waste Tire Processing Facility