



**FLORIDA DEPARTMENT OF
ENVIRONMENTAL PROTECTION**

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

RICK SCOTT
GOVERNOR

CARLOS LOPEZ-CANTERA
LT. GOVERNOR

JONATHAN P. STEVERSON,
SECRETARY

February 17, 2015

Electronic Mail
jchristi@wm.com

Jim Christiansen
Environmental Protection Manager
Waste Management Inc. of Florida
7382 Talona Drive
W. Melbourne, FL 32904

SPCD-SW-15-2782

Orange County
Vista Landfill, LLC WACS # 87081
Correction to MPIS Issued with Permit 0165969-024-SO-MM

Dear Mr. Christiansen:

In an email to the Department on 1/9/2015, SCS Engineers noted an error in the Water Quality Monitoring Plan Implementation Schedule (MPIS) at Vista Class III Landfill. The MPIS was issued with the minor modification permit 0165969-024-SO-MM. The Department had previously approved annual sampling of the "B" zone wells. This was not included in the MPIS.

Attached is a corrected MPIS to become part of the permit 0165969-024-SO-MM.

You can contact Marjorie Heidorn by email at marjorie.heidorn@dep.state.fl.us or phone at (407) 897-4302 with questions about this letter.

Sincerely,

A handwritten signature in cursive script, appearing to read "F. Thomas Lubozynski".

F. Thomas Lubozynski, P.E.
Waste Program Administrator

FTL/mh

Attachment: Revised MPIS

Vista Landfill, LLC WACS # 87081

Jim Christiansen

Page 2 of 2

February 17, 2015

cc: Perez, Deborah - dperez@wm.com
Grant, Sheree - sgrant@wm.com
Ramaley, Seth - SRamaley@wm.com
Nassar, Frederick - fnassar@wm.com
Parker, Eric (FL) - EParker1@wm.com
Alexander Lacsamana, PE - alacsama@wm.com
Jay Davoll, City of Apopka - jdavoll@apopka.net
Richard Tedder - richard.tedder@dep.state.fl.us
Rainey, Allen - Allen.Rainey@dep.state.fl.us
Rush, Kim - Kim.Rush@dep.state.fl.us
Hess, Nathan - Nathan.Hess@dep.state.fl.us
David Bromfield, OCEPD - david.bromfield@ocfl.net
Kenneth Guilbeault, SCS Engineers - KGuilbeault@scsengineers.com
Marjorie Heidorn - Marjorie.Heidorn@dep.state.fl.us

EXHIBIT I

VISTA Class III Landfill

WACS_FACILITY: 87081

MONITORING PLAN IMPLEMENTATION SCHEDULE (MPIS) 12/2/2014 Revised 1/12/2015

GENERAL

1. This MPIS is becomes part of Permit No. SO48-0165969-018 as revised by Permit No. SO48-0165969-024 and is effective from the date of Permit No. SO48-0165969-024. [62-701.510(1)(b)&(c), 62-520.600(5),(F.A.C.)]
2. The field testing, sample collection and preservation and laboratory testing, including quality control procedures, shall be in accordance with Chapter 62-160 (F.A.C.) Approved methods as published by the Department or as published in Standard Methods, ASTM, or EPA Methods shall be used. [62-701.510(2)(b), F.A.C.]
3. The organization collecting samples at this site must use the Field and Laboratory Standard Operating Procedures (DEP-SOP-001/01) referenced in Chapter 62-160, F.A.C. Sampling personnel must have a copy of the SOP for purging and sampling in the field when sampling and must be knowledgeable of its contents, procedures, and forms. The laboratory designated to conduct the chemical analyses must be certified by the Florida Department of Health Environmental Laboratory Certification Program (DoH ELCP). This Certification must be for the test method and analyte(s) that are reported. [62-160.210(1), 62-160.300(1), F.A.C.]

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

4. If, at any time, analyses detect parameters which are significantly above background water quality, or which are at levels above the Department's water quality standards or criteria specified in Chapter 62-520, F.A.C., in the detection wells or at the edge of the Zone of Discharge, the Permittee, to confirm the data, shall resample the wells within thirty (30) days of receipt of the sampling data. Should the permittee choose not to resample, the Department will consider the water quality analysis as representative of current ground water conditions at the facility. The permittee must notify the Department within 14 days of receipt of the sampling data whether the original data will be accepted as representative of current ground water conditions or whether resampling will be accomplished to confirm the data.

If the resampling event detects parameters which are significantly above background water quality, or which are at levels above the Department's water quality standards or criteria specified in Chapter 62-520, F.A.C., the Permittee shall notify the Department in writing within 14 days of receipt of the sampling data. Confirmed data must be submitted

to the Department within 60 days from completion of lab analyses. Use “CONF” (for confirmation data) in the report type column. [62-701.510(6)(a), F.A.C.]

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

GROUND WATER QUALITY MONITORING

5. The fifty (50) ground water monitoring wells--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. For current Phase I monitoring 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	6. 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 in writing, hard copy or e-mail, at least fourteen (14) days prior to the installation and/or sampling of any monitoring well(s). [62-701.510(8)(a), F.A.C.]

MONITORING WELL COMPLETION

16. One (1) paper copy and one (1) electronic copy (Adobe pdf format) of **Attachment C Monitoring Well Completion Report** (as modified by the Central District) and required Attachments (for example, construction diagram and lithologic log), must be submitted to the Department (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) paper copy and one (1) electronic copy (Adobe pdf format) of a drawing must be submitted within thirty (30) days following monitoring well installation showing the location of all monitoring sites (active, abandoned, and Evaluation Monitoring), piezometers, water bodies and waste filled areas. The location of features on the drawing must be horizontally and vertically located by standard surveying techniques. The drawing shall include all monitoring well locations, each monitoring well name and identification (WACS) number, the top of casing, pad elevation, permanent benchmark(s) and/or corner monument marker(s) referenced to NGVD 1929 with an accuracy of 0.01 feet. The latitude and longitude of each well in degrees, minutes and seconds, to two (2) decimal places, with an accuracy of 15 feet, must be determined and provided on the drawing. The survey shall be conducted and certified by a Florida Licensed Surveyor and Mapper. [62-701.510(1)(c)&(3)(d)1, F.A.C.]
18. If a monitoring well is being replaced or new wells are being added to an existing ground water monitoring plan, only the new wells need to be surveyed as long as all other monitoring wells in the MPIS have been surveyed and certified by a Florida Licensed Surveyor and Mapper and there is no reason to believe that the elevations have changed. The location and elevation determinations and the certification must be provided with the Monitoring Well Completion Form for the new well,

DEPTH MEASUREMENTS

19. A total depth measurement must be made on each well at time of permit renewal. This information must be provided as part of permit renewal application. This measurement is to be reported as total apparent depth below ground surface and should be compared to the original total depth of the well.

INITIAL AND SEMI-ANNUAL SAMPLING

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

WATER ELEVATIONS

21. Water levels in all monitoring wells, whether sampled or not, all piezometers and all surface water sites must be measured to the nearest 0.01 foot and reported semi-annually.

22. Surface water elevations at sampling locations must be measured to the nearest 0.01 foot on the same day as ground water levels in the wells and piezometers and reported semiannually.
23. All water level measurements must be made within a one-day period.
24. These measurements should be reported in a table that includes well or surface water point name, date water level measured, measuring point elevation referenced to NGVD 1929, depth to water and calculated water level elevation referenced to NGVD 1929. The ground water elevations shall be reported in the ADaPT data for the upload into WACS. **[62-701.510(8)(a)8, F.A.C.]**

GROUND WATER CONTOUR MAPS

25. Ground water elevation contour maps for 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) paper and 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	Sampling Periods Covered	Number Of Semi-annual Sampling Events in Report	MPIS Technical Report Due
Permit Renewal Report	December 2013-thru July 2015	4	With the Permit SO48-0165969-024 Renewal Application (Due 02/18/2016)

Requirements for Electronic Reporting of Water Quality Data

28. Required water quality monitoring reports and all ground water, and surface water analytical results shall be submitted as described in Attachment **D (ADaPT electronic reporting requirement)**. Required monitoring reports must be submitted to the Department within sixty (60) days from completion of laboratory analyses. **(62-160.240 and 62-160.340, F.A.C.)**

29. Monitoring Plan Implementation Schedule--Tracking 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.

List of Attachments

Attachment A – Monitoring Well Lists

Attachments 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

ATTACHMENT A1
VISTA CLASS III LANDFILL
WACS_FACILITY: 87081
MONITORING SITES

35.	3	**MW-18B	21935	CO	LOWER SURFICIAL	G-II	ANNGW
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

ATTACHMENT A1
VISTA CLASS III LANDFILL
WACS_FACILITY: 87081
MONITORING SITES

31.	3	**MW-12A	19875	CO	SHALLOW SURFICIAL	G-II	SEMGW
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.

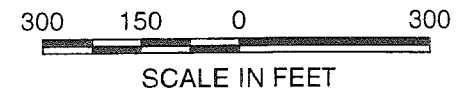
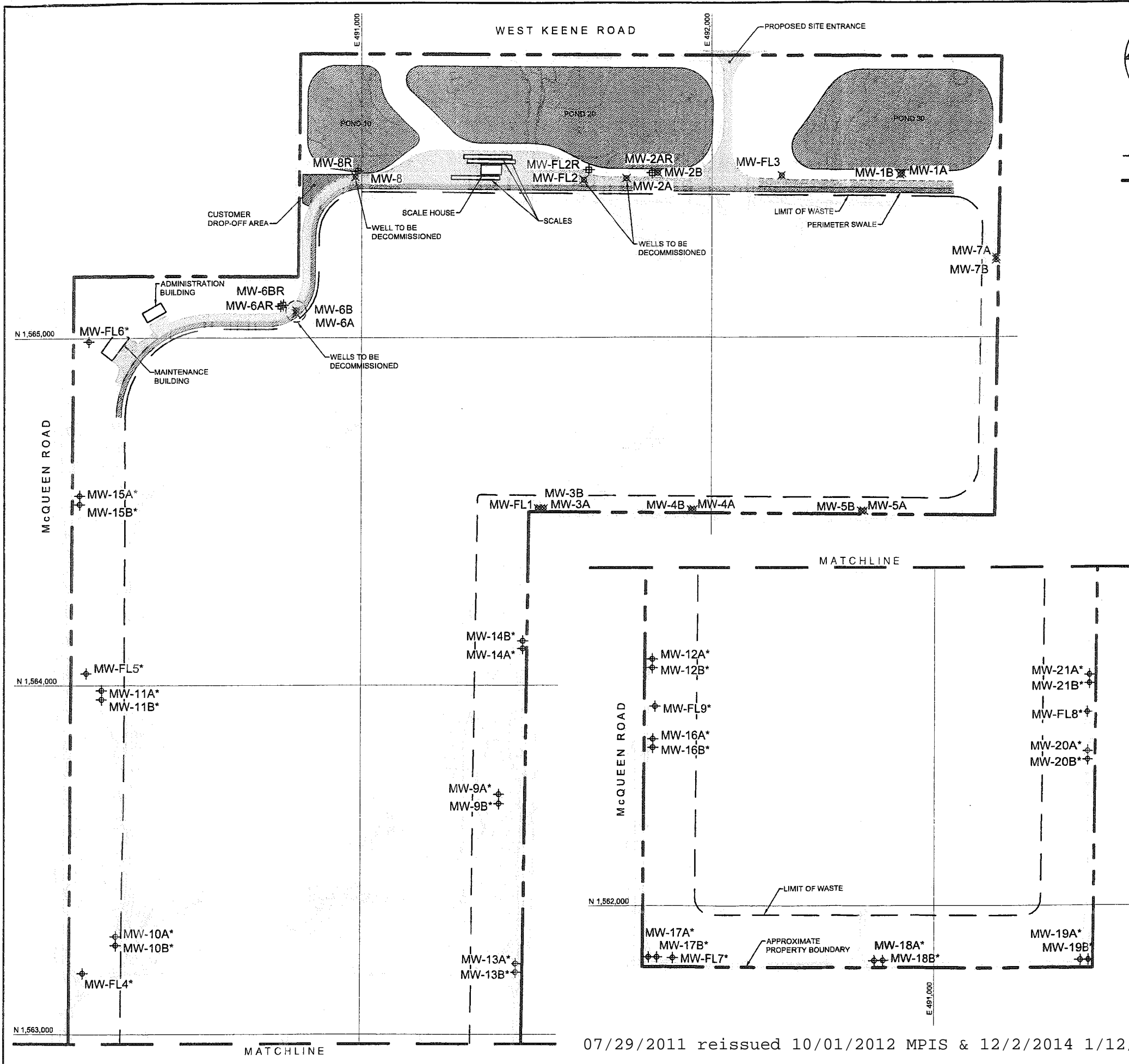
Well Type Codes: (BG) Background (DE) Detection (CO) Compliance

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



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

RECEIVED
JAN 08 2007
 Central Dist. - DEP

NOTES:

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

GROUND WATER MONITORING NETWORK
 KEENE ROAD SOUTH CLASS III LANDFILL



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

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

Additional Survey Notes:

1. Latitude and Longitude Requirements and Definitions:
 - a. **Latitude** must be measured in degrees, minutes and seconds, to at least two (2) decimal places.
 - b. **Longitude** must be measured in degrees, minutes and seconds, to at least two (2) decimal places.
 - c. **Eastings and northings** (State Plane Coordinates) **must** be converted to latitude and longitude.
 - d. **Coordinate Accuracy:** the measured, estimated degree of correctness of the measurement. An accuracy of 15 feet or 5 meters is required.
 - e. **Datum:** the horizontal reference for measuring locations on the Earth's surface. NAD83-North American Datum of 1983 is preferred.
 - f. **Elevation Datum:** the reference datum from which elevation measurements are made. NGVD29 (National Geodetic Vertical Datum of 1929) is required.
 - g. **Collection Method:** the method or mechanism used to derive the measurements, e.g. GPS, map, aerial photo, etc.
 - h. **Collection Date:** the date and time on which the measurements were taken.
 - i. **Collector Name:** the name of the person taking the measurement.
 - j. **Collector Affiliation:** the agency or company for whom the collector works.
2. As specified in the MPIS, One (1) paper copy and one (1) electronic copy of a drawing must be submitted within thirty (30) days following monitoring well installation showing the location of all monitoring wells (active and abandoned), water bodies and waste filled areas. The location of features on the drawing must be horizontally and vertically located by standard surveying techniques. The drawing shall include all monitoring well locations, each monitoring well name and identification (WACS) number, the top of casing, pad elevation, permanent benchmark(s) and/or corner monument marker(s) referenced to NGVD with an accuracy of 0.01 feet. The latitude and longitude of each well in degrees, minutes and seconds, to two (2) decimal places, with an accuracy of 15 feet, must be determined and provided on the drawing. The survey shall be conducted and certified by a Florida Licensed Surveyor and Mapper. **[62-701.510(1)(c)&(3)(d)1, F.A.C.]**
3. If a monitoring well is being replaced or new wells are being added to an existing ground water monitoring plan, only the new wells 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. 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
To the FDEP Central District Waste & Air Resource Programs
December 2, 2014 & January 12, 2015

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/categories/shw/pages/ADaPT.htm>

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_gwmmr.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 swlidd.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 SWlidd.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_swlidd.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_swlidd.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 testsite information needs updating in the WACS Oracle database, or if you need help in submitting the groundwater monitoring report, please contact the Laxsamee 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 Class III Landfill
Address _____
City _____ Zip _____ County _____
Telephone Number (_____) _____ E-mail address _____
- (2) WACS_Facility 87081
- (3) DEP Permit Number _____
- (4) Authorized Representative's Name _____ Title _____
Address _____
City _____ Zip _____ County _____
Telephone Number (_____) _____ E-mail address _____
- (5) Type of Discharge _____ 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 _____

