

Attachment F to the Conditions of Certification - MPIS

Stanton Energy Center Combustion Waste Landfill

WACS Facility: 97663

WATER QUALITY MONITORING PLAN IMPLEMENTATION SCHEDULE (MPIS)

1/6/2017

GENERAL

The Department of Environmental Protection Central District's Industrial Wastewater (IWW) and Solid Waste (SW) programs developed this Monitoring Plan Implementation Schedule (MPIS) to incorporate groundwater monitoring requirements into the Licensee's Conditions of Certification. The MPIS applies to the following units and associated ponds and areas.

- Units A and B
 - make-up pond (unlined)
 - wastewater pond (lined)
 - recycle pond (lined)
- Units 1 and 2
 - stormwater pond (unlined)
 - coal storage area runoff pond (lined)
 - combustion waste area runoff pond (lined)
 - coal storage area
 - combustion waste storage area

The Department's Central District IWW and SW programs are responsible for reviewing and approving all revisions to this document in accordance with Section A, Condition XX (Procedures for Post-Certification Submittals), unless otherwise determined by the Department, and Section B, Specific Condition I.A. (Groundwater Monitoring) of these Conditions.

At a minimum, projects which involve any one of the following shall be reviewed for a determination on the requirement of a modification to these Conditions and if a modification is required, it shall be processed in accordance with Section 403.516(1)(c), F.S., and Rule 62-17.211, F.A.C., as applicable:

- new major sources of wastewater
- new wastewater treatment facilities or improvements made to existing wastewater treatment facilities, including those which provide for a new or expanded land application system;
- pollutants not addressed in the MPIS or these Conditions resulting from a change in the solid waste disposal facility or the industrial wastewater facility; or
- other projects that cause or may cause changes to the quantity and/or quality of discharges to groundwater as a result of solid waste disposal or industrial wastewater treatment.

1. The MPIS is effective immediately. **(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

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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 for this Licensee 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 Licensee shall provide notification of the exceedances in writing to the Department at DEP_CD@dep.state.fl.us within 14 days of receipt of the sampling data and indicate:

- 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 Licensee chooses to resample the well, it shall do so within thirty (30) days of receipt of the original sampling data. Should the Licensee choose not to resample, the Department will consider the water quality analysis as representative of current ground water conditions at the facility.

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 Licensee shall:

- provide notification of the exceedances in writing to the Department at DEP_CD@dep.state.fl.us within 14 days of receipt of the resampling data.
- submit the confirmed data to the Department at DEP_Cd@dep.state.fl.us within 60 days from the lab analyses date
- use "CONF" (for confirmation data) in the report type column.

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

GROUND WATER QUALITY MONITORING

5. Zone of Discharge. The zone of discharge for this facility shall be a three-dimensional volume described below. It is shown in Attachment B of the MPIS (drawing dated 12/20/2013). Class G-II water quality standards must be as Description of Revised ZOD – Stanton Energy Center
 - a. West side: a line parallel to 100 feet west of the edge of the "Area Designated for Solid Waste Management" (landfill area) or the property boundary, whichever is closer to the landfill.

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- b. North side:
 - i. a straight line 100 feet north of and parallel to the landfill area to the northeast corner of landfill area, then
 - ii. a straight line to MW-23
 - c. East side: an arc connecting MW-23 to MW-25 to MW-26
 - d. South side:
 - i. A straight line from MW-26 to MW-20
 - ii. A straight line to 100 feet south of the southeast corner of the landfill area.
 - iii. A straight line 100 feet south of and parallel to the landfill area to the southwest corner of the landfill completing the perimeter of the ZOD.
 - e. Vertical Dimension: To the depth of each well. Compliance will be monitored by MW-3D and MW-11D.
6. The twenty-two (22) active ground water monitoring wells and two (2) piezometers designated for water quality testing and water level measurements are listed on **Attachment A** of the MPIS and shown on **Attachment B** of the MPIS. **(62-701.510(3)(d)2 & 3, F.A.C.)**
 7. Semi-annual samples from the ground water monitoring well shall be collected in April and October. The samples shall be analyzed for the following Ground Water Monitoring Parameters. **(62-701.510(5)(c))**

Field Parameters	Laboratory Parameters
1. Static water level in wells before purging	1. Chloride
2. Dissolved oxygen	2. Nitrate
3. pH	3. Sulfate
4. Specific conductivity	4. Total Dissolved Solids
5. Temperature	5. Arsenic
6. Turbidity	6. Barium
	7. Cadmium
	8. Lead
	9. Manganese
	10. Mercury
	11. Molybdenum
	12. Nickel
	13. Sodium
	14. Vanadium
	15. Gross Alpha (pCi/L)
	16. Ra 226 if gross alpha > 15 pCi/L
	17. Ra 228 if gross alpha >15 pCi/L

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8. Turbidity and Dissolved Oxygen Concentrations

- a. The requirements of the current version of FS_2212, Well Purging Techniques, shall be met. If the field parameter criteria (Turbidity $\leq$ 20 NTU and Dissolved Oxygen $\leq$ 20% saturation) cannot be met, the sample logs must indicate the samples met the alternate criteria in Section 3.5 of FS_2212.
- b. Monitoring wells that in recent history have had turbidity values >20 NTU are MW-2, MW-16, MW-18, MW-19 and MW-26. These wells will continue to be sampled and reported to the Department regardless of the turbidity values.
- c. Other site monitoring wells, not listed in 8.b., above, whose turbidity values are greater than 20 NTU during the sampling event, will be sampled at the higher turbidity value. The sample logs shall document the individual occurrences, as described in 8.a., above. After the third consecutive instance of field turbidity values greater than 20 NTU from a monitoring well not listed in 8.b, Licensee shall contact the Department for further discussion. The discussion will be to review the sampling protocol and data, and then discuss and agree on a course of action.
- d. If a contaminant's concentration is greater than criteria and Licensee claims the exceedance is due to turbidity, then further evaluation, redevelopment, reinstallation or remediation of the well(s) must be considered.
- e. All water quality analyses submitted to the FDEP in compliance with the COC shall be performed on unfiltered samples unless filtering has been 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 Licensee shall notify the Department at DEP_CD@dep.state.fl.us 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,

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.

- b. 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.)**

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12. 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 by the Department, 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.)**
13. 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

14. The Department must be notified at DEP_CD@dep.state.fl.us 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

One (1) electronic copy (Adobe pdf format) of **Attachment C-Monitoring Well Completion Report** of the MPIS (as modified by the Central District) and required Attachments (for example, construction diagram and lithologic log), must be submitted to the Department at 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 at DEP_CD@dep.state.fl.us.

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

15. One (1) electronic copy (Adobe pdf format) of a drawing must be submitted to the Department at 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.)**
16. If a monitoring well is being replaced or new wells are being added to this 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

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changed. The location and elevation determinations and the certification must be provided with the Monitoring Well Completion Form for the new well.

SEMI-ANNUAL SAMPLING

17. Required monitoring reports must be submitted to the Department within sixty (60) days from completion of laboratory analyses. Requirements for submitting the report are outlined in **Attachment D (ADaPT electronic reporting requirement)** of the MPIS. **(62-701.510(8), F.A.C.)**

WATER ELEVATIONS

18. 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. The depth to water shall be converted to feet NGVD 1929 and this elevation shall be reported semi-annually.
19. All water level measurements must be made within a one-day period.
20. These measurements should be reported in a table that includes well 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 and surface water elevations shall be reported in the ADaPT data format for the upload into WACS. **(62-701.510(8)(a)8, F.A.C.)**

GROUND WATER CONTOUR MAPS

21. Ground water elevation contour map(s) must be submitted semi-annually to the Department. Ground water elevation contour map(s) should include monitoring well and piezometer locations, ground water elevation at each monitoring well or piezometer location referenced to NGVD 1929, a bar scale, north arrow, ground water contour interval, date of measurement and ground water flow direction. The map(s) must incorporate adjacent and on-site surface water elevations where appropriate. These maps shall be signed and sealed pursuant to Florida Statutes (F.S.) Chapters 471 and 492. These statutes require that documents requiring the practice of professional engineering or professional geology, as described in Chapter 471 or 492, F.S., to 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.)**

REQUIREMENTS for ELECTRONIC REPORTING of WATER QUALITY DATA

22. 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)** of the MPIS. 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.)**

TECHNICAL REPORT

23. A technical report, signed and sealed by a professional geologist or professional engineer with experience in hydrogeologic investigations, shall be submitted to the Department at DEP_CD@dep.state.fl.us approximately every two and one-half years during the active life of the facility, and every five years during the long-term care

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period. The report shall summarize and interpret the water quality monitoring results and water level measurements collected since the last Technical Report. The report shall contain, at a minimum, the following [62-701.510(8)(b), F.A.C.]:

- a) Tabular displays of any data which shows that a monitoring parameter has been detected, and graphical displays of any leachate key indicator parameters detected (such as pH, specific conductance, TDS, TOC, sulfate, chloride, sodium and iron), including hydrographs for all monitor wells;
- b) Trend analyses of any monitoring parameters consistently detected;
- c) Comparisons among shallow, middle, and deep zone wells;
- d) Comparisons between background water quality and the water quality in detection and compliance wells;
- e) Correlations between related parameters such as total dissolved solids and specific conductance;
- f) Discussion of erratic and/or poorly correlated data;
- g) An interpretation of the ground water contour maps, including an evaluation of ground water flow rates; and
- h) An evaluation of the adequacy of the water quality monitoring frequency and sampling locations based upon site conditions.

24. An electronic copy (Adobe pdf format) of the Technical Report shall be submitted to the Department at DEP_CD@dep.state.fl.us on the following schedule: [62-701.510(8)(b), F.A.C.]

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Report	Sampling Periods Covered	Number of Semi-annual Sampling Events in Report	Date Technical Report Due
1	Second Semi-Annual Event 2015 through Second Semi-Annual Event 2017	5	March 31, 2018
2	First Semi-Annual Event 2018 through First Semi-Annual Event 2020	5	August 31, 2020
3	Second Semi-Annual Event 2020 through Second Semi-Annual Event 2022	5	March 31, 2023
4	First Semi-Annual Event 2023 through First Semi-Annual Event 2025	5	August 31, 2025
5	Second Semi-Annual Event 2025 through Second Semi-Annual Event 2027	5	March 31, 2028
6	First Semi-Annual Event 2028 through First Semi-Annual Event 2030	5	August 31, 2030
7	Second Semi-Annual Event 2030 through Second Semi-Annual Event 2032	5	March 31, 2033
8	First Semi-Annual Event 2033 through First Semi-Annual Event 2035	5	August 31, 2035
9	Second Semi-Annual Event 2035 through Second Semi-Annual Event 2037	5	March 31, 2038
10	First Semi-Annual Event 2038 through First Semi-Annual Event 2040	5	August 31, 2040

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List of Attachments to Attachment F of the Conditions

Attachment A – Monitoring Well Lists

Attachment B – Location Map of Ground Water Monitoring Sites

Attachment C – Monitoring Well Completion Report Form

Attachment D – ADaPT Electronic Reporting Requirements

Attachment E –Water Quality Monitoring Certification Form

Attachment F – Water Sampling Log

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ATTACHMENT A

STANTON ENERGY CENTER COMBUSTION WASTE LANDFILL

WACS_FACILITY: 97663

MONITORING SITES

	Monitoring Site Number	WACS Well	Well Type	Program	GW/SW Class	WACS Report Type
Ground Water						
1.	MW-1	23173	DE	IW	G-II	SEMGW
2.	MW-2	23174	DE	IW	G-II	SEMGW
3.	MW-3	23175	DE	IW	G-II	SEMGW
4.	MW-3D	26320	CO	IW	G-II	SEMGW
5.	MW-4	23176	DE	IW	G-II	SEMGW
6.	MW-5	23177	DE	IW	G-II	SEMGW
7.	MW-7	23179	DE	IW/SW	G-II	SEMGW
8.	MW-10	23182	CO	SW	G-II	SEMGW
9.	MW-11	23183	DE	SW	G-II	SEMGW
10.	MW-11D	26321	CO	SW	G-II	SEMGW
11.	MW-14	23186	DE	IW	G-II	SEMGW
12.	MW-16	26322	BG	SW	G-II	SEMGW
13.	MW-17	26323	DE	SW	G-II	SEMGW
14.	MW-18	26324	DE	SW	G-II	SEMGW
15.	MW-19	26325	DE	SW	G-II	SEMGW
16.	MW-20	26326	CO	SW	G-II	SEMGW
17.	MW-21	26327	DE	IW	G-II	SEMGW
18.	MW-22	27472	DE	IW	G-II	SEMGW
19.	MW-23	29023	CO	IW	G-II	SEMGW
20.	MW-24	29024	DE	IW	G-II	SEMGW
21.	MW-25	29025	CO	IW	G-II	SEMGW
22.	MW-26	29026	CO	IW/SW	G-II	SEMGW
Piezometers						
1.	MW-6	23178	PZ	IW/SW	G-II	SEMGW
2.	MW-9R	23662	PZ	SW	G-II	SEMGW

Well Type Codes

(BG) Background (CO) Compliance (DE) Detection (PZ) Piezometer

Program Codes

(IW) Industrial Wastewater (SW) Solid Waste



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ATTACHMENT C

Florida Department of Environmental Protection

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

MONITORING WELL COMPLETION REPORT FORM

Facility Name: Stanton Energy Center Combustion Waste Landfill		Date:
DEP Permit No.:	WACS Facility ID #: 97663	
WACS Monitoring Site ID #:	WACS Monitoring Site Name:	
Well Type: ☐ Background ☐ Detection ☐ Compliance ☐ 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

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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 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.

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Attachment D Guidance for Submitting Electronic Water Quality Data

1/6/2017

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) shall be emailed to the Department 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 Department's Solid Waste program 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 Licensee 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 Licensee) shall process the Field EDD through ADaPT and correct all Field EDD errors prior to submittal.

Third, as a completeness check, the laboratory, licensee 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 (ADaPTYYYYMMDDHHMMSS.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 Department's 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 Clark Moore, clark.b.moore@dep.state.fl.us, (850) 245-8739 or by emailing ADaPT.EDDs.and.Reports@dep.state.fl.us.



Florida Department of Environmental Protection

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

DEP Form #: 62-701.900(31), F.A.C.

Form Title: Water Quality Monitoring Certification

Effective Date: January 6, 2010

Incorporated in Rule 62-701.510(9), F.A.C.

WATER QUALITY MONITORING CERTIFICATION

PART I GENERAL INFORMATION

- (1) Facility Name Stanton Energy Center Combustion Waste Landfill
 Address _____
 City _____ Zip _____ County _____
 Telephone Number (____) _____
- (2) WACS Facility ID 97663
- (3) DEP Permit Number _____
- (4) Authorized Representative's Name _____ Title _____
 Address _____
 City _____ Zip _____ County _____
 Telephone Number (____) _____
 Email address (if available) _____

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 (____) _____
- Email address (if available) _____

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

FACILITY NAME Stanton Energy Center Combustion Waste Landfill	WACS I.D. 97663	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) = (feet – feet) X gallons/foot = gallons				
EQUIPMENT VOLUME PURGE: 1 EQUIPMENT VOL. = PUMP VOLUME + (TUBING CAPACITY X TUBING LENGTH) + FLOW CELL VOLUME (only fill out if applicable) = gallons + (gallons/foot X feet) + gallons = gallons				
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				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)