

Morris, John R.

From: Morris, John R.
Sent: Wednesday, February 03, 2016 8:24 AM
To: Greenwell, Jeffry; Dave Adams (adamsds@hillsboroughcounty.org)
Cc: Vazquez, Pamala; Morgan, Steve; Meyers, Alissa
Subject: Pleasant Grove Landfill, DRAFT Agreement/Attachments for Long-Term Care and Monitoring [COM_65124, WACS 94587]
Attachments: Draft Agreement PGLF 2_1_16.pdf; Draft Site Access Agreement_att b PGLF 2_1_16.pdf; Draft LTC Plan_att c PGLF 2_2_16.pdf

Gentlemen:

Good morning. For your convenience, the handouts for today's meeting are attached.

Thanks.

John



John R. Morris, P.G.
Permitting and Waste Cleanup Program
Florida Department of Environmental Protection, Southwest District
13051 N Telecom Parkway, Temple Terrace, FL 33637
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Permitting Consistency Initiative: The Florida Department of Environmental Protection is committed to providing efficient, consistent and quality service to the citizens of Florida. In keeping with these objectives, we are pleased to announce ongoing improvements to our permitting process by standardizing and simplifying our documents. During the fall of this year, the Department will begin issuing permitting correspondence formatted consistently throughout all programs. Although the document formatting will look different from past correspondence, please be assured that the content continues to be driven by applicable Rule and Statute. As always, if you have any questions, please contact your local DEP District office.

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

STATE OF FLORIDA DEPARTMENT)
OF ENVIRONMENTAL PROTECTION)
)
vs.)
)
HILLSBOROUGH COUNTY)
SOLID WASTE DIVISION)
PUBLIC WORKS DEPARTMENT)
_____)

IN THE OFFICE OF THE
SOUTHWEST DISTRICT

OGC FILE NO. 15-0386

**AGREEMENT FOR LONG TERM CARE AND MONITORING AT
THE CLOSED PLEASANT GROVE LANDFILL**

This Agreement is entered into between the State of Florida Department of Environmental Protection (Department) and Hillsborough County Solid Waste Division of the Public Works Department (County) to reach a resolution of certain matters at issue between the Department and County.

The Department and County agree to the following:

1. The Department is the administrative agency of the State of Florida having the power and duty to administer and enforce the provisions of chapters 376 and 403, Florida Statutes, and the rules promulgated and authorized in title 62, Florida Administrative Code. The Department has jurisdiction over the matters addressed in this Agreement.

2. The County is a "person" within the meaning of sections 403.031(5) and 403.703(22), Florida Statutes.

3. Pleasant Grove Landfill, a solid waste landfill (the Site) of approximately seven acres was operated by Hillsborough County Solid Waste Department from 1959 until 1963 on property located in the SW ¼ of NW ¼ of Section 25 Township 29 South, Range 21 East, near the intersection of Turkey Creek Road and Crowe Road, in Hillsborough County, Florida. The parcel(s) and the disposal footprint are within the property boundaries of Medard Park, which is owned by the Southwest Florida Water Management District

(SWFWMD). The disposal footprint and the associated parcel boundaries are depicted on the drawings provided in Attachment A. A certified copy of the Declaration to the Public filed in the deed records of the Hillsborough County Clerk's Office that meets the requirements of rule 62-701.600(7), Florida Administrative Code, is also provided in Attachment A. An executed access agreement between the County, SWFWMD, and the Department is provided in Attachment B.

4. The Site was operated with the standard landfill practice using trench and fill methodology to dispose of commercial, industrial, and agricultural wastes. In 2001, an engineered final cap and cover system was installed over the Site. This state of the art cap and cover consists of a 40 mil LLDPE landfill liner with 18 inches of sand, 6 inches of top soil, and vegetative cover; in the area of the power line structure a geosynthetic clay layer was installed in place of the geomembrane. Based on the period of operation, which occurred prior to the requirement to operate under a state permit, the Site qualifies as an "Existing Installation" in accordance with rule 62-520.200(10), Florida Administrative Code.

5. Based on the dates that closure activities were completed, the requirements for closure (rules 62-701.600 and 62-701.610, Florida Administrative Code) and the requirements for long-term care monitoring and maintenance (rule 62-701.620) that are included in the Solid Waste Management Facilities rule with an effective date of April 23, 1997, remain in effect for the Pleasant Grove Landfill. In accordance with rule 62-701.620(1), (rule effective date April 23, 1997), the County shall be responsible for maintenance and monitoring (long-term care) of the site in accordance with an approved closure plan for 30 years from the date of closing. The Pleasant Grove Landfill was considered to have started the long-term care period when routine ground water monitoring was initiated during May 2001. Based on a May 2001 date of closing, the 30-year long-term care period will be satisfied by May 2031, unless extended pursuant to rule 62-701.620(1), or reduced pursuant to rule 62-701.620(2) (rule effective date April 23, 1997).

Having reached a resolution of the matter Respondent and Department mutually agree and it is

ORDERED:

6. The County shall implement post-closure monitoring and maintenance of the Pleasant Grove Landfill in accordance with Attachment C of this Agreement (Long-Term Care Plan). The County may submit proposed revisions to the Long-Term Care Plan at any time, however Respondent shall not implement any revisions to the Long-Term Care Plan without prior Department approval. As long as the County is complying with this Agreement to the Department's satisfaction, relief from the requirements of chapter 62-780, Florida Administrative Code shall be in place.

7. This Agreement does not relieve the County from liability and civil penalties for harm or injury to human health or welfare, animal or plant life, or adjacent properties caused by the landfill, nor does it allow the County to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by the Long-Term Care Plan.

8. The Department reserves its right to seek appropriate remedial measures, if necessary, in the event that noncompliance with the Agreement or its Attachments, causes noncompliance with any Department rule or statute, or new contamination is discovered that is not appropriately addressed in the Agreement or Attachments to the Agreement.

9. Except as otherwise provided, all submittals required by this Agreement shall be sent to the Department of Environmental Protection, Southwest District, 13051 N. Telecom Parkway, Temple Terrace, FL 33637.

10. The County shall allow all authorized representatives of the Department access to inspect the Site at reasonable times for the purpose of determining compliance with the terms of this Agreement and the rules and statutes administered by the Department.

11. The Department, for and in consideration of the complete and timely performance by the County of all the obligations in this Agreement, hereby conditionally waives its right to seek judicial imposition of damages or civil penalties for alleged violations up to the date of the filing of this Agreement. This waiver is conditioned upon the County's complete compliance with all of the terms of this Agreement.

12. This Agreement is a settlement of the Department's civil and administrative authority arising under Florida law to resolve the matters addressed herein. This Agreement is not a settlement of any criminal liabilities which may arise under Florida law, nor is it a settlement of any violation which may be prosecuted criminally or civilly under federal law. Entry of this Agreement does not relieve the County of the need to comply with applicable federal, state, or local laws, rules, or ordinances.

13. The Department hereby expressly reserves the right to initiate appropriate legal action to address any violations of statutes or rules administered by the Department that are not specifically resolved by this Agreement.

14. The terms and conditions set forth in this Agreement may be enforced in a court of competent jurisdiction pursuant to sections 120.69 and 403.121, Florida Statutes. Failure to comply with the terms of this Agreement constitutes a violation of section 403.161(1)(b), Florida Statutes.

15. The County acknowledges and waives its right to an administrative hearing pursuant to sections 120.569 and 120.57, Florida Statutes, on the terms of this Agreement. The County also acknowledges and waives its right to appeal the terms of this Agreement pursuant to section 120.68, Florida Statutes.

16. Electronic signatures or other versions of the parties' signatures, such as .pdf or facsimile, shall be valid and have the same force and effect as originals. No modifications of the terms of this Agreement will be effective until reduced to writing, executed by both the County and the Department, and filed with the clerk of the Department.

17. This Agreement is a final order of the Department pursuant to section 120.52(7), Florida Statutes, and it is final and effective on the date filed with the Clerk of the Department unless a Petition for Administrative Hearing is filed in accordance with chapter 120, Florida Statutes. Upon the timely filing of a petition, this Agreement will not be effective until further order of the Department.

18. The County shall publish the following notice in a newspaper of daily circulation in Hillsborough, Florida. The notice shall be published one time only within 30 days of the

effective date of the Agreement. The County shall provide a certified copy of the published notice to the Department within 30 days of publication.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF AGREEMENT

The Department of Environmental Protection (Department) gives notice of agency action of entering into an Agreement with Hillsborough County Solid Waste Division of the Public Works Department pursuant to section 120.57(4), Florida Statutes. The Agreement addresses the long term care and monitoring at the closed Pleasant Grove Landfill. The Agreement is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at the Department of Environmental Protection, Southwest District, 13051 N. Telecom Parkway, Temple Terrace, FL 33637.

19. Persons who are not parties to this Agreement, but whose substantial interests are affected by it, have a right to petition for an administrative hearing under sections 120.569 and 120.57, Florida Statutes. Because the administrative hearing process is designed to formulate final agency action, the filing of a petition concerning this Agreement means that the Department's final action may be different from the position it has taken in the Agreement.

The petition for administrative hearing must contain all of the following information:

- a) The OGC Number assigned to this Agreement;
- b) The name, address, and telephone number of each petitioner; the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding;
- c) An explanation of how the petitioner's substantial interests will be affected by the Agreement;
- d) A statement of when and how the petitioner received notice of the Agreement;
- e) Either a statement of all material facts disputed by the petitioner or a statement that the petitioner does not dispute any material facts;

- f) A statement of the specific facts the petitioner contends warrant reversal or modification of the Agreement;
- g) A statement of the rules or statutes the petitioner contends require reversal or modification of the Agreement; and
- h) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the Department to take with respect to the Agreement.

20. The petition must be filed (received) at the Department's Office of General Counsel, 3900 Commonwealth Boulevard, MS# 35, Tallahassee, Florida 32399-3000 within 21 days of receipt of this notice. A copy of the petition must also be mailed at the time of filing to the District Office at Southwest District, 13051 N. Telecom Parkway, Temple Terrace, FL 33637. Failure to file a petition within the 21-day period constitutes a person's waiver of the right to request an administrative hearing and to participate as a party to this proceeding under sections 120.569 and 120.57, Florida Statutes. Before the deadline for filing a petition, a person whose substantial interests are affected by this Agreement may choose to pursue mediation as an alternative remedy under section 120.573, Florida Statutes. Choosing mediation will not adversely affect such person's right to request an administrative hearing if mediation does not result in a settlement. Additional information about mediation is provided in section 120.573, Florida Statutes and Rule 62-110.106(12), Florida Administrative Code.

21. Rules referenced in this Agreement are available at <http://www.dep.state.fl.us/legal/Rules/rulelistnum.htm>.

FOR THE RESPONDENT:

Chairman
Hillsborough County Board of County Commissioners

DONE AND ORDERED this # day of Month, Year, in Hillsborough, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Mary Yeargan
District Director
Southwest District

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

Clerk

Date

Copies furnished to:

Lea Crandall, Agency Clerk
Mail Station 35

ATTACHMENT A

DECLARATION TO THE PUBLIC

(TO BE PROVIDED)

DRAFT

ATTACHMENT B

ACCESS AGREEMENT

(TO BE EXECUTED)

DRAFT

ATTACHMENT C
LONG – TERM CARE PLAN

SW_CO (REV. 06/09)

DRAFT

PERMISSION TO ENTER PROPERTY

1. The undersigned property owner, Southwest Florida Water Management District (undersigned), hereby gives permission to the State of Florida, Department of Environmental Protection (Department), and their agents and contractors, and to Hillsborough County Solid Waste Division of the Public Works Department (County), and their agents and contractors to enter the undersigned's property (the property) referred to the Pleasant Grove Landfill located in Hillsborough County. The Pleasant Grove Landfill is a 7-acre parcel within Medard Park, near the intersection of Turkey Creek Road and Crowe Road, in the SW ¼ of NW ¼ of Section 25, Township 29 South, Range 21 East.
2. This permission is specifically limited to conducting the activities required by the Agreement OGC Case No. 15-0386 (attached).
3. The granting of this permission by the undersigned is not intended, nor should it be construed, as an admission of liability on the part of the undersigned or the undersigned's successors and assigns for any contamination discovered on the property.
4. The Department, their agents and contractors and the County and their agents or contractors may enter the property during normal business hours and may also make arrangements to enter the property at other times after agreement from the undersigned.
5. The undersigned shall not be liable for any injury, damage or loss on the property suffered by the Department, the County and their agents or contractors not caused by the negligence or intentional acts of the undersigned's agents or employees.
6. The Department and the County acknowledge and accept their responsibility under applicable law (Section 768.28, Florida Statutes) for damages caused by the acts of its employees while on the property.

Signature of Undersigned (Property Owner)

Signature of Witness

Print Name

Date

Print Name

Date

AGREEMENT FOR LONG TERM CARE AND MONITORING AT THE CLOSED PLEASANT GROVE LANDFILL
ATTACHMENT B

Accepted by the State of Florida Department of Environmental Protection by the following authorized agent:

Signature of Department Representative

Signature of Witness

Print Name Date

Print Name Date

Accepted by Hillsborough County Solid Waste Division of the Public Works Department by the following authorized agent:

Signature of County Representative

Signature of Witness

Print Name Date

Print Name Date

ATTACHMENT C - LONG-TERM CARE PLAN

A. General Operating Requirements

1. This Agreement does not authorize any construction activities at the Pleasant Grove Landfill. Operation activities at the Pleasant Grove Landfill shall be limited to those associated with monitoring and maintenance of the landfill. The County shall conduct monitoring of the Site in accordance with the approved Water Quality Monitoring Plan attached and incorporated herein as Appendix 1. Any deviations to the Long-Term Care Plan or Water Quality Monitoring Plan shall require mutual written agreement of the Department and the County.
 - a. This Agreement does not authorize the acceptance of solid wastes for disposal or recycling, or the temporary acceptance and/or staging of solid wastes at the Pleasant Grove Landfill.
 - b. The key features of the Pleasant Grove Landfill are described in the "General Information" table attached and incorporated herein as APPENDIX 2.
2. Notification of Emergencies: In the event of damage to any portion of the landfill site facilities, failure of any portion of the landfill systems, damaged or dry monitor wells/piezometers, fire, explosion, or the development of sinkhole(s) or other subsurface instability at the Site, the County shall **immediately (within 24 hours of discovery)** notify the Department, explaining such occurrence, remedial measures to be taken, method to prevent recurrence, and time needed for repairs. Written detailed notification shall be submitted to the Department **within seven (7) days** following the discovery. Notification shall be made to the Southwest District, Compliance Assurance Program at (813) 470-5700 or at SWD_Waste@dep.state.fl.us.

B. Gas Management System Requirements

1. Based on the landfill gas monitoring conducted at the Pleasant Grove Landfill, no additional monitoring for combustible gas migration is required.
2. Odor Remediation Plan. The County shall operate the Site to control objectionable odors. If objectionable odors are confirmed beyond the property boundary, the County shall develop and implement an odor remediation plan, upon notification by the Department, to:
 - a. Immediately take steps to reduce the objectionable odors.
 - b. Submit to the Department for approval an odor remediation plan for the gas releases. The plan shall describe the nature and extent of the problem and the proposed long-term remedy. The remedy shall be implemented within 30 days of approval.
 - c. Implement a routine odor monitoring program to determine the timing and extent of any off-site odors, and to evaluate the effectiveness of the odor remediation plan.

ATTACHMENT C - LONG-TERM CARE PLAN

C. Long Term Care Requirements

1. Long-Term Care. The County shall continue to monitor and maintain the integrity and effectiveness of the final cover as well as other appurtenances of the Site, control erosion, fill areas of subsidence, comply with the Water Quality Monitoring Plan, maintain the gas vents, and maintain the stormwater management system. Routine inspections of the Site shall be conducted by the County to look for areas of settlement, ponding, erosion, inadequate vegetation, and seepage. Control of access and the condition of the perimeter fence will also be observed during the routine inspections. Mowing of the vegetative cover shall be conducted as necessary.
2. Erosion Control. The County shall prevent erosion of the final cover soils and ponding of water over the disposal footprint.
 - a. The County shall repair areas of significant erosion within ten days of discovery. For the purposes this section, "significant" means the soil cover materials have eroded such that greater than 50% of the soil in that location has been removed.
 - b. In the event that significant erosion has occurred and the geomembrane cap is exposed, the County shall notify the Department **immediately (within 24 hours of discovery)** and implement corrective measures within ten days of discovery. If the erosion cannot be corrected within ten days of discovery, the County shall notify the Department and propose an alternate schedule.
 - c. In the event that the geomembrane cap is damaged, the County shall notify the Department **immediately (within 24 hours of discovery)**. Prior to implementation of repairs to the geomembrane cap, the County shall provide written notification to the Department describing the procedures to be implemented to restore the cap and a schedule for completion. Repairs to the geomembrane cap shall comply with the requirements of Cover System Specification, Section 13010 (Very Flexible Polyethylene Geomembrane), regarding materials, seaming and testing (see Remedial Action Plan, Appendix B, prepared by SCS Engineers, February 2000).
3. Every five years after the effective date of this Agreement, the County shall submit a report to the Department that addresses stabilization of the landfill. The submittal shall include an evaluation of the monitoring results for the previous five-year period to comply with the requirements of rule 62-701.510(9)(b), Florida Administrative Code (rule effective date April 23, 1997), and shall also address subsidence, barrier layer effectiveness, storm water management, and gas production.

ATTACHMENT C - LONG-TERM CARE PLAN

C. Long Term Care Requirements (continued)

4. Upon Department approval that long-term care monitoring and maintenance activities are no longer required, the County shall submit to the Department a certification, signed and sealed by a professional engineer, verifying that long-term care has been completed. This certification shall include abandonment records for all monitor wells.
5. Use of Closed Landfill Areas. There are no current Department-approved uses of the Pleasant Grove Landfill for activities other than those associated with the long-term care, monitoring and maintenance of the Site. In the event that Hillsborough County intends to conduct activities that include excavation of and/or construction on waste-filled areas of the Pleasant Grove Landfill, the County shall notify the Department. Modification of this Agreement along with separate authorizations may be required depending on the type of proposed activities.

ATTACHMENT C - LONG-TERM CARE PLAN

APPENDIX 1 - Water Quality Monitoring Plan

1. Water Quality Monitoring Quality Assurance.

- a. All field work done in connection with the Site's Water Quality Monitoring Plan regarding the collection of ground water and surface water samples shall be conducted in accordance with the Standard Operating Procedures (SOPs) described in DEP-SOP-001/01 (revised March 1, 2014, effective July 30, 2014) [or as replaced by successor SOPs], as referenced in rule 62-160.210(1), Florida Administrative Code. All laboratory analyses done in connection with the Site's Water Quality Monitoring Plan shall be conducted by firms that hold certificates from the Department of Health Environmental Laboratory Certification Program under chapter 64E-1, Florida Administrative Code, as referenced in rule 62-160.300(1). The SOPs utilized and the laboratory's list of certified test methods and analytes must specifically address the types of sampling and analytical work that are required by this Agreement and shall be implemented by all persons performing sample collection or analysis related to this Agreement. Alternate field procedures and laboratory methods may be used if approved according to the requirements of rules 62-160.220 and 62-160.330, respectively.

NOTE: DEP-SOP-001/01 can be accessed on the Department's web site at:
<http://www.dep.state.fl.us/water/sas/sop/sops.htm>

- b. The field testing, sample collection and preservation, and laboratory testing, including the collection of quality control samples, shall be in accordance with the requirements of and methods approved by the Department in accordance with rule 62-4.246 and chapter 62-160, Florida Administrative Code. Approved methods published by the Department or as published in Standard Methods, or by A.S.T.M., or EPA methods shall be used.

2. Zone of Discharge.

- a. The zone of discharge for this Site shall extend horizontally 100 feet from the limits of the landfill closure or to the property boundary, whichever is less, and shall extend vertically to the bottom of the surficial aquifer.
- b. The County shall ensure that the primary standards for Class G-II ground waters referenced in rule 62-520.420(1), Florida Administrative Code, will not be exceeded at the boundary of the zone of discharge, and that the ground water minimum criteria referenced in rule 62-520.400(1), will not be exceeded outside the footprint of the landfill disposal area. In accordance with rule 62-520.520(1), the Department considers the Pleasant Grove Landfill to be an "existing installation" that is exempt from compliance with the secondary standards for Class G-II ground water referenced in rule 62-520.420(1), at the property boundary.

ATTACHMENT C - LONG-TERM CARE PLAN

APPENDIX 1 - Water Quality Monitoring Plan (continued)

3. **Ground Water Monitor Well Locations.** The locations included in the monitoring plan for the Pleasant Grove Landfill are shown on the **attached** figure titled "Ground Water Monitoring Wells at Pleasant Grove Landfill, Hillsborough County, Florida" prepared by SCS Engineers, received July 31, 2013, as follows:

<u>Well #</u>	<u>Scheduling Notes</u>	<u>WACS Testsite #</u>	<u>Aquifer</u>	<u>Well Designation</u>	<u>Location</u>
PGMW-1S	A	22534	Surficial	Detection	See figure
PGMW-2S	A	22536	Surficial	Detection	↓
PGMW-3S	A	22538	Surficial	Detection	↓
PGMW-5SA	A	29797	Floridan	Detection	↓
PGMW-6SA	A	29798	Surficial	Detection	↓
PGMW-8S	A	22545	Surficial	Background	↓
PGMW-1D	A	22533	Intermediate	Compliance	See figure
PGMW-3D	A	22537	Intermediate	Compliance	↓
PGMW-6D	A	22543	Intermediate	Compliance	↓

Scheduling Notes:

A = existing monitor well; construction details previously provided.

All monitor wells are to be clearly labeled and easily visible at all times. Hillsborough County shall keep all wells locked to minimize unauthorized access.

4. **Ground Water Sampling.** The locations, parameters, and frequencies specified herein represent the minimum requirements for ground water monitoring. Additional samples, wells, and parameters may be required based upon subsequent analysis. Method Detection Limits (MDLs) must be reported at or below the Maximum Contaminant Levels established for the individual parameters to demonstrate compliance with the Class G-II ground water standards referenced in rule 62-520.420(1), Florida Administrative Code, and with the ground water minimum criteria referenced in rule 62-520.400(1). Compliance with ground water standards will be based on analysis of unfiltered samples.

ATTACHMENT C - LONG-TERM CARE PLAN

APPENDIX 1 - Water Quality Monitoring Plan (continued)

4. **Ground Water Sampling.** (continued)

- a. The County shall measure ground water levels **semi-annually** (during the periods from Jan. 1 - June 30, and July 1 - Dec. 31 of each year) at a minimum, including all sampling events described in Appendix 1, Paragraphs #4.b., and #4.c., below, at all active monitor wells, listed in Appendix 1, Paragraph #3., above, to a precision of 0.01 foot. Ground water surface contour maps shall be prepared for each sampling event to include water elevations (using an industry approved datum) calculated for each monitor well.
- b. The County shall conduct an "initial sampling event" **within 7 days of installation and development** of all new monitor wells for analysis of the following parameters:

<u>Field Parameters</u>	<u>Laboratory Parameters</u>	
Static Water Level before purging	Total Ammonia - N	Iron
Specific Conductivity	Chlorides	Mercury
pH	Nitrate	Sodium
Dissolved Oxygen	Sulfate	
Turbidity	Total Dissolved Solids (TDS)	
Temperature	<u>Those parameters listed in</u>	
Color/sheen (by obs.)	<u>40 CFR Part 258, Appendix II</u>	

Results of initial sampling shall be submitted within 60 days of receipt from the analytical laboratory.

- c. The County shall sample the background, detection and compliance wells listed in Appendix 1, Paragraph #3., above, **semi-annually** for analysis of the following parameters:

<u>Field Parameters</u>	<u>Laboratory Parameters</u>	
Static Water Level before purging	Arsenic	
Specific Conductivity	Cadmium	
pH	Iron	
Dissolved Oxygen	Sulfate	
Turbidity	Volatile Organic Compounds listed by EPA Method 8260	
Temperature		
Color/sheen (by obs.)		

ATTACHMENT C - LONG-TERM CARE PLAN

APPENDIX 1 - Water Quality Monitoring Plan (continued)

5. **Ground Water Monitor Well Construction.** Within 90 days of installation, the following information is required to be submitted of all new or replacement monitor wells, or as stated below:
 - a. Prior to construction of all new or replacement monitor wells or piezometers, the County shall request and receive Department approval of a modification to this Water Quality Monitoring Plan.
 - b. Construction details for all new or replacement wells and piezometers shall be provided to the Department's Southwest District Office on Department Form # 62-701.900(30), Monitoring Well Completion Report **[attached]**.
 - c. **Within one week of well completion and development**, each new monitor well shall be sampled for the parameters listed in Appendix 1, Paragraph #4.b., above, to comply with the requirements of rules 62-701.510(8)(a), and 62-701.510(8)(d), Florida Administrative Code (rule effective date April 23, 1997).
 - d. A surveyed drawing shall be submitted in accordance with rule 62-701.510(3)(d)1, Florida Administrative Code (rule effective date April 23, 1997), showing the location of all monitor wells and piezometers (active and abandoned) horizontally located in degrees, minutes and seconds of latitude and longitude, and the elevation of the top of the well casing to the nearest 0.01 foot, using an industry approved datum. The surveyed drawing shall include the monitor well identification number, locations and elevations of all permanent benchmarks and/or corner monument markers at the site. The survey shall be conducted by Florida Licensed Professional Surveyor and Mapper.
6. **Well Abandonment.** All monitor wells not listed in Appendix 1, Paragraph #3., above, and not a part of the approved Water Quality Monitoring Plan shall be plugged and abandoned by the County in accordance with rule 62-532.500(5), Florida Administrative Code, and the rules of the Southwest Florida Water Management District. The County shall submit a written report to the Department **within 30 days of well/piezometer abandonment** verifying proper abandonment.

ATTACHMENT C - LONG-TERM CARE PLAN

APPENDIX 1 - Water Quality Monitoring Plan (continued)

7. **Verification/Evaluation Monitoring.** If at any time monitoring parameters are detected at concentrations significantly above background water quality, or exceed the Department's ground water quality standards or minimum criteria specified in chapter 62-520, Florida Administrative Code, in any detection well, the County has 30 days from receipt of the sampling results to resample the monitor well(s) to verify the original analysis. Should the County choose not to resample, the Department will consider the water quality analysis as representative of current ground water conditions at the Site. If the data is confirmed, or if the County chooses not to resample, the County shall notify the Department in writing within 14 days of this finding. Upon notification by the Department, evaluation monitoring shall be initiated as described in rule 62-701.510(7)(a) (rule effective date April 23, 1997). If monitoring parameters are detected and confirmed at concentrations significantly above background water quality, and exceed the Department's water quality standards or minimum criteria in any compliance well, the County shall notify the Department in writing within 14 days of this finding and shall initiate corrective actions as described in rule 62-701.510(7)(b) (rule effective date April 23, 1997).
8. **Surface Water Sampling.** All surface water bodies that may be affected by a contaminant release at the Site shall be monitored, except bodies of water contained completely within the property boundaries of the site which do not discharge from the site to surface waters (rule 62-701.510(4), Florida Administrative Code, rule effective date April 23, 1997). The locations, parameters, and frequencies specified herein represent the minimum requirements for surface water monitoring. Additional sampling locations and parameters may be required based upon subsequent analysis. Method Detection Limits must be less than or equal to the surface water criteria established for the individual parameters to demonstrate compliance with Class III surface water (predominantly freshwater) referenced in chapter 62-302. Compliance with surface water criteria will be based on analysis of unfiltered samples.
- a. Surface water samples shall be collected at the locations shown on the **attached** figure titled "Ground Water Monitoring Wells at Pleasant Grove Landfill, Hillsborough County, Florida" prepared by SCS Engineers, received July 31, 2013, as follow:

<u>Surface Water Sampling Location Number</u>	<u>WACS Testsite ID Number</u>	<u>Location</u>
SW-1	22605	See figure
SW-2	22606	↓
SW-3	22607	↓

ATTACHMENT C - LONG-TERM CARE PLAN

APPENDIX 1 - Water Quality Monitoring Plan (continued)

8. **Surface Water Sampling.** (continued)

- b. The County shall conduct surface water sampling **semi-annually** at the locations listed in Appendix 1, Paragraph #8.a., above, in accordance with the Department's SOPs for analysis of the following parameters:

<u>Field Parameters</u>	<u>Laboratory Parameters</u>
Static Water Level	Arsenic
before purging	Cadmium
Specific Conductivity	Iron
pH	Sulfate
Dissolved Oxygen	Total hardness (as mg/L CaCO ₃)
Turbidity	Volatile Organic Compounds listed by EPA Method 8260
Temperature	
Color/sheen (by obs.)	

9. **Leachate Sampling.** As the Pleasant Grove Landfill was unlined and was not constructed with a leachate collection system, the sampling and analysis of leachate is not required.

10. **Water Quality Reporting Requirements.** The County shall submit all required water quality monitoring reports for all ground water and surface water analytical results for sampling events conducted at the Pleasant Grove Landfill electronically. Water quality monitoring reports shall be submitted in Adobe pdf format.

- a. 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 as summarized on the Department's web site at: <http://www.dep.state.fl.us/waste/ADaPT/>.

Water quality monitoring reports shall include the following:

- 1) Cover letter;
- 2) Summary of exceedances and sampling problems, if any (e.g., variation from SOP field criteria);
- 3) Conclusions and recommendations;
- 4) An updated ground water table contour map signed and sealed by a Florida-registered professional geologist or professional engineer with experience in hydrogeologic investigations, with contours no greater than one-foot intervals unless site specific conditions dictate otherwise, which indicates ground water elevations and flow direction;
- 5) Laboratory report of results, including chain-of-custody forms;
- 6) Water levels, water elevation table;
- 7) Ground Water Monitoring Certification, using Department Form #62-701.900(31);
- 8) Appropriate sampling information on Form #FD 9000-24 (DEP-SOP-001/01); and,
- 9) Laboratory and Field EDDs and error logs, as applicable.

ATTACHMENT C - LONG-TERM CARE PLAN

APPENDIX 1 - Water Quality Monitoring Plan (continued)

10. **Water Quality Reporting Requirements.** (continued)

All water quality reports shall be submitted to:

Florida Department of Environmental Protection
Southwest District Office, Compliance Assurance Section
13051 North Telecom Parkway, Temple Terrace, FL 33637-0926
SWD_Waste@dep.state.fl.us

and, to:

Florida Department of Environmental Protection
Solid Waste Section, MS 4565
2600 Blair Stone Road
Tallahassee, FL 32399-2400
ADaPT.EDDs.and.Reports@dep.state.fl.us

- b. The County shall submit to the Department the results of analyses reported for each sampling event conducted at the Site by the following due dates:
- 1) Appendix 1, Paragraph #4.b. - results of ground water "initial sampling events" shall be submitted **within 60 days from completion of laboratory analyses**;
 - 2) Appendix 1, Paragraph #4.c. - results of ground water routine semi-annual sampling events shall be submitted **within 60 days from completion of laboratory analyses and no later than Jan. 15th and July 15th of each year for the time periods June 1-Dec. 31, and Jan. 1-June 30, respectively**;
 - 3) Appendix 1, Paragraph #7 - results of ground water verification events shall be submitted **within 60 days from completion of laboratory analyses**; and,
 - 4) Appendix 1, Paragraph #8.b. - results of surface water routine semi-annual sampling events shall be submitted **within 60 days from completion of laboratory analyses and no later than Jan. 15th and July 15th of each year for the time periods June 1-Dec. 31, and Jan. 1-June 30, respectively**

ATTACHMENT C - LONG-TERM CARE PLAN

APPENDIX 1 - Water Quality Monitoring Plan (continued)

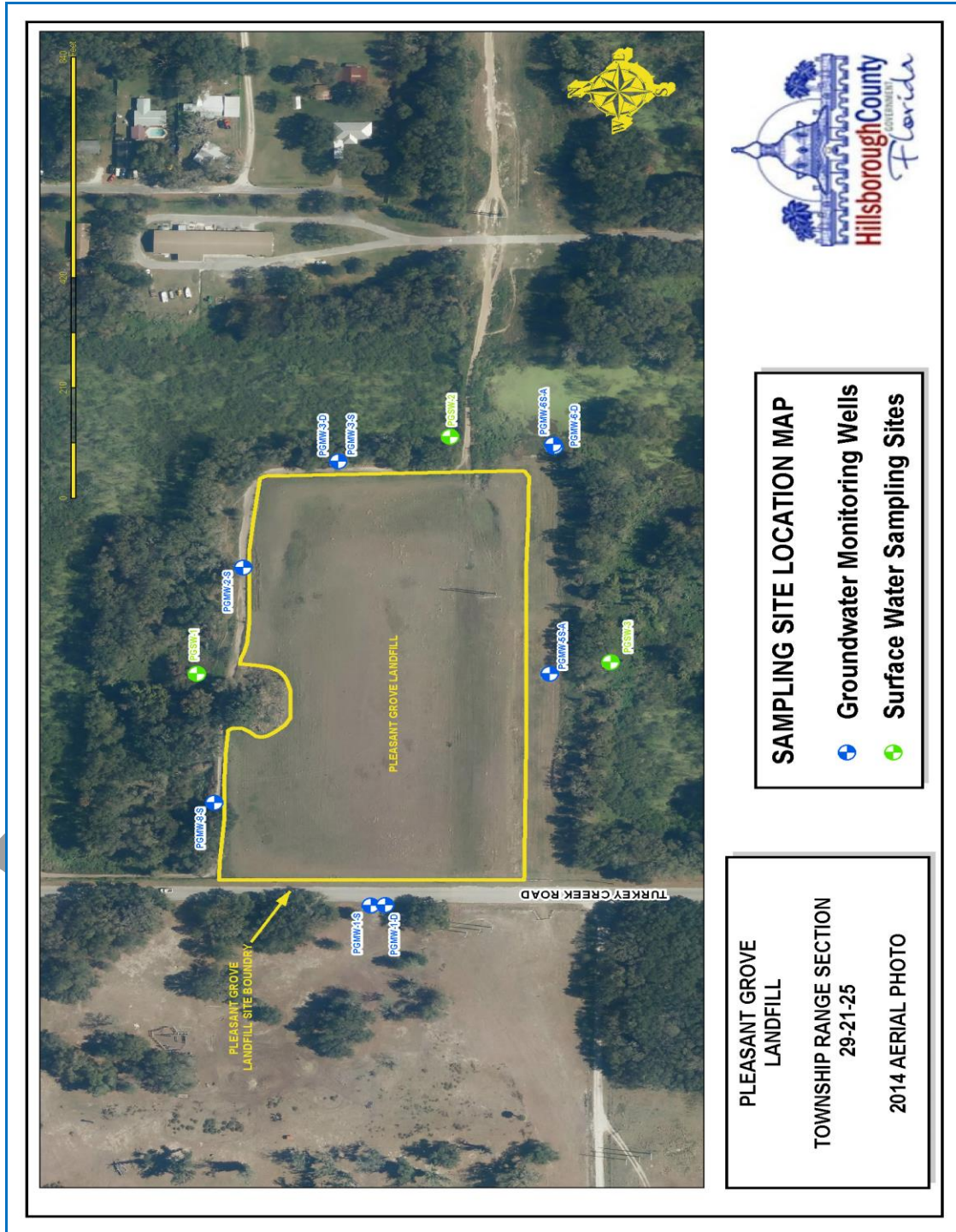
- 11. Monitoring Plan Evaluation.** Every five years after the effective date of this Agreement the County shall submit an evaluation of the water quality monitoring data (ground water analyses, ground water flow direction and velocity, and surface water analyses) as required by rule 62-701.510(9)(b), Florida Administrative Code (rule effective date April 23, 1997).

The monitoring plan evaluations shall be sent to:

Florida Department of Environmental Protection
Southwest District Office, Permitting & Waste Cleanup Program
13051 North Telecom Parkway
Temple Terrace, FL 33637-0926
SWD_Waste@dep.state.fl.us

ATTACHMENT C - LONG-TERM CARE PLAN

APPENDIX 1 - Water Quality Monitoring Plan (continued)



ATTACHMENT C - LONG-TERM CARE PLAN

APPENDIX 1 - Water Quality Monitoring Plan (continued)



Department of
Environmental Protection

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

DEP Form # 62-701.900(30)
Form Title: Monitoring Well Completion Report
Effective Date: January 6, 2010
Incorporated in Rule 62-701.510(3)

MONITORING WELL COMPLETION REPORT

DATE: _____

FACILITY NAME: _____

DEP PERMIT NO.: _____ WACS_FACILITY: _____

WACS MONITORING SITE_NUM.: _____ WACS_WELL: _____

WELL_TYPE: BACKGROUND _____ DETECTION _____ COMPLIANCE _____

LATITUDE AND LONGITUDE (see back 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: _____

INTERVAL COVERED: _____ TO _____ (BLS)

SEALANT TYPE: _____ SEALANT INTERVAL: _____ TO _____ (BLS)

GROUT TYPE: _____ GROUT INTERVAL: _____ TO _____ (BLS)

TOP OF CASING ELEVATION (NGVD): _____ GROUND SURFACE ELEVATION (NGVD): _____

DESCRIBE WELL DEVELOPMENT: _____

POST DEVELOPMENT WATER LEVEL ELEVATION (NGVD): _____

DATE AND TIME MEASURED: _____

REMARKS: _____

NAME OF PERSON PREPARING REPORT: _____

(Name, Organization, Phone No., E-mail)

NOTE: ATTACH AS-BUILT MW CONSTRUCTION DIAGRAM AND LITHOLOGIC LOG (NGVD) NATIONAL GEODETIC VERTICAL DATUM OF 1988 (BLS) = BELOW LAND SURFACE

ATTACHMENT C - LONG-TERM CARE PLAN

APPENDIX 1 - Water Quality Monitoring Plan (continued)

Latitude must be measured in degrees, minutes and seconds, to at least two (2) decimal places.

Longitude must be measured in degrees, minutes and seconds, to at least two (2) decimal places.

Eastings and northings (State Plane Coordinates) **must** be converted to latitude and longitude.

Coordinate Accuracy: the measured, estimated degree of correctness of the measurement. An accuracy of 15 feet or 5 meters is preferred.

Datum: the horizontal reference for measuring locations on the Earth's surface. NAD83-North American Datum of 1983 is preferred.

Elevation Datum: the reference datum from which elevation measurements are made. NGVD88 (National Geodetic Vertical Datum of 1988) is preferred.

Collection Method: the method or mechanism used to derive the measurements, e.g. GPS, map, aerial photo, etc.

Collection Date: the date and time on which the measurements were taken.

Collector Name: the name of the person taking the measurement.

Collector Affiliation: the agency or company for whom the collector works.

ATTACHMENT C - LONG-TERM CARE PLAN

APPENDIX 2 - General Information

<u>Long-Term Care Item</u>	<u>Description</u>
As-Built Survey	Record Survey of Pleasant Grove Landfill, Hillsborough County, Florida, prepared by Chastain Skillman, dated February 12, 2001.
Certification of Closure Construction Completion	Certification of Construction Completion Report, Pleasant Grove Landfill, Department of Solid Waste Management, Hillsborough County, Florida, prepared by SCS Engineers, dated May 25, 2001.
Declaration to the Public	To be provided
Official Date of Closing	May 2001 (based on the initiation of routine ground water monitoring).
Date of Solid Waste Rule in Effect at Closing	Chapter 62-701, F.A.C., rule effective date April 23, 1997.
Long-Term Care Period	Rule Citation: 62-701.620(1), F.A.C., requires a 30 year duration, subject to extension pursuant to Rule 62-701.620(1), F.A.C., or reduction pursuant to Rule 62-701.620(2), F.A.C.

<u>Landfill Feature</u>	<u>Description</u>
Bottom Liner Type	None
Leachate Collection	None
Final Cover System	12-inch general fill over waste, 6-inch bedding sand layer, 40-mil smooth linear low-density polyethylene geomembrane, 18-inch sand layer, 6-inch topsoil layer, vegetative cover.
Landfill Gas Venting	15 passive gas vents.