

PERMIT DATA FORM

CHECK IF NEW: _____

MOD ☒ NEW ☐ RENEWAL _____

SITE WAFR # AIR # 5049-0199726

SITE/WAFER/FACILITY NAME: JED SWF Mod

PROJECT NAME: _____

DESC: _____

TYPE CODE: SD

SUBCODE: MM

CHECK IF GP ☐ EXEMPT ☐ NPDES ☐

CORRECT FEE: \$250-

PROCESSOR: *He*

AMOUNT RCV'D: 250-

AMOUNT REFUND: _____

MONIES DUE: _____

RED ___ YELLOW ___ GREEN ___ NO PERMIT REQ ___

HISTORY SHEET

SITE/WAFR/AIR#: 49-0199726-019 TYPE: SO SUBTYPE: mm

**SITE/WAFR/AIR-
NAME:** _____

Oak Hammock

**PROJECT
NAME:**

[illegible]

THE FACE OF THIS DOCUMENT HAS A COLORED BACKGROUND ON WHITE PAPER - THE BACK CONTAINS AN ARTIFICIAL WATERMARK - HOLD AT AN ANGLE TO VIEW

IESI Corporation

2301 Eagle Parkway, Suite 200
Fort Worth, TX 76177

(817) 632-4000

Fleet Maine, N.A.
South Portland, ME
52-153/112

Check # 101889551

Check Date

2/8/2011

Check Amount

*****\$250.00

** Void after 120 days **

** Not valid over \$50,000 without two manual signatures **

Two Hundred Fifty and 00/100-----

USD

PAY TO THE ORDER OF FLORIDA DEPT OF ENVIRONMENTAL PROTEC

Stephen Moody

Authorized Signature

BORDER CONTAINS MICROPRINTING

|| [REDACTED] || [REDACTED] || [REDACTED] ||



OK #
101889551

Environmental Planning Specialists, Inc.
1936 Bruce B. Downs Blvd. No. 328
Wesley Chapel, Florida 33543
Telephone: (813) 388-1026
www.envplanning.com

March 10, 2011

Mr. F. Thomas Lubozynski, P.E.
Program Administrator, Solid and Hazardous Waste Program
Florida Department of Environmental Protection
Central District Office
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

RECEIVED

MAR 11 2011

DEP Central Dist.

Subject: An Application for a Minor Permit Modification for
Replacement of the Perimeter Gas Monitoring Probes
Permit No. SO49-0199726-015
J.E.D. Solid Waste Management Facility
Omni Waste of Osceola County, LLC

Dear Mr. Lubozynski:

Transmitted herewith are four copies of a minor permit modification application for replacement of the perimeter gas monitoring probes at the J.E.D. Solid Waste Management Facility (JED Facility). This minor permit modification application was prepared by Environmental Planning Specialists, Inc. (EPS) and is being submitted on behalf of Omni Waste of Osceola County, LLC (Omni).

A check in the amount of \$250 is also enclosed with this minor permit modification application. If you or your staff has any questions or need additional information, please feel free to contact Mr. Mike Kaiser of Waste Services, Inc. at (904) 673-0446, mkaiser@wsii.us, or the undersigned at (813) 388-1026, kwills@envplanning.com.

Sincerely,

Kirk Wills
Senior Engineer

Enclosures

Copy: Mike Kaiser, Waste Services, Inc.

Environmental Planning Specialists, Inc. • www.envplanning.com



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Sincerely,

A handwritten signature in blue ink that reads "Kirk Wills".

Kirk Wills
Senior Engineer

Enclosures

Copy: Mike Kaiser, Waste Services, Inc.

Environmental Planning Specialists, Inc. • www.envplanning.com

Applicant:



Omni Waste of Osceola County, LLC

1501 Omni Way
St. Cloud, Florida 34773

**REPLACEMENT OF PERIMETER GAS
MONITORING PROBES – APPLICATION
FOR A MINOR PERMIT MODIFICATION**

J.E.D. SOLID WASTE MANAGEMENT FACILITY

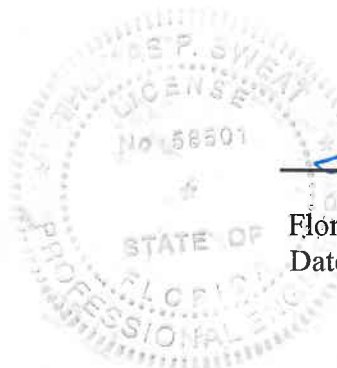
**1501 OMNI WAY
ST. CLOUD, OSCEOLA COUNTY, FLORIDA 34773**

Prepared by:



Environmental Planning Specialists, Inc.
1936 Bruce B. Downs Blvd. No. 326
Wesley Chapel, Florida 33543

March 2011



Thomas P. Sweat

Thomas P. Sweat, P.E.
Florida Registration No. 58501
Date: 3/9/11

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FIGURES

- FIGURE 1 Gas Monitoring Probe Locations
FIGURE 2 Typical Replacement Gas Monitoring Probe Construction Detail

ATTACHMENTS

- | | |
|--------------|--|
| ATTACHMENT 1 | FDEP Form 62-701.900(1) |
| ATTACHMENT 2 | Status Report of Methane Gas Migration Investigation |
| ATTACHMENT 3 | FDEP Correspondence, dated December 16, 2010 |

1 INTRODUCTION

1.1 Terms of Reference

Environmental Planning Specialists, Inc. (EPS) has prepared this minor modification application for the existing Florida Department of Environmental Protection (FDEP) solid waste operating permit (Permit No. SO49-0199726-015) for the J.E.D. Solid Waste Management Facility (JED Facility), a Class I landfill located in Osceola County, Florida (west of highway U.S. 441, approximately 6.5 miles south of Holopaw).

This report was prepared on behalf of Omni Waste of Osceola County, LLC, (Omni) owner and operator of the JED facility. This minor modification application is submitted to the FDEP Central District on behalf of Omni, and was developed to comply with the requirements of Chapter 62-701 of the Florida Administrative Code (F.A.C.). FDEP Form 62-701.900(1), *Application to Construct, Operate, Modify or Close a Solid Waste Management Facility* has been used to verify the completeness of this report, and is included as Attachment 1. Those items for which responses have not substantially changed from previous submittals to FDEP have been marked on the application form in Attachment 1 as "N/C" for no change.

Figures showing locations, and details associated with the installation of the replacement perimeter gas monitoring probes have been included to provide sufficient detail for approval and construction.

This report was prepared by Mr. Kirk Wills and reviewed by Mr. Thomas P. Sweat, P.E., both with EPS. Professional engineer certification is provided on the cover sheet of this report and on FDEP Form 62-701.900(1), and on each figure.

1.2 Report Organization

In accordance with Rule 62-701.530, F.A.C., the remainder of this report describes the design, layout, and construction details for replacement of the perimeter gas monitoring probes, as well as the abandonment procedures for the existing perimeter gas monitoring probes.

2 PROJECT BACKGROUND

2.1 Overview

For the current gas monitoring system, sixteen (16) gas monitoring probes (GP-7 through GP-22) were installed along the existing storm water management berm around the perimeter of the Phase 1, 2 and 3 development areas. For Phases 1, 2 and 3, the storm water berm is aligned along, and in close proximity to the facility's property boundary. The gas monitoring probes were located such that the spacing between the probes was approximately 500 ft, in accordance with the FDEP permit requirements. Each gas monitoring probe was installed in accordance with the permit application and approved permit drawings.

A layout depicting the location of gas monitoring probes installed for Phases 1, 2 and 3 are shown on Figure 1. As shown, the gas monitoring probes were installed along the top, outer edge of the existing storm water management berm. The ground surface at the location of the probes in the storm water berm is at approximately Elevation 85 feet with respect to National Geodetic Vertical Datum of 1929 (NGVD, 1929).

In accordance with the permit drawings, the bottom elevation of the gas monitoring probes was to be set a minimum of 2 ft below the average groundwater elevation. Historical groundwater elevation data generated during the baseline and semi-annual water quality monitoring events completed at the site were used to calculate the average groundwater elevations in the general vicinity of where the gas monitoring probes were installed. The bottoms of the well screens were set to meet this minimum depth requirement. The top of the well screens were set so that the screened interval did not extend above the original or surrounding ground surface elevations (approximately Elevation 80.5 feet [NGVD, 1929]) and up into the storm water berm. The details of the existing perimeter gas monitoring probes are presented in Table 1. The purpose of the gas monitoring probes is to monitor subsurface gas migration i.e., within the unsaturated subsurface soils around the perimeter of the landfill.

On November 14, 2010, Omni submitted a report to FDEP titled "Status Report of Methane Gas Migration Investigation". In the report Omni requested approval to abandon the existing permanent gas monitoring probes and replace them with new gas monitoring probes in the same location, but with a different screened interval. A copy of this report has been included as Attachment 2. In a letter to Mike Kaiser from Tom Lubozynski, dated December 16, 2010, FDEP agreed that it was not desirable to have submerged gas probe screens, even seasonally and provided guidance for the installation of replacement perimeter gas probes consistent with the requirements listed in Rule 62-701.530(2)(b). A copy of this letter has been included as Attachment 3.

Per Rule 62-701.530(2)(b), F.A.C., “soil monitoring probes (aka perimeter gas monitoring probes) shall be installed along each property boundary segment of the facility, particularly those adjacent to off-site occupied structures within 100 ft of the property boundary or where distressed vegetation is present, and shall be spaced as needed to detect gas migration. When locating the soil monitoring probes, the owner or operator shall also consider the location of the facility structures and the soil conditions, hydrogeologic conditions, and hydraulic conditions surrounding the facility. Soil monitoring probes shall extend to the depth of the base of waste fill or at least three feet below the ground surface, whichever is deeper. Sampling shall be conducted in the head space of the monitoring probes without purging the gas before collecting the sample. Where sand, gravel, or more permeable soil strata may interconnect the waste deposit and the property boundary, multiple depth monitoring probes if a confining unit is not penetrated, or a single monitoring probe extending from the soil surface to the water table, are necessary to draw gas samples from the permeable layers.”

This minor modification was prepared in accordance with the recommendations provided in the aforementioned letter.

3 LAYOUT AND CONSTRUCTION DETAILS

3.1 Layout

To maintain the general layout configuration consistent with the existing operations permit, the replacement perimeter gas monitoring probes will be installed adjacent to the existing gas monitoring probes. The replacement probes will be installed approximately 3 to 5 ft. laterally from the existing probes at the same approximate ground surface elevation of 85 feet (NGVD, 1929) along the outer crest of the perimeter storm water management berm. The proposed locations of the replacement gas probes are shown on Figure 1.

3.2 Construction Details

Per Rule 62-701.530.(2)(b), the monitoring probes shall extend to the base of the waste fill, which for the Cells 1-7 constructed to date would be elevation 82 ft. (NGVD, 1929) (elevation of top of liner protective cover at lowest part of cell in front of the sump area) or 3 ft. below the ground surface, whichever is greater. The disposal cells at the JED Facility are all constructed above grade. The original ground surface over which the facility is constructed varied between approximately elevation 78.5 (NGVD, 1929) and elevation 82.5 (NGVD, 1929), with an average elevation of 80.5 ft. (NGVD, 1929). Based on this information, the monitoring probes will be required to extend 3 ft below the original ground surface to an elevation of 77.5 ft. (NGVD, 1929).

The replacement gas monitoring probes will be constructed with 2-in diameter schedule 40 flush-threaded polyvinyl chloride (PVC) casing within a 6-in diameter borehole. The probe screens will be 5-ft in length and machine slotted, with a screen opening of 0.010-in. (#10-slot). A threaded cap will be secured to the bottom of the gas probe screen. No glue, sealants, adhesives or solvents will be used in the construction of the replacement gas monitoring probes. Rounded pea gravel will be placed around the screen to a height of approximately 0.5-ft above the top of the screen. A thin layer (approximately 3 to 4 inches thick) of 20/30 graded silica sand will be placed above the pea gravel to minimize the infiltration of bentonite into the pea gravel. A minimum 1-ft thick bentonite (hydrated) seal will be placed above the fine sand to prevent intrusion of atmospheric air into the screened portion of the gas monitoring probes. The remaining annular space from the top of the bentonite seal to the existing ground surface will be filled with concrete when the protective casings are installed. The PVC well casings will extend approximately 2.5 to 3 ft. above the existing ground surface. The surface completion will consist of a protective anodized aluminum casing with a lockable cover set in a 4-in thick, 2-ft by 2-ft concrete pad. Each well will be provided with a threaded well cap with a quick-connect sampling port, padlock, and an identification (ID) label. The identification label will include an "R" after each gas probe ID (e.g. GP-7R) to denote "replacement" so that future data collected can be differentiated from the readings previously recorded for the existing probes. A boring

log and completion diagram for each replacement perimeter gas probe will be prepared and submitted as part of an installation summary report. A detail of the proposed replacement perimeter gas monitoring probe (typical) construction is shown on Figure 2.

The locations and elevations of each replacement gas monitoring probe, in Florida state plane coordinates and elevation (NGVD, 1929) will be surveyed after completion of the installation activities and will be included with a letter report documenting the installation activities and as-built conditions.

3.3 Abandonment Procedure

The existing gas monitoring probes will be abandoned after the installation of the replacement gas monitoring probes. The concrete pad will be broken up and the anodized aluminum protective casings will be removed and re-used for the replacement gas monitoring probes. The 2 inch diameter PVC casing will be cut-off a minimum of 1-ft below the existing ground surface and the remainder of the casing will be grouted in place using a neat cement grout. The disturbed area will be graded to match the surrounding grade and sodded as necessary.

FIGURES

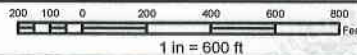


Legend

- Abandoned Gas Monitoring Probe Location
- + Replacement Gas Monitoring Probe Location

NOTES:

AERIAL PHOTOGRAPH
PROVIDED BY BULLSEYE
DESIGN
(2009).
WATER LEVEL MEASUREMENTS
ACQUIRED 11 MAY 2010.
WACS FACILITY ID 89455



Gas Monitoring Probe Locations

WASTE SERVICES OF FLORIDA, INC.
J.E.D. SOLID WASTE
1501 OMNI WAY
ST. CLOUD, FLORIDA



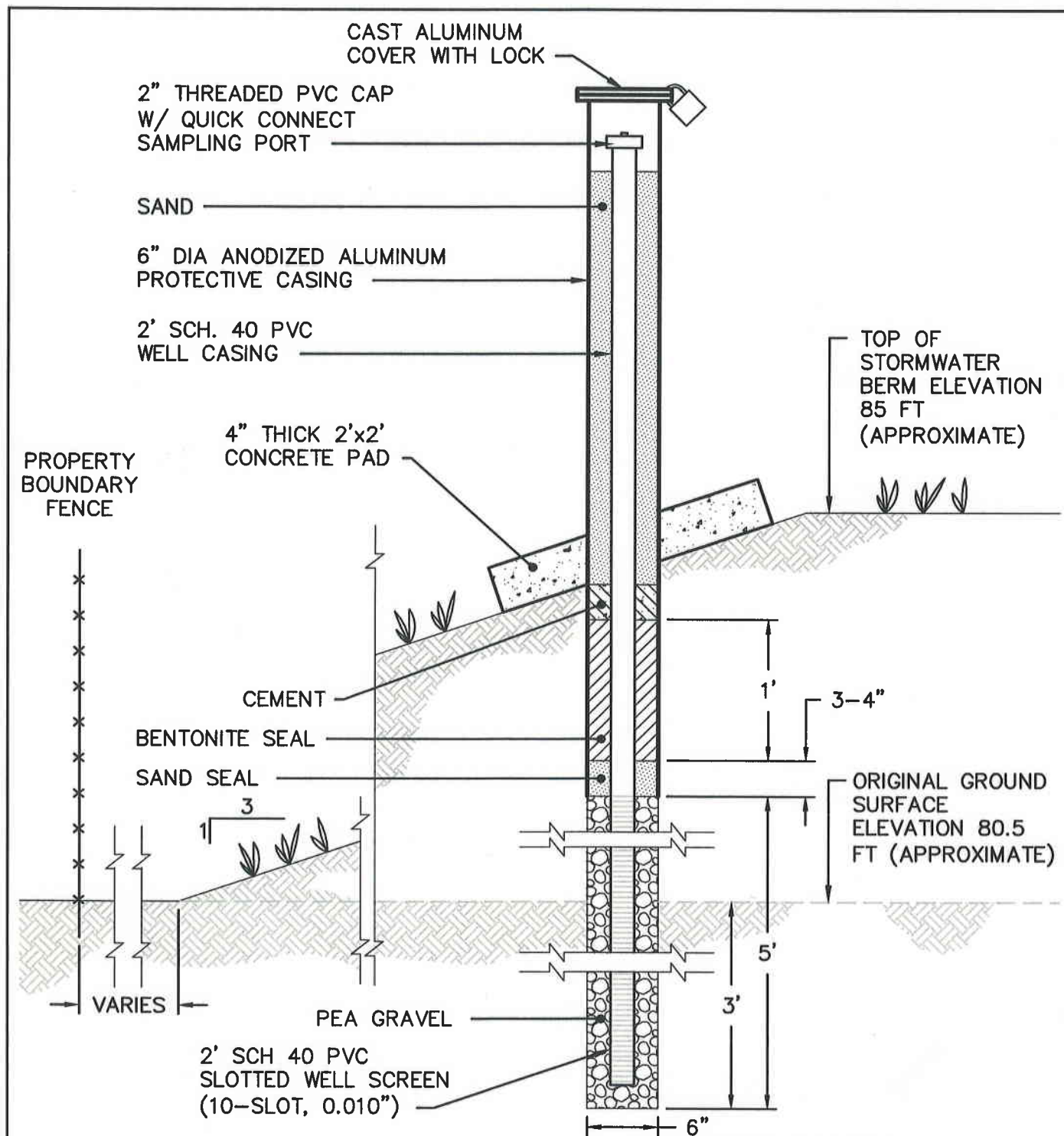
FIGURE

1

TAMPA, FL

MARCH 2011

James A. West
3/9/11



THOMAS P. SWEAT
 LICENSE
 No. 55306
Thomas Sweat
 3/9/11
 PROFESSIONAL ENGINEER
 FLORIDA

NOT TO SCALE	
Typical Replacement Gas Monitoring Probe Construction Detail WASTE SERVICES OF FLORIDA, INC. J.E.D. SOLID WASTE 1501 OMNI WAY ST. CLOUD, FLORIDA	
	FIGURE 2
TAMPA, FL	MARCH 2011

ATTACHMENT 1
FDEP Form 62-701.900(1)



Florida Department of Environmental Protection

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

DEP Form #: 62-701.900(1), F.A.C.

Form Title: Application to Construct, Operate, Modify, or
Close a Solid Waste Management Facility

Effective Date: January 6, 2010

Incorporated in Rule: 62-701.330(3), F.A.C.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

APPLICATION TO CONSTRUCT, OPERATE, MODIFY, OR CLOSE A SOLID WASTE MANAGEMENT FACILITY

APPLICATION INSTRUCTIONS AND FORMS

Northwest District
160 Governmental Center
Pensacola, FL 32502-5794
850-595-8360

Northeast District
7825 Baymeadows Way, Ste. B200
Jacksonville, FL 32256-7590
904-807-3300

Central District
3319 Maguire Blvd., Ste. 232
Orlando, FL 32803-3767
407-894-7555

Southwest District
13051 N. Telecom Pkwy
Temple Terrace, FL 33637
813-632-7600

South District
2295 Victoria Ave., Ste. 364
Fort Myers, FL 33901-3881
239-332-6975

Southeast District
400 North Congress Ave.
West Palm Beach, FL 33401
561-681-6600

INSTRUCTIONS TO APPLY FOR A SOLID WASTE MANAGEMENT FACILITY PERMIT

I. General

Solid Waste Management Facilities shall be permitted pursuant to Section 403.707, Florida Statutes,(FS) and in accordance with Florida Administrative Code (FAC) Chapter 62-701. A minimum of four copies of the application shall be submitted to the Department's District Office having jurisdiction over the facility. The appropriate fee in accordance with Rule 62-701.315, FAC, shall be submitted with the application by check made payable to the Department of Environmental Protection (DEP).

Complete appropriate sections for the type of facility for which application is made. Entries shall be typed or printed in ink. All blanks shall be filled in or marked "not applicable" or "no substantial change". Information provided in support of the application shall be marked "submitted" and the location of this information in the application package indicated. The application shall include all information, drawings, and reports necessary to evaluate the facility. Information required to complete the application is listed on the attached pages of this form.

II. Application Parts Required for Construction and Operation Permits

- A. Landfills and Ash Monofills - Submit Parts A through S
- B. Asbestos Monofills - Submit Parts A,B,C,D,E,F,I,K,M, O through S
- C. Industrial Solid Waste Disposal Facilities - Submit Parts A through S

NOTE: Portions of some Parts may not be applicable.

NOTE: For facilities that have been satisfactorily constructed in accordance with their construction permit, the information required for A, B and C type facilities does not have to be resubmitted for an operation permit if the information has not substantially changed during the construction period. The appropriate portion of the form should be marked "no substantial change".

III. Application Parts Required for Closure Permits

- A. Landfills and Ash Monofills - Submit Parts A,B,L, N through S
- B. Asbestos Monofills - Submit Parts A,B,M, O through S
- C. Industrial Solid Waste Disposal Facilities - Submit Parts A,B, L through S

NOTE: Portions of some Parts may not be applicable.

IV. Permit Renewals

The above information shall be submitted at time of permit renewal in support of the new permit. However, facility information that was submitted to the Department to support the expiring permit, and which is still valid, does not need to be re-submitted for permit renewal. Portions of the application not re-submitted shall be marked "no substantial change" on the application form.

V. Application Codes

S	-	Submitted
LOCATION	-	Physical location of information in application
N/A	-	Not Applicable
N/C	-	No Substantial Change

VI. LISTING OF APPLICATION PARTS

PART A:	GENERAL INFORMATION
PART B:	DISPOSAL FACILITY GENERAL INFORMATION
PART C:	PROHIBITIONS
PART D:	SOLID WASTE MANAGEMENT FACILITY PERMIT REQUIREMENTS, GENERAL
PART E:	LANDFILL PERMIT REQUIREMENTS
PART F:	GENERAL CRITERIA FOR LANDFILLS
PART G:	LANDFILL CONSTRUCTION REQUIREMENTS
PART H:	HYDROGEOLOGICAL INVESTIGATION REQUIREMENTS
PART I:	GEOTECHNICAL INVESTIGATION REQUIREMENTS
PART J :	VERTICAL EXPANSION OF LANDFILLS
PART K:	LANDFILL OPERATION REQUIREMENTS
PART L :	WATER QUALITY AND LEACHATE MONITORING REQUIREMENTS
PART M:	SPECIAL WASTE HANDLING REQUIREMENTS
PART N:	GAS MANAGEMENT SYSTEM REQUIREMENTS
PART O:	LANDFILL CLOSURE REQUIREMENTS
PART P:	OTHER CLOSURE PROCEDURES
PART Q:	LONG-TERM CARE
PART R:	FINANCIAL ASSURANCE
PART S:	CERTIFICATION BY APPLICANT AND ENGINEER OR PUBLIC OFFICER

**STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
APPLICATION FOR A PERMIT TO CONSTRUCT, OPERATE, MODIFY OR CLOSE
A SOLID WASTE MANAGEMENT FACILITY**

Please Type or Print

PART A. GENERAL INFORMATION

1. Type of disposal facility (check all that apply):

- | | |
|--|--|
| <input checked="" type="checkbox"/> Class I Landfill | <input type="checkbox"/> Ash Monofill |
| <input type="checkbox"/> Class III Landfill | <input type="checkbox"/> Asbestos Monofill |
| <input type="checkbox"/> Industrial Solid Waste | |
| <input type="checkbox"/> Other Describe: | |

NOTE: Waste Processing Facilities should apply on Form 62-701.900(4), FAC;
Land Clearing Disposal Facilities should notify on Form 62-701.900(3), FAC;
Compost Facilities should apply on Form 62-701.900(10), FAC; and
C&D Disposal Facilities should apply on Form 62-701.900(6), FAC

2. Type of application:

- ☒ Construction
☐ Operation
☐ Construction/Operation
☐ Closure
☐ Long-term Care Only

3. Classification of application:

- | | |
|----------------------------------|--|
| <input type="checkbox"/> New | <input type="checkbox"/> Substantial Modification |
| <input type="checkbox"/> Renewal | <input type="checkbox"/> Intermediate Modification |
| | <input checked="" type="checkbox"/> Minor Modification |

4. Facility name: J.E.D. Solid Waste Management Facility

5. DEP ID number: 89544 (WACS ID) County: Osceola

6. Facility location (main entrance):
1501 Omni Way, Saint Cloud, Florida 34773

7. Location coordinates:

Section: 11,13,14,17,18 Township: 28S Range: 32E & 33E

Latitude: 28° 3' 32" Longitude: 81° 5' 46"

Datum: WGS84 Coordinate Method: DGPS

Collected by: Johnston's Surveying Company/Affiliation: Johnston's Surevying

8. Applicant name (operating authority): Omni Waste of Osceola County, LLC (Omni)
- Mailing address: 1501 Omni Way Saint Cloud Florida 34773
Street or P.O. Box City State Zip
- Contact person: Mike Kaiser Telephone: (904) 673-0446
- Title: Engineer
- mkaiser@wsii.us
E-Mail address (if available)
9. Authorized agent/Consultant: Environmental Planning Specialists, Inc. (EPS)
- Mailing address: 1936 Bruce B. Downs Wesley Chapel Florida 33543
Street or P.O. Box City State Zip
- Contact person: Kirk Wills Telephone: (813) 388-1026
- Title: Senior Engineer
- kwills@envplanning.com
E-Mail address (if available)
10. Landowner (if different than applicant): N/A
- Mailing address: _____
Street or P.O. Box City State Zip
- Contact person: _____ Telephone: () _____
- _____ E-Mail address (if available)
11. Cities, towns and areas to be served:
Osceola County and other counties (see Section 2.7.1 of the 2006 Solid Waste Renewal Permit
Application)

12. Population to be served:
Current: 5,800,000 Five-Year Projection: 6,000,000
13. Date site will be ready to be inspected for completion: After Installation of Replacement Probes
14. Expected life of the facility: 20 years
15. Estimated costs:
Total Construction: \$ 15,000 Closing Costs: \$ _____
16. Anticipated construction starting and completion dates:
From: May 1, 2011 To: June 30, 2011
17. Expected volume or weight of waste to be received:
_____ yds³/day _____ 6,000 tons/day _____ gallons/day

PART B. DISPOSAL FACILITY GENERAL INFORMATION

1. Provide brief description of disposal facility design and operations planned under this application:

This minor modification application is being submitted for the abandonment of the existing perimeter gas monitoring probes and construction of replacement gas monitoring probes with a different screened interval.

[illegible]

2. Facility site supervisor: Matt Orr

Title: District Manager Telephone: (407) 891-3720

morr@wasteservicesinc.com

E-Mail address (if available)

3. Disposal area: Total 264 acres; Used 89 acres; Available 175 acres.

4. Weighing scales used: ☒ Yes ☐ No

5. Security to prevent unauthorized use: ☒ Yes ☐ No

6. Charge for waste received: _____ \$/yds³ _____ 35 \$/ton

7. Surrounding land use, zoning:

- ☐ Residential
 ☐ Industrial
☒ Agricultural
 ☐ None
☐ Commercial
 ☐ Other Describe:

8. Types of waste received:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Household | <input checked="" type="checkbox"/> C & D debris |
| <input checked="" type="checkbox"/> Commercial | <input checked="" type="checkbox"/> Shredded/cut tires |
| <input checked="" type="checkbox"/> Incinerator/WTE ash | <input type="checkbox"/> Yard trash |
| <input checked="" type="checkbox"/> Treated biomedical | <input type="checkbox"/> Septic tank |
| <input checked="" type="checkbox"/> Water treatment sludge | <input checked="" type="checkbox"/> Industrial |

<input type="checkbox"/> Air treatment sludge	<input type="checkbox"/> Industrial sludge
<input type="checkbox"/> Agricultural	<input checked="" type="checkbox"/> Domestic sludge
<input checked="" type="checkbox"/> Asbestos	<input checked="" type="checkbox"/> Other Describe:
whole tires, auto shredder waste, industrial liquid waste (solidification)	

9. Salvaging permitted: ☐ Yes ☒ No

10. Attendant: ☒ Yes ☐ No Trained operator: ☒ Yes ☐ No

11. Trained spotters: ☒ Yes ☐ No Number of spotters used: 1

12. Site located in: ☒ Floodplain ☐ Wetlands ☐ Other:

13. Days of operation: Monday through Saturday

14. Hours of operation: Monday-Friday 6 a.m. to 5 p.m.; Saturday 6 a.m. to 2 p.m.

15. Days Working Face covered: Each working day

16. Elevation of water table: 79 ft. Datum Used: NGVD 1929

17. Number of monitoring wells: 63

18. Number of surface monitoring points: 2

19. Gas controls used: ☒ Yes ☐ No Type controls: ☒ Active ☐ Passive

Gas flaring: ☒ Yes ☐ No Gas recovery: ☒ Yes ☐ No

20. Landfill unit liner type:

<input type="checkbox"/> Natural soils	<input type="checkbox"/> Double geomembrane
<input type="checkbox"/> Single clay liner	<input type="checkbox"/> Geomembrane & composite
<input type="checkbox"/> Single geomembrane	<input checked="" type="checkbox"/> Double composite
<input type="checkbox"/> Single composite	<input type="checkbox"/> None
<input type="checkbox"/> Slurry wall	<input checked="" type="checkbox"/> Other Describe:

Additional GCL installed beneath primary geomembrane liner within the sump area

21. Leachate collection method:

- | | |
|--|--|
| <input checked="" type="checkbox"/> Collection pipes | <input checked="" type="checkbox"/> Sand layer |
| <input checked="" type="checkbox"/> Geonets | <input type="checkbox"/> Gravel layer |
| <input type="checkbox"/> Well points | <input type="checkbox"/> Interceptor trench |
| <input type="checkbox"/> Perimeter ditch | <input type="checkbox"/> None |
| <input type="checkbox"/> Other Describe: | |

22. Leachate storage method:

- | | |
|--|--|
| <input type="checkbox"/> Tanks | <input checked="" type="checkbox"/> Surface impoundments |
| <input type="checkbox"/> Other Describe: | |

23. Leachate treatment method:

- | | |
|---|---|
| <input type="checkbox"/> Oxidation | <input type="checkbox"/> Chemical treatment |
| <input type="checkbox"/> Secondary | <input type="checkbox"/> Settling |
| <input type="checkbox"/> Advanced | <input checked="" type="checkbox"/> None |
| <input checked="" type="checkbox"/> Other | |

Aeration at leachate pond

24. Leachate disposal method:

- | | |
|---|--|
| <input checked="" type="checkbox"/> Recirculated | <input type="checkbox"/> Pumped to WWTP |
| <input checked="" type="checkbox"/> Transported to WWTP | <input type="checkbox"/> Discharged to surface water/wetland |
| <input type="checkbox"/> Injection well | <input type="checkbox"/> Percolation ponds |
| <input type="checkbox"/> Evaporation | <input type="checkbox"/> Spray Irrigation |
| <input type="checkbox"/> Other | |

25. For leachate discharged to surface waters:

Name and Class of receiving water:

N/A

26. Storm Water:

Collected: ☒ Yes ☐ No

Type of treatment:

Dry and wet retention for landfill and dry retention for access road.

Name and Class of receiving water:

Bull Creek, Class III

27. Environmental Resources Permit (ERP) number or status:

Current ERP numbers are ERP49-0199752-001-EI (Phase 1 Individual), ERP49-0199752-002EI (Conceptual), ERP49-0199752-003 (Phase 2 Individual), and ERP49-0199752-004EM (Phase 3 Individual)

PART C. PROHIBITIONS (62-701.300, FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 1. Provide documentation that each of the siting criteria will be satisfied for the facility; (62-701.300(2), FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 2. If the facility qualifies for any of the exemptions contained in Rules 62-701.300(12) through (18), FAC, then document this qualification(s).
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 3. Provide documentation that the facility will be in compliance with the burning restrictions; (62-701.300(3), FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 4. Provide documentation that the facility will be in compliance with the hazardous waste restrictions; (62-701.300(4), FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 5. Provide documentation that the facility will be in compliance with the PCB disposal restrictions; (62-701.300(5), FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 6. Provide documentation that the facility will be in compliance with the biomedical waste restrictions; (62-701.300(6), FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 7. Provide documentation that the facility will be in compliance with the Class I surface water restrictions; (62-701.300(7), FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 8. Provide documentation that the facility will be in compliance with the special waste for landfills restrictions; (62-701.300(8), FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 9. Provide documentation that the facility will be in compliance with the liquid restrictions; (62-701.300(10), FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 10. Provide documentation that the facility will be in compliance with the used oil and oily waste restrictions; (62-701.300(11), FAC)

PART D. SOLID WASTE MANAGEMENT FACILITY PERMIT REQUIREMENTS, GENERAL (62-701.320, FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>
<input checked="" type="checkbox"/>	Submittal _____	<input type="checkbox"/>	<input type="checkbox"/> 1. Four copies, at minimum, of the completed application form, all supporting data and reports; (62-701.320(5)(a), FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	PART D CONTINUED
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. Documentation that the applicant either owns the property or has legal authority from the property owner to use the site; (62-701.320(7)(g),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	11. For facilities owned or operated by a county, provide a description of how, if any, the facilities covered in this application will contribute to the county's achievement of the waste reduction and recycling goals contained in Section 403.706,FS; (62-701.320(7)(h),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12. Provide a history and description of any enforcement actions taken by the Department against the applicant for violations of applicable statutes, rules, orders or permit conditions relating to the operation of any solid waste management facility in this state; (62-701.320(7)(i),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	13. Proof of publication in a newspaper of general circulation of notice of application for a permit to construct or substantially modify a solid waste management facility; (62-702.320(8),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	14. Provide a description of how the requirements for airport safety will be achieved including proof of required notices if applicable. If exempt, explain how the exemption applies; (62-701.320(13),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	15. Explain how the operator and spotter training requirements and special criteria will be satisfied for the facility; (62-701.320(15), FAC)

PART E. LANDFILL PERMIT REQUIREMENTS (62-701.330, FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Regional map or aerial photograph no more than 5 years old showing all airports that are located within five miles of the proposed landfill; (62-701.330(3)(a),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. Plot plan with a scale not greater than 200 feet to the inch showing; (62-701.330(3)(b),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Dimensions;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Locations of proposed and existing water quality monitoring wells;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Locations of soil borings;

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	PART E CONTINUED
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. Proposed plan of trenching or disposal areas;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	e. Cross sections showing original elevations and proposed final contours which shall be included either on the plot plan or on separate sheets;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	f. Any previously filled waste disposal areas;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	g. Fencing or other measures to restrict access.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. Topographic maps with a scale not greater than 200 feet to the inch with 5-foot contour intervals showing; (62-701.330(3)(c),FAC):
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Proposed fill areas;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Borrow areas;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Access roads;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. Grades required for proper drainage;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	e. Cross sections of lifts;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	f. Special drainage devices if necessary;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	g. Fencing;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	h. Equipment facilities.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. A report on the landfill describing the following; (62-701.330(3)(d),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. The current and projected population and area to be served by the proposed site;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. The anticipated type, annual quantity, and source of solid waste, expressed in tons;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Planned active life of the facility, the final design height of the facility and the maximum height of the facility during its operation;

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>
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PART E CONTINUED

- | | | | | |
|--------------------------|-------|--------------------------|-------------------------------------|---|
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | d. The source and type of cover material used for the landfill. |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5. Provide evidence that an approved laboratory shall conduct water quality monitoring for the facility in accordance with Chapter 62-160,FAC; (62-701.330(3)(g),FAC) |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 6. Provide a statement of how the applicant will demonstrate financial responsibility for the closing and long-term care of the landfill; (62-701.330(3)(h),FAC) |

PART F. GENERAL CRITERIA FOR LANDFILLS (62-701.340,FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>
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- | | | | | |
|--------------------------|-------|--------------------------|-------------------------------------|--|
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1. Describe (and show on a Federal Insurance Administration flood map, if available) how the landfill or solid waste disposal unit shall not be located in the 100-year floodplain where it will restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain unless compensating storage is provided, or result in a washout of solid waste; (62-701.340(3)(b),FAC) |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 2. Describe how the minimum horizontal separation between waste deposits in the landfill and the landfill property boundary shall be 100 feet, measured from the toe of the proposed final cover slope; (62-701.340(3)(c),FAC) |

PART G. LANDFILL CONSTRUCTION REQUIREMENTS (62-701.400,FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>
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- | | | | | |
|--------------------------|-------|--------------------------|-------------------------------------|---|
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1. Describe how the landfill shall be designed so that solid waste disposal units will be constructed and closed at planned intervals throughout the design period of the landfill and shall be designed to achieve a minimum factor of safety of 1.5 using peak strength values to prevent failures of side slopes and deep-seated failures; (62-701.400(2),FAC) |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 2. Landfill liner requirements; (62-701.400(3),FAC) |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | a. General construction requirements; (62-701.400(3)(a),FAC): |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | (1) Provide test information and documentation to ensure the liner will be constructed of materials that have appropriate physical, chemical, and mechanical properties to prevent failure; |

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Document foundation is adequate to prevent liner failure;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3) Constructed so bottom liner will not be adversely impacted by fluctuations of the ground water;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(4) Designed to resist hydrostatic uplift if bottom liner located below seasonal high ground water table;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(5) Installed to cover all surrounding earth which could come into contact with the waste or leachate.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Composite liners; (62-701.400(3)(b),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) Upper geomembrane thickness and properties;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Design leachate head for primary LCRS including leachate recirculation if appropriate;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3) Design thickness in accordance with Table A and number of lifts planned for lower soil component.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Double liners; (62-701.400(3)(c),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) Upper and lower geomembrane thicknesses and properties;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Design leachate head for primary LCRS to limit the head to one foot above the liner;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3) Lower geomembrane sub-base design;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(4) Leak detection and secondary leachate collection system minimum design criteria ($k \geq 10$ cm/sec, head on lower liner ≤ 1 inch, head not to exceed thickness of drainage layer);
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. Standards for geosynthetic components; (62-701.400(3)(d),FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	PART G CONTINUED	
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1)	Factory and field seam test methods to ensure all geomembrane seams achieve the minimum specifications;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2)	Geomembranes to be used shall pass a continuous spark test by the manufacturer;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3)	Design of 24-inch-thick protective layer above upper geomembrane liner;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(4)	Describe operational plans to protect the liner and leachate collection system when placing the first layer of waste above 24-inch-thick protective layer.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(5)	HDPE geomembranes, if used, meet the specifications in GRI GM13 and LLDPE geomembranes, if used, meet the specifications in GRI GM17;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(6)	PVC geomembranes, if used, meet the specifications in PGI 1104;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(7)	Interface shear strength testing results of the actual components which will be used in the liner system;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(8)	Transmissivity testing results of geonets if they are used in the liner system;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(9)	Hydraulic conductivity testing results of geosynthetic clay liners if they are used in the liner system;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	e. Geosynthetic specification requirements; (62-701.400(3)(e),FAC)	
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1)	Definition and qualifications of the designer, manufacturer, installer, QA consultant and laboratory, and QA program;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2)	Material specifications for geomembranes, geocomposites, geotextiles, geogrids, and geonets;

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>		PART G CONTINUED
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3)	Manufacturing and fabrication specifications including geomembrane raw material and roll QA, fabrication personnel qualifications, seaming equipment and procedures, overlaps, trial seams, destructive and nondestructive seam testing, seam testing location, frequency, procedure, sample size and geomembrane repairs;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(4)	Geomembrane installation specifications including earthwork, conformance testing, geomembrane placement, installation personnel qualifications, field seaming and testing, overlapping and repairs, materials in contact with geomembrane and procedures for lining system acceptance;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(5)	Geotextile and geogrid specifications including handling and placement, conformance testing, seams and overlaps, repair, and placement of soil materials and any overlying materials;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(6)	Geonet and geocomposite specifications including handling and placement, conformance testing, stacking and joining, repair, and placement of soil materials and any overlying materials;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(7)	Geosynthetic clay liner specifications including handling and placement, conformance testing, seams and overlaps, repair, and placement of soil material and any overlying materials;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>		f. Standards for soil liner components (62-710.400(3)(f),FAC):
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1)	Description of construction procedures including overexcavation and backfilling to preclude structural inconsistencies and procedures for placing and compacting soil component in layers;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2)	Demonstration of compatibility of the soil component with actual or simulated leachate in accordance with EPA Test Method 9100 or an equivalent test method;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3)	Procedures for testing in-situ soils to demonstrate they meet the specifications for soil liners;

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(4) Specifications for soil component of liner including at a minimum:
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(a) Allowable particle size distribution, Atterberg limits, shrinkage limit;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(b) Placement moisture and dry density criteria;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(c) Maximum laboratory-determined saturated hydraulic conductivity using simulated leachate;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(d) Minimum thickness of soil liner;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(e) Lift thickness;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(f) Surface preparation (scarification);
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(g) Type and percentage of clay mineral within the soil component;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(5) Procedures for constructing and using a field test section to document the desired saturated hydraulic conductivity and thickness can be achieved in the field.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	g. If a Class III landfill is to be constructed with a bottom liner system, provide a description of how the minimum requirements for the liner will be achieved.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. Leachate collection and removal system (LCRS); (62-701.400(4),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. The primary and secondary LCRS requirements; (62-701.400(4)(a),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) Constructed of materials chemically resistant to the waste and leachate;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Have sufficient mechanical properties to prevent collapse under pressure;

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	PART G CONTINUED
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3) Have granular material or synthetic geotextile to prevent clogging;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(4) Have method for testing and cleaning clogged pipes or contingent designs for rerouting leachate around failed areas;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Other LCRS requirements; (62-701.400(4)(b) and (c),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) Bottom 12 inches having hydraulic conductivity $\geq 1 \times 10^{-3}$ cm/sec;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Total thickness of 24 inches of material chemically resistant to the waste and leachate;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3) Bottom slope design to accommodate for predicted settlement and still meet minimum slope requirements;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(4) Demonstration that synthetic drainage material, if used, is equivalent or better than granular material in chemical compatibility, flow under load and protection of geomembrane liner.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. Leachate recirculation; (62-701.400(5),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Describe general procedures for recirculating leachate;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Describe procedures for controlling leachate runoff and minimizing mixing of leachate runoff with storm water;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Describe procedures for preventing perched water conditions and gas buildup;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. Describe alternate methods for leachate management when it cannot be recirculated due to weather or runoff conditions, surface seeps, wind-blown spray, or elevated levels of leachate head on the liner;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	e. Describe methods of gas management in accordance with Rule 62-701.530, FAC;

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	PART G CONTINUED
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	f. If leachate irrigation is proposed, describe treatment methods and standards for leachate treatment prior to irrigation over final cover and provide documentation that irrigation does not contribute significantly to leachate generation.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Leachate storage tanks and leachate surface impoundments; (62-701.400(6), FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Surface impoundment requirements; (62-701.400(6)(b), FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) Documentation that the design of the bottom liner will not be adversely impacted by fluctuations of the ground water;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Designed in segments to allow for inspection and repair as needed without interruption of service;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3) General design requirements;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(a) Double liner system consisting of an upper and lower 60-mil minimum thickness geomembrane;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(b) Leak detection and collection system with hydraulic conductivity ≥ 1 cm/sec;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(c) Lower geomembrane placed on subbase ≥ 6 inches thick with $k \leq 1 \times 10^{-5}$ cm/sec or on an approved geosynthetic clay liner with $k \leq 1 \times 10^{-7}$ cm/sec;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(d) Design calculation to predict potential leakage through the upper liner;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(e) Daily inspection requirements and notification and corrective action requirements if leakage rates exceed that predicted by design calculations;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(4) Description of procedures to prevent uplift, if applicable;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(5) Design calculations to demonstrate minimum two feet of freeboard will be maintained;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(6) Procedures for controlling vectors and off-site odors.

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	PART G CONTINUED
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Above-ground leachate storage tanks; (62-701.400(6)(c),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) Describe tank materials of construction and ensure foundation is sufficient to support tank;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Describe procedures for cathodic protection if needed for the tank;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3) Describe exterior painting and interior lining of the tank to protect it from the weather and the leachate stored;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(4) Describe secondary containment design to ensure adequate capacity will be provided and compatibility of materials of construction;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(5) Describe design to remove and dispose of stormwater from the secondary containment system;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(6) Describe an overfill prevention system such as level sensors, gauges, alarms and shutoff controls to prevent overfilling;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(7) Inspections, corrective action and reporting requirements;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(a) Overfill prevention system weekly;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(b) Exposed tank exteriors weekly;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(c) Tank interiors when tank is drained or at least every three years;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(d) Procedures for immediate corrective action if failures detected;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(e) Inspection reports available for department review.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Underground leachate storage tanks; (62-701.400(6)(d),FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	PART G CONTINUED
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) Describe materials of construction;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) A double-walled tank design system to be used with the following requirements;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(a) Interstitial space monitoring at least weekly;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(b) Corrosion protection provided for primary tank interior and external surface of outer shell;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(c) Interior tank coatings compatible with stored leachate;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(d) Cathodic protection inspected weekly and repaired as needed;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3) Describe an overfill prevention system such as level sensors, gauges, alarms and shutoff controls to prevent overfilling and provide for weekly inspections;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(4) Inspection reports available for department review.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d.Schedule provided for routine maintenance of LCRS; (62-701.400(6)(e),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6.Liner systems construction quality assurance (CQA); (62-701.400(7),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Provide CQA Plan including:
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) Specifications and construction requirements for liner system;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Detailed description of quality control testing procedures and frequencies;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3) Identification of supervising professional engineer;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(4) Identify responsibility and authority of all appropriate organizations and key personnel involved in the construction project;

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	PART G CONTINUED
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(5) State qualifications of CQA professional engineer and support personnel;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(6) Description of CQA reporting forms and documents;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. An independent laboratory experienced in the testing of geosynthetics to perform required testing;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	7. Soil Liner CQA (62-701.400(8)FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Documentation that an adequate borrow source has been located with test results or description of the field exploration and laboratory testing program to define a suitable borrow source;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Description of field test section construction and test methods to be implemented prior to liner installation;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Description of field test methods including rejection criteria and corrective measures to insure proper liner installation.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8. Surface water management systems; (62-701.400(9),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Provide a copy of a Department permit for stormwater control or documentation that no such permit is required;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Design of surface water management system to isolate surface water from waste filled areas and to control stormwater run-off;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Details of stormwater control design including retention ponds, detention ponds, and drainage ways;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9. Gas control systems; (62-701.400(10),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Provide documentation that if the landfill is receiving degradable wastes, it will have a gas control system complying with the requirements of Rule 62-701.530, FAC;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. For landfills designed in ground water, provide documentation that the landfill will provide a degree of protection equivalent to landfills designed with bottom liners not in contact with ground water; (62-701.400(11),FAC)

PART H. HYDROGEOLOGICAL INVESTIGATION REQUIREMENTS (62-701.410(1), FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Submit a hydrogeological investigation and site report including at least the following information:
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Regional and site specific geology and hydrogeology;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Direction and rate of ground water and surface water flow including seasonal variations;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Background quality of ground water and surface water;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. Any on-site hydraulic connections between aquifers;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	e. Site stratigraphy and aquifer characteristics for confining layers, semi-confining layers, and all aquifers below the landfill site that may be affected by the landfill;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	f. Description of topography, soil types and surface water drainage systems;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	g. Inventory of all public and private water wells within a one-mile radius of the landfill including, where available, well top of casing and bottom elevations, name of owner, age and usage of each well, stratigraphic unit screened, well construction technique and static water level;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	h. Identify and locate any existing contaminated areas on the site;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	i. Include a map showing the locations of all potable wells within 500 feet of the waste storage and disposal areas;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. Report signed, sealed and dated by PE and/or PG.

PART I. GEOTECHNICAL INVESTIGATION REQUIREMENTS (62-701.410(2),FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Submit a geotechnical site investigation report defining the engineering properties of the site including at least the following:
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Description of subsurface conditions including soil stratigraphy and ground water table conditions;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Investigate for the presence of muck, previously filled areas, soft ground, lineaments and sink holes;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Estimates of average and maximum high water table across the site;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. Foundation analysis including:
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) Foundation bearing capacity analysis;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Total and differential subgrade settlement analysis;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3) Slope stability analysis;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	e. Description of methods used in the investigation and includes soil boring logs, laboratory results, analytical calculations, cross sections, interpretations and conclusions;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	f. An evaluation of fault areas, seismic impact zones, and unstable areas as described in 40 CFR 258.13, 40 CFR 258.14 and 40 CFR 258.15.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. Report signed, sealed and dated by PE and/or PG.

PART J. VERTICAL EXPANSION OF LANDFILLS (62-701.430,FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Describe how the vertical expansion shall not cause or contribute to leachate leakage from the existing landfill, shall not cause objectionable odors, or adversely affect the closure design of the existing landfill;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. Describe how the vertical expansion over unlined landfills will meet the requirements of Rule 62-701.400, FAC with the exceptions of Rule 62-701.430(1)(c),FAC;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. Provide foundation and settlement analysis for the vertical expansion;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. Provide total settlement calculations demonstrating that the final elevations of the lining system, that gravity drainage, and that no other component of the design will be adversely affected;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Minimum stability safety factor of 1.5 for the lining system component interface stability and deep stability;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. Provide documentation to show the surface water management system will not be adversely affected by the vertical expansion;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	7. Provide gas control designs to prevent accumulation of gas under the new liner for the vertical expansion.

PART K. LANDFILL OPERATION REQUIREMENTS (62-701.500,FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Provide documentation that landfill will have at least one trained operator during operation and at least one trained spotter at each working face; (62-701.500(1),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. Provide a landfill operation plan including procedures for: (62-701.500(2), FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Designating responsible operating and maintenance personnel;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Emergency preparedness and response, as required in subsection 62-701.320(16), FAC;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Controlling types of waste received at the landfill;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. Weighing incoming waste;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	e. Vehicle traffic control and unloading;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	f. Method and sequence of filling waste;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	g. Waste compaction and application of cover;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	h. Operations of gas, leachate, and stormwater controls;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	i. Water quality monitoring.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	j. Maintaining and cleaning the leachate collection system;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. Provide a description of the landfill operation record to be used at the landfill; details as to location of where various operational records will be kept (i.e. FDEP permit, engineering drawings, water quality records, etc.) (62-701.500(3),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. Describe the waste records that will be compiled monthly and provided to the Department annually; (62-701.500(4),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Describe methods of access control; (62-701.500(5),FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	PART K CONTINUED
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. Describe load checking program to be implemented at the landfill to discourage disposal of unauthorized wastes at the landfill; (62-701.500(6),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	7. Describe procedures for spreading and compacting waste at the landfill that include: (62-701.500(7),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Waste layer thickness and compaction frequencies;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Special considerations for first layer of waste placed above liner and leachate collection system;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Slopes of cell working face and side grades above land surface, planned lift depths during operation;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. Maximum width of working face;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	e. Description of type of initial cover to be used at the facility that controls:
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) Vector breeding/animal attraction
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Fires
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3) Odors
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(4) Blowing litter
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(5) Moisture infiltration
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	f. Procedures for applying initial cover including minimum cover frequencies;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	g. Procedures for applying intermediate cover;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	h. Time frames for applying final cover;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	i. Procedures for controlling scavenging and salvaging.

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	PART K CONTINUED
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	j. Description of litter policing methods;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	k. Erosion control procedures.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8. Describe operational procedures for leachate management including; (62-701.500(8),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Leachate level monitoring, sampling, analysis and data results submitted to the Department;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Operation and maintenance of leachate collection and removal system, and treatment as required;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Procedures for managing leachate if it becomes regulated as a hazardous waste;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. Identification of treatment or disposal facilities that may be used for off-site discharge and treatment of leachate;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	e. Contingency plan for managing leachate during emergencies or equipment problems;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	f. Procedures for recording quantities of leachate generated in gal/day and including this in the operating record;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	g. Procedures for comparing precipitation experienced at the landfill with leachate generation rates and including this information in the operating record;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	h. Procedures for water pressure cleaning or video inspecting leachate collection systems.
<input checked="" type="checkbox"/>	Attached Report, Gas Monitoring Probes _____	<input type="checkbox"/>	<input type="checkbox"/>	9. Describe how the landfill receiving degradable wastes shall implement a gas management system meeting the requirements of Rule 62-701.530, FAC; (62-701.500(9),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. Describe procedures for operating and maintaining the landfill stormwater management system to comply with the requirements of Rule 62-701.400(9); (62-701.500(10),FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	PART K CONTINUED
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	11. Equipment and operation feature requirements; (62-701.500(11),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Sufficient equipment for excavating, spreading, compacting and covering waste;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Reserve equipment or arrangements to obtain additional equipment within 24 hours of breakdown;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Communications equipment;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. Dust control methods;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	e. Fire protection capabilities and procedures for notifying local fire department authorities in emergencies;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	f. Litter control devices;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	g. Signs indicating operating authority, traffic flow, hours of operation, disposal restrictions.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	12. Provide a description of all-weather access road, inside perimeter road and other roads necessary for access which shall be provided at the landfill; (62-701.500(12),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	13. Additional record keeping and reporting requirements; (62-701.500(13),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Records used for developing permit applications and supplemental information maintained for the design period of the landfill;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Monitoring information, calibration and maintenance records, copies of reports required by permit maintained for at least 10 years;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Maintain annual estimates of the remaining life of constructed landfills and of other permitted areas not yet constructed and submit this estimate annually to the Department;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. Procedures for archiving and retrieving records which are more than five year old.

PART L. WATER QUALITY AND LEACHATE MONITORING REQUIREMENTS (62-701.510, FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Water quality and leachate monitoring plan shall be submitted describing the proposed ground water, surface water and leachate monitoring systems and shall meet at least the following requirements;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Based on the information obtained in the hydrogeological investigation and signed, dated and sealed by the PG or PE who prepared it; (62-701.510(2)(a),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. All sampling and analysis performed in accordance with Chapter 62-160, FAC; (62-701.510(2)(b),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Ground water monitoring requirements; (62-701.510(3),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) Detection wells located downgradient from and within 50 feet of disposal units;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Downgradient compliance wells as required;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3) Background wells screened in all aquifers below the landfill that may be affected by the landfill;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(4) Location information for each monitoring well;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(5) Well spacing no greater than 500 feet apart for downgradient wells and no greater than 1500 feet apart for upgradient wells unless site specific conditions justify alternate well spacings;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(6) Well screen locations properly selected;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(7) Monitoring wells constructed to provide representative ground water samples;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(8) Procedures for properly abandoning monitoring wells;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(9) Detailed description of detection sensors if proposed.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. Surface water monitoring requirements; (62-701.510(4),FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	PART L CONTINUED
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) Location of and justification for all proposed surface water monitoring points;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Each monitoring location to be marked and its position determined by a registered Florida land surveyor;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	e. Leachate sampling locations proposed; (62-701.510(5),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	f. Initial and routine sampling frequency and requirements; (62-701.510(6),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) Initial background ground water and surface water sampling and analysis requirements;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Routine leachate sampling and analysis requirements;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3) Routine monitoring well sampling and analysis requirements;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(4) Routine surface water sampling and analysis requirements.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	g. Describe procedures for implementing evaluation monitoring, prevention measures and corrective action as required; (62-701.510(7),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	h. Water quality monitoring report requirements;(62-701.510(9),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) Semi-annual report requirements (see paragraphs 62 701.510(6)(c),(d)and (e) for sampling frequencies);
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Documentation that the water quality data shall be provided to the Department in an electronic format consistent with requirements for importing into Department databases, unless an alternate form of submittal is specified in the permit.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3) Two and one-half year report requirements, or every five years if in long-term care, signed, dated and sealed by PG or PE.

PART M. SPECIAL WASTE HANDLING REQUIREMENTS (62-701.520, FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Describe procedures for managing motor vehicles; (62-701.520(1),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. Describe procedures for landfilling shredded waste; (62-701.520(2),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. Describe procedures for asbestos waste disposal; (62-701.520(3),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. Describe procedures for disposal or management of contaminated soil; (62-701.520(4), FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Describe procedures for disposal of biological wastes; (62-701.520(5), FAC)

PART N. GAS MANAGEMENT SYSTEM REQUIREMENTS (62-701.530,FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Provide the design for a gas management system that will (62-701.530(1), FAC):
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Be designed to prevent concentrations of combustible gases from exceeding 25% the LEL in structures and 100% the LEL at the property boundary;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Be designed for site-specific conditions;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Be designed to reduce gas pressure in the interior of the landfill;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. Be designed to not interfere with the liner, leachate control system or final cover.
<input checked="" type="checkbox"/>	Attached Report _____	<input type="checkbox"/>	<input type="checkbox"/>	2. Provide documentation that will describe locations, construction details and procedures for monitoring gas at ambient monitoring points and with soil monitoring probes; (62-701.530(2), FAC):
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. Provide documentation describing how the gas remediation plan and odor remediation plan will be implemented; (62-701.530(3), FAC):
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. Landfill gas recovery facilities; (62-701.530(5), FAC):

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	PART N CONTINUED
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Information required in Rules 62-701.320(7) and 62-701.330(3), FAC supplied;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Information required in Rule 62-701.600(4), FAC supplied where relevant and practical;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Estimate of current and expected gas generation rates and description of condensate disposal methods provided;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. Description of procedures for condensate sampling, analyzing and data reporting provided;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	e. Closure plan provided describing methods to control gas after recovery facility ceases operation and any other requirements contained in Rule 62-701.400(10), FAC;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	f. Performance bond provided to cover closure costs if not already included in other landfill closure costs.

PART O. LANDFILL FINAL CLOSURE REQUIREMENTS (62-701.600,FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Closure permit requirements; (62-701.600(2),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Application submitted to Department at least 90 days prior to final receipt of wastes;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Closure plan shall include the following:
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) Closure design plan;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Closure operation plan;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3) Plan for long-term care;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(4) A demonstration that proof of financial responsibility for long-term care will be provided.

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	PART O CONTINUED
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. Closure design plan including the following requirements: (62-701.600(3),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Plan sheet showing phases of site closing;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Drawings showing existing topography and proposed final grades;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Provisions to close units when they reach approved design dimensions;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. Final elevations before settlement;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	e. Side slope design including benches, terraces, down slope drainage ways, energy dissipaters and discussion of expected precipitation effects;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	f. Final cover installation plans including:
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) CQA plan for installing and testing final cover;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Schedule for installing final cover after final receipt of waste;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3) Description of drought-resistant species to be used in the vegetative cover;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(4) Top gradient design to maximize runoff and minimize erosion;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(5) Provisions for cover material to be used for final cover maintenance.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	g. Final cover design requirements:
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) Protective soil layer design;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Barrier soil layer design;

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	PART O CONTINUED
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3) Erosion control vegetation;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(4) Geomembrane barrier layer design;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(5) Geosynthetic clay liner design if used;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(6) Stability analysis of the cover system and the disposed waste.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	h. Proposed method of stormwater control;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	i. Proposed method of access control;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	j. Description of the proposed or existing gas management system which complies with Rule 62-701.530, FAC.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. Closure operation plan shall include:(62-701.600(4),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Detailed description of actions which will be taken to close the landfill;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Time schedule for completion of closing and long-term care;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Describe proposed method for demonstrating financial assurance for long-term care;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. Operation of the water quality monitoring plan required in Rule 62-701.510, FAC.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	e. Development and implementation of gas management system required in Rule 62-701.530, FAC.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. Certification of closure construction completion including: (62-701.600(6),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Survey monuments; (62-701.600(6)(a),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Final survey report; (62-701.600(6)(b),FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	PART O CONTINUED
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<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Declaration to the public; (62-701.600(7),FAC)
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<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. Official date of closing; (62-701.600(8),FAC)
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<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	7. Justification for and detailed description of procedures to be followed for temporary closure of the landfill, if desired; (62-701.600(9),FAC)
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PART P. OTHER CLOSURE PROCEDURES (62-701.610,FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>
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<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Describe how the requirements for use of closed solid waste disposal areas will be achieved;(62-701.610(1),FAC)
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<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. Describe how the requirements for relocation of wastes will be achieved; (62-701.610(2), FAC)
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PART Q. LONG-TERM CARE (62-701.620,FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>
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<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Maintaining the gas collection and monitoring system; (62-701.620(5), FAC)
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<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. Stabilization report requirements; (62-701.620(6),FAC)
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<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. Right of access;(62-701.620(7),FAC)
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<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. Requirements for replacement of monitoring devices; (62-701.620(8),FAC)
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<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Completion of long-term care signed and sealed by professional engineer (62-701.620(9), FAC).
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PART R. FINANCIAL ASSURANCE (62-701.630,FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Provide cost estimates for closing, long-term care, and corrective action costs estimated by a PE for a third party performing the work, on a per unit basis, with the source of estimates indicated; (62-701.630(3)&(7), FAC).
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. Describe procedures for providing annual cost adjustments to the Department based on inflation and changes in the closing, long-term care, and corrective action plans; (62-701.630(4)&(8), FAC).
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. Describe funding mechanisms for providing proof of financial assurance and include appropriate financial assurance forms; (62-701.630(5),(6),&(9), FAC).
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. Provide documentation and the appropriate forms for delaying submitting proof of financial assurance for solid waste disposal units that qualify; (62-701.630(2)(c), FAC).

1. Applicant:

_____ is aware that statements made in this form and attached

Mike Kim
Signature of Applicant or Agent

1501 Omni Way
Mailing Address

(904) 673-0446
Telephone Number

Date: 3/1/11


Signature

58501
Florida Registration Number
(please affix seal)

(404) 315-9113
Telephone Number

Date: 3/9/11





2893 Executive Park Drive, Suite 305, Weston, Florida 33331

January 24, 2011

RE: Omni Waste of Osceola County, LLC

To Whom It May Concern:

This is to confirm that Michael Kaiser is an authorized signatory of Omni Waste of Osceola County, LLC (the "Corporation"), with authority to execute and deliver all documents and instruments required in connection with environmental matters for the Corporation, including without limitation, permit applications, modifications and financial assurances for permits issued to the Corporation.

Omni Waste of Osceola County, LLC

A handwritten signature in black ink, appearing to read "William P. Hulligan", written over a horizontal line.

William P. Hulligan
Manager

Waste Services, Inc.

A handwritten signature in black ink, appearing to read "William P. Hulligan", written over a horizontal line.

William P. Hulligan
Executive Vice President, U.S. Operations

ATTACHMENT 2

Status Report of Methane Gas Migration Investigation



1501 Omni Way, St. Cloud, FL 34773

November 14, 2010

Mr. F. Thomas Lubozynski, P.E.
Waste Program Administrator
Florida Department of Environmental Protection
Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Subject: Status Report of Methane Gas Migration Investigation
J.E.D. Solid Waste Management Facility
Osceola County, Florida
Permit Nos. SC-0197726-004 and SO49-0199726-005

Dear Mr. Lubozynski:

At the request of Ms. Kimberly Rush of your Department, Omni Waste of Osceola County, LLC (Omni) is submitting the enclosed status report updating activities related to the methane gas migration investigation at the J.E.D. Solid Waste Management Facility (facility). Provided below is a discussion of activities completed since receiving the comments and recommendations outlined in your letter dated July 6, 2010 (provided as reference in Attachment A). The information provided below is outlined in relation to the format of your letter.

Probe Pair Trending Analysis:

Omni's engineering consultant, Golder Associates Inc., completed daily monitoring of the permanent and temporary gas probes during the period August 23rd through August 27th. Each probe was initially monitored for percent methane and then purged for an approximate ten minute period. The initial reading was recorded within a two minute period, typically when the reading appeared to stabilize. This procedure was repeated for each of the five days of monitoring. Monitoring results are provided in Attachment B. Please note that monitoring results for additional temporary probes are listed on the monitoring logs for August 24th through August 27th. Additional temporary probes were being installed at the same time the daily monitoring was performed and the additional probes were monitored as installation was completed. Installation details for the additional temporary probes are discussed later in this letter report.

Based on review of the monitoring results provided in Attachment B, there does not appear to be a significant indication that a "gas bubble" condition was occurring between the paired permanent and temporary gas probes that would explain periodic higher results in

the outer permanent probes than that monitored in the temporary probes located closer to the waste mass. One possible condition that may have influenced the results were the saturated conditions noted within the storm water retention area during the monitoring event. Generally, the storm water retention area contained standing water in the vicinity of the probes as noted on the monitoring logs. Omni has scheduled another round of daily monitoring to occur the week of November 15, 2010. This round of monitoring will be completed under dryer conditions (while the storm water retention areas are dry) to allow for comparison of results.

Gas Sampling and Analysis:

Omni's engineering consultant, Mr. Dick Prosser of GC Environmental, spoke with Mr. Abu-Shaban about his paper titled Fingerprinting and Forensic Techniques for Landfill Gas Geochemical Assessment, 2006, and he indicated that his paper was written to provide information on distinguishing between biogenic (landfill gas and swamp/marsh gas) and thermogenic gas (pipeline gas and oil field gas), not between two biogenic sources. Omni does not believe there is thermogenic gas present at the facility, therefore, this analytical approach would not be appropriate. Omni wishes to continue with other sampling and corrective action measures as outlined in your recommendation letter and this status report before initiating further fingerprinting analysis efforts. Omni's recommended approach is to continue efforts in controlling gas migration nearer the waste limits and then follow with additional fingerprinting analysis to confirm other possible sources of methane gas near the property boundary.

Potential Migration Beneath Dry Retention Areas:

See above comments and further discussion below.

Proposed Actions (Refer to FDEP Letter Attachment A):

1. Omni requests to delay further fingerprinting analysis at the temporary and permanent probes until a suitable approach can be developed based on further evaluation of gas monitoring data and the effects of implemented corrective action measures.
2. Omni has submitted an intermediate permit modification application to your Department to connect the leachate sump manhole risers to the Gas Collection and Control System (GCCS). The application was deemed complete on October 26, 2010, and a final determination will be made by December 26, 2010. Omni anticipates the permit modification will be issued in late December and will be prepared to complete the sump tie-ins shortly thereafter.
3. Omni conducted an investigation of the cap integrity at the Cell 4 sump area and other areas at the base liner and closure liner tie-in locations in June and July. Several areas were discovered near the sump manholes of Cells 1, 2 & 3, at the tie-in location of the base and cap liner systems at Cells 1 through 4, and gas well boots in Cells through 4 that required repairs to eliminate landfill gas leakage and migration. Provided in Attachment C is a report by Environmental Planning

Specialists Inc, dated August 2, 2010, that summarizes the investigation and repair work. Omni will continue to monitor areas for possible leaks and perform repairs as necessary.

4. Total organic content sampling of subsurface soils near selected probes is scheduled for November 16, 2010. The presence of standing storm water runoff in the retention areas has prevented TOC sampling prior to this date. Laboratory analysis will be performed using Method SD1, S3 as approved by the FDEP via e-mail correspondence dated August 25, 2010.
5. Over the past four months Omni has concentrated efforts on increasing the efficiency of the GCCS within Cells 1 through 4 (increasing vacuums at selected wells and well field balancing) and has seen an increase in the flow rate through the landfill flare system. Initially the flow rate at the flare averaged approximately 1,900 standard cubic feet per minute (scfm), increased to approximately 2,400 scfm after initial GCCS balancing efforts, and then decreased over time to approximately 2,100 scfm. In August Omni completed installation of additional gas collection wells for the Sequence 3A project. When vacuum was applied to the new wells, the flow rate at the flare system increased to approximately 3,100 scfm and has since dropped to 2,500 scfm. Omni will continue efforts to balance the GCCS to increase the efficient to the extent possible while maintaining compliance with the facility's Title V permit.
6. In August Omni installed ten temporary ground water piezometers in the storm water retention area to monitor the ground water table elevation near selected permanent gas probes. Two 1-inch diameter PVC piezometers were installed at five locations near an adjacent permanent gas probe as shown on Figure 1 (see Attachment B). One piezometer was screened approximately 1-3 foot below ground surface and the second screened approximately 3-5 feet below ground surface. Well construction diagrams and recent monitoring data are provided in Attachment D. Initial monitoring results from August through November of this year indicate the possible presence of non-saturated zones between the two piezometer pairs. Omni will continue to monitor the piezometers and evaluate the results for any trends related to gas migration. Additionally, subsurface soil conditions evaluated during the forthcoming TOC field work may be useful in identifying subsurface soil conditions supporting the piezometer monitoring data.
7. In August Omni installed additional temporary gas monitoring probes (TGP 4 through TGP-13) on the backslope of the perimeter disposal berm, directly across from a permanent gas monitoring probe. These additional temporary probes were included in the monitoring network along with existing temporary probes TGP-1, TGP-2 and TGP-3. The temporary probes were screened from an elevation of approximately 80' below ground surface (BGS) to within one foot of ground surface (approximately 89' BGS). Elevation 80' BGS is the lowest elevation of waste placement within the disposal cells and meets the requirements of Rule 62-701.530(2)(a), Florida Administrative Code. The locations of the temporary probes are shown on Figure 1 provided in Attachment B. Well construction diagrams are being completed and will be submitted under separate cover.

8. Omni has continued with monitoring efforts for the temporary and permanent probes since August and has noted varying results. As shown in the latest round of monitoring completed on November 5, 2010 (provided in Attachment E), several of the temporary probes were reported at zero percent methane (TGP-4 through TGP-13). However, several permanent probes paired with the temporary probes continue to show elevated readings of methane (GP-14 through GP-22). Paired probes TGP-1/GP-10, TGP-12/GP-14 and TGP3/GP-18 are located near vertical sump manhole locations. Omni believes connection of the sump manholes to the GCCS will allow additional efficiency in controlling landfill gas migration in these locations.

Additional Actions Proposed by the Department (Refer to FDEP Letter Attachment A):

9. Omni has further reviewed the idea of excavating a trench to groundwater along probes GP-18, GP-19, and GP-20 and is concerned about having an open trench that would allow direct contact of storm water run-off with the groundwater table. Omni is open to further discussion with the FDEP on alternative options, including geomembrane liners.
10. Completed as discussed above.

Additional Request by Omni

Omni requests FDEP approval to abandon the existing permanent gas probes and replace them with new permanent gas probes in the same location, however, with a different screen interval. Due to different screen intervals between the permanent and temporary probes, it is believed the facility's water table may be influencing the monitoring results when comparing results between paired probes and seasonal variations. The existing permanent gas probes are screened from approximately 74' to 80' BGS and the temporary gas probes are screened from approximately 80' to 88' BGS. The bottom screened elevation of 80' BGS for the temporary probes represents the lowest elevation of waste fill in the disposal cells (top of protective cover elevation in the sump areas). Omni requests to install the new permanent probes with a bottom screen interval at 80' BGS.

I hope the information provided here-in meets with your approval. If you have any questions or require additional information, please contact me at (904) 673-0446 or mkaiser@wsii.us at your earliest convenience.

Sincerely,



Mike Kaiser
Waste Services, Inc.

ATTACHMENT A



Florida Department of
Environmental Protection
Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

ELECTRONIC MAIL

SMcCash@wasteservicesinc.com

Mr. Shawn McCash
JED Solid Waste Management Facility
1501 Omni Way
St. Cloud, Florida 34773

OCD-SW-10-0374

Osceola County - SW
JED Solid Waste Management Facility
Permit # SO49-0199726-005 and SC49-0199726-004
WACS # 89544
Response to Methane Gas Migration Investigation

Dear Mr. McCash:

As requested during the May 20, 2010 JED Landfill CH₄ Exceedance meeting, the Department received the document titled Methane Gas Migration Investigation dated June 17, 2010. The document summarizes all actions taken regarding the issue to date, conclusions regarding the studies completed, and outlines further steps to be taken in efforts to better understand and control the methane gas migration issue. The following are the Department's questions and comments to the conclusions within the report.

General Questions/Comments:

1. What is the distance in feet between the temporary gas probes and the permanent gas probes?
2. In the Subsurface Migration via Waste section of the report, Golder states that they have observed the lingering presence of landfill gas still present below ground at a similar facility. Based on Golder's experience at this other facility, how long did it take for the gas concentrations present below ground to diminish over time?

Monthly Monitoring:

Conclusion: There does not appear to be strong correlation between seasonal or meteorological conditions and the methane content monitored in the probes.

Department Comments: The department agrees with this conclusion.

Probe Pair Trend Analysis:

Conclusion: Engineering judgment indicates that if the landfill were the sole methane source (of the apparent migration), that the methane content in the probes closest to the landfill (temporary probes) should indicate higher methane content than those further from the disposal boundary (permanent probes).

Department Comments: The Department agrees that the temporary probes should have higher methane concentrations than the permanent probes (when accumulation is not a factor). We do not agree that this is what is being seen in the data outlined in Table 2. The data and conclusions do not take into account the gas flow rate of the methane migration. The 'gas bubble' takes time to travel from the temporary probe to the permanent probe; therefore, the measurement at the temporary probe on 'day 1' cannot be compared to the measurement taken at the corresponding permanent probe on 'day 1'. Instead, the temporary gas probe should be compared to a measurement taken at the permanent probe at a later date based upon the gas flow migration rate. As seen by the lack of correlation between the temporary probes and the permanent

probes, the time it takes for a 'gas bubble' to travel from the temporary probe to the corresponding permanent probe is not quarterly or monthly.

Department Recommendation: The Department recommends taking measurements on a daily basis in the six gas probes listed in Table 2 for a limited amount of time. This will allow for a more accurate correlation of the temporary probes to the permanent probes and the ability to determine a rough estimate of the gas flow rate. It is recommended to purge the probes after measurements are taken in these six probes in order to minimize the influence of gas accumulation on the results.

Gas Sampling and Analysis:

Conclusion: Chlorinated VOCs tend to indicate a non-natural source and can be tracers of landfill gas.

Department Comments: The Department agrees that chlorinated VOCs can be a tracer of landfill gas but the effects of natural attenuation in soil and leaching into the groundwater of such VOCs must also be taken into account. The results outlined in the report are inconclusive because of the possibility for natural attenuation of chlorinated VOCs and the contamination of vinyl chloride seen in the ground water.

Department Recommendations: The Department recommends a fingerprint analysis of the flare gas and probe gas for constituents which are not impacted when moving through soil via adsorption, absorption or degradation. For example, the study Fingerprinting and Forensic Techniques for Landfill Gas Geochemical Assessment by Abu-Shaban and Centeno, 2006 recommends landfill gas fingerprinting by the analysis of H₂S and/or ¹³C/¹²C and ²H/¹H isotopes (see attached).

Potential Migration beneath Dry Retention Areas:

Conclusion: Golder and Omni Waste theorize that the elevated methane concentrations measured within the perimeter probes comes partially from biological sources (wetlands, buried organic matter, etc.) outside of the waste disposal area.

Department Comments: The Department accepts the possibility of biological sources affecting the methane content in the monitoring probes. However, we are not convinced it is the only source of methane in the perimeter probes.

Department Recommendations: Conduct a fingerprint analysis for H₂S and ¹³C/¹²C and ²H/¹H isotopes. Through this analysis, the difference between the landfill gas isotopes and any gas resulting from swamp gas can be analyzed and compared (reference Fingerprinting and Forensic Techniques for Landfill Gas Geochemical Assessment, Abu-Shaban and Centeno, 2006).

SUMMARY – Landfill Gas Migration:

Conclusion: Based upon site improvements, field monitoring data, and laboratory analysis, there does not appear to be a direct relationship in the methane content in the GMPs and landfill gas migration.

Department Comments: The analysis conducted to date is inconclusive. Additional data and analysis must be performed prior to concluding the source of methane in the monitoring probes.

Proposed Actions:

1. Perform additional laboratory analysis of all of the probe pairs (i.e. TGP-1 and GP-10, TGP-2 and GP-14, TGP-3 and GP-18) for the full suite of organics monitored during the 2008 and 2009 sampling events. Additionally, samples from probes GP-11, GP-15, GP-19, GP-21, and GP-22 will be analyzed as well to compare the results from historical sampling. Research the available literature to determine if additional parameters that may be helpful in confirming whether another source of methane is impacting the probes should be added to the analysis.

Department Comments: The Department recommends a fingerprint analysis of the flare gas and probe gas for constituents which are not impacted when moving through soil via adsorption, absorption or degradation.

2. Connect the leachate collection sump manhole risers and any adjacent leachate cleanout risers to the GCCS.

Department Comments: Acceptable.

3. Investigate the cap integrity at the Cell 4 sump area and other areas at the base liner and closure cap liner tie-in locations.

Department Comments: Acceptable.

4. Determine the total organic content using method 415.1 in the soil (vadose/smear) upgradient and downgradient of the GMPs to trend TOC in relation to the probes.

Department Comments: Acceptable.

5. Increase the collection efficiency of the GCCS (increased vacuums at selected wells) and monitor for any influences at the temporary and permanent probes.

Department Comments: Acceptable.

6. Install a series of two temporary groundwater piezometers in various locations in the dry retention areas near selected GMPs. The temporary piezometers will be screened at different intervals to assist in determining whether saturated conditions exist in underlying soils when there is standing water in the dry retention area.

Department Comments: Acceptable.

7. Continue monitoring the temporary and permanent probes on a monthly basis and note any trends that develop.

Department Comments: The Department recommends taking measurements on a daily basis in the six gas probes listed in Table 2 for a limited amount of time. This will allow for a more accurate correlation of the temporary probes to the permanent probes and the ability to determine a rough estimate of the gas flow rate. It is recommended the probes be purged after measurements are taken in these six probes in order to minimize the influence of gas accumulation on the results.

8. Based on findings from the above listed activities, determine whether a new monitoring probe system or techniques should be proposed.

Department Comments: Acceptable.

Additional Actions Proposed by the Department (as discussed in the meeting May 20, 2010):

9. Install a wet ditch which goes to the water table along GP18, GP19 and GP20.
10. Install the next series of gas wells in cells 1-4.

Mr. Shawn McCash
OCD-SW-10-0374
Page #4

Please contact Gloria-Jean DePradine by telephone at (407) 893-3994 or by e-mail at gloria.depradine@dep.state.fl.us, or contact Kim Rush at (407) 893-2312 or by e-mail at kim.rush@dep.state.fl.us if you have any questions or need additional information.

Sincerely,



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

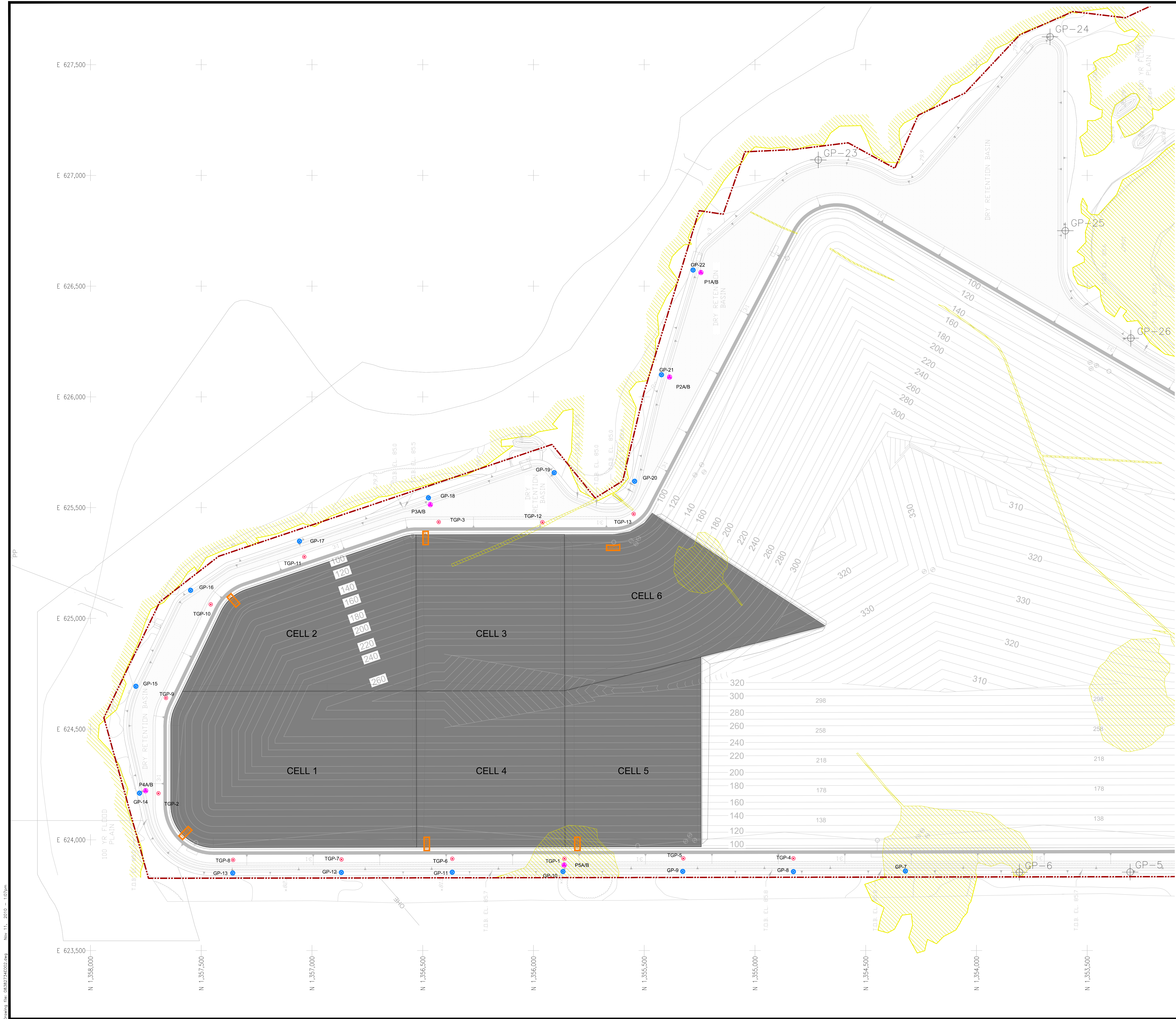
Date: July 6, 2010

Attachment: PowerPoint presentation: Fingerprinting and Forensic Techniques for Landfill Gas
Geochemical Assessment, Abu-Shaban and Centeno, 2006

cc: Mike Kaiser, Omni Waste, MikeKaiser@wsii.us

FTL/gnd/kr

ATTACHMENT B



NOTES

1. THE PURPOSE OF THIS DRAWING IS TO ILLUSTRATE THE KNOWN AS-BUILT DATA OF THE EXISTING GAS MONITORING PROBES, THE APPROXIMATE LOCATIONS OF THE TEMPORARY GAS MONITORING PROBES AND THE PROPOSED LOCATIONS OF FUTURE GAS MONITORING PROBES.
2. THE LOCATIONS FOR THE TEMPORARY GAS MONITORING PROBES ARE APPROXIMATE AND SHOULD ONLY BE USED FOR GENERAL REFERENCE.
3. WETLAND DELINEATION SHOWN TAKEN FROM PERMIT DRAWING No. 9A OF 40 AND 9B OF 40, FILE FL1295.02P09A0, BY GEOSYNTEC, DATED SEPTEMBER 2007.

LEGEND

- TOP OF FINAL COVER (FEET, NGVD)
- GP-8 EXISTING GAS MONITORING PROBE
- GP-1 PROPOSED GAS MONITORING PROBE
- TGP-1 TEMPORARY GAS MONITORING PROBE
- P1A/B TEMPORARY PIEZOMETER LOCATION (DRY RETENTION AREA)
- CURRENT DISPOSAL AREA
- LEACHATE COLLECTION SUMP
- WETLANDS
- PROPERTY LINE

PROJECT
**J.E.D. SOLID WASTE MANAGEMENT FACILITY
 ST. CLOUD, OSCEOLA COUNTY, FLORIDA**

PROBE LOCATION MAP



PROJECT No.	083-82734-8	FILE No.	08382734E002
DESIGN	DEG	11/11/10	SCALE AS SHOWN
CADD	BCL	11/11/10	REV. 0
CHECK			
REVIEW			

FIGURE 1

PERIMETER GAS PROBE MONITORING LOG

Facility Name: J.E.D. Solid Waste Management Facility Date: 8/23/10
 Facility Address: 1501 Omni Way, St Cloud, Florida 34773
 Technician: Veronica Figueroa, Golder Associates
 Company: Omni Waste of Osceola County LLC
 Weather Conditions: Temperature: °F M. Cloudy/P. Cloudy/Clear/Overcast
 Barometric Pressure: inch Hg Wind: 5-10 mph (from the south)
 Humidity:
 Landfill Gas Meter: LandTec Gem.2000 Serial No.GM11327/08

Gas Probe	Date & Time	% CH4	Comment
GP-7	8/23/10 9:45 AM	11.7	Approx. 25'E 4" standing water
GP-7	8/23/10 10:01 AM	35.3	Approx. 25'E 4" standing water
GP-8	8/23/10 10:17 AM	0	Approx. 30'E 2" standing water
GP-8	8/23/10 10:30 AM	0	Approx. 30'E 2" standing water
GP-9	8/23/10 10:41 AM	0	Approx. 60'NE 4" standing water
GP-9	8/23/10 10:54 AM	0.5	Approx. 60'NE 4" standing water
GP-10	8/23/10 11:05 AM	13	Approx. 20'E 1' standing water
GP-10	8/23/10 11:19 AM	41.5	Approx. 20'E 1' standing water
GP-11	8/23/10 11:29 AM	48.9	Approx. 25'E 1' standing water
GP-11	8/23/10 11:42 AM	48.8	Approx. 25'E 1' standing water
GP-12	8/23/10 11:54 AM	0.1	Approx. 25'E 1' standing water
GP-12	8/23/10 12:09 PM	0.2	Approx. 25'E 1' standing water
GP-13	8/23/10 12:18 PM	3.5	Approx. 25'E 2' standing water
GP-13	8/23/10 12:31 PM	3.7	Approx. 25'E 2' standing water
GP-14	8/23/10 12:42 PM	2	Approx. 30'S 2' standing water; Approx. 60'N 1' standing water
GP-14	8/23/10 1:02 PM	4.9	Approx. 30'S 2' standing water; approx. 60'N 1' standing water
GP-15	8/23/10 1:16 PM	15.6	Approx. 25'S 2'-3' standing water; approx. 50'N 2'-3' standing water
GP-15	8/23/10 1:32 PM	15.8	Approx. 25'S 2'-3' standing water; approx. 50'N 2'-3' standing water
GP-16	8/23/10 1:47 PM	10.4	Approx. 25'S 2'-3' standing water; approx. 50'N 1'-2' standing water
GP-16	8/23/10 3:23 PM	3.4	Approx. 25'S 2'-3' standing water; approx. 50'N 1'-2' standing water

Gas Probe	Date & Time	%CH4	Comment
GP-17	8/23/10 3:32 PM	2.5	Approx. 20'W 1'-2' standing water; approx. 50'E 1' standing water
GP-17	8/23/10 3:47 PM	1.9	Approx. 20'W 1'-2' standing water; approx. 50'E 1' standing water
GP-18	8/23/10 3:54 PM	5.2	Approx. 20'W 2'-3' standing water
GP-18	8/23/10 4:07 PM	15.5	Approx. 20'W 2'-3' standing water
GP-19	8/23/10 4:12 PM	28	Approx. 20'NW 2'-3' standing water
GP-19	8/23/10 4:26 PM	33.2	Approx. 20'NW 2'-3' standing water
GP-20	8/23/10 4:32 PM	0.1	Approx. 25'S 2'-3' standing water
GP-20	8/23/10 4:47 PM	0.1	Approx. 25'S 2'-3' standing water
GP-21	8/23/10 4:53 PM	42.8	Approx. 20'S 4' standing water; approx. 60'N 1' standing water
GP-21	8/23/10 5:11 PM	32.3	Approx. 20'S 4' standing water; approx. 60'N 1' standing water
GP-22	8/23/10 5:21 PM	0.1	Approx. 20'S 4' standing water; approx. 60'N 1' standing water
GP-22	8/23/10 5:33 PM	0.1	Approx. 20'S 4' standing water; approx. 60'N 1' standing water
TGP-1	8/23/10 6:34 PM	45	Adjacent to GP-10. Approx. 20'W 2'- 3' standing water
TGP-1	8/23/10 6:47 PM	46.7	Adjacent to GP-10. Approx. 20'W 2'- 3' standing water
TGP-2	8/23/10 6:08 PM	11.7	Adjacent to GP-14. Approx. 20'N 2'- 3' standing water
TGP-2	8/23/10 6:24 PM	5.1	Adjacent to GP-14. Approx. 20'N 2'- 3' standing water
TGP-3	8/23/10 5:44 PM	5.9	Adjacent to GP-18. Approx. 20'E 3'- 4' standing water
TGP-3	8/23/10 6:01 PM	4	Adjacent to GP-18. Approx. 20'E 3'- 4' standing water

Notes: Initial reading taken after 2 minutes based on typical monitoring procedures. Additional reading taken at the time shown (approximately 10 minutes) in attempt to purge the probe.

PERIMETER GAS PROBE MONITORING LOG

Facility Name: J.E.D. Solid Waste Management Facility Date: 8/24/10
 Facility Address: 1501 Omni Way, St Cloud, Florida 34773
 Technician: Veronica Figueroa, Golder Associates
 Company: Omni Waste of Osceola County LLC
 Weather Conditions: Temperature: °F M. Cloudy/P. Cloudy/Clear/Overcast
 Barometric Pressure: inch Hg Wind: 5-10 mph (from the south)
 Humidity:
 Landfill Gas Meter: LandTec Gem.2000 Serial No.GM11327/08

Gas Probe	Date & Time	% CH4	Comment
GP-7	8/24/10 8:52 AM	1.4	Approx. 25'E 1' standing water
GP-7	8/24/10 9:03 AM	5.7	Approx. 25'E 1' standing water
GP-8	8/24/10 9:12 AM	0	Approx. 30'E 2'-3' standing water
GP-8	8/24/10 9:23 AM	0	Approx. 30'E 2'-3' standing water
GP-9	8/24/10 9:30 AM	2.6	Approx. 30'E 2'-3' standing water
GP-9	8/24/10 9:42 AM	2.6	Approx. 30'E 2'-3' standing water
GP-10	8/24/10 9:48 AM	24	Approx. 20'E 1'-2' standing water
GP-10	8/24/10 10:00 AM	43.2	Approx. 20'E 1'-2' standing water
GP-11	8/24/10 10:09 AM	41.7	Approx. 25'E 1'-2' standing water
GP-11	8/24/10 10:21 AM	49.9	Approx. 25'E 1'-2' standing water
GP-12	8/24/10 10:27 AM	1.3	Approx. 25'E 1'-2' standing water
GP-12	8/24/10 10:40 AM	1.3	Approx. 25'E 1'-2' standing water
GP-13	8/24/10 10:47 AM	4.1	Approx. 25'E 2'-2.5' standing water
GP-13	8/24/10 10:59 AM	4.5	Approx. 25'E 2'-2.5' standing water
GP-14	8/24/10 11:07 AM	0.2	Approx. 30'S 2' standing water; approx. 60'N 1' standing water
GP-14	8/24/10 11:20 AM	2.5	Approx. 30'S 2' standing water; Approx. 60'N 1' standing water
GP-15	8/24/10 11:32 AM	7.7	Approx. 25'S 2'-3' standing water; approx. 50'N 2'-3' standing water
GP-15	8/24/10 11:42 AM	2.7	Approx. 25'S 2'-3' standing water; approx. 50'N 2'-3' standing water
GP-16	8/24/10 11:55 AM	0.2	Approx. 25'S 2'-3' standing water; approx. 50'N 1'-2' standing water
GP-16	8/24/10 12:06 PM	0.1	Approx. 25'S 2'-3' standing water; approx. 50'N 1'-2' standing water

Gas Probe	Date & Time	%CH4	Comment
GP-17	8/24/10 12:15 PM	0.2	Approx. 20'W 1'-2' standing water; approx. 50'E 1' standing water
GP-17	8/24/10 12:26 PM	0.1	Approx. 20'W 1'-2' standing water; approx. 50'E 1' standing water
GP-18	8/24/10 12:35 PM	5	Approx. 20'W 2'-3' standing water
GP-18	8/24/10 12:46 PM	15.9	Approx. 20'W 2'-3' standing water
GP-19	8/24/10 12:55 PM	6.5	Approx. 20'NW 2'-3' standing water
GP-19	8/24/10 1:07 PM	30.9	Approx. 20'NW 2'-3' standing water
GP-20	8/24/10 1:17 PM	0	Approx. 25'S 2'-3' standing water
GP-20	8/24/10 1:28 PM	0	Approx. 25'S 2'-3' standing water
GP-21	8/24/10 2:19 PM	10.8	Approx. 20'S 4' standing water; approx. 60'N 1' standing water
GP-21	8/24/10 2:30 PM	17	Approx. 20'S 4' standing water; approx. 60'N 1' standing water
GP-22	8/24/10 1:59 PM	0	Approx. 20'S 4' standing water; approx. 60'N 1' standing water
GP-22	8/24/10 2:10 PM	0	Approx. 20'S 4' standing water; approx. 60'N 1' standing water
TGP-1	8/24/10 4:26 PM	55.7	Adjacent to GP-10. Approx. 20'W 2'-3' standing water
TGP-1	8/24/10 4:30 PM	52.7	Adjacent to GP-10. Approx. 20'W 2'-3' standing water
TGP-2	8/24/10 4:34 PM	8.5	Adjacent to GP-14. Approx. 20'N 2'-3' standing water
TGP-2	8/24/10 4:41 PM	9.6	Adjacent to GP-14. Approx. 20'N 2'-3' standing water
TGP-3	8/24/10 3:36 PM	1.2	Adjacent to GP-18. Approx. 20'E 3'-4' standing water
TGP-3	8/24/10 3:47 PM	0.5	Adjacent to GP-18. Approx. 20'E 3'-4' standing water
TGP-13	8/24/10 2:57 PM	0.1	Adjacent to GP-20. Approx. 20'E 3'-4' standing water
TGP-13	8/24/10 3:10 PM	0.2	Adjacent to GP-20. Approx. 20'E 3'-4' standing water
TGP-12	8/24/10 3:19 PM	34	Adjacent to GP-19. Approx. 20'E 3'-4' standing water
TGP-12	8/24/10 3:29 PM	42.1	Adjacent to GP-19. Approx. 20'E 3'-4' standing water

Notes: Initial reading taken after 2 minutes based on typical monitoring procedures. Additional reading taken at the time shown (approximately 10 minutes) in attempt to purge the probe.

PERIMETER GAS PROBE MONITORING LOG

Facility Name: J.E.D. Solid Waste Management Facility Date: 8/25/10
 Facility Address: 1501 Omni Way, St Cloud, Florida 34773
 Technician: Veronica Figueroa, Golder Associates
 Company: Omni Waste of Osceola County LLC
 Weather Conditions: Temperature: °F M. Cloudy/P. Cloudy/Clear/Overcast
 Barometric Pressure: inch Hg Wind: 5-10 mph (from the south)
 Humidity:
 Landfill Gas Meter: LandTec Gem.2000 Serial No.GM11327/08

Gas Probe	Date & Time	%CH4	Comment
GP-7	8/25/2010 7:10	2.2	Approx. 25'E 1' standing water
GP-7	8/25/2010 7:22	2.2	Approx. 25'E 1' standing water
GP-8	8/25/2010 7:27	0	Approx. 30'E 2'-3' standing water
GP-8	8/25/2010 7:39	0	Approx. 30'E 2'-3' standing water
GP-9	8/25/2010 7:45	2.7	Approx. 30'E 2'-3' standing water
GP-9	8/25/2010 7:55	2.7	Approx. 30'E 2'-3' standing water
GP-10	8/25/2010 8:01	19.2	Approx. 20'E 1'-2' standing water
GP-10	8/25/2010 8:12	40.4	Approx. 20'E 1'-2' standing water
GP-11	8/25/2010 8:19	45.3	Approx. 25'E 1'-2' standing water
GP-11	8/25/2010 8:30	51.6	Approx. 25'E 1'-2' standing water
GP-12	8/25/2010 8:36	0.3	Approx. 25'E 1'-2' standing water
GP-12	8/25/2010 8:47	1.5	Approx. 25'E 1'-2' standing water
GP-13	8/25/2010 8:53	1	Approx. 25'E 2'-2.5' standing water
GP-13	8/25/2010 9:04	4.6	Approx. 25'E 2'-2.5' standing water

Gas Probe	Date & Time	%CH4	Comment
GP-14	8/25/2010 9:11	5.4	Approx. 30'S 2'-3' standing water; approx. 60'N 1'-2' standing water
GP-14	8/25/2010 9:21	10.5	Approx. 30'S 2'-3' standing water; approx. 60'N 1'-2' standing water
GP-15	8/25/2010 9:28	1	Approx. 25'S 2'-3' standing water; approx. 50'N 2'-3' standing water
GP-15	8/25/2010 9:39	3.1	Approx. 25'S 2'-3' standing water; approx. 50'N 2'-3' standing water
GP-16	8/25/2010 9:46	0.2	Approx. 25'S 2'-3' standing water; approx. 50'N 2' standing water
GP-16	8/25/2010 9:56	0.1	Approx. 25'S 2'-3' standing water; approx. 50'N 2' standing water
GP-17	8/25/2010 10:02	0.3	Approx. 20'W 1'-2' standing water; approx. 50'E 1'-2' standing water
GP-17	8/25/2010 10:13	0.1	Approx. 20'W 1'-2' standing water; approx. 50'E 1'-2' standing water
GP-18	8/25/2010 10:19	5.4	Approx. 20'W 2'-3' standing water
GP-18	8/25/2010 10:30	19.6	Approx. 20'W 2'-3' standing water
GP-19	8/25/2010 10:36	15	Approx. 20'NW 2'-3' standing water
GP-19	8/25/2010 10:47	19	Approx. 20'NW 2'-3' standing water
GP-20	8/25/2010 10:54	0	Approx. 25'S 2'-3' standing water
GP-20	8/25/2010 11:05	0	Approx. 25'S 2'-3' standing water
GP-21	8/25/2010 11:14	6.1	Approx. 20'S 4' standing water; approx. 60'N 2' standing water
GP-21	8/25/2010 11:25	13.5	Approx. 20'S 4' standing water; approx. 60'N 2' standing water

Gas Probe	Date & Time	%CH4	Comment
GP-22	8/25/2010 11:30	0	Approx. 20'S 4' standing water; approx. 60'N 1'-2' standing water
GP-22	8/25/2010 11:41	0	Approx. 20'S 4' standing water; approx. 60'N 1'-2' standing water
TGP-1	8/25/2010 12:54	54.1	Approx. 20'W 2'-3' standing water
TGP-1	8/25/2010 13:05	54.1	Approx. 20'W 2'-3' standing water
TGP-2	8/25/2010 14:07	7.3	Approx. 20'N 2'-3' standing water
TGP-2	8/25/2010 14:18	2.5	Approx. 20'N 2'-3' standing water
TGP-3	8/25/2010 15:13	20.6	Approx. 20'E 3'-4' standing water
TGP-3	8/25/2010 15:24	8	Approx. 20'E 3'-4' standing water
TGP-4	8/25/2010 12:15	0	Adjacent to GP-8.
TGP-4	8/25/2010 12:26	0	Adjacent to GP-8.
TGP-5	8/25/2010 12:34	39.6	Adjacent to GP-9.
TGP-5	8/25/2010 12:47	36.9	Adjacent to GP-9.
TGP-6	8/25/2010 13:12	2.4	Adjacent to GP-11.
TGP-6	8/25/2010 13:25	1.5	Adjacent to GP-11.
TGP-7	8/25/2010 13:31	47.6	Adjacent to GP-12.
TGP-7	8/25/2010 13:42	47.7	Adjacent to GP-12.
TGP-8	8/25/2010 13:48	42.4	Adjacent to GP-13.
TGP-8	8/25/2010 14:01	42.1	Adjacent to GP-13.
TGP-9	8/25/2010 14:22	4.9	Adjacent to GP-15.
TGP-9	8/25/2010 14:33	3.8	Adjacent to GP-15.
TGP-10	8/25/2010 14:38	0	Adjacent to GP-16.
TGP-10	8/25/2010 14:39	0	Adjacent to GP-16.
TGP-10	8/25/2010 14:48	0	Adjacent to GP-16.
TGP-11	8/25/2010 14:56	3.9	Adjacent to GP-17.
TGP-11	8/25/2010 15:07	3.7	Adjacent to GP-17.

Gas Probe	Date & Time	%CH4	Comment
TGP-12	8/25/2010 15:29	42.6	Adjacent to GP-19. Approx. 20'E 3'-4' standing water
TGP-12	8/25/2010 15:40	42.8	Adjacent to GP-19. Approx. 20'E 3'-4' standing water
TGP-13	8/25/2010 15:47	0.3	Adjacent to GP-20. Approx. 20'E 3'-4' standing water
TGP-13	8/25/2010 15:58	0.2	Adjacent to GP-20. Approx. 20'E 3'-4' standing water

Notes: Initial reading taken after 2 minutes based on typical monitoring procedures. Additional reading taken at the time shown (approximately 10 minutes) in attempt to purge the probe.

PERIMETER GAS PROBE MONITORING LOG

Facility Name: J.E.D. Solid Waste Management Facility Date: 8/26/10
 Facility Address: 1501 Omni Way, St Cloud, Florida 34773
 Technician: Veronica Figueroa, Golder Associates
 Company: Omni Waste of Osceola County LLC
 Weather Conditions: Temperature: °F M. Cloudy/P. Cloudy/Clear/Overcast
 Barometric Pressure: inch Hg Wind: 5-10 mph (from the south)
 Humidity:
 Landfill Gas Meter: LandTec Gem.2000 Serial No.GM11327/08

Gas Probe	Date & Time	%CH4	Comment
GP-7	8/26/2010 7:16	4.2	Approx. 25'E 1' standing water
GP-7	8/26/2010 7:29	11.1	Approx. 25'E 1' standing water
GP-8	8/26/2010 7:34	0	Approx. 30'E 2'-3' standing water
GP-8	8/26/2010 7:44	0	Approx. 30'E 2'-3' standing water
GP-9	8/26/2010 7:49	0.7	Approx. 30'E 2'-3' standing water
GP-9	8/26/2010 7:59	2.6	Approx. 30'E 2'-3' standing water
GP-10	8/26/2010 8:04	20.8	Approx. 20'E 1'-2' standing water
GP-10	8/26/2010 8:15	41.7	Approx. 20'E 1'-2' standing water
GP-11	8/26/2010 8:19	46	Approx. 25'E 1'-2' standing water
GP-11	8/26/2010 8:30	55.2	Approx. 25'E 1'-2' standing water
GP-12	8/26/2010 8:35	1.5	Approx. 25'E 1'-2' standing water
GP-12	8/26/2010 8:48	1.8	Approx. 25'E 1'-2' standing water
GP-13	8/26/2010 8:53	2.1	Approx. 25'E 2'-2.5' standing water
GP-13	8/26/2010 9:03	4.8	Approx. 25'E 2'-2.5' standing water

Gas Probe	Date & Time	%CH4	Comment
GP-14	8/26/2010 9:09	0.2	Approx. 30'S 2'-3' standing water; approx. 60'N 1'-2' standing water
GP-14	8/26/2010 9:19	9.1	Approx. 30'S 2'-3' standing water; approx. 60'N 1'-2' standing water
GP-15	8/26/2010 9:24	0.2	Approx. 25'S 2'-3' standing water; approx. 50'N 2'-3' standing water
GP-15	8/26/2010 9:35	0.3	Approx. 25'S 2'-3' standing water; approx. 50'N 2'-3' standing water
GP-16	8/26/2010 9:40	0	Approx. 25'S 2'-3' standing water; approx. 50'N 2' standing water
GP-16	8/26/2010 9:50	0	Approx. 25'S 2'-3' standing water; approx. 50'N 2' standing water
GP-17	8/26/2010 9:55	0	Approx. 20'W 1'-2' standing water; approx. 50'E 1'-2' standing water
GP-17	8/26/2010 10:06	0	Approx. 20'W 1'-2' standing water; approx. 50'E 1'-2' standing water
GP-18	8/26/2010 10:11	8.4	Approx. 20'W 2'-3' standing water
GP-18	8/26/2010 10:22	21.5	Approx. 20'W 2'-3' standing water
GP-19	8/26/2010 10:27	14	Approx. 20'NW 2'-3' standing water
GP-19	8/26/2010 10:37	16.6	Approx. 20'NW 2'-3' standing water
GP-20	8/26/2010 10:42	0	Approx. 25'S 2'-3' standing water
GP-20	8/26/2010 10:52	0	Approx. 25'S 2'-3' standing water
GP-21	8/26/2010 10:57	10.2	Approx. 20'S 4' standing water; approx. 60'N 2' standing water
GP-21	8/26/2010 11:07	18.8	Approx. 20'S 4' standing water; approx. 60'N 2' standing water

Gas Probe	Date & Time	%CH4	Comment
GP-22	8/26/2010 11:12	0	Approx. 20°S 4' standing water; approx. 60°N 1'-2' standing water
GP-22	8/26/2010 11:24	0	Approx. 20°S 4' standing water; approx. 60°N 1'-2' standing water
TGP-1	8/26/2010 13:50	56.1	Approx. 20°W 2'-3' standing water
TGP-1	8/26/2010 14:01	55.9	Approx. 20°W 2'-3' standing water
TGP-2	8/26/2010 15:53	3.3	Approx. 20°N 2'-3' standing water
TGP-2	8/26/2010 16:04	1.6	Approx. 20°N 2'-3' standing water
TGP-3	8/26/2010 12:09	16.3	Approx. 20°E 3'-4' standing water
TGP-3	8/26/2010 12:20	6.1	Approx. 20°E 3'-4' standing water
TGP-4	8/26/2010 13:16	0	Adjacent to GP-8.
TGP-4	8/26/2010 13:27	0	Adjacent to GP-8.
TGP-5	8/26/2010 13:34	10.6	Adjacent to GP-9.
TGP-5	8/26/2010 13:45	35.8	Adjacent to GP-9.
TGP-6	8/26/2010 14:05	6.2	Adjacent to GP-11.
TGP-6	8/26/2010 14:22	4.1	Adjacent to GP-11.
TGP-7	8/26/2010 15:23	49.3	Adjacent to GP-12.
TGP-7	8/26/2010 15:33	49.5	Adjacent to GP-12.
TGP-8	8/26/2010 15:38	44	Adjacent to GP-13.
TGP-8	8/26/2010 15:49	44.1	Adjacent to GP-13.
TGP-9	8/26/2010 16:10	0.2	Adjacent to GP-15.
TGP-9	8/26/2010 16:23	0.2	Adjacent to GP-15.
TGP-10	8/26/2010 12:43	0	Adjacent to GP-16.
TGP-10	8/26/2010 12:54	0	Adjacent to GP-16.
TGP-10	8/26/2010 12:27	1.1	Adjacent to GP-16.
TGP-11	8/26/2010 12:37	1.1	Adjacent to GP-17.
TGP-11	8/26/2010 11:12	0	Adjacent to GP-17.

Gas Probe	Date & Time	%CH4	Comment
TGP-12	8/26/2010 11:49	42.7	Adjacent to GP-19. Approx. 20'E 3'-4' standing water
TGP-12	8/26/2010 12:00	43.3	Adjacent to GP-19. Approx. 20'E 3'-4' standing water
TGP-13	8/26/2010 11:32	0.2	Adjacent to GP-20. Approx. 20'E 3'-4' standing water
TGP-13	8/26/2010 11:43	0.2	Adjacent to GP-20. Approx. 20'E 3'-4' standing water

Notes: Initial reading taken after 2 minutes based on typical monitoring procedures. Additional reading taken at the time shown (approximately 10 minutes) in attempt to purge the probe.

PERIMETER GAS PROBE MONITORING LOG

Facility Name: J.E.D. Solid Waste Management Facility Date: 8/27/10
 Facility Address: 1501 Omni Way, St Cloud, Florida 34773
 Technician: Veronica Figueroa, Golder Associates
 Company: Omni Waste of Osceola County LLC
 Weather Conditions: Temperature: °F M. Cloudy/P. Cloudy/Clear/Overcast
 Barometric Pressure: inch Hg Wind: 5-10 mph (from the south)
 Humidity:
 Landfill Gas Meter: LandTec Gem.2000 Serial No. GM11327/08

Gas Probe	Date & Time	%CH ₄	Comment
GP-7	8/27/2010 7:27	5.8	Approx. 25'E 1' standing water
GP-7	8/27/2010 7:38	20	Approx. 25'E 1' standing water
GP-8	8/27/2010 7:43	0	Approx. 30'E 2'-3' standing water
GP-8	8/27/2010 7:54	0	Approx. 30'E 2'-3' standing water
GP-9	8/27/2010 7:58	0	Approx. 30'E 2'-3' standing water
GP-9	8/27/2010 8:09	1.3	Approx. 30'E 2'-3' standing water
GP-10	8/27/2010 8:14	19.1	Approx. 20'E 1'-2' standing water
GP-10	8/27/2010 8:24	39.4	Approx. 20'E 1'-2' standing water
GP-11	8/27/2010 8:29	50.8	Approx. 25'E 1'-2' standing water
GP-11	8/27/2010 8:40	57	Approx. 25'E 1'-2' standing water
GP-12	8/27/2010 8:45	0.7	Approx. 25'E 1'-2' standing water
GP-12	8/27/2010 8:56	1.8	Approx. 25'E 1'-2' standing water
GP-13	8/27/2010 9:00	1.3	Approx. 25'E 2'-2.5' standing water
GP-13	8/27/2010 9:10	4.7	Approx. 25'E 2'-2.5' standing water

Gas Probe	Date & Time	%CH4	Comment
GP-14	8/27/2010 9:14	0.3	Approx. 30°S 2'-3' standing water; approx. 60°N 1'-2' standing water
GP-14	8/27/2010 9:25	13.5	Approx. 30°S 2'-3' standing water; approx. 60°N 1'-2' standing water
GP-15	8/27/2010 9:32	10.4	Approx. 25°S 2'-3' standing water; approx. 50°N 2'-3' standing water
GP-15	8/27/2010 9:43	8.3	Approx. 25°S 2'-3' standing water; approx. 50°N 2'-3' standing water
GP-16	8/27/2010 11:29	0	Approx. 25°S 2'-3' standing water; approx. 50°N 2' standing water
GP-16	8/27/2010 11:40	0	Approx. 25°S 2'-3' standing water; approx. 50°N 2' standing water
GP-17	8/27/2010 11:43	0	Approx. 20°W 1'-2' standing water; approx. 50°E 1'-2' standing water
GP-17	8/27/2010 11:54	0	Approx. 20°W 1'-2' standing water; approx. 50°E 1'-2' standing water
GP-18	8/27/2010 11:58	6.6	Approx. 20°W 2'-3' standing water
GP-18	8/27/2010 12:09	25.6	Approx. 20°W 2'-3' standing water
GP-19	8/27/2010 12:13	12.1	Approx. 20°NW 2'-3' standing water
GP-19	8/27/2010 12:24	22.7	Approx. 20°NW 2'-3' standing water
GP-20	8/27/2010 12:27	0	Approx. 25°S 2'-3' standing water
GP-20	8/27/2010 12:38	0	Approx. 25°S 2'-3' standing water
GP-21	8/27/2010 12:42	11.3	Approx. 20°S 4' standing water; approx. 60°N 2' standing water
GP-21	8/27/2010 12:53	19.3	Approx. 20°S 4' standing water; approx. 60°N 2' standing water

Gas Probe	Date & Time	%CH4	Comment
GP-22	8/27/2010 12:55	0	Approx. 20'S 4' standing water; approx. 60'N 1'-2' standing water
GP-22	8/27/2010 13:06	0	Approx. 20'S 4' standing water; approx. 60'N 1'-2' standing water
TGP-1	8/27/2010 15:37	55.2	Approx. 20'W 2'-3' standing water
TGP-1	8/27/2010 15:48	47.3	Approx. 20'W 2'-3' standing water
TGP-2	8/27/2010 14:38	1.2	Approx. 20'N 2'-3' standing water
TGP-2	8/27/2010 14:49	0.6	Approx. 20'N 2'-3' standing water
TGP-3	8/27/2010 13:42	18.1	Approx. 20'E 3'-4' standing water
TGP-3	8/27/2010 13:52	6.8	Approx. 20'E 3'-4' standing water
TGP-4	8/27/2010 16:09	0	Adjacent to GP-8.
TGP-4	8/27/2010 16:20	0	Adjacent to GP-8.
TGP-5	8/27/2010 15:53	1.6	Adjacent to GP-9.
TGP-5	8/27/2010 16:03	0.7	Adjacent to GP-9.
TGP-6	8/27/2010 15:23	0.6	Adjacent to GP-11.
TGP-6	8/27/2010 15:33	0.7	Adjacent to GP-11.
TGP-7	8/27/2010 15:09	48.9	Adjacent to GP-12.
TGP-7	8/27/2010 15:20	49.4	Adjacent to GP-12.
TGP-8	8/27/2010 14:55	44.1	Adjacent to GP-13.
TGP-8	8/27/2010 15:05	44.5	Adjacent to GP-13.
TGP-9	8/27/2010 14:23	0.2	Adjacent to GP-15.
TGP-9	8/27/2010 14:34	0.2	Adjacent to GP-15.
TGP-10	8/27/2010 14:09	0	Adjacent to GP-16.
TGP-10	8/27/2010 14:20	0	Adjacent to GP-16.
TGP-10	8/27/2010 13:56	0.9	Adjacent to GP-16.
TGP-11	8/27/2010 14:06	0.8	Adjacent to GP-17.
TGP-11	8/27/2010 12:55	0	Adjacent to GP-17.

Gas Probe	Date & Time	%CH4	Comment
TGP-12	8/27/2010 13:26	42.7	Adjacent to GP-19. Approx. 20'E 3'-4' standing water
TGP-12	8/27/2010 13:37	43.1	Adjacent to GP-19. Approx. 20'E 3'-4' standing water
TGP-13	8/27/2010 13:11	0.1	Adjacent to GP-20. Approx. 20'E 3'-4' standing water
TGP-13	8/27/2010 13:22	0	Adjacent to GP-20. Approx. 20'E 3'-4' standing water

Notes: Initial reading taken after 2 minutes based on typical monitoring procedures. Additional reading taken at the time shown (approximately 10 minutes) in attempt to purge the probe.

ATTACHMENT C



Environmental Planning Specialists, Inc.
1936 Bruce B. Downs Blvd. No. 328
Wesley Chapel, Florida 33543
Telephone: (813) 388-1026
www.envplanning.com

August 2, 2010

Mr. Mike Kaiser
Vice President, Environmental Management and Engineering, U.S.
Waste Services, Inc.
1501 Omni Way
St. Cloud, Florida 34773

Subject: Landfill Gas Migration Investigation – Closure Cap Integrity Evaluation and Repair
Omni Waste of Osceola County, LLC
J.E.D. Solid Waste Management Facility
St. Cloud, Osceola County, Florida

Dear Mr. Kaiser:

Environmental Planning Specialists, Inc (EPS) is pleased to present this letter report to Omni Waste of Osceola County, LLC (Omni) documenting the findings of the investigation of potential gas migration within the Phase 1 partial closure system performed at the J.E.D. Solid Waste Management facility.

The remainder of this letter report presents: (i) project background; (ii) results of investigation; and (iii) recommendations.

PROJECT BACKGROUND

In August 2008, construction of the Phase 1, Sequence 1 and 2 of the Gas Collection and Control System (GCCS) commenced. This construction included the installation of 45 gas wells, the corresponding lateral and header pipes, and a candlestick flare unit in the northwest corner of the Phase 1 area (adjacent to Cell 1 sump area). Phase 1, Sequence 1 (which included the flare) was operational by the end of December 2008 and the construction of Sequence 2 was completed and operational by March 2009. In February 2009, the construction of the Phase 1 partial closure system commenced and included the installation of the final cover system over approximately 25 side slope acres of the Phase 1 area (Cells 1-4). Construction of the Phase 1 partial closure system was completed in October 2009.

In 2007, perimeter gas monitoring probes (gas probes) were installed on the outer slope of the storm water berm around the Phase 1-3 property boundary to monitor for off-site migration of landfill gas. Readings exceeding 100% of the Lower Explosive Limit (LEL) threshold for

methane were recorded in several of the gas probes during the initial quarterly monitoring event and subsequent quarterly events, triggering additional investigation of potential landfill gas migration from the landfill to the property boundary. Initial investigation work was completed by Brown and Caldwell Consultants, followed by the most recent investigation work by Golder Associates, Inc. (Golder). Additional investigation work completed by Golder included installation of temporary gas probes at the landfill perimeter berm, continued gas probe monitoring, and evaluation and collection of air samples for further fingerprinting analysis. A Methane Gas Migration Investigation Report was completed by Golder on June 17, 2010, which included findings and additional proposed action measures. The Florida Department of Environmental Protection (FDEP), Central District, provided comments to Golder's report in a letter dated July 6, 2010, and also recommended additional proposed action measures. Item No. 3 of the FDEP proposed actions included investigation of the closure cap integrity at the Cell 4 sump area and other closure cap tie-in locations.

During the 2nd quarter 2010 surface emissions monitoring with a flame ionization detector (FID), elevated readings were encountered by Golder at seven (7) locations within the limits of the Phase 1 partial closure area (see 2nd Quarter Surface emissions Monitoring Record performed by Golder on June 15, 2010). Two (2) of the areas were adjacent to gas extraction wells, three (3) of the areas were located on the side slopes of Cell 2, one (1) was located on the south side of the Cell 1 sump area, and the final area was located on the south side of the Cell 4 sump area. Additional locations of possible gas migration through the closure cap were documented by site personnel during a routine inspection of the closure cap. Stressed vegetation was the primary indicator of possible gas migration. Figure 1 shows the locations of the elevated surface emissions identified and additional locations noted during inspection of the closure cap.

Based on the information provided above, Omni requested the services of EPS to investigate and document repair of any integrity issues discovered with the closure cap and or base liner tie-in locations. The investigation and repair efforts as described in this report focuses on the findings of the exploration near the Cell 1, 2, and 4 sump areas and gas well rebooting/repairs.

RESULTS OF INVESTIGATION

The gas migration investigation was performed between June 23 and 28, 2010. Initially, the two areas near the Cell 1 and Cell 4 sump areas where elevated readings were recorded with the FID were investigated. Earthwork activities were performed by ERC General Contracting Services, Inc. (ERC), Winter Garden, Florida. Repairs to the geosynthetics were performed by Comanco Environmental Corporation (Comanco), Plant City, Florida. EPS monitored all activities associated with the earthwork and repairs to the geosynthetics.

Cell 1 Sump Area

Excavation on the south side of the Cell 1 sump area commenced on Wednesday, June 23, 2010. ERC utilized a Komatsu PC 78 MR mini excavator to carefully remove the closure vegetation and protective cover soils to expose the closure geosynthetics (see Attachments - Photo No. 1). Laborers utilized flat head shovels to remove the protective cover soils directly overlying the geosynthetics. The excavated soil was temporarily stockpiled adjacent to the excavation area. The extrusion weld - seaming the closure geomembrane liner to the Cell 1 base liner was exposed near the Cell 1 southern leachate collection system 6-inch diameter HDPE clean-out pipe. No apparent leaks were initially found, but the presence of landfill gas was evident based on odors detected. Excavation continued towards the Cell 1 sump area until a hissing noise was observed and bubbles were seen emanating from the storm water collected in the excavation near the geosynthetics. At the intersection of the Cell 1 sump area closure flap and the Cell 1 base liner was an approximate 2 foot long section where the sump cover flap and the base liner were not welded (Photo No.3). The Cell 1 primary geocomposite was not cut in this location to weld these two geomembrane liners together. Landfill gas was flowing through this un-welded area. This un-welded section was located in what was the anchor trench for the base liner. Note that the water seen in these pictures is from the closure drainage geocomposite and surface water drainage from a recent rain event. Excavation continued in the anchor trench to follow the un-welded section to where the two liners were found to be properly extrusion welded.

To cut off the landfill gas flowing through this opening, the Cell 1 primary geocomposite (gray colored material in Photo No. 3) was cut using a hook blade and pulled back. The approximate 2-ft long section was extrusion welded. The landfill gas pressure beneath the liner made it possible to check the seam by applying a soapy water solution to the weld. Bubbles identified leaks in the repair. Repairs to the extrusion weld were made until no bubbles were observed (Photo No.6). A visual examination of the exposed geomembrane liners and application of soapy water to exposed extrusions welds showed no other leaks (Photo No. 7). While exposed, the boots on the adjacent clean-out pipes were also checked with the soapy water solution. No leaks were found. Prior to backfilling a four gas meter (LEL, oxygen, hydrogen sulfide, and carbon monoxide) was used to screen the area. No readings, with the exception of oxygen, were recorded. The area was promptly backfilled after completion of the repairs (Photo No. 8). The backfilled area was regraded and sodded.

Based on what was encountered on the south side the Cell 1 sump area, the area on the north side of the Cell 1 sump area where the sump area closure flap intersects the base liner was also exposed (Photo's 4 and 5). A similar scenario was encountered; an approximate 4-ft un-welded section was discovered. The un-welded section included the 2-ft vertical face of the anchor trench and the 2-ft horizontal run-out. The liners were exposed to where they were originally

extrusion welded together. The repairs were made and the area backfilled as described previously.

Cell 4 Sump Area

On June 23, 2010 ERC laborers also exposed the geosynthetics approximately 50-ft south of the Cell 4 sump area where a high FID reading was recorded during the quarterly surface emissions monitoring. Prior to exposing the area, distressed vegetation was visually evident similar to what is shown in Photo No. 11, which was taken approximately 20-ft south of the Cell 4 sump area. No leaks in the geosynthetics were located and the landfill gas built up beneath the closure geomembrane “ballooning” the closure geomembrane (Photo No.’s 9 and 10). This area was left open while the investigation proceeded closer to the Cell 4 sump area to the location shown in Photo No.11.

As with the excavation at Cell 1; ERC utilized a Komatsu PC 78 MR mini excavator to carefully remove the closure vegetation and protective cover soils to expose the closure geosynthetics. The excavation revealed the same situation encountered at Cell 1. The Cell 4 base liner and the sump cover flap were not welded (Photo No.’s 12 and 16). As shown in these photos, the primary geocomposite (white colored geocomposite) was not cut in these two locations in order to weld these two geomembrane liners together. Landfill gas was flowing through this un-welded area. Both of these two un-welded sections were located in what was the anchor trench for the base liner. In addition, the closure drainage geocomposite (black colored geocomposite shown in Photo No.’s 12 and 16) overlaps the un-welded area. This overlap of the closure drainage geocomposite over the opening allowed for the lateral migration of landfill gas into the closure drainage geocomposite. This can explain why high FID readings were recorded further south to the area shown in Photo No. 9. Landfill gas could move laterally in the closure drainage geocomposite layer following the path of least resistance to where the protective cover soils were the thinnest (i.e., at the location of an erosion rill).

The repair procedure for the two areas near the Cell 4 sump was the same as that for described previously for the Cell 1 sump area (Photo No.’s 13, 14, and 17). As part of the investigation work at Cell 4, the geosynthetics were exposed along the entire length of the Cell 4 control panel pad (Landfill side) to check for any other potential leaks. No additional leaks were found. Prior to backfilling the open excavation areas at the Cell 4 sump area, a four gas meter (LEL, oxygen, hydrogen sulfide, and carbon monoxide) was used to screen the area. No readings, with the exception of oxygen, were recorded. These open excavation areas were promptly backfilled after completion of the repairs (Photo No. 18). The backfilled area was regraded and sodded.

Cell 2 Sump Area

At the Cell 2 sump area, distressed vegetation was visually observed around the 6-in diameter HDPE leachate collection clean-out pipe located on the south side of the Cell 2 sump area. The closure pipe boot was exposed and a soapy water solution was used to check for leaks. A leak was found on the pipe boot weld where the neoprene gasket and stainless steel band secured the boot to the pipe. The band and gasket were removed and the boot was extended above the level of the protective cover (Photo No. 19). A new neoprene gasket and stainless steel band were used to secure the boot at the top of the boot extension. At the completion of the work, the boot was again checked with a soapy water solution and no leaks were found.

While working at the Cell 2 sump area, a piece of geomembrane liner was visually observed on the surface of the closure vegetation (Photo No. 21). ERC laborers utilized flat headed shovels to carefully dig around the geomembrane until the entire area was exposed (Photo No. 22). The damaged closure liner was repaired using an approximate 5ft by 6 ft extrusion welded patch (Photo No. 23). The extrusion welds were non-destructively tested using the vacuum box as shown in Photo No. 24. No additional leaks were found and the area was backfilled, regraded and sodded.

Gas Well Rebooting/Repairs

During the quarterly surface emissions monitoring, high FID readings were recorded at Gas Well Nos. 47 and 57. The grass around each of these two wells was visibly distressed. The area around each gas well was excavated to expose the closure cap boot and skirt to check for leaks. Leaks were found in the boots for both of these two gas wells. These boots were removed and new boots were extrusion welded to the skirt. The new gas well boots were extended above the height of the surrounding protective cover soils. A soapy water solution was used to check for leaks in the new boots. No leaks were found.

RECOMMENDATIONS

Based on the work performed to investigate the potential landfill gas leaks within the Phase I partial closure area, Omni will consider the following recommendations by EPS: (i) Cells 1 through 5 were all constructed using the vertical leachate sump risers located within the limits of the Cell liner system and have the closure flaps covering the sump areas. Two Cells were investigated and the same situation was encountered at both. If high FID readings are detected in the vicinity of Cells 2 and 3 during quarterly surface emissions monitoring, or distressed vegetation is observed near the sump areas, Omni will investigate these areas. The area around Cell 5 sump can be addressed when the final closure system is constructed for Cell 5; (ii) Omni will consider specifying adjustable stainless steel bands for pipe boots. Based on expansion and

contracting of the HDPE geomembrane pipes and boots, the stainless steel bands loosen over time. Adjustable bands would allow Omni to tighten existing bands without having to remove and replace the bands.

Sincerely,



Kirk E. Wills
Senior Engineer

Attachments

ATTACHMENTS



Legend

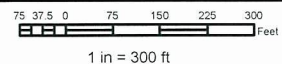


REPAIR LOCATIONS

NOTES:

AERIAL PHOTOGRAPH
PROVIDED BY BULLSEYE
DESIGN
(2009).

REPAIRS WERE COMPLETED
IN AREAS NOTED AS PART
OF SURFACE EMISSIONS
MONITORING (SEM).



**LOCATIONS OF LINER REPAIRS
CELLS 1,2, 4**

WASTE SERVICES OF FLORIDA, INC.
J.E.D. SOLID WASTE
1501 OMNI WAY
ST. CLOUD, FLORIDA



FIGURE

1

TAMPA, FL

JULY 2010

PHOTOGRAPHIC LOG



Client: Omni Waste of Osceola County, LLC

Project Name: Landfill Gas Migration Investigation

Project Location: J.E.D. Solid Waste Management Facility, Osceola County, Florida

Photograph No. 1

Date: June 23, 2010

Direction: Northeast

Comments: Excavation on south side of Cell 1 Sump area at location where a high surface emission reading was recorded with FID.

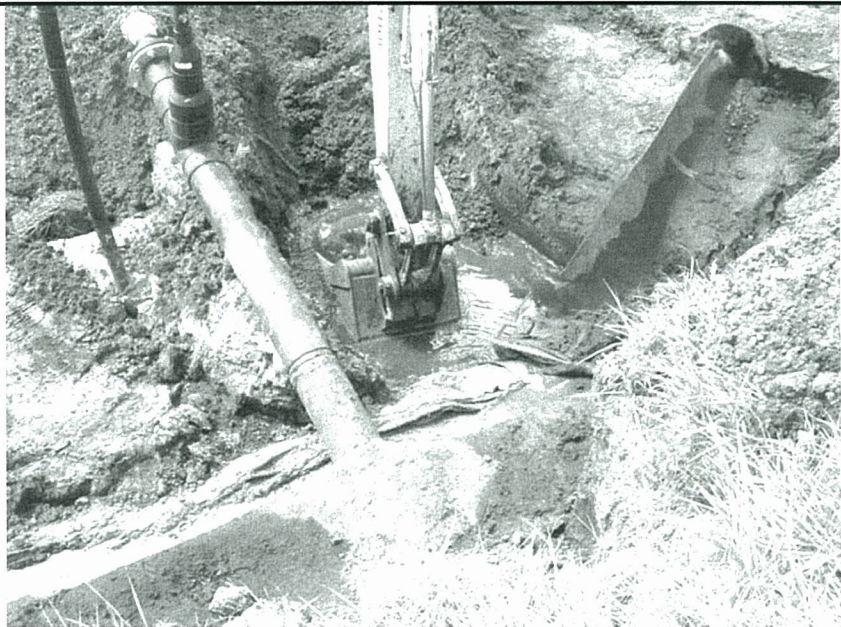


Photograph No. 2

Date: June 23, 2010

Direction: North

Comments: Excavation to investigate cause of high surface emission reading on south side of Cell 1 sump area.



PHOTOGRAPHIC LOG



Client: Omni Waste of Osceola County, LLC

Project Name: Landfill Gas Migration Investigation

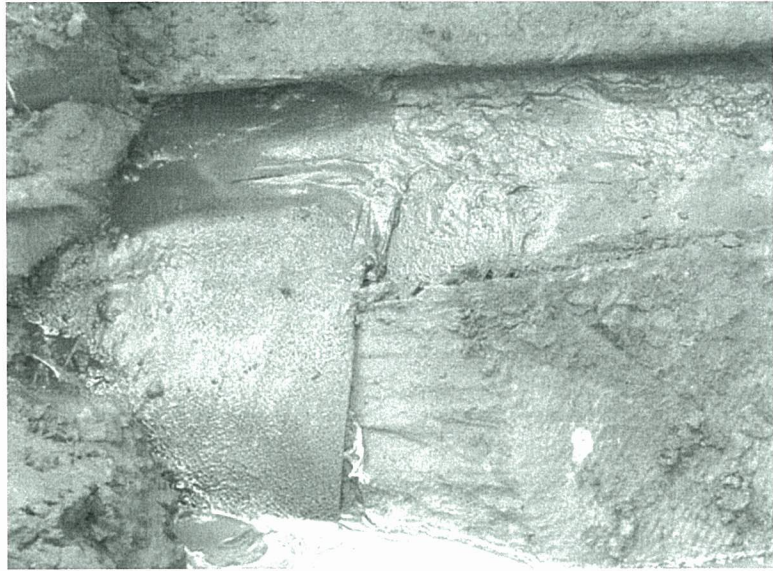
Project Location: J.E.D. Solid Waste Management Facility, Osceola County, Florida

Photograph No. 3

Date: June 23, 2010

Direction: South

Comments: South side of Cell 1 Sump area. Closure Cap over vertical sump area not welded to base liner system in anchor trench.



Photograph No. 4

Date: June 23, 2010

Direction: Southeast

Comments: North side of Cell 1 Sump area. Closure Cap over vertical sump area not welded to base liner system in anchor trench.



PHOTOGRAPHIC LOG



Client: Omni Waste of Osceola County, LLC

Project Name: Landfill Gas Migration Investigation

Project Location: J.E.D. Solid Waste Management Facility, Osceola County, Florida

Photograph No. 5

Date: June 25, 2010

Direction: South

Comments: Preparations for extrusion welding the sump closure cap with the base liner.



Photograph No. 6

Date: June 25, 2010

Direction: South

Comments: Extrusion welded patch to close up the approximate 2-ft long un-welded section of the sump area closure cap and the Cell 1 base liner.



PHOTOGRAPHIC LOG



Client: Omni Waste of Osceola County, LLC

Project Name: Landfill Gas Migration Investigation

Project Location: J.E.D. Solid Waste Management Facility, Osceola County, Florida

Photograph No. 7

Date: June 25, 2010

Direction: Northeast

Comments: Soapy water is used to test extrusions welds for leaks.



Photograph No. 8

Date: June 25, 2010

Direction: Northeast

Comments: Area on south side of Cell1 sump area is backfilled after completion of liner repairs.



PHOTOGRAPHIC LOG



Client: Omni Waste of Osceola County, LLC

Project Name: Landfill Gas Migration Investigation

Project Location: J.E.D. Solid Waste Management Facility, Osceola County, Florida

Photograph No. 9

Date: June 23, 2010

Direction: South

Comments: Area located to the south side of the Cell 4 sump area where a high surface emission reading was recorded with FID.

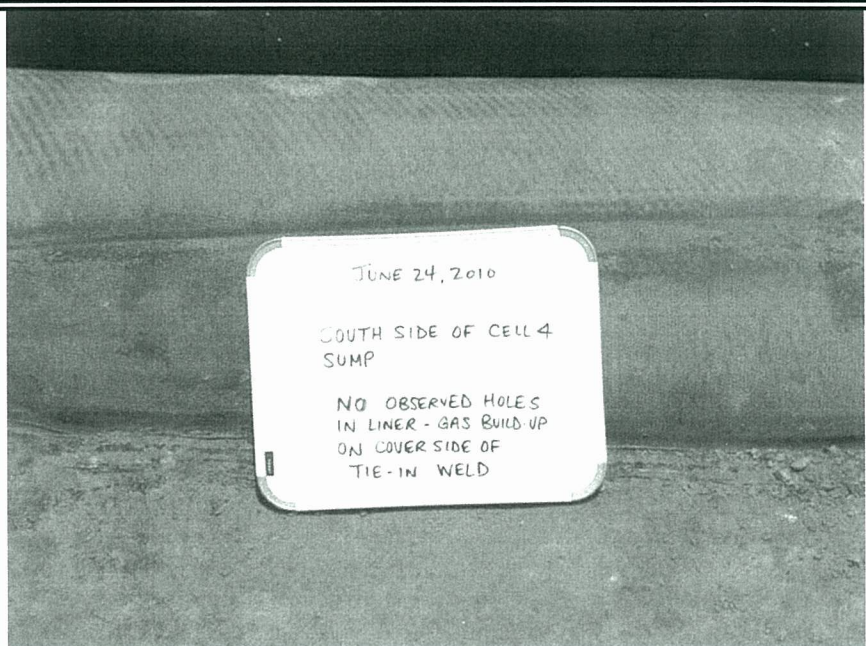


Photograph No. 10

Date: June 24, 2010

Direction: East

Comments: Same area as shown in Picture No. 9. No hole in liner found.



PHOTOGRAPHIC LOG



Client: Omni Waste of Osceola County, LLC

Project Name: Landfill Gas Migration Investigation

Project Location: J.E.D. Solid Waste Management Facility, Osceola County, Florida

Photograph No. 11

Date: June 24, 2010

Direction: North

Comments: Distressed vegetation on south side of Cell 4 sump area.



Photograph No. 12

Date: June 24, 2010

Direction: East

Comments: Geosynthetics exposed beneath distressed vegetation shown in previous photo. Sump area closure flap not welded to base liner in anchor trench.



PHOTOGRAPHIC LOG



Client: Omni Waste of Osceola County, LLC

Project Name: Landfill Gas Migration Investigation

Project Location: J.E.D. Solid Waste Management Facility, Osceola County, Florida

Photograph No. 13

Date: June 28, 2010

Direction: East

Comments: Liner crew tack welds the seam to be extrusion welded with Lyster heat gun.



Photograph No. 14

Date: June 28, 2010

Direction: East

Comments: Cell 4 sump area closure cap extrusion welded to the Cell 4 base liner on south side of Cell 4 sump area.



PHOTOGRAPHIC LOG



Client: Omni Waste of Osceola County, LLC

Project Name: Landfill Gas Migration Investigation

Project Location: J.E.D. Solid Waste Management Facility, Osceola County, Florida

Photograph No. 15

Date: June 24, 2010

Direction: Northeast

Comments: Cell 4 base and closure geomembrane liners exposed adjacent to the Cell 4 control panel.



Photograph No. 16

Date: June 24, 2010

Direction: East

Comments: Cell 4 closure cap over the vertical sump area not welded to the Cell 4 base liner in the anchor trench on north side of sump area.



PHOTOGRAPHIC LOG



Client: Omni Waste of Osceola County, LLC

Project Name: Landfill Gas Migration Investigation

Project Location: J.E.D. Solid Waste Management Facility, Osceola County, Florida

Photograph No. 17

Date: June 28, 2010

Direction: Northeast

Comments: Repairs made on north side of the Cell 4 sump area adjacent to the control panel pad.



Photograph No. 18

Date: June 28, 2010

Direction: North

Comments: Backfilling of area behind Cell 4 control panel after completion of repairs.



PHOTOGRAPHIC LOG



Client: Omni Waste of Osceola County, LLC

Project Name: Landfill Gas Migration Investigation

Project Location: J.E.D. Solid Waste Management Facility, Osceola County, Florida

Photograph No. 19

Date: June 25, 2010

Direction: South

Comments: Repair of boot around leachate clean-out pipe located on the south side of the Cell 2 sump area.

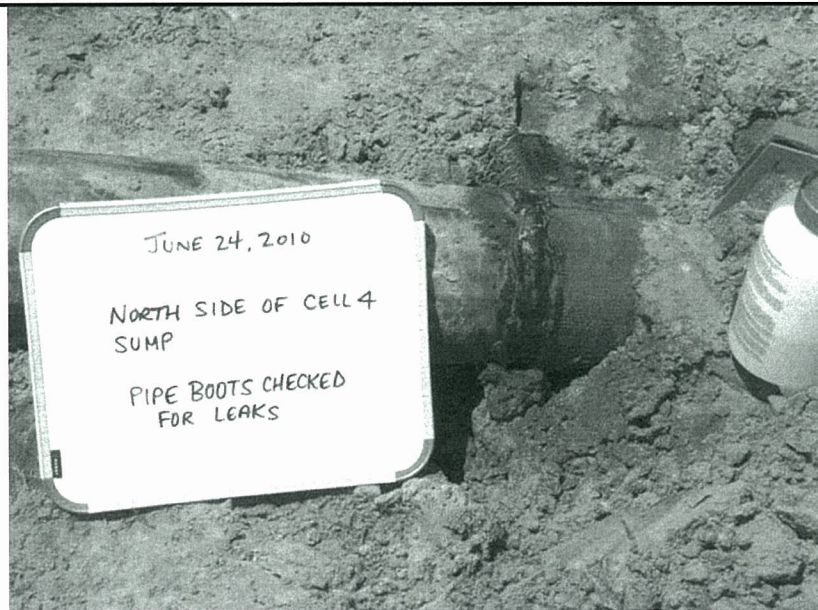


Photograph No. 20

Date: June 24, 2010

Direction: N/A

Comments: Pipe boots checked for gas leaks using soapy water.



PHOTOGRAPHIC LOG

EPS

Client: Omni Waste of Osceola County, LLC

Project Name: Landfill Gas Migration Investigation

Project Location: J.E.D. Solid Waste Management Facility, Osceola County, Florida

Photograph No. 21

Date: June 24, 2010

Direction: Southeast

Comments: Piece of liner is observed on ground surface behind Cell 2 sump. Hand shovels used to dig out around the liner.



Photograph No. 22

Date: June 24, 2010

Direction: North

Comments: Damage to the closure geomembrane liner behind Cell 2 sump area.



PHOTOGRAPHIC LOG



Client: Omni Waste of Osceola County, LLC

Project Name: Landfill Gas Migration Investigation

Project Location: J.E.D. Solid Waste Management Facility, Osceola County, Florida

Photograph No. 23

Date: June 25, 2010

Direction: South

Comments: Extrusion welding patch on closure liner behind Cell 2 sump area.



Photograph No. 24

Date: June 25, 2010

Direction: South

Comments: Vacuum box testing of extrusion welded patch on closure liner behind Cell 2 sump area.



ATTACHMENT D

Temporary Groundwater Piezometer and Gas Probe Monitoring Log **Groundwater Elevations - Methane Gas Migration Investigation**

JED Solid Waste Management Facility

Monitored By: Joe Terry, EPS

Date: August 25, 2010

Temporary Piezometer / Gas Probe ID	Top PVC Casing Elevation (feet msl)	Ground Surface Elevation (feet msl)	Measured Depth to Groundwater from TOC (feet)	Groundwater Elevation (feet msl)
P-1A	83.70	78.70	4.74	78.96
P-1B	83.53	78.70	4.75	78.78
GP-22	87.26	83.87		
P-2A	83.38	78.50	4.62	78.76
P-2B	83.41	78.50	4.83	78.58
GP-21	87.30	84.28		
P-3A	84.76	79.80	6.31	78.45
P-3B	84.71	79.80	4.77	79.94
GP-18	87.85	84.47		
P-4A	84.71	79.80	5.97	78.74
P-4B	84.76	79.80	5.94	78.82
GP-14	87.58	83.52		
P-5A	84.63	80.00	7.43	77.20
P-5B	84.96	80.00	4.26	80.70
GP-10	88.16	84.72		

Notes: PA - Piezometers screened approximately 3-5 feet BGS.
PB - Piezometers screened approximately 1-3 feet BGS.

Temporary Groundwater Piezometer and Gas Probe Monitoring Log

Groundwater Elevations - Methane Gas Migration Investigation

JED Solid Waste Management Facility

Monitored By: Keith Lunsford

Date: November 5, 2010

Temporary Piezometer / Gas Probe ID	Top PVC Casing Elevation (feet msl)	Ground Surface Elevation (feet msl)	Measured Depth to Groundwater from TOC (feet)	Groundwater Elevation (feet msl)
P-1A	83.70	78.70	5.90	77.80
P-1B	83.53	78.70	5.85	77.68
GP-22	87.26	83.87		
P-2A	83.38	78.50	6.00	77.38
P-2B	83.41	78.50	5.25	78.16
GP-21	87.30	84.28		
P-3A	84.76	79.80	7.75	77.01
P-3B	84.71	79.80	7.25	77.46
GP-18	87.85	84.47		
P-4A	84.71	79.80	7.60	77.11
P-4B	84.76	79.80	7.65	77.11
GP-14	87.58	83.52		
P-5A	84.63	80.00	8.45	76.18
P-5B	84.96	80.00	7.50	77.46
GP-10	88.16	84.72		

Notes: PA - Piezometers screened approximately 3-5 feet BGS.
PB - Piezometers screened approximately 1-3 feet BGS.

Temporary Groundwater Piezometer and Gas Probe Monitoring Log **Groundwater Elevations - Methane Gas Migration Investigation**

JED Solid Waste Management Facility

Monitored By: Keith Lunsford

Date: October 29, 2010

Temporary Piezometer / Gas Probe ID	Top PVC Casing Elevation (feet msl)	Ground Surface Elevation (feet msl)	Measured Depth to Groundwater from TOC (feet)	Groundwater Elevation (feet msl)
P-1A	83.70	78.70	6.71	76.99
P-1B	83.53	78.70	6.65	76.88
GP-22	87.26	83.87	10.40	76.86
P-2A	83.38	78.50	6.70	76.68
P-2B	83.41	78.50	6.80	76.61
GP-21	87.30	84.28	10.70	76.60
P-3A	84.76	79.80	9.45	75.31
P-3B	84.71	79.80	Dry	#VALUE!
GP-18	87.85	84.47	11.40	76.45
P-4A	84.71	79.80	8.10	76.61
P-4B	84.76	79.80	7.90	76.86
GP-14	87.58	83.52	10.60	76.98
P-5A	84.63	80.00	8.40	76.23
P-5B	84.96	80.00	8.80	76.16
GP-10	88.16	84.72	11.90	76.26

Notes: PA - Piezometers screened approximately 3-5 feet BGS.
PB - Piezometers screened approximately 1-3 feet BGS.

Temporary Groundwater Piezometer and Gas Probe Monitoring Log Groundwater Elevations - Methane Gas Migration Investigation

JED Solid Waste Management Facility

Monitored By: Keith Lunsford

Date: September 9, 2010

Temporary Piezometer / Gas Probe ID	Top PVC Casing Elevation (feet msl)	Ground Surface Elevation (feet msl)	Measured Depth to Groundwater from TOC (feet)	Groundwater Elevation (feet msl)
P-1A	83.70	78.70	4.85	78.85
P-1B	83.53	78.70	4.10	79.43
GP-22	87.26	83.87		
P-2A	83.38	78.50	4.85	78.53
P-2B	83.41	78.50	5.00	78.41
GP-21	87.30	84.28		
P-3A	84.76	79.80	NM	#VALUE!
P-3B	84.71	79.80	NM	#VALUE!
GP-18	87.85	84.47		
P-4A	84.71	79.80	6.00	78.71
P-4B	84.76	79.80	7.60	77.16
GP-14	87.58	83.52		
P-5A	84.63	80.00	7.20	77.43
P-5B	84.96	80.00	4.10	80.86
GP-10	88.16	84.72		

Notes: PA - Piezometers screened approximately 3-5 feet BGS.
PB - Piezometers screened approximately 1-3 feet BGS.
NM - Not monitored due to presence of gator near piezometers.



WELL CONSTRUCTION DIAGRAM

SITE: J.E.D. Solid Waste Management Facility PROJECT J.E.D. SWMF (3) TASK NO.: 04
LOCATION: 1501 Omni Way, St. Cloud, FL 34773 DATE: 08 mo 17 day 2010 year
DRILLING COMPANY: NA TECHNICIAN: Joe Terry
PIEZOMETER NO.: P-1A

LOCATION AND ELEVATION: ☒ SURVEYED ☐ ESTIMATED
NORTHING Not Surveyed EASTING: Not Surveyed GROUND ELEVATION: 78.70

DRILLING METHOD: Hand Auger

TOP OF CASING: 5.00 ft
ELEVATION*: 83.70 ft

ELEVATION*: 78.70 ft GROUND SURFACE

DEPTH: 0.00 ft TOP OF BENTONITE PLUG/BOTTOM OF GROUT:
ELEVATION*: 78.70 ft

DEPTH: 2.10 ft TOP OF SAND/BOTTOM OF BENTONITE PLUG:
ELEVATION*: 76.60 ft

MONITORING WELL LOCATION
(INDICATE DISTANCES TO PERMANENT FEATURES)
North side of storm water berm at toe down from GP-22

DEPTH: 4.60 ft BOTTOM OF BOREHOLE:
ELEVATION*: 74.10 ft

DIAMETER OF BOREHOLE: 3.25 in.
DIAMETER OF CASING: 1.00 in.
CASING MATERIAL: Sch 40 PVC
WIDTH OF SCREEN SLOT: 0.01 in.

TOP OF SCREEN: DEPTH: 2.60 ft
ELEVATION*: 76.10 ft

BOTTOM OF SCREEN/WEEL: DEPTH: 4.60 ft
ELEVATION*: 74.10 ft

NOTES: (1) * indicates vertically surveyed elevation; (2) drawing has no scale; (3) depths and heights are relative to above or below ground surface (AGS/BGS).



WELL CONSTRUCTION DIAGRAM

SITE: J.E.D. Solid Waste Management Facility PROJECT J.E.D. SWMF (3) TASK NO.: 04
LOCATION: 1501 Omni Way, St. Cloud, FL 34773 DATE: 08 mo 17 day 2010 year
DRILLING COMPANY: NA TECHNICIAN: Joe Terry
PIEZOMETER NO.: P-1B

LOCATION AND ELEVATION: ☒ SURVEYED ☐ ESTIMATED
NORTHING Not Surveyed EASTING: Not Surveyed GROUND ELEVATION: 78.70

DRILLING METHOD: Hand Auger

TOP OF CASING: HEIGHT: 4.83 ft
ELEVATION*: 83.53 ft

ELEVATION*: 78.70 ft GROUND SURFACE

DEPTH: 0.00 ft TOP OF BENTONITE PLUG/BOTTOM OF GROUT:
ELEVATION*: 78.70 ft

DEPTH: 0.50 ft TOP OF SAND/BOTTOM OF BENTONITE PLUG:
ELEVATION*: 78.20 ft

MONITORING WELL LOCATION
(INDICATE DISTANCES TO PERMANENT FEATURES)
North side of storm water berm at toe down from GP-22

DEPTH: 3.00 ft BOTTOM OF BOREHOLE:
ELEVATION*: 75.70 ft

DIAMETER OF BOREHOLE: 3.25 in.
DIAMETER OF CASING: 1.00 in.
CASING MATERIAL: Sch 40 PVC
WIDTH OF SCREEN SLOT: 0.01 in.

TOP OF SCREEN: DEPTH: 1.00 ft
ELEVATION*: 77.70 ft

BOTTOM OF SCREEN/Well: DEPTH: 3.00 ft
ELEVATION*: 75.70 ft

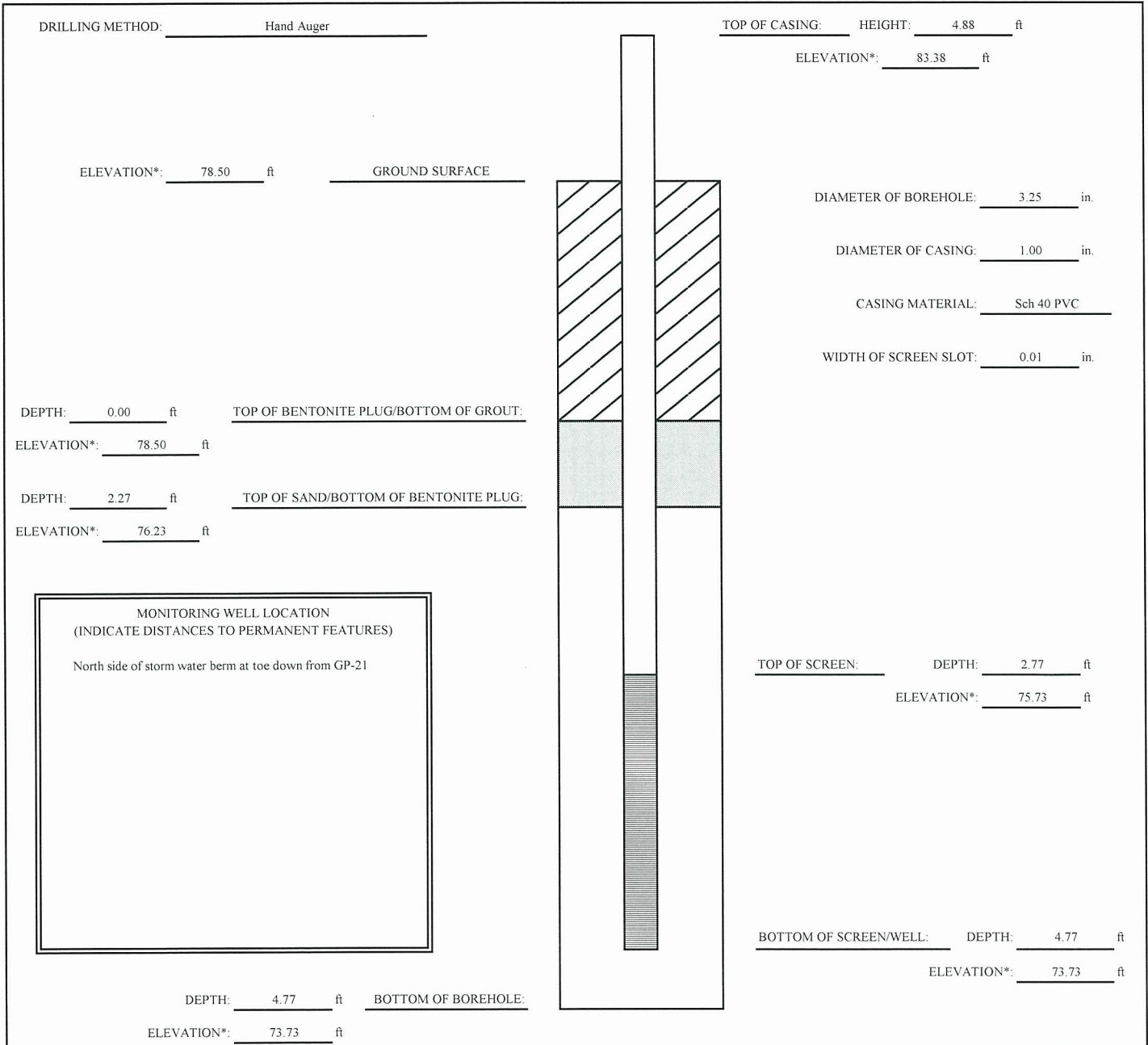
NOTES: (1) * indicates vertically surveyed elevation; (2) drawing has no scale; (3) depths and heights are relative to above or below ground surface (AGS/BGS).



WELL CONSTRUCTION DIAGRAM

SITE: J.E.D. Solid Waste Management Facility PROJECT J.E.D. SWMF (3) TASK NO.: 04
LOCATION: 1501 Omni Way, St. Cloud, FL 34773 DATE: 08 mo 17 day 2010 year
DRILLING COMPANY: NA TECHNICIAN: Joe Terry
PIEZOMETER NO.: P-2A

LOCATION AND ELEVATION: ☒ SURVEYED ☐ ESTIMATED
NORTHING Not Surveyed EASTING: Not Surveyed GROUND ELEVATION: 78.50



NOTES: (1) * indicates vertically surveyed elevation; (2) drawing has no scale; (3) depths and heights are relative to above or below ground surface (AGS/BGS).



WELL CONSTRUCTION DIAGRAM

SITE: J.E.D. Solid Waste Management Facility PROJECT J.E.D. SWMF (3) TASK NO.: 04
LOCATION: 1501 Omni Way, St. Cloud, FL 34773 DATE: 08 mo 17 day 2010 year
DRILLING COMPANY: NA TECHNICIAN: Joe Terry
PIEZOMETER NO.: P-2B

LOCATION AND ELEVATION: ☒ SURVEYED ☐ ESTIMATED
NORTHING Not Surveyed EASTING: Not Surveyed GROUND ELEVATION: 78.50

DRILLING METHOD: Hand Auger

TOP OF CASING: 4.91 ft
ELEVATION*: 83.41 ft

ELEVATION*: 78.50 ft GROUND SURFACE

DEPTH: 0.00 ft TOP OF BENTONITE PLUG/BOTTOM OF GROUT:
ELEVATION*: 78.50 ft

DEPTH: 0.40 ft TOP OF SAND/BOTTOM OF BENTONITE PLUG:
ELEVATION*: 78.10 ft

MONITORING WELL LOCATION
(INDICATE DISTANCES TO PERMANENT FEATURES)
North side of storm water berm at toe down from GP-21

DEPTH: 2.90 ft BOTTOM OF BOREHOLE:
ELEVATION*: 75.60 ft

DIAMETER OF BOREHOLE: 3.25 in.
DIAMETER OF CASING: 1.00 in.
CASING MATERIAL: Sch 40 PVC
WIDTH OF SCREEN SLOT: 0.01 in.

TOP OF SCREEN: DEPTH: 0.90 ft
ELEVATION*: 77.61 ft

BOTTOM OF SCREEN/ WELL: DEPTH: 2.90 ft
ELEVATION*: 75.60 ft

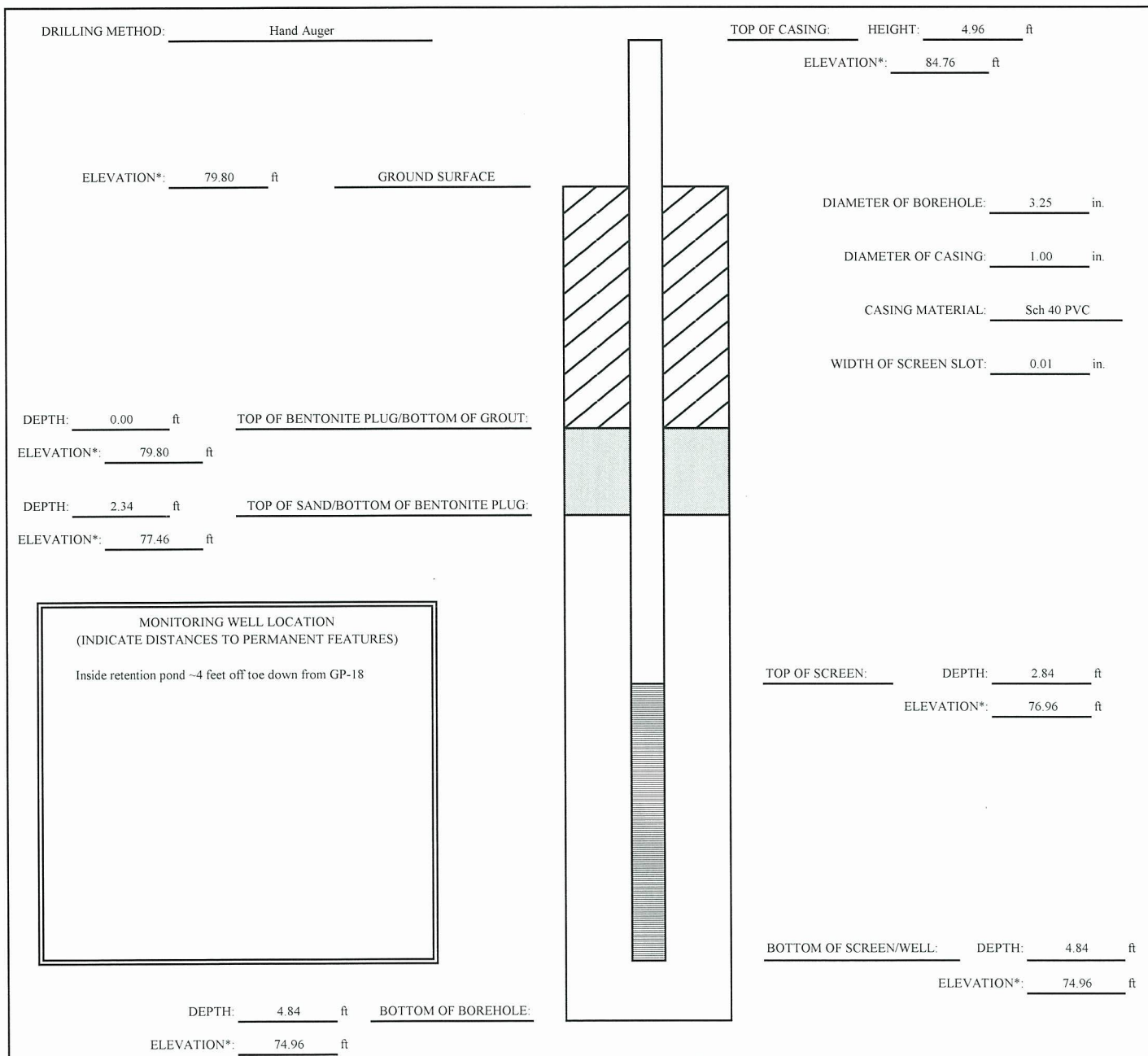
NOTES: (1) * indicates vertically surveyed elevation; (2) drawing has no scale; (3) depths and heights are relative to above or below ground surface (AGS/BGS).



WELL CONSTRUCTION DIAGRAM

SITE: J.E.D. Solid Waste Management Facility PROJECT J.E.D. SWMF (3) TASK NO.: 04
LOCATION: 1501 Omni Way, St. Cloud, FL 34773 DATE: 08 mo 17 day 2010 year
DRILLING COMPANY: NA TECHNICIAN: Joe Terry
PIEZOMETER NO.: P-3A

LOCATION AND ELEVATION: ☒ SURVEYED ☐ ESTIMATED
NORTHING Not Surveyed EASTING: Not Surveyed GROUND ELEVATION: 79.80



NOTES: (1) * indicates vertically surveyed elevation; (2) drawing has no scale; (3) depths and heights are relative to above or below ground surface (AGS/BGS).



WELL CONSTRUCTION DIAGRAM

SITE: J.E.D. Solid Waste Management Facility PROJECT J.E.D. SWMF (3) TASK NO.: 04
LOCATION: 1501 Omni Way, St. Cloud, FL 34773 DATE: 08 mo 17 day 2010 year
DRILLING COMPANY: NA TECHNICIAN: Joe Terry
PIEZOMETER NO.: P-3B

LOCATION AND ELEVATION: ☒ SURVEYED ☐ ESTIMATED
NORTHING Not Surveyed EASTING: Not Surveyed GROUND ELEVATION: 79.80

DRILLING METHOD: Hand Auger

TOP OF CASING: 4.91 ft
ELEVATION*: 84.71 ft

ELEVATION*: 79.80 ft GROUND SURFACE

DEPTH: 0.00 ft TOP OF BENTONITE PLUG/BOTTOM OF GROUT:
ELEVATION*: 79.80 ft

DEPTH: 0.50 ft TOP OF SAND/BOTTOM OF BENTONITE PLUG:
ELEVATION*: 79.30 ft

MONITORING WELL LOCATION
(INDICATE DISTANCES TO PERMANENT FEATURES)
Inside retention pond ~4 feet off toe down from GP-18

DEPTH: 3.00 ft BOTTOM OF BOREHOLE:
ELEVATION*: 76.80 ft

DIAMETER OF BOREHOLE: 3.25 in.
DIAMETER OF CASING: 1.00 in.
CASING MATERIAL: Sch 40 PVC
WIDTH OF SCREEN SLOT: 0.01 in.

TOP OF SCREEN: DEPTH: 1.00 ft
ELEVATION*: 78.80 ft

BOTTOM OF SCREEN/WEEL: DEPTH: 3.00 ft
ELEVATION*: 76.80 ft

NOTES: (1) * indicates vertically surveyed elevation; (2) drawing has no scale; (3) depths and heights are relative to above or below ground surface (AGS/BGS).



WELL CONSTRUCTION DIAGRAM

SITE: J.E.D. Solid Waste Management Facility PROJECT J.E.D. SWMF (3) TASK NO.: 04
LOCATION: 1501 Omni Way, St. Cloud, FL 34773 DATE: 08 mo 17 day 2010 year
DRILLING COMPANY: NA TECHNICIAN: Joe Terry
PIEZOMETER NO.: P-4A

LOCATION AND ELEVATION: ☒ SURVEYED ☐ ESTIMATED
NORTHING Not Surveyed EASTING: Not Surveyed GROUND ELEVATION: 79.80

DRILLING METHOD: Hand Auger

TOP OF CASING: 4.91 ft
ELEVATION*: 84.71 ft

ELEVATION*: 79.80 ft GROUND SURFACE

DEPTH: 0.00 ft TOP OF BENTONITE PLUG/BOTTOM OF GROUT:
ELEVATION*: 79.80 ft

DEPTH: 2.24 ft TOP OF SAND/BOTTOM OF BENTONITE PLUG:
ELEVATION*: 77.56 ft

MONITORING WELL LOCATION
(INDICATE DISTANCES TO PERMANENT FEATURES)
Inside retention pond ~4 feet off toe down from GP-14

DIAMETER OF BOREHOLE: 3.25 in.
DIAMETER OF CASING: 1.00 in.
CASING MATERIAL: Sch 40 PVC
WIDTH OF SCREEN SLOT: 0.01 in.

TOP OF SCREEN: DEPTH: 2.74 ft
ELEVATION*: 77.06 ft

BOTTOM OF SCREEN/WELL: DEPTH: 4.74 ft
ELEVATION*: 75.06 ft

DEPTH: 4.74 ft BOTTOM OF BOREHOLE:
ELEVATION*: 75.06 ft

NOTES: (1) * indicates vertically surveyed elevation; (2) drawing has no scale; (3) depths and heights are relative to above or below ground surface (AGS/BGS).



WELL CONSTRUCTION DIAGRAM

SITE: J.E.D. Solid Waste Management Facility PROJECT J.E.D. SWMF (3) TASK NO.: 04
LOCATION: 1501 Omni Way, St. Cloud, FL 34773 DATE: 08 mo 17 day 2010 year
DRILLING COMPANY: NA TECHNICIAN: Joe Terry
PIEZOMETER NO.: P-4B

LOCATION AND ELEVATION: ☒ SURVEYED ☐ ESTIMATED
NORTHING Not Surveyed EASTING: Not Surveyed GROUND ELEVATION: 79.80

DRILLING METHOD: Hand Auger

TOP OF CASING: HEIGHT: 4.96 ft
ELEVATION*: 84.76 ft

ELEVATION*: 79.80 ft GROUND SURFACE

DEPTH: 0.00 ft TOP OF BENTONITE PLUG/BOTTOM OF GROUT:
ELEVATION*: 79.80 ft

DEPTH: 0.50 ft TOP OF SAND/BOTTOM OF BENTONITE PLUG:
ELEVATION*: 79.30 ft

MONITORING WELL LOCATION
(INDICATE DISTANCES TO PERMANENT FEATURES)
Inside retention pond ~4 feet off toe down from GP-14

DIAMETER OF BOREHOLE: 3.25 in.
DIAMETER OF CASING: 1.00 in.
CASING MATERIAL: Sch 40 PVC
WIDTH OF SCREEN SLOT: 0.01 in.

TOP OF SCREEN: DEPTH: 1.00 ft
ELEVATION*: 78.80 ft

BOTTOM OF SCREEN/WELL: DEPTH: 3.00 ft
ELEVATION*: 76.80 ft

DEPTH: 3.00 ft BOTTOM OF BOREHOLE:
ELEVATION*: 76.80 ft

NOTES: (1) * indicates vertically surveyed elevation; (2) drawing has no scale; (3) depths and heights are relative to above or below ground surface (AGS/BGS).



WELL CONSTRUCTION DIAGRAM

SITE: J.E.D. Solid Waste Management Facility PROJECT J.E.D. SWMF (3) TASK NO.: 04
LOCATION: 1501 Omni Way, St. Cloud, FL 34773 DATE: 08 mo 17 day 2010 year
DRILLING COMPANY: NA TECHNICIAN: Joe Terry
PIEZOMETER NO.: P-5A

LOCATION AND ELEVATION: ☒ SURVEYED ☐ ESTIMATED
NORTHING Not Surveyed EASTING: Not Surveyed GROUND ELEVATION: 80.00

DRILLING METHOD: Hand Auger

TOP OF CASING: 4.63 ft
ELEVATION*: 84.63 ft

ELEVATION*: 80.00 ft GROUND SURFACE

DEPTH: 0.00 ft TOP OF BENTONITE PLUG/BOTTOM OF GROUT:
ELEVATION*: 80.00 ft

DEPTH: 2.70 ft TOP OF SAND/BOTTOM OF BENTONITE PLUG:
ELEVATION*: 77.30 ft

MONITORING WELL LOCATION
(INDICATE DISTANCES TO PERMANENT FEATURES)
Inside retention pond ~1.5 feet off toe down from GP-10

DIAMETER OF BOREHOLE: 3.25 in.
DIAMETER OF CASING: 1.00 in.
CASING MATERIAL: Sch 40 PVC
WIDTH OF SCREEN SLOT: 0.01 in.

TOP OF SCREEN: DEPTH: 3.20 ft
ELEVATION*: 76.80 ft

BOTTOM OF SCREEN/WELL: DEPTH: 5.20 ft
ELEVATION*: 74.80 ft

DEPTH: 5.20 ft BOTTOM OF BOREHOLE:
ELEVATION*: 74.80 ft

NOTES: (1) * indicates vertically surveyed elevation; (2) drawing has no scale; (3) depths and heights are relative to above or below ground surface (AGS/BGS).



WELL CONSTRUCTION DIAGRAM

SITE: J.E.D. Solid Waste Management Facility PROJECT J.E.D. SWMF (3) TASK NO.: 04
LOCATION: 1501 Omni Way, St. Cloud, FL 34773 DATE: 08 mo 17 day 2010 year
DRILLING COMPANY: NA TECHNICIAN: Joe Terry
PIEZOMETER NO.: P-5B

LOCATION AND ELEVATION: ☒ SURVEYED ☐ ESTIMATED
NORTHING Not Surveyed EASTING: Not Surveyed GROUND ELEVATION: 80.00

DRILLING METHOD: Hand Auger

TOP OF CASING: 4.96 ft
ELEVATION*: 84.96 ft

ELEVATION*: 80.00 ft GROUND SURFACE

DEPTH: 0.00 ft TOP OF BENTONITE PLUG/BOTTOM OF GROUT:
ELEVATION*: 80.00 ft

DEPTH: 0.30 ft TOP OF SAND/BOTTOM OF BENTONITE PLUG:
ELEVATION*: 79.70 ft

MONITORING WELL LOCATION
(INDICATE DISTANCES TO PERMANENT FEATURES)
Inside retention pond ~1.5 feet off toe down from GP-10

DEPTH: 2.80 ft BOTTOM OF BOREHOLE:
ELEVATION*: 77.20 ft

DIAMETER OF BOREHOLE: 3.25 in.
DIAMETER OF CASING: 1.00 in.
CASING MATERIAL: Sch 40 PVC
WIDTH OF SCREEN SLOT: 0.01 in.

TOP OF SCREEN: DEPTH: 0.80 ft
ELEVATION*: 79.20 ft

BOTTOM OF SCREEN/WELL: DEPTH: 2.80 ft
ELEVATION*: 77.20 ft

NOTES: (1) * indicates vertically surveyed elevation; (2) drawing has no scale; (3) depths and heights are relative to above or below ground surface (AGS/BGS).

ATTACHMENT E

PERIMETER GAS PROBE MONITORING LOG

Facility Name: J.E.D. Solid Waste Management Facility Date: 11-5-10

Facility Address: 1501 Omni Way, St Cloud, Florida 34773

Technician: K. Lunsford Company: Omni Waste of Osceola County LLC

Weather Conditions: Temperature: 63 °F M. Cloudy/P. Cloudy/Clear/Overcast

Barometric Pressure: inch Hg 29.8 Wind: 20 mph Humidity: 75%

Landfill Gas Meter: Envision Serial No 1007003.

Gas Probe No.	Time	%CH ₄	Comments
GP-7	9:04am	25.4	Dry in storm water retention area
GP-8	9:12am	0.0	1' standing water 50' E
GP-9	9:18am	0.0	Dry in storm water retention area
GP-10	9:24am	41.7	Saturated in storm water retention area
GP-11	9:31am	40.1	Saturated in storm water retention area
GP-12	9:37am	0.0	Saturated in storm water retention area
GP-13	9:45am	0.0	Saturated in storm water retention area
GP-14	9:52am	32.1	Saturated in storm water retention area
GP-15	10:07am	18.4	Saturated in storm water retention area
GP-16	10:15am	17.9	Saturated in storm water retention area
GP-17	10:25am	12.0	Saturated in storm water retention area
GP-18	10:35am	33.4	Saturated in storm water retention area
GP-19	10:48am	40.1	Saturated in storm water retention area
GP-20	10:56am	22.3	Saturated in storm water retention area
GP-21	11:05am	24.3	0.5 ' standing water 50' W in storm water retention area
GP-22	11:19am	8.0	0.5 ' standing water 50' W in storm water retention area
TGP-1	12:00pm	53	Saturated in storm water retention area
TGP-2	12:13pm	12.1	Saturated in storm water retention area
TGP-3	12:25pm	32.4	Saturated in storm water retention area
TGP-4	11:53am	0	1' standing water 50' W in storm water retention area
TGP-5	11:57am	0	Dry in storm water retention area

Notes: Gas meter run time set at two minutes. Monitoring performed until reading stabilizes at reported value within the two minute period.

PERIMETER GAS PROBE MONITORING LOG

Facility Name: J.E.D. Solid Waste Management Facility Date: 10-29-10

Facility Address: 1501 Omni Way, St Cloud, Florida 34773

Technician: Klunsford Company: Omni Waste of Osceola County LLC

Weather Conditions: Temperature: 80 °F M. Cloudy/P. Cloudy/Clear/Overcast

Barometric Pressure: 29.75 inch Hg Wind: 20 mph Humidity: 75%

Landfill Gas Meter: Envision Serial No 1007003.

Gas Probe No.	Time	%CH ₄	Comments
GP-7	9:00 AM	16	DRY
GP-8	9:07 AM	0	SATURATED
GP-9	9:13 AM	0	DRY
GP-10	9:18 AM	10.3	DRY
GP-11	9:30 AM	8.1	DRY
GP-12	9:26 AM	0	DRY
GP-13	9:42 AM	0	DRY
GP-14	9:51 AM	10.0	DRY
GP-15	10:01 AM	0.0	DRY
GP-16	10:51 AM	0.0	DRY
GP-17	10:57 AM	0.0	DRY
GP-18	11:04 AM	15.1	DRY
GP-19	11:15 AM	3.6	DRY
GP-20	11:23 AM	0.8	DRY
GP-21	11:30 AM	22.1	3" STANDING WATER 50' NW
GP-22	11:40 AM	0.5	3" STANDING WATER 50' NW
TGP4	12:02 PM	0	DRY
TGP5	12:04 PM	0	DRY
TGP1	12:07 PM	42.3	DRY
TGP6	12:11 PM	0	DRY
TGP7	12:16 PM	15	DRY
TGP8	12:20 PM	0	DRY
TGP2	12:23 PM	6.4	DRY

Notes: Percent of lower explosive limit (LEL) was calibrated to Methane (CH₄) Continuous gas monitors that sound alarms at 0.95% by volume of methane in air have been installed at the admin office and scale house. SWB=Storm water berm>>> = Above the detection limit of the gas meter used

PERIMETER GAS PROBE MONITORING LOG

Facility Name: J.E.D. Solid Waste Management Facility Date: 9-9-10

Facility Address: 1501 Omni Way, St Cloud, Florida 34773

Technician: Klunsford Company: Omni Waste of Osceola County LLC

Weather Conditions: Temperature: 90 °F M. Cloudy/P. Cloudy/Clear/Overcast

Barometric Pressure: 29.82 inch Hg Wind: 0 mph Humidity: 100__

Landfill Gas Meter: LandTec Gem.2000 Serial No. GM11327/08

Gas Probe No.	Time	%CH4	Comments
GP-7	8:54am	1.4	Saturated
GP-8	9:01am	0.0	1.5' Water 50 E
GP-9	9:08am	0.0	1.5' Water 50 East
GP-10	9:14am	13.3	1.5' Water 50 East
GP-11	9:25am	40.7	1.5' Water 50 East /Sulfur Smell
GP-12	9:31am	0.7	1.5' Water 50 East
GP-13	9:38am	0.0	1.5' Water 50 East
GP-14	9:45am	2.3	1.5' Water 50 South
GP-15	10:07am	0.2	1.5' Water 50 South
GP-16	10:14am	0.0	1.5' Water 50 South
GP-17	10:24am	0.0	1.5' Water 50 West
GP-18	10:31am	7.8	1.5' Water 50 West
GP-19	10:39am	9.0	1.5' Water 50 North
GP-20	10:46am	0.0	1.5' Water 50 South
GP-21	10:54am	10.3	1.5' Water 50 West
GP-22	11:04am	0.0	1.5' Water 50 West
TGP4	12:46pm	0.0	1.5' Water 50 West
TGP5	1:03pm	31.0	1.5' Water 50 West/ 2' Washout area
TGP1	1:08pm	52.3	1.5' Water 50 West
TGP6	1:11pm	0.3	1.5' Water 50 West
TGP7	1:15pm	48.4	1.5' Water 50 West
TGP8	1:19pm	43.6	1.5' Water 50 North
TGP2	1:24pm	3.7	1.5' Water 50 North

Notes: Percent of lower explosive limit (LEL) was calibrated to Methane (CH₄) Continuous gas monitors that sound alarms at 0.95% by volume of methane in air have been installed at the admin office and scale house. SWB=Storm water berm>>> = Above the detection limit of the gas meter used

ATTACHMENT 3

FDEP Correspondence, dated December 16, 2010



Florida Department of
Environmental Protection
Central District
3319 Maguire Boulevard, Suite 232
Orlando, Florida 32803-3767

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Mimi Drew
Secretary

ELECTRONIC MAIL
Mkaiser@wsii.us

Mr. Mike Kaiser
Omni Waste of Osceola County, LLC (Omni)
1501 Omni Way
St. Cloud, Florida 34773

OCD-SW-10-0585

Osceola County - SW
JED Solid Waste Management Facility
Permit # SO49-0199726-005 and SC49-0199726-004
WACS # 89544
Response to "Status Report of Methane Gas Migration Investigation"

Dear Mr. Kaiser:

Waste Services submitted the document "Status Report of Methane Gas Migration Investigation" dated 11/14/2010. The report contained the following request:

Additional Request by Omni

Omni requests FDEP approval to abandon the existing permanent gas probes and replace them with new permanent gas probes in the same location, however, with a different screen interval. Due to different screen intervals between the permanent and temporary probes, it is believed the facility's water table may be influencing the monitoring results when comparing results between paired probes and seasonal variations. The existing permanent gas probes are screened from approximately 74' to 80' BGS and the temporary gas probes are screened from approximately 80' to 88' BGS. The bottom screened elevation of 80' BGS for the temporary probes represents the lowest elevation of waste fill in the disposal cells (top of protective cover elevation in the sump areas). Omni requests to install the new permanent probes with a bottom screen interval at 80' BGS.

The Department accepts the possibility that the differences in elevation of the bottom of the screens might influence the monitoring results. Also, the Department agrees that having the landfill gas probe screens 100% in the water table, even seasonally, is not desirable. However, your request does not meet the requirements of Rule 62-701.530(2)(b), F.A.C..

Per Rule 62-701.530(2)(b), F.A.C., soil monitoring probes shall extend to the depth of the base of waste fill or at least three feet below ground surface, whichever is deeper. The original ground surface was at approximately 80.5' NGVD and the lowest waste fill elevation is at approximately 80' NGVD. The Department will approve the following changes to the landfill gas monitoring probes in order to satisfy the Rule and address the screened interval variations:

- Abandon the existing permanent gas probes.
- Replace them with permanent gas probes in the same location (in the landfill perimeter berm with an elevation of approximately 85' NGVD).
- Construct the new probes such that the bottom of the screened interval will be at approximately 77.5' NGVD.
- The screened length should be five feet or six inches below land surface which is less.

These changes will require a minor modification to the existing solid waste operating permit. The submittal must identify each location that will have a new well. It must show a detail drawing for the new landfill gas probes. Although the landfill gas probe changes do not affect the gas collection and treatment system, I recommend you check with the Air Program regarding whether they have permitting requirements.

Please contact Gloria-Jean DePradine by telephone at (407) 893-3994 or by e-mail at gloria.depradine@dep.state.fl.us, or contact Kim Rush at (407) 893-3328 or by e-mail at kim.rush@dep.state.fl.us if you have any questions or need additional information.

Sincerely,



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

Date: December 16, 2010

FTL/gnd/kr

cc:

Shawn McCash, Waste Services, Inc., SMcCash@wasteservicesinc.com

Caroline Shine, CD Air Program Administrator Caroline.Shine@dep.state.fl.us