

Omni Waste of Osceola County, LLC

1501 Omni Way St. Cloud, Florida 34773

MINOR MODIFICATION APPLICATION FOR REVISED FINANCIAL ASSURANCE

PHASE 1 PARTIAL CLOSURE CONSTRUCTION

J.E.D. SOLID WASTE MANAGEMENT FACILITY
Osceola County, Florida

Prepared by

Geosyntec^D

consultants

14055 Riveredge Drive, Suite 300 Tampa, Florida 33637

Project Number FQ1672-03

December 2009



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MINOR MODIFICATION APPLICATION FOR REVISION OF FINANCIAL ASSURANCE TO ACCOUNT FOR THE PHASE 1 PARTIAL CLOSURE CONSTRUCTION J.E.D. SOLID WASTE MANAGEMENT FACILITY

1. INTRODUCTION

Geosyntec Consultants (Geosyntec) has prepared this minor modification application to provide the revised closure estimate for the JED Solid Waste Management (JED) facility, located in Osceola County, Florida. The closure cost estimate for the JED facility is being updated to exclude the portion of the landfill closure covered by the Phase 1 partial closure construction project. The Phase 1 partial closure construction was completed on 23 November 2009.

The JED facility is owned and operated by Omni Waste of Osceola County, LLC (Omni), which is a wholly owned subsidiary of Waste Services, Inc. (WSI). This minor modification application is being submitted to the Florida Department of Environmental Protection (FDEP), Central District on behalf of Omni.

This minor modification application is being submitted to comply with Permit No. SO49-0199726-010. This permit was issued by FDEP on 17 February 2009 authorizing the construction of Phase 1 partial closure based on a minor modification application dated 25 November 2008 and response to request for additional information (RAI #1) dated 18 December 2008. Attachment 1 includes the FDEP Form 62-701.900(1), Application for a Permit to Construct, Operate, Modify or Close a Solid Waste Management Facility, which has been completed for this minor modification for revised financial assurance.

2. PROJECT BACKGROUND

The current 5-year construction and operation permit authorizes the development of Phases 1 through 3 of the JED facility. Phase 1 consists of four cells, Cells 1 through 4, and has a footprint of approximately 53 acres. Phase 2 consists of three cells, Cells 5 through 7, and has a footprint of approximately 36 acres. To date, Cells 1 through 6 have been constructed.



Since each of the remaining cells (Cells 7 through 10) in Phases 2 and 3 will be constructed at different times, the financial assurance requirement for each new cell will be provided to FDEP as a minor modification with the submittal of each Cell certification report. Annual financial assurance updates will consider only the cells containing waste during the period covered by the financial assurance. The current financial assurance, approved by FDEP for the JED facility includes closure and long-term care costs for Cells 1 through 6.

The financial assurance cost estimates included in this minor modification application are based on the JED vertical expansion solid waste and environmental resource permits (ERP), and Phase 1, Sequence 1-3 GCCS construction drawings.

3. FINANCIAL ASSURANCE COST ESTIMATE FOR PHASE 1 PARTIAL CLOSURE

This minor modification application is being submitted to update the financial assurance cost estimate for the JED facility to exclude the landfill area closed as part of the Phase 1 partial closure project. The unit prices for the closure of the JED facility are based on the unit prices provided in the successful bids for the Phase 1 partial closure project completed in November 2009 and the Phase 1, Sequence 1 and 2 Gas Collection and Control System (GCCS) project completed in January 2009. Additionally, closure costs for the Waste Tire Storage and Processing and Auto Shredder Residual Recycling operations have been included. These operations were proposed for the JED facility based on a minor permit modification submitted to FDEP on December 20, 2009. FDEP Form 62-701.900(28), Financial Assurance Cost Estimate Form, with notes and calculations is included as Attachment 2. It is noted that the financial assurance cost estimate presented in Attachment 2 includes only revised closure costs. Since the entire facility has not received final closure, the long-term care costs have not been adjusted.

The current approved closure and long-term care costs include six cells (Cells 1 through 6). This minor modification application updates the current closure cost estimate (Cells 1 through 6) for the JED facility to exclude the Phase 1 area which received final closure.

The closure and long-term care cost estimates for Cells 1 through 6, at the JED facility are presented in the table below.



Identification	Closure Cost Estimate	Long-Term Care Cost Estimate	Financial Assurance Cost Estimate
Current Approved Closure Cost Estimate (Cells 1-6)	\$6,467,502.27	\$6,536,404.23	\$13,003,906.50
Revised Closure Cost Estimate (Cells 1-6)	\$4,722,141.72	\$6,536,404.23	\$11,258,545.95

Omni will provide the FDEP with an insurance certificate for the revised financial assurance cost estimate of \$11,258,545.96 upon approval of this revised closure cost estimate.

ATTACHMENT 1 FDEP FORM 62-701.900(1)



Florida Department of Environmental Protection

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, FL 32399-2400

DEP Form # 62-701.900(1)						
Form Title Solid Waste Management Facility Permit						
Effective Date05-27-01						
DEP Application No						
(Filled by DEP)						

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

APPLICATION INSTRUCTIONS AND FORMS

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, B, D through T
- B. Asbestos Monofills Submit parts A,B,D,E,F,G,J,L,N, P through S, and T
- C. Industrial Solid Waste Facilities Submit parts A,B, D through T
- D. Non-Disposal Facilities Submit parts A,C,D,E,J,N,S and T

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,C and D 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,M, O through T
- B. Asbestos Monofills Submit parts A,B,N, P through T
- C. Industrial Solid Waste Facilities Submit parts A,B, M through T
- D. Non-Disposal Facilities Submit parts A, C, N, S and T

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: NON-DISPOSAL FACILITY GENERAL INFORMATION

PART D: PROHIBITIONS

PART E: SOLID WASTE MANAGEMENT FACILITY PERMIT REQUIREMENTS, GENERAL

PART F: LANDFILL PERMIT REQUIREMENTS

PART G: GENERAL CRITERIA FOR LANDFILLS

PART H: LANDFILL CONSTRUCTION REQUIREMENTS

PART I: HYDROGEOLOGICAL INVESTIGATION REQUIREMENTS

PART J: GEOTECHNICAL INVESTIGATION REQUIREMENTS

PART K: VERTICAL EXPANSION OF LANDFILLS

PART L: LANDFILL OPERATION REQUIREMENTS

PART M: WATER QUALITY AND LEACHATE MONITORING REQUIREMENTS

PART N: SPECIAL WASTE HANDLING REQUIREMENTS

PART O: GAS MANAGEMENT SYSTEM REQUIREMENTS

PART P: LANDFILL CLOSURE REQUIREMENTS

PART O: CLOSURE PROCEDURES

PART R: LONG TERM CARE REQUIREMENTS

PART S: FINANCIAL RESPONSIBILITY REQUIREMENTS

PART T: 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

1.	Type of facility (check all that apply):
	[✔] Disposal [✔] Class I Landfill [] Ash Monofill [] Class II Landfill [] Asbestos Monofill [] Class III Landfill [] Industrial Solid Waste [] Other Describe:
	[] Non-Disposal [] Incinerator For Non-biomedical Waste [] Waste to Energy Without Power Plant Certification [] 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.	<pre>Type of application: [] Construction [/] Operation [] Construction/Operation [] Closure</pre>
3.	Classification of application: [] New [] Substantial Modification [] Intermediate Modification [/] Minor Modification
4.	Facility name: J.E.D. Solid Waste Management Facility
5.	DEP ID number: 89544 (WACS) County: Osceola
6.	Facility location (main entrance): 1501 Omni Way
	St. Cloud, FL 34773
7.	Location coordinates: 32E & 11,13,14,17 & 18 Section: Township: 28S

	rating authority): Omni		
Mailing address: _	1501 Omni Way, Street or P.O. Box	City St	tate Zip
Contact person:	Mike Kaiser		
	Vice Pre		
		mkaiser@ws	:ii.us
	_	E-Mail address (i	f available)
Authorized agent/Co	nsultant:	Geosyntec Consultan	ts
Mailing address:	14055 Riveredge Dr. Street or P.O. Box	, Suite 300, Tampa,	FL 33637
Contact person:	Craig R. Browne, P.E.	Telephone: (<u>813</u>)	558-0990
Title:	Project	Engineer	
		cbrowne@geosy	
		E-Mail address (i	f available)
Landowner(if differ	ent than applicant):	N/A	
Mailing address: _			
	Street or P.O. Box	City St	ate Zip
Contact person:		Telephone: ()	
	_	E-Mail address (i	f available)
	reas to be served:	Osceola count	and
other Counties	(see Section 2.7.1 of 20	006 SW Renewal Permi	t Application)
Population to be se	rved:		t Application)
Population to be se		ear	- -
Population to be se	rved:	ear tion:	
Population to be se Current: Date site will be r	rved: -5.8 M Five-Y Projec ready to be inspected for	ear tion: completion:	N/A
Population to be se Current: Date site will be r	rved: Five-Y ~5.8 M Projec	ear tion: completion:	N/A
Population to be se Current: Date site will be r Expected life of th Estimated costs:	rved: -5.8 M Five-Y Projec eady to be inspected for the facility:	ear tion: completion: N/A	N/A year
Population to be securent: Date site will be respected life of the Estimated costs: Total Construction:	rved: -5.8 M Five-Y Projected for the facility:	ear tion: r completion: N/A osing Costs: \$	N/A year
Population to be second current: Date site will be respected life of the Estimated costs: Total Construction: Anticipated construction	rved: -5.8 M Five-Y Projec eady to be inspected for the facility:	ear tion: N/A osing Costs: \$	N/A year

This minor modification financial assurance Phase 1 (Cells 1 th	e for the		s being s	ubmitted t	o update th	_	
financial assurance Phase 1 (Cells 1 th		JED faci				<u>.e</u>	
Phase 1 (Cells 1 th	rough 4).		lity to r	eflect the	partial cl	osure	of
Facility site super	visor:			Matt Orr			
Title:Site	Manager	T	elephone:	(_407_)	891-372	20	
					eservicesino		
			E	-Mail addr	ess (if ava:	ilable	:)
Disposal area: Total	2 64 ac	cres; U	sed76	acres;	Available_	188	_acres
Weighing scales used	d: [√] Yes	[] No)				
Security to prevent	unauthoriz	zed use:	[√] Yes	[] No			
Charge for waste red	ceived:	\$/y	rds³ _3	<u>0-40</u> \$/tor	1		
Surrounding land use	e, zoning:						
[] Residential			ndustrial				
[] Residential [✔] Agricultural [] Commercial		[] No [] Ot		ribe:			
Types of waste rece							
[√] Residential		[√] C	& D debri	İs			
[✓] Commercial		[√] Sh	redded/cu				
[] Incinerator/ [✔] Treated biom				2			
[√] Water treatm [] Air treatmen			dustrial dustrial	aludae			
[] Agricultural	_		mestic sl				
[√] Asbestos [] Other Descri	be:						
						$\overline{}$	

11.

12.

Spotters: Yes [√] No [] Number of spotters used: __Min. 1 of per workface__

Site located in: [1] Floodplain [] Wetlands [] Other_____

13.	Property recorded as a Disposal Site in County Land Records: [\checkmark] Yes [] No
14.	Days of operation: Monday thru Saturday
15.	Hours of operation: Mon-Fri: 6am to 5pm and Sat: 6am to 2pm
16.	Days Working Face covered: Each working day
17.	Elevation of water table:79 Ft. (NGVD 1929)
18.	Number of monitoring wells: 63
19.	Number of surface monitoring points:2
20.	Gas controls used: $[\hspace{-1.5pt}\checkmark\hspace{-1.5pt}]$ Yes $[\hspace{-1.5pt}]$ No $[\hspace{-1.5pt}]$ Type controls: $[\hspace{-1.5pt}\checkmark\hspace{-1.5pt}]$ Active $[\hspace{-1.5pt}]$ Passive
	Gas flaring: [/] Yes [] No Gas recovery: [] Yes [/] No
21.	
	[] Natural soils [] Double geomembrane [] Single clay liner [] Geomembrane & composite [] Single geomembrane [] Double composite (for Cells 1 through 4) [] Single composite [] None [] Slurry wall [] Other Describe: Additional GCL below primary geomembrane in the sump
22.	Leachate collection method:
	<pre>[/] Collection pipes</pre>
23.	Leachate storage method:
	[] Tanks [✔] Surface impoundments (with flexible storage containers) [] Other Describe:
24.	Leachate treatment method:
	[] Oxidation [] Chemical treatment [] Secondary [] Settling [] Advanced [✔] None [] Other

25.	Leachate disposal method:
	<pre>[✓] Recirculated [] Pumped to WWTP [✓] Transported to WWTP [] Discharged to surface water [] Injection well [] Percolation ponds [✓] Evaporation [] Other</pre>
26.	For leachate discharged to surface waters:
	Name and Class of receiving water:
27.	Storm Water:
	Collected: [✓] Yes [] No
	Type of treatment: Dry and wet retention for landfill and dry retention for acess road
	Name and Class of receiving water: Bull Creek, Class III
28.	Environmental Resources Permit (ERP) number or status:
	Current ERP Numbers are ERP49-0199752-001-El (Phase 1 Individual), ERP49-0199752-002-El (Conceptual), ERP-49-0199752-003 (Phase 2 Individual), and ERP49-0199752-004-EM (Phase 3 Individual)

Facility site supervisor:
Title: Telephone: ()
E-Mail address (if available)
Site area: Facility acres; Property acres
Security to prevent unauthorized use: [] Yes [] No
Site located in: [] Floodplain [] Wetlands [] Other
Days of operation:
Hours of operation:
Number of operating staff:
Expected useful life:Years
Weighing scales used: [] Yes [] No
Normal processing rate:yd³/daytons/daygal/day
Maximum processing rate:yd³/daytons/daygal/da
Charge for waste received:
Storm Water Collected: [] Yes [] No
Type of treatment:
Name and Class of receiving water:
Environmental Resources Permit (ERP) number or status:
Final residue produced:
% of normal processing rate% of maximum processing rate
Tons/dayTons/day

17.	Estimated operating cost	: \$	
	Total cost/ton: \$	Net cost/ton: \$	

- 18. Provide a site plan, at a scale not greater than 200 feet to the inch, which shows the facility location and identifies the proposed waste and final residue storage areas, total acreage of the site, and any other features which are relevant to the prohibitions or location restrictions in Rule 62-701.300, FAC, such as water bodies or wetlands on or within 200 feet of the site, and potable water wells on or within 500 feet of the site.
- 19. Provide a description of how the waste and final residue will be managed to not be expected to cause violations of the Department's ground water, surface water or air standards or criteria
- 20. Provide an estimate of the maximum amount of waste and final residue that will be store on-site.
- 21. Provide a detailed description of the technology use at the facility and the functions of all processing equipment that will be utilized. The descriptions shall explain the flow of waste and residue through all the proposed unit operations and shall include: (1) regular facility operations as they are expected to occur; (2) procedures for start up operations, and scheduled and unscheduled shut down operations; (3) potential safety hazards and control methods, including fire detection and control; (4) a description of any expected air emissions and wastewater discharges from the facility which may be potential pollution sources; (5) a description and usage rate of any chemical or biological additives that will be used in the process; and (6) process flow diagrams for the facility operations.
- 22. Provide a description of the loading, unloading and processing areas.
- 23. Provide a description of the leachate control system that will be used to prevent discharge of leachate to the environment and mixing of leachate with stormwater. Note: Ground water monitoring may be required for the facility depending on the method of leachate control used.
- 24. Provide an operation plan for the facility which includes: (1) a description of general facility operations, the number of personnel responsible for the operations including their respective job descriptions, and the types of equipment that will be used at the facility; (2) procedures to ensure any unauthorized wastes received at the site will be properly managed; (3) a contingency plan to cover operation interruptions and emergencies such as fires, explosions, or natural disasters; (4) procedures to ensure operational records needed for the facility will be adequately prepared and maintained; and (5) procedures to ensure that the wastes and final residue will be managed to not be expected to cause pollution.
- 25. Provide a closure plan that describes the procedures that will be implemented when the facility closes including: (1) estimated time to complete closure; (2) procedures for removing and properly managing or disposing of all wastes and final residues; (3) notification of the Department upon ceasing operations and completion of final closure.

D. **PROHIBITIONS** (62-701.300, FAC)

<u>s</u>	LOCATION	N/A N/C		
		<u>X</u>	1.	Provide documentation that each of the siting criteria will be satisfied for the facility; (62-701.300(2), FAC)
_		<u>X</u>	2.	If the facility qualifies for any of the exemptions contained in Rules $62-701.300(12)$ through (16) , FAC, then document this qualification(s).
_		X	3.	Provide documentation that the facility will be in compliance with the burning restrictions; (62-701.300(3), FAC)
_		<u>x</u>	4.	Provide documentation that the facility will be in compliance with the hazardous waste restrictions; (62-701.300(4), FAC)
_		<u> </u>	5.	Provide documentation that the facility will be in compliance with the PCB disposal restrictions; (62-701.300(5), FAC)
_		<u>x</u>	6.	Provide documentation that the facility will be in compliance with the biomedical waste restrictions; (62-701.300(6), FAC)
_		X	7.	Provide documentation that the facility will be in compliance with the Class I surface water restrictions; (62-701.300(7), FAC)
_		<u>x</u>	8.	Provide documentation that the facility will be in compliance with the special waste for landfills restrictions; (62-701.300(8), FAC)
_		<u>X</u>	9.	Provide documentation that the facility will be in compliance with the special waste for waste-to-energy facilities restrictions; (62-701.300(9), FAC)
		<u>X</u>	10.	Provide documentation that the facility will be in compliance with the liquid restrictions; (62-701.300(10), FAC)
_		<u>×</u>	11.	Provide documentation that the facility will be in compliance with the used oil restrictions; (62-701.300(11), FAC)

Ε.	SOLID WASTE	MANAG	EMENT	FACILIT	Y PERMIT	REQUIREMENTS, GENERAL (62-701.320, FAC)
<u>s</u>	LOCATION	N/A	N/C			
		X		1.	form, a	pies, at minimum, of the completed application ll supporting data and reports;
		<u>X</u>		2.	(signat and all	ring and/or professional certification ure, date and seal) provided on the applications engineering plans, reports and supporting tion for the application; (62-701.320(6),FAC)
		X		3.		r of transmittal to the Department; .320(7)(a),FAC)
		X		4.		eted application form dated and signed by the nt; (62-701.320(7)(b),FAC)
		<u>X</u>		5.	or mone	fee specified in Rule 62-701.315, FAC in check y order, payable to the Department; .320(7)(c),FAC)
		<u>X</u>		6.	this ru text pr numbere of the plan, c records	neering report addressing the requirements of le and with the following format: a cover sheet, inted on 8 1/2 inch by 11 inch consecutively d pages, a table of contents or index, the body report and all appendices including an operation ontingency plan, illustrative charts and graphs, or logs of tests and investigations, ring calculations; (62-701.320(7)(d),FAC)
				7.		ion Plan and Closure Plan; .320(7)(e)1,FAC)
		X		8.	Conting	ency Plan; (62-701.320(7)(e)2,FAC)
				9.	facilit restric horizon	r drawings for the solid waste management ies in appropriate format (including sheet size tions, cover sheet, legends, north arrow, tal and vertical scales, elevations referenced 1929) showing; (62-702.320(7)(f),FAC)
		<u>X</u>				regional map or plan with the project ocation;
		<u>X</u>				vicinity map or aerial photograph no more than year old;
		<u>, X</u>				site plan showing all property boundaries ertified by a registered Florida land surveyor;

<u>s</u>	LOCATION	<u>N/A</u>	<u>N/C</u>	PART E CONTINUED			
		X		d. Other necessary details to support the engineering report.			
		X		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)			
		<u>X</u>		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)			
		<u> </u>		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)			
		X		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)			
		<u>X</u>		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)			
		<u>X</u>		15. Explain how the operator training requirements will be satisfied for the facility; (62-701.320(15), FAC)			

F. LANDFILL PERMIT REQUIREMENTS (62-701.330, FAC)

<u>s</u>	LOCATION	<u>N/A</u>	N/C			
		<u>X</u>		1.	old ar zoning suffic water the vi	ty map or aerial photograph no more than 1 year and of appropriate scale showing land use and local within one mile of the landfill and of cient scale to show all homes or other structures, bodies, and roads other significant features of cinity. All significant features shall be ed; (62-701.330(3)(a),FAC)
		<u>X</u>		2.	old sh	ty map or aerial photograph no more than 1 year nowing all airports that are located within five of the proposed landfill; (62-701.330(3)(b),FAC)
		<u>X</u>		3.		plan with a scale not greater than 200 feet to the showing; (62-701.330(3)(c),FAC)
		X			a.	Dimensions;
		<u>X</u>			b.	Locations of proposed and existing water quality monitoring wells;
		X			C.	Locations of soil borings;
		<u>X</u>			d.	Proposed plan of trenching or disposal areas;
		<u>X</u>			е.	Cross sections showing original elevations and proposed final contours which shall be included either on the plot plan or on separate sheets;
		X			f.	Any previously filled waste disposal areas;
		X			g.	Fencing or other measures to restrict access.
				4.	to the	raphic maps with a scale not greater than 200 feet e inch with 5-foot contour intervals showing; 01.330(3)(d),FAC):
		X			a.	Proposed fill areas;
		X			b.	Borrow areas;
		_X			C.	Access roads;
		X			d.	Grades required for proper drainage;
		X			e.	Cross sections of lifts;

<u>s</u>	LOCATION	<u>N/A</u>	N/C			PART F CONTINUED
		X			f.	Special drainage devices if necessary;
		X			g.	Fencing;
		X			h.	Equipment facilities.
				5.		ort on the landfill describing the following; 01.330(3)(e),FAC)
		<u>X</u>			a.	The current and projected population and area to be served by the proposed site;
		X			b.	The anticipated type, annual quantity, and source of solid waste, expressed in tons;
		X			C.	The anticipated facility life;
		X			d.	The source and type of cover material used for the landfill.
		<u>X</u>		6.	condu accor	de evidence that an approved laboratory shall ct water quality monitoring for the facility in dance with Chapter 62-160, FAC; 01.330(3)(h), FAC)
<u>X</u>	Attachment 2			7.	demon and l	de a statement of how the applicant will strate financial responsibility for the closing ong-term care of the landfill; 01.330(3)(i),FAC)
G.	GENERAL CRI	TERIA	FOR LA	NDFILLS	6 (62-5	701.340,FAC)
		<u> </u>		1.	Admin landf locat restr tempo unles	ibe (and show on a Federal Insurance istration flood map, if available) how the ill or solid waste disposal unit shall not be ed in the 100-year floodplain where it will ict the flow of the 100-year flood, reduce the rary water storage capacity of the floodplain s compensating storage is provided, or result in out of solid waste; (62-701.340(4)(b),FAC)
		X		2.	waste prope toe c	ibe how the minimum horizontal separation between deposits in the landfill and the landfill rty boundary shall be 100 feet, measured from the f the proposed final cover slope; 01.340(4)(c),FAC)
		<u>X</u>		3.	landf	ibe what methods shall be taken to screen the ill from public view where such screening can ically be provided; (62-701.340(4)(d),FAC)

н.	LANDFILL CO	ONSTRUC	TION	KEQUIKE:	MENTS	(62-701	.400, FAC)
<u>s</u>	LOCATION	<u>N/A</u>	N/C				
		_ <u>X</u>		1.	solid close	waste d at pl	w the landfill shall be designed so that disposal units will be constructed and lanned intervals throughout the design he landfill; (62-701.400(2),FAC)
				2.	Landf	ill lin	ner requirements; (62-701.400(3),FAC)
					a.		al construction requirements; 01.400(3)(a),FAC):
		<u> </u>				(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;
		X				(2)	Document foundation is adequate to prevent liner failure;
		_ X	<u> </u>			(3)	Constructed so bottom liner will not be adversely impacted by fluctuations of the ground water;
		X				(4)	Designed to resist hydrostatic uplift if bottom liner located below seasonal high ground water table;
		X_				(5)	Installed to cover all surrounding earth which could come into contact with the waste or leachate.
					b.	Compo	site liners; (62-701.400(3)(b),FAC)
		_ X				(1)	Upper geomembrane thickness and properties;
		X_				(2)	Design leachate head for primary LCRS including leachate recirculation if appropriate;
	· -	X				(3)	Design thickness in accordance with Table A and number of lifts planned for lower soil component.

<u>s</u>	LOCATION	<u>N/A</u>	N/C	C.	Double	PART H CONTINUED e liners; (62-701.400(3)(c),FAC)
		X			(1)	Upper and lower geomembrane thicknesses and properties;
		<u>X</u>			(2)	Design leachate head for primary LCRS to limit the head to one foot above the liner;
		X			(3)	Lower geomembrane sub-base design;
		<u> </u>			(4)	Leak detection and secondary leachate collection system minimum design criteria ($k \ge 10$ cm/sec, head on lower liner ≤ 1 inch, head not to exceed thickness of drainage layer);
				d.		ards for geosynthetic components; 01.400(3)(d),FAC)
		X			(1)	Field seam test methods to ensure all field seams are at least 90 percent of the yield strength for the lining material;
		X			(2)	Geomembranes to be used shall pass a continuous spark test by the manufacturer;
		<u> </u>			(3)	Design of 24-inch-thick protective layer above upper geomembrane liner;
		X	_		(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.
_		X			(5)	HDPE geomembranes, if used, meet the specifications in GRI GM13;
		<u>X</u>			(6)	PVC geomembranes, if used, meet the specifications in PGI 1197;
_	· <u>~•</u>	<u>X</u>			(7)	Interface shear strength testing results of the actual components which will be used in the liner system;
		<u>X</u>	_		(8)	Transmissivity testing results of geonets if they are used in the liner system;
-		<u>X</u>			(9)	Hydraulic conductivity testing results of geosynthetic clay liners if they are used in the liner system;

<u>s</u>	LOCATION	N/A	N/C			PART H CONTINUED
				е.		nthetic specification requirements; (01.400(3)(e),FAC)
		_ X			(1)	Definition and qualifications of the designer, manufacturer, installer, QA consultant and laboratory, and QA program;
		_ X			(2)	Material specifications for geomembranes, geocomposites, geotextiles, geogrids, and geonets;
		<u>×</u>			(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;
		_ X			(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;
		_ X			(5)	Geotextile and geogrid specifications including handling and placement, conformance testing, seams and overlaps, repair, and placement of soil materials and any overlying materials;
		X			(6)	Geonet and geocomposite specifications including handling and placement, conformance testing, stacking and joining, repair, and placement of soil materials and any overlying materials;
		<u> </u>			(7)	Geosynthetic clay liner specifications including handling and placement, conformance testing, seams and overlaps, repair, and placement of soil material and any overlying materials;
				f.		dards for soil components 710.400(3)(f),FAC):
		_ X	:		(1)	Description of construction procedures including overexcavation and backfilling to preclude structural inconsistencies and procedures for placing and compacting soil component in layers;

<u>s</u>	LOCATION	N/A	N/C				PART	H CONTINUED
		<u>X</u>				(2)	compo leach	nstration of compatibility of the soil onent with actual or simulated nate in accordance with EPA Test od 9100 or an equivalent test method;
		<u>X</u>				(3)	demor for s Speci	edures for testing in-situ soils to astrate they meet the specifications soil liners; ifications for soil component of liner ading at a minimum:
		V					111011	aring at a minimum.
		<u> </u>					(a)	Allowable particle size distribution, Atterberg limits, shrinkage limit;
		<u> </u>					(b)	Placement moisture and dry density criteria;
		<u>X</u>					(c)	Maximum laboratory-determined saturated hydraulic conductivity using simulated leachate;
		X					(d)	Minimum thickness of soil liner;
		X					(e)	Lift thickness;
		X					(f)	Surface preparation (scarification);
		<u> </u>					(g)	Type and percentage of clay mineral within the soil component;
		<u>X</u>				(5)	field satu	edures for constructing and using a distance to document the desired rated hydraulic conductivity and kness can be achieved in the field.
				3.		nate co '01.400		on and removal system (LCRS);
					a.			y and secondary LCRS requirements; 0(4)(a),FAC)
		X				(1)		tructed of materials chemically stant to the waste and leachate;
		X				(2)		sufficient mechanical properties to ent collapse under pressure;
		X				(3)		granular material or synthetic extile to prevent clogging;
		<u> </u>				(4)	clog	method for testing and cleaning ged pipes or contingent designs for uting leachate around failed areas:

<u>s</u>	LOCATION	<u>N/A</u>	N/C	b.		PART H CONTINUED ry LCRS requirements; 01.400(4)(b),FAC)
		X			(1)	Bottom 12 inches having hydraulic conductivity \geq 1 x 10 ⁻³ cm/sec;
		<u>X</u>			(2)	Total thickness of 24 inches of material chemically resistant to the waste and leachate;
		<u>X</u>			(3)	Bottom slope design to accomodate for predicted settlement;
		<u>X</u>			(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.
			4.	Leach	ate re	circulation; (62-701.400(5),FAC)
		<u>X</u>		a.	Descr leach	ibe general procedures for recirculating ate;
		<u>X</u>		b.	runof	ribe procedures for controlling leachate f and minimizing mixing of leachate runoff storm water;
		<u>X</u>		c.		ibe procedures for preventing perched water tions and gas buildup;
		<u>X</u>	_	d.	manag weath wind-	ribe alternate methods for leachate mement when it cannot be recirculated due to the derivative or runoff conditions, surface seeps, blown spray, or elevated levels of leachate on the liner;
		<u>X</u> _		е.		ibe methods of gas management in accordance Rule 62-701.530, FAC;
		<u>X</u>		f.	treat treat and p not c	eachate irrigation is proposed, describe ment methods and standards for leachate ment prior to irrigation over final cover provide documentation that irrigation does contribute significantly to leachate ration.

<u>s</u>	LOCATION	<u>N/A</u>	<u>N/C</u>	5.	PART H CONTINUED Leachate storage tanks and leachate surface impoundments; (62-701.400(6),FAC)				
					a.			oundment requirements; (6)(b),FAC)	
		<u>X</u>				(1)	botto	mentation that the design of the om liner will not be adversely sted by fluctuations of the ground	
		X				(2)	inspe	gned in segments to allow for ection and repair as needed without cruption of service;	
						(3)	Gener	cal design requirements;	
		<u>X</u>					(a)	Double liner system consisting of an upper and lower 60-mil minimum thickness geomembrane;	
		<u>X</u>					(b)	Leak detection and collection system with hydraulic conductivity ≥ 1 cm/sec;	
		<u>×</u>	_				(c)	Lower geomembrane placed on subbase \geq 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;	
		<u>X</u>					(d)	Design calculation to predict potential leakage through the upper liner;	
		<u>X</u>					(e)	Daily inspection requirements and notification and corrective action requirements if leakage rates exceed that predicted by design calculations;	
	·	<u>X</u>				(4)		ription of procedures to prevent et, if applicable;	
		<u>X</u>				(5)	Desig	gn calculations to demonstrate minimum Feet of freeboard will be maintained;	
	·	<u>X</u>	-			(6)		edures for controlling disease vectors off-site odors.	

<u>s</u>	LOCATION	<u>N/A</u>	<u>N/C</u>	b.		PART H CONTINUED e-ground leachate storage tanks; 01.400(6)(c),FAC)
		<u> </u>			(1)	Describe tank materials of construction and ensure foundation is sufficient to support tank;
		X			(2)	Describe procedures for cathodic protection if needed for the tank;
		X			(3)	Describe exterior painting and interior lining of the tank to protect it from the weather and the leachate stored;
		<u> </u>			(4)	Describe secondary containment design to ensure adequate capacity will be provided and compatibility of materials of construction;
		X			(5)	Describe design to remove and dispose of stormwater from the secondary containment system;
		<u> </u>			(6)	Describe an overfill prevention system such as level sensors, gauges, alarms and shutoff controls to prevent overfilling;
					(7)	Inspections, corrective action and reporting requirements;
		X				(a) Overfill prevention system weekly;
		X				(b) Exposed tank exteriors weekly;
		<u> </u>				(c) Tank interiors when tank is drained or at least every three years;
		X				(d) Procedures for immediate corrective action if failures detected;
		<u> </u>				(e) Inspection reports available for department review.
				C.		rground leachate storage tanks; 701.400(6)(d),FAC)
		_ X	<u> </u>		(1)	Describe materials of construction;
		<u> </u>			(2)	A double-walled tank design system to be used with the following requirements;

<u>s</u>	LOCATION	N/A	N/C				PART	H CONTINUED
		<u>X</u>					(a)	<pre>Interstitial space monitoring at least weekly;</pre>
		<u>X</u>					(b)	Corrosion protection provided for primary tank interior and external surface of outer shell;
		<u>X</u>					(c)	Interior tank coatings compatible with stored leachate;
		<u>X</u>					(d)	Cathodic protection inspected weekly and repaired as needed;
		<u>X</u>				(3)	such shuto	ribe an overfill prevention system as level sensors, gauges, alarms and off controls to prevent overfilling provide for weekly inspections;
		<u>X</u>				(4)		ection reports available for the transfer that the transfer to
		<u>X</u>			d.			ovided for routine maintenance of 01.400(6)(e),FAC)
				6.		system 01.400		struction quality assurance (CQA);
		<u>X</u>			a.	Provi	de CQA	Plan including:
		<u>X</u>				(1)		fications and construction rements for liner system;
		<u>X</u>				(2)		led description of quality control ng procedures and frequencies;
		X				(3)	Ident engin	ification of supervising professional eer;
		<u>X</u>				(4)	all a	rify responsibility and authority of appropriate organizations and key onnel involved in the construction ect;
		<u> </u>				(5)		e qualifications of CQA professional neer and support personnel;
		<u>X</u>				(6)		ription of CQA reporting forms and ments:

<u>s</u>	LOCATION	<u>N/A</u>	N/C		PART H CONTINUED
		<u>X</u>		te	n independent laboratory experienced in the esting of geosynthetics to perform required esting;
				7. Soil Liner	CQA (62-701.400(8)FAC)
		<u>X</u>		bo tl	ocumentation that an adequate borrow source has een located with test results or description of he field exploration and laboratory testing rogram to define a suitable borrow source;
		<u>X</u>		aı	escription of field test section construction nd test methods to be implemented prior to iner installation;
		<u>X</u>		re	escription of field test methods including ejection criteria and corrective measures to nsure proper liner installation.
				8. Surface	water management systems; (62-701.400(9),FAC)
		<u>X</u>		S.	rovide a copy of a Department permit for tormwater control or documentation that no such ermit is required;
		<u>X</u>		i	esign of surface water management system to solate surface water from waste filled areas nd to control stormwater run-off;
		<u>X</u>		r	etails of stormwater control design including etention ponds, detention ponds, and drainage ays;
				9. Gas con	trol systems; (62-701.400(10),FAC)
		<u>X</u>		r	rovide documentation that if the landfill is eceiving degradable wastes, it will have a gas ontrol system complying with the requirements f Rule 62-701.530, FAC;
		X		document of prote bottom	dfills designed in ground water, provide tation that the landfill will provide a degree ection equivalent to landfills designed with liners not in contact with ground water; .400(11),FAC)

I.	HYDROGEOLO	GICAL 1	INVEST	IGATION	REQUI	REMENTS (62-701.410(1), FAC)
<u>s</u>	LOCATION	<u>N/A</u>	<u>N/C</u>	1.		t a hydrogeological investigation and site report ding at least the following information:
		_ X			a.	Regional and site specific geology and hydrogeology;
		X			b.	Direction and rate of ground water and surface water flow including seasonal variations;
		<u>X</u>			C.	Background quality of ground water and surface water;
		_ <u>X</u>			d.	Any on-site hydraulic connections between aquifers;
		X			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;
		X			f.	Description of topography, soil types and surface water drainage systems;
		<u> </u>	_		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;
		X			h.	Identify and locate any existing contaminated areas on the site;
		_ X			i.	Include a map showing the locations of all potable wells within 500 feet, and all community water suupply wells within 1000 feet, of the waste storage and disposal areas;
		X_		2.	Repor	rt signed, sealed and dated by PE or PG.

J. GEOTECHNICAL INVESTIGATION REQUIREMENTS (62-701.	410(2),FAC)
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<u>s</u>	LOCATION	<u>N/A</u>	N/C				
				1.	defin	ing the	otechnical site investigation report e engineering properties of the site t least the following:
		<u> </u>			a.	soil :	iption of subsurface conditions including stratigraphy and ground water table tions;
					b.		tigate for the presence of muck, previously d areas, soft ground, lineaments and sink;
		<u>X</u>			С.		ates of average and maximum high water across the site;
					d.	Found	ation analysis including:
		<u>X</u>				(1)	Foundation bearing capacity analysis;
		<u>X</u>				(2)	Total and differential subgrade settlement analysis;
		<u> </u>				(3)	Slope stability analysis;
		<u>X</u>			e.	and in	iption of methods used in the investigation ncludes soil boring logs, laboratory ts, analytical calculations, cross ons, interpretations and conclusions;
		<u>X</u>			f.	zones	aluation of fault areas, seismic impact , and unstable areas as described in 40 58.13, 40 CFR 258.14 and 40 CFR 258.15.
		<u>X</u>		2.	Repor	rt sign	ed, sealed and dated by PE or PG.

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

<u>s</u>	LOCATION	N/A	<u>N/C</u>		
		<u>X</u>		1.	Describe how the vertical expansion shall not cause or contribute to leachate leakage from the existing landfill or adversely affect the closure design of the existing landfill;
		<u>X</u>	_	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;
		X		3.	Provide foundation and settlement analysis for the vertical expansion;
		<u>X</u>		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;
		<u>X</u>		5.	Minimum stability safety factor of 1.5 for the lining system component interface stability and deep stability;
		<u>X</u>		6.	Provide documentation to show the surface water management system will not be adversely affected by the vertical expansion;
		<u>X</u>	<u>-</u>	7.	Provide gas control designs to prevent accumulation of gas under the new liner for the vertical expansion.

Χ	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)
	2.	Provide a landfill operation plan including procedures for: (62-701.500(2), FAC)
 X	_	 Designating responsible operating and maintenance personnel;
 X	_	b. Contingency operations for emergencies;
 X	_	c. Controlling types of waste received at the landfill;
 X	_	d. Weighing incoming waste;
 X	_	e. Vehicle traffic control and unloading;
 X	_	f. Method and sequence of filling waste;
 X	_	g. Waste compaction and application of cover;
 X	_	h. Operations of gas, leachate, and stormwater controls;
 X	_	i. Water quality monitoring.
 <u>X</u>	_	j. Maintaining and cleaning the leachate collection system;
Χ	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)
 X	4.	Describe the waste records that will be compiled monthly and provided to the Department quarterly; (62-701.500(4),FAC)
 X	_ 5.	Describe methods of access control; (62-701.500(5),FAC)
 X	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)
	7.	Describe procedures for spreading and compacting waste at the landfill that include: (62-701.500(7),FAC)
 X	_	a. Waste layer thickness and compaction frequencies;

<u>s</u>	LOCATION	<u>N/A</u>	N/C			PART L CONTINUED
		- X			b.	Special considerations for first layer of waste placed above liner and leachate collection system;
		X			С.	Slopes of cell working face and side grades above land surface, planned lift depths during operation;
		X			d.	Maximum width of working face;
					e.	Description of type of initial cover to be used at the facility that controls:
		X				(1) Disease vector breeding/animal attraction
		X				(2) Fires
		X				(3) Odors
		X				(4) Blowing litter
		_ X				(5) Moisture infiltration
		<u>X</u>			f.	Procedures for applying initial cover including minimum cover frequencies;
		_ X			g.	Procedures for applying intermediate cover;
	<u> </u>	_ X			h.	Time frames for applying final cover;
		<u>X</u>			i.	Procedures for controlling scavenging and salvaging.
		_ X			j.	Description of litter policing methods;
		X			k.	Erosion control procedures.
				8.		ribe operational procedures for leachate management uding; (62-701.500(8),FAC)
		X			a.	Leachate level monitoring, sampling, analysis and data results submitted to the Department;
		_ X			b.	Operation and maintenance of leachate collection and removal system, and treatment as required;
		X			C.	Procedures for managing leachate if it becomes regulated as a hazardous waste;
		X			d.	Agreements for off-site discharge and treatment of leachate;
	·	X			e.	Contingency plan for managing leachate during emergencies or equipment problems;

<u>s</u>	LOCATION	N/A	N/C		PART L CONTINUED		
		<u>X</u>			f.	Procedures for recording quantities of leachate generated in gal/day and including this in the operating record;	
		_X			g.	Procedures for comparing precipitation experienced at the landfill with leachate generation rates and including this information in the operating record;	
		X			h.	Procedures for water pressure cleaning or video inspecting leachate collection systems.	
		<u>X</u>		9.	shall requi	ribe how the landfill receiving degradable wastes implement a gas management system meeting the rements of Rule 62-701.530, FAC; 701.500(9), FAC)	
		<u>X</u>		10.	landf the r	ribe procedures for operating and maintaining the fill stormwater management system to comply with requirements of Rule 62-701.400(9); 701.500(10), FAC)	
				11.		ment and operation feature requirements;	
	· 	X			a.	Sufficient equipment for excavating, spreading, compacting and covering waste;	
		<u>X</u>			b.	Reserve equipment or arrangements to obtain additional equipment within 24 hours of breakdown;	
		X			c.	Communications equipment;	
		<u>X</u>			d.	Dust control methods;	
		<u> </u>			е.	Fire protection capabilities and procedures for notifying local fire department authorities in emergencies;	
		<u>X</u>			f.	Litter control devices;	
		<u> </u>			g.	Signs indicating operating authority, traffic flow, hours of operation, disposal restrictions	
		<u>X</u>		12.	insid acces	de a description of all-weather access road, de perimeter road and other roads necessary for shich shall be provided at the landfill; 701.500(12),FAC)	
				13.		cional record keeping and reporting requirements; 701.500(13),FAC)	

<u>s</u>	LOCATION	<u>N/A</u>	N/C		PART L CONTINUED
		<u>X</u>		a.	Records used for developing permit applications and supplemental information maintained for the design period of the landfill;
		<u>X</u>		b.	Monitoring information, calibration and maintenance records, copies of reports required by permit maintained for at least 10 years;
	, 	<u>X</u>		С.	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;
		X		d.	Procedures for archiving and retrieving records which are more than five year old.

м.	WATER QUALIT	Y AND	LEACH	ATE MON	NITORIN	G REQU	IREMENTS (62-701.510, FAC)
<u>s</u>	LOCATION	<u>N/A</u>	N/C				
		<u>X</u>		1.	submit water	ted de	cy and leachate monitoring plan shall be escribing the proposed ground water, surface eachate monitoring systems and shall meet at ollowing requirements;
		<u>X</u>			a.	hydrog and se	on the information obtained in the geological investigation and signed, dated ealed by the PG or PE who prepared it; 01.510(2)(a),FAC)
		<u>x</u>			b.	accord	ampling and analysis preformed in dance with Chapter 62-160, FAC; 01.510(2)(b),FAC)
					C.		d water monitoring requirements; 01.510(3),FAC)
		X				(1)	Detection wells located downgradient from and within 50 feet of disposal units;
		X				(2)	Downgradient compliance wells as required;
		<u>X</u>				(3)	Background wells screened in all aquifers below the landfill that may be affected by the landfill;
		<u>X</u>				(4)	Location information for each monitoring well;
		<u>X</u>				(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;
		X				(6)	Well screen locations properly selected;
		<u>X</u>	·			(7)	Procedures for properly abandoning monitoring wells;
		_X				(8)	Detailed description of detection sensors if proposed.

<u>s</u>	LOCATION	<u>N/A</u>	N/C	d.		PART M CONTINUED ce water monitoring requirements; 01.510(4),FAC)
		X			(1)	Location of and justification for all proposed surface water monitoring points;
		<u>X</u>			(2)	Each monitoring location to be marked and its position determined by a registered Florida land surveyor;
		<u> </u>		e.		ate sampling locations proposed; 01.510(5),FAC)
				f.		al and routine sampling frequency and rements; (62-701.510(6),FAC)
		X			(1)	Initial background ground water and surface water sampling and analysis requirements;
		X			(2)	Routine leachate sampling and analysis requirements;
		<u>X</u>			(3)	Routine monitoring well sampling and analysis requirements;
		<u>X</u>			(4)	Routine surface water sampling and analysis requirements.
		<u> </u>		g.	monit	ibe procedures for implementing evaluation oring, prevention measures and corrective n as required; (62-701.510(7),FAC)
		X		h.		quality monitoring report requirements; 01.510(9),FAC)
		X			(1)	Semi-annual report requirements;
		<u>X</u>			(2)	Bi-annual report requirements signed, dated and sealed by PG or PE.

LO	CATION	<u>N/A</u>	N/C			
_		<u>X</u>		1.		ribe procedures for managing motor vehicles;
		<u>X</u>		2.		ribe procedures for landfilling shredded waste;
_		X		3.	Descr	ribe procedures for asbestos waste disposal;
		<u> </u>		4.	Descr	ibe procedures for disposal or management of
		_X		5.	Descr	minated soil; (62-701.520(4), FAC) ribe procedures for disposal of biological wastes;
GA	S MANAGEME	NT SY	STEM I	REQUIRE		(62-701.530, FAC)
				1.		de the design for a gas management systems that (62-701.530(1), FAC):
		<u>X</u>			a.	Be designed to prevent concentrations of combustible gases from exceeding 25% the LEL in structures and 100% the LEL at the property boundary;
	-	X			b.	Be designed for site-specific conditions;
		_X			C.	Be designed to reduce gas pressure in the interior of the landfill;
	·	<u>X</u>			d.	Be designed to not interfere with the liner, leachate control system or final cover.
		<u> </u>		2.	const at am	de documentation that will describe locations, ruction details and procedures for monitoring gas bient monitoring points and with soil monitoring es; (62-701.530(2), FAC):
	·	<u>X</u>		3.	remed	de documentation describing how the gas diation plan and odor remediation plan will be mented; (62-701.530(3), FAC):
				4.	Landf	ill gas recovery facilities; (62-701.530(5), FAC)
		<u>X</u>			a.	Information required in Rules 62-701.320(7) and 62-701.330(3), FAC supplied;
		<u>X</u> _			b.	Information required in Rule 62-701.600(4), FAC supplied where relevant and practical;
		<u>X</u>			C.	Estimate of current and expected gas generation rates and description of condensate disposal
LO	CATION	N/A	N/C			<pre>methods provided; PART O CONTINUED</pre>
-		X	_		d.	Description of procedures for condensate sampling, analyzing and data reporting provided;

		<u>X</u>			е.	contr opera	are plan provided describing methods to col gas after recovery facility ceases ation and any other requirements contained ale 62-701.400(10), FAC;
		<u>X</u>			f.	if no	ormance bond provided to cover closure costs ot already included in other landfill are costs.
P.	LANDFILL FI	NAL CI	OSURE	REQUIR	EMENTS	(62-	701.600,FAC)
				1.	Closu	re sch	nedule requirements; (62-701.600(2),FAC)
		<u>X</u>			a.	sched Depar	mentation that a written notice including a dule for closure will be provided to the the thent at least one year prior to final opt of wastes;
		<u>X</u>			b.		ce to user requirements within 120 days of receipt of wastes;
		<u>X</u>	·		c.		ce to public requirements within 10 days of receipt of wastes.
				2.			rmit general requirements;
		<u>X</u>			a.		ication submitted to Department at least 90 prior to final receipt of wastes;
					b.	Closu	are plan shall include the following:
		_X				(1)	Closure report;
		_X				(2)	Closure design plan;
-		_X_				(3)	Closure operation plan;
		X				(4)	Closure procedures;
		<u>X</u>				(5)	Plan for long term care;
<u>X</u>	Attachment 2					(6)	A demonstration that proof of financial responsibility for long term care will be provided.
				3.	Closu	ıre rep	port requirements; (62-701.600(4),FAC)
					a.	Genei	ral information requirements;
		Х				(1)	Identification of landfill;

<u>s</u>	LOCATION	N/A	N/C				PART P CONTINUED		
		X				(2)	Location, description and vicinity map;		
		<u> </u>				(3)	Total acres of disposal areas and landfill property;		
		X				(4)	Legal property description;		
		X_				(5)	History of landfill;		
		X				(6)	Identification of types of waste disposed of at the landfill.		
		<u>X</u>			b.	quali	chnical investigation report and water ty monitoring plan required by Rule 1.330(3),FAC;		
		<u> </u>			С.	ident prese	use information report indicating: ification of adjacent landowners; zoning; nt land uses; and roads, highways -of-way, or easements.		
		<u> </u>			d.	landf	t on actual or potential gas migration at ills containing degradable wastes which allow migration of gas off the landfill rty;		
		<u> </u>			е.	landf of ge and s conce	t assessing the effectiveness of the ill design and operation including results otechnical investigations, surface water torm water management, gas migration and ntrations, condition of existing cover, and e of waste disposed of at the landfill;		
						ure design requirements to be included in the ure design plan: (62-701.600(5),FAC)			
		X			a.	Plan	sheet showing phases of site closing;		
		<u> </u>			b.		ngs showing existing topography and sed final grades;		
		X			C.		sions to close units when they reach ved design dimensions;		
		<u> </u>			d.	Final	elevations before settlement;		
		<u>X</u>			е.	down	slope design including benches, terraces, slope drainage ways, energy dissipators and ssion of expected precipitation effects;		
					f.	Final	cover installation plans including:		
		X				(1)	CQA plan for installing and testing final cover;		

<u>s</u>	LOCATION	N/A	N/C			PART P CONTINUED			
		X			(2)	Schedule for installing final cover after final receipt of waste;			
		X			(3)	Description of drought-resistant species to be used in the vegetative cover;			
		X			(4)	Top gradient design to maximize runoff and minimize erosion;			
		X			(5)	Provisions for cover material to be used for final cover maintenance.			
				g.	Final	cover design requirements:			
		X			(1)	Protective soil layer design;			
		<u> X</u>			(2)	Barrier soil layer design;			
		X _			(3)	Erosion control vegetation;			
		X			(4)	Geomembrane barrier layer design;			
		<u>X</u>			(5)	Geosynthetic clay liner design if used;			
		<u>X</u>			(6)	Stability analysis of the cover system and the disposed waste.			
		X		h.	Propos	sed method of stormwater control;			
		X		i.	Propos	sed method of access control;			
		X		j.	landfill, if any;				
		<u>X</u>		k.					
			5			ration plan shall include: (6),FAC)			
		X		a.	Detai taken	led description of actions which will be to close the landfill;			
		_ <u>X</u> _		b.	Time schedule for completion of closing and loterm care;				
		X		C.		ibe proposed method for demonstrating cial responsibility;			
		X		d.		ate any additional equipment and personnel d to complete closure.			

<u>s</u>	LOCATION	N/A	N/C			PART P CONTINUED
		<u>X</u>			е.	Development and implementation of the water quality monitoring plan required in Rule 62-701.510, FAC.
		<u>X</u>			f.	Development and implementation of gas management system required in Rule 62-701.530, FAC.
		<u>X</u>		6.	proce	fication for and detailed description of dures to be followed for temporary closure of the fill, if desired; (62-701.600(7),FAC)

Q.	CLOSURE PRO	CEDURE	:S (62	-701.6	510,FAC)
<u>s</u> .	LOCATION	<u>N/A</u>	N/C		
		X		1.	Survey monuments; (62-701.610(2),FAC)
		<u>X</u>		2.	Final survey report; (62-701.610(3),FAC)
		<u>X</u>		3.	Certification of closure construction completion; (62-701.610(4),FAC)
		_X		4.	Declaration to the public; (62-701.610(5),FAC)
		X		5.	Official date of closing; (62-701.610(6),FAC)
		X		6.	Use of closed landfill areas; (62-701.610(7),FAC)
		<u>X</u>		7.	Relocation of wastes; (62-701.610(8), FAC)
R.	LONG TERM C.	ARE RE	QUIREM	ENTS	(62-701.620, FAC)
_		<u>x</u>		1.	Maintaining the gas collection and monitoring system; (62-701.620(5), FAC)
		<u> </u>		2.	Right of property access requirements; (62-701.620(6),FAC)
		<u>X</u>		3.	Successors of interest requirements; (62-701.620(7),FAC)
		<u>X</u>		4.	Requirements for replacement of monitoring devices; (62-701.620(9),FAC)
		<u> </u>		5.	Completion of long term care signed and sealed by professional engineer (62-701.620(10), FAC).
s.	FINANCIAL R	ESPONS	SIBILIT	Y REQU	JIREMENTS (62-701.630, FAC)
X	Attachment 2			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).
		<u>X</u>		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).
_X	Attachment 2			3.	Describe funding mechanisms for providing proof of financial assurance and include appropriate financial assurance forms; (62-701.630(5),(6),&(9), FAC).

T.

County, LLC (Omni) is awar	ed representative of Omni Waste of Osceola
County, LLC (Omni) is awar	
	re that statements made in this form and attac
orida Department of Environmental Priss application is true, correct and lief. Further, the undersigned agress, Florida Statutes, and all rules a	Minor Modification Permit from the rotection and certifies that the information i complete to the best of his/her knowledge and sees to comply with the provisions of Chapter and regulations of the Department. It is insferable, and the Department will be notified for the permitted facility.
Make la	1501 Omni Way
gnature of Applicant or Agent	Mailing Address
Mike Kaiser, Vice President, WSI	St. Cloud, Florida 34773
Name and Title (please type)	City, State, Zip Code
mkaiser@wsii.us	(904) 673-0446
-Mail address (if available)	(904) 673-0446 Telephone Number
	Date: 12/31/2009
ctions 403.707 and 403.7075, Floridatis is to certify that the engineering cility have been designed/examined by inciples applicable to such facility cility, when properly maintained and atutes of the State of Florida and dersigned will provide the applicant	ng features of this solid waste management by me and found to conform to engineering ies. In my professional judgment, this d operated, will comply with all applicable rules of the Department. It is agreed that th t with a set of instructions of proper
intenance and operation of the facil	illy.
J. San	14055 Riveredge Drive, Suite 300
O Signature /2/3/109	Mailing Address
	Tampa, Florida 33637
Craig R. Browne, Project Engineer	
Name and Title (please type)	City, State, Zip Code
The state of the s	City, State, Zip Code cbrowne@geosyntec.com
Name and Title (please type)	City, State, Zip Code
Name and Title (please type)	City, State, Zip Code cbrowne@geosyntec.com

1.

2.

Date: (2/71)09

ATTACHMENT 2

FDEP FINANCIAL ASSURANCE FORM 62-701.900(28) WITH NOTES AND CALCULATIONS



Florida Department of Environmental Protection Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, FL 32399-2400

DEP Form # 62-701.900(28)
Form Title Financial Assurance Cost Estimate Form Effective Date 05-27-01 DEP Application No. (Filled by DEP)

FINANCIAL ASSURANCE COST ESTIMATE FORM

Date:	Decembe	er 2009	-	Date of DEP A	pproval:		
I. GENERAL INF	ORMATIO	N:					
Facility Name:	J.E.D. S	Solid Wa	ste Manag	gement Facil	ity	WACS or GMSID	#: <u>89544</u>
Permit / Application	on No.:	SC49-019	99726-004	/SO49-01997	26-005	Expiration Date:	11 Jan 2012
Facility Address:	1501 Om	ni Way,	St. Clou	d, FL 34773			
Permittee:	Omni Was	te of Os	sceola Co	unty, LLC (a	a wholly	owned subsidia	ary of WSI)
Mailing Address:	2893 Exe	cutive E	Park Driv	e, Suite 30	5 Weston,	Florida 33331	-
Latitude:	28 03'31	11	Longitude	81 05'46"		or UT	M:
Solid Waste Dis	posal Units		in Estimat	Date Unit Began Accepting		Design Life of Un	al
Phase / Cell Ph 1/Cell 1	•	Acres 7.8	-	Waste Jan 2004		Receipt of Waste	<u>}</u>
Ph 1/Cell 2	-	4.8	-	Apr 2006	•	1 to 2 yrs	
Ph 1/Cell 3	-	8.3	-	Nov 2006		1 to 2 yrs	
Ph 1/Cell 4	-	7.0	_	Sept 2005	•	1.to 2 yrs	
Ph 2/Cell 5	-	11.2	_	Mar 2009	•	1 to 2 yrs	
Ph 2/Cell 6		12.5	-	Mar 2009		1 to 2 yrs	
Total Landfill Acr	eage includ	ed in this e	- estimate.	51.6 acres	Closure	76.7 acres	Long-Term Care
Type of landfill:			_Class I		Class III		C&D Debris
II. TYPE OF FIN	ANCIAL A	SSURANC	E DOCUM	ENT (Check Type)			
	Letter of C	redit*			Insurance	Certificate	*Indicates
	Surety Bor	nd*		Escrow Account			mechanisms that require use of a Standby Trust Fund
	Trust Fund	l Agreeme	nt	Financial Test			Agreement

III. ESTIMATE ADJUSTMENT

40 CFR Part 264 Subpart H as adopted by reference in Rule 62-701.630, Florida Administrative Code sets forth the method of annual cost estimate adjustment. Cost estimates may be adjusted by using an inflation factor or by recalculating the maximum costs of closure in current dollars. Select one of the methods of cost estimate adjustment below.

	(a) Infl	ation	Facto	or Ad	justm	ent
--	----	--------	-------	-------	-------	-------	-----

Inflation adjustment using an inflation factor may only be made when a Department approved closure cost estimate exists and no changes have occurred in the facility operation which would necessitate modification to the closure plan. The inflation factor is derived from the most recent Implicit Price Deflator for Gross National Product published by the U.S. Department of Commerce in its survey of Current Business. The inflation factor is the result of dividing the latest published annual Deflator by the Deflator for the previous year. The inflation factor may also be obtained from the Solid Waste Financial Coordinator at (850)-245-8732.

Latest Department Approved Closure Cost Estimate:	Current Year Inflation Factor		Inflation Adjusted Closure Cost Estimate:
Closure Cost Estimate.	X	=	\$0.00
			
This adjustment is based on the D	epartment approved long-term care cos	t estimate dated:	
This adjustment is based on the D Latest Department Approved	epartment approved long-term care cos	t estimate dated:	Inflation Adjusted
•	epartment approved long-term care cos Current Year Inflation Factor	t estimate dated:	Inflation Adjusted Annual Long-Term Care Cost Estimate:
Latest Department Approved Annual Long-Term Care Cost	Current Year	t estimate dated:	Annual Long-Term Care
Latest Department Approved Annual Long-Term Care Cost Estimate:	Current Year Inflation Factor	t estimate dated: = X	Annual Long-Term Care Cost Estimate:

(b) Recalculate Estimates (see section V)

IV. CERTIFICATION BY ENGINEER

This is to certify that the Financial Assurance Cost Estimates pertaining to the engineering features of the this solid waste management facility have been examined by me and found to conform to engineering principals applicable to such facilities. In my professional judgement, the Cost Estimates are a true, correct and complete representation of the financial liabilities for closing and long-term care of the facility and comply with the requirements of Florida Administrative Code (F.A.C.), Rule 62-701.630 and all other Department of Environmental Protection rules, and statutes of the State of Florida. It is understood that the Financial Assurance Cost Estimates shall be submitted to the Department **annually**, revised or adjusted as required by Rule 62-701.630(4), F.A.C.

	Make a			
Signature of Engineer	Signature of Owner/Operator			
Craig Browne P.E., Project Engineer	Mike Kaiser, Vice President			
Name & Title (please type) Geosyntec Consultants	Name & Title (please type) Waste Services, In			
68613 12/31/09	(904) 673-0446			
Florida Registration Number (affix seal) &Date	Telephone Number			
14055 Riveredge Drive Ste 300, Tampa, FL				
Mailing Address				

(813) 558-0990 Telephone Number

V. RECALCULATE ESTIMATED CLOSING COST

For the time period in the landfill operation when the extent and manner of its operation makes closing **most expensive**.

^{**} Costs must be for a third party providing all material and labor

DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL
Proposed Monitoring Wells	(Do no	t include wells already in	existence.)	
	EA			\$0.00
2. Slope and Fill (bedding layer between	waste and	barrier layer):		
Excavation	CY			\$0.00
Placement and Spreading	CY	86,959	\$1.85	\$160,874.15
Compaction	CY			\$0.00
Off-Site Material	CY			\$0.00
Delivery	CY			\$0.00
		Subtotal S	lope and Fill:	\$160,874.15
3. Cover Material (Barrier Layer):				
Cover Protective Soil	CY	130,438	\$2.00	\$260,876.00
Synthetics - 40 mil (textured)	SY	260,876	\$2.34	\$610,449.84
Synthetics - 40 mil (smooth)	SY	0	\$0.00	\$0.00
Synthetics - Geocomposite	SY	229,416	\$3.02	\$692,836.32
Synthetics - Other	SY	-	Annual Control of the	\$0.00
		Subtotal Ba	rrier Layer Cover:	\$1,564,162.1
4. Vegetative Soil Cover:				
Off-Site Material	CY			\$0.00
Delivery	CY			\$0.00
Spread	CY	43,479	\$3.00	\$130,437.00
		Subtotal	Top Soil Cover:	\$130,437.00

^{**} Third Party Estimate / Quote must be provided for each item

DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL
5. Vegetative Layer				
Sodding	SY	260,876	\$1.75	\$456,533.00
Hydroseeding	AC			\$0.00
Fertilizer	AC			\$0.00
Mulch	AC			\$0.00
Other	SY			\$0.00
		Subtotal \	√egetative Layer:	\$456,533.00
6. Stormwater Control System:				
Earthwork	CY	19,609	\$2.00	\$39,218.00
Grading	SY			\$0.00
Piping	LF	4,070	\$29.00	\$118,030.00
Ditches	LF			\$0.00
Berms	LF			\$0.00
Control Structures	EA	70	\$850.00	\$59,500.00
Other (4-in seepage pipe)	SY	25,700	\$4.10	\$105,370.00
		Subtotal St	ormwater Controls:	\$322,118.00
7. Gas Controls: Active				
Wells	EA	51	\$9,645.39	\$491,914.89
Pipe and Fittings	LF	10,400	\$19.58	\$203,632.00
Monitoring Probes	EA			\$0.00
NSPS/Title V requirements	LS			\$0.00
		Subtotal Pa	assive Gas Control:	\$695,546.89

DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL
8. Gas Control: Active Extraction				
Traps	EA	2	\$6,500.00	\$13,000.00
Sump	EA			\$0.00
Flare Assembly	EA			\$0.00
Flame Arrestor	EA			\$0.00
Mist Eliminator	EA			\$0.00
Flow Meter	EA	-	N	\$0.00
Blowers	EA			\$0.00
Collection System	LS	<u></u>		\$0.00
Other (Gas Flare System)	LS	1	\$345,690.00	\$345,690.00
		Subtotal Acti	ive Gas Extraction:	\$358,690.00
9. Security System:				
Fencing				\$0.00
Gate(s)	LS			\$0.00
Sign(s)				\$0.00
		Subtotal S	Security System:	\$0.00
10. Engineering:				
Closure Plan report	LS			\$20,000.00
Certified Engineer	LS			\$0.00
NSPS/Title V Air Permit	LS			\$0.00
Final Survey	LS			\$64,680.00
Certification of Closure	LS			\$6,000.00
				\$0.00
		Subtotal Engineeri	 ng:	
				\$90,680.00

11. Professional Services

_	Contract N	lanagement	Quality A	ssurance		
-	Hours	LS	Hours	LS		Total
P.E. Supervisor						\$0.00
On-Site Engineer			*			\$0.00
Office Engineer						\$0.00
On-Site Technician						\$0.00
Other (explain) 3% of	<u>constructio</u> n c	ost \$113,371	7% o <u>f construct</u> ion	cost \$264,533		\$377,904.00
DESCRIPTION		UNIT	QUANTITY	UNIT COST		TOTAL
Quality Assurance Tes	sting	LS				\$0.00
			Subtotal F	Professional Serv	ices:	\$377,904.00
			Subtotal of 1-1	1 Above: _	\$4,15	66,945.20
12. Contingency		% of Total (ex	cample. enter .1 for	10%)		10%
			Closing Cost S	Subtotal: _	4,57	2,639.72
13. Site Specific Cost	s (explain)					
a. Mobiliza	tion (3% of tota	al construction cost)	_	\$113	3,371.00
b. Waste T	ire Processing	Facility		_	\$37	,700.00
<u>c. Auto Shr</u>	redder Residu	al Recycling Opera	tions	_	\$40	,000.00
				_		
				_		
<u>t</u>		_		_		<u></u>
		-	_	_		
-			Subtotal Site Spe	cific Costs:	\$19	1,071.00
			TOTAL CLOSIN	G COSTS _	\$4,72	22,141.72

VI. ANNUAL COST FOR LONG-TERM CARE

(Check Term Length)

_____5 Years _____20 Years _____ 30 Years _____ Other

See 62-701.600(1)a.1., 62-701.620(1), 62-701.630(3)a. and 62-701.730(11)b. F.A.C. for required term length. For landfills certified closed and Department accepted, enter the remaining long-term care length as "Other" and provide years remaining.

All items must b	** Costs must be for a	te / Quote must be prov third party providing al detailed explanation fo		able (N/A)
Description	Sampling Frequency (events/yr.)	Number of Wells	\$ / Well / Event	\$ / Year
. Groundwater Monitorin	g (62-701.510(6), and (8)(a))		
Monthly	12			\$0.00
Quarterly	ΝТ			\$0.00
Semi-Annual		o Kei	isions	\$0.00
Annual	1			\$0.00
		Subtotal Gr	oundwater Monitoring:	\$0.00
. Surface Water Monito	ring (62-701.510(4), and	(8)(b)		\$0.00
Monthly	12			
Quarterly	NT.	o D or	1101010	\$0.00
Semi-Annual	1N(JREV	risions	\$0.00
Annual	1			\$0.00
		Subtotal Su	rface Water Monitoring:	\$0.00
3. Gas Monitoring				
Monthly	12			\$0.00
Quarterly	n T	D		\$0.00
Semi-Annual		o Kei	visions	\$0.00
Annual	1			\$0.00
				¢0.00

Subtotal Gas Monitoring:

\$0.00

Description	Sampling Frequency (events/yr.)	Number of Locations	\$/Location/Event	\$ / Year
1. Leachate Monitoring (62-7	701.510(5), (6)(b) and	d 62-701.510(8)(c)		
Monthly	12			\$0.00
Quarterly				\$0.00
Semi-Annual	N	o Rev	visions	\$0.00
Annual	Particular participants	U ILU	A 1910119	\$0.00
Other				\$0.00
		Subtotal L	eachate Monitoring:	\$0.00
DESCRIPTION	UNIT	QUANTITY	UNIT COST	ANNUAL COST
Collection Pipes	LS			\$0.00
Maintenance				
·		-		\$0.00
Sumps, Pumps	LS			\$0.00
Lift Stations	EA			
Cleaning	LS			\$0.00
Other LS		-		\$0.00
mpoundments (Flexible Stor	age Bladder)			
Liner Rep rim	CV			\$0.00
Sludge Re		o Rev	isions	\$0.00
Aeration Systems	LN	U IKU	1310113	\$0.00
Floating Aerators	EA			\$0.00
Spray Aerators	EA			\$0.00
Disposal				
Off-site	gallon			\$0.00
(Include Transportation a	nd Disposal)			\$0.00
DEP FORM 62-701.900(28)				Page 8 of 11

6. Leachate Collection/Treatment Systems Operation

Operation		Hours	\$/Hour	Total
P.E. Supervisor	HR			\$0.00
On-Site Enginee		Ma Day	71 01 010	\$0.00
Office Engineer		No Rev	V1S10118	\$0.00
OnSite Technician	HR			\$0.00
Materials	LS	· · · · · · · · · · · · · · · · · · ·		\$0.00
Subtotal	Leachate C	ollection/Treatment System Ma	intenance & Operation:	\$0.00

7. Maintenance of Groundwater Monitoring Wells

Monitoring Well		\$0.00
Replacement	No Revisions	\$0.00
Abandonment		\$0.00

Subtotal Groundwater Monitoring Well Maintenance: \$0.00

DESCRIPTION	UNIT	QUANTITY	UNIT COST	ANNUAL COST
Gas System Maintenance				
Piping, Vents	LF			\$0.00
Blowers	EA			\$0.00
Flaring Units				\$0.00
Meters, Valves	dropped (No Re	V1S101	1S \$0.00
Compressors			10101	\$0.00
Flame Arrestors	EA			\$0.00
Total Cost for Replace	ment I S			\$0.00

9. Landscape

Mowing

Fertilizer

No Revisions

\$0.00

\$0.00

\$0.00

Subtotal Landscape Maintenance:

SubTotal Gas System:

\$0.00

UNIT **QUANTITY UNIT COST DESCRIPTION ANNUAL COST** 10. Erosion Control & Cover Maintenance \$0.00 Sodding SY \$0.00 Regrading \$0.00 Liner Repair \$0.00 CY Clay \$0.00 Subtottal Erosion Control and Cover Maintenance: 11. Storm Water Management System Maintenance Conveyance Maintena o Revisions 12. Security System Maintenance \$0.00 Fences LF No Revision \$0.00 Gate(s) Sign(s) \$0.00 Subtotal Security System: \$0.00 13. Utilities LS 14. Administrative Hours \$/Hour Total \$0.00 P.E. Supervisor HR \$0.00 On-Site Engineer \$0.00 Office Engineer \$0.00 OnSite Technician ĦК \$0.00 Other (explain) LS \$0.00 Subtotal Administrative: 10% 15. Contingency % of Total \$0.00 Subtotal Contingency: \$0.00

16. Site Specific Costs (explain)

UNIT COST

No Revisions

ANNUAL LONG-TERM CARE COST (\$/Year):

\$0.00

NUMBER OF YEARS OF LONG-TERM CARE

0.00

TOTAL LONG-TERM CARE COST (\$)

\$0.00



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Written by: Kirk Wills Date: Reviewed by: **C. Browne** December 2009 Date: Dec 2009 Omni Waste of Financial Client: Project: Project No.: FQ1672 Phase No.: 03 Osceola County, Assurance LLC

FINANCIAL ASSURANCE COST ESTIMATE FOR PHASE 1 (CELLS 1-4) AND PHASE 2 (CELLS 5 & 6): NOTES AND CALCULATIONS J.E.D. SOLID WASTE MANAGEMENT FACILITY

The information provided below presents the methods and assumptions used to estimate the cost for the items listed on the FDEP Form 62-701.900(28), *Financial Assurance Cost Estimate Form*. The unit prices for closure of the J.E.D. Solid Waste Management (JED) facility are based on the unit prices provided in the successful bids for the Phase 1 Partial Closure project completed in November 2009 and the Phase 1, Sequence 1 and 2 Gas Collection and Control System (GCCS) project completed in January 2009. Side slope areas of Phase 1, Cells 1-4 were closed in November 2009. Additionally, closure costs for the Waste Tire Storage and Processing and Auto Shredder Residual Recycling operations have been included. These operations were proposed for the facility based on a minor permit modification submitted to the FDEP on December 20, 2009. The original and closed areas for each Cell are as follows:

Cell	Original Area	Area Closed	Remaining Area to be Closed
Cell 1	18	10.2	7.8
Cell 2	12	7.2	4.8
Cell 3	12	3.7	8.3
Cell 4	11	4.0	7.0
Cell 5	11.2	0	11.2
Cell 6	12.5	0	12.5

The JED vertical expansion solid waste and environmental resource permits (ERP), and Phase 1, Sequence 1-3 GCCS construction drawings were utilized for determining the closure quantities used in this closure cost estimate. The areas shown in the table above are plan areas and have not been corrected for the three horizontal to one vertical (3H:1V) side slopes. The remaining areas to be closed for Cells 1-4 have been divided into side slope and top areas. Cells 5 and 6 have been considered to contain only 3H:1V side slopes as assumed in previously approved estimates. The corrected areas are included in the



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Written	by: Kirk Wills	Date: I	December 2009	Reviewed by:	C. Browne	Date:	Dec 2009
Client:	Omni Waste of Osceola County, LLC	Project:	Financial Assurance	Project No.:	FQ1672	Phase	e No.: 03

quantity calculations that follow. The bid documents for the construction of Phase 1 partial closure and installation of the Phase 1, Sequence 1 & 2 GCCS are included in Attachment 2-1. The section numbers noted below correspond to the item numbers on the FDEP form. Since the entire facility has not received final closure, the long term care costs have not been adjusted.

I. GENERAL INFORMATION

The financial assurance cost estimate presented on the FDEP form provides for the closure costs for the remainder of the Phase 1, Cells 1-4 areas (upper slopes and top), Cell 5, and Cell 6 of the Phase 2 development area at the JED facility.

V. RECALCULATE ESTIMATED CLOSING COST

1. Monitoring Wells

The groundwater monitoring well system for Phases 1 through 3 (Cells 1 through 10) has already been completed. Therefore, no costs have been included as part of this financial assurance revision.

2. Slope and Fill (Intermediate Cover)

On-site soils will be used for intermediate cover. The total estimated cubic yardage is 86,959 yd³ for the 1-ft thick intermediate cover layer over the waste surface. The cost per cubic yard (yd³) includes excavation, hauling, placement, spreading, grading, and compaction. The estimated cost for slope and fill material is as follows:

For Phase 1 (Cells 1-4), the top deck area covers 6.5 acres and 3H:1V side slope area of 21.4 acres. Cell 5 and Cell 6 have been considered to have only 3H:1V side slopes. To account for the additional area attributed to the 3H:1V side slopes the plan areas are multiplied by 1.05. Therefore, for Phase 1, 21.4 acres x 1.05 = 22.5 acres; for Cell 5, 11.2 acres x 1.05 = 11.8 acres; and for Cell 6, 12.5 acres x 1.05 = 13.1 acres for a total corrected area of **53.9 acres**.

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Written	by: Kirk Wills	Date:	December 2009	Reviewed by:	C. Browne	Date:	Dec 2009
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$$(53.9 \text{ acres x } 43,560 \text{ ft}^2/\text{acre x } 1 \text{ ft cover thickness}) \div 27 \text{ ft}^3/\text{ yd}^3 = 86,959 \text{ yd}^3$$

 $86,959 \text{ yd}^3 @ \$1.85/\text{ yd}^3 = \$160,874$

3. Cover Material (Barrier Layer)

The final cover system for the JED facility is comprised of (from bottom to top):

- 12 inch intermediate cover soil layer (Item No.2 above)
- 40-mil PE textured geomembrane;
- geocomposite drainage layer (on 3H:1V side slopes only);
- 18 inch cover protective soil layer; and
- 6 inch vegetative soil layer (Item No. 4 below)

Cover protective soil will consist of material obtained from on-site. Cost for cover protective soil includes excavation, hauling, placement, spreading, grading, and compaction. Cost for geosynthetics includes material and installation costs.

The estimated quantities are:

- 40-mil PE textured geomembrane:
 53.9 acres x 43,560 ft²/acre ÷ 9 ft²/yd² = 260,876 yd²
 260,876 yd² 40-mil PE textured geomembrane @ \$2.34/yd²= \$ 610,450
- geocomposite drainage layer (on 3H:1V side slopes only): 53.9 acres -6.5 acres (top of Phase 1) = 47.4 acres 47.4 acres x 43,560 ft²/acre \div 9 ft²/yd² = 229,416 yd² 229,416 yd² geocomposite drainage layer @ \$3.02/yd²= \$692,836
- 18 inch cover protective soil layer: $(53.9 \text{ acres x } 43,560 \text{ ft}^2/\text{acre x } 1.5 \text{ ft cover thickness}) \div 27 \text{ ft}^3/\text{ yd}^3 = 130,438 \text{ yd}^3 = 130,438 \text{ yd}^3 \text{ cover soils } @ \$2.00/\text{ yd}^3 = \$ 260,876$

The total cost for final cover materials (excluding the intermediate and vegetative soil layers) is \$1,564,162.



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4. Vegetative Soil Layer

The vegetative soil layer consists of a 6 inch layer over the cover protective soil. The estimated cubic yardage is 43,479 yd³. The vegetative soil will consist of material obtained from on-site sources. The cost per cubic yard includes hauling, placing, spreading, and grading. The estimated cost for the vegetative soil layer is as follows:

(53.9 acres x 43,560 ft²/acre x 0.5 ft cover thickness)
$$\div$$
 27 ft³/ yd³ = 43,479 yd³ (43,479 yd³ (20) \$3.00/ yd³ = \$130,437

5. Vegetative Layer

The final cover area will be sodded. Sodding costs include all labor and materials.

53.9 acres x 43,560 ft²/acre
$$\div$$
 9 ft²/yd² = 260,876 yd² 260,876 yd² Bahia sod @ \$1.75/yd² = \$456,533

6. Storm Water Control System

Most of the perimeter site storm water control system components (i.e., concrete storm water structures, discharge pipes to dry retention areas, and perimeter road swale inlet pipes) were installed as part of the landfill (Cell) construction, and therefore, have not been included as part of this closure construction estimate. Storm water control components that will be installed during closure consist of side slope drainage swales, inlet structures on the side slope swales, cover drainage piping, and HDPE corrugated down chute pipes. The earthwork estimate includes excavation, hauling, placement, spreading, grading, and compaction of additional soils required on the drainage benches for sloping and over the down chute piping.

Based on the JED Vertical Expansion Permit drawings (Sheet 37 of 40), approximately 4,070 linear feet of 18-inch down chute pipes, 25,700 linear feet of 4-in cover drainage pipe, and seventy (70) inlet structures will be installed to convey the storm water from the proposed side slope swales to the dry retention area located at the toe of the landfill

Geosyntec consultants

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perimeter berm. These quantities exclude the quantities installed during the Phase 1, Cell 1-4 partial closure construction completed in November 2009.

The total cost for the storm water control system is estimated to be \$322,118 as indicated below.

- Earthwork: Additional soil to construct drainage swales = 20.6 ft² per linear foot of swale. 20.6 ft² x 25,700 ft = 529,420 ft³ \div 27 ft³/yd³ = 19,609 yd³ 19,609 yd³ @ \$2.00/ yd³ = \$39,218
- Piping (material and installation):
 - 1. 4,070 ft of 18-inch HDPE corrugated pipe @ \$29/ft = \$118,030
 - 2. 25,700 ft of 4-inch HDPE corrugated pipe @ 4.10/ft = \$105,370
- Drainage inlet structures: 70 @ \$850 each = \$59,500

7. Gas Controls: Active

The JED facility has an active gas collection and control system (GCCS) within the Phase 1 development area (i.e., Cells 1-4), which will be expanded upon with the closure of subsequent cells. The costs associated with the installation of gas controls were calculated utilizing the proposed GCCS design as provided in the vertical expansion permit application for the JED facility (sheet 29 of 40) and the Phase 1, Sequence 1 and 2 GCCS Construction Drawings. Costs include materials and installation.

Gas Wells (drilling, perforated pipe section, solid pipe section, and well head): [Drilling @ \$27/ft, perforated pipe section @ \$51.50/ft, solid pipe section @\$34/ft, and well heads @ \$1,200 each] Well depths shown are typical.

- 10 35-ft gas well @ \$3,449/gas well = \$34,490
- 10 75-ft gas well @ \$6,659/gas well = \$66,590
- 19 135-ft gas well @ \$11,605/gas well = \$220,495
- 12 170-ft gas well @ \$14,195/gas well = **\$170,340**

To calculate an average cost per gas well for the FDEP form, the total well costs above have been divided by the proposed number of gas wells:

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Written by: Kirk Wills Date: December 2009 Reviewed by: C. Browne Date: Dec 2009 Omni Waste of Financial Project: Client: Osceola County, Project No.: FO1672 Phase No.: 03 Assurance LLC

$$(\$34,490 + \$66,590 + \$220,495 + \$170,340) = \$491,915 \div (10 + 10 + 19 + 12) =$$

\$9,645.39 per well x 51 gas wells = \$491,914.89

Lateral Piping (6-inch SDR-17 HDPE Pipe):

• 9,370 ft @ \$18/ft = \$168,660

Header piping (12-inch SDR-17 HDPE Pipe):

• 1,030 ft @ \$34/ft = \$35,020

To calculate the cost per linear foot of gas system piping, the total pipe cost has been divided by the total estimated linear footage of pipe:

$$(\$168,660 + \$35,020) = \$203,680 \div (9,370 + 1,030)$$
 ft = $\$19.58$ /ft

$$19.58$$
/ft x $10,400$ ft = $203,632$

Note that the cost per linear foot of pipe includes fittings.

Perimeter gas monitoring probes have been installed for Phases 1 through 3 (i.e., Cells 1-10) therefore, no costs have been included in this closure cost estimate.

The total cost for active gas controls is \$695,546.89.

8. Gas Control: Active Extraction

Based on the proposed GCCS design, two gas flare stations will be installed as part of the GCCS for Phases 1 through 3. One gas flare station was already installed as part of the Phase 1, Sequence 1 and 2 GCCS installation (for Cells 1 through 4). One additional gas flare station will be installed for the closure of Phases 2 and 3 (Cells 5-10). The cost for the gas flare station is \$221,690 plus an additional \$124,000 for site work, installation, electrical, condensate management, and misc. installation costs for a total of \$345,690. Phases 2 through 3 consist of six landfill cells (i.e., Cells 5 through 10). Because the additional gas flare station must be installed regardless of the number of cells constructed in Phases 2 and 3 at the time of closure, the entire amount was included in the estimate and equals \$345,690.



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In addition, two condensate traps will be installed as part of the GCCS system within the footprint of Cells 5 and 6. The cost per condensate trap is $$6,500 \times 2 = $13,000$.

The total cost for active gas extraction control is \$358,690.

9. Security System

The perimeter fencing and gates were installed as part of the Phase 1 construction and therefore have not been included as part of this closure cost estimate.

10. Engineering

Costs for each item of engineering services associated with closure of the remaining Phase 1 area, and Cells 5 and 6 are based on the costs associated with the partial closure of Phase 1. Where applicable, the costs are split based on the acreage to estimate the costs for the closure of the remaining Phase 1 area and Cells 5 and 6 (53.3 acres). As an example – the survey cost for the partial closure of Phase 1 was based on the closure area of approximately 25-acres: 30,000 / 25 acres = 1,200/acre

- Closure Permit Plan and Report (includes Construction Drawings and Technical Specifications): \$20,000
- Final Survey: \$1,200/acre x 53.9 acres = \$64,680
- Certification Report (prepared and certified by Florida registered professional engineer): \$6,000

Total cost for Engineering is \$90,680.

11. Professional Services

It has been assumed that 3% of construction cost will be needed for contract/construction management, which corresponds to $0.03 \times \$3,779,041 = \$113,371$.



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It has also been assumed that 7% of construction cost will be needed for construction quality assurance, which corresponds to $0.07 \times 3,779,041 = \$264,533$. This amount includes quality assurance testing.

Total cost for Professional Services is \$377,904.

12. Contingency

A contingency of 10% of the closure cost has been assumed: $0.10 \times 4,156,945 = 415,695$

13. Site Specific Costs

a. Mobilization

Contractor mobilization has been assumed to be 3% of the closure cost, excluding the costs for professional services, which corresponds to $0.03 \times 3,779,041 = 113,371$.

b. Waste Tire Storage and Processing Facility

Based on the permit modification application for the Waste Tire Storage and Processing Facility, the maximum number or volume of whole passenger tires, processed tires, and residuals that can be stored at the storage and processing areas are 41,760 whole tires (469 tons), 469 tons of processed tires, and 10 tons of residuals.

Quoted costs to transport and recycle whole tires is provided by RMD Americas of Florida, LLC has been included in Attachment 2-2. Loading of whole tires into RMD's trucks will be completed by ERC General Contracting Services, Inc. based on the estimated costs also provided in Attachment 2-2.

Cost for off-site transport and disposal of the 469 tons of whole tires is \$23,450 (\$50.00/ton).

ERC provided costs for: i) loading whole tires (469 tons) onto tractor trailers for off-site disposal; and ii) loading the processed tire chips (469) on off-road trucks and hauling to the active disposal area. The costs associated with the two scenarios listed above are \$4,250



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and \$6,500, respectively. In addition, a \$3,500 cost has been included for final clean-up of the waste tire storage area, which includes removal of the 10 tons of residuals, soil base material, regrading of area to natural grade, and seeding of the area.

The total cost for closure of the waste tire storage area as described above is \$37,700.

c. Auto Shredder Residual Recycling Operations

Auto shredder residual (ASR) recycling operations will be performed within the lined active disposal area. At closure, any remaining residual auto shredder material will be incorporated into the active disposal area. Resource Reclamation Company/RMG Holdings, LLC (subcontracted operator of the ASR recycling operations) has provided a cost estimate of \$40,000 to dismantle and remove all processing equipment from the Facility. A copy of the cost estimate provided by RMG Holdings, LLC. is provided in Attachment 2-3.

Total Closure Costs for the remaining areas of Phase 1, Cell 5, and Cell 6, as described above, is \$4,722,142.

ATTACHMENT 2-1

BID DOCUMENTS FOR THE PHASE 1 PARTIAL CLOSURE CONSTRUCTION AND PHASE 1, SEQUENEC 1 AND 2 GCCS CONSTRUCTION

2.4 BID WORKSHEET:

JED Solid Waste Management Facility (J.E.D. Landfill) Partial Closure Construction Cells 1 - 4

Revised February 11, 2009

Item	Description	Unit	Quantity	Unit Price	Sub-Total
1	Mobilization and Demobilization (not to exceed 5% of total bid) (See Note 1)	LS	1	\$35,000.00	\$35,000
2	Offloading and Staging Geosynthetic Liner Materials	LS	1	\$2,500.00	\$2,500
3	Surveying & As-builts (See Note 2)	LS	1	\$30,000.00	\$30,000
4	Borrow Area Development and Management (See Note 3)	LS	1	\$50,000.00	\$50,000
5	Silt Fencing at Borrow Area	LF	3,000	\$0.65	\$1,950
6	NOI, SWPPP, Sediment and Erosion Controls (BMP's)	LS	1	\$3,500.00	\$3,500
7	Expose Existing Base Liner at Anchor Trench	LF	4,430	\$0.65	\$2,880
8	Disconnect Existing Odor Flares at Leachate Cleanout Risers (See Note 4)	EA	14	\$150,00	\$2,100
9	Placement of Earthfill and Regrading to Meet Design Waste Grades (See Note 5)	CY	85,000	\$1.85	\$157,250
10	Placement and Grading of Intermediate Cover Layer (See Note 6)	CY	41,200	\$1.85	\$76,220
11	Excavation and Backfilling of Anchor Trenches	LF	4,000	\$1.20	\$4,800
12	Placement and Grading of Cap Protective Layer (See Note 6)	CY	68,750	\$2.00	\$137,500
13	18" Dia. Stormwater Piping (See Note 7)	LF	3,045	\$29.00	\$88,305
14	18" Dia. Stormwater Inlet Structures at Benches (See Note 8)	EA	40	\$850.00	\$34,000
15	18" Dia. Stormwater Inlet Structures (Top Area Outside Closure Limits) (See Note 9)	EA	10	\$730,00	\$7,300
16	Supply of Recycled Concrete Rip-Rap	TN	50	\$63.00	\$3,150
17	4-inch Diamater Seepage Header Pipe (solid and perforated)	LF	11,750	\$1,10	\$12,925
18	Placement and Grading of Soil Vegetation Layer	CY	21,750	\$3.00	\$65,250
19	Vegetation Layer Soil Amendments	AC	27	\$1,000.00	\$27,000
20	Sodding	SY	130,750	\$1.75	\$228,813
21	Waste/Closure Limit Markers	EA	· 20	\$37.00	\$740
22	Flushing of Existing Stormwater Control Structures and Outfall Piping (See Note 10)	EA	10	\$185.00	\$1,850
					\$0
					\$0
				Total Bid	\$973,032

See Notes Below and Scope of Work - Section I of Contract Agreement:

- Note 1 One half of total cost will be paid upon mobilization and one half upon demobilization.
- Note 2 Six (6) signed and sealed hard copies and one each (pdf and CADD file) of all as-built drawings must be provided to Owner at completion of project.
- Note 3 Borrow Area Development and Management (Item 3) shall be in accordance with SFWMD permits and RHPA drawings dated October 2004.
- This item also includes any necessary survey, clearing, grubbing, dewatering, grading and restoration activities for the borrow area and haul road.
- Vegetation cleared at the borrow area shall be stockpiled south of the Cell 5 area in a location approved by the Owner.

 Note 4 Payment includes disconnecting, storing and reconnecting odor flares at leachate cleanouts riser pipes.
- Note 5 Includes haul and placement of clean fill soil to achieve waste grade elevations (account for existing waste underfill). Regrading of overfill soils shall be included in the unit rate.
- Note 6 Unit rate and payment will be based on in-place compacted volumes based on design grades: No additional payment will be made for overfilling and tolerance allowance.
- Note 7 Unit rate shall include miscellaneous fittings (elbows, bends, bands and ties, gaskets etc.) required to complete the stormwater piping. Pay item does not include Y-fittings at the bench locations.
- Note 8 Includes all costs for Y-fittings, pipe extensions, bar screens and concrete to complete the stormwater inlet structures at the bench locations.
- Note 9 Includes mitered end fittings, filter fabric and placement of recycled concrete rip-rap.
- Note 10 Includes flushing of sediments in existing stormwater structures and outfall piping at perimeter road/disposal area limits.

BID WORKSHEET

J.E.D. Solid Waste Management Facility

Phase 1 - Gas Collection and Control System Revised May 9, 2008 - Mike Kaiser

Item/Description	Unit	Quantity	Unit Cost	Subtotal Cost
General				
Mobilization/Demobilization	LS	1	5% of Total	\$ 19,500.00
Erosion and Sediment Control	LS	1	\$ 7,760.00	\$ 7,760.00
Survey	LS	1	\$ 11,300.00	\$ 11,300.00
HDRE Header and Lateral Piping				
6" SDR-17 Lateral Pipe	LF	2800	\$ 18.00	\$ 50,400.00
8" SDR-17 LateralPipe	LF	200	\$ 24.00	\$ 4,800.00
12" SDR-17 Pipe, Header	LF	350	\$ 34.00	\$ 11,900.00
14" SDR-17 Pipe, Header	LF	310	\$ 41.00	\$ 12,710.00
18" SDR-17 Pipe, Header	LF	1650	\$ 59.00	\$ 97,350.00
20" SDR-17 Pipe, Header	LF	310	\$ 79.00	\$ 24,490.00
24" SDR-17 Pipe, Header	LF	100	\$ 160.00	\$ 16,000.00
Valves and Other Components				
Fittings	LS	1	\$ 15,000.00	\$ 15,000.00
Header Access Riser (Header High Points)	EA	1	\$ 1,000.00	\$ 1,000.00
14" Isolation Butterfly Valve	EA	1	\$ 8,200.00	\$ 8,200.00
18" Isolation Butterfly Valve	EA	1	\$ 16,000.00	\$ 16,000.00
20" Isolation Butterfly Valve	EA	1	\$ 19,000.00	\$ 19,000.00
Gas Extraction Wells				
Gas Well Head Assemply	EA	29	\$ 1,200.00	\$ 34,800.00
8" Sch 80 PVC Perforated Gas Extraction Well Section	LF	1410	\$ 51.50	\$ 72,615.00
8" Sch 80 PVC Solid Gas Extraction Well Section	LF	587	\$ 34.00	\$ 19,958.00
Vertical Well Drilling (36-inch diameter)	LF	1910	\$ 27.00	\$ 51,570.00
Condensate Collection & Management		45/2016/14/2014		
Condensate Drains at Leachate Cleanouts	EA	3	\$ 6,500.00	\$ 19,500.00
HDPE 36" Dia, Knockout Pot at Flare Station	EA	1	\$ 15,000.00	\$ 15,000.00
Condensate Management System at Flare Station	LS	. 1	\$ 18,000.00	\$ 18,000.00
Gas Flare Station				
Flare Station Pad (Excavation, Fill and Grading)	LS	1	\$ 13,000.00	\$ 13,000.00
Gas Flare Station Receiving & Installation	LS	1	\$ 10,900.00	\$ 10,900.00
Electrical	LS	1	\$ 23,000.00	\$ 23,000.00
8' Tall Chain Link Fencing	LF	160	\$ 29.00	\$ 4,640.00
4' Wide Man Gate	EA	- 1	\$ 520.00	\$ 520.00
Sodding	SF	1000	\$ 2.00	\$ 2,000.00
12" Thick 3/4" Gravel with Geofabric	SF	1250	\$ 3.50	\$ 4,375.00
Retaining Wall and Footing (8' H x 8" W)	LF	80	\$ 350.00	\$ 28,000.00
Start-up Support	LŚ	1	\$ 4,690.00	\$ 4,690.00
TOTAL CONSTRUCTION COSTS				\$ 637,978.00

Notes

1. Mobilization and demobilization shall not exceed 5% of total.

Sales Agreement No. 030802R2

This Agreement covers the purchase of a landfill methane flare system with control rack and related peripheral equipment from LFG Specialties (LFG) by Purchaser.

Bill-to Address	(please fill in)	Ship-to Address (please fill in)
J.E.D Solid Was	te Management Facility	Same as billing address
1501 Omni Way		
St. Cloud, Floric	la 34773	
Attention: Mik	e Kaiser	Attention:
Phone: (90-	4) 673-0446	Phone:
Fax: <u>(40</u>	7) 891-3730	Fax:
and the Terms a goods and servi-	and Conditions of Sales, constitu	ment herein, which include the Equipment Specification te the entire understanding of the parties relating to the sequent modifications to this Agreement shall not be y LFG Specialties.
TOTAL EQUIPM	MENT COST:	\$205,930.00
START-UP AND	TRAINING ASSISTANCE:	\$4,690.00
ESTIMATED SH	HIPPING & HANDLING:	\$9,500.00
OPTIONS SELE	<u>CTED</u>	
Ten foot stack	extension (to-be-confirmed)	\$ 1,570.00
PARTICULAR DE L'ANNO		\$
		\$
TOTAL ESTIMA	ATED CONTRACT VALUE:	\$ 221,690
IN WITNESS W authorized repre	HEREOF, the parties have causesentatives as of the month, day	sed this Agreement to be executed by their duly and year set forth below.
LFG SPECIALT	<u>TES</u>	PURCHASER
NAMES TO THE PARTY OF THE PARTY		SIGN: Jan. McCon
		NAME: R. Shawn McCash
		TITLE: Sr. Vice President
	and the second s	DATE: 4/11/08
		P.O.#: NA – Reference JED Flare 2008

2.4 BID WORKSHEET:

JED Solid Waste Management Facility- Geosynthetics for Partial Closure Cells 1-4

M/P Item	Description	Unit	Bid Estimate Install Quantity	Comanco		Bid Estimate Material Supply Quantity	Agru	
1	Mobilization and Demobilization	LS	1	\$5,000	\$5,000			
2	Tie-In to Existing 60-mil Liner at Base Anchor T	LF	4,000	4.25	\$17,000			
3	40-mil Textured Geomembrane	SF	1,120,000	\$0.095	\$106,400	1,250,000	0.1664	\$208,000
4	Geocomposite	SF	1,120,000	\$0.090	\$100,800	1,250,000	0.2460	\$307,500
5	Seepage Header Piping Wrap	LF	11,750	\$3	\$30,550			
6	8" Diameter Leachate Riser Pipe Boots	EA	15	\$225	\$3,375	15		
7	8" Diameter Gas Well Boots	EA	43	\$225	\$9,675	43		
8	6" Diameter Lateral Boots	EA	43	\$225	\$9,675	43		
9	4" Diamater Header Riser Access Pipe Boots	EA	10	\$225	\$2,250	10		
	Estimated Delivery							\$37,500

284,725

\$553,000

WSI Notes:

- 1. Install and material supply quantities are provided for bid estimate purposes. Install pay quantities will be based on actual square footage verified by 3rd party survey (including anchor trench). Material supply quantities shall be based on Installers take-off estimate, approved by Owner. Supply quantities shall include waste, slope, anchor trench, overlap, and any other adjustment factors necessary to supply all material to complete the work.
- 2. Earthwork Contractor will offload and stage geosynthetics materials delivered to the site. Material Supplier will furnish strappings on the rolls for offloading.
- 3. Installation quotes will be evaluated on cost and time to complete the work both are important. Please indicate how many crews can be placed on the project and estimated time.
- 4. Material Supply Unit Price INCLUDES FREIGHT and is a DELIVERED TO FACILITY price. The JED Facility is exempt from sales tax.
- 5. Material specifications are attached. Material Unit Price includes all MQC testing as required by the specifications.
- 6. Earthwork Contractor will supply and place the seepage header pipe. Geomembrane installer shall cut, wrap and sew the geocomposite around the pipe.

Bidder Notes:

ATTACHMENT 2-2 CLOSURE COST ESTIMATE FOR WASTE TIRE PROCESSING FACILITY



ERC GENERAL CONTRACTING SERVICES, INC.

Carter CommerCenter • 890 Carter Road, Suite 170 Winter Garden, Florida 34787 (407) 656-3900 • Fax (407) 656-2128

December 14, 2009

Mr. Kirk Wills Geosyntec Consultants 14055 Riveredge Drive, Suite 300 Tampa, FL 33637

Re: JED Landfill

Closure of Waste Tire Storage Area

Estimated Costs 1501 Omni Way St. Cloud, FL 34773

Dear Mr. Wills:

I have reviewed the information you provided for the JED Landfill regarding closure of the waste tire storage area. Below are estimated costs to perform the work requested:

- 1. Load approximately 41,760 (469 tons) passenger tires into semi-tractor trailers for transport to a recycling facility. Costs if for loading only using rubber tire loader or other equipment. **Estimate \$4,250**
- 2. Load approximately 469 tons processed tires onto heavy haul trucks and transport to active disposal area. ERC will provide all equipment. **Estimate \$6500**
- 3. Remove soil and base material at storage area and regrade to natural grades. General cleanup and reseeding. **Estimated \$3500**

Total estimated costs - \$14,250

If there is anything else that you need, please give me a call.

Sincerely,

Jerry Pinder ERC General Contracting Services, Inc.

RMD Americas of Florida, LLC. 270 Barnes Blvd.

Rockledge, FL 32955 Phone: 321-636-3532 Fax: 321-631-9218



AMERICAS

Recycling: Copper, aluminium, plastic and rubbar Engineering and Equipment: Recycling and waste-to-energy turnkey plants Thermolysis Process: Integral recovery of scrap tires

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ATTACHMENT 2-3

COST ESTIMATE FOR CLOSURE ACTIVITIES ASSOCIATED WITH THE AUTO SHREDDER RESIDUAL RECYCLING OPERATIONS

RMG Holdings, LLC 6111 Cochran Rd., Solon, OH 44139

Phone: 440-519-1768; Fax: 440-519-1769

Mr. Kirk Wills Principal Engineer Geosyntec Consultants 14055 Riveredge Drive, Suite 300 Tampa, Florida 33637

December 1, 2009

RE: Closure Cost Estimate – Auto Shredder Residue (ASR) Recycling Plant

Dear Mr. Wills,

Please be advised that upon closure of the JED Solid Waste Management Facility or upon discontinued operation of the RMG Holdings, LLC ASR Recycling Plant, the total cost for RMG Holdings, LLC to dismantle and remove the equipment from the JED Landfill facility is \$40,000.00.

Should you have additional questions, please contact me at 440-287-7216, by e-mail at dennisstropko@reserve-group.com, or by mail at the above address.

Sincerely

Dénnis V. Stropko

Safety and Environmental Manager, Reserve Management Group

CC: Mike Kaiser, JED Landfill

> Steve Joseph, Reserve Management Group Scott Joseph, Reserve Management Group Saba Salloum, Reserve Management Group