## SECTION S

# FINANCIAL RESPONSIBILITY REQUIREMENTS

#### S.1 CLOSURE COST ESTIMATE

Estimates of the probable cost of closure and long term care were presented in Section S in the County's July 11, 2008 application to construct an expansion to the Class III cell. This cost estimate was approved by the FDEP on January 21, 2009 when the FDEP issued a permit to construct the expansion to the Class II cell. A copy of this estimate is included in Attachment S-1.

The County intends to complete the required closure activities as portions of the facility reach final grade. At the time of closure, required activities would include a small area of final cover, the final survey, and certification of closure construction. If the site were to be closed prior to reaching final grade, additional grading and soil cover would be required. Attachment S-1 presents the estimate of probable closure cost based on an outside contractor being brought in to complete the required closure. The estimate assumes that sufficient cover soil and topsoil is available on-site, and that the County will have this material stockpiled for use by the closure contractor.

### S.2 ANNUAL COST ADJUSTMENTS

The County updates the Closure and Long-term Care Cost Estimates as required by Rule 62-701.630(4), F.A.C., and certified copies are submitted to FDEP on an annual basis for review and approval in accordance with regulatory requirements.

# S.3 PROOF OF FINANCIAL RESPONSIBILITY FUNDING MECHANISMS

A description of the County's proof of financial responsibility is included in Attachment S-1.

# ATTACHMENT S-1 FINANCIAL ASSURANCE

DEP Form# 62-701.900(28)

Form Title Financial Assurance Cost Estimate Form

Effective Date

05-27-01

DEP Application No

( Filled by DEP)



# Florida Department of Environmental Protection

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

### FINANCIAL ASSURANCE COST ESTIMATE FORM

Date: June 2	23, 2009		Date of FDEP	Approval:			
I. GENERAL INFORMA	ATION:						
Facility Name: Tomoka	Farms Road Class III	Landfill	WACS or	GMSID #.:			
Permit / Application No.:			-		August 25, 2	2009	_
-	1990 Tomoka Farms	Road, D	-				
Permittee: Volusia C							
	3151 East New York	Avenue,	DeLand, Florida 3	32724			
Latitude: 29° 07' 53"	Longitude	81°0	5' 31"	or	UTM:		
Solid Waste Disposal U	Inits Included in Esti	mate:					
		- 1	Date Unit				
			Began		Design Life o		
Dh / O - II	A	,	Accepting		From Date of Initial		
Phase / Cell Class III	Acres		Waste	_	Receipt of Waste		
Class III	81.4 existing		1998	_	18		
	8 expansion			_			
				_			
<del></del>				_			
			_	_			
				_			
Total Landfill Acreage in	cluded in this estimate	 e.	89.4	- Closure	8	39.4	Long-Term Care
-				_			
Type of Landfill:	Class	I	X	_Class III	_		C&D Debris
II. TYPE OF FINANCIA	L ASSURANCE DOC	UMENT	(Check Type)				
Letter of Cree	dit *		Insurance Certific	cate			dicates
Performance	Bond *	X	_Escrow Account		r	require	nisms that e use of a
Guaranty Bo	nd *		_Financial Test		Sta	-	Trust Fund eement

III. ESTIMATE ADJUSTMENT	
	e 62-701.630, Florida Administrative Code sets forth the method of annual by using an inflation factor or by recalculating the maximum costs of closure adjustment below.
(a) Inflation Factor Adjustment	
changes have occurred in the facility operation which would from the most recent Implicit Price Deflator for Gross Nation	de when a Department approved closure cost estimate exists and no necessitate modification to the closure plan. The inflation factor is derived al Product published by the U.S. Department of Commerce in its survey of g the latest published annual Deflator by the Deflator for the previous year. See Financial Coordinator at (850)-488-0300.
This adjustment is based on the Department ap	proved closure cost estimate dated:
Latest Department Approved Closure Cost Estimate: Closure Cost Estimate: Current Year Inflation Factor	Inflation Adjusted Closure Cost Estimate:
This adjustment is based on the Department approved	long-term care cost estimate dated:
Latest Department Approved Annual Long-Term Care Cost Estimate: Current Year Inflation Factor	Inflation Adjusted Annual Long-Term Care Cost Estimate =
Number of Years of Long Term Care Remain  Inflation Adjusted Long-Term Care Cos	
(b) Recalculate Estimates (see section V)  IV. CERTIFICATION BY ENGINEER  This is to certify that the Financial Assurance Cost Estimate.	s pertaining to the engineering features of the this solid waste management
facility have been examined by me and found to conform to judgement, the cost Estimates are a ture, correct and complete facility and comply with the requirements of Florida Adm	engineering principals applicable to such facilities. In my professional lete representation of the financial liabilities for closing and long-term care of inistrative Code (F.A.C.), Rule 62-701.630 and all other Department of Florida. It is understood that the Financial Assurance Cost Estimates shall
Signature of the street	Signature of Owner/Operator
Lee A. Powell, P.E. Name & Title (please type)	Leonard Marion, Solid Waste Director  Name & Title (please type)
FL # 35992 Florida Registration Number (affix seal)	(386) 943-7889 Telephone Number
SCS Engineers 501 North Grandview Ave., Suite 400 Daytona Beach, FL 32118 Mailing Address	
(386) 238-7770 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.

\*\* Third Party Estimate / Quote must be provided for each item
\*\* Costs must be for a third party providing all material and labor

DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL
1. Proposed Monitoring Wells	(Do no	ot include wells alre	eady in existence.)	
2. Slope and Fill (bedding layer between	een waste and	barrier layer): (1	2")	
Excavation	CY			
Placement and Spreading	CY	40,000	3.00	\$120,000
Compaction	CY			
Off Site Material	CY			\$0
Delivery	CY	40000	1.50	\$60,000
			Subtotal Slope and Fill:	\$180,000
3. Cover Material (Barrier Layer):				
Off-Site Clay	CY			
Synthetics - 40 mil	SY	433,000	5.40	\$2,338,200
Synthetics - GCL	SY			
Synthetics - Geonet	SY	433,000	4.00	\$1,732,000
Synthetics - Other	SY			
		Su	btotal Barrier Layer Cover:	\$4,070,000
4. Top Soil Cover: (24" protective	e soil)			
Off-Site Material	CY	0	0.000	\$0
Delivery	CY	289,000	1.500	\$433,500
Spread	CY	289,000	3.000	\$867,000
			Subtotal Top Soil Cover _	\$1,301,000

DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL
5. Vegetative Layer				
Sodding	SY	433,000	1.60	\$692,800
Hydroseeding	AC			
Fertilizer	AC			
Mulch	AC			
Other	SY			
			Subtotal Vegetative Layer:	\$693,000
6. Stormwater Control System:				
Earthwork	CY		<u> </u>	
Grading	SY			
Piping	LF	19,000.00	27.00	
Ditches	LF	•		
Berms	LF			
Terrace Structures	LS	162.00	1,500.00	\$243,000
Discharge Structures	EA	39	1,500.00	\$58,500
			Subtotal Stormwater Controls:	\$302,000
7. Gas Controls: Passive				
Wells	EA	42	7,000	\$294,000
Pipe and Fittings	LF			
Monitoring Probes	EA			
NSPS/Title V requirements	LS			
			Subtotal Passive Gas Control:	\$294,000

DESCRIPTION	UNIT	QUANTITY	UNIT COST	TOTAL
8. Gas Control: Active Extraction				
Traps	EA	0.00		\$0
Sump	EA	0.00		\$0
Flare Assembly	EA	0.00		\$0
Flame Arrestor	EA	0.00		\$0
Mist Eliminator	EA	0.00		\$0
Flow Meter	EA	0.00		\$0
Blowers	EA	0.00		\$0
Collection System	LF	0.00		\$0
Other (describe)		0.00		\$0
		Subtota	I Active Gas Extraction: _	\$0
9. Security System				
Fencing	LF	0.00	0.00	\$0
Gate(s)	EA	0.00	0.00	\$0
Sign(s)	EA	0.00	0.00	\$0
		Su	btotal Security System: _	\$0
10. Engineering:				
Closure Plan report	LS	1.00	60,000	\$60,000
Certified Engineer	LS			
NSPS/Title V Air Permit	LS			
Final Survey	LS	1.00	12,000	\$12,000
Certification of Closure	LS	1.00	20,000	\$20,000
Other (detail)				
			Subtotal Engineering: _	\$92,000

		Management		ssurance	TOTAL
_	Hours	UNIT COST	Hours	UNIT COST	TOTAL
P.E. Supervisor	60	140			\$8,400
On-Site Engineer _					
Office Engineer _	180	110			\$19,800
On-Site Technician _			1,000	90	\$90,000
Other (Explain)					
Reimbursables _		2,000		10,000	\$12,000
ESCRIPTION		UNIT	QUANTITY	UNIT COST	TOTAL
Quality Assurance Te	esting	LS	1	20,000	\$20,000
			Subtotal P	rofessional Service	s: <u>\$150,00</u>
			Cubinial at	5 1 1 1 Abava.	<b>#7</b> 092 000
			Subtotal of	f 1-11 Above:	\$7,082,000
2. Contingency		% of Total			5.00%
			Closing C	ost Subtotal:	\$7,436,100
3. Site Specific Costs (e	explain)				
, ,	. ,				

TOTAL CLOSING COSTS: \$7,436,100

VI. ANNUAL COST FOR I	LONG-TERM CARE	(Chec	k Term	Length)		
	5 years	_ 20 years	X_	_ 30 years	Oth	ner
See 62-701.600(1)a.1., 62-7 andfills certified closed and years remaining.						
	hird Party Estimate a					
All items must b	e addressed. Attach	n a detailed ex	planatio	on for all ite	ems marked no	t applicable (N/A
DESCRIPTION	Sampling Frequency (events/yr.)		nber of /ells	\$/	Well/Event	\$ / Year
Groundwater Monitoring	(62-701.510(6), and	(8)(a))	Includ	ded with CI	ass I Cell Oper	ation and Closu
Monthly (Gradient)	12					
Quarterly	4		0		0	\$0
Semi-Annual	2		0		0	\$0
Annual	1					
		Subto	tal Gro	undwater N	Monitoring:	\$0
2. Surface Water Monitorin	ng (62-701.510(4), an	d (8)(b))	Includ	ded with Cl	ass I Cell Oper	ation and Closu
Monthly	12					
Quarterly	4					
Semi-Annual	2		0		0	\$0
Annual	1			_	<del> </del>	
		Subtota	al Surfa	ce Water I	Monitoring:	\$0

Monthly 12 Quarterly 0 \$0 4 0 Semi-Annual 2 0.00 0.00 \$0 Annual 0.00 1 0.00 \$0

> Subtotal Gas Monitoring: \$0

Included with Class I Cell Operation and Closure

3. Gas Monitoring

DESCRIPTION	Sampling Frequency (events/yr.)	Number of Wells	\$/Well/Event	\$ / Year
4. Leachate Monitoring (62	2-701.510(5), (6)(b) and 6	62-701.510(8)(c))		
Monthly	12			
Quarterly	4			
Semi-Annual	2			
Annual	1	0	0	\$0
Other				
		Subtotal Ground	water Monitoring:	\$0
DESCRIPTION	UNIT	QUANTITY	UNIT COST	ANNUAL COS
Collection Pipes	LF	0.00	0.00	\$0
<ol><li>Leachate Collection/Tre Maintenance</li></ol>	,			
Sumps, Traps	EA	0.00	0.00	\$0
Lift Stations	EA	0	0	\$0
Cleaning	LS			
Tanks	EA			
Impoundments				
Liner Repair	LS			
Sludge Removal	CY			
Aeration Systems	CY			
Floating Aerators	EA			
Spray Aerators	EA			
Disposal				
Off-site (Include Transportation and	1000 gallon d Disposal)	0	0	\$0 \$0

6. Leachate Collection/Treatmen	nt Systems Opera	tion				
Operation		Hours	\$/Hour	Total		
P.E. Supervisor	HR					
On-Site Engineer	HR					
Office Engineer	HR	0	0	\$0.00		
On-site Technician	HR	0	0	\$0.00		
Transducers	LS	0	0	\$0.00		
Subtotal Leac	hate Collection/Tr	eatment System Maintenar	nce & Operation:	\$0.00		
7. Maintenance of Groundwater	Monitoring Wells					
Monitoring Wells	EA	0	0	<u> </u>		
Replacement	EA	0	0	<u>\$0</u>		
Abandonment	EA					
	Subtotal Groundwater Monitoring Well Maintenance:					
DESCRIPTION	UNIT	QUANTITY	UNIT COST	ANNUAL COST		
8. Gas System Maintenance						
Piping, Vents	EA	42	100	\$4,200		
Blowers	EA	0.00		\$0.00		
Flaring Units	EA	0.00		\$0.00		
Meters, Valves	EA	0.00		\$0.00		
Compressors	EA	0.00		\$0.00		
Flame Arrestors	EA	0.00		\$0.00		
Operation	LS	0.00		\$0.00		
		\ Subto	otal Gas System:	\$4,200		
9. Landscape						
Mowing	AC	90	150	\$13,500		
Fertilizer	AC					
		Subtotal Landscap	oe Maintenance:	\$13,500		

DESCRIPTION	UNIT	QUANTITY	UNIT COST	ANNUAL COST
10. Erosion Control & Cover Ma	intenance			
Sodding	SY	3,000	1.80	\$5,400
Regrading	LS	1	2,000	\$2,000
Liner Repair	SY	20	100.00	\$2,500
Clay	CY			
	Subtotal	Erosion Control and Co	over Maintenance:	\$9,900
11. Storm Water Management S	System Maintenance			
Conveyance Mainten	ance LS	1	5,000	\$5,000
	Sul	btotal Storm Water Sys	tem Maintenance:	\$5,000
12. Security System Maintenand	ce			
Fences	LF	10	25.00	\$250
Gate(s)	EA	1	30	\$30
Sign(s)	EA	0	0	\$0
		Subtota	l Security System:	\$280
13. Utilities	LS	0	0	\$0
14. Administrative		Hours	\$/ Hour	
P.E. Supervisor	HR	20.00	140.00	\$2,800
On-Site Engineer	HR			
Office Engineer	HR			\$0
On-site Technician	HR	80	65	\$5,200
Other (explain)				
		Subto	otal Administrative:	\$8,000
15. Contingency	% of Total	\$40,880.00	10%	\$4,000
		Sub	total Contingency:	\$4,000

16. Site Specific Costs (explain)	UNIT COST	
	LS	\$0.00
	LS	\$0.00
	LS	\$0.00
ANNUAL LONG-TERM CA	RE COST (\$/Year):	\$44,880
NUMBER OF YEARS OF	LONG-TERM CARE	30
TOTAL LONG-TER	M CARE COST (\$)	\$1 346 400