



FLORIDA DEPARTMENT OF Environmental Protection

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

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Noah Valenstein
Secretary

November 16, 2018

Transmitted via E-Mail only to: rmontgomery@co.volusia.fl.us

Regina Montgomery, Director
Volusia County Solid Waste Division
3151 East New York Avenue
DeLand, FL 32724

RE: Tomoka Farms Road Solid Waste Management Facility – Class I, South Cell
Inflation Adjusted Closure Cost Estimate Approval
Permit No. 0078767-030-SO-01, Volusia County
WACS No: 27540

Dear Ms. Montgomery,

This letter is to acknowledge receipt of the subject facility's updated detailed closure cost estimates dated June 12, 2018 and received June 13, 2018 as Appendix A of the 5-Year Submittal Report. This cost estimate was prepared by S2L, Inc., for Tomoka Farms Road Solid Waste Management Facility. This cost estimate provides long-term care costs for the 114 acres of the Class I, South Cell. The recalculated estimate(s) were submitted to comply with Rule 62-701.630(4)(b), Florida Administrative Code, (F.A.C.). The following cost estimates received on August 28, 2018 are **APPROVED for 2018:**

South Cell

Annual Long-term care – \$114,042.56

Total Long-term care – \$3,421,276.80 for 30 years

The next annual cost estimate update is due between July 1 and September 1, 2019.

A copy of these estimates will be forwarded to the Financial Coordinator, FDEP, 2600 Blair Stone Road, MS 4565, Tallahassee, Florida 32399-2400. Please work with Susan Eldredge at (850) 245-8740 or susan.f.eldredge@dep.state.fl.us directly to assess the facility's compliance with the funding mechanism requirements of Rule 62-701.630, F.A.C. If you have any questions, you may contact me at (850) 245-8744.

Ms. Montgomery
November 16, 2018
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Most information received or sent by the Department is public record and is placed in OCULUS, an electronic database. You can view this and other documents for this facility at the following link:

http://approd.dep.state.fl.us/WWW_WACS/Reports/SW_Facility_Docs.asp?wacsid=27540

Sincerely,

A handwritten signature in blue ink that reads "El Kromhout". The signature is written in a cursive, flowing style.

El Kromhout, P.G.
Solid Waste Section
Permitting and Compliance Assistance Program

Enclosure: South Cell Cost Estimate Form

cc:

Sam Levin, P.E., S2L, Inc., slevin@s2li.com
Robert Mackey, P.E., S2L, Inc., bmackey@s2li.com
Jennifer Stirk, Volusia County, JStirk@volusia.org
Junos Reed, Volusia County, JReed@volusia.org
Central District, DEP_CD@dep.state.fl.us
Cory Dilmore, P.E., FDEP Solid Waste, cory.dilmore@flordadep.gov
Solid.Waste.Financial.Coordinator@dep.state.fl.us



Florida Department of Environmental Protection

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

DEP Form # 62-701.900(28), F.A.C.
Form Title: Closure Cost Estimating Form
For Solid Waste Facilities
Effective Date: January 6, 2010
Incorporated in Rule 62-701.630(3), F.A.C.

CLOSURE COST ESTIMATING FORM FOR SOLID WASTE FACILITIES

Date of DEP Approval: _____

I. GENERAL INFORMATION:

Facility Name: Tomoka Farms Road Landfill - South Cell WACS ID: 27540
 Permit Application or Consent Order No.: 0078767-030-SO-01 Expiration Date: 5-13-2033
 Facility Address: 1990 Tomoka Farms Road, Port Orange, FL 32128
 Permittee or Owner/Operator: Volusia County Solid Waste Division
 Mailing Address: 3151 East New York Avenue, DeLand, FL 32724

Latitude: 29° 07' 50" Longitude: 81° 06' 02"
 Coordinate Method: GPS Datum: NAD 1983
 Collected by: J.E. Zapert Company/Affiliation: Sliger and Associates, Inc.

Solid Waste Disposal Units Included in Estimate:

Phase / Cell	Acres	Date Unit Began Accepting Waste	Active Life of Unit From Date of Initial Receipt of Waste	If active: Remaining life of unit	If closed: Date last waste received	If closed: Official date of closing
South Cell	114	June 1978	Approx. 23 years	N/A	2001	2001

Total disposal unit acreage included in this estimate: Closure: N/A Long-Term Care: 114

Facility type: Class I Class III C&D Debris Disposal
 (Check all that apply) Other: _____

II. TYPE OF FINANCIAL ASSURANCE DOCUMENT (Check type)

- Letter of Credit* Insurance Certificate Escrow Account
 Performance Bond* Financial Test Form 29 (FA Deferral)
 Guarantee Bond* Trust Fund Agreement

* - Indicates mechanisms that require the use of a Standby Trust Fund Agreement

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

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

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

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

South District
2295 Victoria Ave., Ste. 364
Fort Myers, FL 33901-3881
239-332-8975

Southeast District
400 N. Congress Ave., Ste. 200
West Palm Beach, FL 33401
561-681-6600

III. ESTIMATE ADJUSTMENT

40 CFR Part 264 Subpart H as adopted by reference in Rule 62-701.630, Florida Administrative Code, (F.A.C.) 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) Inflation Factor Adjustment (b) Recalculated or New Cost Estimates

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 website www.dep.state.fl.us/waste/categories/swfr or call the Financial Coordinator at (850) 245-8706.

This adjustment is based on the Department approved closing cost estimate dated: _____

Latest Department Approved Closing Cost Estimate:	×	Current Year Inflation Factor, e.g. 1.02	=	Inflation Adjusted Closing 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, e.g. 1.02	=	Inflation Adjusted Annual Long-Term Care Cost Estimate:
_____		_____		_____
Number of Years of Long Term Care Remaining:			×	_____
Inflation Adjusted Long-Term Care Cost Estimate:			=	_____

<p>Signature by: <input type="checkbox"/> Owner/Operator <input checked="" type="checkbox"/> Engineer (check what applies)</p> <p>_____</p> <p>Robert E. Mackey, P.E. Senior Engineer</p> <p>_____</p> <p>6/12/13</p> <p>_____</p> <p>Date</p>	<p>531 Versailles Drive, Suite 202</p> <p>_____</p> <p>Address</p> <p>Maitland, Florida 32751</p> <p>_____</p> <p>City, State, Zip Code</p> <p>bmackey@s2li.com</p> <p>_____</p> <p>E-Mail Address</p>
<p>407-475-9163</p> <p>_____</p> <p>Telephone Number</p>	

IV. ESTIMATED CLOSING COST (check what applies)

Recalculated Cost Estimate

New Facility Cost Estimate

- Notes: 1. Cost estimates for the time period when the extent and manner of landfill operation makes closing most exp
 2. Cost estimate must be certified by a professional engineer.
 3. Cost estimates based on third party suppliers of material, equipment and labor at fair market value.
 4. In some cases, a price quote in support of individual item estimates may be required.

Description	Unit	Number of Units	Cost / Unit	Total Cost
1. Proposed Monitoring Wells (Do not include wells already in existence.)				
	EA	_____	_____	_____
			Subtotal Proposed Monitoring Wells:	_____
2. Slope and Fill (bedding layer between waste and barrier layer):				
Excavation	CY	_____	_____	_____
Placement and Spreading	CY	_____	_____	_____
Compaction	CY	_____	_____	_____
Off-Site Material	CY	_____	_____	_____
Delivery	CY	_____	_____	_____
			Subtotal Slope and Fill:	_____
3. Cover Material (Barrier Layer):				
Off-Site Clay	CY	_____	_____	_____
Synthetics - 40 mil	SY	_____	_____	_____
Synthetics - GCL	SY	_____	_____	_____
Synthetics - Geonet	SY	_____	_____	_____
Synthetics - Other (explain) _____	_____	_____	_____	_____
			Subtotal Cover Material:	_____
4. Top Soil Cover:				
Off-Site Material	CY	_____	_____	_____
Delivery	CY	_____	_____	_____
Spread	CY	_____	_____	_____
			Subtotal Top Soil Cover:	_____
5. Vegetative Layer				
Sodding	SY	_____	_____	_____
Hydroseeding	AC	_____	_____	_____
Fertilizer	AC	_____	_____	_____
Mulch	AC	_____	_____	_____
Other (explain) _____	_____	_____	_____	_____
			Subtotal Vegetative Layer:	_____
6. Stormwater Control System:				
Earthwork	CY	_____	_____	_____
Grading	SY	_____	_____	_____
Piping	LF	_____	_____	_____
Ditches	LF	_____	_____	_____
Berms	LF	_____	_____	_____
Control Structures	EA	_____	_____	_____
Other (explain) _____	_____	_____	_____	_____
			Subtotal Stormwater Control System:	_____

Description	Unit	Number of Units	Cost / Unit	Total Cost
7. Passive Gas Control:				
Wells	EA	_____	_____	_____
Pipe and Fittings	LF	_____	_____	_____
Monitoring Probes	EA	_____	_____	_____
NSPS/Title V requirements	LS	1	_____	_____
Subtotal Passive Gas Control:				_____
8. Active Gas Extraction Control:				
Traps	EA	_____	_____	_____
Sumps	EA	_____	_____	_____
Flare Assembly	EA	_____	_____	_____
Flame Arrestor	EA	_____	_____	_____
Mist Eliminator	EA	_____	_____	_____
Flow Meter	EA	_____	_____	_____
Blowers	EA	_____	_____	_____
Collection System	LF	_____	_____	_____
Other (explain) _____	_____	_____	_____	_____
Subtotal Active Gas Extraction Control:				_____
9. Security System:				
Fencing	LF	_____	_____	_____
Gate(s)	EA	_____	_____	_____
Sign(s)	EA	_____	_____	_____
Subtotal Security System:				_____
10. Engineering:				
Closure Plan Report	LS	1	_____	_____
Certified Engineering Drawings	LS	1	_____	_____
NSPS/Title V Air Permit	LS	1	_____	_____
Final Survey	LS	1	_____	_____
Certification of Closure	LS	1	_____	_____
Other (explain) _____	_____	_____	_____	_____
Subtotal Engineering:				_____

Description	Hours	Cost / Hour	Hours	Cost / Hour	Total Cost
11. Professional Services					
	<u>Contract Management</u>		<u>Quality Assurance</u>		
P.E. Supervisor	_____	_____	_____	_____	_____
On-Site Engineer	_____	_____	_____	_____	_____
Office Engineer	_____	_____	_____	_____	_____
On-Site Technician	_____	_____	_____	_____	_____
Other (explain) _____	_____	_____	_____	_____	_____

Description	Unit	Number of Units	Cost / Unit	Total Cost
Quality Assurance Testing	LS	1	_____	_____
Subtotal Professional Services:				_____

Subtotal of 1-11 Above: _____

12. Contingency _____ % of Subtotal of 1-11 Above

Subtotal Contingency: _____

Estimated Closing Cost Subtotal: _____

Description	Total Cost
13. Site Specific Costs	
Mobilization	_____
Waste Tire Facility	_____
Materials Recovery Facility	_____
Special Wastes	_____
Leachate Management System Modification	_____
Other (explain) _____	_____
_____	_____
	Subtotal Site Specific Costs: _____

TOTAL ESTIMATED CLOSING COSTS (\$): _____

V. ANNUAL COST FOR LONG-TERM CARE

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. (Check Term Length) 5 Years 20 Years 30 Years Other, ___ Years

- Notes: 1. Cost estimates must be certified by a professional engineer.
 2. Cost estimates based on third party suppliers of material, equipment and labor at fair market value.
 3. In some cases, a price quote in support of individual item estimates may be required.

All items must be addressed. Attach a detailed explanation for all entries left blank.

Description	Sampling Frequency (Events / Year)	Number of Wells	(Cost / Well) / Event	Annual Cost
1. Groundwater Monitoring [62-701.510(6), and (8)(a)]				
Monthly	12	_____	_____	_____
Quarterly	4	_____	_____	_____
Semi-Annually	2	54	\$444.44	\$47,999.52
Annually	1	_____	_____	_____
Subtotal Groundwater Monitoring:				\$47,999.52
2. Surface Water Monitoring [62-701.510(4), and (8)(b)]				
Monthly	12	_____	_____	_____
Quarterly	4	_____	_____	_____
Semi-Annually	2	_____	_____	_____
Annually	1	_____	_____	_____
Subtotal Surface Water Monitoring:				_____
3. Gas Monitoring [62-701.400(10)]				
Monthly	12	_____	_____	_____
Quarterly	4	8	\$161.75	\$5,176.00
Semi-Annually	2	_____	_____	_____
Annually	1	_____	_____	_____
Subtotal Gas Monitoring:				\$5,176.00
4. Leachate Monitoring [62-701.510(5), (6)(b) and 62-701.510(8)c]				
Monthly	12	_____	_____	_____
Quarterly	4	_____	_____	_____
Semi-Annually	2	_____	_____	_____
Annually	1	_____	_____	_____
Other (explain) _____	_____	_____	_____	_____
Subtotal Leachate Monitoring:				_____

Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
5. Leachate Collection/Treatment Systems Maintenance				
<u>Maintenance</u>				
Collection Pipes	LF	_____	_____	_____
Sumps, Traps	EA	_____	_____	_____
Lift Stations	EA	_____	_____	_____
Cleaning	LS	1	_____	_____
Tanks	EA	_____	_____	_____

Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
5. (continued)				
<u>Impoundments</u>				
Liner Repair	SY	_____	_____	_____
Sludge Removal	CY	_____	_____	_____
<u>Aeration Systems</u>				
Floating Aerators	EA	_____	_____	_____
Spray Aerators	EA	_____	_____	_____
<u>Disposal</u>				
Off-site (Includes transportation and disposal)	1000 gallon	_____	_____	_____
Subtotal Leachate Collection / Treatment Systems Maintenance:				_____
6. Groundwater Monitoring Well Maintenance				
Monitoring Wells	LF	_____	_____	_____
Replacement	EA	_____	_____	_____
Abandonment	EA	_____	_____	_____
Subtotal Groundwater Monitoring Well Maintenance:				_____
7. Gas System Maintenance				
Piping, Vents	LF	_____	_____	_____
Blowers	EA	_____	_____	_____
Flaring Units	EA	_____	_____	_____
Meters, Valves	EA	_____	_____	_____
Compressors	EA	_____	_____	_____
Flame Arrestors	EA	_____	_____	_____
Operation	LS	1	_____	_____
Subtotal Gas System Maintenance:				_____
8. Landscape Maintenance				
Mowing	AC	114	\$56.12	\$6,397.68
Fertilizer	AC	_____	_____	_____
Subtotal Landscape Maintenance:				\$6,397.68
9. Erosion Control and Cover Maintenance				
Sodding	SY	4,840	\$2.11	\$10,212.40
Regrading	AC	1	\$11,294.00	\$11,294.00
Liner Repair	SY	150	\$11.00	\$1,650.00
Clay	CY	_____	_____	_____
Subtotal Erosion Control and Cover Maintenance:				\$23,156.40
10. Storm Water Management System Maintenance				
Conveyance Maintenance	LS	1	_____	_____
Subtotal Storm Water Management System Maintenance:				_____
11. Security System Maintenance				
Fences	LS	1	_____	_____
Gate(s)	EA	_____	_____	_____
Sign(s)	EA	_____	_____	_____
Subtotal Security System Maintenance:				_____

Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
12. Utilities	LS	<u>1</u>		
			Subtotal Utilities:	
13. Leachate Collection/Treatment Systems Operation				
<u>Operation</u>				
P.E. Supervisor	HR	<u> </u>	<u> </u>	<u> </u>
On-Site Engineer	HR	<u> </u>	<u> </u>	<u> </u>
Office Engineer	HR	<u> </u>	<u> </u>	<u> </u>
OnSite Technician	HR	<u> </u>	<u> </u>	<u> </u>
Materials	LS	<u>1</u>	<u> </u>	<u> </u>
			Subtotal Leachate Collection/Treatment Systems Operation:	<u> </u>
14. Administrative				
P.E. Supervisor	HR	<u>10</u>	<u>\$160.00</u>	<u>\$1,600.00</u>
On-Site Engineer	HR	<u>20</u>	<u>\$140.00</u>	<u>\$2,800.00</u>
Office Engineer	HR	<u>20</u>	<u>\$100.00</u>	<u>\$2,000.00</u>
OnSite Technician	HR	<u> </u>	<u> </u>	<u> </u>
Other <u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
			Subtotal Administrative:	<u>\$6,400.00</u>
			Subtotal of 1-14 Above:	<u>\$89,129.60</u>
15. Contingency	<u>10</u>	% of Subtotal of 1-14 Above		<u>\$8,912.96</u>
			Subtotal Contingency:	<u>\$8,912.96</u>

Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
16. Site Specific Costs				
Prorated Costs	LS	<u>1</u>	<u>\$16,000.00</u>	<u>\$16,000.00</u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>
			Subtotal Site Specific Costs:	<u>\$16,000.00</u>

ANNUAL LONG-TERM CARE COST (\$ / YEAR): \$114,042.56

Number of Years of Long-Term Care: 30

TOTAL LONG-TERM CARE COST (\$): \$3,421,276.80

VI. CERTIFICATION BY ENGINEER

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



Robert E. Mackey, P.E. - Senior Engineer
 Name and Title (please type)

40176
 Florida Registration Number
 (please affix seal)

531 Versailles Drive, Suite 202
 Mailing Address

Maitland, FL 32751
 City, State, Zip Code

bmackey@s2li.com
 E-Mail address (if available)

407-475-9163
 Telephone Number

VII. SIGNATURE BY OWNER/OPERATOR

Regina Montgomery
 Signature of Applicant

Regina Montgomery
 Name and Title (please type)

rmontgomery@volusia.org
 E-Mail address (if available)

1990 Tomoka Farms Road
 Mailing Address

Port Orange, FL 32128
 City, State, Zip Code

386-947-2952
 Telephone Number