

8381 Dix Ellis Trail, Suite 400 Jacksonville, Florida 32256

tel: 904-731-7109 fax: 904-519-7090 RECEIVED ENVIRONMENTAL PROFECTION

SEP 1 5 2014

PERMITTING & COMPLIANCE ASSISTANCE PROGRAM

September 12, 2014

Mr. Cory Dilmore Florida Department of Environmental Protection Solid Waste Section 2600 Blair Stone Road/MS 4565 Tallahassee, FL 32399

Subject:

City of Jacksonville

Trail Ridge Landfill 2014 Financial Assurance

Facility ID 33628

Dear Mr. Dilmore:

On behalf of the City of Jacksonville and Waste Management Inc. (WMI), CDM Smith is pleased to submit the enclosed financial assurances information for the City of Jacksonville Trail Ridge Class I Landfill. This form updates the financial assurances previously submitted in February 2014 for the landfill to reflect construction of Phase 6 expansion.

Please contact me directly at 904-527-6726 or <u>SterlingLM@cdmsmith.com</u> if you require any additional information.

Sincerely,

Lisa M. Sterling, P.E. Project Manager

CDM Smith Inc.

cc: Greg Mathes, WMI (w/enclosure) Lee Alford, COJ (w/enclosure) Patrick Victor, (w/o enclosure)

FILE

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Florida Department of **Environmental Protection**

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 DEP Form # 82-701.900(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: Trail Ridge	Class i Lan	dfill			WACS ID: 33628	ı
Permit Application or Consent	Order No.:				ation Date:	
Facility Address: 5110 U.S.	Highway 3	01, Baldwin, Fi	orida 32234			
Permittee or Owner/Operator:		dge Landfill, Inc			· · ·	
Mailing Address: Same as I	acility Add					
Latitude: 30 °	13'	27N "	Longitude:	82°	02'	40W "
Coordinate Method:	·		atum: NGVD 1929			
Collected by: Robert M. Ang	as Associa		ompany/Affiliation		ıt.	
Solid Waste Disposal Units Inc	duded in Es	stimate:				
		Date Unit	Active Life of		if closed:	If closed:
		Began	Unit From Date	If active:	Date last	Official
Dhana / Oall		Accepting	of Initial Receipt	Remaining	waste	date of
Phase / Cell	Acres	Waste	of Waste	life of unit	received	closing
Phase 1-5	144	18-MAY-1992	20 years +/-	5 years +/-		
Phase 6	30.5	NA NA	5 years+/-	NA NA		
	_					
		'				
lotal disposal unit acreage incl	uded in this	s estimate:	Closure: 128.	2 Lor	g-Term Care:	174 5
		oosmalo.	Ologui 6. 120,	<u> </u>	ig-Tollii Care.	174.5
Facility type:	Class I		ass (II 🗆	C&D Debris	Disposal	
(Check all that apply)	Other:	2 0.		Oud Debila	Diaposai	
	_					
I. TYPE OF FINANCIAL ASS	URANCE D	OCUMENT (C	hack time)			
☐ Letter of Credit*		•	e Certificate	M Esc	row Account	
□ Performance Bond	•	□ Financia			n 29 (FA Defe	rral)
☐ Guarantee Bond*		nd Agreement	- 1 OII	II 79 /I V Dele	ilei)	
* - Indicates mechanism	that require t		_			
	m. 194ana n	a cento)	, mati did Ağısenent			
Northwest District Northeas 160 Government Center 7825 Baymeadow	t District Way, Ste. B200	Central District 3319 Maguire Blvd., Ste.	Southwest District 282 13051 N. Telecom Ploy	South District		east District

Pensecola, FL 32502-5794 850-595-8360

Jacksonville, FL 32256-7590 904-807-3300

Orlando, FL 32803-3767 407-894-7555

Temple Terrece, FL 33637 Fort Myers, FL 33901-3881 813-632-7600 229-332-6375

400 N. Congress Ave., Ste. 200 West Pelm Beach, FL 33401 561-661-6600

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 ajustment below.

□ (a) Inflation Factor A	diustmen	rt
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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 Deflatory 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 closin	g cost estimate date	d:	
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-to	erm care cost estima	ite 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 L	ong Term Care Remaining:	a	×	
Inflation Adjusted L	ong-Term Care Cost Estima	ate:	= .	·
Signature by:	Owner/Operator	□ Engineer	(check what ap	piles)
Signati	ıre		Ac	Idress
Name &	Title		City, Sta	te, Zip Code
Date			E-Mai	Address
Telephone I	Number			

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 supp	ort of individual item	estimates may be required.	
_			Number		
	cription	Unit	of Units	Cost / Unit	Total Cost
1. I	Proposed Monitoring Wells	•	ude wells already	y in existence.)	
		EA			
	_			Proposed Monitoring Wells:	
2. S	lope and Fill (bedding layer be		e and barrier lay	er):	
	Excavation	CY			
	Placement and Spreading	CY	207,000	\$1.75	\$362,250.00
	Compaction	CY			
	Off-Site Material	CY			
	Delivery	CY			
				Subtotal Slope and Fill:	\$362,250.00
. C	over Materiai (Barrier Layer):			•	
	Off-Site Clay	CY	140,000	\$25.00	\$3,500,000.00
	Synthetics - 40 mil	SY	201,000	\$6.10	\$1,226,100.00
	Synthetics - GCL	SY			
	Synthetics - Geonet	SY	201,000	\$3.00	\$603,000.00
	Synthetics - Other (explain)	CY	67,000	\$10.00	\$670,000.00
	Sand			Subtotal Cover Material:	\$5,999,100.00
T	op Soll Cover:			-	
	Off-Site Material	CY	347,000	\$15.00	\$5,205,000.00
	Delivery	CY			40,000,000
	Spread	CY		-	
				Subtotal Top Soll Cover:	\$5,205,000.00
V	getative Layer			-	40,230,000,00
	Sodding	SY	620,000	\$2.90	\$1,798,000.00
	Hydroseeding	AC		42.00	411100100000
	Fertilizer	AC	*		
	Mulch	AC			
	Other (explain)	,			
	, , ,			Subtotal Vegetative Layer:	\$1,798,000.00
St	ormwater Control System:				\$1,788,000.00
	Earthwork	CY			
	Grading	SY			·
	Piping Piping	LF			
	Ditches (Letdown Piping)	LF	10,000	£122.20	\$4 222 200 00
	Berms	LF		<u>\$123.28</u>	\$1,232,800.00
	Central Structures Terrace Drains		105	\$7,000.00	\$735,000.00
				41,000,00	a/35.UUU.UU
	Other (explain) Underdrain	LF	51,000	\$20.00	\$1,020,000.00

Description		Unit	Numbe of Units		t / Unit	Total Cost
7. Passive Gas Contr	ol:					I OLDI COSI
Wells		EA				
Pipe and Fittings		LF		P		
Monitoring Probe	8	EA		-		
NSPS/Title V requ		LS	1	-	0	
22				Subtotal Pa	assive Gas Contr	ol: \$0,00
8. Active Gas Extract	ion Control:					
Traps		EA	9	\$14	,292.00	\$128, 628.
Sumps	20	EA				
Flare Assembly	Pines and Fittin	gs (LF)		\$212	2,260.00	
Flame Arrester	Cines and Cities	## (FA	<u>30,600</u>		34.60	\$1,058,760.00
Mist Eliminator Well Dr	wa Libae and Limu	DS (LEA	<u>15,000</u>	\$	50.90	\$763,500.00
Flow Meter	Control Valve	(EA	12,300	\$1	00.60	\$1,237,380.00
Biewers 12"-18" (Control Values	(EA) (EA)	26		000.00	\$78,000.00
Collection System	90111101 741100	LF.	32	\$3,	285.00	\$105,120.00
Other (explain) <u>We</u>	II head Assbly	EA			60.00	\$40,480
			Subtotal	Active Gas	Extraction Contro	ol: \$3,411,868.
. Security System:						
Fencing		LF				
Gate(s)	15.	EA				
Sign(s)		EA	2.2			
0. Engineering:		N.		Subtota	I Security System	n:
Closure Plan Repo	ort	LS	1		147% mm	4 00
Certified Engineering	*01	LS	<u> </u>		150.00	\$89,150.0
NSPS/Title V Air P		LS	1		,400.00	\$318,400.00
Final Survey	GITTEL	LS	1		<u>o</u>	**************************************
Certification of Clo	CLIPO.	LS	1		420.00	876,420.0
Other (explain)	aure	Lo		<u>525</u> ,	500.00	\$25,500.00
				Sub	total Engineering	3509,470.
escription	Hours	Cos	t / Hour	Hours	Cost / Hour	Total Cost
1. Professional Servic	:88					
		<u>Manageme</u>		Quality As	<u>ssurance</u>	
P.E. Supervisor	<u> 15</u>	\$	160	15	\$134	\$4,410.00
On-Site Engineer		-		170	\$83.	\$14,110.00
Office Engineer	30	_	128	57	\$116日	\$10,395.00
On-Site Technician	188_	<u>.\$</u>	96. 41	690	\$51.	\$53,046.00
Other (explain)		-				
			Number		2.	
escription		Unit	of Units	Cost	/ Unit	Total Cost
Quality Assurance	Testing	LS	1	\$15,0	00.00 essional Services	\$15,000.00

		Subtotal of 1-11 Above:	\$20,370,449.00
12.	Contingency 10	% of Subtotal of 1-11 Above	\$2,037,044.90
		Subtotal Contingency:	\$2,037,044.90
		Estimated Closing Cost Subtotal:	\$22,407,493.90
	Description	3	Total Cost
13.	Site Specific Costs		
	Mobilization	8 8 8	\$427,575.60
	Waste Tire Facility	a) a (a (\$10,000.00
	Materials Recovery Facility	_	4.0,000.00
	Special Wastes	Erosion Control (1% of Construction Cost)	\$63,700.00
	Leachate Management-Sy	etem Medification \$237,000	\$3,000.00
	Other (explain) Bonds (1.2%	of Construction Cost)	\$285,000.00
		Subtotal Site Specific Costs:	\$1,023,275.60
	ë :	TOTAL ESTIMATED CLOSING COSTS (\$):	#00 400 T00 F0
			\$23,430,769.50

V. ANNUAL COST FOR LON	IG-TERM CARE					
See 62-701.600(1)a.1., 62-701.62 certified closed and Department a	20(1), 62-701.630(3)a. ar accepted, enter the remai	nd 62-701.730(11)b. F. Ining long-term care le	A.C. for required term lengtingth as "Other" and provide	h. For landfills years remaining.		
(Check Term Length) 5 Years	□ 20 Years □ X 30	Years Other,	Years			
Notes: 1. Cost estim	ates must be certified by	a professional engine	er.			
2. Cost estimate	ates based on third party	suppliers of material,	equipment and labor at fair	market value.		
3. In some ca	ses, a price quote in sup	port of individual item (estimates may be required.			
All Items must be addressed	I. Attach a detailed exp	planation for all entri	es left blank.			
Description	Sampling Frequency (Events / Year)	Number of	(Cost / Well) /			
Description	(EAGUEN LOGI)	Wells	Event	Annual Cost		
1. Groundwater Monitoring	182_704_E40/8\ /9	V-\7				
Monthly	12)(a)]				
Quarterly Permit Renewal	4	1.65				
Semi-Annually	2	21	\$660,00	\$4,356.00		
Annually Cost for Blennial Tec		1	\$1,365.00	\$57,330.00		
All idealy ober to distillize fee	ii rioport		\$2,600.00	\$2,600.00		
Subtotal Groundwater Monitoring: \$84,286.00 2. Surface Water Monitoring [62-701.510(4), and (8)(b)]						
Monthly	12	Itake				
Quarterly	4	-				
Semi-Annually	2	7				
Annually	1		\$410.00	\$5,740.00		
Allidally	'	Cubtotal Cu	urface Water Monitoring:			
3. Gas Monitoring [62-701.400	M40\1	Sudicizii Si	inace water monitoring:	\$5,740.00		
Monthly	12					
Quarterly	4	20		<u> </u>		
Semi-Annually	2	<u>30</u> 1	\$60.00	\$7,200.00		
Annually	2 1		\$830.00	\$1,660.00		
Artifically	70	— ,	helatel One Manifester			
A Leschete Monitoring (62-7	04 540/5\ <i>(8</i> \/b\ and 6		Subtotal Gas Monitoring:	\$8,860.00		
4. Leachate Monitoring [62-74 Monthly	01.310(3), (0)(b) and t 12	12-701.510(6)0]				
Quarterly	4					
Semi-Annually	2	2				
Annually	4		\$650.00	\$2,600.00		
Other (explain) Composite	2	1	-			
			\$560.00 tal Leachate Monitoring:	\$1,120.00		
		Subju	iai Leachale Monitoring:	\$3,720.00		
		Number of				
Description	Unit	Units / Year	Cost / Unit	Annual Cost		
5. Leachate Collection/Treatment	nent Systems Mainte	nance				
Maintenance						
Collection Pipes	LF					
Sumps, Traps	EA					
Lift Stations	EA					
Cleaning	LS	_1_	\$46,000.00	\$46,000.00		
Tanks	EA					

Description	Unit	Number of Units / Year	Cost / Unit	Annual Cost
5. (continued)			333710111	
<u>Impoundments</u>				
Liner Repair	SY			
Sludge Removal	CY			
Aeration Systems				
Floating Aerators	EA			
Spray Aerators	EA			
<u>Disposal</u>				
Off-site (Includes	1000 gallon	6,000	\$51.00	\$306,000.00
ransportation and disposal)	•		e Collection / Treatment	4300,000.00
		Odbiolai Eogoriai	Systems Maintenance:	\$352,000.00
. Groundwater Monitoring We	ell Maintenance			\$352,000.00
Monitoring Wells	LF	1	\$8,300,00	
Replacement	EA		<u>\$8.300.00</u>	\$8,300.00
Abandonment	EA			
•	 •	tal Groundwater Monite	oring Well Maintenance:	
. Gas System Maintenance	Gubus		Aing Trail Maintenance.	\$8,300,00
Piping, Vents	LF			
Blowers	° EA			
Flaring Units	EA		-	
Meters, Valves	EA			
*		· · · · · ·		
Compressors Flame Arrestors	EA			
	EA			
Operation	LS	_1	\$32,000.00	\$32,000.00
A seed as see Adulate		Subtotal Gas	s System Maintenance:_	\$32,000.00
Landscape Maintenance				
Mowing	AC	<u> 174</u>	\$360.00	\$62,640.00
Fertilizer	AC	174	\$320.00	\$55,680.00
		Subtotal La	indscape Maintenance:	\$118,320.00
Erosion Control and Cover				
Sodding	SY	4.000	\$2.90	\$11,600.00
Regrading	AC	0.9	\$8,500.00	\$7,650.00
Liner Repair	SY	2.000	\$6.10	\$12.200.00
Clay	CY	1.000	\$25.00	\$25,000.00
43	Sub	total Erosion Control a	nd Cover Maintenance:	\$56,450.00
i. Storm Water Management	System Maintenan	ICO	_	<u> </u>
Conveyance Maintenance	LS	_1_	\$3,851.00	\$3,851.00
•	Subtotal Sto	rm Water Management		\$3,851.00
. Security System Maintena		-	_	- W/W/ 1.W/
Fences	LS	_1_	\$10,620.00	\$10,620.00
Gate(s)	EA		910,020,00	# I U,02U.UU
Sign(s)	EA			
.	 -	Subtotal Security	System Maintenance:	<u> </u>
		-antom vovill)	Jown Wallie lellos.	\$10.620.00

			Number of		
	Description	Unit	Units / Year	Cost / Unit	Annual Cos
12.	Utilities	LS	_1_	\$53,100.00	\$53,100.00
				Subtotal Utilities:	
13.	Leachate Collection/Tre	atment Systems O	peration		
<u>Op€</u>	<u>eration</u>				
	P.E. Supervisor	HR	55	\$160.00	\$8,800.00
	On-Site Engineer	HR			
	Office Engineer	HR			
	OnSite Technician	HR	210	\$100.00	\$21,000.00
	Materials	LS	1	•	0
		Subtotal Lea	achate Collection/Treatm	nent Systems Operation:	\$29,800.00
4.	Administrative				,,
	P.E. Supervisor	HR	200_	\$160.00	\$32,000.00
	On-Site Engineer	HR			,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,
	Office Engineer	HR			
	OnSite Technician	HR	1,500	\$100.00	\$150,000.00
	Other				\$100,000.00
		_		Subtotal Administrative:	\$182,000.00
			5	Subtotal of 1-14 Above:	\$929,047.00
E 4	Cantingana	40	6/ -6 65-15-4-4-1		
J. (Contingency		% of Subtotal of 1-14 Al		\$92,904.70
				Subtotal Contingency:	\$92,904.70
_			Number of		
	escription	Unit	Units / Year	Cost / Unit	Annual Cost
3. \$	Site Specific Costs				···
-					
_			——————————————————————————————————————	otal Site Specific Costs:	
			Subs	oral site specific Costs:	
		AN	INUAL LONG-TERM C	ARE COST (\$ / YEAR):_	\$1,021,951.70
			Number of Ye	ars of Long-Term Care:	30
			TOTAL LONG-T	ERM CARE COST (\$): _	\$30.658.551.00

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.

3	2301 Maylano CENTER RAKWA
Signatura	Mailing Address
Louise PE	MAITLAND, FL. 32751
Name and Title (please type)	City, State, Zip Code
9/1/14	Ladrenja@cdmsnith.com
Date	E-Mail address (if available)
31969	407-660-2552
Florida Registration Number	Telephone Number
(please affix seal)	

VII. SIGNATURE BY OWNER/OPERATOR

Signature of Applicant	Mailing Address
Name and Title (please type)	City, State, Zlp Code
E-Mail address (if available)	Telephone Number