

August 10, 2016

Mr. Tom Lubozynski, P.E. Section Supervisor Waste Management Program – Central District Florida Department of Environmental Protection Orlando, Florida 32803-3767

Re: Financial Assurance Responsibility Report (Fiscal Year 2016)

Tomoka Farms Road Landfill ID# 27540 (North Cell Class I, South Cell, Class III Landfills) and Plymouth Avenue Landfill ID#27539

Volusia County, Florida

Dear Mr. Lubozynski,

On behalf of Volusia County, we are hereby submitting updated closure and long-term care cost estimates for the above-referenced landfills, fulfilling the requirements of 62-701.630(4) F.A.C.

If you have any questions or comments, please contact Lenny Marion at (386) 947-2952 or me at (904) 598-8900.

Sincerely,

HDR Engineering, Inc.

Mark Roberts, P.E. Project Manager

cc: Cory Dilmore, P.E., FDEP Tallahassee

Solid Waste Financial Coordinator, FDEP Tallahassee Lenny Marion, Volusia County Solid Waste Director

Enc. - Financial Assurance Responsibility Report (Fiscal Year 2016)

hdrinc.com

VOLUSIA COUNTY SOLID WASTE SYSTEM

FINANCIAL RESPONSIBILITY CLOSURE & LONG-TERM CARE COST ESTIMATES FY 2016

Prepared for:



VOLUSIA COUNTY – SOLID WASTE DIVISION

1990 Tomoka Farms Road Port Orange FL 32128

Prepared by:



HDR ENGINEERING, INC.

200 W Forsyth St, Suite 800 Jacksonville, FL 32202 Telephone: (904) 598-8900 Fax (904) 598-8988

August 2016

SECTION 1.0

Executive Summary

The following report provides an estimate of closing and long-term costs for the various portions of the Volusia County (County) Solid Waste Management System for use by the County in providing assurance of Financial Responsibility as required by the Florida Administrative Code, (FAC) Section 62-701.630.

This report provides the County with an updated estimate of closing and long-term care costs for the active North Cell Class I and Class III landfills at the Tomoka Farms Road Solid Waste Management Facility (TFR Facility), and the long-term care costs for the closed South Cell at the TFR Facility and the closed Plymouth Avenue Landfill. This report addresses costs associated with the currently permitted, constructed and operating landfills, but does not provide costs of current areas permitted for future landfilling. The financial assurance mechanism for expansion disposal areas will be fully funded according to Florida Department of Environmental Protection (FDEP) approved cost estimates and FDEP rules governing financial assurance responsibility at least sixty days prior to the acceptance of solid waste in these areas (FAC 62-701.630(1)(b)).

The following definitions for the words closing and closure as stated in FAC 62-701 are used in this report.

"Closing": means the time at which a solid waste management facility ceases to

accept wastes, and includes those actions taken by the owner or operator of the facility to prepare the facility for any necessary monitoring and

maintenance after closing.

"Closure": means the cessation of operation of a solid waste management facility

and the act of securing such a facility so that it will pose no significant threat to human health or the environment. This includes closing, long

term monitoring, maintenance, and financial responsibility.

This report was prepared assuming that financial responsibility for FY 2016 would be met by the Escrow Accounting Method, as defined in FAC 62-701.630(5). The 2015 closing and long-term care cost estimates, approved by FDEP, were adjusted assuming the Class I and Class III landfill areas will be closed in accordance with the requirements of the existing FDEP Operations Permits. The approved closure and long-term care costs were adjusted using current year annual inflation factor published by the U.S. Department of Commerce and provided by the FDEP.

The long-term care cost estimates for the Plymouth Avenue Landfill and TFR Facility's Class I South Cell and Class III Landfills were updated by adjusting the previously approved costs based on the current year annual inflation factor published by the U.S. Department of Commerce and provided by the FDEP. The current year inflation factor is 1.009 for estimates due September 1, 2016.

The FDEP Form 62-701.900(28) was completed for each facility to comply with the filing requirements of FAC 62-701.630. The estimated escrow funding obligations are presented for each disposal area individually.

Since last year's report:

- The County continued disposal operations in the Class I North Cell (including Phase II Area 3) and Class III landfills at the TFR Facility.
- The County continued long-term care activities at Plymouth Avenue Landfill.

This report includes:

- Updated closing and long-term care cost estimates for the Class I solid waste disposal area at the TFR Facility based on current permit requirements and previously approved cost estimate adjusted for inflation.
- Updated closing and long-term care cost estimates for the Class III solid waste disposal area at the TFR Facility based on current permit requirements and previously approved cost estimate adjusted for inflation.
- Updated long-term care cost estimates for the closed South Cell landfill based on current permit requirements and previously approved cost estimate adjusted for inflation.
- Updated long-term care cost estimates for the Plymouth Avenue Landfill based on current permit requirements and previously approved cost estimates adjusted for inflation.
- Closure cost estimate for the waste tire temporary storage area at the TFR Facility.

Based on the updated cost estimates for closure and long-term care for the noted facilities and detailed in this report, the County's escrow fund must provide for financial responsibility for FY 2016 in the amount of \$11,622,767.

The FY 2016 Volusia County Landfill Escrow Fund consisting of account GMS 3064C00071 for TFR Facility and account GMS 3064C00070 for Plymouth Avenue Landfill showed a combined balance of \$10,567,504 as of September 30, 2015. The calculated increase to the Volusia County escrow fund for FY2016 financial responsibility equals \$1,055,263.

In accordance with FDEP requirements, the fund balances reported should indicate balance information for closing and long term care costs separately for each disposal facility. The updated closure cost for each facility and required escrow fund balance for FY 2016 is summarized as follows. The financial assurance forms must be submitted by September 1, 2016 to comply with the regulatory deadline specified in FAC 62-701.630(4)(a).



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 INFORMATIO	DN:			, .		
Facility Name: Tomoka F	arms Road La	andfill- South C	Cell		WACS ID: 27540	
Permit Application or Conse	ication or Consent Order No.: 0078767-030-SO-01			Expira	ation Date: 05/	13/2033
Facility Address: 1990 To	omoka Farms	Road, Daytona	a Beach, Florida		>====	
Permittee or Owner/Operate	or: <u>Volusia</u>	County Solid \	Waste Division			
Mailing Address: 3151 E	ast New York	Avenue, DeLai	nd, Florida 32724			
Latitude: 29 °	07 '	50 "	Longitude:	81°	06'	02 "
Coordinate Method: Auto	CAD/GPS		0atum: <u>NAD 1983/9</u>	0 (east)		
Collected by: J.E. Zapert			Company/Affiliation	Sliger & Assoc	iates, Inc.	
Solid Waste Disposal Units	Included in Es	timate:				
		Date Unit	Active Life of		If closed:	If closed:
		Began	Unit From Date	If active:	Date last	Official
Phase / Cell	Acros	Accepting Waste	of Initial Receipt of Waste	Remaining	waste	date of
South Cell	Acres			life of unit	received	closing
South Cell	114	June 1978	Approx. 23 years	NA	2001	2001
Total disposal unit acreage i	ncluded in this	s estimate:	Closure: <u>NA</u>	Lor	g-Term Care:	<u>114</u>
7 71		Ď C	lass III 💆	C&D Debris	Disposal	
(Check all that apply)	□ Other: —					
I. TYPE OF FINANCIAL A			** /			
□ Letter of Credit*			ce Certificate	ॉ Esc	row Account	
□ Performance Bo		□ Financia		☐ Form	m 29 (FA Defe	rral)
☐ Guarantee Bon	d*	□ Trust Fu	und Agreement			
* - Indicates mechan	isms that require t	he use of a Standb	y Trust Fund Agreement	t		
Northwest District No	rtheast District	Central District	Southwest District	South Distric	t South	heaet Dietriet

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

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 239-332-6975 Southeast District 400 N. Congress Ave., Ste. 200 West Palm Beach, FL 33401 561-681-6600

116	ESTI	ΠΔΝ	FΔ	וו.ת.	IST	MF	NT

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 ral cost estimate adjustment. Cost estimates may be adjusted by using an inflation factor or by recalculating the maximum costs of c. ure in current dollars. Select one of the methods of cost estimate ajustment below.

☐ (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 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 th	e Department approved clo	osing cost estimate	e dated:	
Latest Department Approved Closing Cost Estimate:	Inflation Adjusted Closing Cost Estimate:			
	×		=	
This adjustment is based on the	e Department approved lor	ng-term care cost o	estimate dated:	9/1/2015
Latest Department Approved Annual Long-Term Care Cost Estimate:	Current Year Infla Factor, e.g. 1.0			Inflation Adjusted Annual Long-Term Care Cost Estimate:
\$121,905.64	x <u>1.009</u>		=	\$123,002.79
Number of Years of	Long Term Care Remaini	ng:	×	30
Inflation Adjusted	Long-Term Care Cost Es	timate:	=	\$3,690,083.72
Signature by:	Owner/Operator	௴ Engineer		yth St, Ste 800
Signa	ature		А	ddress
Mark Roberts, F	Project Manager		Jacksony	rille, FL 32202
Name	& Title			ate, Zip Code
8/10/1	Co			s@hdrinc.com
Da	te		E-Ma	il Address
(904) 59 Telephone				



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. GENERA	AL INFORMATION:						
Facility Na	me: <u>Tomoka Far</u>	ms Road La	andfill-North Ce	ell, Class I		WACS ID: 27540	
Permit Application or Consent Order No.: 0078767-030-SO-01			Expira	ation Date: 05/1	13/2033		
Facility Add	dress: 1990 Tom	oka Farms l	Road, Daytona	Beach, Florida			====
Permittee o	or Owner/Operator:	Volusia	County Solid V	Vaste Division			
Mailing Add	dress: <u>3151 East</u>	New York A	Avenue, DeLar	nd, Florida 32724			
Latitude:	29 °	07'	50 "	Longitude:	81°	06	02 "
Coordinate	Method: AutoCA	AD/GPS		atum: <u>NAD 1983/9</u>	0 (east)		
Collected b	y: J.E. Zapert			company/Affiliation	Sliger & Asso	ciates, Inc.	
Solid Wast	e Disposal Units Inc	luded in Es	timate:				
			Date Unit Began Accepting	Active Life of Unit From Date of Initial Receipt	If active: Remaining	If closed: Date last waste	If closed; Official date of
Р	hase / Cell	Acres	Waste	of Waste	life of unit	received	closing
North Cell	- Excluding Area 4	77.85	June 1999	17 years	8 years	NA	NA
Total dispos	sal unit acreage inc	uded in this	s estimate:	Closure: <u>77.8</u>	5 Lor	ng-Term Care:	77.85
	cility type:		□ C	lass III 🔻	C&D Debris	Disposal	
_	F FINANCIAL ASS	URANCE D				_	
	Letter of Credit*	1.4		ce Certificate		row Account	
	Performance Bond	1*	□ Financia		☐ For	m 29 (FA Defe	erral)
	Guarantee Bond*			und Agreement			
	* - Indicates mechanism	s that require t	he use of a Standb	y Trust Fund Agreement			

111	FS:	TIM	ATF	ΔD.	IIIS.	TMEN	т
	-		~	$\alpha \nu$,,,		

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 rall cost estimate adjustment. Cost estimates may be adjusted by using an inflation factor or by recalculating the maximum costs of c. Ure in current dollars. Select one of the methods of cost estimate ajustment below.

☐ (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 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	ne Department approved clo	osing cost estimate date	d:	9/1/2015
Latest Department Approved Closing Cost Estimate: \$11,205,481.65	Current Year Inflat Factor, e.g. 1.02 × 1.009		=	Inflation Adjusted Closing Cost Estimate: \$11,306,330.98
	· ·			
This adjustment is based on the	ne Department approved lor	ng-term care cost estima	ite dated:	9/1/2015
Latest Department Approved Annual Long-Term Care Cost Estimate:	Current Year Inflat Factor, e.g. 1.02			Inflation Adjusted Annual Long-Term Care Cost Estimate:
\$200,218.98	× 1.009		Ξ	\$202,020.95
Number of Years o	of Long Term Care Remainir	ng:	×	30
Inflation Adjusted	I Long-Term Care Cost Es	timate:	=	\$6,060,628.52
Signature by:	Owner/Operator	Ճ Engineer	(check what a	
Sign	ature		F	Address
Mark G. Roberts, Pr	oject Manager	Jackson	ville, FL 32202-	4321
Name	& Title		City, St	ate, Zip Code
8/10/1	6	Mark.Ro	berts@hdrinc.co	om
Da	ate		E-Ma	ail Address
	598-8900 e Number			
•				



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. GENERA	AL INFORMATIO	N:					
Facility Na	me: <u>Tomoka F</u>	arms Road La	andfill- Class II	l Landfill		WACS ID: 27540	
Permit App	Permit Application or Consent Order No.: 0078767-034-SO-T3				Expira	ation Date: 9/24	1/2024
Facility Ad	dress: 1990 To	moka Farms	Road, Daytona	Beach, Florida			
Permittee of	or Owner/Operato	r: Volusia	County Solid \	Waste Division			
Mailing Ad	dress: 3151 Ea	st New York	Avenue, DeLar	nd, Florida 32724			x
Latitude:	29 *	07'	53 "	Longitude:	81°	05'	31 "
Coordinate	Method: Auto	CAD/GPS		0atum: NAD 1983/9	0 (east)	2	
Collected b	y: J.E. Zapert			Company/Affiliation	Sliger & Asso	ciates, Inc.	
							- 78
Solid Wast	e Disposal Units I	ncluded in Es	timate:				
			Date Unit	Active Life of		If closed:	If closed:
			Began Accepting	Unit From Date of Initial Receipt	If active: Remaining	Date last waste	Official date of
Р	hase / Cell	Acres	Waste	of Waste	life of unit	received	closing
	Class III LF	88.06	June 1998	18 years	25 years	NA	NA
					-		
Total diana	aal unit aaraaga ir	soludod in this	o o o timo o to c	Clasura, OR O	C	. Taura Cara	20.00
i otal ulspo	sal unit acreage ir	iciuaea iii tiiis	s esumate.	Closure: <u>88.0</u>	b Lor	ng-Term Care:	88.06
Fa	acility type:	☐ Class I	⊁ C	class III	C&D Debris	Dienosal	
		Other:			COD DODING	Disposal	
`	,	_					
II. TYPE C	F FINANCIAL AS	SURANCE D	OCUMENT (Check type)			
	Letter of Credit*			ce Certificate	č Esc	row Account	
	Performance Bo	nd*	□ Financi			m 29 (FA Defe	erral)
	Guarantee Bond			und Agreement		,	,
	* - Indicates mechani	sms that require t		by Trust Fund Agreemen	t		
			<u>.</u> <u>.</u>	-	_		

Ш	FSTIM	ATF A	AD.III	STMENT

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 ral cost estimate adjustment. Cost estimates may be adjusted by using an inflation factor or by recalculating the maximum costs of c. ure in current dollars. Select one of the methods of cost estimate ajustment 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 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 th	e Department approved clos	sing cost estima	te dated:	9/1/2015
Latest Department Approved Closing Cost Estimate:	Current Year Inflation Factor, e.g. 1.02	on		Inflation Adjusted Closing Cost Estimate:
\$8,789,731.18	× <u>1.009</u>			\$8,868,838.76
This adjustment is based on the	e Department approved long	g-term care cos	t estimate dated:	9/1/2015
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:
\$58,859.14	× 1.009		=	\$59,388.87
Number of Years of	^r Long Term Care Remainin <u></u>	j :	×	30
Inflation Adjusted	Long-Term Care Cost Est	mate:	E	\$1,781,666.17
Signature by:	□ Owner/Operator	述 Enginee	r (check what an	
Sign	ature		Δ	ddress
Mark Roberts, F	Project Manager		Jacksonville	e, FL, 32256
Name	& Title		City, St	ate, Zip Code
8/10/10	P		Mark.Robert	s@hdrinc.com
Da	te		E-Ma	ail Address
(904) 598		_		
Telephone	Number			



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: Plymouth Av	enue Landf	ill			WACS ID: 27539	
Permit Application or Consent Order No.: SF64-0127461-002 Expiration Date: 11/29/2016					29/2016	
Facility Address: Northeast	of the inters	ection of Plym	outh Ave and Grar	nd Ave, west of	DeLand, Flor	ida
Permittee or Owner/Operator:	Volusia	County Solid V	Waste Division			
Mailing Address: 3151 East	New York A	venue, DeLar	nd, Florida 32724			
Latitude: 29 °	02'	35 "	Longitude:	81°	20"	50 "
Coordinate Method: AutoCA	D/GPS		0atum: NAD 1983/9	0 (east)		
Collected by: J.E. Zapert			Company/Affiliation	Sliger & Asso	ciates, Inc.	
		-				
Solid Waste Disposal Units Inc	uded in Es	timate:	_			
		Date Unit	Active Life of		If closed:	If closed:
		Began	Unit From Date	_If active:	Date last	Official
Phase / Cell	Acres	Accepting Waste	of Initial Receipt of Waste	Remaining life of unit	waste	date of
Plymouth LF	79.6*		1		received	closing
Plymouth LF	79.6	1940s	approx. 60 years	NA	1996	10/13/1999
Total disposal unit acreage incl	uded in this	estimate:	Closure: NA	Lon	g-Term Care:	39
			Ş 			
Facility type:	Class I	Ď C	lass III 🛚 🙇	C&D Debris	Disposal	
(Check all that apply) $\ \ \Box$	Other:					
* of the 79.6 acres o	f waste	disposal a	reas, 39 acres	were close	d after Ju	ly 1, 1985
II. TYPE OF FINANCIAL ASS	URANCE D	OCUMENT (C	Check type)			
□ Letter of Credit*		□ Insuran	ce Certificate	🛎 Esc	row Account	
□ Performance Bond	*	□ Financia	al Test	□ Form	m 29 (FA Defe	erral)
☐ Guarantee Bond*		□ Trust F	und Agreement			
* - Indicates mechanisms	s that require th	ne use of a Standb	y Trust Fund Agreement	t		
Northwest Dieleist	t District	0-1.10:11:	0			
Northwest District Northeas	UISTRICT	Central District	Southwest District	South Distric	st Sou	lheasl District

Ш	FS'	TIMA	TF	AD.	ш	STI	MEN	ıΤ
			`' -			\sim 1 $^{\circ}$		

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 all cost estimate adjustment. Cost estimates may be adjusted by using an inflation factor or by recalculating the maximum costs of c. ure in current dollars. Select one of the methods of cost estimate ajustment below.

☐ (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 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 closing co	ost 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 d	ated:	9/1/2015
Latest Department Approved Annual Long-Term Care Cost Estimate: \$96.580.71 Current Year Inflation Factor, e.g. 1.02			Inflation Adjusted Annual Long-Term Care Cost Estimate:
\$96,580.71 × 1.009		=	\$97,449.94
Number of Years of Long Term Care Remaining:		×	14
Inflation Adjusted Long-Term Care Cost Estimate:	ţ	=	\$1,364,299.11
Signature by: Owner/Operator	Engineer (check what a	pplies) syth St, Ste 800
Signature			Address
Mark Roberts, Project Manager	<u></u>	Jackson	ville, FL 32202
Name & Title		City, St	tate, Zip Code
8/10/16		Mark.Rol	perts@hdrinc.com
Date)		ail Address
(904) 598-8900 Telephone Number			

SECTION 2.0

Regulatory Requirements

FAC 62-701.630 addresses financial responsibility requirements for landfills and other solid waste management facilities. Government-owned landfills can demonstrate financial responsibility in several ways. Mechanisms available include establishment of an escrow account, use of the corporate guarantee (financial test), surety bonds, certificates of deposit, securities, letters of credit, trust fund agreements, and closure insurance.

Volusia County uses the escrow accounting mechanism to provide for financial responsibility. FAC 62-701.630 allows government-owned landfills to demonstrate financial responsibility for the annual cost of long-term care one-year prior to the actual final closure. The disposal areas at the TFR Facility and the Plymouth Avenue Landfill are required to have long-term care for 30 years after the landfill has been certified closed by the FDEP.

In March 1996, the U.S. Environmental Protection Agency (EPA) promulgated *Standards of Performance, Emission Guidelines and Compliance Times, and New Source Performance Standards* for municipal solid waste (MSW) landfills. These regulations brought MSW landfills under the direct control of the Clean Air Act (CAA) and require the installation of landfill gas (LFG) emissions controls for the Volusia County Tomoka Farms Road Landfill. Costs for implementation of the LFG control systems for the TFR Facility has been included in the closure cost estimates. The current FDEP closure permit for the Plymouth Avenue Landfill does not require a landfill gas collection system and costs for such system is not allocated in the updated long-term care cost estimates.

The FDEP establishes the method for estimating closing and long-term care costs for financial responsibility in FAC 62-701.630 and referencing and adopting 40 CFR, Part 264, Subpart H. These federal regulations specify that closing and long-term care cost estimates may be made by:

- Recalculating the maximum costs of closing and long-term care in current dollars; or,
- Using an inflation factor derived from the most recent Implicit Price Deflator for Gross Domestic Product published by the U.S. Department of Commerce in its *Economic Report of the President* to inflate cost estimates from the prior year.

The FDEP requirements for financial responsibility annual adjustments were met for the Class I North Cell landfill, Class I South Cell landfill and Class III landfill at the TFR Facility and the closed Plymouth Avenue Landfill by updating the 2015 FDEP-approved cost estimates with the annual inflation factor. An inflation rate of 0.9% was used for this year's financial responsibility report as provided by the FDEP. This value was obtained from the FDEP Solid Waste Financial Responsibility webpage. The 2015 cost estimates for the Class I North Cell landfill, Class I South Cell landfill and Class III landfill at the TFR Facility and the closed Plymouth Avenue Landfill were approved by the FDEP via an email dated September 1, 2015.

SECTION 3.0 Methodology

Closure and long-term care costs for the Class I North Cell, Class I South Cell and Class III landfills at TFR Facility and the Plymouth Avenue Landfill were adjusted for inflation based on the FY2015 Financial Responsibility Closure and Long-Term Care Cost Estimates Report cost estimates approved by the FDEP. No modifications to the TFR North Cell, TFR South Cell, TFR Class III or Plymouth landfills or their permits have occurred since the previous year's financial assurance submittal that would necessitate a recalculation of their financial assurance responsibility.

FDEP Form 62-701.900(28) was submitted for each facility individually with the updated estimated cost estimates for closure and long-term. Additional data including population data, airspace depletion rate, and life expectancy of the current permitted landfills are presented in Section 4.0.

Population projections and a six-year-averaged per capita landfill capacity utilization rate for Class I and Class III solid waste is used to project future landfill airspace utilization rates. The amount of permitted airspace utilized since the previous financial assurance report was determined by comparing new aerial topographic mapping flown in April 2016 with last year's aerial topographic survey flown in May 2015. This method takes into account the landfill volume used for the required daily and intermediate cover material and the landfill volume gained due to waste decomposition and compaction, as well as other factors which may impact permitted disposal capacity and the projection of remaining life.

Table 1 provides updated population projections for the Class I and Class III solid waste service areas. The contributing population for Class I solid waste is assumed to be the population of Volusia County only as waste from Flagler County to the Volusia County TFR Facility discontinued at the end of 2013. The contributing population for Class III solid waste was assumed to be Volusia County. The population projections are based on the data supplied by the Office of Economic and Demographic Research (EDR).

Table 2 presents the per capita permitted disposal capacity depletion rate. Tables 3 and 4 provide the permitted airspace depletion analysis for the Class I North Cell and Class III landfills. Table 5 provides a summary of the calculated closure dates and long-term care periods of the landfills. Tables 6 and 7 summarize the costs and required funding for closure and long-term care of each facility and provide an analysis of annual contributions to fund closure. Table 8 has been developed for Volusia County and presents estimates on the accrued liability.

Although permitted for construction, the Phase II Area 4 expansion has not yet been constructed and certified by the FDEP for waste disposal. Therefore, the Phase II Area 4 expansion was not included in the calculations presented in this report. Per FAC 62-701.630(1)(b), the financial assurance mechanism for the Phase II Area 4 expansion area will be funded according to FDEP-approved cost estimates and FDEP rules governing financial assurance responsibility at least sixty days prior to the acceptance of solid waste in these areas. Based on future population projections, per capita utilizations and volume calculation by HDR, the Phase II Area 4 expansion will increase the total waste capacity by 1.7 million cubic yards and increase the site life by 4.6 years.

The TFR Facility waste tire storage area is a stand-alone waste tire drop-off facility where tires are loaded into containers for transportation to a permitted off-site processing facility. This operation is anticipated to remain as long as the other solid waste activities take place on the property. Since this length of time is not now defined, it is assumed that the closing date will be the same as the closing date for the TFR Solid Waste Management Facility. The cost estimate for closing the TFR Facility waste tire storage area was assumed to be the cost of disposing the quantity of tires stored at the facility. This cost was calculated by

multiplying 52 tons of tires by the cost of hauling and disposal of tires by a third party contractor currently \$80/ton for regular tires (approx. 97% of total tires) and \$200/ton for oversized tires (approx. 3% of total tires). The quantity of waste tires (approx. 52 tons of quarterly ending inventory) was calculated by averaging quarterly waste tire quantities reported since 2015 report submittal (*Quarterly Waste Tire Report & Inventory Update* reports submitted to the department: 3rd quarter 2015; 4th quarter 2015; and 1st quarter 2016).

SECTION 4.0

Figures and Tables

The figures and tables are organized as follows:

т.	
Figure <u>Number</u>	Title
1	Existing Topographic Survey (April 2016) - Class I North Cell – Tomoka Farms Road Landfill
2	Final Grading Plan without Phase II Area 4 Expansion – Class I North Cell– Tomoka Farms Road Landfill
3	Final Grading Plan with Phase II Area 4 Expansion — Class I North Cell — Tomoka Farms Road Landfill
4	Existing Topographic Survey (April 2016) - Class III Landfill-Tomoka Farms Road Landfill
5	Final Grading Plan - Class III Landfill – Tomoka Farms Road Landfill
6	Aerial Site Plan (April 2016) – Tomoka Farms Road Landfill
Table	
Number	<u>Title</u>
1	Title Population Projections of Wasteshed Service Areas
1	Population Projections of Wasteshed Service Areas
1 2	Population Projections of Wasteshed Service Areas Annual Rate of Landfill Capacity Utilization
1 2 3	Population Projections of Wasteshed Service Areas Annual Rate of Landfill Capacity Utilization North Cell Class I Landfill - Projected Capacity Utilization
1 2 3 4	Population Projections of Wasteshed Service Areas Annual Rate of Landfill Capacity Utilization North Cell Class I Landfill - Projected Capacity Utilization Class III Landfill - Projected Capacity Utilization
1 2 3 4 5	Population Projections of Wasteshed Service Areas Annual Rate of Landfill Capacity Utilization North Cell Class I Landfill - Projected Capacity Utilization Class III Landfill - Projected Capacity Utilization Summary of Closing & Final Closure of Landfills

SECTION 5.0

Sources

- 1. Volusia County Solid Waste System, Financial Responsibility Closure and Long Term Care Costs Report, FY 2015, August 2015, HDR Engineering, Inc.
- 2. Schedule of Activities, Landfill Management Escrow Accounts, September 30, 2015, James Moore & Co., P.L. dated March 22, 2016.
- 3. Waste Tire Processing Price Agreement between County of Volusia and Wheelebrator Ridge Energy, Inc. (3131 K-Ville Avenue, Auburndale, FL 33823).
- 4. Volusia County Public Works Department Solid Waste Division, Quarterly Waste Tire Report & Inventory Update, 3rd Quarter 2015 dated October 15, 2015.
- 5. Volusia County Public Works Department Solid Waste Division, Quarterly Waste Tire Report & Inventory Update, 4th Quarter 2015 dated January 11, 2016.
- 6. Volusia County Public Works Department Solid Waste Division, Quarterly Waste Tire Report & Inventory Update, 1st Quarter 2016 dated April 7, 2016.
- 7. FDEP Operation Permit-North Cell Class I Landfill Tomoka Farms Road Solid Waste Management Facility.
- 8. FDEP Construction Permit-North Cell Class I Landfill Phase II Expansion Tomoka Farms Road Solid Waste Management Facility.
- 9. FDEP Closure Permit-North Cell Class I Landfill-Tomoka Farms Road Solid Waste Management Facility.
- 10. FDEP Operation Permit-Class III Landfill-Tomoka Farms Road Solid Waste Management Facility.
- 11. FDEP Closure Permit -South Cell Landfill -Tomoka Farms Road Solid Waste Management Facility.
- 12. FDEP Long-Term Care Permit -Plymouth Avenue Landfill.
- 13. Topography Survey and Mapping Report, Pickett & Associates, May 2015.
- 14. Topography Survey Surveyor's Report, Pickett & Associates, April 2016.
- 15. Certified Topographic Survey Capacity Calculation Report, Aerial Cartographics of America, November 2008 (ACA Job Number 2008679).
- 16. Minor Permit Modification Application for Class I North Cell Landfill, May 27, 2015.

Table 1: Population Projections of Wasteshed Service Areas 2016 Financial Assurance Report Volusia County, Florida

	Se	rvice Area Populations ¹					
Year ^{2,3}	Volusia County	Flagler County	City of Deltona	Class I Wasteshed	Class III Wasteshed		
2010	506,528 95,671		84,749	517,451	421,780		
2011	495,400	96,241	85,233	506,408	410,167		
2012	497,145	97,160		594,305	497,145		
2013	498,978	===		498,978	498,978		
2014	502,179			502,179	502,179		
2015	510,494	•••		510,494	510,494		
2016	516,602	***		516,602	516,602		
2017	521,997	(##.		521,997	521,997		
2018	526,840	(. 	-	526,840	526,840		
2019	531,351	:	-	531,351	531,351		
2020	535,789		1995	535,789	535,789		
2021	540,229	2,550	1888	540,229	540,229		
2022	544,640		5 ***	544,640	544,640		
2023	548,979	***	S - 1 - -	548,979	548,979		
2024	553,200		, ****	553,200	553,200		
2025	557,257	***	() () (557,257	557,257		
2026	561,111			561,111	561,111		
2027	564,740	I-000	***	564,740	564,740		
2028	568,132			568,132	568,132		
2029	571,271	***		571,271	571,271		
2030	574,144	900	(inter-	574,144	574,144		
2031	576,751		***	576,751	576,751		
2032	579,154		922	579,154	579,154		
2033	581,433		1966	581,433	581,433		
2034	583,665	1446	1245	583,665	583,665		
2035	585,929	7450	/200	585,929	585,929		
2036	588,284		-	588,284	588,284		
2037	590,709	***	-	590,709	590,709		
2038	593,164	- €0		593,164	593,164		
2039	595,611	-		595,611	595,611		
2040	598,009	, 		598,009	598,009		

- 1. Population estimates for the years 2010 through 2014 were derived from Table 1 of HDR Engineering's FY2015 Financial Responsibility Closure & Long-term Care Cost Estimates, dated August 2015. The Office of Economic and Demographic Research (EDR) is the source for Volusia County and Flagler County population estimates for 2015 through 2040.
- 2. From June 2009 to September 2011 waste generated by City of Deltona was diverted from disposal in the Class I & III landfills.
- 3. Per Volusia County, Flagler County's Class I waste was not accepted for disposal at the Class I landfill from 2013 onwards.

Table 2: Annual Rate of Landfill Capacity Utilization 2016 Financial Assurance Report Volusia County, Florida

A. Class | Landfill-North Cell

Year ⁽¹⁾	Annual Utilization ⁽²⁾ (CY)	Population of Wasteshed	Rate of Class I Landfill Space Utilization Per Capita (CY/Yr) ⁽⁴⁾
2010	266,219	517,451	0.514
2011	335,394	506,408	0.662
2012	399,352	594,305	0.672
2013	351,235	498,978	0.704
2014	354,489	502,179	0,706
2015	348,715	510,494	0.683
ojected Rate of Cla	ss Landfill Space Utilization Per Capi	ita (CY/Yr)	0.657

B. Class III Landfill

Year ⁽¹⁾	Annual Utilization (2) (CY)	Population of Wasteshed	Rate of Class III Landfill Space Utilization Per Capita (CY/Yr) ^{(3),(3)}		
2010	145,471	421,780	0.345		
2011	122,020	410,167	0.297		
2012	78,803	497,145	0.159		
2013	125,074	498,978	0,251		
2014	154,533	502,179	0,308		
2015	144,195	510,494	0.282		
ed Rate of Clas	ss III Landfill Space Utilization Per Cap	pita (CY/Yr)	0.274		

- 1) The year shown refers to the period in between the annual aerial topographic surveys (i.e., year 2015 refers to May 7, 2015 to April 9, 2016), For the year 2015, the annual utilized airspace, 322,919 cubic yards for the Class II North Cell and 133,529 cubic yards for the Class III Landfill, was divided by 0,92603to normalize for the 338 days in between aerial photograph dates (May 7, 2015 to April 9, 2016).
- 2) Annual utilization for the years 2010 through 2014 is provided by HDR Engineering's 2015 Financial Assurance Report dated August 2015. The Class I 2015 annual utilization was calculated by Autodesk AutoCAD Civil 3D using the May 7, 2015 and April 9, 2016 aerial topographic surveys by Pickett and Associates, Inc. The extent of the area used in the volume calculation was the "Existing Edge of Liner" Final Cover/Closure Site Plan SCS Engineers, 7/24/2009. The boundary was truncated at the 29' contour on the northern boundary of the origina North Cell. The boundary used for the Class III landfill volume calculation was "the limits of permitted Class III" line shown on the SCS Engineers permit renewal drawing dated June 2009. The western margin of the permitted Class III boundary was truncated (approximately 10 acres) since activities unrelated to waste disposal, compaction or decomposition (i.e., removal of yard trash stockpiles) occurred in this area.
- 3) Reduced Class III landfill per capita space utilization for 2012 tonnages may be attributed to a downtum in construction.
- 4) The projected rate of landfill space utilization is assumed to be the average rate of per capita utilization for the past six years.
- 5) The estimated annual landfill space utilization includes landfill space lost due to the use of intermediate/daily cover material and the space gained due to compaction and decomposition of waste,

Table 3: North Cell Class I Landfill - Projected Capacity Utilization 2016 Financial Assurance Report Volusia County, Florida

Year ⁽¹⁾	Time Period	Estimated Volume Utilized (CY)	Estimated Cumulative Volume Utilized (CY)	Permitted Disposal Capacity Remaining without Phase II, Area 4 Expansion (CY)	Percent of Permitted Disposa Capacity Used
2014 ⁽²⁾	5/24/14 to 5/7/15	-	3 75 5	3,353,025	68%
2015 ⁽³⁾	5/8/15 to 4/9/16	322,919	7,596,980	3,035,355	71%
2015	4/10/16 to 9/30/16	158,968	7,755,948	2,876,387	73%
2016	10/1/16 to 9/30/17	339,408	8,095,355	2,536,980	76%
2017	10/1/17 to 9/30/18	342,952	8,438,307	2,194,028	79%
2018	10/1/18 to 1/20/19	346,134	8,784,441	1,847,894	83%
2019	10/1/19 to 1/20/20	349,098	9,133,539	1,498,796	86%
2020	10/1/20 to 1/20/21	352,013	9,485,552	1,146,783	89%
2021	10/1/21 to 1/20/22	354,930	9,840,483	791,852	93%
2022	10/1/22 to 1/20/23	357,828	10,198,311	434,024	96%
2023	10/1/23 to 1/20/24	360,679	10,558,990	73,345	99%
2024	10/1/24 to 12/10/24	73,345	10,632,335	0	100%
				Calculated Closure Date	December 2024

- 1) Year generally represents October 1 to September 30 (i.e. year 2017 is from October 1, 2017 to September 30, 2018).
- 2) Source is 2015 Financial Responsibility Report, HDR Engineering dated August 2015.
- 3) The volume capacity remaining as of the April 9, 2016 topo survey was calculated to be approximately 3,291,657 cubic yards. This volume was calculated using the final cap grade contours and the April 9, 2016 aerial topographic survey. The final cover volume was estimated to be 256,302 cubic yards which assumes a permitted 2-foot thick soil cover for the entire closure area. The remaining capacity, 3,035,355 cubic yards, was assumed to be utilized for waste disposal and daily/intermediate cover.
- 4) The total design capacity is assumed same as the total capacity used in 2015 Financial Responsibility Report prepared by HDR Engineering and dated August 2015.

Table 4: Class III Landfill - Projected Capacity Utilization 2016 Financial Assurance Report Volusia County, Florida

Year ⁽¹⁾	Time Period	Estimated Volume Utilized (CY)	Estimated Cumulative Volume Utilized (CY)	Permitted Disposal Capacity Remaining (CY)	Percent of Permitted Disposa Capacity Used
2014 ⁽²⁾	5/24/14 to 5/7/15	-	2	4,031,703	42%
2015 ⁽³⁾	5/8/15 to 4/9/16	133,529	3,110,951	3,898,311	44%
2015	4/10/16 to 9/30/16	66,297	3,177,248	3,832,014	45%
2016	10/1/16 to 9/30/17	141,549	3,318,797	3,690,465	47%
2017	10/1/17 to 9/30/18	143,027	3,461,824	3,547,438	49%
2018	10/1/18 to 9/30/19	144,354	3,606,178	3,403,084	51%
2019	10/1/19 to 9/30/20	145,590	3,751,768	3,257,494	54%
2020	10/1/20 to 9/30/21	146,806	3,898,574	3,110,688	56%
2021	10/1/21 to 9/30/22	148,023	4,046,597	2,962,665	58%
2022	10/1/22 to 9/30/23	149,231	4,195,828	2,813,434	60%
2023	10/1/23 to 9/30/24	150,420	4,346,249	2,663,013	62%
2024	10/1/24 to 9/30/25	151,577	4,497,825	2,511,437	64%
2025	10/1/25 to 9/30/26	152,688	4,650,514	2,358,748	66%
2026	10/1/26 to 9/30/27	153,744	4,804,258	2,205,004	69%
2027	10/1/27 to 9/30/28	154,739	4,958,997	2,050,265	71%
2028	10/1/28 to 9/30/29	155,668	5,114,665	1,894,597	73%
2029	10/1/29 to 9/30/30	156,528	5,271,193	1,738,069	75%
2030	10/1/30 to 9/30/31	157,315	5,428,509	1,580,753	77%
2031	10/1/31 to 9/30/32	158,030	5,586,539	1,422,723	80%
2032	10/1/32 to 9/30/33	158,688	5,745,227	1,264,035	82%
2033	10/1/33 to 9/30/34	159,313	5,904,540	1,104,722	84%
2034	10/1/34 to 9/30/35	159,924	6,064,464	944,798	87%
2035	10/1/35 to 9/30/36	160,545	6,225,008	784,254	89%
2036	10/1/36 to 9/30/37	161,190	6,386,198	623,064	91%
2037	10/1/37 to 9/30/38	161,854	6,548,052	461,210	93%
2038	10/1/38 to 9/30/39	162,527	6,710,579	298,683	96%
2039	10/1/39 to 9/30/40	163,197	6,873,777	135,485	98%
2040	10/1/40 to 7/30/41	135,485	7,009,262	0	100%
		- 101		Calculated Closure Date	July 2041

- 1) Year generally represents October 1 to September 30 (i.e., year 2016 is from October 1, 2016 to September 30, 2017),
- 2) Source is 2015 Financial Responsibility Report, HDR Engineering dated August 2015.
- 3) The total air space remaining as of the April 9, 2016 aerial survey was calculated to be 4,333,427 (final cap to 133 feet). The required volume for final cover is 435,116 cubic yards of final cover, per Renewal Application for Operating Permit, SCS, 2009. A remaining capacity of 3,898,311 cubic yards was assumed to be utilized for waste disposal and intermediate cover.
- 4) The total design capacity is assumed same as the total capacity used in 2015 Financial Responsibility Report prepared by HDR Engineering and dated August 2015.

Table 5: Summary of Closing & Final Closure of Landfills 2016 Financial Assurance Report Volusia County, Florida

	Calculated Time of Closure ⁽¹⁾	Acreage Remaining to be Closed ⁽⁴⁾	Acreage Closed	Approximate Time of Post-closure	Remaining Years of Operations left in Current Footprint ⁽¹⁾	Remaining Years of LTC under Current Status
1. Tomoka Farms Road Landfi	ill					
South Cell ⁽²⁾		0	114	-	0	30
North Cell Class I	December 2024	66	0	2025-2055	8	30
Class III Landfill	July 2041	88	0	2041-2071	25	30
Plymouth Ave. Landfill	· · · · · · · · · · · · · · · · · · ·					
Final Closure (LTC Period)	. (.	0	39		0	14

- 1) As calculated in Tables 3 and 4 of this report. Reference date is 9/1/2016.
- 2) Under the current FDEP permit, the thirty-year long term care period for the South Cell landfill will begin once the North Cell Class I Landfill is certified closed by the FDEP.
- 3) Plymouth Avenue Landfill's Remaining Years of LTC was acquired from the Financial Assurance spreadsheet from Volusia County Solid Waste Accounting and subtracting one year.

TABLE 6: Summary of Estimated Costs 2016 Financial Assurance Report Volusia County, Florida

Facility	Updated Closing Cos Estimate	t Updated Annual LTC Cost Estimate	Total Updated LTC Cost Estimate	Total Updated Cost Estimate
Tomoka Farms Road Landfill				
South Cell-Previously Closed (LTC Period) ¹		\$ 123,002.79	\$ 3,690,083.72	\$ 3,690,083.72
North Cell (in Operation) ¹	\$ 11,306,330.9	8 \$ 202,020.95	\$ 6,060,628.52	\$ 17,366,959.50
Class III Landfill (In Operation) ¹	\$ 8,868,838.7	6 \$ 59,388.87	\$ 1,781,666.17	\$ 10,650,504.93
2. Plymouth Ave, Landfill				
Previously Closed (LTC Period) ¹		\$ 97,449.94	\$ 1,364,299.11	\$ 1,364,299.11
3. Used Tire Area (in Operation) ²	\$ 4,347.0	0		\$ 4,347.00
Total Estimated Cost				\$ 33,076,194.26

Notes:
1) Refer to the FDEP Forms 62-701.900(28), F.A.C. provided in this Report.

TABLE 7: Summary of Escrow Analysis 2016 Financial Assurance Report Volusia County, Florida

Facility	South C	Cell Landfill	North	Cell Class I Landfill	Class III Landfill	Plymouth Av	e. Landfill		Used Tire Area	Total Cost
Estimated Updated Closing Cost (CE)	\$		\$	11,306,330.98	\$ 8,868,838.76	\$		\$	4,347.00	\$ 20,179,516.74
Months of Exhausted Design Life (DE) ⁽¹⁾		4		207	219		_	Г	***	
Months of Total Design Life (DL) ⁽²⁾				306	518					1.00
Documented Closure Expenses (E)	\$::	\$		\$ 388	\$		\$	390	\$ *
Remaining Years of Long-term Care		30		30	30		14		0	74
Estimated Updated Post-Closure LTC Cost	\$	3,690,083.72	\$	8	\$ (a)	\$ 1,3	364,299.11	\$	(5)	\$ 5,054,382.83
Escrow Account Balance ⁽³⁾	\$	121,954.00	\$	7,051,571.00	\$ 3,291,343.00	\$	96,617.00	\$	6,019.00	\$ 10,567,504.00
Total Escrow Funding Required ⁽⁴⁾	\$	123,002.79	\$	7,648,400.37	\$ 3,749,566.97	\$	97,449.94	\$	4,347.00	\$ 11,622,767.07
Total Estimated (ncrease/(Decrease) for FY-16 Requirement	\$	1,048.79	\$	596,829.37	\$ 458,223.97	\$	832.94	\$	(1,672.00)	\$ 1,055,263.07
Financial Responsibility Escrow Account Balance for 2016 FDE	P Requireme	nt								\$ 11,622,767.07

¹⁾ Exhausted design life as of September 1, 2016.

²⁾ North/Phase I Landfill: opening date is June 1999 and closure date of December 2024 as calculated in Table 3. Class III landfill - opening date is June 1998 and closure date of July 2041 as calculated in Table 4.

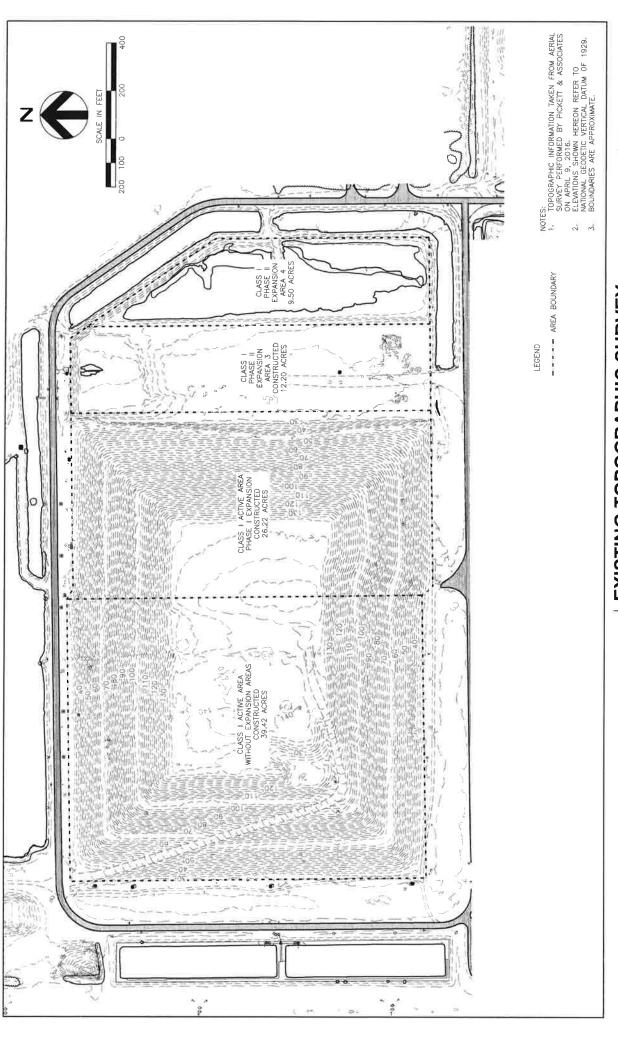
³⁾ See attached documentation from James & Moore for Escrow balance dated 9/30/2015 (Attachment B).

⁴⁾ With the exception of the used tire facility, the escrow account funding required for closure of active sites was calculated using the formula [CE x DE/DL] - E. Funding requirements for sites in post-closure care are required to provide funding for one year. Keeping with last year's report methodology, it was assumed that the escrow funding required for closing the waste tire facility is equal to the calculated cost of disposing the waste tires.

TABLE 8: Estimate of Accrued Liability (As of September 30, 2016) 2016 Financial Assurance Report Volusia County, Florida

ltem ¹	Tomoka Farms (South Cell)	Tomoka Farms (North Class I)	Tomoka Farms (Class III)	Plymouth Avenue	Waste Tire	Total
CLOSURE AND POST-CLOSURE COST ESTIMATES						
Closure Cost (Non-Completed) (Note 3)	\$	\$ 11,306,330.98	\$ 8,868,838.76	\$ 7	\$ 4,347.00	\$ 20,179,516.74
Post Closure Care (30 Years) (Note 2)	\$ 3,690,083.72	\$ 6,060,628.52	\$ 1,781,666,17	\$ 1,364,299.11	\$ 	\$ 12,896,677,52
Total FY 2016 Estimates	\$ 3,690,083.72	\$ 17,366,959.50	\$ 10,650,504.93	\$ 1,364,299.11	\$ 4,347.00	\$ 33,076,194.26
% of Capacity Used	100.00%	72.95%	45.33%	100.00%	N/A	:•::
FY2016 LF Closure & LTC Cost Estimate (Current FY2016 Estimate x % of Capacity Used)	\$ 3,690,083.72	\$ 12,668,640.76	\$ 4,827,796.68	\$ 1,364,299.11	\$ 4,347.00	\$ 22,555,167.27
TRIAL BALANCE ADJUSTMENT	7					
FY2015 LF Closure & LTC Liability (as of 9/30/2015)	\$ 3,657,169.06	\$ 11,992,988.40	\$ 4,558,222.05	\$ 1,448,710.67	\$ 6,019.00	\$ 21,663,109,18
Less Amount Paid for Closure in 2016 included in Closure Cost Re-calculation	\$	\$ ia:	\$ 12	\$ ii ,	\$ 145	\$ 3 €3
FY2016 LF Closure & LTC Liability Pre-Adjusted Balance (8/30/2016)	\$ 3,657,169.06	\$ 11,992,988.40	\$ 4,558,222.05	\$ 1,448,710.67	\$ 6,019.00	\$ 21,663,109.18
Adjustment for FY2016 Fiscal Year-End Change in LF Closure and LTC Estimate	\$ 32,914.66	\$ 675,652.36	\$ 269,574.63	\$ (84,411.56)	\$ (1,672.00)	\$ 892,058.09

- 1, Closure costs, Long-Term Care Costs and Percent Used Capacity are based on this report,
- 2. Post-Closure Care Costs are all based on 30 years except for Plymouth Avenue which is under long-term care period with 14 years of remaining long-term care.

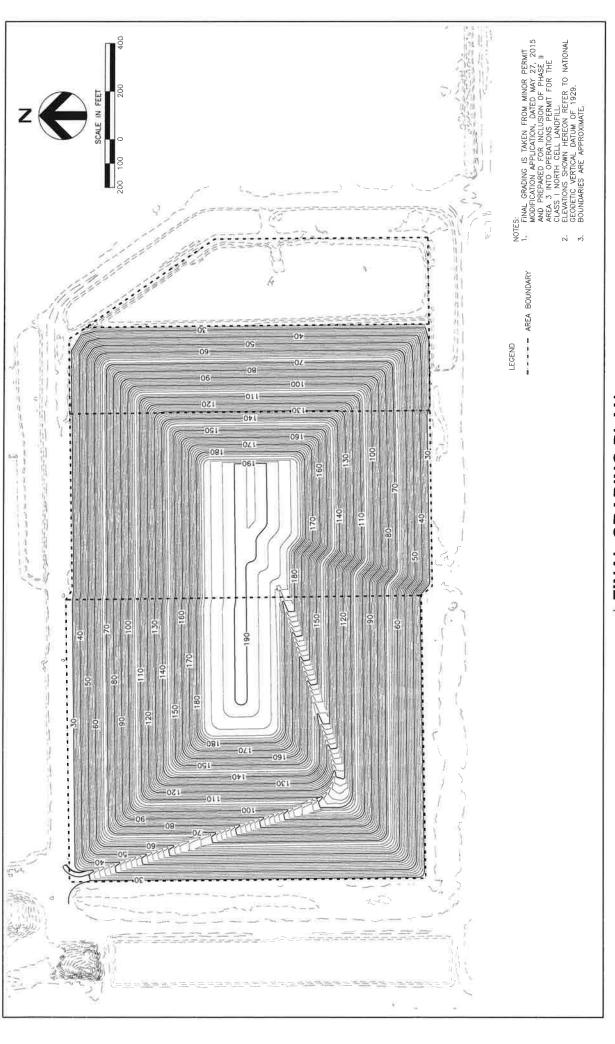


EXISTING TOPOGRAPHIC SURVEY (MAY 2016) CLASS I NORTH CELL

VOLUSIA COUNTY, FLORIDA

06/16

FIGURE





06/16

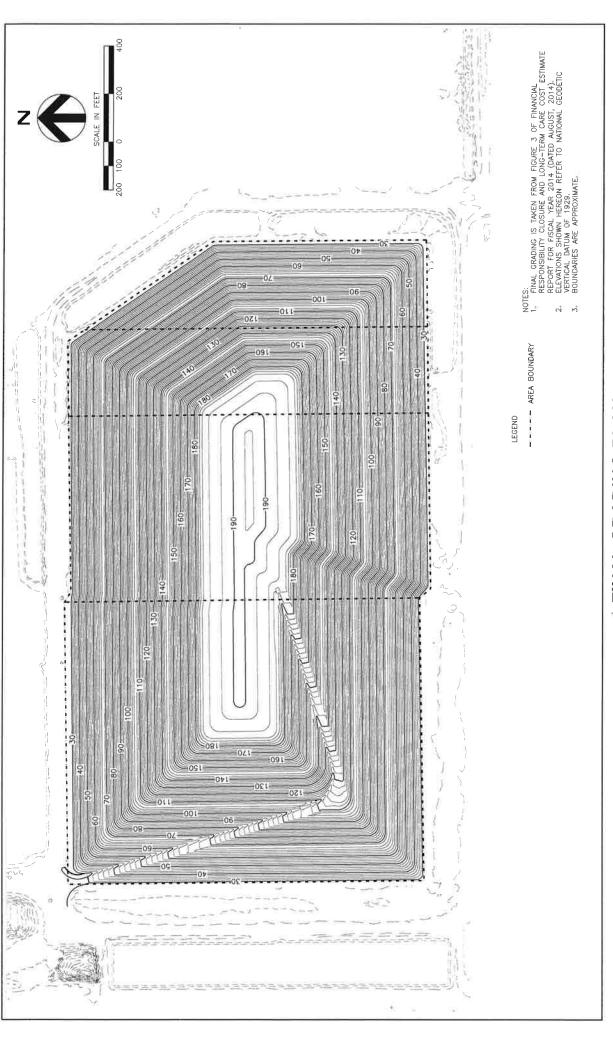
DATE

FIGURE

•

N

VOLUSIA COUNTY, FLORIDA

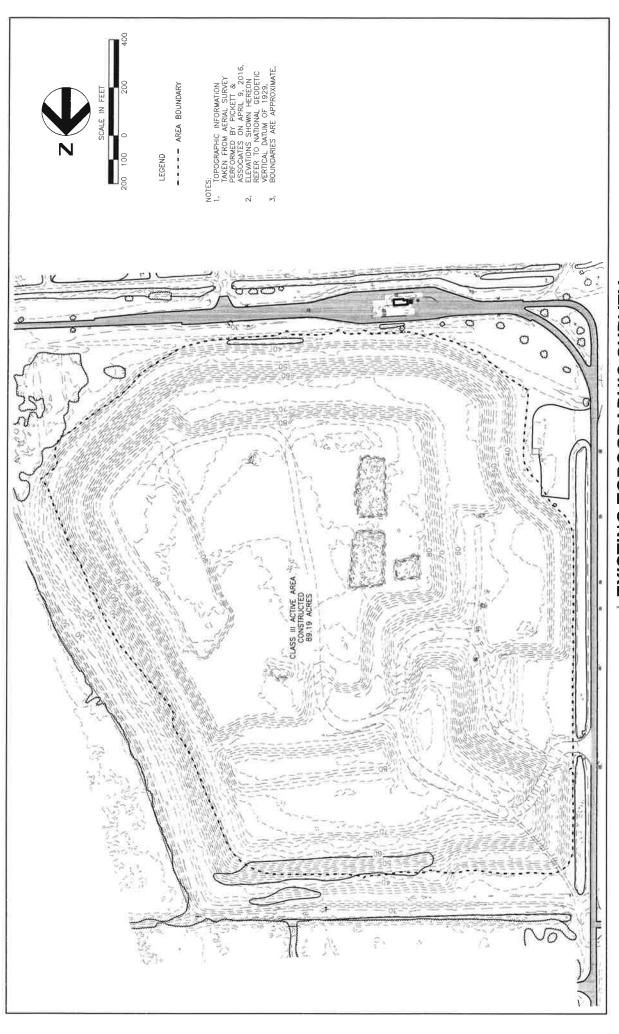


FINAL GRADING PLAN WITH PHASE II AREA 4 EXPANSION CLASS I NORTH CELL

06/16 FIGURE

DATE

VOLUSIA COUNTY, FLORIDA

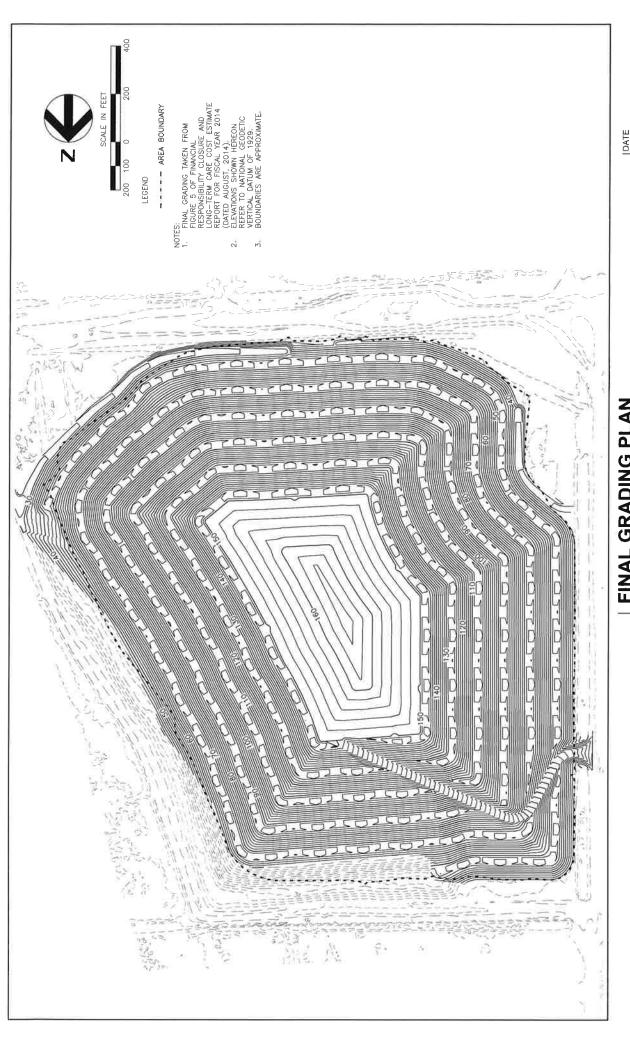


EXISTING TOPOGRAPHIC SURVEY (MAY 2016) CLASS III LANDFILL

VOLUSIA COUNTY, FLORIDA

06/16 FIGURE 4

DATE



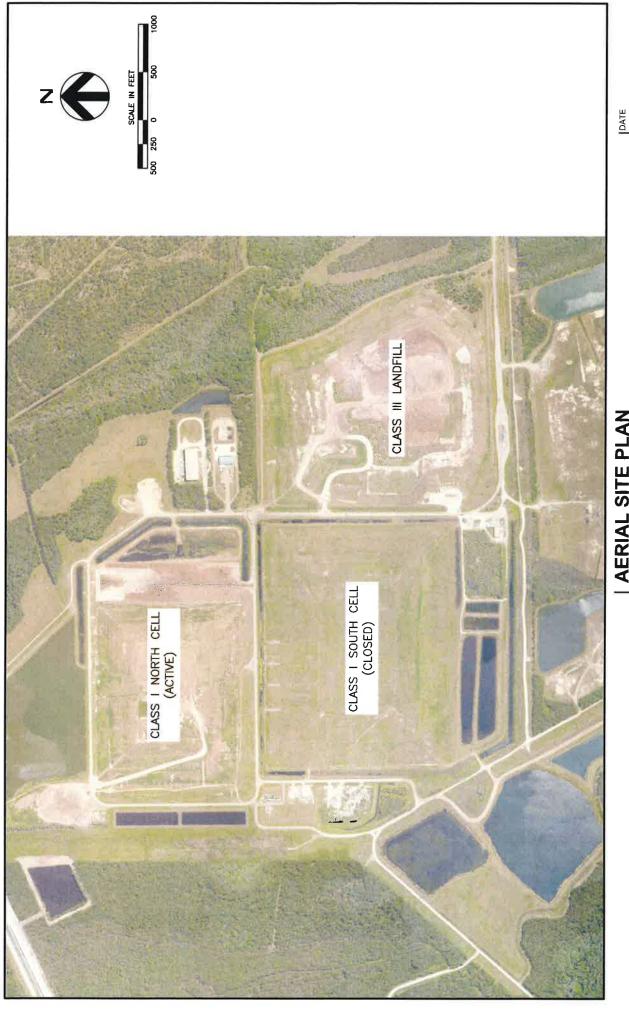
FINAL GRADING PLAN CLASS III LANDFILL

06/16 FIGURE

u,

2

VOLUSIA COUNTY, FLORIDA



AERIAL SITE PLAN (MAY 2016)

VOLUSIA COUNTY, FLORIDA

06/16 FIGURE 6



Attachment A

Surveyor's Report Tomoka Farms Road Solid Waste Disposal Facility

SURVEYOR'S REPORT

Tomoka Farms

Prepared for:



Prepared by:



PICKETT & ASSOCIATES PROJECT NO.: 17691-1 TITLE/TYPE OF SURVEY: Topographic Survey DATE OF SURVEY: This Map is based on aerial imagery & Lidar data flown 04/09/16

NOTE: THIS REPORT AND ACCOMPANYING DIGITAL MAP TITLED TOMOKA FARMS, ARE NOT FULL AND COMPLETE WITHOUT THE OTHER AND ARE NOT VALID WITHOUT THE SIGNATURE AND ORIGINAL RAISED SEAL OF A FLORIDA LICENSED SURVEYOR AND MAPPER.

HORIZONTAL DATUM:

The horizontal control was referenced to the North American Datum of 1983(NAD83) 1990 Adjustment, State Plane Coordinates, Florida East Zone. The primary horizontal data was derived from RTK GPS observations.

VERTICAL DATUM:

The vertical control will be referenced to the North American Vertical Datum of 1988 (NAVD88). The vertical data was established from National Geodetic Survey (NGS) monument PC 16 PID# AA8148 having a published elevation of 62.43' feet (63.39' feet NGVD 1929) with additional control data being retrieved from the Lengemann "L-Net" control network, a previous aerial target control survey prepared by ATS Land Surveying, LLC., dated July 29, 2011, June 3, 2012 and June 6, 2013.

Control Points Used:

Pt#	Northing	Easting	Elevation
1	1748049.0901	622992.9613	30.06
2	1742581.2923	623883.4279	28.84
4	*1742953.0300	629467.6635	24.80
5	1747185.6769	625821.0163	25.39

ACCURACY STATEMENT: The following stated plus or minus tolerances encompass a minimum of 90% of the difference between photogrammetrically measured values and any ground truth of all well-identified features. Mapped features will meet or exceed the Florida Minimum Technical Standards.

VERTICAL:

Contours have an estimated vertical positional accuracy of 0.5'. Spot elevations have an estimated vertical positional accuracy of 0.25'.

HORIZONTAL:

Well-identified features have an estimated horizontal positional accuracy of 1.66', as per the Standards of Practice, Ch.5J-17, adopted by the State of Florida Department of Agriculture and Consumer Services, regulating Professional Surveyors and Mappers. All measurements are in U.S. Survey Feet.

Measurement Methods:

This map is limited to those features visible on aerial imagery. Color digital imagery was acquired at an average altitude of 4332' using a metric precision digital camera whose focal length is 70.3mm. Mapping was performed using LiDAR and softcopy photogrammetric techniques. The LiDAR data has an estimated point sample distance of 0.89 foot and a density of 1.26 points per square foot (±13.56 points per square meter). For a vertical accuracy check, the LiDAR data was compared to the four (4) points set as targets for aerial imagery. The Root Mean Square Error of the Elevations (RMSEZ) is 0.062 foot, being the equivalent of 0.122' FGDC/NSSDA Vertical Accuracy. All measurements are in U.S. Survey Feet.

Limitations:

This mapping should be used for preliminary design work only and should not replace an actual field survey where the required accuracy is greater than the accuracy stated in this report. No responsibility is assumed for areas outside the contracted scope or for the ground control provided by ATS Land Surveying, LLC, Ormond Beach, Florida.

MAP PLOTTING:

This map is intended to be displayed at a scale of 1'' = 50' (1:600) or smaller.

T. JEFFREY YOUNG, PSM, CP

FLORIDA REGISTRATION NO. 5440 PICKETT AND ASSOCIATES, INC.

FLORIDA REGISTRATION NO. 364

SURVEY DATE

Attachment B

FY – 2016 Escrow Account Balance



Financial and Administrative Services

March 22, 2016

Florida Department of Environmental Protection Solid Waste Financial Coordinator 2600 Blair Stone Road Tallahassee, Florida 32399-2400

Subject: Volusia County Financial Responsibility

Dear Ladies and Gentlemen:

As per Rule 62-701.630(5) Florida Administrative Code, the County of Volusia has established an interest bearing account with the Florida State Board of Administration, Agency No. 301052 in January 1991. As of November 2007, this account has been transferred to a Morgan Stanley Liquidity Fund.

The updated Cost Estimates (submitted to your office by HDR Engineering, Inc.) indicated the Financial Responsibility Escrow Account Balance for FY15 required a balance of \$10,563,303. Accordingly, enclosed is the following documentation providing proof of our compliance of the current established financial responsibility requirements:

- 1. The audited "Schedule of Activity" for the County of Volusia Landfill Management Escrow Accounts for the fiscal year ending September 30, 2015.
- 2. The "Volusia County Solid Waste System, Financial Responsibility Closure & Long-Term Care Cost Estimates FY 2015", report.
- 3. The September 2015 Morgan Stanley Liquidity Fund: Account Detail showing the Fiscal Year end balance of funds set aside for the Landfill Liability.

If you have any questions or require any additional information, please let me know.

Sincerely.

Ryan Ossowski, CPA Accounting Director

Cc: State of Florida, Environmental Specialist Leonard Marion, Solid Waste Director

COUNTY OF VOLUSIA, FLORIDA SCHEDULE OF ACTIVITY LANDFILL MANAGEMENT ESCROW ACCOUNTS SEPTEMBER 30, 2015



INDEPENDENT AUDITORS' REPORT

To the Honorable County Council Members of the County of Volusia, Florida:

Report on the Schedule

We have audited the accompanying Schedule of Activity for the County of Volusia, Florida (the County) Landfill Management Escrow Accounts, as of and for the year ended September 30, 2015, and the related notes.

Management's Responsibility for the Financial Statements

Management is responsible for the preparation and fair presentation of this schedule in accordance with accounting principles generally accepted in the United States of America; this includes the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of the schedule that is free from material misstatement, whether due to fraud or error.

Auditors' Responsibility

Our responsibility is to express an opinion on the schedule based on our audit. We conducted our audit in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the schedule is free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the schedule. The procedures selected depend on the auditors' judgment, including the assessment of the risks of material misstatement of the schedule, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the County's preparation and fair presentation of the schedule in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the County's internal control. Accordingly, we express no such opinion. An audit also includes evaluating the appropriateness of accounting principles used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the schedule.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

121 Executive Circle
Daytona Beach, FL 32114-1180
Telephone: 386/257-4100

Fax: 386/255-3261 dab@jmco.com 5931 NW 1st Place Gainesville, FL 32607-2063 Telephone: 352/378-1331 Fax: 352/372-3741

Fax: 352/372-3741 gnv@jmco.com 2477 Tim Gamble Place, Suite 200 Tallahassee, FL 32308-4386 Telephone: 850/386-6184 Fax: 850/422-2074 tlh@jmco.com

Member of AGN International with offices in principal cities worldwide

Opinion

In our opinion, the Schedule of Activity for the County of Volusia, Florida Landfill Management Escrow Accounts, for the year ended September 30, 2015, referred to above presents fairly, in all material respects the cash balance of the escrow account as of September 30, 2015, and the activity in the escrow account for the year then ended, in conformity with the requirements of Rule 62-701.630, Florida Administrative Code.

Other Matter

We have audited, in accordance with auditing standards generally accepted in the United States of America, the financial statements of the County of Volusia, Florida for the year ended September 30, 2015, and our report thereon, dated March 18, 2015, expressed an unmodified opinion on those financial statements.

James Maore ; Co., P.L.

Daytona Beach, Florida March 21, 2016

COUNTY OF VOUSIA, FLORIDA LANDFILL MANAGEMENT ESCROW ACCOUNTS SCHEDULE OF ACTIVITY FOR THE YEAR ENDED SEPTEMBER 30, 2015

	Tomoka Class III	Tomoka Class I	Tomoka South	Plymouth	Waste Tire	Total
Escrow Account Balances, October 1, 2014	\$ 2,879,947	\$ 7,399,190	\$ 120,223	\$ 95,247	\$ 2,592	\$ 10,497,199
Deposits						
September 24, 2015	18,136	46,595	757	600	16	66,104
Interest Income						
October 31, 2014	98	252	4	3		357
November 30, 2014	95	243	4	3	0-00 0- 0 0	345
December 31, 2014	98	252	4	3	-	357
January 31, 2015	98	252	4	3	-	357
February 28, 2015	88	227	4	3		322
March 31, 2015	98	252	4	3	/#:	357
April 30, 2015	95	243	4	3	5945	345
May 31, 2015	98	252	4	3	7/27	357
June 30, 2015	95	243	4	3		345
July 31, 2015	98	252	4	3	3-3	357
August 31, 2015	98	252	4	3	-	357
September 30, 2015	95	243	4	3	120	345
Total interest income	1,154	2,963	48	36		4,201
Escrow Account Balances, September 30, 2015						
before transfers due to changes in escrow required	2,899,237	7,448,748	121,028	95,883	2,608	10,567,504
Transfers due to changes in escrow required	392,106	(397,177)	926	734	3,411	•
Escrow Account Balances, September 30, 2015	\$ 3,291,343	\$ 7,051,571	\$ 121,954	\$ 96,617	\$ 6,019	\$ 10,567,504
Cash and Cash Equivalents	\$ 3,291,343	\$ 7,051,571	\$ 121,954	\$ 96,617	\$ 6,019	\$ 10,567,504

COUNTY OF VOLUSIA, FLORIDA LANDFILL MANAGEMENT ESCROW ACCOUNTS NOTES TO SCHEDULE OF ACTIVITY SEPTEMBER 30, 2015

(1) Reporting Entity:

The County of Volusia, Florida (the County) is a political subdivision of the State of Florida, which is responsible for legislative and fiscal administration of the County.

The Schedule of Activity for the County Landfill Management Escrow Accounts (the Schedule) is prepared and submitted to the State of Florida Department of Environmental Protection pursuant to Section 62-701.630 of the Florida Administrative Code (the Code). The Schedule contains only the escrow balances required by the Code and is not intended to present the financial position of the County of Volusia, Florida's Refuse Disposal Fund, or any fund in the County's financial statements.

(2) Landfill Management Escrow:

The County records the landfill management escrows as restricted cash to fund postclosure care costs of the Plymouth Landfill and closure costs and postclosure care costs of the Tomoka Landfill. The escrow, which is part of the County's cash and cash equivalents, is calculated annually based on the "balance" method, which uses months of exhausted design life as a percentage of total design life times the estimated costs calculated by inflationary indexes or, if changes to the facility are made, by a study performed by a Registered Professional Engineer.

Morgan Stanley

Morgan Stanley Institutional Liquidity Funds PO BOX 219804 Kansas City MO 64121-9804

Investment Report

September 1, 2015 - September 30, 2015

Page 1 of 2

COUNTY OF VOLUSIA FL SOLID WASTE RE FINANCIAL AND ADMINISTRATIVE SERVIC ATTN MYRIAM LEMAY 123 W INDIANA AVENUE ROOM 300 DELAND FL 32720-4615

000436

Access
Your Account

888-378-1630



On the Web

www.morganstanley.com/im

For account number(s), refer to page 2 "Account Summary."

Total Portfolio Value as of September 30, 2015

\$10,567,504.38

Portfolio Value Summary

	Monthly Activity	Year-to-Date Activity
Beginning Value	\$10,501,054.10	\$10,498,257.45
Investments/Contributions	\$66,104.49	\$66,104.49
Withdrawals/Redemptions	\$0.00	\$0.00
Dividends/Cap Gains	\$345.79	\$3,142.44
Change in Portfolio Value	\$66,450.28	\$69,246.93
Total Portfolio Value	\$10,567,504.38	\$10,567,504.38

Change in Portfolio Value is the difference between the Total Portfolio Value (closing value) and the Beginning Value.

News

Liquidity Link offers a convenient and secure way of investing with the Morgan Stanley Institutional Liquidity Funds. Access to Liquidity Link includes trading rights, principal and accrual balances, as well as access to a wide range of MSILF reports including monthly statements, holdings reports, daily rates, fund commentary, and fact sheets.

For more information, please call Client Services at the number listed above.

We are pleased to announce the ability to suppress daily confirms. Please contact us at 1-888-378-1630 for more details.

Asset Allocation as of September 30, 2015

Percent	Asset Category	Total Value
0.00%	Money Market	\$0.00
0.00%	Prime	\$0.00
100.00%	Government	\$10,567,504.38
0.00%	Treasury	\$0.00
0.00%	Government Securities	\$0.00
0.00%	Tax Exempt	\$0.00
0.00%	Treasury Securities	\$0.00
100.00%	Total	\$10,567,504.38

Morgan Stanley

Morgan Stanley Institutional Liquidity Funds P0 B0X 219804 Kansas City M0 64121-9804

Investment Report

September 1, 2015 - September 30, 2015

Page 2 of 2

Account Summary

Fund Name Fund/Account Number	Beginning Value as of 9/01/2015	Investments/ Contributions	Withdrawals/ Redemptions	Dividends/ Cap Gains	Change in Value	Closing Value as of 9/30/2015
estment Accounts						
Government Portfolio Instit	utional Class					
8302/756014866	\$10,501,054.10	\$66,104.49	\$0.00	\$345 .79	\$66,450,28	\$10,567,504.38
Total All Accounts	\$10.501.054.10	\$66,104,49	\$0.00	\$345.79	\$66.450.28	\$10,567,504.38

Change in Portfolio Value is the difference between the Total Portfolio Value (closing value) and the Beginning Value.

Account Transactions

Government Portfolio Institutional Class

Fund/Account Number Tax ID Number Account Owner 8302/756014866

Certified

Certined
County Of Volusia FL Solid Waste Re
Financial and Administrative Servic

Attn Myriam Lemay

Year-to-Date Dividends Year-to-Date Capital Gains

Dividends are Capital Gains are \$3,142.44 \$0.00

Reinvested Reinvested

Trade Date	Transaction Description	Dollar Amount	Share Price	Shares This Transaction	Total Shares
09/24/2015	Beginning Value as of 9/01/2015 Shares Purchased By Wire	\$10,501,054.10 \$66,104.49	\$1.00 \$1.00	66,104,490	10,501,054.100 10,567,158.590
09/30/2015	Income Reinvest	\$345.79	\$1.00	345.790	10,567,504.380
	Ending Value as of 9/30/2015	\$10,567,504.38	\$1.00		10,567,504.380

Thank you for choosing Morgan Stanley Investment Management. Your satisfaction is important to us. If you identify any inaccuracy or discrepancy on your statement, it is your responsibility to notify us promptly but no later than 10 business days following receipt of your initial confirmation. To further protect your rights as a customer, oral communication should be reconfirmed in writing.

