



November 28, 2007

## Dept. of Environmental Protection

NOV 29 2007

Southwest District

Ms. Susan Pelz, P.E.
Solid Waste Section
Florida Department of Environmental Protection
Southwest District Office
13051 North Telecom Parkway
Temple Terrace, FL 33637

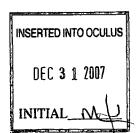
RE: Angelo's Aggregate Materials Enterprise Recycling and Disposal Facility

Class III Operations Permit Minor Modification Jones Edmunds Project No.: 01030-006-02

#### Dear Susan:

This letter has been prepared to transmit to you the operations permit minor modification for the Enterprise Recycling and Disposal Facility. The proposed modification encompasses a minor deviation in the filling sequence of the disposal cells and is not expected to lead to substantially different environmental impacts. The pertinent sections of the operations plan and engineering report as well as the permit drawings have been revised to reflect this change. These documents are enclosed as following:

- ATTACHMENT 1- Revised Operations Permit Application (Parts A, B, E, L and T)-These components are provided either as required per the minor modification or to denote sections of the permit (Operations Plan-Part L, Engineering Report-Part E) that have been revised.
- ATTACHMENT 2- Revised pages of the Operations Plan- The sequencing plan description was revised by tracking changes in the document. This revised page as well any other pages affected by pagination are provided (pages 10 thru 26).
- ATTACHMENT 3- Revised pages of the Engineering Report- The sequencing plan description was revised by tracking changes in the document. This revised page as well any other pages affected by pagination are provided (pages 3-8 thru 3-20).
- ATTACHMENT 4- Revised Permit Drawings (full-size, signed and sealed).



Med # 177982-014 Segrecce med 730 NE Waldo Rd Gainesville, FL 32641

352.377.5821 Phone 352.377.3166 Fax www.jonesedmunds.com

FILE

Ms. Susan Pelz Page 2 11/28/2007

Also attached with this letter is Check # 011120 for \$250 for the minor modification in accordance with 62-4.050(4)(s),F.A.C. Please contact me at 352-377-5821 if you have any questions regarding this information.

\_Sincerely,

Dennis A. Davis, P.E.

Project Manager

Attachments

 $M: \\ 01030-Angelos Recycled \\ 005-01-RAI3 Class III \\ Minor Modification \\ 2007\_11\_28-LTR-Pelz-FDEP-Minor Mod\_DDavis. docorder for the following properties of the propertie$ 

xc: John Arnold, Angelo's Aggregate Material

Dept. of Environmental Protection NOV 29 2007

Southwest District

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## ATTACHMENT 1 REVISED OPERATIONS PERMIT APPLICATION



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

Form Title Solid Waste Management Facility P	ermit
Effective Date 05-27-01	
DEP Application No.	
(Filled by DEP)	

Dept. of Environmental Protection

NOV 29 2007

Southwest District

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

APPLICATION INSTRUCTIONS AND FORMS

#### INSTRUCTIONS TO APPLY FOR A SOLID WASTE MANAGEMENT FACILITY PERMIT

#### I. General

Solid Waste Management Facilities shall be permitted pursuant to Section 403.707, Florida Statutes, (FS) and in accordance with Florida Administrative Code (FAC) Chapter 62-701. A minimum of four copies of the application shall be submitted to the Department's District Office having jurisdiction over the facility. The appropriate fee in accordance with Rule 62-701.315, FAC, shall be submitted with the application by check made payable to the Department of Environmental Protection (DEP).

Complete appropriate sections for the type of facility for which application is made. Entries shall be typed or printed in ink. All blanks shall be filled in or marked "not applicable" or "no substantial change". Information provided in support of the application shall be marked "submitted" and the location of this information in the application package indicated. The application shall include all information, drawings, and reports necessary to evaluate the facility. Information required to complete the application is listed on the attached pages of this form.

#### II. Application Parts Required for Construction and Operation Permits

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

NOTE: Portions of some parts may not be applicable.

NOTE: For facilities that have been satisfactorily constructed in accordance with their construction permit, the information required for A,B,C and D type facilities does not have to be resubmitted for an operation permit if the information has not substantially changed during the construction period. The appropriate portion of the form should be marked "no substantial change".

#### III. Application Parts Required for Closure Permits

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

NOTE: Portions of some parts may not be applicable.

#### IV. Permit Renewals

The above information shall be submitted at time of permit renewal in support of the new permit. However, facility information that was submitted to the Department to support the expiring permit, and which is still valid, does not need to be re-submitted for permit renewal. Portions of the application not re-submitted shall be marked "no substantial change" on the application form.

#### V. Application Codes

S - Submitted

LOCATION - Physical location of information in application

N/A - Not Applicable

N/C - No Substantial Change

#### VI. LISTING OF APPLICATION PARTS

PART A: GENERAL INFORMATION

PART B: DISPOSAL FACILITY GENERAL INFORMATION

PART C: NON-DISPOSAL FACILITY GENERAL INFORMATION

PART D: PROHIBITIONS

PART E: SOLID WASTE MANAGEMENT FACILITY PERMIT REQUIREMENTS, GENERAL

PART F: LANDFILL PERMIT REQUIREMENTS

PART G: GENERAL CRITERIA FOR LANDFILLS

PART H: LANDFILL CONSTRUCTION REQUIREMENTS

PART I: HYDROGEOLOGICAL INVESTIGATION REQUIREMENTS

PART J: GEOTECHNICAL INVESTIGATION REQUIREMENTS

PART K: VERTICAL EXPANSION OF LANDFILLS

PART L: LANDFILL OPERATION REQUIREMENTS

PART M: WATER QUALITY AND LEACHATE MONITORING REQUIREMENTS

PART N: SPECIAL WASTE HANDLING REQUIREMENTS

PART O: GAS MANAGEMENT SYSTEM REQUIREMENTS

PART P: LANDFILL CLOSURE REQUIREMENTS

PART Q: CLOSURE PROCEDURES

PART R: LONG TERM CARE REQUIREMENTS

PART S: FINANCIAL RESPONSIBILITY REQUIREMENTS

PART T: CERTIFICATION BY APPLICANT AND ENGINEER OR PUBLIC OFFICER

#### STATE OF FLORIDA

### DEPARTMENT OF ENVIRONMENTAL PROTECTION APPLICATION FOR A PERMIT TO CONSTRUCT, OPERATE, MODIFY OR CLOSE A SOLID WASTE MANAGEMENT FACILITY

Please Type or Print

A.	GENERAL INFORMATION
1.	Type of facility (check all that apply):
	[] Disposal [] Class I Landfill [] Ash Monofill [] Class II Landfill [] Asbestos Monofill [] Class III Landfill [] Industrial Solid Waste [] Other Describe:
	[ ] Non-Disposal         [ ] Incinerator For Non-biomedical Waste         [ ] Waste to Energy Without Power Plant Certification         [ ] Other Describe:
NOTE:	Waste Processing Facilities should apply on Form 62-701.900(4), FAC; Land Clearing Disposal Facilities should notify on Form 62-701.900(3), FAC; Compost Facilities should apply on Form 62-701.900(10), FAC; and C&D Disposal Facilities should apply on Form 62-701.900(6), FAC
2.	Type of application:  [ ] Construction  [ ] Operation  [ ✓] Construction/Operation  [ ] Closure
3.	Classification of application:  [] New  [] Substantial Modification  [] Renewal  [] Intermediate Modification  [✓] Minor Modification
1.	Facility name: Enterprise Recycling and Disposal Facility
5.	DEP ID number: SWD-51-87895 County: Pasco
5.	Facility location (main entrance): 41111 Enterprise Road
	Dade City, Florida 33525
7.	Location coordinates:
	Section: 5,8 Township: 25S Range: 22E
	Latitude: 28 ° 19 , 53 " Longitude: 82 ° 08 , 06 "

8.	Applicant name (ope	erating authority):	Ange	lo's Aggreg	ate Mater	ials, Ltd.
	Mailing address:	41111 Enterprise	e Road,	Dade City,	Florida 3	3525-1539
	_	Street or P.C	. Box	City	Stat	e Zip
	Contact person:	Dominic Iafrat	:е	_ Telephone	: ( <u>727</u> ) _	581-1544
	Title:		Preside	nt		٠.
				diafra	te@iafrat	e.com
				E-Mail add	ress (if a	available)
9.	Authorized agent/Co					
	Mailing address: _	730 NE Waldo	Road, G	ainesville,	Florida	32641
	_	Street or P.O	. Box	City	State	e Zip
	Contact person:	Dennis A. Davis,	P.E.	_ Telephone	: (352)	377-5821
	Title:	Pre	oject Ma	nager		
				ddavis@	onesedmur	
				E-Mail add	ress (if a	vailable)
10.	Landowner(if differ	ent than applicant)	:		same	
	Mailing address: _			•		
	_	Street or P.O	. Box	City	State	e Zip
	Contact person:			_ Telephone	: ()	
				E-Mail add:	ress (if a	vailable)
11.	Cities, towns and a	reas to be served:		Pasco (	County and	<u> </u>
		surrou	nding a	reas		
12.	Population to be se	erved:				
	Current:1	म	ive-Year rojectio	c on:	2,027,7	76
13.	Date site will be r	eady to be inspecte	d for co	ompletion: _	Ongoing	construction
14.	Expected life of th	e facility:		30		years
15.	Estimated costs:					
	Total Construction:	\$100,000	Closi	ing Costs: \$	1,02	9,072.59
16.	Anticipated constru	ction starting and	complet:	ion dates:		
	From:	Ongoing	To:		Ongoing	
17.	Expected volume or					
		layt				·a
	yus /c	tay t	ons/day		garrons/	uay

4		
	· · · · · · · · · · · · · · · · · · ·	
Facility site	supervisor:	Jeff Rogers
		Telephone: ( <u>352</u> )
		E-Mail address (if available)
Di	makas 111 a.s.	
		cres; Used 39 acres; Available 72 acre
Weighing scale	es used: [√] Yes	[ ] No
Security to pr	event unauthorize	ed use: [/] Yes [] No
Charge for was	ste received:9.	.50 \$/yds <sup>3</sup> \$/ton
Surrounding la	and use, zoning:	
[√] Resider		[√] Industrial
[√] Agricu]	tural	[] None
[ ] Commerc	ial	[ ] Other Describe:
Types of waste	received:	
[ ] Resider	ntial	[√] C & D debris
[] Commerc	ial	<pre>[/] Shredded/cut tires</pre>
	rator/WTE ash l biomedical	[] Septic tank
[ ] Water t	reatment sludge	[ ] Industrial
[ ] Air tre	atment sludge	[] Industrial sludge [] Domestic sludge
		Waste classified as Class III
[√] Asbesto		Waste classified as Class III
[√] Asbesto [√] Other I	escribe:	
[√] Other I		

13.	Property recorded as a Disposal Si	.te	in County Land Records: [ ] Yes $\[\[\]\]$ No
14.	Days of operation: Monda	ıУ	through Friday; Saturday
15.	Hours of operation: 7 a.m.	t	o 6 p.m.; 7 a.m. to 2 p.m.
16.	Days Working Face covered:		Once per week
17.	Elevation of water table: 61 - 8	5	Ft. (NGVD 1929)
18.	Number of monitoring wells:	2	upgradient, 14 downgradient
19.			
20.			Type controls: [ ] Active [ ] Passive
	Gas flaring: [ ] Yes [ ] No		Gas recovery: [ ] Yes [ ] No
21.	Landfill unit liner type:		
	[ ] Single geomembrane	[ ]	Double geomembrane Geomembrane & composite Double composite None
22.	Leachate collection method:		
	[] Geonets [] Well points	[ ]	Sand layer Gravel layer Interceptor trench None
23.	Leachate storage method:		
	[ ] Tanks [ ] Surface impoundments [ ] Other Describe:		N/A
24.	Leachate treatment method:		
	[ ] Secondary [ ] Advanced		Chemical treatment Settling
	[] None [] Other		N/A

25.	Leachate disposal method:		
		[ ]	Pumped to WWTP Discharged to surface water Percolation ponds
	[] Other		N/A
26.	For leachate discharged to surface	e wa	aters:
	Name and Class of receiving water	:	N/A
27.	Storm Water:		
	Collected: [✓] Yes [ ] No		
	Type of treatment:		·
	Name and Class of receiving water	::	
28.	Environmental Resources Permit (E	RP)	number or status:

LOCATION	N/A	N/C		
		<u>X</u>	1.	Four copies, at minimum, of the completed application form, all supporting data and reports; (62-701.320(5)(a),FAC)
			2.	Engineering and/or professional certification (signature, date and seal) provided on the application and all engineering plans, reports and supporting information for the application; (62-701.320(6),FAC)
			3.	A letter of transmittal to the Department; (62-701.320(7)(a),FAC)
Section 1			4.	A completed application form dated and signed by the applicant; (62-701.320(7)(b),FAC)
Separate Cover			5.	Permit fee specified in Rule 62-701.315, FAC in check or money order, payable to the Department; (62-701.320(7)(c),FAC)
Section 3	. —		6.	An engineering report addressing the requirements of this rule and with the following format: a cover sheet text printed on 8 1/2 inch by 11 inch consecutively numbered pages, a table of contents or index, the body of the report and all appendices including an operation plan, contingency plan, illustrative charts and graphs records or logs of tests and investigations, engineering calculations; (62-701.320(7)(d),FAC)
App. 3-A	<u></u>		7.	Operation Plan and Closure Plan; (62-701.320(7)(e)1,FAC)
App. 3-B		<u>X</u>	8.	Contingency Plan; (62-701.320(7)(e)2,FAC)
			9.	Plans or drawings for the solid waste management facilities in appropriate format (including sheet size restrictions, cover sheet, legends, north arrow, horizontal and vertical scales, elevations referenced to NGVD 1929) showing; (62-702.320(7)(f),FAC)
Figure 3-1		<u>x</u>		a. A regional map or plan with the project location;
Figure 3-2	<del></del>	<u>X</u>		<ul><li>b. A vicinity map or aerial photograph no more than 1 year old;</li></ul>
Section 2		X .	•	c. A site plan showing all property boundaries

<u>s</u>	LOCATION	N/A	N/C		PART E CONTINUED
<u>X</u>	Section 3			•	d. Other necessary details to support the engineering report.
	Section 2	-	<u>x</u>	]	Documentation that the applicant either owns the property or has legal authority from the property owner to use the site; (62-701.320(7)(g),FAC)
		<u> </u>		. ( 1	For facilities owned or operated by a county, provide a description of how, if any, the facilities covered in this application will contribute to the county's achievement of the waste reduction and recycling goals contained in Section 403.706,FS; (62-701.320(7)(h),FAC)
	App. 3-A Sec. 24.0	<del></del>	<u>x</u>	i I s	Provide a history and description of any enforcement actions taken by the Department against the applicant for violations of applicable statutes, rules, orders or permit conditions relating to the operation of any solid waste management facility in this state; (62-701.320(7)(i),FAC)
		<u>X</u>		(	Proof of publication in a newspaper of general circulation of notice of application for a permit to construct or substantially modify a solid waste management facility; (62-702.320(8),FAC)
	App. 3-C Fig. S-4		<u>x</u>	ā	Provide a description of how the requirements for airport safety will be achieved including proof of required notices if applicable. If exempt, explain how the exemption applies; (62-701.320(13),FAC)
_	App. 3-A Sec. 15.1		<u>X</u>		explain how the operator training requirements will be eatisfied for the facility; (62-701.320(15), FAC)

L.	LANDFILL OPERATION	REQU	IREMENT	TS (62-701.500,FAC)
	App.3-A, Sec.15.1	X	1.	Provide documentation that landfill will have at least one trained operator during operation and at least one trained spotter at each working face; (62-701.500(1),FAC)
			2.	Provide a landfill operation plan including procedures for: (62-701.500(2), FAC)
	App.3-A, Sec.15	X		<ul> <li>Designating responsible operating and maintenance personnel;</li> </ul>
	App.3-A, Sec.3-B	X		b. Contingency operations for emergencies;
	App.3-A, Sec.5	X		c. Controlling types of waste received at the landfill;
	App.3-A, Sec.5	X		d. Weighing incoming waste;
	App.3-A, Sec.7	X		e. Vehicle traffic control and unloading;
_X_	App.3-A, Sec.8			f. Method and sequence of filling waste;
	App.3-A, Sec.9	X		g. Waste compaction and application of cover;
	App.3-A, Sec.10	<u>X</u>		h. Operations of gas, leachate, and stormwater controls;
	App.3-A, Sec.19.1	X		i. Water quality monitoring.
_	App.3-A, Sec.19 X	_		j. Maintaining and cleaning the leachate collection system;
	·	<u>x</u>	3.	Provide a description of the landfill operation record to be used at the landfill; details as to location of where various operational records will be kept (i.e. FDEP permit, engineering drawings, water quality records, etc.) (62-701.500(3),FAC)
	App.3-A, Sec.19	<u>X</u>	4.	Describe the waste records that will be compiled monthly and provided to the Department quarterly; (62-701.500(4),FAC)
	App.3-A, Sec.2.3	Χ	5.	Describe methods of access control; (62-701.500(5),FAC
	App.3-A, Sec.5	X	6.	Describe load checking program to be implemented at the landfill to discourage disposal of unauthorized wastes at the landfill; (62-701.500(6),FAC)
	. ,		7.	Describe procedures for spreading and compacting waste at the landfill that include: (62-701.500(7),FAC)
	App.3-A, Sec.9	X		a. Waste layer thickness and compaction frequencies:

<u>s</u>	LOCATION	<u>n/a</u>	N/C			PART L CONTINUED
		<u>X</u>			b.	Special considerations for first layer of waste placed above liner and leachate collection system;
	App.3-A, Sec.8.2		<u>x</u>		c.	Slopes of cell working face and side grades above land surface, planned lift depths during operation;
	App.3-A, Sec.8.2		<u>X</u>		d.	Maximum width of working face;
				•	e.	Description of type of initial cover to be used at the facility that controls:
	App.3-A, Sec.14		Х			(1) Disease vector breeding/animal attraction
	App.3-A, Sec.14		X			(2) Fires
	App.3-A, Sec.10.1		<u>X</u>			(3) Odors
	App.3-A, Sec.13		_X			(4) Blowing litter
<del></del>	App.3-A, Sec.10.3		<u>X</u>			(5) Moisture infiltration
	App.3-A, Sec.9		<u>x</u>		f.	Procedures for applying initial cover including minimum cover frequencies;
	App.3-A, Sec.9		_X		g.	Procedures for applying intermediate cover;
	Sec.7		X		h.	Time frames for applying final cover;
	App.3-A, Sec.15		<u>X</u>		i.	Procedures for controlling scavenging and salvaging.
	App.3-A, Sec.13		_X		j.	Description of litter policing methods;
	App.3-A, Sec.8.2		X		k.	Erosion control procedures.
	·			8.		ibe operational procedures for leachate management ding; (62-701.500(8),FAC)
		<u>X</u>			a.	Leachate level monitoring, sampling, analysis and data results submitted to the Department;
		<u>X</u>			b.	Operation and maintenance of leachate collection and removal system, and treatment as required;
		<u>X</u>			c.	Procedures for managing leachate if it becomes regulated as a hazardous waste;
		<u>X</u>			đ.	Agreements for off-site discharge and treatment of leachate;
<del></del>		<u>X</u>			e.	Contingency plan for managing leachate during emergencies or equipment problems;

<u>s</u>	LOCATION	<u>N/A</u>	N/C			PART L CONTINUED
		<u>X</u>			f.	Procedures for recording quantities of leachate generated in gal/day and including this in the operating record;
		<u>x</u>			g.	Procedures for comparing precipitation experienced at the landfill with leachate generation rates and including this information in the operating record;
		<u>X</u>			h.	Procedures for water pressure cleaning or video inspecting leachate collection systems.
	App.3-A, Sec.10.1		<u>X</u>	9.	shall requi	ibe how the landfill receiving degradable wastes implement a gas management system meeting the rements of Rule 62-701.530, FAC; 01.500(9),FAC)
	Sec.3.10.3		<u>X</u>	10.	landf the r	ibe procedures for operating and maintaining the ill stormwater management system to comply with equirements of Rule 62-701.400(9); 01.500(10),FAC)
				11.		ment and operation feature requirements; 01.500(11),FAC)
	App.3-A, Sec.17		<u>x</u>		a.	Sufficient equipment for excavating, spreading, compacting and covering waste;
	App.3-A, Sec.17		<u>x</u>		b.	Reserve equipment or arrangements to obtain additional equipment within 24 hours of breakdown;
	App.3-A, Sec.16.0		_X_		c.	Communications equipment;
	App.3-A, Sec.12		_X_		đ.	Dust control methods;
	App.3-A, Sec.14	******	<u>X</u>		e.	Fire protection capabilities and procedures for notifying local fire department authorities in emergencies;
	App.3-A, Sec.13		<u>X</u>		f.	Litter control devices;
	App.3-A, Sec.11		<u>X</u>		g.	Signs indicating operating authority, traffic flow, hours of operation, disposal restrictions.
	App.3-A, Sec.2.2		<u>X</u>	12.	inside acces	de a description of all-weather access road, e perimeter road and other roads necessary for s which shall be provided at the landfill; 01.500(12),FAC)
				13.		ional record keeping and reporting requirements; 01.500(13),FAC)

s	LOCATION	N/A	N/C	PART L CONTINUED
	App.3-A, Sec.19	<u></u>	<u>X</u>	<ul> <li>Records used for developing permit applications and supplemental information maintained for the design period of the landfill;</li> </ul>
	App.3-A, Sec.19.2	_	<u>X</u>	<ul> <li>Monitoring information, calibration and maintenance records, copies of reports required by permit maintained for at least 10 years;</li> </ul>
	App.3-A, Sec.19		<u> </u>	c. Maintain annual estimates of the remaining life of constructed landfills and of other permitted areas not yet constructed and submit this estimate annually to the Department;
_	App.3-A, Sec.19.2		<u>X</u>	d. Procedures for archiving and retrieving records which are more than five year old.

#### T. CERTIFICATION BY APPLICANT AND ENGINEER OR PUBLIC OFFICER

The undersigned applicant or authorize	ed representative of Angelo's Aggregate Materials, Ltd	
is awar	e that statements made in this form and attach	
this application is true, correct and belief. Further, the undersigned agre 403, Florida Statutes, and all rules a	rotection and certifies that the information is complete to the best of his/her knowledge and ses to comply with the provisions of Chapter and regulations of the Department. It is asferable, and the Department will be notified	
Signature of Applicant or Agent	Mailing Address	
John P. Arnold, Civil Engineer	Largo, Florida 33779	
Name and Title (please type)	City, State, Zip Code	
john.phillip.arnold@gmail.com	(727) 581-1544	
E-Mail address (if available)	Telephone Number	
	Date:	
corporate officer.  Professional Engineer registered in Fl	nt is not a governmental official, owner, or lorida (or Public Officer if authorized under a Statutes):	
corporate officer.  Professional Engineer registered in Fl Sections 403.707 and 403.7075, Florida This is to certify that the engineering	lorida (or Public Officer if authorized under a Statutes):  ng features of this solid waste management	
corporate officer.  Professional Engineer registered in Fl Sections 403.707 and 403.7075, Florida  This is to certify that the engineering facility have been designed/examined by principles applicable to such facilities facility, when properly maintained and statutes of the State of Florida and rundersigned will provide the applicant	lorida (or Public Officer if authorized under a Statutes):  Ing features of this solid waste management by me and found to conform to engineering ies. In my professional judgment, this d operated, will comply with all applicable rules of the Department. It is agreed that the with a set of instructions of proper lity.	
Professional Engineer registered in Fl Sections 403.707 and 403.7075, Florida This is to certify that the engineering facility have been designed/examined by principles applicable to such facilities facility, when properly maintained and statutes of the State of Florida and rundersigned will provide the applicant maintenance and operation of the facility	lorida (or Public Officer if authorized under a Statutes):  Ing features of this solid waste management by me and found to conform to engineering ies. In my professional judgment, this d operated, will comply with all applicable rules of the Department. It is agreed that the with a set of instructions of proper lity.  730 NE Waldo Road	
Professional Engineer registered in Fl Sections 403.707 and 403.7075, Florida This is to certify that the engineering facility have been designed/examined by principles applicable to such facilities facility, when properly maintained and statutes of the State of Florida and rundersigned will provide the applicant maintenance and operation of the facility	lorida (or Public Officer if authorized under a Statutes):  Ing features of this solid waste management by me and found to conform to engineering ies. In my professional judgment, this d operated, will comply with all applicable rules of the Department. It is agreed that the with a set of instructions of proper lity.    T30 NE Waldo Road   Mailing Address   Mailing Addr	
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2.

# ATTACHMENT 2 REVISED PAGES OF THE OPERATIONS PLAN

waste is placed in the cell. The access road will be relocated to provide access to the next cell. The cell landfilling will continue in similar fashion until the cell reaches final grade less 3 feet. Some areas of the cells may have partial lifts, based on the final cell elevations. The working face shall not exceed a slope of 3H:1V and a width of 100 feet along the side slopes, however, once the waste elevation reaches a height of 125 feet, NGVD, the working face slope shall not exceed 4H:1V. The stormwater retention pond (Pond 1) will be constructed at this time. The north and west sides of completed Cell No. 1 stormwater will drain to the temporary pond, in the northeast corner of the site.

Cell #2 is the next 560-foot cell to the south of Cell #1. Cell sequencing will continue to the south (through Cell #2) and then move to the north and west of the filled areas for Cells 15, 5, 4, and Cell 3. Completion of cells 14, 16, and a portion of Cell 5 will entail filling the northeast temporary retention pond once the floor of the pond has been built up with clean soil to the landfill base elevation of 80 feet NGVD in this portion of the landfill. The ponds constructed for completed cells within the buffer areas will approximately replace the stormwater capacity of the northeast temporary pond.

The sequence of filling operations is as follows, (see Drawing Sheet C-5 and Sequence Drawing Sheets C-6 through C-13):

Sequence 1 Fill Cells 1, 2, & 15 four 10 to 12-foot lifts (130-foot EL). (Filled)

Intermediate cover to be placed on slopes as constructed above grade.

Sequence 2 Fill portion of Cell 5 four 10 to 12-foot lifts (125-foot EL), against Cell 15. Fill Cells 5 and 15 two lifts (145-foot EL)

Sequence 3A Fill Cell 4 six four 10- to 12-foot lifts (150110-foot EL) against Cell 5 and Cell 1 slopes.

Fill Cells 5 and 15 one lift (150-foot EL).

Fill Cell 1 two 10- to 12-foot lifts (150-foot EL

Intermediate cover to be placed on above grade slopes.

Sequence 3B Fill Cell 3 twofour 10- to 12-foot lifts (11095-foot EL) against Cell 4 and Cell 2 slopes. Intermediate cover to be placed on slopes as constructed above grade.

Sequence 3C Fill Cell 4 four 10- to 12- foot lifts (150-foot EL) against Cell 5 and Cell 1 slopes.

Fill Cells 5 and 15 one lift (150-foot EL). Fill Cell 1 two 10- two 12- foot lifts (150 foot EL). Fill Cell 3 two 10 to 12- foot lifts (110) against Cell 4 and 2 slopes.

Intermediate cover to be placed on above grade slopes.

Sequence 4 Fill Cells 3 and 4 six four 10- to 12-foot lifts (135150-foot EL) against Cell 4 and Cell 2 slopes.

Fill Cells 1 and 2 two 10- to 12-foot lifts (150-foot EL).

Fill Cells 5 and 15 one lift (150-foot EL).

Intermediate cover to be placed on above grade slopes.

- Sequence 5 Fill Cell 6 in five 10- to 12-foot lifts (140-foot EL) against Cell 3 Intermediate cover to be placed on above grade slopes.
- Sequence 6 Fill Cell 7 seven 10-to 12-foot lifts (160-foot EL), against Cell 6 and Cell 4 slopes.

  Fill Cells 3, 4, and 6 one 10- to 12-foot lift (160-foot EL)

  Intermediate cover to be placed on above grade slopes.
- Fill Cell 8 seven 10- to 12-foot lifts (160-foot EL) against Cell 7 and Cell 5 slopes
  Fill Cell 4 one lift (170-foot EL)
  Fill Cell 5 one lift (16-foot EL)
  Intermediate cover to be placed on above grade slopes.
- Sequence 8 Fill Cells 9, 10, and 11 six or seven lifts (150- to 170-foot EL) against Cells 6, 7, and 8 slopes
  Fill Cell 7 one 10- to 12-foot lift (170-foot EL)
  Final cover to be placed on finished grades to maximum permitted height.

Lift height includes cover material. Due to the landfill bottom elevation some lifts may not be a full 10 feet in height. It is anticipated that filling each cell will take approximately 6 months to 1 year.

As each sequence is active, the following procedures will be followed.

The access road to the working face will be constructed and graded as necessary.

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- Waste will be compacted as it is placed. General lift height will be 10 feet and will come within three (3) feet of the final elevation to provide for final cover.
- The working face will remain approximately 100 feet in length.
- Weekly cover of six (6) inches of soil will be placed on the working face.
- Intermediate cover of 12 inches of soil will be placed in areas that will not receive waste within 180 days. The cover may be removed immediately prior to placement of new waste.

Stormwater runoff on the interior of the excavation and filling area will be diverted to the onsite temporary storage pond using a temporary interior swale and 6-foot berm. Perimeter berms will direct stormwater away from excavation and filling areas. The temporary stormwater pond will receive runoff until Pond 3 is developed.

#### 8.2 Erosion Control

The following engineering controls will be used to minimize erosion at the working face.

- Construct a berm along the top of the slope during the regrading to redirect any rainfall runoff away from the face of the slope. The area along the berm should be graded so as to allow rapid runoff along the top of the slope. Ponding of water near the top of the slope should not be allowed, since seepage through the slope may initiate slope erosion.
- As soon as possible following the construction of the clay liner, begin to fill against the 2H:1V slope with the landfill material.

In order to assist with erosion control of the intermediate cover as well as initial cover, the landfill may apply processed mulch over such covered areas to minimize erosion.

#### 8.3 Life Expectancy

Research of the U.S Census Bureau website reveals that the following Florida counties located within the service area of the facility are included in the 100 fastest growing counties in the U.S.

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through 6/2005. In the last 5 years the counties and their respective growth rates are as follows: Pasco County (24.5%), Osceola County (34.3%), Lake County (31.6%), Hernando County (21.1%), and Sumter County (20.3%). In addition, the most recent estimates of growth rates in the last year show Citrus County, Hernando County, Hillsborough County, Lake County, Pasco County, Sumter County, Osceola County, and Polk County are growing between the rates of 3% through 6% per year. Demolition waste coming from current and proposed projects in Hillsborough and Pinellas County are increasing significantly as of late.

It is anticipated that the projected growth rate for waste acceptance based on the aforementioned data will be 8.5% per year. Therefore, through compounding the 8.5% rate will generate daily acceptance rates of 1800 tons in the first year with 1,953 tons, 2,119 tons, 2,299 tons, and 2,495 tons respectively in year 2 through year 5 of the permit.

The calculated volume of each of the landfill cells, order of cell construction, and estimated life expectancy are presented on the revised Table 1 of this submittal.

From site surveys performed in 2005 and 2006 and accompanying waste records, an apparent inplace landfill density was calculated to be 0.90 tons/cyd. Assuming this compacted density and estimating a yearly increase of 8.5% in the waste acceptance rate from the current 1800 tons/day, the landfill, including Cells 1 through 11, and 15, has a lift expectancy of approximately 5 years. Future development of Cells 12 through 14 and Cell 16 are anticipated to have an additional life of approximately 3 years (see Table 1). Therefore, based upon the calculated volume of landfill space available, and apparent in-place density, the landfill has an estimated life expectancy of 8 years at projected disposal volumes and waste disposal rates. The life expectancy will fluctuate as waste compaction and intake rates vary.

#### 9.0 WASTE COMPACTION AND APPLICATION OF COVER

Waste received shall be segregated based on compactibility. Bulky, incompressible items, such as concrete and tree debris, shall be separated. Concrete is stockpiled and periodically removed, transported to an off-site processing facility to be crushed, and returned if needed for on-site uses. Tree debris is separated from the waste and periodically mulched for on-site use. The remaining debris is disposed of in designated "cells" using a CAT 826G Compactor, or equivalent to place, spread the waste daily and compact the debris weekly. Initial cover material is planned to be excavated from onsite areas and placed weekly in approximately 6-inch layers on the compacted lifts to control vectors, reduce rain infiltration and provide a more stable working

face area. The amount of weekly cover material required for the design life of the landfill is estimated to be approximately 400,000 cyds. The facility may also use a 50/50 mixture of mulch and soil as cover in accordance with Policy Memo # SWM-05.4 dated April 25, 2001. An intermediate cover of one (1) foot of compacted soil will be applied if final cover or an additional lift is not to be applied within 180 days of cell completion. Cell closure will occur when all existing and proposed cells are filled. For final buildout grade and closure detail, see Drawing Sheets C-13 and C-22. Those landfill cells within the eastern half of the landfill will be temporarily closed until a second tier of cells are filled on top to planned grade, see Sequence Drawings, C-6 through C-13.

Cell closure shall conform to the grades and lines specified in the grading plan. The grading plan shall conform to the rules and regulation specified in 62-701.600, as well as 62-701.400 (7) and 62-701.400(8), Florida Administrative Code. Pesticides when deemed necessary to control rodents, insects and other vectors shall be used as specified by the Florida Department of Agriculture and Consumer Services. Uncontrolled and unauthorized scavenging shall not be permitted at the landfill site. Controlled recycling may be permitted by the Site Manager responsible for the operation of the landfill facility. Temporary storage of soil fill or recycling materials may be required in the closed cell areas.

#### 10.0 OPERATION OF GAS, LEACHATE AND STORMWATER CONTROLS

#### 10.1 Gas Monitoring and Control

The type of material to be disposed in the Class III Landfill is not expected to generate significant amounts of methane or other toxic gases since the landfill's design prevents groundwater contact. Therefore, a passive gas control system is proposed. The Enterprise RDF site Manager will conduct daily and weekly inspections of the landfill and will check for objectionable odors or gas by driving around the perimeter of the site, record the results, and notify the FDEP and County of any positive detection and immediately take corrective actions. Corrective actions will include placement of additional soil cover, or mulch, or lime containing materials such as crushed concrete that is documented to abate the odors. Quarterly gas monitoring is currently conducted. The facility only accepts Class III debris for disposal and accepts no putrescible household wastes. Surface water and groundwater contact with the Class III wastes will be prevented by the approved facility design thus preventing possible odor operation. Other best management practices to prevent odors include: 1) closure of each cell as it is completed; 2) weekly soil cover application; and, 3) immediate corrective actions to abate any detected onsite odors.

However, since yard trash is an acceptable Class III waste, and it is biodegradable, a system of gas probes surrounding the landfill is used to monitor methane gas levels.

A system of passive gas vents will be installed to prevent explosions and fires from possible gas generating from the biodegradable wastes (yard trash) in the landfill. The location of the gas vents is shown on Figure 3-15. The construction details of the vents are shown on Figure 3-16. The vents will be installed during the final closure and installation of the final cover over each landfill cell.

A system of 16 gas probes will be installed to monitor gas at the site, see Figure 3-13. The construction details a typical gas probe as shown on Figure 3-14.

#### 10.1.1 Methane Gas Measurement

In accordance with the subject landfill permits, methane gas levels will be monitored at each of the 16 gas monitoring points quarterly and submitted to the FDEP for review. See Figure 3-13. A portable explosimeter, or lower explosive limit (LEL) meter will be used to measure methane levels from each of the gas probes. LEL meters, such as the MSA Model 260 or GEM 500 or equivalent, will be used to conduct this monitoring. These meters are capable of measuring percent volume of methane in air and the percent LEL level of the methane by volume. The meter shall be calibrated in accordance with manufacturer's specifications prior to each methane monitoring event. Appendix D presents the proposed gas monitoring probe survey form to be used to conduct the quarterly monitoring at the subject site. This form will document at the time of each gas probe reading, air temperature in degrees Fahrenheit, methane levels in percent volume in air as measured by the lower explosive limit. The ball valve will remain closed between monitoring events and pre-purge measurements will be recorded. In the event of a positive gas measurement, the post-purge measurement will also be recorded. The results of each quarterly gas probe survey will be submitted to the Department on the presented form within two weeks of each monitoring event. These events are planned to be coordinated with the semi-annual groundwater monitoring at the subject site.

#### 10.1.2 Gas Contingency Plan

The following Contingency Plan will be implemented if any of the measured gas monitoring points methane levels are detected above the 100% LEL of greater than 5 percent methane in air, or if 25% of the LEL or higher is measured in a structure. If this level of methane or greater is detected in any of the probes, the Enterprise RDF landfill operator will institute measurement of methane in nearby structures, i.e., stormwater collection points, or any maintenance or office buildings nearby the subject gas probe, on a weekly basis, until these levels go below the 100% LEL at the subject probe. If methane levels measured in any on-site building exceed 25% of the LEL, building windows and/or doors will be opened for ventilation and all personnel evacuated until methane readings are maintained below 25% of the LEL for methane. The monitoring report for any event that detects methane above the LEL will also report methane levels from any nearby structures and may include monthly monitoring measurements at the high methane gas probe points until the levels go below the methane LEL level or until corrective actions are conducted to reduce methane levels. The FDEP will be notified within seven days of any gas monitoring levels that exceed the reporting action levels.

#### 10.2 Leachate Control

Liquid disposal is not permitted at the Class III Landfill site. However, to control any leachate production that may occur and result in infiltration or increased head on the clay layer, a leachate control system has been implemented. This system for the Enterprise RDF Class III landfill is based on the continuous 3-foot thick clay layer (10<sup>-8</sup> cm/s) that will be placed on the bottom and the cell slopes of the landfill. The clay layer beneath each individual cell will form a continuous barrier layer that will be graded to direct leachate to the temporary stormwater pond. The controlled method of screening waste also supplements the leachate control. Because Angelo's Recycled Materials privately owns the Enterprise Class III Landfill facility, most of the haulers, waste generators, and sources of waste are known to Angelo's and the scale house attendents. For those haulers that are unfamiliar to Angelo's, the scale house attendants question the haulers more intensely to determine the contents of their loads. The spotters and operators add additional monitoring at the active disposal location. The addition of video surveillance to the monitoring process of incoming wastes helps to identify fires or smoking loads. Combined methods of screening waste is an effective method to reduce any possible threat to public health or the environment.

Based on well inventory information from the Southwest Florida Water Management District, shallow residential wells in the area have a depth ranging from 75 to 190 feet. Potable wells normally withdraw water from limestone in the Floridan aquifer.

A consistent confining layer above the limestone will exist across the site, due to the overexcavation of the cells and backfilling with 3 feet of compacted clay. Additionally, Floridan aquifer monitor wells will be installed on the site to ensure early detection of any exceeded groundwater parameters in this aquifer.

#### 10.3 Stormwater Control

The approved Stormwater Management Plan for the landfill consists of berms, swales and ponds constructed within the 200-foot landscape buffer zone to divert, collect and contain stormwater runoff from the completed site. These stormwater facilities are designated to retain the 100-year, 24-hour storm volume as required by the FDEP. During excavation, construction, and waste disposal, stormwater will be controlled mainly by a series of berms that direct stormwater to the temporary stormwater pond located in the northeast corner of the site. A 6-foot berm adjacent to active and filled cells retains stormwater from the filling area and diverts stormwater from the

excavation area to the temporary stormwater pond. Additional details concerning the stormwater management is provided in Drawing Sheet C-6 through C-13, and the details on Sheet C-22.

The site manager will perform weekly inspections of the stormwater management system. Any areas in need of maintenance will be repaired within seven days.

#### 11.0 SIGNS

Signs will be posted at the entrance to the Enterprise RDF site which will list the following information:

The operating entity;
Hours of operation;
No scavenging allowed;
No hazardous waste accepted;
List of acceptable and unacceptable waste; and,
24-hour phone number of emergency contact.

The gate attendant will direct each driver to the area appropriate to unload wastes. Signs will also be posted to direct trucks to either the borrow pit or the landfill working face.

#### 12.0 DUST ABATEMENT PLAN

Enterprise RDF will provide a water tanker to water the landfill access roads if and when dust becomes a problem. This will also be done whenever the County receives complaints about dust or when a dust problem is observed during a County or State inspection.

#### 13.0 DUST, LITTER, AND VECTOR CONTROL PLAN

The nature of the waste to be disposed in the landfill does not typically create litter and vector problems. Daily placement of waste and/or compaction will be the primary means utilized to control litter and vectors. The facility personnel will perform daily inspections of the facility and the access road to assure litter is controlled. As needed, laborers shall pick up blowing debris and dispose of it in appropriate containers and/or on site. In addition, the laborers shall weekly patrol the haul route west on Enterprise Road to C.R.35A for pick up of litter from vehicles hauling material to and from the site. Temporary fencing to contain litter at the working face of

the landfill will be used as needed. These litter controls will also be implemented whenever the County or State receives a complaint from adjacent landowners or a litter problem is observed during an inspection.

If vectors (rodents, insects, and domestic animals) become a nuisance at the Facility, the Operator may obtain the services of a licensed pest management company to review the operations and recommend control measures.

#### 14.0 FIRE PROTECTION AND FIRE FIGHTING FACILITIES

Fires that originate in landfills are primarily extinguished by soil application. Supplemental fire protection will be furnished by the Dade City Fire Department (Station No. 1). The Fire Department will be notified immediately of all landfill fires. An emergency contact sign will be posted at the entrance so it is visible to emergency vehicles with a contact phone number available 24-hours.

During a fire, incoming trucks will be directed toward another area of the landfill so that a temporary active face can be established. Once the fire is extinguished, appropriate cover will be applied to the waste and operations will continue at the original active face. If the fire is extensive and a temporary active face cannot be established, incoming trucks will be redirected to another landfill.

Onsite fire prevention facilities will include:

- Fire extinguishers mounted in the cab of all heavy equipment and in the gatehouse;
- Radio communication to notify personnel of a fire; and
- Onsite equipment (dozer) and fill dirt to extinguish fires on working face.

Soil for fire fighting purposes will be borrowed from the closest unexcavated area of the site to the fire. Details of all fire fighting episodes will be recorded in the landfill operating record.

#### 14.1 Hot Loads and Spills

Any hot load (of authorized material) found will be dumped on an area at least 500 feet away from the active working face. The load will immediately be covered with soil if a fire is imminent. Once the fire is extinguished, the load will be pushed and spread using a dozer,

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allowing for the load to be inspected by a spotter. The waste will not be disposed of until it has cooled completely, and the fire hazard has been mitigated.

In the event of a fire at the working face, waste acceptance will cease until the fire has been completely extinguished and additional cover material compacted in the area of the fire. If the fire is located elsewhere in the landfill, waste acceptance operations may continue at the manager's discretion.

Since liquid disposal is prohibited in a Class III landfill, spills from waste vehicles are not anticipated. In the case of a fuel spill or leak, the contaminated soil will be collected to the extent possible, contained in a drum or roll off container, and taken offsite within thirty (30) days for proper disposal or treatment.

#### 15.0 LANDFILL PERSONNEL

The gate attendant and certified landfill operator shall be onsite during all operating hours. In addition, there shall be a minimum of one (1) other person (spotter) onsite, for a total of three (3). The state certified landfill operator will be assigned to manage the daily landfill operations. The personnel will be stationed at the landfill ticket gate and active disposal face. Additional personnel will be assigned to the landfill operation as the demand necessitates. Two spotters are generally located at the working face at all times that waste is accepted. However, there are up to eight spotter-trained or in-house trained spotter employees on-site each day and therefore; additional trained employees can be relocated to the working face as necessary to inspect the incoming waste. Certificates for current trained personnel are attached as Appendix 14.m to this submittal.

At least one (1) spotter will be at the working face at all times the facility is accepting waste. The spotter will direct vehicle traffic around the working face and will direct drivers where to empty their vehicles. The loads will be inspected as described in Section 5.0. If the load is acceptable, the waste will be spread and compacted as necessary. If the load is unacceptable, the spotter will direct the driver to reload the waste into the vehicle, if possible. If the driver is unable to reload the material, on-site personnel will reload the material for the driver using on-site equipment. The spotter will also discourage scavanging by the public.

A typical work schedule is as follows:

	Operating	Gate	Certified		Equipment
Day	Hours	Attendant	Operator	Spotter(s)	Operator
M-F	7 am –6 pm	1 (7 am-6 pm)	1 (6 am -6 pm)	Min. 1 (7 am –6 pm)	Min. 1
				For 2 or more	(7 am –6 pm)
		·		(7 am –4 pm),	
				(12 pm –6pm)	
S	7 am – 2 pm	1 (7 am –2 pm)	1 (6 am -3 pm)	Min. 1 (7 am –2 pm)	Min. 1
					(7 am –2 pm)

#### 15.1 <u>Training Plan</u>

Enterprise RDF will implement an employee training plan to properly train their landfill operators and spotters to operate the landfill in accordance with this Operations Plan, state and local regulations, and accepted disposal practices and to properly manage any hazardous or prohibited materials which are received at the landfill.

A trained operator will be at the site during all times that the landfill receives waste. All facility operators will be trained at an approved FDEP training course. Each operator will submit proof of training and documentation to the FDEP upon receipt of their certificates.

Landfill operators must have at least one year of work experience in landfill operation and a high school diploma; or have at least two (2) years experience at a Class I, II, or III landfill. Each operator will complete at least 24 hours of initial training in an FDEP-approved training course, and shall pass an examination as part of that training. Sixteen (16) hours of continuing training will be completed within three (3) years of each operator's initial training from an approved course documented by the form in Appendix C. A list of FDEP approved training courses for operators and spotters are included in Appendix E.

Enterprise RDF landfill spotters will complete an initial eight (8) hour FDEP-approved course and four (4) hours of continuing training every three (3) years. Records documenting each employee's training course completion and schedule will be maintained and kept at the landfill office at all times.

In addition to FDEP required training, in-house training programs will be conducted by Enterprise RDF trained operators for interim operators, spotters and other employees in proper Class III landfill operations, unacceptable Class III waste material handling, asbestos handling, and facility maintenance. These in-house courses will be provided at least every six (6) months and be documented in a training log as shown in Appendix C.

#### 16.0 COMMUNICATION FACILITIES

The landfill gate house will have both telephone and facsimile facilities. In addition, all landfill operating areas (gate house, working face, etc.) will have radio communication or cell phones with the base station at the gate house.

#### 17.0 EQUIPMENT INVENTORY

Equipment currently planned for use at the landfill site includes:

- A. D-8 Caterpillar bulldozer, CAT 826 G Compactor; two 2.5 cyd loaders, water truck, 590 John Deer backhoe, or equivalent are sufficient for adequate operation of the facility. A wood chipper/grinding machine (Hogzilla), or equivalent, will be moved to the site periodically (approximately once every six months) to process wood wastes as needed. Additional equipment, such as a grader may be rented as needed.
- B. Arrangements will be made to provide alternate equipment within 24 hours following an equipment breakdown.
- C. There will be safety devices present on equipment to shield and protect the operators from potential hazards during operation.

#### 17.1 Equipment Maintenance

Enterprise RDF will conduct routine heavy equipment and vehicle maintenance onsite. Maintenance includes fueling of heavy equipment with diesel fuel, lubrication, oil changes and, antifreeze changes. Tire repairs will be handled by an outside service company.

A permanent equipment fueling facility will be installed and registered in accordance with FAC 62-761. Pasco County will be copied on the registration.

Oil and antifreeze changes will be contained by large drip pans to catch the waste oils. These wastes will then be transferred either to a 250-gallon waste oil skid tank or to a 55-gallon drum for waste antifreeze, which will be located in a containment area. The containment area is a covered metal storage shed. Enterprise RDF plans to enter into contracts with licensed recyclers to periodically pick up the waste oil and antifreeze. Records of these pickups will be maintained by Enterprise RDF. All virgin lubricants will be stored undercover within the gate house building.

#### 18.0 SAFETY DEVICES

All operating equipment which will be utilized at the landfill site will be fitted with rollover protection and fire extinguishers. All landfill personnel will be required to wear safety helmets, safety shoes, eye protective glasses, gloves, and safety vests. The onsite heavy equipment will meet OSHA safety requirements. First aid equipment will be kept in the office trailer and in the operating equipment.

#### 19.0 RECORDS, PERMITS AND REPORTS

A copy of any Florida Department of Environmental Protection (FDEP) and Pasco County approved engineering drawings, permits and supporting information shall be kept at the facility for reference and inspections. Permits will be posted at site per ordinance. A waste type and quantity intake (in tons) log will be kept daily, compiled monthly and a report will be submitted quarterly to Pasco County and the FDEP.

An annual estimate of the remaining life and capacity in cyds of the landfill will be reported annually to the FDEP.

#### 19.1 Water Quality Monitoring

Enterprise RDF will conduct the required initial and semi-annual groundwater monitoring at the sites' monitoring wells as described in the sites' Groundwater Monitoring Plan. Semi-annual reports of this monitoring will be submitted to Pasco County and FDEP in accordance with this plan. Quarterly monitoring will also be conducted and reported at specific wells per Pasco

County conditions. Semi-annual monitoring of the potable supply well was initiated once disposal operations began in Cell 2.

#### 19.2 Landfill Operating Records

The operating record for the landfill will document daily as a minimum the following activities:

- Self inspections of landfill conditions, safety equipment and unacceptable waste received, any odor detected;
- Records used to develop permit applications;
- Change in construction, operation or closure permits and all supporting designs;
- Water quality sampling events, analytical reports, well installation or repair;
- Employee training;
- Random load checks:
- Facility construction, major maintenance, or demolition;
- Other activities that significantly affect facility operations.

Self-inspections of the landfill conditions are conducted daily, and more extensive inspections are included weekly. Daily inspections include general inspection of site access, site security, and conditions of intermediate cover. Weekly inspections include more detailed inspections of the conditions of the surface water and stormwater management systems and groundwater monitoring wells.

The Operating Record will be kept at the landfill and be accessible to the landfill operators to maintain and for FDEP or Pasco County inspection at reasonable times.

Operational records will be maintained for the design life of the landfill. Water quality monitoring information, maintenance records, and permit reports will be maintained for a minimum of 10 years. Background water quality records will be maintained for the design period of the landfill.

#### 20.0 EROSION CONTROL

The site's inherent design as an excavation pit will prevent stormwater from leaving the property. Stabilization by seeding and mulching of the final fill areas will occur as the fill operations progress from cell to cell.

#### 21.0 FINAL GRADE PLAN

Final grade plan of the facility is shown on the plans (Drawing C-13) and in the cross-sections (Drawings C-14 through C-20). The finished elevation after all fill material has been placed and final cover provided is designed to reclaim excavated areas back to the grade which existed prior to the site being opened as a mine with allowance for positive drainage.

#### 22.0 CLOSURE AND LONG TERM CARE

The site's Reclamation and Closure Plan details the procedures to properly close and maintain the landfill during the 30-year post-closure period. A Closure Report will be prepared for the landfill that details the site-specific limitations for land use based on geotechnical stability (settlement), potential gas migration, and site access. Long-term maintenance of erosion controls, stormwater controls and monitoring devices is discussed in the Closure Plan, Section 7, of the permit application document.

#### 23.0 CERTIFICATION

Laboratory testing and observation of cell floor conditions during cell construction completion shall consist of the following:

- In-place density testing for each 12-inch thick soil lift, based on laboratory proctor test results for the construction material, will be recorded by a properly trained technician. These tests will be conducted in the location of each permeability test.
- Thickness testing of each lift will be recorded at a minimum frequency of two tests per acre, per lift.
- Confirmation hydraulic conductivity testing of Shelby tube or drive cylinder samples of the compacted cell floor material will be performed at a minimum frequency of one test per lift, per acre.
- Observance for unstable areas such as limestone, sink holes and soft ground will be performed for each cell.

If the test data from a cell floor section does not meet the requirements of the anticipated conditions of the hydrologeological and geotechnical reports and the requirements of the facility construction permit, additional random samples may be tested from that cell section. If the additional testing demonstrates that the hydraulic conductivity meets the requirements, the cell will be considered acceptable. If not, that cell will be reworked or reconstructed so that it will meet these requirements.

Upon completion of construction of any cell within the disposal facility, the Engineer of Record shall certify to the FDEP on form 62-701.900(2) that the approved construction is complete and in accordance with the submitted plans. The operator will provide the completed form to the FDEP in accordance with FAC 62-701.320(9)a., along with the quality assurance test results described above.

#### 24.0 HISTORY OF ENFORCEMENT ACTION

In 2000, OGC Case No. 00-0009 was opened against the applicant for the Frontier Recycling facility (now Angelo's Recycling Facility) in Largo, Florida. A model consent order was used to resolve the issues of the case. The DEP's database did not include information regarding the subject of the enforcement.

In 2004, OGC Case No. 04-0887 (solid waste) and No. 04-0426 (stormwater) were opened against the applicant for Angelo's Recycling facility in Largo, Florida. ARM requested a minor permit modification to resolve the solid waste enforcement case. Formal enforcement was not taken to resolve the stormwater case. Instead, it was handled through submittal of a new permit application.

In 2006, OGC Case No. 06-0783 was opened against the applicant for the Enterprise Class III Landfill and Recycling Facility in Pasco County, Florida. ARM performed the corrective actions that were required to bring the facility into compliance and the assessed civil penalties were paid.

# ATTACHMENT 3 REVISED PAGES OF THE ENGINEERING REPORT

the landfill base elevation of 80 feet NGVD in this portion of the landfill. The ponds constructed for completed cells within the buffer areas will approximately replace the stormwater capacity of the northeast temporary pond.

The sequence of filling operations are as follows (see Drawing Sheet C-5 and Sequence Drawing Sheets C-6 through C-13):

Sequence 1 Fill Cells 1, 2, & 15 four 10- to 12-foot lifts (130-foot EL—3H:1V up to 125; 4H:1V from 125-130)).

Intermediate cover to be placed on slopesas constructed above grade

Fill portion of Cell 5 four 10- to 12-foot lifts (125-foot EL), against Cell 15.

Fill Cells 5 and 15 two lifts (145-foot EL)

Intermediate cover to be placed on above grade slopes

Sequence 3A Fill Cell 4 six-four 10- to 12-foot lifts (150110-foot EL) against Cell 5 and Cell 1 slopes

Fill Cells 5 and 15 one lift (150-foot EL)

Fill Cell 1 two 10- to 12- foot lifts (150-foot EL)

Intermediate cover to be placed on above grade slopes.

Sequence 3B Fill Cell 3 twofour 10- to 12- foot lifts (95110-foot EL) against Cell 4 and Cell 2 slopes. Intermediate cover to be placed on slopes as constructed above grade.

Sequence 3C Fill Cell 4 four 10- to 12- foot lifts (150- foot EL) against Cell 5 and Cell 1 slopes. Fill Cell 5 and 15 one lift (150-foot EL). Fill Cell 1 two 10- to 12- foot lifts (150 foot-EL). Fill Cell 3 two 10- to 12- foot lifts (110) against Cell 4 and 2 slopes. Intermediate cover to be placed on above grade slopes.

Sequence 4 Fill Cells 3 and 4 six-four 10- to 12-foot lifts (135150-foot EL). against Cell 4 and Cell 2 slopes
Fill Cells 1 and 2 two 10- to 12-foot lifts (150-foot EL)

Fill Cells 5 and 15 one lift (150-foot EL).

\_\_\_Intermediate cover to be placed on above grade slopes.

Sequence 5 Fill Cell 6 in five 10- to 12-foot lifts (140-foot EL) against Cell 3

Intermediate cover to be placed on above grade slopes

Sequence 6 Fill Cell 7 seven 10- to 12-foot lifts (160-foot EL) against Cell 6 and Cell 4 slopes

Fill Cells 3, 4, and 6 one 10- to 12-foot lift (160-foot EL) Intermediate cover to be placed on above grade slopes

Sequence 7 Fill Cell 8 seven 10- to 12-foot lifts (160-foot EL) against Cell 7 and Cell 5 slopes

Fill Cell 4 one lift (170-foot EL) Fill Cell 5 one lift (160-foot EL)

Intermediate cover to be placed on above grade slopes

Sequence 8 Fill Cells 9, 10, and 11 six or seven lifts (150 to 170-foot EL) against Cells 6, 7, and 8 slopes

Fill Cell 7 one 10- to 12-foot lift (170-foot EL)

Final cover to be placed on finished grades to maximum permitted height

Lift height includes cover material. Due to the landfill bottom elevation, some lifts may not be a full 10 feet in height. It is anticipated that filling each cell will take approximately 6 months to one year.

As each sequence is active, the following procedures will be followed.

- The access road to the working face will be constructed and graded as necessary.
- Waste will be compacted as it is placed. General lift height will be 10 feet and will come within three (3) feet of the final elevation to provide for final cover.
- The working face will remain approximately 100 feet in length.
- Weekly cover of six (6) inches of soil will be placed on the working face.
- Intermediate cover of 12 inches of soil will be placed in areas that will not receive waste within 180 days. The cover may be removed immediately prior to placement of new waste.

Stormwater runoff from the interior of the excavation and filling area will be diverted to the onsite temporary storage pond using a temporary interior swale and 6-foot berm. Perimeter berms will direct stormwater away from excavation and filling areas. stormwater pond will receive runoff until Pond 3 is developed.

#### 3.8.1 Vertical Expansion

The landfill is permitted to be completed from 125 to 175 feet NGVD. The final grading plan is shown on Drawing C-13. The finished grade will extend the existing hill eastward. A series of swales and other stormwater conveyance will be used to prevent side slope erosion, see Section 6.

The top (30H:1V) and side slope (4H:1V) designs provide for proper drainage and minimize rainfall infiltration into the landfill surface.

#### 3.8.2 **Erosion Control**

The following engineering controls will be used to minimize erosion at the working face:

- Regrade a maximum of 100 linear feet of the outer edge slopes at a time to 2H:1V. The purpose of this recommendation is that a relatively small area will be subjected to surface erosion at any given time.
- Construct a berm along the top of the slope during the regrading to redirect any rainfall runoff away from the face of the slope. The area along the berm should be graded so as to allow rapid runoff along the top of the slope. Ponding of water near the top of the slope should not be allowed, since seepage through the slope may initiate slope erosion.
- As soon as possible following the construction of the clay liner, begin to fill against the 2H:1V slope with the landfill material.

#### 3.8.3 Life Expectancy

Research of the U.S Census Bureau website reveals that the following Florida counties located within the service area of the facility are included in the 100 fastest growing counties in the U.S.

through 6/2005. In the last 5 years the counties and their respective growth rates are as follows: Pasco County (24.5%), Osceola County (34.3%) Lake County (31.6%), Hernando County (21.1%), and Sumter County (20.3%). In addition, the most recent estimates of growth rates in the last year show Citrus County, Hernando County. Hillsborough County, Lake County, Pasco County, Sumter County, Osceola County, and Polk County are growing between the rates of 3% through 6% per year. Demolition waste coming from current and proposed projects in Hillsborough and Pinellas County are increasing significantly as of late.

It is anticipated that the projected growth rate for waste acceptance based on the aforementioned data will be 8.5% per year. Therefore, through compounding the 8.5% annual growth, estimated daily acceptance rates are as follows: 1,800 tons in the first year with 1,953 tons, 2,119 tons, 2,299 tons, and 2,495 tons respectively in year 2 through year 5 of the permit.

The calculated volume of each of the landfill cells, order of cell construction, and estimated life expectancy are presented as revised Table 3.8 of this submittal. From site surveys performed in 2005 and 2006 and waste records, an apparent in-place landfill density was calculated to be 0.90 tons/cy. Assuming this compacted density and estimating a yearly increase of 8.5% in the waste acceptance rate from the current 1,800 tons/day, the landfill, including cells 1 through 11 and 15, has a life expectancy of approximately 5 years. Future development of cells 12 through 14 and cell 16 are anticipated to have an additional life of approximately 3 years. Therefore, based upon the calculated volume of landfill space available and apparent in-place density, the landfill has an estimated life expectancy of 9 years at projected disposal volumes and waste disposal rates. The life expectancy will fluctuate as waste compaction and intake rates vary.

#### 3.9 WASTE COMPACTION AND APPLICATION OF COVER

Waste received shall be segregated based on compactibility. Bulky, incompressible items, such as concrete and tree debris, shall be separated and stockpiled for future processing off-site. Concrete is stockpiled and periodically removed, transported to an off-site processing facility to be crushed, and returned if needed for on-site uses. Tree debris is separated from the waste and periodically mulched for on-site use. The remaining debris is disposed of in designated cells using onsite equipment to place the debris and a Catipillar 826 Compactor, or equivalent, to weekly compact the waste. Initial cover material is planned to be excavated from onsite areas and placed weekly in approximately 6-inch layers on the compacted lifts to control vectors, reduce rain infiltration and provide a more stable working face area. The amount of weekly cover material required for the design life of the landfill is estimated to be approximately

400,000 cyds. An intermediate cover of one (1) foot of compacted soil will be applied if final cover or an additional lift is not to be applied within 180 days of cell completion. Cell closure will occur when all existing and proposed cells are filled. For final buildout grade and closure detail, see Drawing Sheets C-13 and C-22, respectively. Those landfill cells within the eastern half of the landfill will be temporarily closed until a second tier of cells are filled on top to planned grade, see Sequence Drawings, C-6 through C-13.

A final cover consisting of 18 inches of compacted soil barrier layer and 18 inches of top soil that will sustain vegetative growth, see Closure Plan, Section 7. The final thickness of the final cover will be evaluated by thickness tests and/or surveys. Cell closure shall conform to the grades and lines specified in the grading plan and shall conform to the rules and regulation specified in 62-701.600, as well as 62-701.400 (7) and 62-701.400(8), Florida Administrative Code. Pesticides when deemed necessary to control rodents, insects and other vectors shall be used as specified by the Florida Department of Agriculture and Consumer Services. Uncontrolled and unauthorized scavenging shall not be permitted at the landfill site. Controlled recycling may be permitted by the Site Manager responsible for the operation of the landfill facility. Temporary storage of soil fill or recycling materials may be required in the closed cell areas.

#### 3.10 DESIGN OF GAS, LEACHATE AND STORMWATER CONTROLS

#### 3.10.1 Gas Monitoring and Control

The type of material to be disposed in the Class III Landfill is not expected to generate significant amounts of methane or other toxic gases since the landfill's design prevents groundwater contact. Therefore, no active gas control systems or venting is proposed. However, because biodegradable waste will be accepted, a passive gas control system is proposed, see section 3.10.1.5. The Enterprise RDF site Manager will conduct daily and weekly inspections of the landfill and will check for objectionable odors or gas by driving around the perimeter of the site. The Manager will notify the FDEP and County of any positive detection and immediately take corrective actions. Corrective actions will include placement of additional cover material or mulch, or lime contained materials such as crushed concrete that is documented to abate the odors. Quarterly gas point monitoring is currently conducted. The facility only accepts Class III debris for disposal and accepts no putrescible household wastes. Surface water and groundwater contact with the Class III wastes will be prevented by the approved facility design. Other best management practices to prevent odors include: 1) closure of each cell as it is completed; 2) weekly soil cover application; and, 3) immediate corrective actions to abate any detected onsite odors.

#### 3.10.1.1 Gas Probe Locations

Gas monitoring points are spaced approximately 600 linear feet apart surrounding the landfill. Figure 3-13 presents these locations of the gas probes surrounding the landfill.

After reviewing the sites' geology and topographic maps for any high permeability or low areas that might accumulate methane, we found no significant low areas, nor any geologic heterogeneities that would cause us to locate gas probes at potential accumulation locations surrounding the landfill or at closer spacing than proposed. Therefore, a total of 16 gas monitoring probes will be installed throughout the subject landfill site. The gas probes are to be placed no farther than 25 feet from the toe of the landfill. Gas Probes (GP) 6 through 14 are existing, and GP 1 through 5, 15 and 16 are proposed and will be installed as part of cell construction completion certification. The remaining gas probes are to be installed in accordance with the following schedule in Table 3.10:

Table 3.10 Gas Proble Installation Schedule					
Gas Probe	Cell Construction Completion				
GP-1	Cell 10				
GP-2	Cell 11				
GP-3	Cell 12				
GP-4	Cell 13				
GP-5	Cell 14				
GP-15	Cell 6				
GP-16	Cell 9				

#### 3.10.1.2 Gas Probe Design

Attached Figure 3-14 presents our gas probe design for the subject landfill site. These gas probes are designed to be surface sealed and to provide a greater permeability than the surrounding sediments to act as collector points for any methane gas, if present. Based on the landfill design, we have designed all of the gas probes to each be typically 20-foot in depth with an 18-foot open screen for the monitoring point. This depth will allow the screened interval to intercept the full cross-section of the landfilled waste that could potentially generate methane.

The groundwater table is approximately at a 50-foot depth below land surface (bls) across most of the site, so these gas probes are not designed to intercept the groundwater table. The polyvinyl chloride plastic pipe (PVC), Schedule-40 was selected at the material of choice for these wells since it is basically inert to any attack from landfill gases and most other landfilled materials. The PVC casing and screen will be flush-threaded and have a screen slot size large enough to accommodate easy methane extraction from the monitoring point. The sand/bentonite slurry proposed for a surface seal shall be a blend of 4 parts of sand to one part of granular bentonite. The sand and the bentonite shall be mixed dry and hydrated immediately prior to placing it in the annular space of the borehole. The gas probe points are proposed to be installed by hollow-stem auger to construct an eight-inch borehole to be filled with pea gravel. The pea gravel shall meet the requirements of FDOT standard size No. 10 aggregate washed pea gravel. Each gas probe will be protected by a surface mounted well protector and locked for security purposes. Each gas probe will terminate at the surface with a PVC ball valve to accommodate easy monitoring of methane levels, with a portable meter. The ball valve will remain closed between monitoring events and pre-purge measurements will be recorded. In the event of a positive gas measurement, the post-purge measurement will also be recorded.

#### 3.10.1.3 Methane Gas Measurement

In accordance with the subject landfill permits, methane gas levels will be monitored at each of the 16 gas monitoring points quarterly and submitted to the FDEP for review. A portable explosimeter, or lower explosive limit (LEL) meter will be used to measure methane levels from each of the gas probes. LEL meters, such as the MSA Model 260 or GEM 500 or equivalent, will be used to conduct this monitoring. These meters are capable of measuring percent volume of methane in air and the percent LEL level of the methane by volume. The meter shall be calibrated in accordance with manufacturer's specifications prior to each methane monitoring event. Appendix D, Operations Plan, presents the proposed gas monitoring probe survey form to be used to conduct the quarterly monitoring at the subject site. This form will document at the time of each gas probe reading, air temperature in degrees Fahrenheit, methane levels in percent volume in air and percent LEL. The reporting action level for methane in air will be considered 5 percent by volume in air as measured by the lower explosive limit. The reporting action limit for methane in structures is 25% of the LEL, or 1.25% methane by volume. The results of each quarterly gas probe survey will be submitted to the Department on the presented form within two weeks of each monitoring event. These events are planned to be coordinated with the semiannual groundwater monitoring at the subject site.

#### 3.10.1.4 Gas Contingency Plan

The following Contingency Plan will be implemented if any of the measured gas monitoring points methane levels are detected above the 100% LEL of greater than 5 percent methane in air, or if 25% of the LEL or higher is measured in a structure. If this level of methane or greater is detected in any of the probes, the Enterprise RDF operator will institute measurement of methane in nearby structures, i.e., stormwater collection points, or any maintenance or office buildings nearby the subject gas probe on a weekly basis until these levels go below the 100% LEL at the subject probe. If methane levels measured in any on-site building exceed 25% of the LEL, building windows and/or doors will be opened for ventilation and all personnel evacuated until methane readings are maintained below 25% of the LEL for methane. The monitoring report for any event that detects methane above the LEL will also report methane levels from any nearby structures and may include monthly monitoring measurements at the high methane gas probe points until the levels go below the methane LEL level or until corrective actions are conducted to reduce methane levels. The FDEP will be notified within seven days of any gas monitoring levels that exceed the reporting action levels.

#### 3.10.1.5 Passive Gas Vents

Within 90 days of closure of each landfill cell, a passive landfill gas vent will be installed at the highest point of the cell to prevent explosions, fires and damages to vegetation from methane gas buildup. Figure 3-15 shows the location of the 16 gas vents and Figure 3-16 presents the design of a typical vent. The facility's gas emissions are expected to be far below the threshold of a Title V or an NSPS permit.

#### 3.10.2 <u>Leachate Control</u>

Liquid disposal is not permitted at the Class III Landfill site. However, to control any leachate production that may occur and result in infiltration or increased head on the clay layer, a leachate control system has been implemented. This system for the Enterprise RDF Class III landfill is based on the continuous 3-foot thick clay layer (10<sup>-8</sup> cm/s) that will be placed on the bottom and the cell slopes of the landfill. The clay layer beneath each individual cell will form a continuous barrier layer that will be graded to direct leachate to the temporary stormwater pond. The controlled method of screening waste also supplements the leachate control. Because Angelo's Recycled Materials privately owns the Enterprise Class III Landfill facility, most of the haulers, waste generators, and sources of waste are known to Angelo's and the scale house attendents. For those haulers that are unfamiliar to Angelo's, the scale house attendants question the haulers more intensely to determine the contents of their loads. The spotters and operators add additional monitoring at the active disposal location. The addition of video surveillance to the monitoring process of incoming wastes helps to identify fires or smoking loads. Combined methods of screening waste is an effective method to reduce any possible threat to public health or the environment.

Based on well inventory information from the Southwest Florida Water Management District, shallow residential wells in the area have a depth ranging from 75 to 190 feet. Potable wells normally withdraw water from limestone in the Floridan aquifer.

A consistent confining layer above the limestone will exist across the site, due to the overexcavation of the cells and backfilling with 3 feet of compacted clay. Additionally, Floridan aquifer monitor wells will be installed on the site to ensure early detection of any exceeded groundwater parameters in this aquifer.

#### 3.10.3 Stormwater Controls

The approved Stormwater Management Plan for the landfill consists of berms, swales, and ponds constructed within the 200-foot landscape buffer zone to divert, collect and contain stormwater runoff from the completed site. These stormwater facilities are designated to retain the 100-year, 24-hour storm volume as required by Pasco County and the FDEP. During excavation, construction and waste disposal, stormwater will be controlled by a series of berms that direct stormwater to the temporary stormwater pond located in the northeast corner of the site. A 6-foot berm adjacent to active and filled cells retains stormwater from the filling area and diverts stormwater from the excavation area to the temporary stormwater pond. Additional details concerning the stormwater management is provided in Drawings Sheets C-6 through C-13, and the details on Sheet C-22. Refer to Section 6 for details of the Stormwater Management Plan.

The stormwater management system was recently modified to include Cells 14 and 16, and a small portion of Cell 5, as the temporary stormwater pond. As the modified pond is constructed, the base of the pond will be certified with a three-foot thick confining layer, in accordance with construction permit specific condition 9.c. In addition, the design of Pond 2 has been slightly modified to accommodate excavation and monitor wells on the east side of the landfill.

#### 3.11 EROSION CONTROL

The perimeter swales and ponds surrounding the landfill prevent stormwater from leaving the property. The series of berms described in Section 3.10.3 above will help prevent erosion. Additionally, landfill side slopes will be constructed at 3H:1V to elevation 125 and 4H:1V thereafter and will receive intermediate cover to be maintained until final landfill closure that will occur when all existing and proposed cells are filled. See Reclamation and Closure Plan (Section 7) for further details.

#### 3.12 FINAL GRADE PLAN

Final grade plan of the facility is shown on the plans (Drawing C-13) and in the cross-sections (Drawings C-14 through C-20). The excavated areas will be certified to the approved bottom grade prior to accepting any waste material. The finished elevation after all fill material has been placed and final cover provided is designed to reclaim excavated areas.

#### 3.13 SETBACKS AND VISUAL BUFFERS

The following setbacks (buffers) shall be used:

- 1. Minimum of 200 feet from the property boundary to landfill footprint.
- 2. Minimum of 500 feet setback from surrounding residential wells to landfill footprint.

Buffer areas are to be improved to maintain visual screening of the landfill by the following methods.

- 1. 8-foot high berms along the frontage of Enterprise and Auton roads.
- 2. Landscaping to provide visual buffers within setback areas are shown on attached Drawing C-1 and will be completed within 6 months of permit issuance, or sooner, and will be in compliance with the Pasco County LDC.
- 3. Trees shall be planted in the specified buffers as required by the Pasco County Land Development Code.
- 4. Existing trees within the setbacks will be maintained.

All trees shall be nursery grown and meet the grades and standards established by the Florida Department of Agriculture for FL #1 materials. Trees shall be sound, healthy, vigorous species free from defects and fully developed without voids and open spaces.

The planting of trees on the site shall conform to the following landscape requirements in accordance with the County LDC.

Planting shall be inspected at the completion of the project. Final acceptance shall subject the project to compliance with specified material and installation requirements.

#### 3.14 FOUNDATION ANALYSIS

A Geotechnical evaluation was conducted on the landfill site to estimate if the base and geologic setting are capable of providing structural support. Universal Engineering Sciences, Inc.

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completed the Geotechnical Report included as Section 4. The report states that the landfill base will adequately support the Class III landfill wastes without excessive settlement. It also states that the potential for sinkhole development on the site is low. In the event a sinkhole is discovered on-site, or within 500-feet of the site, the Department will be notified within 24 hours. A reclamation plan of action will be submitted to the Department within seven days. Soil boring logs used to support the foundation analysis are also in Section 4, Appendix B.

#### 3.15 CERTIFICATION

Laboratory testing and observation of cell floor conditions during cell construction completion shall consist of the following:

- In-place density testing for each 12-inch thick soil lift, based on laboratory proctor test results for the construction material, will be recorded by a properly trained technician. These are to be conducted at the location of each permeability test.
- Thickness testing of each lift will be recorded at a minimum frequency of two tests per acre, per lift.
- Confirmation hydraulic conductivity testing of Shelby tube or drive cylinder samples of the compacted cell floor material will be performed at a minimum frequency of one test per lift, per acre.
- Observance for unstable areas such as limestone, sink holes and soft ground will be performed for each cell.

If the test data from a cell floor section does not meet the requirements of the anticipated conditions of the hydrologeological and geotechnical reports and the requirements of the facility construction permit, additional random samples may be tested from that cell section. If the additional testing demonstrates that the hydraulic conductivity meets the requirements, the cell will be considered acceptable. If not, that cell will be reworked or reconstructed so that it will meet these requirements.

Upon completion of construction of any cell within the disposal facility, the Engineer of Record shall certify to the FDEP on form 62-701.900(2) that the approved construction is complete and in accordance with the submitted plans. The operator will provide the completed form to the

FDEP, along with the quality assurance test results described above, and arrange for an inspection prior to acceptance of Class III wastes into the constructed disposal area.

#### 3.16 OPERATIONS PLAN

The landfill's Operations Plan is included as Appendix 3-A.

#### 3.17 CONTINGENCY PLAN

The landfill's Contingency Plan is included as Appendix 3-B.

## ATTACHMENT 4 REVISED PERMIT DRAWINGS

### **ATTENTION**



# APPENDIX 4 REVISED PERMIT DRAWINGS HAVE BEEN SCANNED SEPARATELY PLEASE SEE:

- Class III LF-Sequence Mod; Initial submittal-Dwg no. V-2-general notes & abbreviations
- Class III LF-Sequence Mod; Initial submittal-Dwg no. C-8-Filling Sequence 3A
- Class III LF-Sequence Mod; Initial submittal-Dwg no. C-8A-Filling Sequence 3B
- Class III LF-Sequence Mod; Initial submittal-Dwg no. C-9-Filling Sequence 4
- Class III LF-Sequence Mod; Initial submittal-Dwg no. C-22-Details

## Southwest District Permitting Application

New Site

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730 NE Waldo Road Gainesville, FL 32641 352-377-5821 Millennium Bank 63-1454/631 011120

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730 NE Waldo Road • Gainesville, FL 32641 • 352 377 5821

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NOV 29 2007

Southwest District



730 NE Waldo Road Gainesville, FL 32641 Millennium Bank 63-1454/631 011120

CHECK DATE
November 21, 2007

Two Hundred Fifty and 00/100 Dollars

**AMOUNT** 

\$250.00

FL Dept of Environmental Protection

JONES EDMUNDS & Associates, Inc.

VOID AFTER 60 DAYS

JONES EDMUNDS & Associates, Inc.

730 NE Waldo Road • Gainesville, FL 32641 • 352 377 5821

011120

Invoice Number	Date	Voucher	Amount	Discounts	Previous Pay	Net Amount
ANGELOS CL3 PERMIT	11/20/07	0007108	250.00	0.00	0.00	250.00
FL Dept of Environmental MIL-12369 1	Protection 10296	Totals	250.00	0.00	0.00	250.00

## Dept. of Environmental Protection

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