

Golder Associates Inc.

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June 19, 2008

993-3928.84

Florida Department of Environmental Protection
 Northeast District
 7825 Baymeadows Way, Suite B200
 Jacksonville, Florida 32256- 7577

Attention: Mr. Emerson Raulerson, P.E.

**RE: MINOR PERMIT MODIFICATION APPLICATION
 ALTERNATE DAILY COVER
 WEST NASSAU CLASS I LANDFILL
 NASSAU COUNTY, FLORIDA
 DEP PERMIT NO. 0002870-010-SO
 ID NO. NED/45/00037140**

On behalf of the Nassau County Board of County Commissioners (Board), Golder Associates Inc. (Golder) is pleased to enclose four (4) copies of a minor permit modification application for an alternate daily cover for the West Nassau Class I Landfill located in Callahan, Nassau County, Florida. This application requests approval of a specific material to be used as daily cover under the specific requirements as presented herein (see Attachment 1).

This permit modification application includes a completed DEP Form 62-701.900(1) in accordance with Chapter 62-701 of the Florida Administrative Code (F.A.C.) dated May 27, 2001, which is presented in Attachment 2. Attachments 3 and 4 include a FDEP letter supporting the material's use as a daily cover and replacement pages for the site's Operations Plan, respectively. Also enclosed is a check in the amount of \$250 payable to the FDEP for the permit fee as specified in Chapter 62-4.050(4)(s)5., F.A.C.

The Board appreciates the opportunity to submit this permit modification for consideration. If there are any questions on the enclosed document, please contact Ms. Marianne Marshall, Chair, Nassau County Board of County Commissioners, at 904-491-7380 and/or the undersigned at 904-363-3430.

Sincerely,
GOLDER ASSOCIATES INC.


 Wendy D. Karably
 Senior Consultant/Principal

Attachments

cc: Mr. Lee Pickett, Interim Solid Waste Director
 Mr. Edward Sealover, County Administrator
 Mr. John Crawford, Clerk of Courts

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ATTACHMENT 1

Permit Modification Description

ATTACHMENT 1

Permit Modification Description

On behalf of the Nassau County Board of County Commissioners (Board), Golder Associates Inc. (Golder) has prepared this Permit Minor Modification Application for the West Nassau Landfill to obtain permitting to utilize a specific alternate daily cover (ADC) material. The ADC that West Nassau is requesting permit approval for is screened solid waste (SSW) from the waste material that originates from the Riberia Street Dump Site (located at the Holmes Boulevard Site) in the City of St. Augustine (COSA). The COSA will be producing this material under a Excavation and Disposal Plan approved by the Florida Department of Environmental Protection (FDEP). In a letter dated March 13, 2008 addressed to Mr. John P. Regan, P.E. (Chief Operations Officer, COSA), FDEP did not object to the use of the screened material from this site for interior cover material at a Class 1 landfill, with the condition that the receiving landfill be properly permitted to receive such material, which is the purpose of this application (see Attachment 3).

The COSA will power-screen the material at the Holmes Blvd. Site and then transport the screened portion by truck to the West Nassau Landfill. The estimated amount of screened material to be delivered to the landfill is on the order of 35,000 cubic yards. The West Nassau Landfill will direct the trucks to a designated stockpile area within the lined, top portion of the landfill (i.e., located away from the sideslopes of the landfill). The area to be used for stockpiling will be defined by landfill personnel based on the operational area in use at the time of the initial delivery of the material and the anticipated waste placement sequencing for the delivery period. Generally, the COSA material is anticipated to be delivered to the landfill over a three- to six-month time frame to begin once the material processing is started (dictated by contracting of the work by COSA). It is anticipated that the landfill will utilize the material on a daily basis as it is delivered, assuming the operations of the day allow. Therefore, it is not anticipated that large amounts of this material will be stockpiled at the site at any given time.

The stockpiled material from this source will be kept separate from other daily cover sources at the landfill by having the area defined by temporary fencing (e.g., orange litter fence). This material will only be used as daily cover material on the interior portions of the landfill and will not be utilized for intermediate cover or daily cover that is on the sideslopes of the landfill where only intermediate cover remains to be placed. The material will be placed the same as other daily cover soils are placed, generally in one 6-inch lift at the completion of the waste placement in an area for that day. Similar to other daily cover soil materials, the top 3 to 4 inches can be removed prior to subsequent waste placement and reused as daily cover, as long as there is no visible litter in area where initial cover is removed and the soil is reused as daily cover the same day.

Golder Associates

ATTACHMENT 2

**Permit Modification Application Form
FDEP Form 62-701.900(1)**

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

DEP Form # 62-701.900(1) Form Title <u>Solid Waste Management Facility Permit</u> Effective Date <u>05-27-01</u> DEP Application No. _____ <p style="text-align: right;">(Filled by DEP)</p>
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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

Northwest District 160 Governmental Center Pensacola, FL 32501-5794 850-595-8360	Northeast District 7825 Baymeadows Way, Ste. B200 Jacksonville, FL 32256-7590 904-448-4300	Central District 3319 Maguire Blvd., Ste. 232 Orlando, FL 32803-3767 407-894-7555	Southwest District 3804 Coconut Palm Dr. Tampa, FL 33619 813-744-6100	South District 2295 Victoria Ave., Ste. 364 Fort Myers, FL 33901-3881 941-332-6975	Southeast District 400 North Congress Ave. West Palm Beach, FL 33401 561-481-6600
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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

- | | |
|--|---|
| <input checked="" type="checkbox"/> Class I Landfill | <input type="checkbox"/> Ash Monofill |
| <input type="checkbox"/> Class II Landfill | <input type="checkbox"/> Asbestos Monofill |
| <input type="checkbox"/> Class III Landfill | <input type="checkbox"/> Industrial Solid Waste |
| <input type="checkbox"/> Other Describe: _____ | |

Non-Disposal

- | |
|--|
| <input type="checkbox"/> Incinerator For Non-biomedical Waste |
| <input type="checkbox"/> Waste to Energy Without Power Plant Certification |
| <input type="checkbox"/> 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:

- | |
|---|
| <input type="checkbox"/> Construction |
| <input checked="" type="checkbox"/> Operation |
| <input type="checkbox"/> Construction/Operation |
| <input type="checkbox"/> Closure |

3. Classification of application:

- | | |
|--|--|
| <input type="checkbox"/> New | <input type="checkbox"/> Substantial Modification |
| <input type="checkbox"/> Renewal | <input type="checkbox"/> Intermediate Modification |
| <input checked="" type="checkbox"/> Minor Modification | |

4. Facility name: West Nassau Class I Landfill

5. DEP ID number: NED-45-00037140 County: Nassau

6. Facility location (main entrance): U.S. 1 North, Route 177, 3 miles north of Callahan, Florida

7. Location coordinates:

Section: 8 Township: 2N Range: 25E

Latitude: 30 ° 36 ' 16 " Longitude: 81 ° 49 ' 14 "

8. Applicant name (operating authority): Nassau County Board of County Commissioners

Mailing address: 96160 Nassau Place Yulee Florida 32097
Street or P.O. Box City State Zip

Contact person: Edward Sealover Telephone: (904) 491-7380

Title: Nassau County Administrator
esealover@nassaucountyfl.com

E-Mail address (if available)

9. Authorized agent/Consultant: Golder Associates Inc.

Mailing address: 9428 Baymeadows Rd. Ste 400 Jacksonville, Florida 32256
Street or P.O. Box City State Zip

Contact person: Wendy D. Karably Telephone: (904) 363-3430

Title: Senior Consultant/Principal
wkarably@golder.com

E-Mail address (if available)

10. Landowner(if different than applicant): N/A

Mailing address: _____
Street or P.O. Box City State Zip

Contact person: _____ Telephone: () _____

E-Mail address (if available)

11. Cities, towns and areas to be served: Nassau County, Duval County, Clay County, Fernandina Beach, Callahan, Yulee, Hilliard, Southeast Georgia, Northeast Florida

12. Population to be served: Nassau County

Five-Year

Current: 69,010 (2006) Projection: 80,050 (2011)

13. Date site will be ready to be inspected for completion: N/A

14. Expected life of the facility: N/A years

15. Estimated costs: _____

Total Construction: \$ _____ Closing Costs: \$ N/A

16. Anticipated construction starting and completion dates: N/A

From: _____ To: _____

17. Expected volume or weight of waste to be received: N/A

_____ yds³/day _____ tons/day _____ gallons/day

B. DISPOSAL FACILITY GENERAL INFORMATION

1. Provide brief description of disposal facility design and operations planned under this application:

This permit application has been prepared for a minor modification of the existing operation permit 0002870-002-SC at the West Nassau Class I Landfill. The proposed modification is to allow a specific material to be utilized as an alternate daily cover.

2. Facility site supervisor: Lee Pickett

Title: Nassau County Interim Solid Waste Director Telephone: (904)879-6321

lpickett@nassaucountyfl.com

E-Mail address (if available)

3. Disposal area: Total 53 acres; Used 18.5 acres; Available 34.5 acres.

4. Weighing scales used: Yes No

5. Security to prevent unauthorized use: Yes No

6. Charge for waste received: N/A \$/yds 30 \$/ton in-County waste
\$85.75/ton for out-of-County waste (both prices subject to change)

7. Surrounding land use, zoning:

Residential

Industrial

Agricultural

None

Commercial

Other Describe: Open Rural & Governmental Use

8. Types of waste received:

Residential

C & D debris

Commercial

Shredded/cut tires

Incinerator/WTE ash

Yard trash

Treated biomedical

Septic tank

Water treatment sludge

Industrial

Air treatment sludge

Industrial sludge

Agricultural

Domestic sludge

Asbestos

Other Describe: _____

9. Salvaging permitted: Yes No

10. Attendant: Yes No Trained operator: Yes No

11. Spotters: Yes No Number of spotters used: N/C

12. Site located in: Floodplain Wetlands Other _____

13. Property recorded as a Disposal Site in County Land Records: Yes No
14. Days of operation: Monday - Saturday
15. Hours of operation: M-F: 6 AM-4 PM; Sat and Holidays (Waste receipts): 7 AM - 1 PM, Mon-Sat. (construction and site maintenance) Sunday: Closed
16. Days Working Face covered: Daily
17. Elevation of water table: 15.5 Ft. (NGVD 1929)
18. Number of monitoring wells: 1 background, 16 detection, 10 compliance, 16 water level
19. Number of surface monitoring points: 5
20. Gas controls used: Yes No Type controls: Active Passive
 Gas flaring: Yes No Gas recovery: Yes No
21. Landfill unit liner type:
- | | |
|---|--|
| <input type="checkbox"/> Natural soils | <input type="checkbox"/> Double geomembrane |
| <input type="checkbox"/> Single clay liner | <input type="checkbox"/> Geomembrane & composite |
| <input type="checkbox"/> Single geomembrane | <input checked="" type="checkbox"/> Double composite |
| <input type="checkbox"/> Single composite | <input type="checkbox"/> None |
| <input checked="" type="checkbox"/> Slurry wall | |
| <input type="checkbox"/> Other Describe: _____ | |
22. Leachate collection method:
- | | |
|--|---|
| <input checked="" type="checkbox"/> Collection pipes | <input type="checkbox"/> Sand layer |
| <input type="checkbox"/> Geonets | <input type="checkbox"/> Gravel layer |
| <input type="checkbox"/> Well points | <input type="checkbox"/> Interceptor trench |
| <input type="checkbox"/> Perimeter ditch | <input type="checkbox"/> None |
| <input checked="" type="checkbox"/> Other Describe: <u>French Drain System</u> | |
23. Leachate storage method:
- | |
|--|
| <input checked="" type="checkbox"/> Tanks |
| <input type="checkbox"/> Surface impoundments |
| <input type="checkbox"/> Other Describe: _____ |
24. Leachate treatment method:
- | | |
|--|---|
| <input type="checkbox"/> Oxidation | <input type="checkbox"/> Chemical treatment |
| <input type="checkbox"/> Secondary | <input type="checkbox"/> Settling |
| <input type="checkbox"/> Advanced | |
| <input type="checkbox"/> None | |
| <input checked="" type="checkbox"/> Other <u>Hauled off-site to a privately owned treatment facility</u> | |

25. Leachate disposal method:

- | | |
|--|--|
| <input type="checkbox"/> Recirculated | <input type="checkbox"/> Pumped to WWTP |
| <input type="checkbox"/> Transported to WWTP | <input type="checkbox"/> Discharged to surface water |
| <input type="checkbox"/> Injection well | <input type="checkbox"/> Percolation ponds |
| <input type="checkbox"/> Evaporation | |
| <input checked="" type="checkbox"/> Other <u>Hauled off-site to a privately owned treatment facility</u> | |

26. For leachate discharged to surface waters:

Name and Class of receiving water: _____

27. Storm Water:

Collected: Yes No

Type of treatment: On-site detention and discharge to off-line wetlands

Name and Class of receiving water: Alligator Creek - Freshwater Class III

28. Environmental Resources Permit (ERP) number or status: MS45-200912 &

Modified by 45-127028-EM (2001)

C. NON-DISPOSAL FACILITY GENERAL INFORMATION (NOT APPLICABLE)

1. Provide brief description of the non-disposal facility design and operations planned under this application:

2. Facility site supervisor: _____

Title: _____ Telephone: () _____

_____ E-Mail address (if available)

3. Site area: Facility _____ acres; Property _____ acres

4. Security to prevent unauthorized use: Yes No

5. Site located in: Floodplain Wetlands Other _____

6. Days of operation: _____

7. Hours of operation: _____

8. Number of operating staff: _____

9. Expected useful life: _____ Years

10. Weighing scales used: Yes No

11. Normal processing rate: _____ yd³/day _____ tons/day _____ gal/day

12. Maximum processing rate: _____ yd³/day _____ tons/day _____ gal/day

13. Charge for waste received: _____

14. Storm Water Collected: Yes No

Type of treatment: _____

Name and Class of receiving water: _____

15. Environmental Resources Permit (ERP) number or status: _____

16. Final residue produced:

_____ % of normal processing rate _____ % of maximum processing rate
_____ Tons/day _____ Tons/day

Disposed of at:

Facility name: _____ County: _____

(NOT APPLICABLE)

17. Estimated operating costs: \$ _____

Total cost/ton: \$ _____ Net cost/ton: \$ _____

18. Provide a site plan, at a scale not greater than 200 feet to the inch, which shows the facility location and identifies the proposed waste and final residue storage areas, total acreage of the site, and any other features which are relevant to the prohibitions or location restrictions in Rule 62-701.300, FAC, such as water bodies or wetlands on or within 200 feet of the site, and potable water wells on or within 500 feet of the site.

19. Provide a description of how the waste and final residue will be managed to not be expected to cause violations of the Department's ground water, surface water or air standards or criteria

20. Provide an estimate of the maximum amount of waste and final residue that will be stored on-site.

21. Provide a detailed description of the technology use at the facility and the functions of all processing equipment that will be utilized. The descriptions shall explain the flow of waste and residue through all the proposed unit operations and shall include: (1) regular facility operations as they are expected to occur; (2) procedures for start up operations, and scheduled and unscheduled shut down operations; (3) potential safety hazards and control methods, including fire detection and control; (4) a description of any expected air emissions and wastewater discharges from the facility which may be potential pollution sources; (5) a description and usage rate of any chemical or biological additives that will be used in the process; and (6) process flow diagrams for the facility operations.

22. Provide a description of the loading, unloading and processing areas.

23. Provide a description of the leachate control system that will be used to prevent discharge of leachate to the environment and mixing of leachate with stormwater.

Note: Ground water monitoring may be required for the facility depending on the method of leachate control used.

24. Provide an operation plan for the facility which includes: (1) a description of general facility operations, the number of personnel responsible for the operations including their respective job descriptions, and the types of equipment that will be used at the facility; (2) procedures to ensure any unauthorized wastes received at the site will be properly managed; (3) a contingency plan to cover operation interruptions and emergencies such as fires, explosions, or natural disasters; (4) procedures to ensure operational records needed for the facility will be adequately prepared and maintained; and (5) procedures to ensure that the wastes and final residue will be managed to not be expected to cause pollution.

25. Provide a closure plan that describes the procedures that will be implemented when the facility closes including: (1) estimated time to complete closure; (2) procedures for removing and properly managing or disposing of all wastes and final residues; (3) notification of the Department upon ceasing operations and completion of final closure.

D. PROHIBITIONS (62-701.300, FAC)

S	LOCATION	N/A	N/C	
_____	_____	_____	<u>X</u>	1. Provide documentation that each of the siting criteria will be satisfied for the facility; (62-701.300(2), FAC)
_____	_____	_____	<u>X</u>	2. If the facility qualifies for any of the exemptions contained in Rules 62-701.300(12) through (16), FAC, then document this qualification(s).
_____	_____	_____	<u>X</u>	3. Provide documentation that the facility will be in compliance with the burning restrictions; (62-701.300(3), FAC)
_____	_____	_____	<u>X</u>	4. Provide documentation that the facility will be in compliance with the hazardous waste restrictions; (62-701.300(4), FAC)
_____	_____	_____	<u>X</u>	5. Provide documentation that the facility will be in compliance with the PCB disposal restrictions; (62-701.300(5), FAC)
_____	_____	_____	<u>X</u>	6. Provide documentation that the facility will be in compliance with the biomedical waste restrictions; (62-701.300(6), FAC)
_____	_____	_____	<u>X</u>	7. Provide documentation that the facility will be in compliance with the Class I surface water restrictions; (62-701.300(7), FAC)
_____	_____	<u>X</u>	_____	8. Provide documentation that the facility will be in compliance with the special waste for landfills restrictions; (62-701.300(8), FAC)
_____	_____	<u>X</u>	_____	9. Provide documentation that the facility will be in compliance with the special waste for waste-to-energy facilities restrictions; (62-701.300(9), FAC)
_____	_____	_____	<u>X</u>	10. Provide documentation that the facility will be in compliance with the liquid restrictions; (62-701.300(10), FAC)
_____	_____	_____	<u>X</u>	11. Provide documentation that the facility will be in compliance with the used oil restrictions; (62-701.300(11), FAC)

E. SOLID WASTE MANAGEMENT FACILITY PERMIT REQUIREMENTS, GENERAL (62-701.320, FAC)

S	LOCATION	N/A	N/C	
X	Enclosed			1. Four copies, at minimum, of the completed application form, all supporting data and reports; (62-701.320(5)(a), FAC)
X	Attachment 2			2. Engineering and/or professional certification(signature, date and seal) provided on the applications and all engineering plans, reports and supporting information for the application; (62-701.320(6), FAC)
X	Enclosed			3. A letter of transmittal to the Department; (62-701.320(7)(a), FAC)
X	Attachment 2			4. A completed application form dated and signed by the applicant; (62-701.320(7)(b), FAC)
X	Enclosed			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)
		X		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)
X	Attachment 4 Replacement pages only			7. Operation Plan and Closure Plan; (62-701.320(7)(e)1, FAC)
			X	8. Contingency Plan; (62-701.320(7)(e)2, FAC)
			X	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)
		X		a. A regional map or plan with the project location;
		X		b. A vicinity map or aerial photograph no more than 1 year old;
		X		c. A site plan showing all property boundaries certified by a registered Florida land surveyor;

S LOCATION N/A N/C

E CONTINUED

_____	_____	<u>X</u>	_____	d. Other necessary details to support the engineering report.
_____	_____	_____	<u>X</u>	10. 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>X</u>	_____	11. 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)
_____	_____	_____	<u>X</u>	12. 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>	_____	13. 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)
_____	_____	_____	<u>X</u>	14. 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)
_____	_____	_____	<u>X</u>	15. Explain how the operator training requirements will be satisfied for the facility; (62-701.320(15), FAC)

F. LANDFILL PERMIT REQUIREMENTS (62-701.330, FAC)

S	LOCATION	N/A	N/C	
		X		1. Vicinity map or aerial photograph no more than 1 year old and of appropriate scale showing land use and local zoning within one mile of the landfill and of sufficient scale to show all homes or other structures, water bodies, and roads other significant features of the vicinity. All significant features shall be labeled; (62-701.330(3)(a), FAC)
		X		2. Vicinity map or aerial photograph no more than 1 year old showing all airports that are located within five miles of the proposed landfill; (62-701.330(3)(b), FAC)
			X	3. Plot plan with a scale not greater than 200 feet to the inch showing; (62-701.330(3)(c), FAC)
			X	a. Dimensions;
			X	b. Locations of proposed and existing water quality monitoring wells;
			X	c. Locations of soil borings;
			X	d. Proposed plan of trenching or disposal areas;
			X	e. Cross sections showing original elevations and proposed final contours which shall be included either on the plot plan or on separate sheets;
			X	f. Any previously filled waste disposal areas;
			X	g. Fencing or other measures to restrict access.
			X	4. Topographic maps with a scale not greater than 200 feet to the inch with 5-foot contour intervals showing; (62-701.330(3)(d), FAC):
		X		a. Proposed fill areas;
			X	b. Borrow areas;
			X	c. Access roads;
			X	d. Grades required for proper drainage;
		X		e. Cross sections of lifts;
			X	f. Special drainage devices if necessary;
			X	g. Fencing;
			X	h. Equipment facilities.

S	LOCATION	N/A	N/C	PART F CONTINUED
_____	_____	_____	<u>X</u>	5. A report on the landfill describing the following; (62-701.330(3) (e) ,FAC)
_____	_____	_____	<u>X</u>	a. The current and projected population and area to be served by the proposed site;
_____	_____	_____	<u>X</u>	b. The anticipated type, annual quantity, and source of solid waste, expressed in tons;
_____	_____	_____	<u>X</u>	c. The anticipated facility life;
<u>X</u>	<u>Attachments 1 & 3</u>	_____	_____	d. The source and type of cover material used for the landfill.
_____	_____	_____	<u>X</u>	6. Provide evidence that an approved laboratory shall conduct water quality monitoring for the facility in accordance with Chapter 62-160, FAC; 62-701.330(3) (h) ,FAC)
_____	_____	_____	<u>X</u>	7. Provide a statement of how the applicant will demonstrate financial responsibility for the closing and long-term care of the landfill; (62-701.330(3) (i) ,FAC)

G. GENERAL CRITERIA FOR LANDFILLS (62-701.340, FAC)

S	LOCATION	N/A	N/C	
_____	_____	_____	<u>X</u>	1. Describe (and show on a Federal Insurance Administration flood map, if available) how the landfill or solid waste disposal unit shall not be located in the 100 year floodplain where it will restrict the flow of the 100 year flood, reduce the temporary water storage capacity of the floodplain unless compensating storage is provided, or result in a washout of solid waste; (62 701.340(4) (b) ,FAC)
_____	_____	_____	<u>X</u>	2. Describe how the minimum horizontal separation between waste deposits in the landfill and the landfill property boundary shall be 100 feet, measured from the toe of the proposed final cover slope; (62 701.340(4) (c) ,FAC)
_____	_____	_____	<u>X</u>	3. Describe what methods shall be taken to screen the landfill from public view where such screening can practically be provided; (62 701.340(4) (d) ,FAC)

(NOT APPLICABLE)

H. LANDFILL CONSTRUCTION REQUIREMENTS (62-701.400, FAC)

S	LOCATION	N/A	N/C	
		X		1. Describe how the landfill shall be designed so that solid waste disposal units will be constructed and closed at planned intervals throughout the design period of the landfill; (62-701.400(2), FAC)
				2. Landfill liner requirements; (62-701.400(3), FAC)
				a. General construction requirements; (62-701.400(3)(a), FAC):
		X		(1) Provide test information and documentation to ensure the liner will be constructed of materials that have appropriate physical, chemical, and mechanical properties to prevent failure;
		X		(2) Document foundation is adequate to prevent liner failure;
		X		(3) Constructed so bottom liner will not be adversely impacted by fluctuations of the ground water;
		X		(4) Designed to resist hydrostatic uplift if bottom liner located below seasonal high ground water table;
		X		(5) Installed to cover all surrounding earth which could come into contact with the waste or leachate.
				b. Composite liners; (62-701.400(3)(b), FAC)
		X		(1) Upper geomembrane thickness and properties;
		X		(2) Design leachate head for primary LCRS including leachate recirculation if appropriate;
		X		(3) Design thickness in accordance with Table A and number of lifts planned for lower soil component.
				c. Double liners; (62-701.400(3)(c), FAC)
		X		(1) Upper and lower geomembrane thicknesses and properties;
		X		(2) Design leachate head for primary LCRS to limit the head to one foot above the liner;
		X		(3) Lower geomembrane sub-base design;
		X		(4) Leak detection and secondary leachate collection system minimum design criteria (k > 10 cm/sec, head on lower liner < 1 inch, head not to exceed thickness of drainage layer);

S	LOCATION	N/A	N/C	PART H CONTINUED
				d. Standards for geosynthetic components; (62-701.400(3)(d),FAC)
		X		(1) Field seam test methods to ensure all field seams are at least 90 percent of the yield strength for the lining material;
		X		(2) Geomembranes to be used shall pass a continuous spark test by the manufacturer;
		X		(3) Design of 24-inch-thick protective layer above upper geomembrane liner;
		X		(4) Describe operational plans to protect the liner and leachate collection system when placing the first layer of waste above 24-inch-thick protective layer.
		X		(5) HDPE geomembranes, if used, meet the specifications in GRI GM13;
		X		(6) PVC geomembranes, if used, meet the specifications in PGI 1197;
		X		(7) Interface shear strength testing results of the actual components which will be used in the liner system;
		X		(8) Transmissivity testing results of geonets if they are used in the liner system;
		X		(9) Hydraulic conductivity testing results of geosynthetic clay liners if they are used in the liner system;
				e. Geosynthetic specification requirements; (62-701.400(3)(e),FAC)
		X		(1) Definition and qualifications of the designer, manufacturer, installer, QA consultant and laboratory, and QA program;
		X		(2) Material specifications for geomembranes, geocomposites, geotextiles, geogrids, and geonets;
		X		(3) Manufacturing and fabrication specifications including geomembrane raw material and roll QA, fabrication personnel qualifications, seaming equipment and procedures, overlaps, trial seams, destructive and nondestructive seam testing, seam testing location, frequency, procedure, sample size and geomembrane repairs;

S	LOCATION	N/A	N/C	PART H CONTINUED
_____	_____	<u>X</u>	_____	(4) Geomembrane installation specifications including earthwork, conformance testing, geomembrane placement, installation personnel qualifications, field seaming and testing, overlapping and repairs, materials in contact with geomembrane and procedures for lining system acceptance;
_____	_____	<u>X</u>	_____	(5) Geotextile and geogrid specifications including handling and placement,
_____	_____	<u>X</u>	_____	conformance testing, seams and overlaps, repair, and placement of soil materials and any overlying materials;
_____	_____	<u>X</u>	_____	(6) Geonet and geocomposite specifications including handling and placement, conformance testing, stacking and joining, repair, and placement of soil materials and any overlying materials;
_____	_____	<u>X</u>	_____	(7) Geosynthetic clay liner specifications including handling and placement, conformance testing, seams and overlaps, repair, and placement of soil material and any overlying materials;
_____	_____	<u>X</u>	_____	f. Standards for soil components (62-710.400(3)(f), FAC):
_____	_____	<u>X</u>	_____	(1) Description of construction procedures including overexcavation and backfilling to preclude structural inconsistencies and procedures for placing and compacting soil component in layers;
_____	_____	<u>X</u>	_____	(2) Demonstration of compatibility of the soil component with actual or simulated leachate in accordance with EPA Test Method 9100 or an equivalent test method;
_____	_____	<u>X</u>	_____	(3) Procedures for testing in-situ soils to demonstrate they meet the specifications for soil liners;
_____	_____	<u>X</u>	_____	(4) Specifications for soil component of liner including at a minimum:
_____	_____	<u>X</u>	_____	(a) Allowable particle size distribution, Atterberg limits, shrinkage limit;
_____	_____	<u>X</u>	_____	(b) Placement moisture and dry density criteria;
_____	_____	<u>X</u>	_____	(c) Maximum laboratory-determined saturated hydraulic conductivity using simulated leachate;
_____	_____	<u>X</u>	_____	(d) Minimum thickness of soil liner;

S	LOCATION	N/A	N/C	PART H CONTINUED
_____	_____	<u>X</u>	_____	(e) Lift thickness;
_____	_____	<u>X</u>	_____	(f) Surface preparation (scarification);
_____	_____	<u>X</u>	_____	(g) Type and percentage of clay mineral within the soil component;
_____	_____	<u>X</u>	_____	(5) Procedures for constructing and using a field test section to document the desired saturated hydraulic conductivity and thickness can be achieved in the field.
_____	_____	<u>X</u>	_____	3. Leachate collection and removal system (LCRS); (62-701.400(4), FAC)
_____	_____	<u>X</u>	_____	a. The primary and secondary LCRS requirements; (62-701.400(4)(a), FAC)
_____	_____	<u>X</u>	_____	(1) Constructed of materials chemically resistant to the waste and leachate;
_____	_____	<u>X</u>	_____	(2) Have sufficient mechanical properties to prevent collapse under pressure;
_____	_____	<u>X</u>	_____	(3) Have granular material or synthetic geotextile to prevent clogging;
_____	_____	<u>X</u>	_____	(4) Have method for testing and cleaning clogged pipes or contingent designs for rerouting leachate around failed areas;
_____	_____		_____	b. Primary LCRS requirements; (62-701.400(4)(b), FAC)
_____	_____	<u>X</u>	_____	(1) Bottom 12 inches having hydraulic conductivity $> 1 \times 10^{-3}$ cm/sec;
_____	_____	<u>X</u>	_____	(2) Total thickness of 24 inches of material chemically resistant to the waste and leachate;
_____	_____	<u>X</u>	_____	(3) Bottom slope design to accomodate for predicted settlement; (4) Demonstration that synthetic drainage material, if used, is equivalent or better than granular material in chemical compatibility, flow under load and protection of geomembrane liner.
_____	_____		_____	4. Leachate recirculation; (62-701.400(5), FAC)
_____	_____	<u>X</u>	_____	a. Describe general procedures for recirculating leachate;
_____	_____	<u>X</u>	_____	b. Describe procedures for controlling leachate runoff and minimizing mixing of leachate runoff with storm water;
_____	_____	<u>X</u>	_____	c. Describe procedures for preventing perched water conditions and gas buildup;

S	LOCATION	N/A	N/C	PART H CONTINUED
_____	_____	<u>X</u>	_____	d. Describe alternate methods for leachate management when it cannot be recirculated due to weather or runoff conditions, surface seeps, wind-blown spray, or elevated levels of leachate head on the liner;
_____	_____	<u>X</u>	_____	e. Describe methods of gas management in accordance with Rule 62-701.530, FAC;
_____	_____	<u>X</u>	_____	f. If leachate irrigation is proposed, describe treatment methods and standards for leachate treatment prior to irrigation over final cover and provide documentation that irrigation does not contribute significantly to leachate generation.
				5. Leachate storage tanks and leachate surface impoundments; (62-701.400(6), FAC)
				a. Surface impoundment requirements; (62-701.400(6)(b), FAC)
_____	_____	<u>X</u>	_____	(1) Documentation that the design of the bottom liner will not be adversely impacted by fluctuations of the ground water;
_____	_____	<u>X</u>	_____	(2) Designed in segments to allow for inspection and repair as needed without interruption of service;
_____	_____	<u>X</u>	_____	(3) General design requirements;
_____	_____	<u>X</u>	_____	(a) Double liner system consisting of an upper and lower 60-mil minimum thickness geomembrane;
_____	_____	<u>X</u>	_____	(b) Leak detection and collection system with hydraulic conductivity > 1 cm/sec;
_____	_____	<u>X</u>	_____	(c) Lower geomembrane placed on subbase > 6 inches thick with $k < 1 \times 10^{-5}$ cm/sec or on an approved geosynthetic clay liner with $k < 1 \times 10^{-7}$ cm/sec;
_____	_____	<u>X</u>	_____	(d) Design calculation to predict potential leakage through the upper liner;
_____	_____	<u>X</u>	_____	(e) Daily inspection requirements and notification and corrective action requirements if leakage rates exceed that predicted by design calculations;
_____	_____	<u>X</u>	_____	(4) Description of procedures to prevent uplift, if applicable;
_____	_____	<u>X</u>	_____	(5) Design calculations to demonstrate minimum two feet of freeboard will be maintained;

S	LOCATION	N/A	N/C	PART H CONTINUED
_____	_____	<u>X</u>	_____	(6) Procedures for controlling disease vectors and off-site odors.
_____	_____	<u>X</u>	_____	b. Above-ground leachate storage tanks; (62-701.400(6)(c), FAC)
_____	_____	<u>X</u>	_____	(1) Describe tank materials of construction and ensure foundation is sufficient to support tank;
_____	_____	<u>X</u>	_____	(2) Describe procedures for cathodic protection if needed for the tank;
_____	_____	<u>X</u>	_____	(3) Describe exterior painting and interior lining of the tank to protect it from the weather and the leachate stored;
_____	_____	<u>X</u>	_____	(4) Describe secondary containment design to ensure adequate capacity will be provided and compatibility of materials of construction;
_____	_____	<u>X</u>	_____	(5) Describe design to remove and dispose of stormwater from the secondary containment system;
_____	_____	<u>X</u>	_____	(6) Describe an overflow prevention system such as level sensors, gauges, alarms and shutoff controls to prevent overflowing;
_____	_____	<u>X</u>	_____	(7) Inspections, corrective action and reporting requirements;
_____	_____	<u>X</u>	_____	(a) Overflow prevention system weekly;
_____	_____	<u>X</u>	_____	(b) Exposed tank exteriors weekly;
_____	_____	<u>X</u>	_____	(c) Tank interiors when tank is drained or at least every three years;
_____	_____	<u>X</u>	_____	(d) Procedures for immediate corrective action if failures detected;
_____	_____	<u>X</u>	_____	(e) Inspection reports available for department review.
_____	_____	<u>X</u>	_____	c. Underground leachate storage tanks; (62-701.400(6)(d), FAC)
_____	_____	<u>X</u>	_____	(1) Describe materials of construction;
_____	_____	<u>X</u>	_____	(2) A double-walled tank design system to be used with the following requirements;
_____	_____	<u>X</u>	_____	(a) Interstitial space monitoring at least weekly;
_____	_____	<u>X</u>	_____	(b) Corrosion protection provided for primary tank interior and external
_____	_____	<u>X</u>	_____	surface of outer shell;
_____	_____	<u>X</u>	_____	(c) Interior tank coatings compatible with stored leachate;

S	LOCATION	N/A	N/C	PART H CONTINUED
_____	_____	<u>X</u>	_____	(d) Cathodic protection inspected weekly and repaired as needed;
_____	_____	<u>X</u>	_____	(3) Describe an overflow prevention system such as level sensors, gauges, alarms and shutoff controls to prevent overflowing and provide for weekly inspections;
_____	_____	<u>X</u>	_____	(4) Inspection reports available for department review.
_____	_____	<u>X</u>	_____	d. Schedule provided for routine maintenance of LCRS; (62-701.400(6)(e), FAC)
_____	_____	<u>X</u>	_____	6. Liner systems construction quality assurance (CQA); (62-701.400(7), FAC)
_____	_____	<u>X</u>	_____	a. Provide CQA Plan including:
_____	_____	<u>X</u>	_____	(1) Specifications and construction requirements for liner system;
_____	_____	<u>X</u>	_____	(2) Detailed description of quality control testing procedures and frequencies;
_____	_____	<u>X</u>	_____	(3) Identification of supervising professional engineer;
_____	_____	<u>X</u>	_____	(4) Identify responsibility and authority of all appropriate organizations and key personnel involved in the construction project;
_____	_____	<u>X</u>	_____	(5) State qualifications of CQA professional engineer and support personnel;
_____	_____	<u>X</u>	_____	(6) Description of CQA reporting forms and documents;
_____	_____	<u>X</u>	_____	b. An independent laboratory experienced in the testing of geosynthetics to perform required testing;
_____	_____	<u>X</u>	_____	7. Soil Liner CQA (62-701.400(8)FAC)
_____	_____	<u>X</u>	_____	a. Documentation that an adequate borrow source has been located with test results or description of the field exploration and laboratory testing program to define a suitable borrow source;
_____	_____	<u>X</u>	_____	b. Description of field test section construction and test methods to be implemented prior to liner installation;
_____	_____	<u>X</u>	_____	c. Description of field test methods including rejection criteria and corrective measures to insure proper liner installation.

S

LOCATION

N/A

N/C

PART H CONTINUED

8. Surface water management systems; (62-701.400(9), FAC)

____ X _____

a. Provide a copy of a Department permit for stormwater control or documentation that no such permit is required;

____ X _____

b. Design of surface water management system to isolate surface water from waste filled areas and to control stormwater run-off;

____ X _____

c. Details of stormwater control design including retention ponds, detention ponds, and drainage ways;

9. Gas control systems; (62-701.400(10), FAC)

____ X _____

a. Provide documentation that if the landfill is receiving degradable wastes, it will have a gas control system complying with the requirements of Rule 62-701.530, FAC;

____ X _____

10. For landfills designed in ground water, provide documentation that the landfill will provide a degree of protection equivalent to landfills designed with bottom liners not in contact with ground water; (62-701.400(11), FAC)

(NOT APPLICABLE)

I. HYDROGEOLOGICAL INVESTIGATION REQUIREMENTS (62-701.410(1), FAC)

S	LOCATION	N/A	N/C	
___	_____	<u>X</u>	___	1. Submit a hydrogeological investigation and site report including at least the following information:
___	_____	<u>X</u>	___	a. Regional and site specific geology and hydrogeology;
___	_____	<u>X</u>	___	b. Direction and rate of ground water and surface water flow including seasonal variations;
___	_____	<u>X</u>	___	c. Background quality of ground water and surface water;
___	_____	<u>X</u>	___	d. Any on-site hydraulic connections between aquifers;
___	_____	<u>X</u>	___	e. Site stratigraphy and aquifer characteristics for confining layers, semi-confining layers, and all aquifers below the landfill site that may be affected by the landfill;
___	_____	<u>X</u>	___	f. Description of topography, soil types and surface water drainage systems;
___	_____	<u>X</u>	___	g. Inventory of all public and private water wells within a one-mile radius of the landfill including, where available, well top of casing and bottom elevations, name of owner, age and usage of each well, stratigraphic unit screened, well construction technique and static water level;
___	_____	<u>X</u>	___	h. Identify and locate any existing contaminated areas on the site;
___	_____	<u>X</u>	___	i. Include a map showing the locations of all potable wells within 500 feet, and all community water supply wells within 1000 feet, of the waste storage and disposal areas;
___	_____	<u>X</u>	___	2. Report signed, sealed and dated by PE or PG.

(NOT APPLICABLE)

J. GEOTECHNICAL INVESTIGATION REQUIREMENTS (62-701.410(2), FAC)

S	LOCATION	N/A	N/C	
				1. Submit a geotechnical site investigation report defining the engineering properties of the site including at least the following:
___	_____	<u>X</u>	___	a. Description of subsurface conditions including soil stratigraphy and ground water table conditions;
___	_____	<u>X</u>	___	b. Investigate for the presence of muck, previously filled areas, soft ground, lineaments and sink holes;
___	_____	<u>X</u>	___	c. Estimates of average and maximum high water table across the site;
___	_____	<u>X</u>	___	d. Foundation analysis including:
___	_____	<u>X</u>	___	(1) Foundation bearing capacity analysis;
___	_____	<u>X</u>	___	(2) Total and differential subgrade settlement analysis;
___	_____	<u>X</u>	___	(3) Slope stability analysis;
___	_____	<u>X</u>	___	e. Description of methods used in the investigation and includes soil boring logs, laboratory results, analytical calculations, cross sections, interpretations and conclusions;
___	_____	<u>X</u>	___	f. An evaluation of fault areas, seismic impact zones, and unstable areas as described in 40 CFR 258.13, 40 CFR 258.14 and 40 CFR 258.15.
___	_____	<u>X</u>	___	2. Report signed, sealed and dated by PE or PG.

(NOT APPLICABLE)

K. VERTICAL EXPANSION OF LANDFILLS (62-701.430, FAC)

S	LOCATION	N/A	N/C	
_____	_____	<u>X</u>	_____	1. Describe how the vertical expansion shall not cause or contribute to leachate leakage from the existing landfill or adversely affect the closure design of the existing landfill;
_____	_____	<u>X</u>	_____	2. Describe how the vertical expansion over unlined landfills will meet the requirements of Rule 62-701.400, FAC with the exceptions of Rule 62-701.430(1)(c), FAC;
_____	_____	<u>X</u>	_____	3. Provide foundation and settlement analysis for the vertical expansion;
_____	_____	<u>X</u>	_____	4. Provide total settlement calculations demonstrating that the final elevations of the lining system, that gravity drainage, and that no other component of the design will be adversely affected;
_____	_____	<u>X</u>	_____	5. Minimum stability safety factor of 1.5 for the lining system component interface stability and deep stability;
_____	_____	<u>X</u>	_____	6. Provide documentation to show the surface water management system will not be adversely affected by the vertical expansion;
_____	_____	<u>X</u>	_____	7. Provide gas control designs to prevent accumulation of gas under the new liner for the vertical expansion.

L. LANDFILL OPERATION REQUIREMENTS (62-701.500, FAC)

S	LOCATION	N/A	N/C	
_____	_____	_____	<u>X</u>	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)
_____	_____	_____	<u>X</u>	2. Provide a landfill operation plan including procedures for: (62-701.500(2), FAC)
_____	_____	_____	<u>X</u>	a. Designating responsible operating and maintenance personnel;
_____	_____	_____	<u>X</u>	b. Contingency operations for emergencies;
_____	_____	_____	<u>X</u>	c. Controlling types of waste received at the landfill;
_____	_____	_____	<u>X</u>	d. Weighing incoming waste;
_____	_____	_____	<u>X</u>	e. Vehicle traffic control and unloading;
_____	_____	_____	<u>X</u>	f. Method and sequence of filling waste;
<u>X</u>	<u>Attachment 4</u>	_____	_____	g. Waste compaction and application of cover;
_____	_____	_____	<u>X</u>	h. Operations of gas, leachate, and Stormwater controls;
_____	_____	_____	<u>X</u>	i. Water quality monitoring.
_____	_____	_____	<u>X</u>	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)
_____	_____	_____	<u>X</u>	4. Describe the waste records that will be compiled monthly and provided to the Department quarterly; (62-701.500(4), FAC)
_____	_____	_____	<u>X</u>	5. Describe methods of access control; (62-701.500(5), FAC)
_____	_____	_____	<u>X</u>	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)
_____	_____	_____	<u>X</u>	7. Describe procedures for spreading and compacting waste at the landfill that include: (62-701.500(7), FAC)
_____	_____	_____	<u>X</u>	a. Waste layer thickness and compaction frequencies;

S	LOCATION	N/A	N/C	PART L CONTINUED
_____	_____	_____	<u>X</u>	b. Special considerations for first layer of waste placed above liner and leachate collection system;
_____	_____	_____	<u>X</u>	c. Slopes of cell working face and side grades above land surface, planned lift depths during operation;
_____	_____	_____	<u>X</u>	d. Maximum width of working face;
_____	_____	_____	<u>X</u>	e. Description of type of initial cover to be used at the facility that controls: (1) Disease vector breeding/animal attraction (2) Fires (3) Odors (4) Blowing litter (5) Moisture infiltration
<u>X</u>	<u>Attachment 4</u>	_____	_____	f. Procedures for applying initial cover including minimum cover frequencies;
_____	_____	_____	<u>X</u>	g. Procedures for applying intermediate cover;
_____	_____	_____	<u>X</u>	h. Time frames for applying final cover;
_____	_____	_____	<u>X</u>	i. Procedures for controlling scavenging and salvaging.
_____	_____	_____	<u>X</u>	j. Description of litter policing methods;
_____	_____	_____	<u>X</u>	k. Erosion control procedures.
_____	_____	_____	<u>X</u>	8. Describe operational procedures for leachate management including; (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>	d. Agreements for off-site discharge and treatment of leachate;
_____	_____	_____	<u>X</u>	e. Contingency plan for managing leachate during emergencies or equipment problems;

S	LOCATION	N/A	N/C	PART I 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.
_____	_____	_____	<u>X</u>	9. Describe how the landfill receiving degradable wastes shall implement a gas management system meeting the requirements of Rule 62-701.530, FAC; (62-701.500(9), FAC)
_____	_____	_____	<u>X</u>	10. Describe procedures for operating and maintaining the landfill stormwater management system to comply with the requirements of Rule 62-701.400(9); (62-701.500(10), FAC)
_____	_____	_____	<u>X</u>	11. Equipment and operation feature requirements; (62-701.500(11), FAC)
_____	_____	_____	<u>X</u>	a. Sufficient equipment for excavating, spreading, compacting and covering waste;
_____	_____	_____	<u>X</u>	b. Reserve equipment or arrangements to obtain additional equipment within 24 hours of breakdown;
_____	_____	_____	<u>X</u>	c. Communications equipment;
_____	_____	_____	<u>X</u>	d. Dust control methods;
_____	_____	_____	<u>X</u>	e. Fire protection capabilities and procedures for notifying local fire department authorities in emergencies;
_____	_____	_____	<u>X</u>	f. Litter control devices;
_____	_____	_____	<u>X</u>	g. Signs indicating operating authority, traffic flow, hours of operation, disposal restrictions.
_____	_____	_____	<u>X</u>	12. Provide a description of all-weather access road, inside perimeter road and other roads necessary for access which shall be provided at the landfill; (62-701.500(12), FAC)
_____	_____	_____	<u>X</u>	13. Additional record keeping and reporting requirements; (62-701.500(13), FAC)

				PART I CONTINUED	
S	LOCATION	N/A	N/C		
---	_____	---	<u>X</u>	a. Records used for developing permit applications and supplemental information maintained for the design period of the landfill;	
---	_____	---	<u>X</u>	b. Monitoring information, calibration and maintenance records, copies of reports required by permit maintained for at least 10 years;	
---	_____	---	<u>X</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;	
---	_____	---	<u>X</u>	d. Procedures for archiving and retrieving records which are more than five year old.	

M. WATER QUALITY AND LEACHATE MONITORING REQUIREMENTS (62-701.510, FAC)

S	LOCATION	N/A	N/C	
_____	_____	_____	<u>X</u>	1. Water quality and leachate monitoring plan shall be submitted describing the proposed ground water, surface water and leachate monitoring systems and shall meet at least the following requirements;
_____	_____	_____	<u>X</u>	a. Based on the information obtained in the hydrogeological investigation and signed, dated and sealed by the PG or PE who prepared it; (62-701.510(2)(a), FAC)
_____	_____	_____	<u>X</u>	b. All sampling and analysis performed in accordance with Chapter 62-160, FAC; (62-701.510(2)(b), FAC)
_____	_____	_____	<u>X</u>	c. Ground water monitoring requirements; (62-701.510(3), FAC)
_____	_____	_____	<u>X</u>	(1) Detection wells located downgradient from and within 50 feet of disposal units;
_____	_____	_____	<u>X</u>	(2) Downgradient compliance wells as required;
_____	_____	_____	<u>X</u>	(3) Background wells screened in all aquifers below the landfill that may be affected by the landfill;
_____	_____	_____	<u>X</u>	(4) Location information for each monitoring well;
_____	_____	_____	<u>X</u>	(5) Well spacing no greater than 500 feet apart for downgradient wells and no greater than 1500 feet apart for upgradient wells unless site specific conditions justify alternate well spacings;
_____	_____	_____	<u>X</u>	(6) Well screen locations properly selected;
_____	_____	_____	<u>X</u>	(7) Procedures for properly abandoning monitoring wells;
_____	_____	_____	<u>X</u>	(8) Detailed description of detection sensors if proposed.

S	LOCATION	N/A	N/C	PART M CONTINUED
_____	_____	_____	<u>X</u>	d. Surface water monitoring requirements; (62-701.510(4), FAC)
_____	_____	_____	<u>X</u>	(1) Location of and justification for all proposed surface water monitoring points;
_____	_____	_____	<u>X</u>	(2) Each monitoring location to be marked and its position determined by a registered Florida land surveyor;
_____	_____	<u>X</u>	_____	e. Leachate sampling locations proposed; (62-701.510(5), FAC)
_____	_____	_____	_____	f. Initial and routine sampling frequency and requirements; (62-701.510(6), FAC)
_____	_____	_____	<u>X</u>	(1) Initial background ground water and surface water sampling and analysis requirements;
_____	_____	<u>X</u>	_____	(2) Routine leachate sampling and analysis requirements;
_____	_____	_____	<u>X</u>	(3) Routine monitoring well sampling and analysis requirements;
_____	_____	_____	<u>X</u>	(4) Routine surface water sampling and analysis requirements.
_____	_____	_____	<u>X</u>	g. Describe procedures for implementing evaluation monitoring, prevention measures and corrective action as required; (62-701.510(7), FAC)
_____	_____	_____	<u>X</u>	h. Water quality monitoring report requirements; (62-701.510(9), FAC)
_____	_____	_____	<u>X</u>	(1) Semi-annual report requirements;
_____	_____	_____	<u>X</u>	(2) Bi-annual report requirements signed, dated and sealed by PG or PE.

(NOT APPLICABLE)

N. SPECIAL WASTE HANDLING REQUIREMENTS (62-701.520, FAC)

S	LOCATION	N/A	N/C	
___	_____	<u>X</u>	___	1. Describe procedures for managing motor vehicles; (62-701.520(1), FAC)
___	_____	<u>X</u>	___	2. Describe procedures for landfilling shredded waste; (62-701.520(2), FAC)
___	_____	<u>X</u>	___	3. Describe procedures for asbestos waste disposal; (62-701.520(3), FAC)
___	_____	<u>X</u>	___	4. Describe procedures for disposal or management of contaminated soil; (62-701.520(4), FAC)
___	_____	<u>X</u>	___	5. Describe procedures for disposal of biological wastes; (62-701.520(5), FAC)

O. GAS MANAGEMENT SYSTEM REQUIREMENTS (62-701.530, FAC)

___	_____	___	<u>X</u>	1. Provide the design for a gas management systems that will (62-701.530(1), FAC):
___	_____	___	<u>X</u>	a. Be designed to prevent concentrations of combustible gases from exceeding 25% the LEL in structures and 100% the LEL at the property boundary;
___	_____	___	<u>X</u>	b. Be designed for site-specific conditions;
___	_____	___	<u>X</u>	c. Be designed to reduce gas pressure in the interior of the landfill;
___	_____	___	<u>X</u>	d. Be designed to not interfere with the liner, leachate control system or final cover.
___	_____	___	<u>X</u>	2. Provide documentation that will describe locations, construction details and procedures for monitoring gas at ambient monitoring points and with soil monitoring probes; (62-701.530(2), FAC):
___	_____	___	<u>X</u>	3. Provide documentation describing how the gas remediation plan and odor remediation plan will be implemented; (62-701.530(3), FAC):
___	_____	<u>X</u>	___	4. Landfill gas recovery facilities; (62-701.530(5), FAC):
___	_____	<u>X</u>	___	a. Information required in Rules 62-701.320(7) and 62-701.330(3), FAC supplied;
___	_____	<u>X</u>	___	b. Information required in Rule 62-701.600(4), FAC supplied where relevant and practical;
___	_____	<u>X</u>	___	c. Estimate of current and expected gas generation rates and description of condensate disposal methods provided;

				PART 0 CONTINUED
S	LOCATION	N/A	N/C	
_____	_____	<u>X</u>	_____	d. Description of procedures for condensate sampling, analyzing and data reporting provided;
_____	_____	<u>X</u>	_____	e. Closure plan provided describing methods to control gas after recovery facility ceases operation and any other requirements contained in Rule 62-701.400(10), FAC;
_____	_____	<u>X</u>	_____	f. Performance bond provided to cover closure costs if not already included in other landfill closure costs.

P. LANDFILL FINAL CLOSURE REQUIREMENTS (62-701.600, FAC)

S	LOCATION	N/A	N/C	
_____	_____	_____	_____	1. Closure schedule requirements; (62-701.600(2), FAC)
_____	_____	_____	<u>X</u>	a. Documentation that a written notice including a schedule for closure will be provided to the Department at least one year prior to final receipt of wastes;
_____	_____	_____	<u>X</u>	b. Notice to user requirements within 120 days of final receipt of wastes;
_____	_____	_____	<u>X</u>	c. Notice to public requirements within 10 days of final receipt of wastes.
_____	_____	_____	_____	2. Closure permit general requirements;
_____	_____	_____	<u>X</u>	(62-701.600(3), FAC)
_____	_____	_____	<u>X</u>	a. Application submitted to Department at least 90 days prior to final receipt of wastes;
_____	_____	_____	_____	b. Closure plan shall include the following:
_____	_____	_____	<u>X</u>	(1) Closure report;
_____	_____	_____	<u>X</u>	(2) Closure design plan;
_____	_____	_____	<u>X</u>	(3) Closure operation plan;
_____	_____	_____	<u>X</u>	(4) Closure procedures;
_____	_____	_____	<u>X</u>	(5) Plan for long term care;
_____	_____	_____	<u>X</u>	(6) A demonstration that proof of financial responsibility for long term care will be provided.
_____	_____	_____	_____	3. Closure report requirements; (62-701.600(4), FAC)
_____	_____	_____	_____	a. General information requirements;
_____	_____	_____	<u>X</u>	(1) Identification of landfill;

S	LOCATION	N/A	N/C	PART P CONTINUED
_____	_____	_____	<u>X</u>	(2) Location, description and vicinity map;
_____	_____	_____	<u>X</u>	(3) Total acres of disposal areas and landfill property;
_____	_____	_____	<u>X</u>	(4) Legal property description;
_____	_____	_____	<u>X</u>	(5) History of landfill;
_____	_____	_____	<u>X</u>	(6) Identification of types of waste disposed of at the landfill.
_____	_____	_____	<u>X</u>	b. Geotechnical investigation report and water quality monitoring plan required by Rule 62-701.330(3), FAC;
_____	_____	_____	<u>X</u>	c. Land use information report indicating: identification of adjacent landowners; zoning; present land uses; and roads, highways right-of-way, or easements.
_____	_____	_____	<u>X</u>	d. Report on actual or potential gas migration at landfills containing degradable wastes which would allow migration of gas off the landfill property;
_____	_____	_____	<u>X</u>	e. Report assessing the effectiveness of the landfill design and operation including results of geotechnical investigations, surface water and storm water management, gas migration and concentrations, condition of existing cover, and nature of waste disposed of at the landfill;
_____	_____	_____		4. Closure design requirements to be included in the closure design plan: (62-701.600(5), FAC)
_____	_____	_____	<u>X</u>	a. Plan sheet showing phases of site closing;
_____	_____	_____	<u>X</u>	b. Drawings showing existing topography and proposed final grades;
_____	_____	_____	<u>X</u>	c. Provisions to close units when they reach approved design dimensions;
_____	_____	_____	<u>X</u>	d. Final elevations before settlement;
_____	_____	_____	<u>X</u>	e. Side slope design including benches, terraces, down slope drainage ways, energy dissipators and discussion of expected precipitation effects;
_____	_____	_____		f. Final cover installation plans including:
_____	_____	_____	<u>X</u>	(1) CQA plan for installing and testing final cover;

S	LOCATION	N/A	N/C	PART P CONTINUED
_____	_____	_____	<u>X</u>	(2) Schedule for installing final cover after final receipt of waste;
_____	_____	_____	<u>X</u>	(3) Description of drought-resistant species to be used in the vegetative cover;
_____	_____	_____	<u>X</u>	(4) Top gradient design to maximize runoff and minimize erosion;
_____	_____	_____	<u>X</u>	(5) Provisions for cover material to be used for final cover maintenance.
				g. Final cover design requirements:
_____	_____	_____	<u>X</u>	(1) Protective soil layer design;
_____	_____	_____	<u>X</u>	(2) Barrier soil layer design;
_____	_____	_____	<u>X</u>	(3) Erosion control vegetation;
_____	_____	_____	<u>X</u>	(4) Geomembrane barrier layer design;
_____	_____	_____	<u>X</u>	(5) Geosynthetic clay liner design if used;
_____	_____	_____	<u>X</u>	(6) Stability analysis of the cover system and the disposed waste.
_____	_____	_____	<u>X</u>	h. Proposed method of stormwater control;
_____	_____	_____	<u>X</u>	i. Proposed method of access control;
_____	_____	_____	<u>X</u>	j. Description of proposed final use of the closed landfill, if any;
_____	_____	_____	<u>X</u>	k. Description of the proposed or existing gas management system which complies with Rule 62-701.530, FAC.
				5. Closure operation plan shall include: (62-701.600(6), FAC)
_____	_____	_____	<u>X</u>	a. Detailed description of actions which will be taken to close the landfill;
_____	_____	_____	<u>X</u>	b. Time schedule for completion of closing and long term care;
_____	_____	_____	<u>X</u>	c. Describe proposed method for demonstrating financial responsibility;
_____	_____	_____	<u>X</u>	d. Indicate any additional equipment and personnel needed to complete closure.

S	LOCATION	N/A	N/C	PART P CONTINUED
_____	_____	_____	<u>X</u>	e. Development and implementation of the water quality monitoring plan required in Rule 62-701.510, FAC.
_____	_____	_____	<u>X</u>	f. Development and implementation of gas management system required in Rule 62-701.530, FAC.
_____	_____	_____	<u>X</u>	6. Justification for and detailed description of procedures to be followed for temporary closure of the landfill, if desired; (62-701.600(7),FAC)

Q. CLOSURE PROCEDURES (62-701.610, FAC)

S	LOCATION	N/A	N/C	
_____	_____	_____	<u>X</u>	1. Survey monuments; (62-701.610(2), FAC)
_____	_____	_____	<u>X</u>	2. Final survey report; (62-701.610(3), FAC)
_____	_____	_____	<u>X</u>	3. Certification of closure construction completion; (62-701.610(4), FAC)
_____	_____	_____	<u>X</u>	4. Declaration to the public; (62-701.610(5), FAC)
_____	_____	_____	<u>X</u>	5. Official date of closing; (62-701.610(6), FAC)
_____	_____	_____	<u>X</u>	6. Use of closed landfill areas; (62-701.610(7), FAC)
_____	_____	_____	<u>X</u>	7. Relocation of wastes; (62-701.610(8), FAC)

R. LONG TERM CARE REQUIREMENTS (62-701.620, FAC) (NO CHANGE)

_____	_____	_____	<u>X</u>	1. Maintaining the gas collection and monitoring System; (62-701.620(5), FAC)
_____	_____	_____	<u>X</u>	2. Right of property access requirements; (62-701.620(6), FAC)
_____	_____	_____	<u>X</u>	3. Successors of interest requirements; (62-701.620(7), FAC)
_____	_____	_____	<u>X</u>	4. Requirements for replacement of monitoring devices; (62-701.620(9), FAC)
_____	_____	_____	<u>X</u>	5. Completion of long term care signed and sealed by professional engineer (62-701.620(10), FAC).

S. FINANCIAL RESPONSIBILITY REQUIREMENTS (62-701.630, FAC) (NO CHANGE)

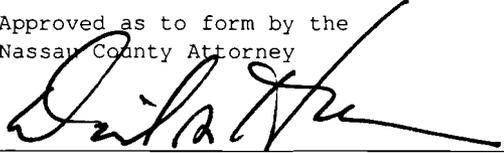
_____	_____	_____	<u>X</u>	1. Provide cost estimates for closing, long term care, and corrective action costs estimated by a PE for a third party performing the work, on a per unit basis, with the source of estimates indicated; (62-701.630(3)&(7), FAC).
_____	_____	_____	<u>X</u>	2. Describe procedures for providing annual cost adjustments to the Department based on inflation and changes in the closing, long-term care, and corrective action plans; (62-701.630(4)&(8), FAC).
_____	_____	_____	<u>X</u>	3. Describe funding mechanisms for providing proof of financial assurance and include appropriate financial assurance forms; (62-701.630(5), (6), &(9), FAC).

T. CERTIFICATION BY APPLICANT AND ENGINEER OR PUBLIC OFFICER

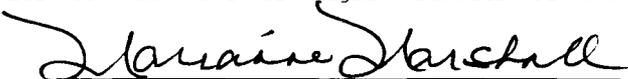
1. Applicant:

The undersigned applicant or authorized representative of Nassau County is aware that statements made in this form and attached information are an application for a Minor Modification of Operations Permit from the Florida Department of Environmental Protection and certifies that the information in this application is true, correct and complete to the best of his/her knowledge and belief. Further, the undersigned agrees to comply with the provisions of Chapter 403, Florida Statutes, and all rules and regulations of the Department. It is understood that the Permit is not transferable, and the Department will be notified prior to the sale or legal transfer of the permitted facility.

Approved as to form by the
Nassau County Attorney



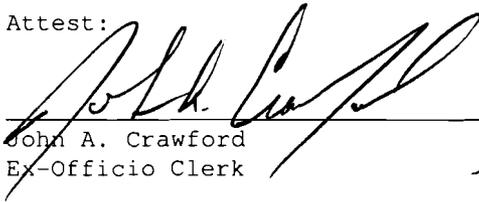
David Hallman



Signature of Applicant or Agent

Marianne Marshall, Chair
Nassau Co. Board of County Commissioners
Name and Title

Attest:



John A. Crawford
Ex-Officio Clerk

2008/6/10/08

Date: June 9, 2008

96160 Nassau Place
Mailing Address

Yulee, Florida 32097
City, State, Zip Code

E-Mail address (if available)

(904) 491-7380
Telephone Number

Attach letter of authorization if agent is not a governmental official, owner, or corporate officer.

2. Professional Engineer registered in Florida (or Public Officer if authorized under Sections 403.707 and 403.7075, Florida Statutes):

This is to certify that the engineering features of this solid waste management facility have been designed/examined by me and found to conform to engineering principles applicable to such facilities. In my professional judgment, this facility, when properly maintained and operated, will comply with all applicable statutes of the State of Florida and rules of the Department. It is agreed that the undersigned will provide the applicant with a set of instructions of proper maintenance and operation of the facility.



Kevin S. Brown
Name and Title (please type)

3730 Chamblee Tucker Road
Mailing Address

Atlanta, Georgia 30341
City, State, Zip Code

kbrown@golder.com
E-Mail address (if available)

57819
Florida Registration Number
(please affix seal)

(770) 496-1893
Telephone Number

Date: 6/18/08

6/18/08

ATTACHMENT 3

FDEP Letter Dated March 13, 2008



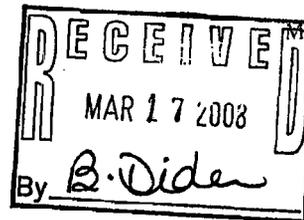
Florida Department of Environmental Protection

Northeast District Office
7825 Baymeadows Way, Suite 200B
Jacksonville, Florida 32256-7590

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary



March 13, 2008

Mr. John P. Regan, P.E.
Chief Operations Officer
City of St. Augustine
Post Office Box 210
St. Augustine, Florida 32085

**Re: Holmes Boulevard - Use of Screened Solid Waste (SSW) as
Landfill Cover Material
St. Johns County - Solid Waste**

Dear Mr. Regan:

The Florida Department of Environmental Protection does not object to your request to use the Screened Solid Waste (i.e., the fines fraction of screened solid waste) from the waste material that originated from the Riberia Street dump site, which is currently located at the Holmes Boulevard site, for interior cover material at Class I landfills.

Please note that removal of waste from Holmes Boulevard must be conducted in accordance with an approved Excavation and Disposal Plan. That Plan must include, at a minimum, the following conditions:

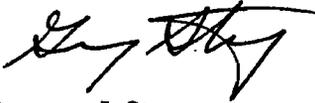
1. The waste must be power screened before leaving the site;
2. Only the SSW may be used as interior cover material, and;
3. With the exception of explicitly approved clean debris, the remaining portions of the waste material must be properly disposed of in a permitted Class I landfill.

Additionally, unless the receiving landfill is authorized to receive contaminated soils and/or waste material for use as interior cover material, it must obtain a minor modification of its permit prior to doing so.

Mr. John P. Regan, P.E.
March 13, 2008
Page Two

If you have any questions or comments concerning this matter, please contact Emerson Raulerson at the letterhead address or at telephone number 904.807.3365.

Sincerely,



Gregory J. Strong
District Director

GJS/ecr/lp

cc: Lee Pickett, Nassau County Solid Waste Director

ATTACHMENT 4

**Replacement Pages for Operations Plan
West Nassau Landfill**

Daily soil cover consists of uncontaminated soil from on and off site sources and/or petroleum contaminated soil which has been treated pursuant to Chapter 62-713, F.A.C. and meets the criteria of Rules 62-701.200(39), (59), and (61), F.A.C. Materials other than clean soil may be used as initial cover provided that the material:

- Could be accepted for disposal at the landfill;
- Meets the appropriate definition in 62-701.200 (59), F.A.C.;
- Is applied and maintained so as to minimize impacts on stormwater; and
- Has been approved by the Department.

The landfill operator may use ADC (alternate daily cover) when needed instead of daily soil cover. The alternate cover material may include commercial foam-type products; spray-on agents or formulas; chipped tires (during wet weather operations only); demolition debris, such as crushed concrete or bricks; and contaminated soils as allowed by Chapter 62-701.200,(61), F.A.C. ADC consists of materials that minimize the attraction of birds, prevent litter, minimize odor, minimize disease vectors, and minimize fires as required by FAC 62-701.500(7)(e). Only ADC material that has been approved for use by the FDEP is to be used by the County. Presently, the only ADCs approved by FDEP for use at the site includes a tarpaulin (i.e. Fabrene product G168 or equivalent) and specific screened material from the City of St. Augustine (COSA), with restrictions as described herein. *The screened material from COSA is a limited amount of material that will be hauled to the West Nassau Landfill as it is screened at the Holmes Boulevard Site. This material will only be allowed to be stockpiled within the lined portions of the landfill for use as ADC within the waste disposal area. The stockpiled material will be stored separate from other daily cover sources at the landfill utilizing temporary fencing. This material will only be used for daily cover and will not be utilized for intermediate cover or daily cover that is on the sideslopes of the landfill where only intermediate cover remains to be placed. The landfill will utilize the material on a daily basis as it is delivered, assuming the operations of the day allow.*

Other ADC materials may be used but required approval from the FDEP by providing documentation demonstrating that the proposed material will satisfy the initial cover requirements listed in Chapter 62-701 F.A.C. including, but not limited to , functioning as a fire barrier, and obtains the Department's written approval.

The landfill operator is responsible for selecting ADC and placing the ADC in a manner which meets the FDEP requirements and policies. If soil cover is used, then the top 3 to 4 inches can be removed prior to subsequent waste placement and reused as daily cover as long as there is no visible litter in area where initial cover ~~is~~ removed and the soil ~~is~~ reused as daily cover the same day.

5.10.6 Intermediate Cover

If additional waste or final cover is not to be applied within 180 days in a specific portion of the landfill, intermediate cover consisting of 12 inches of soil is applied over the existing 6 inches of initial (daily) cover within seven days of the last filling operation in that area. The landfill