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May 2, 2012

MAY 02 2012

NORTHEAST DISTRICT
DEP-JACKSONVILLE

Mr. Emerson Raulerson, P.E.
Florida Department of Environmental Protection
Northeast District Office
7825 Baymeadows Way, Suite 200B
Jacksonville, Florida 32256-7590

RE: Trail Ridge Landfill – Minor Modification
DEP Permit Number 0013493-017-SO
ETM No. 07-044-02

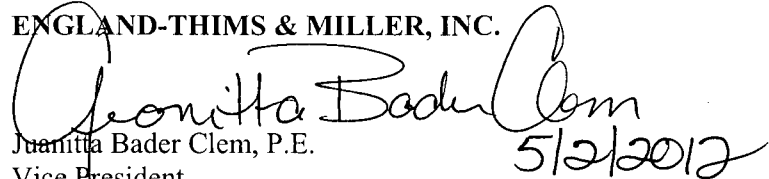
Dear Mr. Raulerson:

Pursuant to Florida Statutes 403.708(12)(c)1 (attached) and on behalf of Trail Ridge Landfill, Inc., we hereby request a minor modification of the referenced permit for Trail Ridge Landfill to accept yard waste for re-use and disposal. Please find herewith an Application for a Permit to Modify a Solid Waste Management Facility and the application fee of \$250.00 per Rule 62-4.050 (4) (s) 5, F.A.C. Trail Ridge Landfill has an active gas collection system as well as a Gas-to-Energy system, wherein the landfill gas is converted to energy. Trail Ridge Landfill, Inc., as the permittee, hereby provides the attached certification that the gas collection system and beneficial use will continue after the landfill is closed. Please see the attached updated page 4 of the Operation Plan regarding the acceptance of yard waste at the landfill.

We respectfully request that the Department consider this requested modification. Please contact me at 265-3181 or email me at clenj@etminc.com, if you have any questions or require additional information.

Sincerely,

ENGLAND-THIMS & MILLER, INC.


Juanitta Bader Clem, P.E.
Vice President

5/2/2012

Attachments: Florida Statutes 403.708(12)(c)1
Application to Modify a Solid Waste Management Facility (Minor Modification)
Application Fee (\$250)
TRLI Certification
Revised Engineering Report (Section VI A) – Page 4 Only

XC: Tim Hawkins, Trail Ridge Landfill, Inc. (TRLI)
Greg Mathes, TRLI
Jim Purvis, TRLI
Jim Christiansen, TRLI
Eric Parker, TRLI
Scott Lockwood, P.E., ETM



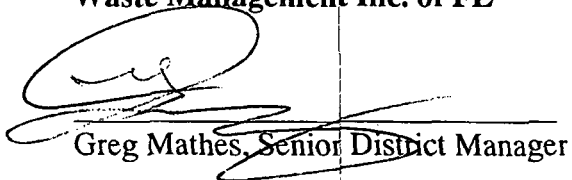
WASTE MANAGEMENT INC. OF FLORIDA

Trail Ridge Landfill, Inc.
5110 U.S. Highway 301 South
Baldwin, FL 32234-3608
(904) 289-9100
(904) 289-9013 Fax

Certification Statement

Waste Management Inc. of FL hereby certifies that it shall continue gas collection for beneficial use at the Trail Ridge Landfill, in accordance with the requirements of 403.708(12)(c)1, Florida Statutes, upon acceptance of yard trash for disposal.

Waste Management Inc. of FL

A handwritten signature in black ink, appearing to read 'Greg Mathes', is written over a horizontal line. Below the signature, the text 'Greg Mathes, Senior District Manager' is printed.

Greg Mathes, Senior District Manager

From everyday collection to environmental protection, Think Green® Think Waste Management.

Florida Statutes 403.708(12)(c)1.

Yard trash in lined landfills classified by department rule as Class I landfills, unless the Class I landfill uses an active gas-collection system to collect landfill gas generated at the disposal facility and provides or arranges for a beneficial use of the gas. A Class I landfill may also accept yard trash for the purpose of mulching and using the yard trash to provide landfill cover for municipal solid waste disposed at the landfill. The department shall, by rule, develop and adopt a methodology to award recycling credit for the use or disposal of yard trash at a Class I landfill having a gas-collection system that makes beneficial use of the collected landfill gas. A qualifying permitted Class I landfill must obtain a minor permit modification to its operating permit which describes the beneficial use being made of the landfill gas and modifies the facility's operation plan before receiving yard trash as authorized under this subparagraph. The permittee must certify that gas collection and beneficial use will continue after closure of the disposal facility that is accepting yard trash. If the landfill is located in a county that owns and operates a compost facility, waste-to-energy facility, or biomass facility that sells renewable energy to a public utility and that is authorized to accept yard trash, the department shall provide the county with notice of, and opportunity to comment on, the application for permit modification.

4. Screening from Public View

The Landfill has at least a 200 foot buffer around. Further, the surrounding property is currently zoned agriculture.

F. OPERATOR TRAINING

Currently, Trail Ridge Landfill, Inc. has seven trained operators, five of whom are also trained spotters. The operators/spotters were trained at the University of Florida TREEO Center which is a Department approved provider of training services. In accordance with Rule 62-701.320(15), F.A.C., the continued training (16 hours for operators and four hours for spotters) will be conducted, at a minimum, every three years. Please see the certification documents for existing trained personnel in **Appendix B**. If additional personnel or new personnel require training, training will be provided by a Department approved provider within sixty days of hiring. In the interim, new personnel will work under the supervision of a trained operator or trained spotter, whichever applies. In addition, the facility also has an in-house training program and all employees are briefed on various environmental, health and safety topics. An interim operator may be employed by the facility in lieu of a trained operator for no more than three consecutive months in accordance with Chapter 62-701.320 (15) F.A.C. Interim spotters may be employed but only if they work under a direct supervision of a trained spotter or trained operator in accordance with Chapter 62-701.320 (15) F.A.C.

III. TYPES AND QUANTITY OF WASTE ACCEPTED

The types of waste accepted at Trail Ridge Landfill typically consist of residential/household, office, commercial, agricultural, and industrial wastes. The materials accepted for disposal include garbage, refuse, treated biomedical waste, construction and demolition debris, shredded waste tires, asbestos, water treatment sludge, industrial sludge, domestic sludge and non-hazardous special waste. The waste stream is monitored as each vehicle enters the site and passes by the ticket office/scale house operator and again at the working face. The waste stream is monitored for prohibited wastes such as hazardous waste, untreated biomedical waste, non-containerized liquid wastes, and special wastes prohibited by Rule 62-701.300(8), F.A.C. Incoming waste quantities are determined by the use of scales. In accordance with the Florida Statutes 403.708(12)(c)1, this landfill may accept yard waste for re-use and disposal because there is an active gas collection and Gas-To Energy system.



Florida Department of Environmental Protection

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

DEP Form #: 62-701.900(1), F.A.C.

Form Title: Application to Construct, Operate, Modify, or
Close a Solid Waste Management Facility

Effective Date: January 6, 2010

Incorporated in Rule: 62-701.330(3), F.A.C.

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MAY 02 2012
NORTHEAST DISTRICT
DEP-JACKSONVILLE

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

APPLICATION INSTRUCTIONS AND FORMS

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

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

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

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

South District
2295 Victoria Ave., Ste. 364
Fort Myers, FL 33901-3881
239-332-6975

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

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 through S
- B. Asbestos Monofills - Submit Parts A,B,C,D,E,F,I,K,M, O through S
- C. Industrial Solid Waste Disposal Facilities - Submit Parts A through S

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 and C 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,L, N through S
- B. Asbestos Monofills - Submit Parts A,B,M, O through S
- C. Industrial Solid Waste Disposal Facilities - Submit Parts A,B, L through S

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:	PROHIBITIONS
PART D:	SOLID WASTE MANAGEMENT FACILITY PERMIT REQUIREMENTS, GENERAL
PART E:	LANDFILL PERMIT REQUIREMENTS
PART F:	GENERAL CRITERIA FOR LANDFILLS
PART G:	LANDFILL CONSTRUCTION REQUIREMENTS
PART H:	HYDROGEOLOGICAL INVESTIGATION REQUIREMENTS
PART I:	GEOTECHNICAL INVESTIGATION REQUIREMENTS
PART J:	VERTICAL EXPANSION OF LANDFILLS
PART K:	LANDFILL OPERATION REQUIREMENTS
PART L:	WATER QUALITY AND LEACHATE MONITORING REQUIREMENTS
PART M:	SPECIAL WASTE HANDLING REQUIREMENTS
PART N:	GAS MANAGEMENT SYSTEM REQUIREMENTS
PART O:	LANDFILL CLOSURE REQUIREMENTS
PART P:	OTHER CLOSURE PROCEDURES
PART Q:	LONG-TERM CARE
PART R:	FINANCIAL ASSURANCE
PART S:	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

PART A. GENERAL INFORMATION

1. Type of disposal facility (check all that apply):

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

- ☐ Construction
☐ Operation
☒ Construction/Operation
☐ Closure
☐ Long-term Care Only

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: Trail Ridge Landfill

5. DEP ID number: NED / 16 / 00033628 County: Duval

6. Facility location (main entrance):
5110 U.S. Highway 301, Baldwin, Florida 32234

7. Location coordinates:

Section: 18, 19, 20, 21 Township: 3 South Range: 23 East

Latitude: 30° 13' 27" Longitude: 82° 2' 40"

Datum: NVGD 1929 Coordinate Method: _____

Collected by: Robert M. Angas Associates, Inc. Company/Affiliation: _____

8. Applicant name (operating authority): Trail Ridge Landfill, Inc.
- Mailing address: 5110 U.S. Highway 301 Baldwin Florida 32234
- Street or P.O. Box City State Zip
- Contact person: Greg Mathes Telephone: (904) 289-9100
- Title: District Manager
- gmathes@wm.com
E-Mail address (if available)
9. Authorized agent/Consultant: ETM - England Thims & Miller, Inc.
- Mailing address: 14775 Old St. Augustine Road Jacksonville, Florida 32258
- Street or P.O. Box City State Zip
- Contact person: Juanitta Clem Telephone: (904) 265-3181
- Title: Vice President
- clemj@etminc.com
E-Mail address (if available)
10. Landowner (if different than applicant): City of Jacksonville
- Mailing address: 1031 Superior Street, Jacksonville, Florida 32202
- Street or P.O. Box City State Zip
- Contact person: Jeff Foster, P.E. Telephone: (904) 255-7512
- jsfoster@coj.net
E-Mail address (if available)
11. Cities, towns and areas to be served:
The City of Jacksonville (Duval County) and Northeast Florida
- _____
- _____
- _____
- _____
12. Population to be served:
- Current: 897,597 (2007 Duval) Five-Year
Projection: 949,157 (2012 Duval)
13. Date site will be ready to be inspected for completion: N/A
14. Expected life of the facility: 7 years
15. Estimated costs:
- Total Construction: \$ N/A Closing Costs: \$ 15.9 Million
16. Anticipated construction starting and completion dates:
- From: N / A To: N / A
17. Expected volume or weight of waste to be received:
- _____ yds³/day 5,000 (peak) tons/day _____ gallons/day
4,000 Ton / Day (monthly average)

PART B. DISPOSAL FACILITY GENERAL INFORMATION

1. Provide brief description of disposal facility design and operations planned under this application:
Modification to accept yard waste for re-use and disposal in accordance with the Florida Statutes
403.708(12)(c)1

2. Facility site supervisor: Greg Mathes
 Title: District Manager Telephone: (904) 289-9100
gmathes@wm.com
 E-Mail address (if available)

3. Disposal area: Total 148 acres; Used 148 acres; Available 0 acres.

4. Weighing scales used: ☒ Yes ☐ No

5. Security to prevent unauthorized use: ☒ Yes ☐ No

6. Charge for waste received: N/A \$/yds³ 29.87 \$/ton

7. Surrounding land use, zoning:

☐ Residential ☐ Industrial
☐ Agricultural ☐ None
☐ Commercial ☒ Other Describe:
Silviculture

8. Types of waste received:

☒ Household ☒ C & D debris
☒ Commercial ☒ Shredded/cut tires
☐ Incinerator/WTE ash ☐ Yard trash
☒ Treated biomedical ☐ Septic tank
☒ Water treatment sludge ☒ Industrial

- ### Non-Hazardous Special Waste

- Number of spotters used: 1 (min.)

- [illegible]

18. Number of surface monitoring points: 2

- Gas recovery: ☒ Yes ☐ No

- With Bentonite Mat and 6" clay subgrade

21. Leachate collection method:

☒ Collection pipes

☐ Sand layer

☒ Geonets

☐ Gravel layer

☐ Well points

☐ Interceptor trench

☐ Perimeter ditch

☐ None

☐ Other Describe:

22. Leachate storage method:

☒ Tanks

☐ Surface impoundments

☐ Other Describe:

23. Leachate treatment method:

☐ Oxidation

☐ Chemical treatment

☐ Secondary

☐ Settling

☐ Advanced

☐ None

☒ Other

Off-site Treatment at a JEA Wastewater Treatment Facility

24. Leachate disposal method:

☐ Recirculated

☐ Pumped to WWTP

☒ Transported to WWTP

☐ Discharged to surface water/wetland

☐ Injection well

☐ Percolation ponds

☐ Evaporation

☐ Spray Irrigation

☐ Other

25. For leachate discharged to surface waters:

Name and Class of receiving water:

N / A

26. Storm Water:

Collected: ☒ Yes ☐ No

Type of treatment:

wet detention

Name and Class of receiving water:

Headwaters of Deep Creek-Class III

27. Environmental Resources Permit (ERP) number or status:

Permitted as Solid Waste Permit (DEP File Nos. 18444, 184445 and 184447). Stormwater Management Facility was permitted, constructed and certified.

PART C. PROHIBITIONS (62-701.300, FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Provide documentation that each of the siting criteria will be satisfied for the facility; (62-701.300(2), FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. If the facility qualifies for any of the exemptions contained in Rules 62-701.300(12) through (18), FAC, then document this qualification(s).
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	3. Provide documentation that the facility will be in compliance with the burning restrictions; (62-701.300(3), FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. Provide documentation that the facility will be in compliance with the hazardous waste restrictions; (62-701.300(4), FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Provide documentation that the facility will be in compliance with the PCB disposal restrictions; (62-701.300(5), FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6. Provide documentation that the facility will be in compliance with the biomedical waste restrictions; (62-701.300(6), FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	7. Provide documentation that the facility will be in compliance with the Class I surface water restrictions; (62-701.300(7), FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8. Provide documentation that the facility will be in compliance with the special waste for landfills restrictions; (62-701.300(8), FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9. Provide documentation that the facility will be in compliance with the liquid restrictions; (62-701.300(10), FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	10. Provide documentation that the facility will be in compliance with the used oil and oily waste restrictions; (62-701.300(11), FAC)

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

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	
	Attached			
<input checked="" type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	1. Four copies, at minimum, of the completed application form, all supporting data and reports; (62-701.320(5)(a), FAC)

S **LOCATION** **N/A** **N/C**

PART D CONTINUED

- | | | | | |
|-------------------------------------|-------------------|--------------------------|-------------------------------------|--|
| <input checked="" type="checkbox"/> | Attached
_____ | <input type="checkbox"/> | <input type="checkbox"/> | 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) |
| <input checked="" type="checkbox"/> | Attached
_____ | <input type="checkbox"/> | <input type="checkbox"/> | 3. A letter of transmittal to the Department; (62-701.320(7)(a),FAC) |
| <input checked="" type="checkbox"/> | Attached
_____ | <input type="checkbox"/> | <input type="checkbox"/> | 4. A completed application form dated and signed by the applicant; (62-701.320(7)(b),FAC) |
| <input checked="" type="checkbox"/> | Attached
_____ | <input type="checkbox"/> | <input type="checkbox"/> | 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) |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 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) |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 7. Operation Plan and Closure Plan; (62-701.320(7)(e)1,FAC) |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 8. Contingency Plan; (62-701.320(7)(e)2,FAC) |
| <input type="checkbox"/> | Attached
_____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 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; (62-701.320(7)(f),FAC) |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | a. A regional map or plan with the project location in relation to major roadways and population centers; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | b. A vicinity map or aerial photograph no more than 1 year old showing the facility site and relevant surface features located within 1000 feet of the facility; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | c. A site plan showing all property boundaries certified by a Florida Licensed Professional Surveyor and Mapper; and |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | d. Other necessary details to support the engineering report, including referencing elevations to a consistent, nationally recognized datum and identifying the method used for collecting latitude and longitude data. |

S **LOCATION** **N/A** **N/C**

PART D CONTINUED

- | | | | | |
|--------------------------|-------|--------------------------|-------------------------------------|---|
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 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) |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 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) |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 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) |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 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) |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 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) |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 15. Explain how the operator and spotter training requirements and special criteria will be satisfied for the facility; (62-701.320(15), FAC) |

PART E. LANDFILL PERMIT REQUIREMENTS (62-701.330, FAC)

S **LOCATION** **N/A** **N/C**

- | | | | | |
|--------------------------|-------|--------------------------|-------------------------------------|--|
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1. Regional map or aerial photograph no more than 5 years old showing all airports that are located within five miles of the proposed landfill; (62-701.330(3)(a),FAC) |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 2. Plot plan with a scale not greater than 200 feet to the inch showing; (62-701.330(3)(b),FAC) |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | a. Dimensions; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | b. Locations of proposed and existing water quality monitoring wells; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | c. Locations of soil borings; |

S **LOCATION** **N/A** **N/C**

PART E CONTINUED

- | | | | | |
|-------------------------------------|-------|-------------------------------------|-------------------------------------|--|
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | d. Proposed plan of trenching or disposal areas; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | e. Cross sections showing original elevations and proposed final contours which shall be included either on the plot plan or on separate sheets; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | f. Any previously filled waste disposal areas; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | g. Fencing or other measures to restrict access. |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 3. Topographic maps with a scale not greater than 200 feet to the inch with 5-foot contour intervals showing; (62-701.330(3)(c),FAC): |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | a. Proposed fill areas; |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | b. Borrow areas; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | c. Access roads; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | d. Grades required for proper drainage; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | e. Cross sections of lifts; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | f. Special drainage devices if necessary; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | g. Fencing; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | h. Equipment facilities. |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 4. A report on the landfill describing the following; (62-701.330(3)(d),FAC) |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | a. The current and projected population and area to be served by the proposed site; |
| <input checked="" type="checkbox"/> | _____ | <input type="checkbox"/> | <input type="checkbox"/> | b. The anticipated type, annual quantity, and source of solid waste, expressed in tons; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | c. Planned active life of the facility, the final design height of the facility and the maximum height of the facility during its operation; |

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S **LOCATION** **N/A** **N/C**

PART E CONTINUED

- | | | | | |
|--------------------------|-------|--------------------------|-------------------------------------|---|
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | d. The source and type of cover material used for the landfill. |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 5. 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)(g),FAC) |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 6. 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)(h),FAC) |

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

S **LOCATION** **N/A** **N/C**

- | | | | | |
|--------------------------|-------|--------------------------|-------------------------------------|--|
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 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(3)(b),FAC) |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 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(3)(c),FAC) |

PART G. LANDFILL CONSTRUCTION REQUIREMENTS (62-701.400,FAC)

S **LOCATION** **N/A** **N/C**

- | | | | | |
|--------------------------|-------|--------------------------|-------------------------------------|---|
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 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 and shall be designed to achieve a minimum factor of safety of 1.5 using peak strength values to prevent failures of side slopes and deep-seated failures; (62-701.400(2),FAC) |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 2. Landfill liner requirements; (62-701.400(3),FAC) |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | a. General construction requirements; (62-701.400(3)(a),FAC): |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | (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; |

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	PART G CONTINUED
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Document foundation is adequate to prevent liner failure;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3) Constructed so bottom liner will not be adversely impacted by fluctuations of the ground water;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(4) Designed to resist hydrostatic uplift if bottom liner located below seasonal high ground water table;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(5) Installed to cover all surrounding earth which could come into contact with the waste or leachate.
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	b. Composite liners; (62-701.400(3)(b),FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(1) Upper geomembrane thickness and properties;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(2) Design leachate head for primary LCRS including leachate recirculation if appropriate;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(3) Design thickness in accordance with Table A and number of lifts planned for lower soil component.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Double liners; (62-701.400(3)(c),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) Upper and lower geomembrane thicknesses and properties;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Design leachate head for primary LCRS to limit the head to one foot above the liner;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3) Lower geomembrane sub-base design;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(4) Leak detection and secondary leachate collection system minimum design criteria ($k \geq 10$ cm/sec, head on lower liner ≤ 1 inch, head not to exceed thickness of drainage layer);
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. Standards for geosynthetic components; (62-701.400(3)(d),FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	PART G CONTINUED
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) Factory and field seam test methods to ensure all geomembrane seams achieve the minimum specifications;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Geomembranes to be used shall pass a continuous spark test by the manufacturer;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3) Design of 24-inch-thick protective layer above upper geomembrane liner;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(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.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(5) HDPE geomembranes, if used, meet the specifications in GRI GM13 and LLDPE geomembranes, if used, meet the specifications in GRI GM17;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(6) PVC geomembranes, if used, meet the specifications in PGI 1104;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(7) Interface shear strength testing results of the actual components which will be used in the liner system;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(8) Transmissivity testing results of geonets if they are used in the liner system;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(9) Hydraulic conductivity testing results of geosynthetic clay liners if they are used in the liner system;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	e. Geosynthetic specification requirements; (62-701.400(3)(e),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) Definition and qualifications of the designer, manufacturer, installer, QA consultant and laboratory, and QA program;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Material specifications for geomembranes, geocomposites, geotextiles, geogrids, and geonets;

S **LOCATION** **N/A** **N/C**

PART G CONTINUED

- | | | | | |
|--------------------------|-------|-------------------------------------|-------------------------------------|---|
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | (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; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | (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; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | (5) Geotextile and geogrid specifications including handling and placement, conformance testing, seams and overlaps, repair, and placement of soil materials and any overlying materials; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | (6) Geonet and geocomposite specifications including handling and placement, conformance testing, stacking and joining, repair, and placement of soil materials and any overlying materials; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | (7) Geosynthetic clay liner specifications including handling and placement, conformance testing, seams and overlaps, repair, and placement of soil material and any overlying materials; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | f. Standards for soil liner components (62-710.400(3)(f),FAC): |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | (1) Description of construction procedures including overexcavation and backfilling to preclude structural inconsistencies and procedures for placing and compacting soil component in layers; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | (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; |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (3) Procedures for testing in-situ soils to demonstrate they meet the specifications for soil liners; |

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	PART G CONTINUED
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(4) Specifications for soil component of liner including at a minimum:
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(a) Allowable particle size distribution, Atterberg limits, shrinkage limit;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(b) Placement moisture and dry density criteria;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(c) Maximum laboratory-determined saturated hydraulic conductivity using simulated leachate;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(d) Minimum thickness of soil liner;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(e) Lift thickness;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(f) Surface preparation (scarification);
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(g) Type and percentage of clay mineral within the soil component;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(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.
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	g. If a Class III landfill is to be constructed with a bottom liner system, provide a description of how the minimum requirements for the liner will be achieved.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. Leachate collection and removal system (LCRS); (62-701.400(4),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. The primary and secondary LCRS requirements; (62-701.400(4)(a),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) Constructed of materials chemically resistant to the waste and leachate;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Have sufficient mechanical properties to prevent collapse under pressure;

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	PART G CONTINUED
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3) Have granular material or synthetic geotextile to prevent clogging;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(4) Have method for testing and cleaning clogged pipes or contingent designs for rerouting leachate around failed areas;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Other LCRS requirements; (62-701.400(4)(b) and (c),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) Bottom 12 inches having hydraulic conductivity $\geq 1 \times 10^{-3}$ cm/sec;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Total thickness of 24 inches of material chemically resistant to the waste and leachate;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3) Bottom slope design to accommodate for predicted settlement and still meet minimum slope requirements;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(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.
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	4. Leachate recirculation; (62-701.400(5),FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Describe general procedures for recirculating leachate;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	b. Describe procedures for controlling leachate runoff and minimizing mixing of leachate runoff with storm water;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	c. Describe procedures for preventing perched water conditions and gas buildup;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	e. Describe methods of gas management in accordance with Rule 62-701.530, FAC;

S **LOCATION** **N/A** **N/C**

PART G CONTINUED

<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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.
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	5. Leachate storage tanks and leachate surface impoundments; (62-701.400(6), FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	a. Surface impoundment requirements; (62-701.400(6)(b), FAC)
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(1) Documentation that the design of the bottom liner will not be adversely impacted by fluctuations of the ground water;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(2) Designed in segments to allow for inspection and repair as needed without interruption of service;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(3) General design requirements;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(a) Double liner system consisting of an upper and lower 60-mil minimum thickness geomembrane;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(b) Leak detection and collection system with hydraulic conductivity ≥ 1 cm/sec;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(c) Lower geomembrane placed on subbase ≥ 6 inches thick with $k \leq 1 \times 10^{-5}$ cm/sec or on an approved geosynthetic clay liner with $k \leq 1 \times 10^{-7}$ cm/sec;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(d) Design calculation to predict potential leakage through the upper liner;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(e) Daily inspection requirements and notification and corrective action requirements if leakage rates exceed that predicted by design calculations;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(4) Description of procedures to prevent uplift, if applicable;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(5) Design calculations to demonstrate minimum two feet of freeboard will be maintained;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(6) Procedures for controlling vectors and off-site odors.

S **LOCATION** **N/A** **N/C**

PART G CONTINUED

<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Above-ground leachate storage tanks; (62-701.400(6)(c),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) Describe tank materials of construction and ensure foundation is sufficient to support tank;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(2) Describe procedures for cathodic protection if needed for the tank;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(3) Describe exterior painting and interior lining of the tank to protect it from the weather and the leachate stored;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(4) Describe secondary containment design to ensure adequate capacity will be provided and compatibility of materials of construction;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(5) Describe design to remove and dispose of stormwater from the secondary containment system;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(6) Describe an overfill prevention system such as level sensors, gauges, alarms and shutoff controls to prevent overfilling;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(7) Inspections, corrective action and reporting requirements;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(a) Overfill prevention system weekly;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(b) Exposed tank exteriors weekly;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(c) Tank interiors when tank is drained or at least every three years;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(d) Procedures for immediate corrective action if failures detected;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(e) Inspection reports available for department review.
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	c. Underground leachate storage tanks; (62-701.400(6)(d),FAC)

S	LOCATION	N/A	N/C	PART G CONTINUED
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(1) Describe materials of construction;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(2) A double-walled tank design system to be used with the following requirements;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(a) Interstitial space monitoring at least weekly;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(b) Corrosion protection provided for primary tank interior and external surface of outer shell;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(c) Interior tank coatings compatible with stored leachate;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(d) Cathodic protection inspected weekly and repaired as needed;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(3) Describe an overfill prevention system such as level sensors, gauges, alarms and shutoff controls to prevent overfilling and provide for weekly inspections;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	(4) Inspection reports available for department review.
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	d.Schedule provided for routine maintenance of LCRS; (62-701.400(6)(e),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	6.Liner systems construction quality assurance (CQA); (62-701.400(7),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Provide CQA Plan including:
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) Specifications and construction requirements for liner system;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Detailed description of quality control testing procedures and frequencies;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3) Identification of supervising professional engineer;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(4) Identify responsibility and authority of all appropriate organizations and key personnel involved in the construction project;

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	PART G CONTINUED
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(5) State qualifications of CQA professional engineer and support personnel;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(6) Description of CQA reporting forms and documents;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. An independent laboratory experienced in the testing of geosynthetics to perform required testing;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	7. Soil Liner CQA (62-701.400(8)FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Description of field test section construction and test methods to be implemented prior to liner installation;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Description of field test methods including rejection criteria and corrective measures to insure proper liner installation.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8. Surface water management systems; (62-701.400(9),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Provide a copy of a Department permit for stormwater control or documentation that no such permit is required;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Design of surface water management system to isolate surface water from waste filled areas and to control stormwater run-off;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input type="checkbox"/>	c. Details of stormwater control design including retention ponds, detention ponds, and drainage ways;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	9. Gas control systems; (62-701.400(10),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	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)

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

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Submit a hydrogeological investigation and site report including at least the following information:
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Regional and site specific geology and hydrogeology;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Direction and rate of ground water and surface water flow including seasonal variations;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Background quality of ground water and surface water;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. Any on-site hydraulic connections between aquifers;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	f. Description of topography, soil types and surface water drainage systems;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	h. Identify and locate any existing contaminated areas on the site;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	i. Include a map showing the locations of all potable wells within 500 feet of the waste storage and disposal areas;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. Report signed, sealed and dated by PE and/or PG.

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

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

PART J. VERTICAL EXPANSION OF LANDFILLS (62-701.430,FAC) N/A

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 1. Describe how the vertical expansion shall not cause or contribute to leachate leakage from the existing landfill, shall not cause objectionable odors, or adversely affect the closure design of the existing landfill;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 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;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 3. Provide foundation and settlement analysis for the vertical expansion;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 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;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 5. Minimum stability safety factor of 1.5 for the lining system component interface stability and deep stability;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 6. Provide documentation to show the surface water management system will not be adversely affected by the vertical expansion;
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/> 7. Provide gas control designs to prevent accumulation of gas under the new liner for the vertical expansion.

PART K. LANDFILL OPERATION REQUIREMENTS (62-701.500,FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	2. Provide a landfill operation plan including procedures for: (62-701.500(2), FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Designating responsible operating and maintenance personnel;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Emergency preparedness and response, as required in subsection 62-701.320(16), FAC;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Controlling types of waste received at the landfill;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. Weighing incoming waste;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	e. Vehicle traffic control and unloading;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	f. Method and sequence of filling waste;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	g. Waste compaction and application of cover;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	h. Operations of gas, leachate, and stormwater controls;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	i. Water quality monitoring.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	j. Maintaining and cleaning the leachate collection system;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. Describe the waste records that will be compiled monthly and provided to the Department annually; (62-701.500(4),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	5. Describe methods of access control; (62-701.500(5),FAC)

S	LOCATION	N/A	N/C	PART K CONTINUED
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	7. Describe procedures for spreading and compacting waste at the landfill that include: (62-701.500(7),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Waste layer thickness and compaction frequencies;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Special considerations for first layer of waste placed above liner and leachate collection system;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Slopes of cell working face and side grades above land surface, planned lift depths during operation;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. Maximum width of working face;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	e. Description of type of initial cover to be used at the facility that controls:
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) Vector breeding/animal attraction
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Fires
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3) Odors
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(4) Blowing litter
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(5) Moisture infiltration
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	f. Procedures for applying initial cover including minimum cover frequencies;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	g. Procedures for applying intermediate cover;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	h. Time frames for applying final cover;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	i. Procedures for controlling scavenging and salvaging.

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	PART K CONTINUED
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	j. Description of litter policing methods;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	k. Erosion control procedures.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	8. Describe operational procedures for leachate management including; (62-701.500(8),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Leachate level monitoring, sampling, analysis and data results submitted to the Department;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Operation and maintenance of leachate collection and removal system, and treatment as required;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Procedures for managing leachate if it becomes regulated as a hazardous waste;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. Identification of treatment or disposal facilities that may be used for off-site discharge and treatment of leachate;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	e. Contingency plan for managing leachate during emergencies or equipment problems;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	f. Procedures for recording quantities of leachate generated in gal/day and including this in the operating record;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	g. Procedures for comparing precipitation experienced at the landfill with leachate generation rates and including this information in the operating record;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	h. Procedures for water pressure cleaning or video inspecting leachate collection systems.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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)

S **LOCATION** **N/A** **N/C**

PART K CONTINUED

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|--------------------------|-------|--------------------------|-------------------------------------|---|
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 11. Equipment and operation feature requirements; (62-701.500(11),FAC) |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | a. Sufficient equipment for excavating, spreading, compacting and covering waste; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | b. Reserve equipment or arrangements to obtain additional equipment within 24 hours of breakdown; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | c. Communications equipment; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | d. Dust control methods; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | e. Fire protection capabilities and procedures for notifying local fire department authorities in emergencies; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | f. Litter control devices; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | g. Signs indicating operating authority, traffic flow, hours of operation, disposal restrictions. |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 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) |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 13. Additional record keeping and reporting requirements; (62-701.500(13),FAC) |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | a. Records used for developing permit applications and supplemental information maintained for the design period of the landfill; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | b. Monitoring information, calibration and maintenance records, copies of reports required by permit maintained for at least 10 years; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 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; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | d. Procedures for archiving and retrieving records which are more than five year old. |

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

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. All sampling and analysis preformed in accordance with Chapter 62-160, FAC; (62-701.510(2)(b),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Ground water monitoring requirements; (62-701.510(3),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) Detection wells located downgradient from and within 50 feet of disposal units;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Downgradient compliance wells as required;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3) Background wells screened in all aquifers below the landfill that may be affected by the landfill;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(4) Location information for each monitoring well;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(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;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(6) Well screen locations properly selected;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(7) Monitoring wells constructed to provide representative ground water samples;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(8) Procedures for properly abandoning monitoring wells;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(9) Detailed description of detection sensors if proposed.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. Surface water monitoring requirements; (62-701.510(4),FAC)

S **LOCATION** **N/A** **N/C**

PART L CONTINUED

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|--------------------------|-------|-------------------------------------|-------------------------------------|---|
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | (1) Location of and justification for all proposed surface water monitoring points; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | (2) Each monitoring location to be marked and its position determined by a registered Florida land surveyor; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | e. Leachate sampling locations proposed; (62-701.510(5),FAC) |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | f. Initial and routine sampling frequency and requirements; (62-701.510(6),FAC) |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | (1) Initial background ground water and surface water sampling and analysis requirements; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | (2) Routine leachate sampling and analysis requirements; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | (3) Routine monitoring well sampling and analysis requirements; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | (4) Routine surface water sampling and analysis requirements. |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | g. Describe procedures for implementing evaluation monitoring, prevention measures and corrective action as required; (62-701.510(7),FAC) |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | h. Water quality monitoring report requirements;(62-701.510(9),FAC) |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | (1) Semi-annual report requirements (see paragraphs 62 701.510(6)(c),(d)and (e) for sampling frequencies); |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | (2) Documentation that the water quality data shall be provided to the Department in an electronic format consistent with requirements for importing into Department databases, unless an alternate form of submittal is specified in the permit. |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | (3) Two and one-half year report requirements, or every five years if in long-term care, signed, dated and sealed by PG or PE. |

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

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

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

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1. Provide the design for a gas management system that will (62-701.530(1), FAC):
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Be designed to prevent concentrations of combustible gases from exceeding 25% the LEL in structures and 100% the LEL at the property boundary;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Be designed for site-specific conditions;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Be designed to reduce gas pressure in the interior of the landfill;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. Be designed to not interfere with the liner, leachate control system or final cover.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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):
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. Provide documentation describing how the gas remediation plan and odor remediation plan will be implemented; (62-701.530(3), FAC):
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. Landfill gas recovery facilities; (62-701.530(5), FAC):

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>
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PART N CONTINUED

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|--------------------------|-------|--------------------------|-------------------------------------|---|
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | a. Information required in Rules 62-701.320(7) and 62-701.330(3), FAC supplied; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | b. Information required in Rule 62-701.600(4), FAC supplied where relevant and practical; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | c. Estimate of current and expected gas generation rates and description of condensate disposal methods provided; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | d. Description of procedures for condensate sampling, analyzing and data reporting provided; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 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; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | f. Performance bond provided to cover closure costs if not already included in other landfill closure costs. |

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

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>
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|--------------------------|-------|-------------------------------------|-------------------------------------|---|
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | 1. Closure permit requirements; (62-701.600(2),FAC) |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | a. Application submitted to Department at least 90 days prior to final receipt of wastes; |
| <input type="checkbox"/> | _____ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | b. Closure plan shall include the following: |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | (1) Closure design plan; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | (2) Closure operation plan; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | (3) Plan for long-term care; |
| <input type="checkbox"/> | _____ | <input type="checkbox"/> | <input checked="" type="checkbox"/> | (4) A demonstration that proof of financial responsibility for long-term care will be provided. |

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	PART O CONTINUED
<input type="checkbox"/>	_____	<input checked="" type="checkbox"/>	<input type="checkbox"/>	2. Closure design plan including the following requirements: (62-701.600(3),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Plan sheet showing phases of site closing;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Drawings showing existing topography and proposed final grades;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Provisions to close units when they reach approved design dimensions;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. Final elevations before settlement;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	e. Side slope design including benches, terraces, down slope drainage ways, energy dissipaters and discussion of expected precipitation effects;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	f. Final cover installation plans including:
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) CQA plan for installing and testing final cover;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Schedule for installing final cover after final receipt of waste;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3) Description of drought-resistant species to be used in the vegetative cover;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(4) Top gradient design to maximize runoff and minimize erosion;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(5) Provisions for cover material to be used for final cover maintenance.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	g. Final cover design requirements:
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(1) Protective soil layer design;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(2) Barrier soil layer design;

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	<u>PART O CONTINUED</u>
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(3) Erosion control vegetation;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(4) Geomembrane barrier layer design;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(5) Geosynthetic clay liner design if used;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	(6) Stability analysis of the cover system and the disposed waste.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	h. Proposed method of stormwater control;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	i. Proposed method of access control;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	j. Description of the proposed or existing gas management system which complies with Rule 62-701.530, FAC.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. Closure operation plan shall include:(62-701.600(4),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Detailed description of actions which will be taken to close the landfill;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Time schedule for completion of closing and long-term care;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	c. Describe proposed method for demonstrating financial assurance for long-term care;
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	d. Operation of the water quality monitoring plan required in Rule 62-701.510, FAC.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	e. Development and implementation of gas management system required in Rule 62-701.530, FAC.
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. Certification of closure construction completion including: (62-701.600(6),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	a. Survey monuments; (62-701.600(6)(a),FAC)
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	b. Final survey report; (62-701.600(6)(b),FAC)

S LOCATION N/A N/C PART O CONTINUED

☐ _____ ☒ ☐ 5. Declaration to the public; (62-701.600(7),FAC)

☐ _____ ☒ ☐ 6. Official date of closing; (62-701.600(8),FAC)

☐ _____ ☒ ☐ 7. Justification for and detailed description of procedures to be followed for temporary closure of the landfill, if desired; (62-701.600(9),FAC)

PART P. OTHER CLOSURE PROCEDURES (62-701.610,FAC)

S LOCATION N/A N/C

☐ _____ ☒ ☐ 1. Describe how the requirements for use of closed solid waste disposal areas will be achieved;(62-701.610(1),FAC)

☐ _____ ☒ ☐ 2. Describe how the requirements for relocation of wastes will be achieved; (62-701.610(2), FAC)

PART Q. LONG-TERM CARE (62-701.620,FAC)

S LOCATION N/A N/C

☐ _____ ☐ ☒ 1. Maintaining the gas collection and monitoring system; (62-701.620(5), FAC)

☐ _____ ☐ ☒ 2. Stabilization report requirements; (62-701.620(6),FAC)

☐ _____ ☐ ☒ 3. Right of access;(62-701.620(7),FAC)

☐ _____ ☐ ☒ 4. Requirements for replacement of monitoring devices; (62-701.620(8),FAC)


☐ _____ ☐ ☒ 5. Completion of long-term care signed and sealed by professional engineer (62-701.620(9), FAC).

PART R. FINANCIAL ASSURANCE (62-701.630,FAC)

<u>S</u>	<u>LOCATION</u>	<u>N/A</u>	<u>N/C</u>	
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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).
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	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).
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	3. Describe funding mechanisms for providing proof of financial assurance and include appropriate financial assurance forms; (62-701.630(5),(6),&(9), FAC).
<input type="checkbox"/>	_____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	4. Provide documentation and the appropriate forms for delaying submitting proof of financial assurance for solid waste disposal units that qualify; (62-701.630(2)(c), FAC).

1. Applicant:

is aware that statements made in this form and attached


Signature of Applicant or Agent

2700 Wiles Road

Mailing Address

(904) 289-9100
Telephone Number

Date: 5-1-12

Signature _____

ETM - 14775 Old St. Augustine Road
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City, State, Zip Code

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E-Mail address (if available)

(904) 265-3181
Telephone Number

Date: May 2, 2017