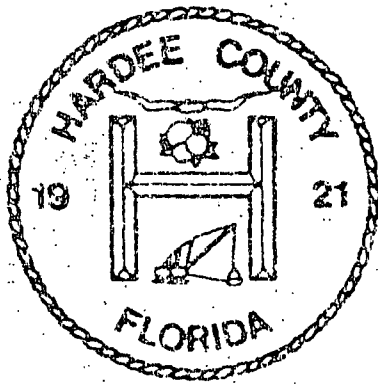


Hardee County, Florida REGIONAL COUNTY LANDFILL



Prepared For

**Hardee County Department
of Solid Waste and Recycling
Center**

P. O. Box 246
Wauchula, Florida 33873
(813) 773-5089

D. E. R.

JUN 3 1992

SOUTHWEST DISTRICT
TAMPA



Prepared By

Wade Trim

201 E. Kennedy Blvd.
Suite 334
Tampa, Florida 33602
(813) 221-2090

June, 1992

**HARDEE COUNTY
REGIONAL LANDFILL**

D.E.R.
JUN 3 1992
SOUTHWEST DISTRICT
TAMPA

**APPLICATION FOR PERMIT TO OPERATE SOLID WASTE RESOURCE RECOVERY
AND MANAGEMENT FACILITY**

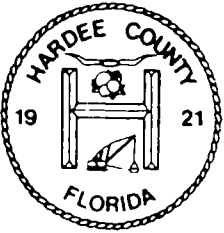
FOR

**RENEWAL OF CLASS I LANDFILL OPERATING PERMIT
PERMIT NO. S025-096551**

Submitted by:

**Wade-Trim, Inc.
201 E. Kennedy Boulevard
Suite 334
Tampa, Florida 33602**

June 1992



HARDEE COUNTY
BOARD OF COUNTY COMMISSIONERS

Room A-204, Courthouse Annex
412 West Orange Street
Wauchula, Florida 33873-2867
(813) 773-6952 • (813) 773-9430 • FAX (813) 773-0958

MINOR L. BRYANT
District I

BENNY W. ALBRITTON
District II

JAMES O. MOYE
District III

ROYCE TYSON, JR.
District IV

JAMES W. HARRISON
District V

GARY ODEN
County Manager

GARY A. VORBECK
County Attorney

June 2, 1992

Mr. Robert Butera, P.E.
Division of Waste Management
Florida Department of Environmental Regulation
4520 Oak Fair Boulevard
Tampa, Florida 33610-7347

Re: Letter of Transmittal
Hardee County
Permit Renewal Application
Operation Permit #5025-096551

Dear Mr. Butera:

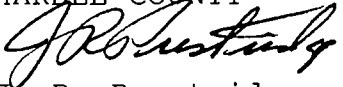
Please find included within this document all the required information and documentation necessary for the permit application to renew the operation permit of the Class I landfill prepared by the County's consulting engineer, Wade-Trim, Inc.

If in the Department of Environmental staff review, additional information should be required, please do not hesitate to contact me.

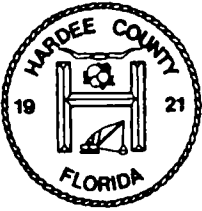
I am looking forward to your favorable response to this application.

Sincerely,

HARDEE COUNTY


J. R. Prestridge
Solid Waste Superintendent
Enclosure
JRP/vt

cc: Steven A. Dutch, P.E.



HARDEE COUNTY
Department of Solid Waste & Recycling Center
P.O. Box 246
Wauchula, Florida 33873

AGREEMENT FOR ENGINEERING SERVICES
FOR HARDEE COUNTY SANITARY LANDFILL, PERMIT APPLICATION

HARDEE COUNTY, THROUGH ITS BOARD OF COUNTY COMMISSIONERS AND WADE-TRIM OF TAMPA, FLORIDA, HEREBY AGREE TO THE FOLLOWING:

Wade-Trim will provide professional engineering services for the Hardee County Sanitary Landfill, in preparing the Class I Landfill Permit Application to FDER.

Wade-Trim will provide the following scope of services to complete the FDER application in accordance with Chapter 17-701 F.S.

- Review operations and pertinent information with County's landfill operating staff.
- Prepare a Landfill Report, identifying existing landfill use.
 - a. Current and projected population and area to be served
 - b. Type, annual quantity and source of solid waste
 - c. Anticipated life of site
 - d. Source and characteristics of cover material.
- Prepare a gas control plan which includes:
 - a. identifying methods of prevention of gas migration
 - b. prevention of vegetation damage
 - c. off site odor control
- The Operations Plan will be revised and brought into accordance with Section 17-701, F.A.C. This revision will concentrate on inclusion of a description of the new bale fill operation, the proposed high-rise configuration and its impact on the expected landfill life.

- The existing Final Closure Plan will be revised and brought into accordance with Section 17-701, F.A.C. This plan should address the following:
 - a. final grade modifications
 - b. leachate management control
 - c. stormwater management control
 - d. identification of final cover specifications.
- Prepare a set of drawings including existing and proposed contours, leachate and stormwater management, gas control and ground water monitoring.
 - a. the Site Plans
 - b. Leachate and Stormwater Management Plan
 - c. Gas Control Monitoring and Groundwater Monitoring and
 - d. Final Closure Plans
- Prepare a description of the groundwater monitoring system.
- Prepare surface water management plan identifying control of surface water runoff onto waste areas, storm water controls and consistency with the SWFWMD permit.
- Present a final permit application submittal package to Hardee County Staff for their review of all information proposed for submittal to the FDER. Any minor changes recommended by the County will be incorporated into the final permit application prior to submittal to the FDER.
- Meet with FDER Solid Waste Section to present the completed permit application. The purpose of the meeting will be to show the FDER that Hardee County has made a "good faith" effort in submitting a complete permit application in light of the impending permit expiration. Additionally, if the Department staff have any procedural or technical question of Hardee County, these can be determined through discussions at the meeting.
- Respond to any FDER questions of the application after submittal and attend any meetings requested by the FDER.

The following information will be provided by Hardee County:

- Current solid waste data.
- Current population data and projections.
- Current groundwater monitoring information.
- Provide elevations of existing waste filled area.
- Existing operations plan.
- Existing closing plan.
- Existing geotechnical information.
- Adjacent land use information.
- Payment of all permit fees.

Wade - Trim hereby agrees to complete the scope of services and submit the complete Class I Permit Application to the DER by the deadline date, **JUNE 1, 1992**. Wade - Trim will also agree to the Not-to-Exceed Figure quoted in their proposal in the amount of **\$14,600.00**.

Wade - Trim
Consulting Engineering

Signed 
Authorized Agent

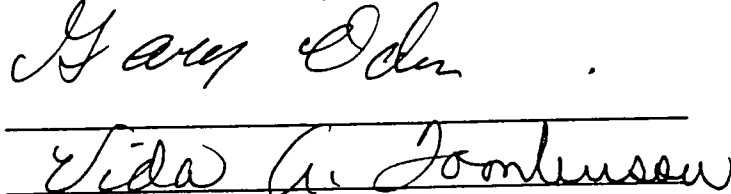
Date 5/4/92

Hardee County Board of County Commissioners

Signed 
Chairman of the Board

Date 5/11/92

Attest:



**HARDEE COUNTY
REGIONAL LANDFILL**

**RENEWAL CLASS I LANDFILL OPERATING PERMIT
PERMIT NO. S025-096551**

TABLE OF CONTENTS

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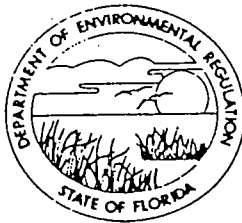
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7. Closure	
8. Solid Waste Disposal Facility Data Form	
9. Solid Waste-Volume Reduction and Resource Recovery Facility Data Form	
10. Certification by Applicant and Engineer	

DEPARTMENT OF ENVIRONMENTAL REGULATION

SOUTHWEST DISTRICT

4520 OAK FAIR BLVD.
TAMPA, FLORIDA 33610-7347

813-623-5561
Suncom—552-7612



BOB MARTINEZ
GOVERNOR

DALE TWACHTMANN
SECRETARY

DR. RICHARD D. GARRITY
DISTRICT MANAGER

APPLICATION FOR PERMIT TO
CONSTRUCT ☐
OPERATE ☒

A SOLID WASTE RESOURCE RECOVERY AND MANAGEMENT FACILITY

GENERAL REQUIREMENTS

Solid Waste Resource Recovery and Management Facilities shall be permitted pursuant to Section 403.707, Florida Statutes, and in accordance with Florida Administrative Code Rule 17-7. A minimum of six copies of the application shall be submitted to the Department District Office having jurisdiction over the facility. Complete appropriate sections for the type of facility for which application is made. Entries should be typed or printed in ink. All blanks should be filled in or marked not applicable. The application shall include all information, drawings, and reports necessary to evaluate the facility. Information required to support the application is listed on the attached pages of this form.

Facility Type: Existing ☒ Proposed ☐

Sanitary Landfill:

- ☒ Class I,
- ☐ Class II,
- ☐ Class III: Trash/yard Trash
- ☐ Class III: Yard Trash Composting

Volume Reduction:

- ☐ Composting
- ☐ Shredder
- ☐ Incinerator/Trench Burner
- ☐ Resource Recovery:
- ☐ Energy ☐ Materials

Sludge Landspreading:

- ☐ Grade I
- ☐ Grade II
- ☐ Grade III
- ☐ Septage/Food Service

FACILITY NAME: HARDEE COUNTY REGIONAL LANDFILL / S025-096551
DER ID Number

FACILITY LOCATION (main entrance): Airport Rd. approx. 1 mile N. of SR 636
S35 section, T 33 S township, R 25 E range / Latitude 81 ° 47 ' 1 " Longitude 27 ° 34 ' 10 "

Applicant Name (operating authority): HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS
Street Address & P. O. Box: 412 W. ORANGE ST., WAUCHULA, FL 33873 - 2867
City County Zip

Contact Person: J.R. PRESTRIDGE / SOLID WASTE SUPERINTENDENT (813)773-5089
Name Phone Number

Authorized Agent/Consultant: WADE-TRIM, INC. (813)221-2090
Name Phone Number

Contact Person: STEVEN DITCH, P.E. 201 E. KENNEDY BLVD. STE 334, (813)221-2090
Name Street P. O. Box Phone Number

TAMPA HILLSBOROUGH FL 33602
City County State Zip

Landowner (if different than applicant): N/A

Address of Landowner: _____
Street, P. O. Box City State Zip

Cities, Towns and Areas to be Served: UNINCORPORATED HARDEE COUNTY

Current and Projected Population to Served: 22,240 (current), 22,600 (1995), 23,400 (2000)

Acres within Waste Site Boundary: 11.8 Acres within Property Boundary: 97.5

Protecting Florida and Your Quality of Life

Volume of Solid Waste to be received: 41.3 cu. yds/day tons/day gallons/day

Date Site Ready to Received Solid Waste: FEBRUARY, 1984 Estimated Life of Facility 11.25 years

Estimated Cost of Construction, Total: \$ N/A Estimated cost of Closing: \$ 394,500

Anticipated Construction Starting and Completion Dates

From: N/A To: N/A

**REQUIRED ATTACHEMENTS FOR CONSTRUCTION/OPERATION PERMIT
FOR A RESOURCE RECOVERY AND MANAGEMENT FACILITY**

GENERAL

Permit application and supporting information shall include the following (17-7.030(2), F.A.C.):

- | | <u>Completeness (Check)</u> |
|---|-----------------------------|
| 1. A letter of transmittal to the Department; (17-7.030(3)(a) F.A.C.) | <u>X</u> |
| 2. A table of contents listing the main sections of the application: (17-7.030(3)(b), F.A.C.) | <u>X</u> |
| 3. The permit fee specified in Florida Administrative Code Rule 17-4.05 in check or money order payable to the Department: (17-7.030(3)(c), F.A.C.) | <u>X</u> |
| 4. Six copies, at minimum, of the completed application form, all supporting data, and reports; (17-7.030(2), F.A.C.) | <u>X</u> |
| 5. Engineer seal; (17-7.030(2)(d), F.A.C.) | <u>X</u> |
| 6. Engineer's letter of appointment if applicable; (17-7.030(3)(e), F.A.C.) | <u>X</u> |
| 7. Copy of any lease agreement, transfer of property agreement with right of entry for long-term care, or any other agreement between operator and property owner by which the closing and long-term care of the facility may be affected; (17-7.030(3)(h)) | <u>X</u> |
| 8. Proof of publication of notice of application for the proposed activity in a newspaper of general circulation; (17-7.03(4), F.A.C.) | <u>X</u> |

SPECIFICATION ATTACHMENT ITEMS

The following information items must be included in the application or an explanation given if they are not applicable.

Construction Permits:

- A. Landfills - Submit items 1, 2, 3, 4, 5, 6, 7, 8, 10.
- B. Volume Reduction - Submit items 1, 2, 3, 4, 5, 6, 7, 9, 10.
- C. Sludge Landspreading - Submit items 2, 3, 4, 5, 6, 8, 10.

Operation Permits:

- A. Landfills - All the items above.
- B. Volume Reduction - All the items above.
- C. Sludge Landspreading - All the items above.

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 changed during the construction period.

1. A foundation analysis (17-7.050(2)(b), F.A.C.)
2. Evidence that the facility is in conformance with local zoning (17-7.050(2)(c)4, F.A.C.)
3. Facility Design (17-7.050(3), F.A.C.):

N/A No new structures proposed.

X

NOTE: All maps, plan sheets, drawings, isometrics, cross-sections, or aerial photographs shall be legible; be signed and sealed by the registered professional engineer responsible for their preparation; be of appropriate scale to show clearly all required details; be numbered, referenced to narrative, titled, have a legend of symbols used, contain horizontal and vertical scales (where applicable), and specify drafting or origination dates; and use uniform scales as much as possible, contain a north arrow, and use NGVD for all elevations.

Completeness Check

- a. A map or aerial photograph of the area, no more than 1 year old, showing land use and zoning within 1 mile of the facility. (17-7.050(3)(a), F.A.C.) X
- b. Plot Plan (17-7.050(3)(b), F.A.C.) X

NOTE: The plot plan on a scale not greater than 200 feet to the inch showing the following:

- (1) Dimensions and Legal Description of the site X
- (2) Location and depth (NGVD) of soil borings X
- (3) Plan for trenching or disposal areas X
- (4) Fencing or other measures to restrict access X
- (5) Cross sections showing both original and proposed fill elevations X
- (6) Location, depth, and construction details of monitoring wells X

- c. Topographic Maps (17-7.050(3)(c), F.A.C.) X

NOTE: The topographic maps; which may be combined with the plot plan (item 4b), on a scale not greater than 200 feet to the inch showing the following:

- (1) Five foot contour intervals X
- (2) Proposed fill areas X
- (3) Borrow areas X
- (4) Access roads X
- (5) Grades required for proper drainage X
- (6) Typical cross sections of disposal site including lifts, borrow areas and drainage controls X
- (7) Special drainage devices X
- (8) Fencing X
- (9) Equipment facilities X
- (10) Other pertinent information based on intended use of facility X

- d. Report (17-7.050(3)(d), F.A.C.)

- (1) Estimated population and area served by the proposed site with basis for the estimate X
- (2) Anticipated type, annual quantity, and source of solid waste X
- (3) Anticipated life of site X
- (4) Source and characteristics of cover material X

- e. Ground Water Monitoring Plan (17-7.050(3)(e), F.A.C.)

- (1) Plan and hydrogeological survey, including foundation analysis, in accordance with 17-4.245(6), 17-7.030, and 17-7.050 F.A.C.; or
- (2) A copy of a Department letter of approval of a previously submitted plan, if applicable.

N/A see 1987 permit

N/A see 1987 permit

Completeness Check

4. Landfill Performance and Design Standards (17-7.050(4), F.A.C.)

- | | |
|---|----------------------------|
| a. Liner performance (17-7.050(4)(a)(b), F.A.C.) | <u>N/A See 1987 permit</u> |
| (1) Material type (soil, synthetic, other) | <u>"</u> |
| (2) Adequate base support | <u>"</u> |
| (3) Planned installation adequate to cover all surrounding earth | <u>"</u> |
| (4) Equivalency to design standards | <u>"</u> |
| b. Liner quality control plan (17-7.050(4)(c), F.A.C.) | <u>N/A See 1987 permit</u> |
| (1) Specifications | <u>"</u> |
| (2) Construction/installation methods | <u>"</u> |
| (3) Sampling and testing | <u>"</u> |
| (4) Manufacturer's specifications and recommendations | <u>"</u> |
| c. Leachate control and removal system performance (17-7.050(4)(e), F.A.C.) | <u>N/A See 1987 permit</u> |
| (1) Construction materials | <u>"</u> |
| (2) Strength and thickness | <u>"</u> |
| (3) Measures to prevent clogging | <u>"</u> |
| (4) Central collection point for treatment and disposal | <u>"</u> |
| (5) Leachate depth not to exceed one foot | <u>"</u> |
| (6) Equivalency to design standards | <u>"</u> |
| d. Surface water management system performance (17-7.050(4)(g), F.A.C.) | <u>X</u> |
| (1) Prevention of surface water flow onto waste-filled areas | <u>X</u> |
| (2) Stormwater run-off controls; retention, detention ponds | <u>X</u> |
| (3) Equivalency to design standards | <u>X</u> |
| (4) Water management district approval | <u>X</u> |
| e. Gas control system performance (17-7.050(4)(i), F.A.C.) | <u>X</u> |
| (1) Prevention of methane migration | <u>X</u> |
| (2) Prevention of damage to vegetation | <u>X</u> |
| (3) Prevention of objectionable odors off site | <u>X</u> |
| (4) Equivalency to design standards | <u>X</u> |

5. Operations Plan (17-7.050(5)(b),(c)(d) & (e), F.A.C.)

- | | |
|--|----------|
| a. Designation of responsible person(s) | <u>X</u> |
| b. Contingency operations | <u>X</u> |
| c. Controlling the type of waste received at the site: | <u>X</u> |

	Completeness Check
d. Weighing or measuring incoming waste	<u>X</u>
e. Vehicle traffic control and unloading	<u>X</u>
f. Method and sequence of filling waste	<u>X</u>
g. Waste compaction and application of cover	<u>X</u>
h. Operations of gas, leachate, and storm water controls	<u>X</u>
i. Ground water monitoring	<u>X</u>
j. All weather access roads	<u>X</u>
k. Effective barrier	<u>X</u>
l. Signs indicating name of operating authority, traffic flow, hours of operation, and charges for disposal (if any)	<u>X</u>
m. Dust control methods	<u>X</u>
n. Litter control devices	<u>X</u>
o. Fire protection and fire fighting facilities	<u>X</u>
p. Attendant	<u>X</u>
q. Communication facilities	<u>X</u>
r. Adequate in-service and reserve equipment	<u>X</u>
s. Safety devices on equipment to shield and protect operators	<u>X</u>
6.- <u>Water Quality Standards</u> (17-7.050(5)(g) & (h), F.A.C.)	<u>X</u>
Describe how surface runoff and leachate will be handled to meet water quality standards of Florida Administrative Code Rules 17-3 and 17-4.	<u>X</u> See 1987 permit
7. <u>Closure</u> (17-7.070(2), F.A.C.)	
a. <u>Closure plan</u> (17-7.073, F.A.C.)	<u>X</u> See 1987 permit
(1) Design	<u>X</u>
(2) Final use	<u>X</u>
(3) Closure operations	<u>X</u>
(4) Post-closure (17-7.075, F.A.C.)	<u>X</u>
(5) Financial responsibility(17-7.071, F.A.C.)	<u>X</u>
b. <u>Closure plan schedule</u> (17-7.071, F.A.C)	<u>X</u>
8. <u>Solid Waste Disposal Facility Data Form</u>	<u>X</u>
9. <u>Solid Waste-Volume Reduction and Resource Recovery Facility Data Form</u>	<u>X</u>
10. <u>Certification by Applicant and Engineer or Public Officer</u>	<u>X</u>

SOLID WASTE DISPOSAL FACILITY DATA FORM

Date Form Completed: MAY 22, 1992Permit No.: S025-096551Issue Date: SEPT. 27, 1982 Expires: JUNE 11, 1992DER ACTION: Add Delete Change Deactivate Site

1. DER IDENTIFICATION NUMBER

2. SITE NAME

HARDEE COUNTY REGIONAL LANDFILL

3. COUNTY

HARDEE

4. FACILITY ADDRESS (Road, cross road, street)

Airport Rd. approx. 1 mile north of SR 636

4a. Facility Phone Number: (813)773-5089

4b. Facility Site Supervisor J.R. PRESTRIDGE

5a. 81° 47' 1" 27° 34' 10"
Latitude Longitude5b. 33 S 25 E 35
Township Range Section

6. Operating Authority Name

HARDEE COUNTY BOARD OF COUNTY COMMISSIONERS

8. Operating Authority Address

412 W. ORANGE ST., WAUCHILA, FL 33873-2867

7. Phone Number

9. Owner of Site Property (if different from operator)
N/A

11. Address of Owner

See no. 8

10. Phone Number of ~~Owner~~ Operator (813)773-5089

12. Facility Type -

☒ Class I, Sanitary Landfill
☐ Class II, Sanitary Landfill
☐ Class III, Trash/Yard Trash
☐ Class III Yard trash comp.

Sludge Landspreading:

☐ Grade I
☐ Grade II
☐ Grade III
☐ Septage

Type

☐ Other Facility

13. Month Year Begun

FEB. 1984

14. Disposal Area

11.8 Acres

15. Population Served

22,240

16. Expected Useful Lifetime

11.25 Years

17. Weighing Scales

☒ Yes ☐ No

18. Security to Prevent Unauthorized Used

☒ Yes ☐ No

19. Depth of Water Table

.77 Ft. (NGVD)

20. Quantity of Waste/Day

41.3 tons or Yd³

21. Charge

\$ N/A

COUNTY SPECIAL
ASSESSMENT FOR
RESIDENTS
yd/ton

22. Surrounding Land Use Zoning

☐ Residential ☐ None ☒ Agricultural ☐ Commercial ☐ Industrial ☐ Other

23. Types of Waste Received

☒ Residential ☐ Agricultural ☒ Yard Trash/Trash
☒ Commercial ☐ Septic Tank ☐ Sewage Sludge
☐ Incinerator Residue ☐ Industrial ☐ Industrial Sludge
☐ Pathological/Infectious ☐ Water/Air Treat Sludge ☐ HospitalOther:

24. Number of Monitoring Wells 7

25. Number of Surface Monitoring Points 0

26. Gas Control / Recovery

☒ Yes ☐ No / ☐ Yes ☒ No

27. Salvaging Permitted

☐ Yes ☒ No

28. Attendant

☒ Yes ☐ No

29. Leachate Control Method - Liner Type: <input type="checkbox"/> Natural <input type="checkbox"/> Emplaced Clay <input checked="" type="checkbox"/> Synthetic <input checked="" type="checkbox"/> None <input type="checkbox"/> Other		
Collection Method: <input type="checkbox"/> Well Point <input type="checkbox"/> Perimeter Ditch <input checked="" type="checkbox"/> None <input type="checkbox"/> Under Site Drains <input type="checkbox"/> Other		
Treatment Method: <input type="checkbox"/> Oxidation <input type="checkbox"/> Recirculated <input type="checkbox"/> Chemical <input type="checkbox"/> Advanced <input type="checkbox"/> None <input type="checkbox"/> Other DETENTION		
30. Leachate Discharge <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Class of Receiving Water III	
31. Site Located in <input type="checkbox"/> Floodplain <input type="checkbox"/> Wetlands <input checked="" type="checkbox"/> Other: UPLANDS		
32. Surface Runoff Collected <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Type of Runoff Treatment DETENTION	Class of Receiving Waters III
33. Property Recorded as a Solid waste Disposal Site in County Land Records <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		
34. Days of Operation 6/WK	Days of Cover 6/WK	Hours of Operation 8am-6pm
35. Name, Title and Phone Number of Person Completing Form STEVEN DUTCH, P.E., ENVIRONMENTAL ENGINEER, (813)221-2090		

NOTE: All blanks must be filled or marked as not applicable.

*****N/A*****
SOLID WASTE VOLUME REDUCTION AND
RESOURCE RECOVERY FACILITY DATA FORM

Permit No.: N/A Issue Date: _____ Expires: _____

Facility No. (DER Identification): _____

DER ACTION: ☐ Add ☐ Delete ☐ Change ☐ Deactivate Site ☐ Other

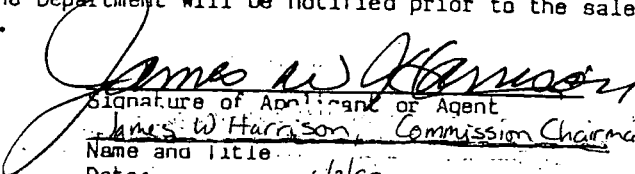
1. County		2. Site Name	
3. Date Form Completed		4. Facility Address	
4a. Facility Phone No.		4b. Facility Site Supervisor	
5a. ° ' " Latitude Longitude		5b. Township Range Section	
6. Operating Authority Name		8. Operating Authority Address	
7. Phone Number			
9. Owner of Site Property (if different from Operator)			
10. Phone Number of Owner		11. Address of Owner	
12. Facility Type (check one or more)			
<input type="checkbox"/> Incinerator Only <input type="checkbox"/> Biomass Gas Production <input type="checkbox"/> Pyrolysis <input type="checkbox"/> Other: <input type="checkbox"/> Sludge Concentration <input type="checkbox"/> Baler (compactor) <input type="checkbox"/> Composting Plant <input type="checkbox"/> Transfer Station <input type="checkbox"/> Waterwall Incinerator <input type="checkbox"/> Shredder (pulverizer)			
13. Month/Year Begun		14. Disposal Area Acres	
15. Population Served		16. Expected Useful Lifetime Years	
17. Weighing Scales <input type="checkbox"/> Yes <input type="checkbox"/> No		18. Waste Processed Per Operational Day tons/gal/yd	
19. Charge/		20. Days Operated S M T W T F S	
21. Hours/Day Operated		22. Maximum Processing Rate tons/day	
23. Material Recovered, Tons/Week			
<input type="checkbox"/> Paper <input type="checkbox"/> Glass Other: <input type="checkbox"/> Ferrous Metals <input type="checkbox"/> Non-Ferrous Metals <input type="checkbox"/> Aluminum <input type="checkbox"/> Plastics			
24. Energy Recovery, in units shown			
<input type="checkbox"/> High Pressure Steam-lb/hr <input type="checkbox"/> Chilled Water-gal/hr <input type="checkbox"/> Gas-ft ³ /hr <input type="checkbox"/> Low Pressure Steam-lb/hr <input type="checkbox"/> Oil-gal/hr <input type="checkbox"/> Gas-BTU/hr <input type="checkbox"/> Electricity-kw/hr <input type="checkbox"/> Oil-BTU/hr Other:			
25. Process Water Recycled <input type="checkbox"/> Yes <input type="checkbox"/> No		Treatment Method Used	
Discharged to: <input type="checkbox"/> Surface Waters <input type="checkbox"/> Underground		Class Receiving Water	
26. Final Residue is % of waste intake		Residue is disposed of at (Site Name)	
27. Supplementary Fuel Used			
Type		Quantity Used/Hour	
28. Estimated Operating Costs Material - Energy Revenue \$		Total Cost/Ton \$	
29. Number of Staff		Net Cost/Ton \$	
30. State Pollution Control Bond Financing Amount \$		31. Estimated Amount of Tax Exemptions that will be Requested \$	
32. Name and Title of Person Completing Form			

Note: All blanks must be filled or marked as not applicable.

CERTIFICATION BY APPLICANT AND ENGINEER OR PUBLIC OFFICER

A. Applicant

The undersigned applicant or authorized representative of HARDEE COUNTY is aware that statements made in this form and attached information are an application for a OPERATING PERMIT CLASS I SANITARY LANDFILL Permit from the Florida Department of Environmental Regulation and certifies that the information in this application is true, correct and complete to the best of his 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.


Signature of Applicant or Agent

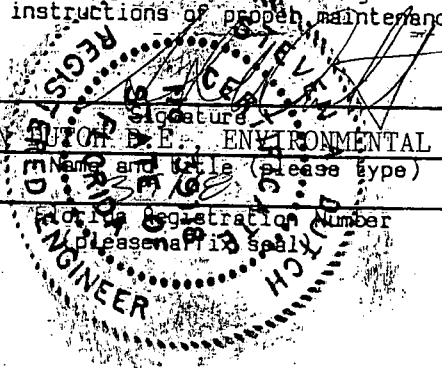
James W. Harrison Commission Chairman

Date: 6/2/92

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

B. Professional Engineer Registered in Florida or Public Officer as Required in Section 403.707 and 403.7075, Florida Statutes

This is to certify that the engineering features of this resource recovery and management facility have been designed/examined by me and found to conform to engineering principals applicable to such facilities. In my professional judgement, 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.


Signature
STEVEN DUTON D.E. ENVIRONMENTAL ENGINEER

Name and Title (please type)

Florida Registration Number

Please affix seal

201 E. KENNEDY BLVD. STE 334

Mailing Address
TAMPA, FL 33602

City, State, Zip Code

(813) 221-2090

Telephone Number

Date: 6/1/92

Construction Cost Estimate: _____

Permit Number: _____

Issue Date: _____

Review Date: _____

Expiration Date: _____

HARDEE COUNTY REGIONAL LANDFILL

RENEWAL OF CLASS I LANDFILL OPERATING PERMIT PERMIT NO.S025-096551 SPECIFIC ATTACHMENT ITEMS

1. Foundation Analysis

A foundation analysis in accordance with Section 17-7.050(2)b FAC and 17.701.05(3)(b) is included in the report entitled "Feasibility Study on Use of Mobil Site as a Class I Sanitary Landfill" dated February 1982, submitted in support of the application to construct this facility. The previous application cited the following passages which were prepared in response to these items and are located in the existing FDER files.

- a. Degree of limitation - See page IV-2
- b. Soil series - See Table IV-1 and Figure IV-4
- c. Soil drainage class - See page IV-2
- d. Permeability - See page IV-2 and IV-4
- e. Slope - See page IV-2
- f. Soil texture - See page IV-2
- g. Depth to bedrock - See Figures IV-5, IV-6, IV-7, IV-8 and IV-9
- h. Thickness and character of overburden - See page IV-3, Appendix A, and Figures IV-5 through IV-9
- i. Character of bedrock - See page IV-3, Appendix A, and Figures IV-5 through IV-9
- j. Depth of water table and potentiometric surface - See page IV-4 and IV-5

2. Zoning

Site zoning is defined in a letter from the Hardee County Planning Department (Attachment 1).

3. Facility Design

- a. An aerial photograph prepared by the Hardee County Planning Department showing zoning is included as Attachment 2.
- b. Plot plan is included as part of Attachment 3.
- c. Topographic maps of facility are shown as part of Attachment 3.
- d. Report

1. The area to be served by the landfill is limited to unincorporated Hardee County. The current, estimated population to be served is 22,240 persons. An annual growth rate of 3% is projected. Population data was obtained from the Hardee County Comprehensive Plan.
2. The waste received in the landfill consists primarily of household wastes. As outlined in the Operation Plan (Attachment 4) other wastes are monitored and separated. Interpolated from operation data, the estimated annual tonnage of waste disposed of in the Class I landfill is expected to be 15,500. The waste production from November 1991 through April 1992 was as follows:

<u>Category</u>	<u>Tons</u>
Landfill Waste	7,533.43
Construction & Demolition	806.63
Yard/Wood Trash	1,051.18
Tree Limbs	91.92
Recyclables	<u>359.30</u>
TOTAL	9,842.46

3. The anticipated life of site is identified in Attachment 5.
 4. Interim cover material is excavated on site as described in the operations plan.
- e. Groundwater Monitoring Plan
- A groundwater monitoring plan prepared by Seaburn and Robertson was approved in 1985 and modified in 1987. Please refer to the FDER files for a copy of the current plan.
4. Landfill Performance and Design Standards
 - a. Liner performance

A synthetic plastic liner was installed in accordance with the requirements of the permit in 1987 (Condition 12).
 - b. Liner quality control plan

A liner quality control plan was conducted in accordance with the permit issued in 1987 (Condition 11)

c. Leachate control and removal system performance

A leachate control and removal system was constructed in accordance with the 1987 permit.

d. Surface water management system performance

A surface water management system was constructed in accordance with the plans provided in the 1989 permit modification.

e. Gas control system performance

1. Methane migration is controlled by a synthetic liner ringing the perimeter of the landfill. PVC vents are located at 500 foot intervals around the perimeter to vent gas to the atmosphere.
2. Vents extend 3 feet above ground to provide sufficient dispersion and to prevent damage to vegetation.
3. Due to the remote location of the facility, objectionable off site odors are not expected.

5. Operations Plan

Operations plan is included as Attachment 4.

6. Water Quality Standards

Surface water and leachate collection and treatment are handled in accordance with the permit issued in 1987 and the modification issued in 1989.

7. Closure

Closure Plan is Attachment 6.

8. Solid Waste Disposal Facility Data Form

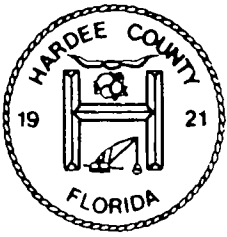
See application form (Sheet 7 of 10).

9. Solid Waste-Volume Reduction and Resource Recovery Facility Data Form

See application form (Sheet 9 of 10).

10. Certifications

See application form (Sheet 10 of 10).



HARDEE COUNTY
BUILDING AND ZONING DEPARTMENT

413 West Orange Street
Wauchula, FL 33873

(813) 773-3236

May 29, 1992

State of Florida
Department of Environmental Regulation
4520 Oak Fair Blvd.
Tampa, FL 33610-7347

Attn.: Kim Ford

Re: Hardee County Landfill

Dear Sir:

The Hardee County Sanitary Landfill complies with all elements of the Hardee County Land Use Plan including Future Land Use Map, and is in conformance with all applicable portions of the Hardee County Zoning Ordinance and Zoning Map.

If you have any questions, you may contact me at (813) 773-3236.

Sincerely,

Ronald D. Stowers, P.E.
Building and Zoning Official

RDS/bjh

OPERATION PLAN

FOR THE

HARDEE COUNTY SANITARY LANDFILL

AIRPORT ROAD

HARDEE COUNTY, FLORIDA

MAY, 1992

PREPARED BY:

J.R. PRESTRIDGE
HARDEE COUNTY SOLID WASTE SUPERINTENDENT

TABLE OF CONTENTS

INTRODUCTION

- A. Designation of Responsible Persons
- B. Contingency Operations
- C. Controlling the Type of Waste Received at the Site
- D. Measuring Waste
- E. Vehicle Traffic Control and Unloading
- F. Method and Sequence of Filling Waste
- G. Waste Compaction and Application of Cover
- H. Gas, Leachate and Storm Water Control
- I. Ground Water Monitoring
- J. All Weather Access Road
- K. Effective Barrier
- L. Signs
- M. Dust Control
- N. Litter Control
- O. Fire Protection and Fire Fighting Facilities
- P. Attendant
- Q. Communication Facilities
- R. In Service and Reserve Equipment
- S. Safety Devices

INTRODUCTION

The purpose of this Operation Plan is to provide a written description of the daily operation of the landfill, in accordance to the requirements of Chapter 17-7.050 (5)(b)(c)(d), and (e) of the Florida Administrative Code.

It is recognized that landfills are dynamic systems under constant development. Changes in the type of material brought to the site, the quantity and rate of refuse delivery, surface topography of the landfill, and administrative and regulatory requirements may all result in changes in the way the landfill may be best operated to conserve landfill space, protect the environment, and provide safe and efficient operation for users of the landfill. It is the intent of this Operation Plan to be kept as an accurate description of the actual operation and procedures. This plan should be modified as required to reflect changes in the landfill operation as they occur.

A. Designation of Responsible Persons

A Solid Waste Superintendent has been assigned by the Board of County Commissioners to manage the operation of the Landfill. A Supervisor is designated as being in charge of the site. The Solid Waste Superintendent directs the Supervisor of where the waste is to be placed.

B. Contingency Operations

The Landfill has two dozers, one end loader, one dragline and a diesel pump. Should any one piece of equipment be disabled, the Landfill could continue to operate. We also have included in our budget, the cost of one months leasing or rental for heavy equipment for contingency purposes. In addition, equipment from the Hardee County Public Works Road and Bridge Section could be loaned to the Solid Waste Division for use during an emergency.

The Landfill is large enough that if a portion of the site had to be closed due to some emergency, it is likely that some other area of the site could remain open.

C. Controlling the Type of Waste Received at the Site

The first line of defense against this waste is the weighmaster located at the scale

house. Each vehicle entering the landfill must stop and have their load weighed in and classified. The weighmaster does a visual check of the load and depending on the type of material, it is directed to one of six sites: Material Recovery Facility, Construction and Demolition Debris, Wood and Yard Trash, Scrap Metal, Waste Tire or Class I Landfill. Loads directed to the Construction and Demolition Debris Site or the Wood and Yard Trash Site will be refused if they are mixed with other types of waste.

The second line of defense is the Material Recovery Facility where the materials are dumped and hand sorted for recycling. All Landfill employees are trained to look for liquid waste, drums, waste in sealed containers, unusual odors or fumes. If the material is suspicious to the personnel, it will not be permitted to enter the Landfill until the Solid Waste Superintendent comes to the site and identifies the material and determines its suitability for Landfilling.

The Landfill will not accept closed or sealed containers; all drums, tanks, and cans must have one end open and have been flushed. The Landfill will not accept septic tank sludge, paint thinners, contaminated gasoline or like liquids; human waste from hospitals, doctor's offices or clinics or personal homes as a result of surgery or contamination. The Landfill will not accept any materials which the hauler can not identify the composition of the material nor supply certification that the material is non-hazardous waste. The Landfill will not accept solid waste generated from outside

the borders of Hardee County without prior written approval from the Board of County Commissioners or their designee.

If a suspicious material has already been dumped, it is kept separate from other wastes and the Solid Waste Superintendent is called to the site to determine its suitability for the Landfill. The ultimate decision on whether to accept or reject the material is made by the Solid Waste Superintendent. If it is marked unsuitable, the material will be held for Hazardous Waste Collection.

D. Measuring Waste

All vehicles entering and exiting the Landfill are required to pass over the scales. All loads are classified and the weights are printed on tickets and recorded on computer.

E. Vehicle Traffic Control and Unloading

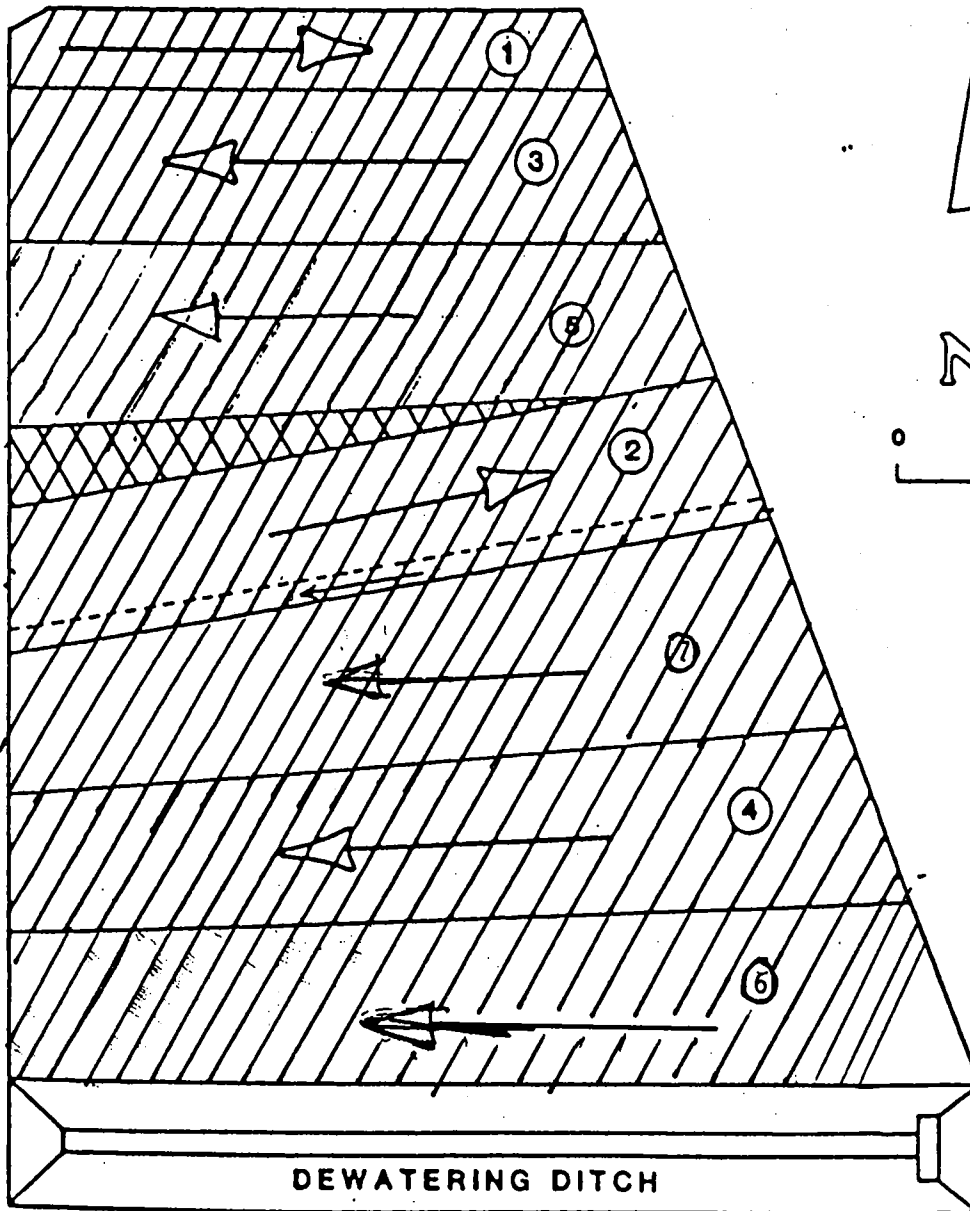
Upon entering the Landfill, all vehicles are required to stop at the stop sign, posted on the gate, wait until the scales are clear and then proceed at the posted 3 miles per hour speed limit. The weighmaster will direct the driver of where to unload. The on site roads are adequate for two-way traffic, and speed limits are clearly marked.

F. Method and Sequence of Filling Waste

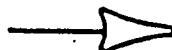
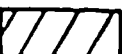


A flatbed truck carries the bales from the Material Recovery Facility to the bale field where a front end loader with forks stacks the bales.

Waste that is not suitable for the Material Recovery Facility will be directly routed to the landfill and deposited at the working face which is approximately fifty feet wide.

See attached drawings for Sequence of Filling Waste.



EXPLANATION

- 
DIRECTION OF BOTTOM SLOPE
- 
COMPLETED CELLS
- 
AREA NOT IN ANY CELL DUE TO DRAGLINE LIMITATIONS
- 
CELL NUMBERS

SEABURN AND ROBERTSON, INC.
Water Resources Consultants



FIGURE 1.- SITE PLAN FOR HARDEE COUNTY LANDFILL - PHASE 1

MAP UPDATED - May 7, 1992

J. R. PRESTRIDGE

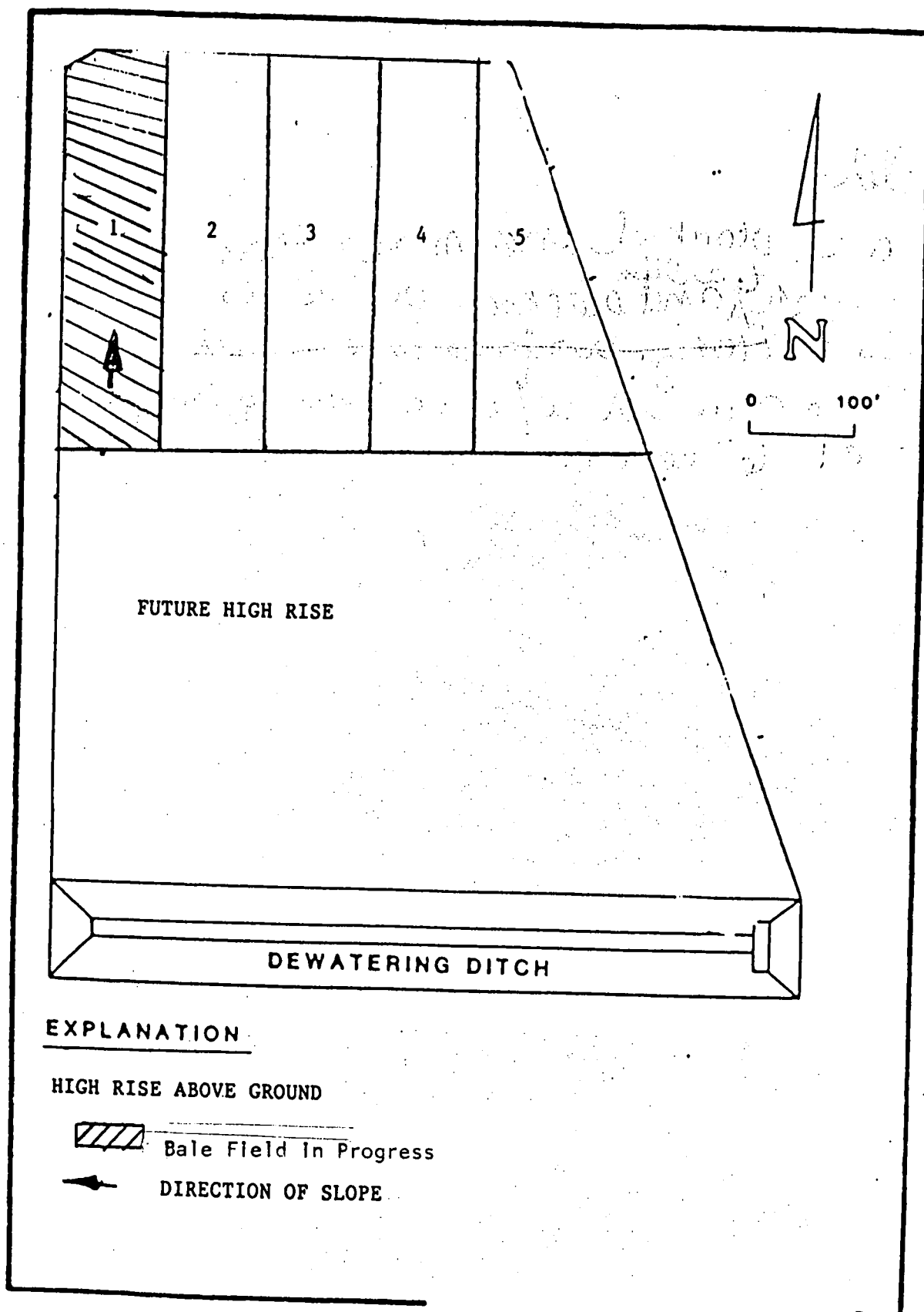


FIGURE 1.- SITE PLAN FOR HARDEE COUNTY LANDFILL - PHASE 1

May 7, 1992

J. R. PRESTRIDGE

G. Waste Compaction and Application of Cover

Bales are stacked no more than three bales high to a lift and stacked so joints are offset. Bales are covered with succeeding day's waste or six inches of cover.

Cover material is taken from an excavated burrow pit on site and placed at the working face by the end loader. At the end of each day of operation, a cover of six inches is placed over the compacted trash and spread with the dozer.

H. Gas, Leachate, and Storm Water Control

The stormwater control consists of ditches, ponds and control structures. Staff will periodically check the drainage ditches for erosion and will reshape and re-sod them on a needed basis. The plant types in the littoral zone will be checked and intruding vegetation removed if required. Drainage sumps will be cleaned out at least once per year and the storm sewer lines checked for plugging. The area in front of the control structure will be checked at least quarterly to remove any excess plants or debris that would cause the structure to plug.

The sedimentation basin will be checked using a probe to determine the level of sediment in the sump. When the level of sediment becomes excessive, the accumulated debris will be cleaned out of the pond in order to restore operating efficiency.

Leachate generated at the Landfill will be collected by under drains installed on the North, East, and West perimeter, adjacent to the side wall liner. The Leachate collected will be deposited in the dewatering ditch on the South end of the Landfill site. The leachate collected will then be sprayed on a 5.4 acre site south of the dewatering ditch.

- Gas Control

Gas control consists of PVC goose neck vents located at 500 intervals around the perimeter of the site inside the side wall liner.

The vents should be checked periodically to assure that gases are released freely and vents have not been damaged by trucks and equipment.

- Spray Field Operation

The pumps should be operated one day a week, preferable near the beginning of the week. The number of hours to pump should be based on the irrigation needs of the cover crop. Until actual operating data is collected, the enclosed table may be used as a guide. It should be pointed out that the actual rainfall crop growth, and leachate production in any given month could be substantially different. If the spray field appears to be saturated, the number of hours of irrigation for that month should be cut back. It is expected that

water levels in the dewatering ditch will fluctuate. They should not be allowed to go above 77.4 elevation and by July or August should be lowered to 74.2. The low level cut off for the pump is set at 72.0.

I. Ground Water Monitoring

Ground water sampling and analysis of the approved Ground Water Monitoring Plan will be done by Enviro Lab, Water Resources Consultants. Hardee County will retain this firm for the taking of samples and analysis. The Solid Waste Superintendent will be responsible for reviewing the reports and submitting to the F.D.E.R.

J. All Weather Access Roads

The onsite roads are paved and shelled base roads with drainage swells on both sides. The roads are slightly elevated above surrounding grades and are crowned to promote drainage. The roads are routinely graded by the Hardee County Public Works Department.

K. Effective Barrier

The entire property is surrounded by a fence. Vehicular traffic must pass over the

scales at the scale house upon entering the Landfill. When the Landfill is not in operation, the gates are kept locked.

L. Signs

A large sign on State Road 636 indicates the landfill is run by Hardee County and the days and hours of operation. There are many other signs throughout the Landfill to indicate traffic flow, types of waste that are not acceptable, speed limits, and underground liner signs, etc... Signs posted at the gate house, state the rates and fee schedules. The manholes will be marked with a warning sign stating "This Manhole Contains Toxic and Explosive Gases. Do Not Enter Without Proper Ventilation".

M. Dust Control

During dry periods, it is occasionally necessary to control dust on the haul roads. When dust control becomes necessary, water from the existing storm water pond will be pumped into a 1,000 gallon tank truck equipped with a spray bar and nozzles. The tank truck sprays the roads requiring dust control.

N. Litter Control

Litter at the Landfill is caused by refuse previously unloaded at the working face, by refuse being unloaded, and refuse falling from improperly covered loads; the wind sometimes catches the paper and blows it away from the working face. A snow fence in close proximity to the working face catches some of the papers. During periods of high winds, some of the litter does escape. This litter is retrieved on a weekly basis by county trustees. This litter is collected on the roadway, stormwater ditches, and returned to the working face.

O. Fire Protection and Fire Fighting Facilities

Landfill fires are particularly hazardous. If a fire is observed during working hours, the burning material is separated and covered with soil to smother fire out. Fire extinguishers are installed on the equipment and at the maintenance barn. This equipment could be used to extinguish small fires. Fires that occur outside of the normal working hours are more difficult to control since they are usually well developed before it is reported. Whenever a landfill fire does develop, the staff is instructed to call the Hardee County Fire Department. This department is equipped with self contained breathing devices, and is trained in fighting landfill fires.

The response time is approximately four minutes from the station. If they should need additional help, the Division of Forestry could be called. The Hardee County Fire Department is responsible for fire control in the area of the County where the Landfill is located. In the event that a fire is observed or reported during the hours the Landfill is closed, the Sheriff's Office is instructed to contact the Landfill Superintendent or the Landfill Supervisor.

P. Attendant

A trained Landfill operator is present during all hours the landfill is open. During other hours, the fenced and locked gates help prevent unauthorized access to the site.

Q. Communication Facilities

The gate house is equipped with telephones. The supervisory personnel are assigned vehicles with radios that communicate with the County's Public Works Division. They can relay messages to the Sheriff's Office and other emergency services.

R. In Service and Reserve Equipment

See attached equipment list B.

S. Safety Devices

All Landfill equipment has fully enclosed cabs for roll over protection. The end loader and dozers are equipped with air conditioning and heaters. Each piece of equipment has a fire extinguisher to assist in handling small fires. Site employees are equipped with safety boots, rain gear, gloves, and goggles for personal protection while working at the Landfill.

"B" EQUIPMENT LIST			
72.B		1973	Tractor, Diesel Ford Model 5000 E1014C
80-B	99087	1973	Wood Chuck Safety Test Model STWC 16-3000 Serial 3203 (Eng.)
109-B		1982	Dozier Fiat Allis Model 14-C S/N 020090
120-B			Trailer - made in shop for S.W. - 500 pump
142-B		1990	D7H WDA Dozier, Cat STN 79204076
143-B		1986	Disc Wood Chipper, Morbark Model 22XL, S/N 1619 w/Dorsey Chip van ID#60704
147-B		1991	Wheel Loader Model 950F Caterpillar S/N 7ZF00619 w/60" Forks J01632 Bucket J01633 Rake J01634
148-B		1991	Bobcat Loader Model 843B S/N 61245 w/66" Utility bucket #104766 54 HP Isuan Diesel

"B" EQUIPMENT LIST			
149-B		1991	Forklift, Model T50D Caterpillar 5000 S/N8EB11420
108-B		1983	Dragline American Model 4120 S/N 8212A03114 Detroit 471 Engine Model 10435000 S/N 4A0245215
71	63774	1979	2-Ton Truck, GMC Model CGD042 I.D. # T16DA9V615591 Sierra Series 6000 Eng. - 350 Cu In., 5 Speed



Wade-Trim

Member of the Wade-Trim Group

201 E. Kennedy Blvd. ■ Suite 334 ■ Tampa, FL 33602
813-221-2090

ATTACHMENT 5

WORK SHEET

ESTIMATE OF REMAINING LIFE

ANNUAL SOLID WASTE * 19500 TONS
 YARD WASTE & CONST. DEBRIS - 3900 TONS
 RECYCLING - 720 TONS
 LAND FILL WASTE 15180 TONS/YR

* FROM 1991 - 92 OPERATING RECORDS

$$\text{BALE DENSITY} = 40\text{ }^{\#}/\text{CF} = 1080\text{ }^{\#}/\text{CY}$$

$$15180 \text{ TONS} \times 2000\text{ }^{\#}/\text{TON} / 1080\text{ }^{\#}/\text{CY} = 28100\text{ CY/YR}$$

ASSUME: 10% COVER & 5% ANNUAL GROWTH

YEAR	SOLID WASTE	COVER	TOTAL	Cum CY
1	28100	2810	30910	30910
2	28950	2895	31845	62345 62755
3	29810	2981	32791	95186 95546
4	30705	3071	33776	128962 129322
5	31625	3163	34788	163750 164110
6	32575	3258	35833	199583 199943
7	33550	3355	36905	236488 236848
8	34560	3456	38016	274504 274864
9	35600	3560	39160	313664 314024
10	36665	3666	40331	353995 354355
11	37764	3776	41540	395535 395895
12	38895	3890	42785	438320 438680
13	40065	4007	44072	482392 482752
14	41265	4127	45392	527784 528144
15	42505	4251	46756	574540 574900



SUBJECT HARDEE COUNTY LAND FILL	BY SAD	CHK.	SHEET NO. 1 OF 5	JOB NUMBER HAR: 2001-01
DATE 5/29/97	DATE			



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813-221-2090

WORK SHEET

HARDEE COUNTY LAND FILL

VOLUME AVAILABLE

VOLUME BETWEEN EXISTING GRADE
AND PROPOSED FINAL GRADES
(SEE ATTACHED) = 446,356 CY

FINAL COVER
2 x 830 x 600 / 27 = -36,889 CY

INTERIM COVER
1 x 400 x 200 / 27 = -3000 CY

TOTAL VOL. = 406,467 CY

REMAINING LIFE

FROM TABLE LIFE ≈ 11.25 years

NOTE: LIFE MAY BE EXTEND BY INCREASED RECYCLING EFFORTS.

SUBJECT HARDEE COUNTY LAND FILL	BY <u>SAD</u>	CHK.	SHEET NO.	JOB NUMBER
	DATE <u>5/29/92</u>	DATE	<u>2</u> OF <u>5</u>	<u>HAR • 2001 • 01</u>



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201 E. Kennedy Blvd. ■ Suite 334 ■ Tampa, FL 33602
813-221-2090

WORK SHEET

<u>EXIST. EL.</u>	<u>FINAL EL.</u>	<u>DIFFERENCE</u>
85	93	8
85	93	8
85	93	8
85	93	8
85	93	8
86	93	8
84	85	1
87	113	26
89	113	24
89	113	24
87	113	26
87	113	26
87	113	26
84	93	9
89	113	24
94	131	37
94	135	41
89	139	50
88	134	46
88	110	22
100	113	13
102	131	29
102	135	33
98	139	41
95	129	34
89	102	13
107	113	6
108	131	23
106	135	29
105	138	33
102	117	15
91	93	2
SUBTOTAL		701
SUBJECT		
BY db	CHK.	SHEET NO. 3 OF 5
DATE 6.1.92	DATE	JOB NUMBER HAR • 2001 • 01



Wade-Trim

Member of the Wade-Trim Group

201 E. Kennedy Blvd. ■ Suite 334 ■ Tampa, FL 33602
813-221-2090

WORK SHEET

EXIST. EL. FINAL EL. DIFFERENCE

107	113	4
104	131	27
106	135	29
105	133	28
101	110	9
107	110	3
104	131	27
103	131	28
102	128	26
93	102	9
106	111	5
104	111	7
101	111	10
101	111	10
91	88	-3

SUBTOTAL 221

701

TOTAL 1146

$$\frac{1146}{47} = 24.4 \text{ (AVE. DEPTH)} \times (830 \times 600) = \frac{12,051,600}{27} = 446,356 \text{ C.Y.}$$

SUBJECT

BY

db

CHK.

DATE

6.1.92

DATE

SHEET NO.

4

OF

3

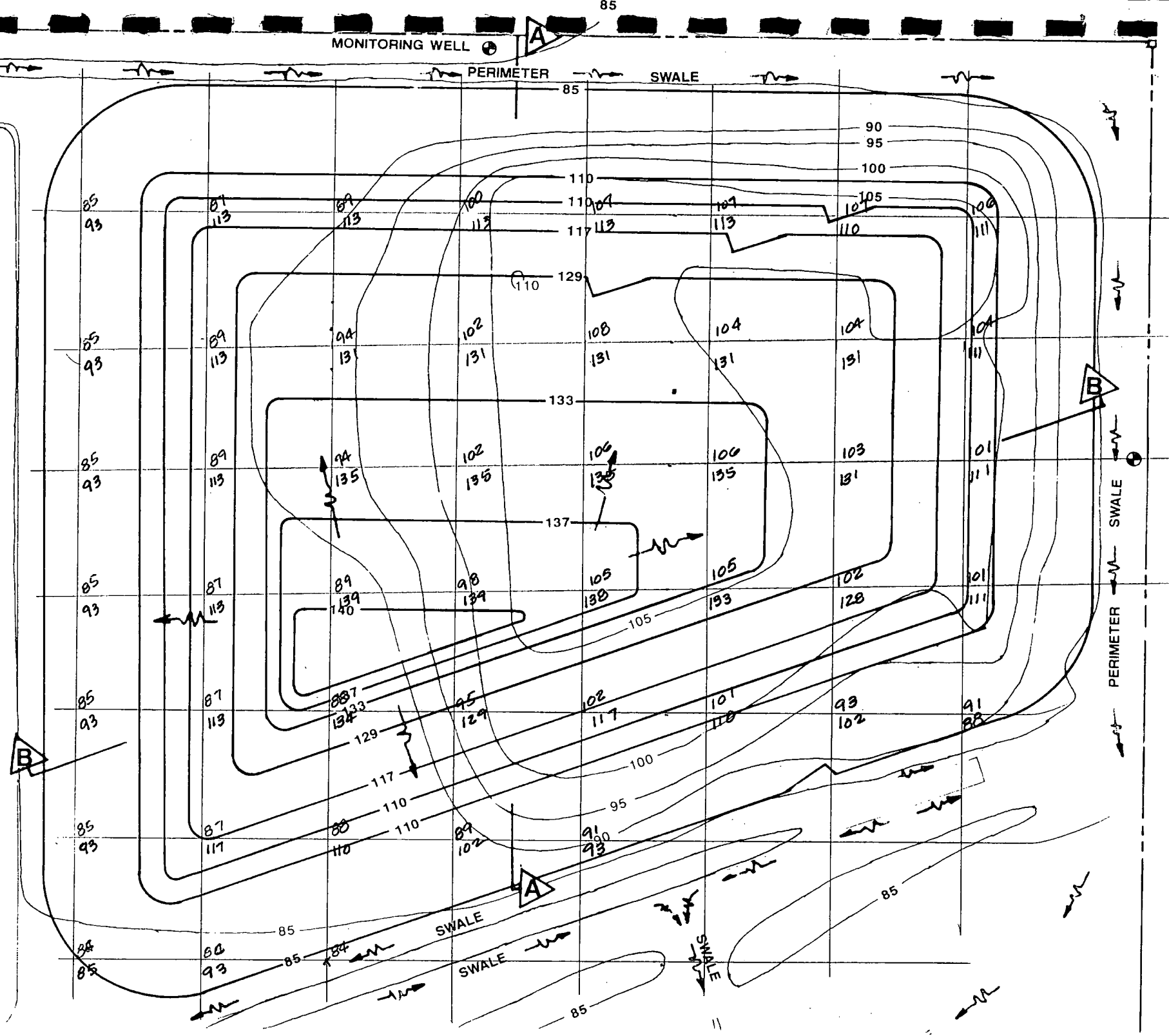
JOB NUMBER

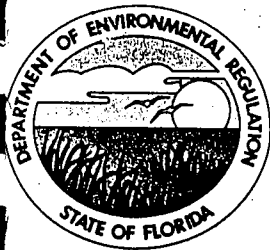
HAB • 2001 • 01

S of S 845

TION

DEWATERING DITCH





Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

May 6, 1992

Mr. J. R. Prestridge
Solid Waste Superintendent
Hardee County
74 Hanchey Road
Wauchula, Florida 33873-2867

RE: GMS 4025C30001 - Hardee County Regional Landfill

Dear Mr. Prestridge:

We have received the Independent Auditors' Report on the Landfill Closure Fund for the year ending September 30, 1991 for the above referenced facility. Based on your estimates dated June 28, 1991, and a design life of 12 years, the funding in the escrow account is adequate to meet the requirements of 17-701.076, F.A.C.

Please note that Rule 17-701.076(4)(d), F.A.C., (copy enclosed) requires that the owner or operator shall revise cost estimates annually. Send the revised cost estimates to Bob Butera in the Southwest District Office for his review and approval.

If you have any questions, call me at (904) 922-6104 or SunCom 292-6104.

Sincerely,

Fred J. Wick
Fred J. Wick
Environmental Specialist
Solid Waste Section

FJW/blr

cc: Bob Butera

17-701.076 Financial Responsibility.

(1) As used in this section:

(a) "Landfill" means any solid waste land disposal area for which a permit, other than a general permit, is required by Section 403.707, F.S., that receives solid waste for disposal in or upon land other than a land-spreading site, injection well, or a surface impoundment. A landfill includes solid waste disposal areas operating under any Department permit or certification which are required to comply with the landfill closure standards of Rules 17-701.070 through 17-701.075, F.A.C.

(b) "Owner or operator" means, in addition to the usual meanings of the term, any owner of record of any interest in land whereon a landfill is or has been located and any person or corporation which owns a majority interest in any other corporation which is the owner or operator of a landfill.

(c) "Securities" means any liquid assets including cash, stocks, bonds or other negotiable instruments.

(2) Rule applicability.

(a) As a condition for the issuance of a landfill construction permit, the owner or operator shall provide proof of financial responsibility to the Department. The effective date of the financial document shall be 60 days prior to the acceptance of any solid waste at the facility. Such proof shall be:

1. That there has been established a landfill management escrow account; or

2. Proof of the existence of an alternate financial mechanism pursuant to Rule 17-701.076(6), F.A.C.

(b) Owners or operators of existing landfills or landfills which have received a construction permit prior to the effective date of this rule shall submit proof of financial responsibility to the Department by October 1, 1990. Such proof shall be:

1. That a landfill management escrow account has been established and that such account and interest thereon is current as to the required level of funding pursuant to Rule 17-701.076(5), F.A.C.; or,

2. Proof of the existence and current value of an alternate financial mechanism pursuant to Rule 17-701.076(6), F.A.C.

(c) Other solid waste management facilities which are required to submit proof of financial responsibility under Rule 17-711, F.A.C. (Waste Tire Rule) for closure of the facility, but not for long-term care costs, shall comply with Rule 17-701.076(7), F.A.C.

(3) Cost estimates.

(a) For the purpose of determining the amount of proof of financial responsibility that is required in Rules 17-701.076(5) and (6), F.A.C., the owner or operator shall estimate the total cost of closure for the permitted portions of the landfill or for those portions of the landfill for which a construction permit is sought, for the time period in the landfill operation when the extent and manner of its operation make closing most expensive. The annual cost of long-term care shall be estimated and listed separately. The owner or operator shall submit the estimates, together with all necessary justification, to the Department for approval along with the proof of financial responsibility. The costs shall be estimated by a Registered Professional Engineer registered in the State of Florida in accordance with provisions of Chapter 471, F.S., for a third party performing the work, on a per unit basis, with the source of estimates indicated.

(b) Closing costs shall be based on the nature and characteristics of the wastes disposed of at the site and shall include estimated costs of cover material, topsoil, seeding, fertilizing, mulching, labor, and any other costs of compliance with Rule 17-701.073 and 17-701.074, F.A.C.

(c) Long-term care costs shall include land surface care; gas monitoring; leachate pumping, transportation, monitoring and treatment; groundwater monitoring, collection and analysis; and any other costs of compliance with Rule 17-701.075, F.A.C.

(4) Annual cost adjustments.

(a) Every owner or operator of a landfill shall submit to the Department an annual cost adjustment statement, certified by a Professional Engineer registered in the State of Florida in accordance with the provisions of Chapter 476, F.S. Closure and long-term care costs shall be listed separately.

(b) During the life of those portions of the landfill which have not been finally closed, the owner or operator shall revise the closure cost estimate for inflation and changes in the closure and long-term care plan if such change increases or decreases the closure cost estimate. Such revisions shall be made annually and used as the basis for comparison against the balance in the landfill management escrow account or the value of an alternate funding mechanism.

(c) If the value of the landfill management escrow account or alternative funding mechanism is less than the total amount of the current closure cost estimate, the owner or operator shall comply with paragraph 1. or 2. below, as applicable.

1. For an escrow account, the owner or operator, within 180 days, shall deposit an amount into the landfill management escrow account which is equal to the difference between the current estimated closure cost and the new estimated closure cost divided by the number of remaining years in the permitted life of the landfill. The calculation of such adjustment shall be as follows:

$$\text{payment} = \frac{(\text{NCE} - \text{OCE}) - \text{CY}}{\text{Y}}$$

where NCE is the new estimate of closure cost, OCE is the old estimate of closure cost, CV is the current value of the landfill management escrow account and Y is the number of years remaining in the permitted life of landfill.

2. For an alternative funding mechanism, the owner or operator, within 180 days, shall revise the funding mechanisms to reflect the new estimate.

(d) If the value of the landfill management escrow account or alternative funding mechanism is greater than the total amount of the current closure cost estimate, the owner or operator may reduce the value of the account or funding mechanism to reflect the new estimate.

(5) Landfill management escrow account.

(a) The owner or operator of a landfill shall establish a fee, or a surcharge on existing fees, or other appropriate revenue-producing mechanism, to ensure the availability of financial resources for the proper closure and long-term care of the landfill.

(b) The revenue-producing mechanism shall produce revenue at a rate sufficient to generate funds to meet state landfill closure requirements.

(c) The revenue shall be deposited in an interest-bearing escrow account, the landfill management escrow account, to be held and administered by the owner or operator. The owner or operator shall file with the Department an annual audit of the account. The audit shall be conducted by a Certified Public Accountant and shall be filed no later than December 31 of each year. Counties using a Single Audit accounting system are encouraged to file this audit by March 31 of that year. The audit shall consist of reporting the balance in the landfill management escrow account as of the end of each fiscal year and a list of all withdrawals made. The list shall include the date and the amount of each withdrawal.

(d) Payments into the landfill management escrow account shall be made by the owner or operator at least annually over the term of the active life of the landfill according to one of the following methods:

1. For a new landfill, the first payment must be made before the end of the first year after the initial receipt of solid waste into the landfill. A notice of such payment shall be submitted to the Department. The first payment shall be equal to the current closure cost estimate for the landfill divided by the number of years in the permitted life of the landfill as estimated in the closure plan. Subsequent payments must be accomplished at least annually on the anniversary date of the first

payment. The calculations for such annual payment shall be as follows:

$$\text{payment} = \frac{\text{CE} - \text{CV}}{\text{Y}}$$

where CE is the current calculated closure cost estimate, CV is the current value of the escrow account, and Y is the number of remaining years in the permitted life of landfill.

2. The owner or operator may accelerate payments into the landfill management escrow account or may deposit the full amount of the current closure cost estimate at the time that the account is established.

(e) The owner or operator may make expenditures from the account and its accumulated interest only for the purpose of landfill closure and long-term care, according to Rule 17-701.076(4)(d), F.A.C., and, if such expenditures do not deplete the fund to the detriment of eventual closure and long-term care as described under the certification procedure in (4) above, for planning and construction of resource recovery or landfill facilities. If the owner or operator does not operate a landfill, any funds remaining in the account after paying for proper and complete closure and long-term care, as determined by the Department, shall be deposited by the owner or operator into the general fund of the local government of jurisdiction.

(f) The revenue generated under this subsection and any accumulated interest thereon may be applied to the payment of, or pledged as security for, the payment of revenue bonds issued in whole or in part for the purpose of complying with state landfill closure and long-term care requirements. Such application or pledge may be made directly in the proceedings authorizing such bonds or in an agreement with an insurer of bonds to assure such insurer of additional security therefore.

(6) Alternative proof of financial responsibility for landfills.

(a) An owner or operator may establish proof of financial responsibility with the Department in lieu of, or in combination with, the requirements of (5) above. Such proof may include surety bonds, certificates of deposit, securities, letters of credit, trust fund agreements, closure insurance or financial tests and corporate guarantees showing that the owner or operator has sufficient financial resources to cover, at a minimum, the costs of complying with all state landfill closure and long-term care requirements. If such proof of financial responsibility is surety bonds, letters of credit, trust fund agreements, closure insurance or financial tests and corporate guarantees, such proof shall be submitted on forms provided by the Department in accordance with the requirements of (b) and (c) below. If proof of financial responsibility is securities or certificates of deposit, such financial documents shall be submitted directly to the Department. The owner or operator shall estimate such costs pursuant to subsection (3) above.

(b) 40 CFR Part 264 Subpart H which contains EPA's rules on financial requirements for owners and operators of hazardous waste facilities are hereby adopted as financial requirements for purposes of this section and incorporated by reference as those rules appear in 40 CFR 264 revised as of July 1, 1988, except:

1. The following sections of 40 CFR Part 264 Subpart H are specifically not adopted as part of this rule:

- a. 264.140; 264.141(a); 264.141(e); 264.147; 264.149; 264.150; and 264.151.
- b. All references to 40 CFR Part 265.
- c. All references to sections or subparts of 40 CFR 264 not contained in Subpart H.
- d. All references to EPA Regions.
- e. All references to RCRA, Section 3008 of RCRA, or RCRA permits.

2. References in 40 CFR 264 Subpart H to the United States Environmental Protection Agency or to EPA shall mean the State of Florida Department of Environmental Regulation; to Regional Administrator shall mean the Secretary of DER; to EPA identification number shall mean the DER Identification Number; to hazardous waste shall mean solid waste; and to hazardous waste treatment, storage or disposal facilities shall mean landfills.

(c) Form 17-701.130(11) shall be used when submitting proof of financial responsibility under this section.

(7) Proof of financial responsibility for other solid waste management facilities.

(a) An owner or operator of a solid waste management facility which is required to submit proof of financial responsibility for closure of the facility, but not for long-term care costs, may establish such proof through the use of escrow accounts, surety bonds, certificates of deposit, securities, letters of credit, trust fund agreements, closure insurance or financial tests and corporate guarantees showing that the owner or operator has sufficient financial resources to cover, at a minimum, the costs of complying with all state landfill closure requirements. If such proof of financial responsibility is surety bonds, letters of credit, trust fund agreements, closure insurance or financial tests and corporate guarantees, such proof shall be submitted on forms provided by the Department in accordance with the requirements of (b) and (c) below. If proof of financial responsibility is an escrow account, securities or certificates of deposit, such financial documents shall be submitted directly to the Department. The owner or operator shall estimate such costs pursuant to Rule 17-711.510, F.A.C.

(b) 40 CFR Part 264 Subpart H which contains EPA's rules on financial requirements for owners and operators of hazardous waste facilities are hereby adopted as financial requirements for purposes of this section incorporated by reference as those rules appear in 40 CFR 264, revised as of July 1, 1988, except:

1. The following sections of 40 CFR Part 264 Subpart H are specifically not adopted as part of this rule:

a. 264.140; 264.141 (a); 264.141 (c); 264.141 (e); 264.145; 264.146; 264.147; 264.149; 264.150; and 265.151.

b. All references to 40 CFR Part 265.

c. All references to sections or subparts of 40 CFR 264 not contained in Subpart H.

d. All references to EPA Regions.

e. All references to RCRA, Section 3008 of RCRA, or RCRA permits.

f. All references to post-closure care.

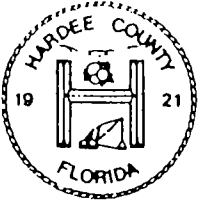
2. References in 40 CFR 264 Subpart H to the United States Environmental Protection Agency (EPA) shall mean the State of Florida Department of Environmental Regulation; to Regional Administrator shall mean the Secretary of DER; to EPA identification number shall mean the DER Identification number; to hazardous waste shall mean solid waste; and to hazardous waste treatment, storage or disposal facilities shall mean solid waste management facilities.

(c) Form 17-701.130(12) shall be used when submitting proof of financial responsibility under this section.

Specific Authority: 403.704, F.S.

Law Implemented: 403.704, 403.707, F.S.

History: New 7-1-85; Formerly 17-7.076, Amended 11-28-89.



HARDEE COUNTY
BOARD OF COUNTY COMMISSIONERS
PUBLIC WORKS DEPARTMENT
74 Hanchey Road
Wauchula, Florida 33873-2867

Buildings & Grounds
Parks & Recreation
Purchasing
Road & Bridge
Solid Waste

October 15, 1990

Department of Environmental Regulation
Southwest District
7601 Highway 301 North
Tampa, Florida 33601

Subject: Review and updated cost projections of Landfill closure
Hardee County Sanitary Landfill Permit #S025-096551

INTRODUCTION:

Upon completing refuse deposition in the permitted area of the site, the site will be in a closure configuration. The cost itemized below is for normal site closure. It will be verified, as necessary, on an annual basis to reflect inflation and other factors.

Hardee County intends to use on site native materials, in closing Phase I of the Landfill. The materials are clay, sand, topsoil plants, grasses, etc. The closed portion of the Landfill will also be proposed to be utilized for a spray irrigation field for future use for leachate disposal, in Phase II of our operation.

Hardee County intends to use in-house personnel and equipment for all earth work. Excavation of Fill, loading, hauling, grading and grassing of site.

MONITORING WELLS:

Ground water sampling and monitoring will continue as required by the Permit. No new monitoring wells should be required for closure, Therefore, the estimated cost for installing new monitoring wells for closure operation is \$0.00.

BACKFILL:

It is expected that the disposal site can be readily placed into an acceptable closure condition; 3:1 slopes and appropriate top grades by using on site equipment and clay materials. Therefore, the cost for this task is estimated \$4,000.00.

CLAY CAP:

The site will be capped by two (2) feet of compacted clay, utilizing on site clay material. This will require: 38,161 cubic yards, 45,793 loose cubic yards at 20% swell over the 11.82 acre site, which will require soil cover. Therefore, the estimated cost is \$91,586.00.

Landfill Closure Plan

TOPSOIL:

The site developement plan requires a topsoil cover of 6 inches over the two (2) feet compacted clay cap (10,971 loose cubic yards at 15% swell). The estimated cost is \$2.00 dollar per loose cubic yard. Therefore, the estimated cost is \$21,942.00.

CONTOUR GRADING/SURFACE WATER:

Placement of the site into a closure configuration and appropriate final cover, requires contour grading to insure surface water drainage. This is accomplished as the materials are being placed. The site will require finish grading. The estimated cost for this task is \$2,000.00.

GAS MIGRATION CONTROL:

The synthetic liner should prevent any gas migration off site. The leachate collection system should serve the purpose of gas control. Therefore, the estimated cost for gas control is \$0.00.

BENCH MARKS:

The property in which Phase I of the Hardee County Sanitary Landfill is located, has survey markers already in place. The estimated cost for Bench Marks is \$0.00.

LANDSCAPING:

The Hardee County facility will be landscaped using sand and clay found within the property boundries. These soils readily support native vegetation. It is expected that fertilizing will not be required on a regular basis. Estimated cost is \$0.00.

REVEGETATION:

After placing of final cover, seeding of site will be done to provide a quick cover for erosion control, and to provide a permanent grass cover to blend in with the surrounding area. Therefore, the estimated cost is \$500.00.

SECURITY SYSTEM:

The in place fencing, gates, and attendants should provide ample security to the closed site. Estimated cost \$0.00.

CERTIFICATION: \$20,000.00.

ESTIMATED POST CLOSURE PLAN

GROUNDWATER QUALITY SAMPLING AND ANALYSIS:

SAMPLING:

The monitor wells will be sampled quarterly, the first three (3) years. Upon satisfactory results from this program, the sampling will be reduced to a semi-annual frequency for the next seventeen (17) years. Labor, equipment and expenses for each of these events is estimated at \$1,500.00. For twenty (20) years, forty-six (46) events, the estimated cost is \$69,000.00.

CHEMICAL ANALYSIS:

The analytical chemistry cost per sample will be \$300.00. The facility utilizes six (6) groundwater monitoring wells. The total cost for chemical analysis will be (\$300.00/sample) (6 samples/sampling events) (46 events).

Estimated cost \$82,800.00.

HARDEE COUNTY SANITARY LANDFILL

TABLE I

PLACEMENT OF SITE INTO CLOSURE STATUS

ESTIMATED CLOSURE COST SUMMARY

	<u>COST ESTIMATED</u>
MONITORING WELLS	<u>\$0.00</u>
FINAL COVER	
Backfill	<u>4,000.00</u>
Clay cap	<u>91,586.00</u>
Topsoil	<u>21,942.00</u>
CONTOUR GRADING AND SURFACE	
Water Diversion	<u>2,000.00</u>
GAS MIGRATION CONTROL	<u>0.00</u>
REVEGETATION	<u>500.00</u>
SECURITY SYSTEMS	<u>0.00</u>
CERTIFICATION	<u>20,000.00</u>
<hr/>	
SUBTOTAL CLOSURE COSTS	<u>\$140,028.00</u>
PLUS 25% CONTINGENCY FEE	<u>35,007.00</u>
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TOTAL FINANCIAL RESPONSIBILITY	<u>\$175,035.00</u>

HARDEE COUNTY SANITARY LANDFILL

TABLE II

MONITORING AND MAINTENANCE

ESTIMATED POST CLOSURE COST SUMMARY

	<u>COST ESTIMATED</u>
GROUNDWATER MONITORING	
Sampling	\$ 69,000.00
Chemical Analysis	<u>82,800.00</u>
GAS MONITORING	<u>0.00</u>
INSPECTION AND MAINTENANCE	
Pumps and Wells	<u>15,000.00</u>
Benchmarks	<u>0.00</u>
Landscaping	<u>0.00</u>
Revegetation	<u>500.00</u>
Mowing, Fertilizing, Sprinkling	<u>3,000.00</u>
<hr/>	
SUBTOTAL POST CLOSURE COST	<u>\$170,300.00</u>
PLUS 15% CONTINGENCY FEE	<u>25,545.00</u>
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TOTAL CLOSURE COST	<u>\$195,845.00</u>