

Sumter County Landfill

APPLICATIONS FOR
PERMIT TO OPERATE COMPOSTING FACILITY
PERMIT TO CONSTRUCT LEACHATE TREATMENT FACILITY
PERMIT TO OPERATE RESOURCE RECOVERY FACILITY
WASTE TIRE GENERAL PERMIT
AND
PERMIT TO MAINTAIN CLOSED CLASS I SANITARY LANDFILL
PREPARED FOR



BOARD OF COUNTY COMMISSIONERS
DEPARTMENT OF PUBLIC WORKS
222 EAST McCOLLUM AVENUE
BUSHNELL, FLORIDA 33513

4060000092 W

MARCH 30, 1992

92-1100.00

### Springstead Engineering, inc.

Consulting Engineers — Planners — Surveyors 727 South 14th Street Leesburg, Florida 34748 Lake (904) 787-1414 Sumter (904) 793-3639 Fax (904) 787-7221

# APPLICATIONS FOR PERMIT TO OPERATE COMPOSTING FACILITY PERMIT TO CONSTRUCT LEACHATE TREATMENT FACILITY PERMIT TO OPERATE RESOURCE RECOVERY FACILITY WASTE TIRE GENERAL PERMIT AND PERMIT TO MAINTAIN CLOSED CLASS I SANITARY LANDFILL PREPARED FOR



BOARD OF COUNTY COMMISSIONERS DEPARTMENT OF PUBLIC WORKS 222 EAST McCOLLUM AVENUE BUSHNELL, FLORIDA 33513

#### PREPARED BY



LEESBURG, FLORIDA

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. 727 South 14th Street Leesburg, Florida 34748

Lake (904) 787-1414. Sumter (904) 793-3639 Fax (904) 787-7221

March 30, 1992

Mr. Kim Ford, P.E. Florida Department of Environmental Regulation Southwest District 4520 Oak Fair Boulevard Tampa, Florida 33610-7347

Re:

Sumter County Solid Waste Management Facility

SC60-123071

Class I Landfill (Closed)

SF60-146475

Sumterville, Florida

Dear Mr. Ford:

Enclosed, you will find the completed permit applications for the Sumter County Solid Waste Management Facility. The permit applications include the operation permits for the resource recovery and composting facility, the construction permit for a leachate treatment system, a general permit for storing waste tires and a long-term care permit for the closed Class I landfill.

The permits are presented in this volume with necessary supporting information presented in a separate Appendices volume.

We hope that this information satisfies your needs at the present time. If you have any questions or require additional information, please do not hesitate to contact us.

Very truly yours,

SPRINGSTEAD, ENGINEERING, INC.

John W. Springstead, P.E.

Florida Registration No. 8579

JWS/DWS OV

<u>Distribution of Reports:</u>

FDER - 6 Copies

Sumter County Department of Public Works - 2 Copies

Springstead Engineering, Inc. - 2 Copies

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# **SECTION 1**

INTRODUCTION AND SCOPE

#### PREPARED FOR



BOARD OF COUNTY COMMISSIONERS DEPARTMENT OF PUBLIC WORKS 222 EAST McCOLLUM AVENUE BUSHNELL, FLORIDA 33513

#### **PREPARED BY**



LEESBURG, FLORIDA

MARCH 30, 1992

92-1100.00

#### 1.0 INTRODUCTION AND SCOPE

#### 1.1 Purpose

This volume and the accompanying Appendix volume have been prepared under the direction of the Sumter County Board of County Commissioners - Department of Public Works. The purpose of this document is to submit completed permit applications to the Florida Department of Environmental Regulation (FDER) in order to renew the existing operation permits for the resource recovery facility, the composting facility and the long term care of the closed Class I landfill at the Sumter County Landfill - A Solid Waste Management Facility. In addition, completed permit applications are being submitted for a new general permit to store waste tires and for a construction permit to design and build a new leachate treatment system for the existing composting facility.

We request that the construction permit for the leachate treatment system be processed as expeditiously as possible. The construction and availability of this system will allow full utilization of all existing compost pad space providing the capability to compost all material received and begin reducing the volume of material stored in the Class I cell area.

#### 1.2 Site Location

The subject facility is located approximately \( \) mile south of County Road 470 and approximately 1 mile east of Interstate Highway 75 in Sumterville, Sumter County, Florida (Section 15, Township 20 South, Range 22 East). The general site location is shown on the Site Location Map presented in Figure 1.

#### 1.3 Status of County

Sumter County is a small, rural west central Florida county with a population of approximately 32,000. Sumter County is currently at the 10 mil cap for ad valorem taxes and has been for the past four The unemployment rate in the county is at 10.6% which is 2% above the state average. Resources are extremely limited. the county's intent through the completion of existing facilities and providing the additional improvements to provide cost effective and environmentally acceptable solid waste disposal for an extended period of time. With the help of state grants for solid waste management, Sumter County has been able to comply with state requirements concerning solid waste management. The existing solid waste facility would be adequate to provide solid waste disposal in the county if necessary pieces of equipment can be purchased and flow control for the resource recovery composting facility is Plans for the improvements are being considered and implemented. arrangements are being made to accomplish these improvements.

#### 1.4 Site History

The solid waste facility site was originally permitted by FDER as a Class I landfill in 1975. As the landfill began to reach capacity and the State of Florida passed laws requiring recycling, the officials of Sumter County realized the need for a different approach to the county's methods of disposal of solid waste.

After reviewing the options which were available at the time for treating solid waste, Sumter County opted for the relatively new process of composting Class I solid waste along with a resource recovery facility which would separate out the recyclables. It was the county's intent to establish economically and environmentally

acceptable methods to handle solid waste. As the Class I landfill was being capped, the County was constructing one of the first resource recovery/solid waste composting facilities in the state. Sumter County began composting Class I solid waste in 1987. Since then, additional equipment such as balers and screens have been added to streamline the resource/recovery composting process.

Sumter County has purchased an additional 40 acres of property adjacent to the existing solid waste facility and is investigating the feasibility of expanding the facility onto this adjacent property located south of the existing facility. This would allow the county to provide a long term facility for solid waste disposal. The concept is to construct a structure in which to dry, screen and package graded compost, construct an additional composting pad to provide for additional capacity, and to construct a Class III solid waste landfill cell for disposal of inert materials.

#### 1.5 Current Facility Status

#### 1.51 General

The Sumter County Solid Waste Management Facility is the only public collection center for solid waste in the county. The location of the site is centrally located in the county to provide access to all residents of the county. The facility is open six days a week (Monday through Saturday) between the hours of 8:00 AM and 4:00 PM. The operation and maintenance of the facility is contracted out. Currently, Sumter County is engaged in a management contract with AMERICYCLE, The American Recycling Company, Inc., who have offices on county property located adjacent to the facility.

#### 1.52 Operations

The solid waste enters the facility, is weighed, and directed to the resource recovery building or to the recycling area. Material directed to the resource recovery building is placed on the tipping floor in the building. It is then pushed onto a conveyor belt where the material is preshredded and then passed under a magnetic belt separator to remove ferrous items and then onto a sorting conveyor where aluminum, HDPE, PETE, OCC, nonferrous metals, etc., are removed by hand sorters. The material then goes into a double rotor flail mill where it is shredded, then conveyed into trucks for transportation to the composting pad. The material is formed into windrows, injected with a proprietary starter, and composted for approximately 60 days. When the compost is cured, it is passed through a screen to remove film plastics and other undesirables materials prior to grading. The graded compost then marketed into several types of agricultural applications.

Recyclables including metals, plastics, glass, used oil, tires, batteries, and other items are segregated and placed in areas designated for each item. The recyclables are sold and removed by vendors.

Construction and demolition (C&D) debris are generally not received at the site. Any C&D received is segregated, loaded and hauled to an FDER approved disposal site.

No hazardous waste is accepted at the facility.

The facility processes, on average, about 60 tons of solid waste a day. While the resource recovery facility has a much greater capacity, to produce the quality of compost desired, the existing composting facilities are well suited for this process volume.

#### 1.53 Waste Components

Based on information provided by AMERICYCLE, approximately 70% of the solid waste which enters the facility is eventually recycled. Of this 70%, approximately 10% of the incoming waste being is being sorted out and sold directly to recyclers and approximately 60% is shredded, allowed to compost and is ultimately sold. The remaining 30% is hauled to an approved FDER facility for disposal.

The Sumter County Solid Waste Facility also contains a permitted, lined, Class I solid waste cell. Currently this cell is not in use for Class I solid waste, but is being utilized for storage of shredded MSW prior to being composted. It is the county's intent that this area is to also be used for temporary contingency measures should the primary solid waste system for some reason be interrupted.

#### 1.6 Permit Applications

Permit applications are being submitted to FDER as required to continue to operate the Sumter County Solid Waste Management Facility. The permits required were specified in a response letter from FDER to Springstead Engineering, Inc., dated February 20, 1992.

This document is structured so that the required permits, as numbered in the above referenced letter, coincide with the report section relating to the information requested in the permit. Because some of the permits request identical information, a compilation of Appendices has been included which contains the requested items.

The report section number and letter permit request correlation pertains to all required permits with exception of Number 1, the construction permit for the proposed expansion of the composting Sumter County is currently working to expand the facilities. facility. At this time the proposed expansion and funding is being Materials and plans are being developed which will be submitted to FDER for conceptual review. The proposed time frame for these improvements to be constructed and operational anticipated to be fiscal year 1994-95.

The permit application for the operation of the composting facility which will replace the related modification of permit SC60-132071 which expires June 1, 1992 is presented in Section 2.0 of this The necessary permit information is presented on the application as well as in the report. The numbered information presented in the report corresponds to the question number designated in the permit application. The operation permit application includes all existing composting facilities, even though the north and south pads are not currently in use (See Section 3.0).

Section 3.0 is the application for a permit to construct a leachate treatment system for the resource recovery and composting facility. It is important that this application be permitted immediately in order to provide full pad utilization as explained in the Section

1.1. As explained in Section 3.0, since there is no formal application specifically for construction of a leachate treatment

system, an application to construct a domestic treatment system was utilized at the suggestion of FDER.

Section 4.0 presents the application for a permit to operate the existing resource recovery facilities used for segregating and shredding waste. Section 5.0 consists of the necessary information required in applying for general permit for storing waste tires.

Section 6.0 is the application for a long term care permit for the closed Class I landfill to replace permit SF60-146475. This permit addresses the continued groundwater monitoring and landfill maintenance. In addition, it is designed to identify findings or problems from the past monitoring and recommend changes or improvements which might be necessary.

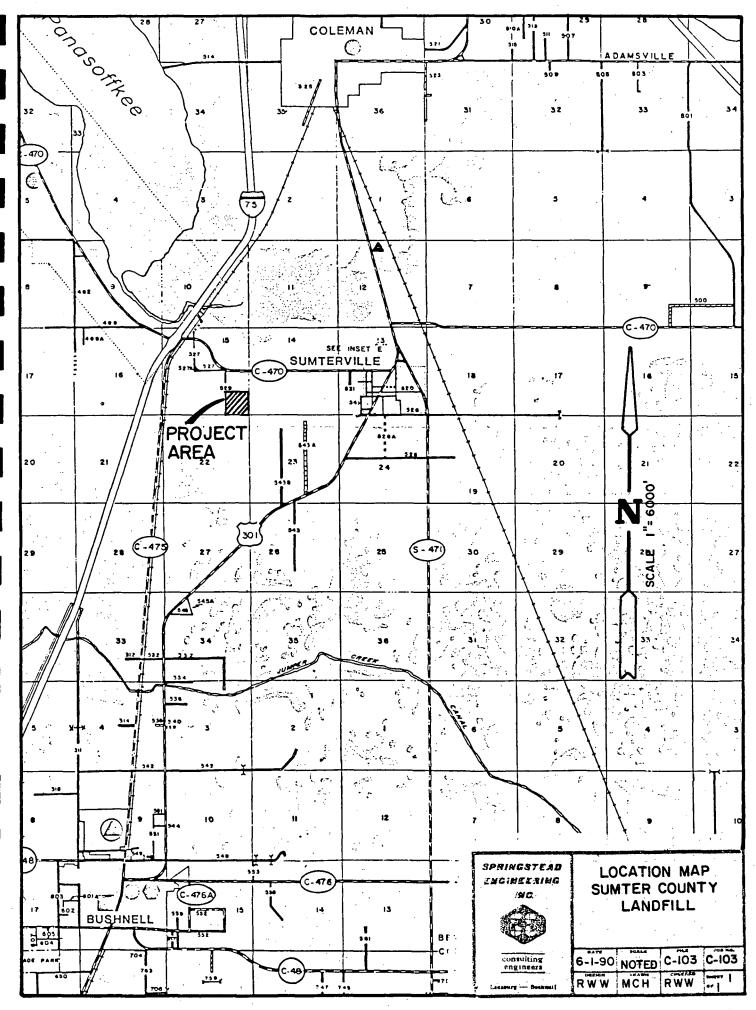
#### 1.7 LINED CLASS I CELL

At this time, the Class I Solid Waste Cell contains waste which has been sorted and milled and is ready to be placed on the composting pad. The waste has not been placed on a pad because of an agreement between Sumter County and FDER that the two new composting pads not be put into service prior to a leachate treatment system being in place.

Presented in Section 3.0 of this report is the permit application to construct a leachate treatment facility for the three composting pads. Upon the permitting and construction of the system and the subsequent activation of the two nonoperating pads, the waste in the cell will be removed and composted. Due to the present lower-

than-average intake of waste at the facility, it is anticipated that the cell can be emptied in a timely manner. This is the primary plan for the removal of waste from the cell. In addition, when Sumter County gets the site permitted and begins the work on the adjacent property to the south, the planned additional composting pad will be used initially to expedite the emptying of the cell.

In the event that there is a delay in completing the treatment facility, or that improvements on the adjacent site do not occur, Sumter County will remove the material from the cell and have it hauled to other FDER approved facilities for disposal. The removal and hauling to other facilities is Sumter County's least desirable solution for emptying the cell and will not be considered until all other options have been exhausted.



# **SECTION 2**

# APPLICATION FOR PERMIT TO OPERATE COMPOSTING FACILITY

PREPARED FOR



BOARD OF COUNTY COMMISSIONERS DEPARTMENT OF PUBLIC WORKS 222 EAST McCOLLUM AVENUE BUSHNELL, FLORIDA 33513

#### PREPARED BY



**LEESBURG, FLORIDA** 

MARCH 30, 1992

92-1100.00



#### Florida Department of Environmental Regulation

Twin Towers Office Bldg. ● 2000 Blair Stone Road ● Tallahassee, Florida 32399-2400

DER Form #_ 17-709.900(1)	1785
Ap for a Permit to Construct : Form Title A Solid Weste Man Fec. for t	Operate he Prod of Composi
Effective Dass Provember 21, 1898	
DER Application No	ny DERI

# Application for a Permit to Construct Operate A Solid Waste Management Facility for the Production of Compost

#### General Requirements

Solid Waste Management Facilities for the production of compost shall be permitted pursuant to Section 403.707, Florida Statutes, and in accordance with Rule 17-709. Florida Administrative Code. 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.

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	1. á	a.	Facility Name:	Sumter (	County La	andfill						
	i	b.	Facility Location	n (main entra	nce): App	roximate]	Ly 1 mile	e east of	I-75 on	C.R. 47	0	
		٠	Section 15	, Township _	<u>205</u> , Ran	ge <u>22E</u> Sumter (	Latitude County Bo	28 • <u>28</u> • <u>2</u> 0	24 30N County Co	." Longitu mmission	de <u>82</u> °_	05 · 20W "
	2. :	a.	Applicant Nami	e (operating	authority):	Departme	ent of Pi	blic Wor	ks.	<del> </del>	<del></del>	<del></del>
	•	b.	Address:22	2 East Mc	Collum A	Avenue, E	Bushnell.	, Florida	ı. 33513		1-1 a	ila grit.
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		b.	Address:			Same as		ıt				
	5.	Es	stimated Cost of	Construction		N/A		<del></del>	City		State	Zip Code
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Effective Deta	
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# Required Attachments for Construction/Operation Permit for a Solid Waste Management Facility Producing Compost

	•
General	Completeness
Permit application and supporting information shall include the following (17-709:310(2), F.A.C.):	<u>Check</u>
1. A letter of transmittal to the Department;	닐
2. A table of contents listing the main section of the application	닏
3. The permit fee specified in Florida Administrative Code Rule 17-4.05 in check or money order payable to the Department	; <u> </u>
4. Six copies, at minimum, of the completed application form, all supporting data, and reports;	
5. Engineer seel:	
6. Engineer's letter of appointment if applicable;	
<ol> <li>Copy of any lease agreement, or any other agreement between operator and property owner by which the closing of the facility may be affected; and</li> </ol>	•
8. Proof of publication of notice of application for the proposed activity in a newspaper of general circulation.	11
	7
Specific Attachment Item	
The following information items must be included in the application. Please explain if they are not applicable.	
NOTE: For facilities that have been satisfactorily constructed in accordance with their construction permit, the information have to be resubmitted for an operation permit if the information has not changed during the construction period	n required does not 1.
1. Facility Design (17-709.500, F.A.C.):	*X
NOTE: All maps, plan sheets, drawings, or aerial photographs shall be legible; be signed and sealed by the registered presponsible for their preparation; be of appropriate scale to show clearly all required details; be numbered, reference have a legend of symbols used, contain horizontal and vertical scales (where applicable), and specify drafting or of use uniform scales as much as possible, contain a north arrow, and use NGVD for all elevations.	ed to narrative, med
a. A map or aenal photograph of the area, no more than 1 year old, unless not substantially changed from older map photograph, showing land use and zoning within 1 mile of the facility (17-709.500(2)(a), FA.C.)	
b. Site Plan (17-709-500(2)(b), F.A.C.)	~ ♠△
NOTE: The site plan shall be on a scale not greater than 200 feet to the inch showing the following	######################################
(1) Dimensions of the site	
(2) Plan for receiving, processing, production, curing (if any) and storage areas	XX
. (3) Fencing or other measures to restrict access	<b>XX</b> )
c. Topographic Maps (17-709-500(2)(c), FAC)	
NOTE: The topographic maps, which may be combined with the plot plan (item 1b), on a scale not greater than 200 feet the following:	to the inch showing
(1) Five foot contour intervals	
(2) Access roads	
(3) Grades required for proper drainage	¥
(4) Special drainage devices	<u>M</u>
(5) Other pertinent information based on intended use of facility	<u> </u>
d. Report (17-709.500(2)(d), F.A.C.)	X
(1) Designed capacity of the proposed facility	<b>*</b>
(2) Anticipated type and source of solid waste	¥
(3) Any additives to be used in the production of compost	<u> </u>

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#### 2 Facility Performance and Design Standards (17-709.500, F.A.C.)

- a. Support for operation (17-709500(1), FA.C.)
  - (1) Material type (soil, synthetic, other)
  - (2) Adequate base support
- b. Leachate control and removal system performance (17-709.500(6), F.A.C.)
  - (1) Construction materials
  - (2) Strength and thickness
  - (3) Measures to prevent clogging
  - (4) Central collection point for reuse, or treatment and disposal
  - (5) Equivalency to design standards
- c. Stormwater management system performance (17-709-500(3), F.A.C.)
  - (1) Prevention of surface water flowing onto receiving, processing, and curing (if any) areas
  - (2) Stormwater run-off controls; retention, detention ponds
  - (3) Equivalency to design standards
  - (4) Design to minimize ponding of solid waste, composting material and finished compost
  - (5) Water management district approval

#### 3. Operational Features and Appurtenances (17-709:500(4), F.A.C.)

- Effective barrier
- b. All weather access road
- c. Signs indicating name of operating authority, traffic flow, hours of operation, contact in cases of emergencies and charges (if any)
- d. Scales
- e. Dust control method ....
- f. Litter control devices (if needed)
- g. Fire protection and control provisions
- h. Odor control devices, methods or practices

#### 4. Additional Operation Criteria (17-709.510(c), F.A.C.)

- a. Attendant
- b. Communication devices

#### 5. Operations Plan (17-709:500(5), F.A.C.)

- a. Designation of responsible person(s)
- b. Proposed equipment
- c. Contingency operations
- d. Controlling the type of waste received at the site;
- e. Weighing incoming waste
- f. Vehicle traffic control and unloading
- g. Method and sequence of processing the waste
- h. Operations of leachate, and stormwater controls
- i. Designation of backup disposal site(s)

#### 6. Water Quality Standards (17-709.500(3) & (6)(c), F.A.C.)

Describe how surface runoff and leachate will be handled to meet water quality standards of Florida Administrative Code Rules 17-3 and 17-4

7. Compost Facility Data Form

8. Certification by Applicant and Engineer or Public Officer

Page 2 of 6

DER Form 6	17-709.900(1)
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Ellectro Dat	November 21, 1989
DER Applica	pion No.
	(Find in by DER)

# Compost Facility Data Form

Permit No.: SC60-132071	Issue Date: 7/10/1987	Expires> 6/1/1992
	50C00092	
acinty 14d (DEI) localismosty.		
DER Action: Add Delete	Change Deactivate Site Other	
1. County	2. Facility Name	
Sumter	Sumter County Solid Waste M	anagement Facility
3. Date Form Completed	4. Facility Address	
3/27/1992	West C.R. 470	
4a. Facility Phone Number	4b. Facility Site Supervisor	
(904) 793-3368	Ric Cray (Amerecycle)	
5. Facility Type		
XX Composting In-vessel	Static Pile XX Windrow Other Describe	<u></u>
6 Month/Year Begun	7-Area within Site Boundary	8. Area within Property Boundary
10/1988	30 Acres	30 Acres
9. Security to Prevent Unauthorized Use	XX Yes No	10. Weighing Scales XX Yes No
<ul><li>11. Waste Processed Per Operational Day</li><li>12. Maximum Processing Rate 25</li></ul>	60 tons	
	14. Days Operated	15. Hours/Day Operated 8.0
	Industrial Agricultural Septic Tank	Sludge XX Yard Trash Sewage Sludge
17. Leachate Recycled XX Yes	No See Applicate	<u> </u>
17b. Discharges to: Surface Waters	Underground G-II	Nater 176. Class Recording Water ground water 126-12 Sept. 1997.
18. Final Residue is	18a. Residue is dispos	ned of at (arte name)
30	% of weste intake FDER site	
19. Surface Runoff Collected XXYes \( \bigcup \)	19a. Type of Runoff Treatment Leachate & Stormwater	19b. Class of Receiving Waters G-II
20 Number of Staff Varies	21. Attendant XX Yes No	
22. Name and Title of Person Completing	Form	
John W. Springstead, P.E	Consultant	
Alexander All All		

DER Form # 17-709-900(1)	:
Ap. for a Permit to Construct, Operate Form Tibe A Solid Wasse Man Fec. for the Prod. of Composi-	
Effective O <sub>660</sub> November 21, 1986	1
DER Apprecanon No	
(Find in the cells	٠

### Certification by Applicant and Engineer or Public Officer

A. Applicant					
	t or authorized representative	the Sumter	County Board	of County Com	nissionere
is aware that statements made					
Facility for the Pro					
the information in this application with the provisions of Chapter 4 and, the Department will be no	403, Florida Statutes, and all ru	ules and regulations of	the Department. It is		
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			Signa	ature of Applicant or A	gent
		F	Tom Dixon, Ch	airman. Board	of Sumter Count
		<del>-</del>	- HEC 12 - 21/2 - 12/2	Name and Title	Commissioners
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#### SPECIFIC ATTACHMENT ITEM

- 1. FACILITY DESIGN
  - a. Zoning Map

A recently revised map of the area showing use and zoning within one (1) mile of facility is presented in Appendix A.

- b. Site Plan
  - A site plan presented in Appendix B shows the following:
  - (1) Dimensions of site;
  - (2) Plan for receiving, processing, production curing and storage areas;
  - (3) Fencing or other measures to restrict access.
- c. Topographic maps
  - A topographic map prepared from a recent aerial photograph was prepared and is enclosed in Appendix
  - C. The topographic map shows the following:
  - (1) One (1) foot contour intervals;
  - (2) Access roads; (2) Access roads;
  - (3) Grades required for proper drainage;
  - (4) Special drainage devices: Grand-On-Vacos
  - (5) Other pertinent information based on intended use of the facility:
- d. Report
  - (1) Design capacity of the facility

    The design capacity of the facility is sixty

    (60) tons per day.

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(2) Anticipated type and source of solid waste
Sumter County contracted with TIA Solid Waste
Management Consultants to conduct a study of
the composition of the county's municipal
solid waste. The results of the study were
submitted to the Sumter County Board of County
Commissioners in a report titled <u>Sumter County</u>
Waste Composition Study - January 1991

Table 3-5 of the above report identified the types and percentages of waste as follows:

	- · · · - · · · · · · · · · · · · · · ·	
1.	Newsprint	7.9
2.	Fine Paper	4.2
3.	Misc. Paper	9.0
4.	Corrugated	8.7
5.	Plastic Film	4.4
6.	Plastic (PET)	0.8
7.	Plastic (HDPE)	0.5
8.	Plastic (BOT)	1.4
9.	Plastic (Other)	3.8
10.	Textiles	1.5
11.	Yard Waste	13.8
12.	Food Waste	5.4
13.	Wood Lumber	0.5
14.	Glass	4.1
15.	Rubber	0.4
16.	Steel Cans	3.1

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17.	Other Ferrous	0.5
18.	Non-Ferrous (Aluminum)	0.5
19.	OBW	0.0
20.	Construction	15.6
21.	Sweepings	0.0
22.	Other	14.0

Also, footnote 3 in Table 3-5 indicate the source of waste as follows:

1.	Residential	54%
2.	Commercial / Industrial	43%
3.	Institutional	3%.

(3) Any additives to be used in the production of compost

The only additive is <u>B.D. Compost Starter</u>
manufactured by the Pfeiffer Foundation, Inc.,
Spring Valley, New York. Sumter County has
been assured that there are no pathogens in
the compost starter and that it is considered
innocuous. Refer to the letter enclosed in
Appendix D.

#### . FACILITY PERFORMANCE AND DESIGN STANDARDS

- a. Support for Operation
  - (1) Material Type (soil, synthetic, other)
    The composting pads are constructed of asphalt.

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#### (2) Adequate base support

The underlying materials provide adequate base support at locations built on undisturbed soils. Portions of the facility built upon former fill areas require periodic grade adjustments to maintain proper drainage.

- b. Leachate control and removal system performance See attached application for permit to construct leachate treatment facility.
- c. Stormwater management system performance
  - (1) Prevention of surface water flowing into receiving, processing and curing areas Controls are in place to prevent surface water from flowing onto the composting pads.
  - (2) Stormwater run-off control; retention, detention ponds
    Stormwater run-off at the site is collected and directed to the retention area located in the northeast corner of the thirty (3) acresite.
  - (3) Equivalency to design standards

    The facility is operating under an approved

    Southwest Florida Water Management District

    Management of Surface Water Permit.

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- (4) Design to minimize ponding of solid waste, composting material and finished product
  Surface of the composting areas are sloped such that surface flow on the composting pads is directed to the leachate ponds. Composting pads constructed on former fill areas may require periodic grad adjustments to prevent ponding.
- A General Management of Surface Water Permit No. 402092.03 was granted Composting Facility Site Improvements on June 13, 1991. The expiration date of this permit is June 13, 1994. A copy of the permit is enclosed in Appendix E.

#### 3. OPERATIONAL FEATURES AND APPURTENANCES

a. Effective barrier

The entire solid waste complex is surrounded by fencing, with entry being controlled by locking gates. See the Site Plan enclosed in Appendix B.

b. All weather access road

Roads that provide access between public roads or highways and the Sumter County Landfill are maintained so as to be passable in ordinary inclement weather. It is necessary that patron be able to enter the site and dispose of solid waste in all sorts of weather. The access road between C.R. 470

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is paved with asphaltic concrete. See Photograph No. 1 in Appendix F.

c. Signs indicating name of operating authority, traffic flow, hours of operation, contact in cases of emergencies and charges (if any)

A sign indicating the name of the facility and operator is located on C.R. 470 and is shown in Photograph No. 2. Numerous instructional signs pertaining to traffic flow are erected at the facility. Photograph No. 3 shows the signs visible to patrons approaching the scales. Photograph No. 4 shows signs visible on approach the building housing the resource recovery facility. Photograph No. 5 shows signs directing traffic back to the scales and out of the facility. Photograph No. 6 shows the signs on the locking gate to the facility indicating the hours of daily operation, indicating that the facility is closed on Sundays, That solid waste transported from outside Sumter County is not waste transported from the Sumter County is not waste transported permitted and that Hazardous materials are accept ed. Photograph No. 7 shows the sign located at the size deep scale house indicating the solid waste rate sched ule.

#### d. Scales

Weigh scales are provided at the entrance to the solid waste complex. Measurement of all refuse received at the facility provides data for planning,

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forecasting and a basis for establishment of fees. Photograph No. 8 shows the inside of the scale house.

#### e. Dust control method

Due to recycling of leachate, dust is not expected to be a problem at the facility. However, suitable measures will be taken whenever dust is a problem. Excessive dust slows operations, creates accident hazards and esthetic problems and may cause eye irritation or other injury and health problems to personnel. See Photograph No. 9.

#### f. Litter control devices

Blowing litter at the resource recovery / volume reduction facility is a problem; however, blowing litter is a problem when the entire solid waste complex is considered. Blowing litter is controlled by fencing. The solid waste complex is regularly policed to minimize the scattering of litter.

#### g. Fire protection and control provisions

Suitable measures will be taken to prevent and control fires. Fires endanger life and property. Smoke and odors create nuisances to surrounding property owners, cause air pollution, endanger disposal personnel and interfere with operations. An adequate supply of water under pressure is available in the facility. Suitable fire extingu-

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ishers, maintained in working order, are located at several strategic locations in and around the facility. The Lake Panasoffkee (telephone (904) 793-2621) is located approximately three (3) miles distant. A volume gun is used in the leachate recycling and may be used for fire fighting.

There will be odors in the vicinity of the solid waste. Some people will find them objectionable.

There is no realistic method of preventing the odors in the areas near the solid waste. Proper operation of all aspects of the solid waste management facility of which the composting facility is part will minimize odors.

#### 4. ADDITIONAL OPERATIONAL CRITERIA

#### a. Attendant

An attendant is on duty during operating hours at the scale house and is shown in Photograph No. 10.

Tipping floor personnel are on duty during operating hours to help with unloading operations and inspect the solid waste stream.

Communication devices devices devices communication is provided at the facility by telephones, two-way radios, direct voice communication and hand signals.

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#### 5. OPERATIONS PLAN

- a. Designation of responsible persons
  Mr. Garry Breeden, Director of Public Works
  222 East McCollom Avenue
  Bushnell, Florida 33513
- b. Proposed equipment
  Milled material is mixed, turned and placed in windrows by a Scarab. A Scarab is a self-propelled machine specially designed to accomplish this procedure. The Scarab presently located at the Sumter County Landfill (a solid waste management

facility) is shown in Photograph No. 11.

- c. Contingency operations

  The solid waste management facility is owned by

  Sumter County. The county can utilize equipment

  and personnel resources in the event of an emergen
  cy, such as fire or equipment failure.
- Other than lead batteries, and used motor oil, sumter County does not accept hazardous waste. It was to recognize that items may be included in the waste stream that should not be processed through the facility. There is no feasible way to prevent the introduction of these materials into the facility. After segregation, bins are provided for storage of items until proper disposal is accomplished. Sumter County will remove or not accept

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easily identifiable hazardous waste. Personnel are to read and become familiar with the Hazardous Waste Information for Sumter County Landfill Operations Personnel supplement in Sumter County Solid Waste Facility Operational Guidelines (November 3, 1988). A copy of the supplement is enclosed in Appendix G.

Incoming solid waste will be inspected at four points as follows:

- The attendant at the scale house looks at all incoming waste loads. The scale house attendant takes the following actions in the event that hazardous waste is identified:
  - a. Tells the person hauling the waste that the waste is hazardous and that it will not be accepted by the facility;
  - facility with the hauler.
- the scale house attendant of the presence of hazardous waste. The notified personnel will observe the dumping of the load and insure that the hazardous waste is not dumped. Tipping floor personnel will

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insure that the hazardous waste is on the vehicle when it leaves the tipping floor and insure that the vehicle precedes directly to the scale house.

- 3. The scale house attendant will insure that the hazardous waste is on the vehicle when it leaves the site.
- The attendant responsible for inspecting 4. solid waste as it leaves the dumping pit on the conveyor belt will visually inspect for hazardous waste. If the source of the hazardous waste can be identified. responsible parties will be notified and required to remove the hazardous waste from the facility. If the source of the hazardous waste cannot be identified, it will be separated and placed in bins and minimum located inside the building. Sumter and the building. County will contract with a commercial was the enterprise to provide pickup and removal of any hazardous waste within 72 hours or transport the material tot a chazardous waste disposal facility.

A tank located inside the facility is provided for the collection of used motor oil. Pickup of the used motor oil is done by National Oil Company, 105 South Alexander Street, Plant City, Florida 33566.

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Photograph No. 12 shows the tank used for used oil collection.

Lead batteries are palletized for collection by All American Recycling, P.O. Box 1556, Ocala, Florida 32678. Photograph No. 13 shows the lead batteries stored on pallets for pickup.

#### e. Weighing incoming waste

Provisions exist for measuring all solid waste delivered to the facility for processing. Weigh scales are provided. Measurement of all refuse received at the facility provides data for planning, forecasting and a basis for establishment of fees.

#### f. Vehicle traffic control and unloading

Signs direct commercial and non-commercial patrons to the proper entrances to the facility. Photograph No. 4 shows the sign directing commercial hauler to the north end of the building. Also, a sign is shown directing haulers of construction debris, white goods and stumps to the proper location. Assistance is provided for unloading due to the ongoing inspections of the solid waste stream at the facility.

g. Method and sequence of processing waste

The milled material from the volume reduction facility is either temporarily stored or placed on

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the composting pads. The composting procedure is started by injecting B.D Compost Starter during the initial turning, mixing and placement of the milled material into windrows.

- h. Operations of leachate and stormwater controls

  See the attached Application for Permit to Construct a Leachate Treatment Facility.
- i. Designation of backup disposal site(s)

  Backup disposal sites include, but is not limited
  to, the Lake County Incinerator, located in Okahumpka, Florida.
- 6. WATER QUALITY STANDARDS

  See the attached Application for Permit to Construct a

  Leachate Treatment Facility.
- 7. COMPOST FACILITY DATA FORM Completed Facility Data Form is page 4 of 5 of the application for permit.
- 8. CERTIFICATION BY APPLICANT AND ENGINEER OR PUBLIC OFFICIAL

  Certifications by Applicant and Engineer or Public Officer is page 5 of 5 of the application for permit.

## **SECTION 3**

# APPLICATION FOR PERMIT TO CONSTRUCT LEACHATE TREATMENT FACILITY

PREPARED FOR



BOARD OF COUNTY COMMISSIONERS DEPARTMENT OF PUBLIC WORKS 222 EAST McCOLLUM AVENUE BUSHNELL, FLORIDA 33513

#### **PREPARED BY**



LEESBURG, FLORIDA

MARCH 30, 1992

92-1100.00

### 3.0 APPLICATION FOR A CONSTRUCTION PERMIT FOR PROPOSED LEACHATE TREATMENT FACILITY

#### 3.1 General

This application is for the permitting of the design and construction of a leachate treatment system which will function in conjunction with the existing composting operations at the Sumter County Solid Waste Facility. As shown in other sections of this report, the site currently has three (3) composting pads with a leachate collection system for each pad. The pads and ponds are generally located at the north, center and south of the existing facility. The center pad was the initial facility constructed in 1986 with the north and south pads being added in 1991.

The composting pads are not covered, consequently leading to precipitation contacting the pad and compost. Regulations require that precipitation contacting the pad and/or compost be treated as leachate. The leachate collection ponds were designed to hold a total volume equal to the volume of a 100-year, 24-hour storm over the entire compost pad leachate pond area (10.7 inches of rain times the total pad/pond area). Presently, only the center composting pad and pond are in use as a result of leachate build-up in the pond.

#### 3.2 Background

Upon initially constructing the center composting pad, a low volume pilot treatment plant for treating and disposing the leachate was permitted by FDER for a period of 1-year. Before the results of the pilot operation were verified, the test plant was taken off line and replaced with a system which could treat a larger volume of leachate in order to empty the leachate pond.

Sumter County Solid Waste Management Facility March 30, 1992
The larger system combined micron filtration, ozonation, activated carbon adsorption and ultraviolet sterilization for the treatment of the leachate. Subsequent 0 & M problems significantly reduced the systems treatment capacity resulting in the search for an alternate treatment system which would be able to treat the leachate generated by the 3 composting pads. Because such a treatment system is not currently in place, Sumter County and FDER have agreed not to operate the north and south compost pads.

#### 3.3 Proposed System for Leachate Treatment

The proposed system for the leachate treatment incorporates two commonly used methods for leachate treatment. The system is designed to treat the total volume of leachate which would be produced during a 100-year, 24-hour storm in the required time period of three weeks. The treatment would be performed using the processes of reapplication of the leachate to the composting pads and through an extended aeration package sewage treatment plant.

The reapplication treatment will incorporate a new flow equalization basin which will collect leachate pumped from the 3 ponds associated with the compost pads. The leachate will be pumped back to the composting pads through a distribution system designed to regulate the location of the reapplication. That is, the piping will have valves which can be operated to direct the leachate to pads or areas of pads which may require moisture or to prevent the spraying of leachate on compost which is being harvested.

In conjunction with the reapplication, an extended aeration sewage treatment plant will also collect leachate from the flow equalization basin and perform treatment to meet the requirements

Sumter County Solid Waste Management Facility March 30, 1992 set forth by FDER for treated leachate. The treatment plant will be sized to handle a maximum capacity of 100,000 gallons per day which will satisfy the 3 week criteria.

The effluent consisting of treated stormwater-leachate will be routed as stormwater to the existing stormwater retention area for percolation into the ground.

A schematic diagram showing the piping network, the associated pumps, the flow equalization basin and the sewage treatment plant locations are shown in Figure 3-1. A schematic of the treatment plant is presented in Figures 3-2 and 3-3.

The combination of treatment through reapplication, evaporation and treatment through the plant will provide sufficient capacity to treat the required volume of leachate from the three existing compost pads in the specified period of time.

According to representatives of FDER, there is no specific permit application to complete for the construction of a leachate treatment facility. It has been recommended that the guidelines of the permit application to construct a domestic wastewater facility be followed in order for a complete application be submitted, therefore, the following is the application permit for the leachate treatment system prepared using the format of DER Form 17-600.910(1).

Sumter County Solid Waste Management Facility March 30, 1992

APPLICATION FOR PERMIT TO CONSTRUCT A COMPOST LEACHATE TREATMENT FACILITY

#### PART II - General Information

1) Application Type:

Construction of a new treatment and disposal system

- 2) This application is for the modification of an existing Solid Waste Facility, GMS ID No: 4060C00092
- 3) Project/Facility name:

Sumter County Landfill - A Solid Waste Management Facility West CR 470
Sumterville 33585 Sumter County, Florida
Lat. 28-44-30 N Long. 82-05-20 W S 15 T 20S R 22E
Telephone No. 904-793-3368

4) Applicant/Responsible Authority:

Sumter County Commission - Department of Public Works Director - Mr. Garry Breedon 222 East McCollum Avenue Bushnell, Florida 33513 Telephone No. 904-793-0240

- 5) Applicant/Responsible Authority is a County (C)
- 6) General Project Description, reason needed, and relationship to existing facilities:

The project consists of the design and construction of a leachate treatment system for an existing Class I resource recovery and composting facility. The leachate treatment system is needed to treat the stormwater-leachate which accumulates in the compost leachate collection ponds after a rainfall in the required time period. The treatment system will be designed to treat and dispose of leachate collected in the existing ponds.

7) Anticipated Start of Construction:

Upon receipt of permit and bidding of project; Projected 9/92

Sumter County Solid Waste Management Facility March 30, 1992

8) Current DER permits include:

Permit No: Type: Issued: Expires:

SC60-132071 Volume Reduction, 7/10/87 6/1/92

Composting, and Class I

Landfill

SF60-146475 Class I Landfill Closure 7/1/88 6/1/92
9) Effluent disposal system will consist of discharge to on-site stormwater percolation pond

10) Reclaimed water is not produced by this facility

#### PART III - Treatment System Data

1) Treatment Facility name:

Sumter County Landfill - A Solid Waste Management Facility

2) Location:

West CR 470
Sumterville 33585 Sumter County, Florida
Lat. 28-44-30 N Long. 82-05-20 W S 15 T 20S R 22E
Telephone No. 904-793-3368

- 3) The treatment system does not serve an area in a county regulated by the Public Service Commission.
- 4) Design Capacity:

Current permitted capacity = 0.0 mgdProposed design capacity = 0.1 mgdTotal design capacity = 0.1 mgd

Basis of design flow:

Flow required to meet FDER's time requirement for emptying leachate ponds.

5) Treatment level to be provided: (As per specific condition No.43 in current FDER Operating Permit)

PARAMETER	CONCENTRATION	UNIT
Flow	-	gpd
рН	6.5 - 8.5	std. units
SS	20	mg/L
BOD <sub>5</sub>	20	mg/L
COD	Acceptable BOD <sub>5</sub> : COD ratio	-
Nitrate as N	12	mg/L
Fecal Coliform	N.D.	#/100 ml

- 6) Disinfection Level: Low level
- 7) pH range: 6.5 minimum to 8.5 maximum
- 8) Class of reliability provided:
- 9) Residual disposal will consist of remixing residuals with curing compost.

#### Part IV - Reuse/Disposal System Data

- A. Discharge to surface waters: Not applicable to this project
- B. Discharge to surface waters-wetlands: Not applicable to this project
- C. Discharge to surface waters-ocean outfall: Not applicable to this project
- D. Reuse of reclaimed water and land application: Not applicable to this project
- E. Ground water disposal by underground injection: Not applicable to this project

- F. 1.) Effluent disposal will consist of groundwater disposal through a stormwater retention area located on-site. The effluent will flow through a swale around the closed Class I landfill and into the water retention area located at the northeast corner of the site.
  - 2.) Lat. 28-44-30 N; Long. 82-05-20 W; S 15 T 20S R 22E
  - 3.) Design Flow:

Current permitted capacity = 0.0 mgdProposed design capacity = 0.1 mgdTotal design capacity = 0.1 mgd

Basis of design flow:

Flow required to meet FDER's time requirement for emptying the existing leachate ponds.

G. Total reuse/disposal capacity:

Current permitted capacity = 0.0 mgdProposed design capacity = 0.1 mgdTotal design capacity = 0.1 mgd

Note: Recycling of leachate to compost pads will occur simultaneously with STP treatment; volume of treated

effluent will be reduced by volume lost to evaporation during recycling.

- H. Antidegradation requirements:
  - 1.) This project does not include a new surface water discharge.
  - 2.) This project does not include an expansion of an existing surface water discharge.

DER Form	17-800.910(1)
Form Tae_AD	to Construct a Domestic Westerness' Facility
Enecine Desc_	July 1, 1991
DER ADD-COLOR	NC (Feed in by DEA:

#### Part V - Certifications

A.	Applica	n

Loertify that the statements made in this application for a construction permit are true, correct and complete to the best of my knowledge and belief. I agree to retain the design engineer, or another professional engineer registered in Florida, to conduct on-site observation of construction, to prepare a certification of completion of construction, and to review record drawings for adequacy as referenced in Rule 17-600.730(4), F.A.C. Further, I agree to provide an appropriate operation and maintenance manual for the facilities pursuant to Rule 17-600.720, F.A.C., and to retain a professional engineer registered in Florida to examine (or to prepare if desired) the manual.

Date: 3-28-92

Signature of the Applicant

Tom Dixon, Chairman, Board of Sumter County Commissioners

B. Professional Engineer Registered in Florida (where required by Chapter 471, F.S.)

This is to certify that the engineering features of this construction project have been (designed) (examined) by me and found to conform to engineering principles applicable to such projects. In my professional judgment this facility, when properly constructed, operated and maintained, will comply with all applicable statutes/of the State of Fiorida and rules of the Department. I will provide the applicant with instructions for proper operation and maintained of the facility.

Name and Title (please type)

JOHN W. SPRINGSTEAD, P.E. 8579

Name (Please type) Florida Registration No.

SPRINGSTEAD ENGINEERING, INC.
Company Name

727 S. 14th STREET

Company Address
LEESBURG, FLORIDA 34748

Date: 3/30/92 Telephone No. (904) 787-1414

C. Professional Engineer Registered in Florida (where required by Chapter 471, F.S.) and if different from project design engineer in B.

I certify that this firm or individual has been retained by the applicant to prepare a certification of completion of construction and to review record drawings for adequacy as referenced in Rules 17-600.717 and 17-600.730(4), F.A.C.

Signature of Engineer

Name (Please type)

Florida Registration No.

Company Name

(Affix Seal)

Company Address

Date \_\_\_\_\_\_ Telephone No. (\_\_\_\_\_)

### **SECTION 4**

## APPLICATION FOR PERMIT TO OPERATE RESOURCE RECOVERY FACILITY

PREPARED FOR



BOARD OF COUNTY COMMISSIONERS DEPARTMENT OF PUBLIC WORKS 222 EAST McCOLLUM AVENUE BUSHNELL, FLORIDA 33513

**PREPARED BY** 



LEESBURG, FLORIDA

MARCH 30, 1992

92-1100.00

#### STATE OF FLORIDA

### DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING 2600 BLAIR STONE ROAD TALLAHASSEE, FLORIDA 32301-8241

DER FORM 17-7.130(1) Effective 12/10/85



BOR GRAHAM VICTORIA J TSCHINKEL SECRETARY

Page 1 of 10

APPLICATION FOR PERMIT TO KX

### 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 informations and the statute of the s 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 XX v Anne. Proposed

Sanitary Landfill:  XX Class I,  Class II,  Class III: Trash/yerd Trash  Class III: Yard Trash Compostin	Volume Reduction: Composting XX Shredder Incinerator/Trench Resource Recovery: EnergyXX Materia	Septage/	l .	
FACILITY NAME: Sumter County Solid	Waste Management Fa	cility /4	060C00092 DER ID Number	<del></del>
FACILITY LOCATION (main entrance): Appro	ximately 1 mile eas	t of I-75 on C.		totalista (j. 1825.) 1888. – Johann Marier, primarija (j. 1888.)
S 15 , T 20S , R 22E township trange	/Latitude 28 • 44	30N Longitude	82 05 20W	
Applicant Name (operating authority)				
Street Address & P. O. Box: 222 East M		hnell Sumter C		<del>-</del>
	den, Director of Pu	City Count blic Works (904	:y Zip ): 793–0240	doring with
Name Springstea	d Engineering Without	Phone Number	· .	the market
Authorized Agent/Consultant: Springstea				
Contact Person: John W. Springstead	Street P.	TS ± 17 → 25 Total (904	) 787-1414 Phone Number	<u>्</u> त्री भूषात्र
Leesburg, Lake County, Florida			THE HOMEST	
	·	te	Zip	<del></del>
Landowner (if different than applicant):	Same as applicant	·	<del></del>	
Address of Landowner: Street, P. O.	Same as applicant Box City	State	Zip	_
Cities, Towns and Areas to be Served: Sum		·		<del></del>
Current and Projected Population to Served	1990 - pop. 31,57	7, 2000 - est.	pop. 38,400	<del></del>
Acres within Waste Site Boundary: 30	Acres within	Property Boundary: _	30	
Protei	cting Florida and Your Qualit	y of Life		

Volume of Solid Waste to be received:	60	xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx	ъке/вку	
Date Site Ready to Received Solid Waster	10/1988	Estimated Life of Facility _	50+ years	3
Estimated Cost of Construction, Total: \$	N/A	Estimated cost of Closing: \$	N/A	
Anticipated Construction Starting and Comparing $N/A$ To:	oletion Dates N/A			

DER FORM 17-7.130(1) Effective 12/10/85

D. - 0 - 6 10

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

Per	RAL nit application and supporting information shall include the following (17-7.030(2), F.A	.c.):
1.	A letter of transmittal to the Department; (17-7.030(3)(a) F.A.C.)	Check
2.		
3.	The permit fee specified in Florida Aministrative Code Rule 17-4.05 in check or money order payable to the Department: (17-7.030(3)(c), F.A.C.)	
4.	Six copies, at minimum, of the completed application form, all supporting data, and reports; (17-7.030(2), F.A.C.)	
5.	Engineer seal; (17-7.030(2)(d), F.A.C.)	
6.	Engineer's letter of appointment if applicable; (17-7.030(3)(e), F.A.C)	
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)	
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)	
SPE	CIFICATION ATTACHMENT ITEMS	
The	following information items must be included in the application or an explanation given they are not applicable.	
	Construction Permits:	· :
	A. Landfills - Submit items 1, 2, 3, 4, 5, 6, 7, 8, 10. 8. 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 Control type facilities does not have to be resubmitted for an operation permit if the information has not changed during the construction period.	enter british a
1.	A foundation analysis (17-7.050(2)(b); F.A.C.)	li est de la
2.	Evidence that the facility is in conformance with local-zoning (17-7.050(2) XX	en <b>e</b> genza en e
3.	Facility Design (17-7.050(3), F.A.C.:	
	NOTE: All maps, plan sheets, drawings, isometrics, cross-sections, or serial photogral legible; be signed and sealed by the registered professional engineer responsi preparation; be of appripriate scale to show clearly all required datails; be referenced to narrative, titled, have a legend of symbols used, contain horizo scales (where applicable), and specify drafting or origination dates; and use much as possible, contain a north arrow, and use NGVD for all elevations.	ble for their numbered, ntal and vertical

	(1/-/.000(3)(a), F.A.C.) XX
land use and zoning within 1 mile of the facility.  Plot Plan (17-7.050(3)(b), F.A.C.)	XX
NOTE: The plot plan on a scale not greater than 20 showing the following:	00 feet to the inch
(1) Dimensions and Lagal Description of the site	XX
(2) Location and depth (NGYD) of soil borings	XX
(3). Plan for trenching or disposal areas	<u> </u>
(4) Fencing or other measures to restrict access	XX
(5) Cross sections showing both original and props	sed fill elevations N/A
(6) Location, depth, and construction details of $\alpha$	
Topographic Mapa (17-7.050(3)(c), F.A.C.)	XX
NOTE: The topographic maps, which may be combined on a scale not greater than 200 feet to the	
(1) Five 6-44	e foot contours XX
(2) Proposed fill areas	$\overline{xx}$
(3) Borrow areas	N/A
(4) Access roads	XX
(5) Grades required for proper drainage	· XX
(6) Typical cross sections of disposal site includences and drainage controls	ing lifts, borrow N/A
(7) Special drainage devices	N/A
(8) Fencing	XX
(9) Equipment facilities	XX
(10) Other pertinent information based on intended t	Use of facility
Report (17-7.050(3)(d), F.A.C.)	
(1) Estimated population and area served by the pro- for the estimate	posed site with basis
	<u>XX</u>
(2) Anticipated type, annual quantity, and source of	
(3) Anticipated life of site	<u>XX</u>
(4) Source and characteristics of cover material	<u>N/</u> A
Ground Water Monitoring Plan (17-7.050(3)(e), F.A.C.)	
<ol> <li>Plan and hydrogeological survey, including foun in accordance with 17-4.245(6), 17-7.030, and 1</li> </ol>	N-1.000 F.A.C.; or $N/A$
(2) A copy of a Department letter of approval of a plan, if applicable.	

Leodfi	11 Peré	formance and Design Standards (17-7.050(4), F.A.C.)	Completeness Check
2.	Liner	performance (17-7.050(4)(a)(b), F.A.C.)	N/A
		Material type (soil, synthetic, other)	N/A
	(2)	Adequate base support	<u>N</u> /A
•	(3)	Planned installation adequate to cover all surrounding earth	<u>N/</u> A
	(4)	Equivalency to design standards	<u>N/</u> A
ь.	Liner	quality control plan (17-7.050(4)(c), F.A.C.)	N/A
•	(1)	Specifications	N/A
	(2)	Construction/installation methods	<u>N/</u> A
	(3)	Sampling and testing	N/A
	(4)	Manufacturer's specifications and recommendations	N/A
c.	Leach	ete control and removal system performance (17-7.050(4)(e), F.A.C.	<u>N/</u> A
	(1)	Construction materials	<u>N/</u> A
•	(2)	Strength and thickness	N/A
•. •.	(3)	Measures to prevent clogging	N/A
	(4)	Central collection point for treatment and disposal	N/A
	(5)	Leachate depth not to exceed one foot	N/A
	(6)	Equivalency to design standards	N/A
d.	Surfac	ce water management system performance (17-7.050(4)(g), F.A.C)	N/A
	(1)	Prevention of surface water flow onto weste-filled areas	N/A
	(2)	Stormwater run-off controls; retention, detention ponds	N/A
	(3)	Equivalency to design standards	N/A
	(4)	Water management district approval	N/A
٠.	Gas c	ontrol system performance (17-7.050(4)(i), F.A.C.)	<u>N/</u> A
	(1)	Prevention of methane migration	<u>N/</u> A
	(2)	Prevention of damage to vegetation and the transfer of the control	<u>N/</u> A
	(3)	Prevention of objectionable odors off site	<u> </u>
	(4)	Equivalency to design standards	<u>N/</u> A
. Operat	ions P	lan (17-7.050(5)(b),(c)(d) & (e), F.A.C.)	XX
٠.	Desig	nation of responsible person(s)	XX
<b>b.</b>	Conti	ngency operations	XX
c.	Contr	olling the type of waste received at the site:	XX

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

## SOLID WASTE VOLUME REDUCTION AND RESOURCE RECOVERY FACILITY DATA FORM

Permit No.:	C60-13207	7 <u>1</u>	ssue Date: _	7/10/1	987	_ Expires: _	6/1/1992	·
	•	4060	C00092					
Facility No. (DE	K Identificatio	)n):						<del></del>
DER ACTION:	□Add	☐ Delete	☐ Change	□ Dead	ctivate Site	☐ Other		
1. County	Sumter	· · · · · · · · · · · · · · · · · · ·	2. Site f	Name Sumt	er County	Solid Was	te Management	Facilit
3. Date Form (	37	/27/1992		ity Address	West C.R.	470	•	
4a, Facility Pho	ne No. (904)	793-3368	4b. Facil	ity Site Supe	rvisor Ric G	ray - Amer	ecycle	
5a. 28 44	30 N 82	0 ' '	* 15b	2,5		20S	221	 Е
Latitue	de	Longitude	-	Township		Range	Sect	tion
6. Operating A Sumter ( 7. Phone Num	Co. Brd. c	Dept. of of Co. Com 793-0240			222 East	McCollum	Avenue	
9. Owner of Si			Operator)	11	Busnnell  Address of O	<u>Florida</u> wner	77717	·
	operator		_ :	<u> </u>	Same as	operator ·		
12. Facility Typ Incinerat Sludge C Transfer	or Only oncentration	☐ Biom ☐ Baler	ass Gas Prod (compactor	·) v	Pyrolysis Composting Shredder (p	g Plant julverizer)	Other:	
13. Month/Year 10/19			14. Disposa N/A		Acres	,	ation Served - pop. 31,57	7 .
16. Expected U			17. Weighin X⊠ Yes				Processed Per Operat	ional Day
19. Charge/ to	on	\$35.00	20. Days Og SI M	perated T W T	F S	21. Hours 8.	/Day Operated 0	
22. Maximum P	rocessing Rate			hourXXXX	daX			
XX	Paper Ferrous Metals Aluminum	, , , , , , , , , , , , , , , , , , ,		lon-Ferrous Plastics		Other:		
	High Pressure S Low Pressure S Electricity-kw/	Steam-Ib/hr Steam-Ib/hr hr		hilled Water Dil-gal/hr	-gal/hr	Gas Cother:	-ft³/hr	
25. Process Wat		☐ Yes	□ No	Treatment N	fethod Used		and a second of the second	
Discharged  Surface	Waters X	Underground			G-II	Class Receiving	Water	·- <u>-</u>
26. Final Resid		% of waste int	ake	Residue is d	isposed of at (S	ite Name) FI	ER site	· · · · · · · · · · · · · · · · · · ·
27. Supplemen	tary Fuel Used	11/21		<u>:</u>		<del> </del>	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
Type	Jeanning Cont	N/A	ass. Perse		uantity Used/F	IV/A	No Contra	
28. Estimated (			30. State Pe	ollution Con ng Amount :		31. Estim	Net Cost/Ton S ated Amount of Tax	
32. Name and	Title of Person	Completing Fo	rm.Tohn t	J. Sprin	N/A	E., Consu	vill be Requested \$	N/A
	<del></del>		JOIM	· · obiriti	saceau, P.	E., Consu	rtant	

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

### CERTIFICATION BY APPLICANT AND ENGINEER OR PUBLIC OFFICER

The undersigned applicant or author	rized representative of Sumter Co. Brd. of Co. Com	nm .
is mware that statements made in this	form and attached information are an application for a	•
Solid Waste Resource Recover		
	Environmental Regulation and certifies that the	*
information in this application is tru	se, 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 re	egulations of the Department. It is understood that the	
Permit is not transferable, and, the D	Department will be notified prior to the sale or legal	•
transfer of the permitted facility.		*
		•
	- Comment of the comm	
	Signature of Applicant or Agent Tom Dixon, Chairman, Board of Sumter Count	. Commissioners
		y commissioners
	Name and little	
	Date:	
	Attach letter of authorization if agent is not a	
	governmental official, owner, or corporate officer.	
	•	
B. Professional Engineer Registered i	in Florids or Public Officer as Required in Section	
403.707 and 403.7075, Florida Statutas	The state of the s	
ر ما الله الله الله الله الله الله الله ا		
	The Market of the State of the Control of the Contr	lander og en skalender og en skalender og en
This is to certify that the engineering	ng features of this resource recovery and management	The state of the s
	by me and found to conform to engineering principals	and the second of the second o
	professional judgement, this facility, when properly	
	with all applicable statutes of the State of Florida and	
ruled We the Debartment It is some	that the undersigned will provide the applicant with a	•
fried hi * auga abbar Misure - ve to advoce	a cuer cue aucerorduse arri breates cue sphitchic arcu d	
ant and instruction of arones selected	more and operation of the famility	<u> </u>
set of instructions of proper maintens	ance and operation of the facility.	
set of instructions of proper maintens	ance and operation of the facility.	
set of instructions of proper saintens	ance and operation of the facility.	
set of instructions of proper saintens	727 South 14th Street	
set of instructions of proper saintens	727 South 14th Street	
Findly Hittim  John W. Springstead, P.E.	727 South 14th Street  Mailing Address Consultant Leesburg Florida 34748	
John W. Springstead, P.E.	727 South 14th Street  Mailing Address Consultant Leesburg Florida 34748	
John W. Springstead, P.E. Name and bille (please type)	727 South 14th Street  Mailing Address  Consultant Leesburg Florida 34748  (904) 787-1414	
John W. Springstead, P.E.  Name and bille (please type)  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	727 South 14th Street  Mailing Address Consultant Leesburg Florida 34748  (904) City, State, Zip Code (787-1414	Figure 1
John W. Springstead, P.E. Name and bitle (please type)	727 South 14th Street  Mailing Address  Consultant Leesburg Florida 34748  (904) 787-1414	Fological Action
John W. Springstead, P.E.  Name and title (please type)  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	727 South 14th Street  Mailing Address Consultant Leesburg Florida 34748  (904) City, State, Zip Code (787-1414	T PERSONAL STATE OF THE PERSON STATE OF THE PE
John W. Springstead, P.E.  Name and bille (please type)  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	727 South 14th Street  Mailing Address Consultant Leesburg Florida 34748  (904) City, State, Zip Code (787-1414	T. Federal Co.
John W. Springstead, P.E.  Name and bille (please type)  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	727 South 14th Street  Mailing Address Consultant Leesburg Florida 34748  (904) City, State, Zip Code (787-1414	Control of the second of the s
John W. Springstead, P.E.  Name and bille (please type)  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	727 South 14th Street  Mailing Address Consultant Leesburg Florida 34748  (904) City, State, Zip Code (787-1414	Table of the second sec
John W. Springstead, P.E.  Name and bille (please type)  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	727 South 14th Street  Mailing Address Consultant Leesburg Florida 34748  (904) City, State, Zip Code (787-1414	Following A.
John W. Springstead, P.E.  Name and bille (please type)  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	727 South 14th Street  Mailing Address Consultant Leesburg Florida 34748  (904) City, State, Zip Code (787-1414	E 222
John W. Springstead, P.E.  Name and bille (please type)  1. Springstead P.E.  Name and bille (please type)	727 South 14th Street  Mailing Address Consultant Leesburg Florida 34748  (904) City, State, Zip Code (787-1414	E Propies No. 1.
John W. Springstead, P.E.  Name and title (please type)  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	727 South 14th Street  Mailing Address Consultant Leesburg Florida 34748  (904) City, State, Zip Code (787-1414	T Pelephone Will.
John W. Springstead, P.E., Name and title (please type)  1. Algrida Registration Number  1. Algrida Registration Number	727 South 14th Street  Mailing Address Consultant Leesburg Florida 34748  (904) 787-1414  (905) 787-1414  This was a little of the facility.	Figure 1
John W. Sonaingstead, P.E., Name and citle (please type)  **Ligrada Registration Number  **If please affix seal)	727 South 14th Street  Mailing Address Consultant Leesburg Florida 34748  (904) 787-1414  (905) 787-1414  This was a little of the facility.	Pelophomy
John W. Springstead, P.E.  Name and bille (please type)  1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	727 South 14th Street  Mailing Address Consultant Leesburg Florida 34748  (904) 787-1414  (905) 787-1414  This was a little of the facility.	F-22000
John W. Sontangstead, P.E., Name and rettle (please type)  **Ligrada Registration Number  ### ### ############################	727 South 14th Street  Mailing Address Consultant Leesburg Florida 34748  (904) 787-1414  (905) 787-1414  This was a little of the facility.	
John W. Sonaingstead, P.E., Name and citle (please type)  **Ligrada Registration Number  **If please affix seal)	727 South 14th Street  Mailing Address Consultant Leesburg Florida 34748  (904) 787-1414  (905) 787-1414  This was a little of the facility.	Feedbann Will.
John W. Springstead, P.E.  Name and bille (please type)  1. Igrada Registration Number  1. Igrada Registration Number  1. Igrada Registration Number	727 South 14th Street  Mailing Address Consultant Leesburg Florida 34748  (904) 787-1414  (904) 787-1414  Telephone Number  This was a first and the facility.	
John W. Springstead, P.E.  Name and bille (please type)  1. Construction Cost Estimate:	727 South 14th Street  Mailing Address Consultant Leesburg Florida 34748  (904) 787-1414  (905) 787-1414  This was a little of the facility.	
John W. Springstead, P.E.  Name and bille (please type)  O	727 South 14th Street  Mailing Address Consultant Leesburg Florida 34748  (904) 787-1414  (904) 787-1414  Telephone Number  This was a first the facility.  Issue Date: 1880 Dat	
John W. Springstead, P.E.  Name and table (please type)  **Lorida Registration Number  **Lorida Registration Number	727 South 14th Street  Mailing Address Consultant Leesburg Florida 34748  (904) 787-1414  (904) 787-1414  Telephone Number  This was a first and the facility.	
John W. Springstead, P.E.  Name and title (please type)  Springstead, P.E.  Name and title (please type)  Springstead P.E.  Name and title (please type)  Springstead P.E.  Permit Number:	727 South 14th Street  Mailing Address Consultant Leesburg Florida 34748  (904) 787-1414  (904) 787-1414  Telephone Number  This was a first the facility.  Issue Date: 1880 Dat	
John W. Springstead, P.E.  John W. Springstead, P.E.  Name and title (please type)  O. Ligrida Registration Number  (F Splease affix seal)  Construction Cost Estimate:	727 South 14th Street  Mailing Address Consultant Leesburg Florida 34748  (904) 787-1414  (904) 787-1414  Telephone Number  This was a first the facility.  Issue Date: 1880 Dat	

A SOLID WASTE RESOURCE RECOVERY AND MANAGEMENT FACILITY
USED FOR AND SHREDDING WASTE AND RECOVERING MATERIALS
SUMTER COUNTY SOLID WASTE MANAGEMENT FACILITY
SUMTER COUNTY, FLORIDA
92-1100.00

#### SPECIFIC ATTACHMENT ITEMS

#### 1. FOUNDATION ANALYSIS

Standard Penetration Test Borings (ASTM D 1586) made in the area of the Solid Waste Recovery Facility Building indicated that the soil at the then proposed construction site were suitable for bearing the building. A copy of the boring logs and a map showing the locations of the borings are enclosed in Appendix H. The controlling factor in a building of this design is uplift. This means the foundations have two functions: provide bearing for the building loads and act as anchors during periods of high winds. The building is still standing.

## 2. EVIDENCE THAT FACILITY IS IN CONFORMANCE WITH LOCAL ZONING

The Sumter County Planning and Zoning Department was contacted regarding the zoning of the facility. The current zoning is INDUSTRIAL DISTRICT as is all adjacent property. Sumter County is currently in a transition period due to the recent adoption of <u>Sumter County</u>

Comprehensive Plan, 1991—2001, adopted by the Sumter County Board of County Commissioners on February 3, 1992. The facility will be permitted or authorized in the under the Comprehensive Plan, regardless the facility is vested. Map VII-19 titled Future Land Use, Sumter County, 2001 in the Comprehensive Plan, presented in Appendix I, shows and area encompassing the present facility and areas in Sections 22 and 23 slated for set

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aside for industrial uses. These areas are slated for expansion of the facility.

#### 3. FACILITY DESIGN

### a. Map or Aerial Photograph

A map was prepared and updated as part of this application process. The map showing land use and zoning within one (1) mile of the facility is presented in Appendix A.

### b. and c. Plot Plan

Maps showing plot plan and topographic information (information requested in 4.c.) based on a recent aerial photograph are presented in Appendix B and Appendix C. The map shows:

- (1) Dimensions and legal description of the site;
- (2) Fencing at the facility to restrict access;
- (3) Access roads;
- (4) Grades required for proper drainage; or proper drainage;
- (5) Special drainage devices;
- (6) Equipment facilities; mand enintaciaities; and and are all and
- (7) Other pertinent information. The map is enclosed in Appendix B. csed in Appendix B.

#### d. To Report to a confidence to the land and the second

Estimated population and area served

Estimated population The 1990 Census as reported in Florida Statistical Abstract 1991

showed that the population of Sumter County was 31,577. The medium (population) projection for Sumter County for the year 2000 was

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38,400. This information was reported in Florida Statistical Abstract 1991 with the source being given as University of Florida, Bureau of Economic and Business Research, Population Program, Population Studies, July 1991, Volume 24, No. 2. Bulletin No. 96. The medium projection is defined as the one that is believed most likely to provide an accurate forecast of future population. The high and low projections given with the above data were 44,600 and 33,000, respectively.

The facility services all of Sumter County.

The area of Sumter County was reported to be

561 square miles in Florida Statistical Abstract 1991.

(2) Anticipated type annual quantity and source of solid waste

Management Consultants to conduct a study of the composition of the occurry's municipal solid waste. The results of the study were submitted to the Sumter County Board of County Commissioners in a report titled <u>Sumter County</u> Waste Composition Study - January 1991

Table 3-5 of the above report identified the types and percentages of waste as follows:

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			*.
	1.	Newsprint	7.9%
	2.	Fine Paper	4.2%
	3.	Misc. Paper	9.0%
	4.	Corrugated	8.7%
	5.	Plastic Film	4.4%
	6.	Plastic (PET)	0.8%
	7.	Plastic (HDPE)	0.5%
	8.	Plastic (BOT)	· ·
	9.	Plastic (Other)	E-13.78%
	10.	Textiles	1.5%
	11.	Yard Waste	13.8%
	12.	Food Waste	5.4%
	13.	Wood Lumber	0.5%
	14.	Glass	4.1%
	15.	Rubber	0.4%
	16.	Steel Cans	3.1%
	17.	Other Ferrous A7.	±0.5%
	18.	Non-Ferrous (Aluminum) - COTTAND	==0.58#07+4+1
	19.	OBW Common profession observed the	0.0%
	20.	Construction 24 Calonathypus	_15.6% (Symmetry
	21.	Sweepings - WELL Sweepings	0.0%
	22.	Other	14.0%
Also	, foo	tnote 3 in Table 3-5 indicate	ed the
sour	ce of	waste as follows:	
	1.	Residential	54%
	2.	Commercial / Industrial	43%
	3.	Institutional	3%.

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Annual quantity of solid waste to be processed is expected to range from 11,000 tons to 22,000 tons.

- (3) Anticipated life of the site

  The anticipated life of the site is 50+ years.
- (4) Source and characteristics of cover material This does not apply for this facility.
- e. Groundwater Monitoring Plan

The groundwater is monitored at the Sumter County Landfill, a solid waste management facility of which the resource recovery facility is a part. A copy of a letter from State of Florida Department of Environmental Regulation dated March 22, 1985 pertaining to the establishment of the Ground Water Monitoring Plan at the Sumter County Landfill is presented in Appendix J. The letter listed the conditions that were to become a part of Permit No. S060-30674.

- 4. LANDFILL PERFORMANCE AND DESIGN STANDARDS TO THE TOTAL OF T
- 5. OPERATIONS PLAN OPERATIONS PLAN TO THE PROPERTY OF THE PROP
  - Mr. Garry Breeden, Director of Public Works

    222 East McCollom Avenue

    Bushnell, Florida 33513
  - b. Contingency operations

    The resource recovery facility is owned by Sumter

    County. The county can utilize equipment and

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personnel resources in the event of an emergency, such as fire or equipment failure.

Controlling the type of waste received at the site Other than lead batteries, and used motor oil, Sumter County does not accept hazardous waste. is recognized that items may be included in the waste stream that should not be processed through the facility. There is no feasible way to prevent introduction of these materials into the facility. After segregation, bins are provided for storage of items until proper disposal is accomplished. Sumter County will remove or not accept easily identifiable hazardous waste. Personnel are to read and become familiar with the Hazardous Information for Sumter County Landfill Operations Personnel supplement in Sumter County Solid Waste Facility Operational Guidelines (November 3, 1988). See Appendix G.

Incoming solid waste will be inspected at four points as follows:

- all incoming waste loads. The scale house attendant takes the following actions in the event that hazardous waste is identified:
  - a. Tells the person hauling the waste that the waste is hazardous and that

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it will not be accepted by the facility;

- b. Insures that the waste leaves the facility with the hauler.
- 2. Tipping floor personal are notified by the scale house attendant of the presence of hazardous waste. The notified personnel will observe the dumping of the load and insure that the hazardous waste is not dumped. Tipping floor personnel will insure that the hazardous waste is on the vehicle when it leaves the tipping floor and insure that the vehicle precedes directly to the scale house.
- 3. The scale house attendant will insure that the hazardous waste is on the vehicle when it leaves the site.
- 4. The attendant responsible for inspecting solid waste as it leaves the dumping pit on the conveyor belt will visually inspect for hazardous waste. If the source of the hazardous waste can be identified, responsible parties will be notified and required to remove the hazardous waste from the facility. If the source of the hazardous waste cannot be identified, it will be separated and placed in bins located inside the building. Sumter

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County will contract with a commercial enterprise to provide pickup and removal of any hazardous waste within 72 hours or transport the material to a hazardous waste disposal facility.

A tank located inside the facility is provided for the collection of used motor oil. Pickup of the used motor oil is done by National Oil Company, 105 South Alexander Street, Plant City, Florida 33566. Photograph No. 12 in Appendix F shows the tank used for used oil collection.

Lead batteries are palletized for collection by All American Recycling, P.O. Box 1556, Ocala, Florida 32678. Photograph No. 13 shows the lead batteries stored on pallets for pickup.

### d. Weighing or measuring incoming waste Provisions exist for measuring all solid waste delivered to the facility for processing. Weigh scales are provided. Measurement of all refuse

received at the facility provides data for planning, forecasting and a basis for establishment of

### e. Vehicle traffic control and unloading

fees.

Signs direct commercial and non-commercial patrons to the proper entrances to the facility. Photograph No. 4 shows the sign directing commercial hauler to the north end of the building. Also, a

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sign is shown directing haulers of construction debris, white goods and stumps to the proper location. Assistance is provided for unloading due to the ongoing inspections of the solid waste stream at the facility.

f. Method and sequence of filling waste This does not apply for this facility.

(2)

- g. Waste compaction and application of cover
  This does not apply for this facility.
- h. Operations of gas, leachate, and stormwater controls
  - (1) Control of gas

    The possible buildup of gases inside the resource recovery building is controlled by use of explosion-proof exhaust fans.
    - Control of leachate

      Fluids emanating from solid waste of water

      that has previously been in contact with the

      solid waste is by definition leachate. The

      tipping floor is sloped toward four recepta
      cles. Any leachate flowing into the pits is

      pumped into a concrete above ground storage

      tank located on the west side of the building.

      It is then transported by truck and dumped

      into the leachate treatment system.

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#### (3) Control of Stormwater

Stormwater is collected and directed to the stormwater retention pond located in the northeast corner of the 30 acres.

### i. Groundwater monitoring

Groundwater monitoring is accomplished in accordance with the approved Groundwater Monitoring Plan, dated June 14, 1984. The letter of approval from Florida Department of Environmental Regulation dated March 22, 1985 is presented in Appendix J.

#### j. All weather access roads

Roads that provide access between public roads or highways and the Sumter County Landfill are maintained so as to be passable in ordinary inclement weather. It is necessary that patrons of the Sumter County Landfill shall be able to enter the site and dispose of solid waste in all sorts of weather. The access road between C.R. 470 is paved with asphaltic concrete. See Photograph No. 1.

### k. Effective barrier

The Sumter County Landfill is surrounded by fencing, with entry being controlled by locking gates.

See the Site Plan enclosed in Appendix B.

 Signs indicating name of operating authority, traffic flow, hours of operation, and charges for disposal (if any)

A sign indicating the name of the facility and operator is located on C.R. 470 and is shown in

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Numerous instructional signs Photograph No. 2. pertaining to traffic flow are erected at the facility. Photograph No. 3 shows the signs visible to patrons approaching the scales. Photograph No. 4 shows signs visible on approach the building housing the resource recovery facility. Photograph No. 5 shows signs directing traffic back to the scales and out of the facility. Photograph No. 6 shows the signs on the locking gate to the facility indicating the hours of daily operation, indicating that the facility is closed on Sundays, That solid waste transported from outside Sumter County is not permitted and that Hazardous materials are accept-Photograph No. 7 shows the sign located at the scale house indicating the solid waste rate schedule.

#### m. Dust control methods

Dust is not expected to be a problem at the Sumter County Landfill. However, suitable measures will be taken whenever dust is a problem. Excessive dust slows operations, creates accident hazards and esthetic problems and may cause eye irritation or other injury and health problems to personnel. Dust is controlled by ventilation and water jets at the mills.

#### n. Litter control devices

Blowing litter is a problem; however, blowing litter is a problem when the entire solid waste

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management facility is considered. Blowing litter is controlled by fencing. The solid waste complex is regularly policed to minimize the scattering of litter.

Suitable measures will be taken to prevent and control fires. Fires endanger life and property. Smoke and odors create nuisances to surrounding property owners, cause air pollution, endanger disposal personnel and interfere with operations. An adequate supply of water under pressure is available in the facility. Suitable fire extinguishers, maintained in working order, are located at several strategic locations in and around the facility. The Lake Panasoffkee Fire Department (telephone (904) 793-2621) is located approximately three (3) miles distant.

#### p. Attendant

An attendant is on duty during operating hours at the scale house and is shown in Photograph No. 10. Tipping floor personnel are on duty during operating hours to help with unloading operations and inspect the solid waste stream.

### q. Communication facilities

Communication is provided at the facility by telephones, two-way radios and direct voice communication.

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r. Adequate in-service and reserve equipment

Adequate in-service equipment is located in the facility. Additional equipment is located at the solid waste management facility. Additional county owned equipment may be transported to the site in case of emergencies or breakdowns.

s. Safety devices on equipment to shield and protect operators

All personnel are equipped with safety devices such as:

- Hard hats;
- Steel-toed boots;
- 3. Safety eyeglasses or face shields; and
- 4. Hearing protection.

Additional safety equipment such as shields on the equipment, eye washing stations and first aid kits are provided in the facility.

6. WATER QUALITY STANDARDS

See leachate control and treatment

7. CLOSURE

This does not apply for this facility.

8. SOLID WASTE DISPOSAL FACILITY DATA FORM

This form is not required for a resource recovery facility operation permit application.

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- 9. SOLID WASTE-VOLUME REDUCTION AND RESOURCE RECOVERY
  FACILITY DATA FORM
  Completed Solid Waste-Volume Reduction and Resource
  Recovery Facility Data Form is page 9 of 10 of the
  application for permit.
- 10. CERTIFICATION BY APPLICANT AND ENGINEER OR PUBLIC OFFICER
  Certifications by Applicant and Engineer or Public
  Officer is page 10 of 10 of the application for permit.

### **SECTION 5**

## APPLICATION FOR WASTE TIRE GENERAL PERMIT

PREPARED FOR



BOARD OF COUNTY COMMISSIONERS DEPARTMENT OF PUBLIC WORKS 222 EAST McCOLLUM AVENUE BUSHNELL, FLORIDA 33513

### **PREPARED BY**



LEESBURG, FLORIDA

MARCH 30, 1992

92-1100.00



### Florida Department of Environmental Regulation

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

DER Form #_ 17-711	.900(2)
Form Tale Waste Ti	re General Permit Notification
Effective Date_Febr	uary 22, 1989
DER Approximon No.	
	(Find in by DER)

### Waste Tire General Permit Notification

Pursuant to Rule 17-711.801, Florida Administrative Code, the owners or operators of a qualifying waste tire collection center or small processing facility or mobile shredding, chopping, or cutting equipment shall submit the following information on this form to the Department.

1. Type and status of operation (check as many as apply):

Existing Proposed XX

Waste tire collection center Mobile shredding, chopping, or cutting equipment	
Small processing facility Other	
2. Waste tire collection centers and small processing facilities must complete the following facilities	y information:
a. Facility name: Sumter County Solid Waste Management Facility	The state of the s
b. Facility location: Approximately 1 mile east of I-75 on C.R. 470	
Street address (main entrance) West C.R. 470	
City Sumterville , County Sumter , Zip.	33585
Section 15 , Township 20S , Range 28°44'30"N	22E
Latitude 28°44'30"N Longitude 82°05'20"W	
c. Name of property owner: Sumter Co. Brd. of Co. Comm., Dept of Public	Works Andrews
d. Address of property owner: 222 East McCollum Avenue	
City Bushnell State Florida Zip	33513 ::
e. Telephone number of property owner: (-904)793-0240	
3. Name of operator: Same as owner	
4. Address of operator: Same as owner	
City Same Zip	Same
5. Telephone number of operator: ( Same Same	
6. Describe the general operation of the facility or equipment (attach additional sheets, if neces	ssary):Collects waste
tires from the citizens of Sumter Countyfor temporary storage and	
FDER permitted processing facilities.	
7. Describe how the waste tire storage and handling requirements of Rule 17-711.540, F.A.C. will be if necessary):	e met (attach additional sheets
See attaches pages	<u> </u>

		Horm 194 Tradition Co.	HOTEL TOTAL TROUBLE
	· ·	Effective DateFebruary	22. 1989
	•	DER Apolication No	(F#+00 in by DER)
8. Date of beginning operation: Contingent on per	mit		
Quantities of waste tires, expressed in tons (assume there)		s per cubic vard):	
Received per month: 2 tons (expected)	·	, per coere jaraj.	
Stored on site: 9.99 tons (To be			
Processed per month: 0 tons	roos than 10 tons)		
Describe how and where the waste tires, processed tires	and residuals from processing	will be disposed:	
Transported to processing facility for cor			
	iversion to tuel product	<del>s</del>	
		*	
List mobile shredding, chopping, and cutting equipment p	processing locations during prece	eding three month	is (Photocopies of
Form 17-711.900(3) for each processing site may be attack	hed in lieu of listing each site). At		
Name of facility or site: N/A		· · · · · · · · · · · · · · · · · · ·	
Site Location (main entrance)	<b></b>		
Street address:		·	· · · · · · · · · · · · · · · · · · ·
City Cour	nty	Zip	
Latitude	Longitude	<u> </u>	
Site property owner:		· ·	
Property owner address:			· · · · · · · · · · · · · · · · · · ·
Property owner phone number: ()		· :	
2. Required attachments:			
a. Letter of notification to fire protection authority			. :
b. General permit fee of \$25.00. (Rule 17-4, F.A.C.)			
3. Certification:			
To the best of my knowledge and belief a certify the info	rrnation provided in this notificati	ion is true, accurat	e. and correct.
	AU J	<i>U</i> <b>7</b> ,	y ny firita ny faritr'i Na Si
		u po	
OHN N. SPRINGSTOAD P.E. MA	e Who 5		30/92
Name of Authorized Agent	Signature of Authorized Agent	T O G	Date
1 7	V	F 1 4	

Mobile Equipment Operators mail completed form to:
Florida Department of Environmental Regulation
Solid Waste Section
Attention: Tires
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Collection Centers and Small Processing Facilities mail completed form to the appropriate district office listed on page 1.

### WASTE TIRE GENERAL PERMIT NOTIFICATION

AΤ

SUMTER COUNTY SOLID WASTE MANAGEMENT FACILITY
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- 7. Describe how waste tire storage and handling requirements of Rule 17-711.540 F.A.C. will be met.
  - Neither waste tires nor processed tires are stored indoors at the Sumter County Landfill. Should indoor storage become a reality waste tire and process tire storage shall be under conditions that meet those in <u>The Standard for Storage of Rubber Tires</u>, NFPA 231D-1986 edition, published by the National Fire Protection Association, Battery March Park, Quincy, Massachusetts.
  - 2. Waste tires and processed tires are stored outdoors at the Sumter Count Landfill. Outdoor storage complies with the following technical and operational standards:
    - (a) The waste tire site is not located within 200 feet of a water body, or in a wetland, transitional wetland or isolated wetland. The waste tire site is located on an impervious surface, sloped to direct stormwater away from the waste tire pile to stormwater retention areas.
    - (b) The size of the waste tire pile shall not approach the size constraints given in Rule 17-711.540(2)(b) as the restrictions of this Waste Tire General Permit Notification are expected to be met. Those to be restrictions are:
      - 1. No more than 1,000 waste tires shall be stored at the site; and
      - 2. All of the waste tires are removed from the site at least once each year.

# WASTE TIRE GENERAL PERMIT NOTIFICATION AT

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The waste tire collection site operated at the Sumter County Landfill should not fall under the processing limit of 500 waste tires per 30 day period as no attempt is made to recapture reusable byproducts from the waste tires or to cut, burn or otherwise alter whole tires so that they are no longer whole. See Rule 17-711.200 (14).

- (c) An unobstructed 50-foot wide fire lane shall be maintained around the waste tire pile.
- (d) Mosquitoes and rodents shall be controlled to protect the public health and welfare.
- (e) A sign located at the locking gate on the entrance road shows the days and hours of operation. A sign is located at the scale house at the entrance of the Sumter County Landfill showing the various rates. The signs are shown in Photographs No. 6 and No. 7 in Appendix F.
- (f) No operations involving the use of open flame shall be conducted within twenty-five (25) feet of the waste tire pile.
- (g) Any vehicle is callowed access to the waste tire pile at any time.
- (h) The Sumter County Landfill is surrounded by an effective barrier, restricting unauthorized dumping. Access is controlled by the use of locking gates.

### WASTE TIRE GENERAL PERMIT NOTIFICATION

### SUMTER COUNTY SOLID WASTE MANAGEMENT FACILITY SUMTER COUNTY, FLORIDA 92-1100.00

- (i) An attendant is on duty at the waste tire pile during unloading operations as inspection of solid waste stream is part of the operational guidelines at the Sumter County Landfill. See Photograph No. 10.
- (j) A concrete barrier is placed downhill from the waste tire pile providing adequate protection from liquid runoff from a potential fire from entering water bodies.
- (k) A copy of the letter sent to Lake Panasoffkee Fire District is enclosed in Appendix L. A fire safety survey was requested.
  - (1) Telephones are maintained at the Sumter County Landfill should contact with local fire prevention authorities be indicated.
  - (m) The waste tire pile is presently located on an asphaltic concrete surface; therefore, potentially flammable vegetation is not a concern.
  - (n) An emergency preparedness manual is available at the site. This manual includes the following elements:
    - 1. A list of names and telephone numbers of persons to be contacted in the event of fire, flood or other emergency;
    - 2. A list of emergency response equipment, locations and how equipment is to be used in the event of fire, flood or other emergency; and

### WASTE TIRE GENERAL PERMIT NOTIFICATION AT

### SUMTER COUNTY SOLID WASTE MANAGEMENT FACILITY SUMTER COUNTY, FLORIDA 92-1100.00

- 3. A description of the procedures that follow in the event of a fire, including procedures to contain and dispose of the oily material generated by the combustion of a large number of tires.
- (o) The Florida Department of Environmental Regulation shall be notified immediately in the event of a fire or other emergency if the potential of offsite effects exists. Within two weeks of any emergency involving potential off-site impact, a written report shall be submitted to the Florida Department of Environmental Regulation describing the origins of the emergency, the actions that were taken to deal with the emergency, the results of the actions that were taken and analysis of the success or failure of the actions.
- (p) Records shall be maintained of the quantity of waste tires and processed tires (road kill) received at the site, stored at the site and shipped from the site.

### **SECTION 6**

### APPLICATION FOR PERMIT TO MAINTAIN CLOSED CLASS I SANITARY LANDFILL

PREPARED FOR



BOARD OF COUNTY COMMISSIONERS DEPARTMENT OF PUBLIC WORKS 222 EAST McCOLLUM AVENUE BUSHNELL, FLORIDA 33513

### PREPARED BY



LEESBURG, FLORIDA

MARCH 30, 1992

92-1100.00

### STATE OF FLORIDA

### DEPARTMENT OF ENVIRONMENTAL REGULATION

TWIN TOWERS OFFICE BUILDING 2600 BLAIR STONE ROAD TALLAHASSEE, FLORIDA 32301-8241



BOB GRAHAM GOVERNOR

VICTORIA J. TSCHINKEL SECRETARY

### APPLICATION FOR PERHIT TO CLOSE A SOLID WASTE RESOURCE RECOVERY AND MANAGEMENT FACILITY

### GENERAL REQUIRÉHENTS

Solid Waste Resource Recovery and Management Facilities must be permitted pursuant to Section 403.707, Florida Statutes. Separate permit applications for each type of Facility, six copies each, should be submitted to the District office of the Department of Environmental Regulation. Complete appropriate sections of the application for the type of facility involved.

Applicant has the responsibility to provide copies of the application to appropriate city, county and/or regional pollution control agencies, established pursuant to Section 403.182, Florida Statutes. Applicant shall also submit the application through appropriate local planning agencies. Comments from any the these agencies shall be forwarded with the application to the Department.

The permit application shall include all information necessary to evaluate the proposed closure plan to insure the landfill will pose no significant threat to public health or the environment. All entries should be typed or printed in ink. If additional space is needed, separate, properly identified sheets of paper may be attached. All blanks shall be filled or marked as not applicable.

### Facility Type:

Senitary Lendfill: Volume Reduction:	
Class I, more than 50 cy or 20 tons   Composting   Compos	
Class II, less than 50 cy or 20 tons II Shredder	anah Kuraya Albina Andri Albinah Albina Mayara Mortila
Class III:	
trash/yard trash Resource Recovery: Energy Materials	este e Eneme
FACILITY NAME: Sumter Co. Solid Waste Management Fac. 44060C0092	andre Specification
FACILITY LOCATION (main entrance): Approx. 1 mile east of I=7.5 on C.R: 470	
s 15 ,T 20S ,R 22E /tatitude 28 60 44 30N tongitude 82 • 05 • 20W	C. Lordinania
section township range section in the section township range section township range section is section. Sumter Co. Brd. of Co. Comm.: Deptirof Pul	b Worksma
Street Address (include P. O. Box): 222 East McCollum Avenue, Bushnell, Sumter	r, FL=33513
Contact Person: Carry Breeden, Director of Public Works (904) 793-0240	•
Name phone number Authorized Agent/Consultant: John W. Springstead, P.E., Consultant	
Name phone number	
Mailing Address: 727 South 14th Street	
Leesburg, Lake, Florida 34748	• • • • • • • • • • • • • • • • • • •
city county zip Contact Person: John W. Springstead, P.E. (904) 787-1414	•
name phone nubmer Landowner (if different than applicant): Same as applicant	
Address of Landowner: Same as applicant	
street, P. O. Box city state zip	

### REQUIRED ATTACHEMENTS FOR CLOSURE OF A RESOURCE RECOVERY AND MANAGEMENT FACILITY

Per	wit applications and supporting information shall include the following $(17-7.030(2)$ :	
1.	A letter of transmittal to the Department; (17-7.030(3)(a), F.A.C.)	eness Check
2.	A table of contents listing the main sections of the application: $(17-7.030(3)(a), F.A.C.)$	· <del></del> · · · ·
3.	The permit fee specified in Florida Aministrative Code Rule 17-4.05 in check or money order payable to the Department: (17-7.030(3)(c), F.A.C.)	
4.	Six copies, at minimum, of the completed application form, all supporting data, and reports; (17-7.030(2), F.A.C.)	<u>.</u>
5.	Engineer certification; (17-7.030(3)(g), and 17-7.073(8), F.A.C.)	
6.	Engineer's letter of appointment if applicable; (17-7.030(3)(e), F.A.C.	_
7.	Closure plan as required in Florida Administrative Code Rule 17-7.073.  A copy of a Department letter of approval of the landfill groundwater monitoring plan, or a copy of the letter of transmittal of the groundwater monitoring plan to the Department may be included in the closure plan in lieu of the groundwater monitoring plan-document: The constraint plantage plantagement	
8.	Copy of any lease agreement, transfer of property agreement with right of coarty 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) and 17-7.075(3)(4), F.A.C.)	green-lit valid vidit
if	ATTACHMENT ITEMS  following information items must be included in the application or an explanation they are not applicable.  SURC PLAN REQUIREMENTS (17-7.073), F.A.C.)	given
1.	General Landfill Information Report (17-7.073(1), Florida Administrative Code)	
	a. Identification of the landfill(17-7.073(1)(a), F.A.C.) 中国民族生物	ZXX.A.C.
. •	b. Name, address, and phone number of primery contact person described (17-7.073(1)(b), F.A.C.)	<u>XX</u>
	c. Name of persons or consultants preparing closure plan (17-7.073(1)(c), F.A.C.)	XX
	d. Name of landfill property owners and landfill operator (30 and 17-7.073(1)(d), F.A.C.)	despectation is a second
. <del>-</del>	e. Locations of main entrance or operators office of the landfillation by: township, range, and section and latitude and longitude continued (17-7.073(1)(e), F.A.C.)	chercache Locat vid. In 2001 Investment
	f. Total acreage: of waste disposal area and landfill property waste commonwed (17-7.073(1)(f), F.A.C.)	XX
	g. Legal Description of landfill property (17-7.073(1)(g), F.A.C.)	xx
	h. History of landfill construction and operations (17-7.073(1)(h), F.A.C.)	xx
	<ol> <li>Identity of types of waste disposal of in completed landfill (17-7.073(1)(i), F.A.C.)</li> </ol>	xx
:		•

2.		nformation Report 073(2), F.A.C.)				
	e.	Tapagrpahy (17-7.073(2)(a), F.A.C.)	Completeness XX	Check		•
	b.	Hydrology (17-7.073(2)(b), F.A.C.)	<u>xx</u> _			•
	c.	Geology (17-7.073(2)(c), F.A.C.)	<u>XX</u>		1. 1.11.	
	d.	Hydrageolagy (17-7.073(2)(d), F.A.C.)	XX	·	. • • • · .	
	e.	Ground and surface water quality (17-7.073(2)(e), F.A.C.)	XX	-		• •
	f.	Land use information (17-7.073(2)(f), F.A.C.)	*** *** <u>XX</u>	•••		٠.
3.		Water Monitoring Plan Containing Site Specific Information 075(3) and 17-4.245(6)(d), F.A.C.)	XX			
4.		gration Investigation 073(4), F.A.C.)	<u>XX</u>	·.	•	
-5.		ment of the Effectiveness of Existing Landfill Design and Ope .073(5), F.A.C.)	ration			
	•				-	
	. <b>a.</b>	Effectiveness and results of groundwater investigation (17-7.073(5)(a), F.A.C.)	<u>XX</u>	مارند مارند المارند الماريد	~,	
	b,	Effects of surface water runoff, drainage patterns and exist water controls (17-7.073(5)(b), F.A.C. Lively (97-7.073(5)(b)	ing_stormXX	<u> </u>	Andrew Policie Andrews	Jaines X
	c.	Extent and effects of methane gas migration(17-7.073(5)(c),	F.A.C.) XX			
	, <b>d.</b>	Type and condition of existing cover and effectiveness as le control mechanism. (17-7.073(5)(d), F.A.C.)	achata XX			
	е.	Nature and characteristics of weater disposed of at the land (17-7.073(5)(e), F.A.C.)	fiii. <u>XX</u>	•		
6 <b>.</b> -		e Design Plan ( tursum Descript Final (12-) 2073(60, F.A.C.)		e <del>Special Colores</del> Section		er en
÷	a.	Phasing of site closing. (17-7.073(6)(a), F.A.C)	.;;;; <u>N/A</u>			and the second second
	ь.	Existing topography and proposed final grades. (17-7.073(6)(	b), F.A.C.) N/A	4 4 7 2 4 4 1		
· .	c.	Final cover installation plans. (17-7.073(6)(c), F.A.C.)	<u> N/A</u>	konika.		
	d.	Proposed method of leachate control. (17.7.073(6)(c), F.A.C.			المستعدية الإمارة والأرام وا	
	е.	Compliance with groundwater protection requirements of 17-4 and 17-4.246, F.A.C. (17-7.073(6)(e), 45-A.C. 7.7.7.7.07.00)	245 N/A	eringes Sentinges		
	r.	Proposed method of gas and odor control. (17-7.073(6)(f), E	.A.C.)	3/1005(a):	uni ya Kual	Later and V
	g.	Proposed method of stormwater control, (17-7.073(6)(g), E.A	.c.) - N/A	ULKSIIG	), fightifit	1
	h.	Proposed method of access control, (17-7,073(6)(h), F.A.C.)	ver 100 2 N/A	Maria Es	ASTOLE -	
	i.	Proposed final use of landfill property. (17-7.073(6)(i), F	.A.C.) N <u>/A</u>			

demography is the graph of the programmer Closure Operation Plan (17-7.073(7), F.A.C.) Completeness Check - 18410000 Describe actions which will be taken to close the landfill. (17-7.073(7)(a), F.A.C.) N/A Time schedule for completion of closure and long term care. (17-7.073(7)(b), F.A.C.) SQ APP CARD BOLDERS Proposed method of demonstrating financial responsibility for long term monitoring and maintenance. (17-7.073(7)(d), and 17-7.077(2)(i), F.A.C.)N/A<u> Linter a la de la Ajarta.</u> d. Equipment and personnel needs to complete clasure. (17-7.073(7)(e), F.A.C.) N/A REQUIREMENTS FOR LONG TERM CARE (17-7.075, F.A.C.) XX Establish Long Term Care Period From Date of Closing. (17-7.075(1) and 17-7.074(5), F.A.C.) Acquire Right of Access Agreement Between Operator and Property Owner for Closing and Long-Term Care. (17-7.075(3) and 17-7.077(2)(h), F.A.C.) the condition we are allowed by XX REQUIREMENTS FOR PROOF OF FINANCIAL RESPONSIBILITY (47-7-076) (6.A.C.) elleriere end også tot i detastes fins bligger Closure Cost Estimates randa <u>iz na i zinet i rist</u>anda N/A विवेद्यानिकास कि वेद्यानाकार स्वारी के वेद्यान गान्यव : (17-7.076(1), F.A.C.) 1. 14 Y 12 A A resident to the second of the The Level of the formula more to an increase the section of (C.A.). (6)(8)(570, T=51) ((G)(2)(1) \*210 36 81(0)(5) े १८६७ में प्रतिकार महिल्ला हुने कर स्थापन कार कार्यक्र के हैं किसी नवार कार के प्रतिकार में प्रतिकार के प्रति (12.4) % plontagety. firsty librate. Wiretarky goldenises. Training marting of training mentions (17-3.07366 12d) E. K.C. ). Tar. 6-11 10 Edgares toget mildestogs gestelt finds die endich 17-1. 265

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### INTRODUCTION

State of Florida Department of Environmental Regulation issued permit SF60-146475, July 1, 1988. This permit authorized work to close portions of the solid waste Class I sanitary landfill (approximately 30 acres), referred to as Sumter County Landfill, subject to specific attachments, near Interstate 75 and C.R, 470, north of Bushnell, Sumter County, Florida.

The closure of the Class I sanitary landfill was done in three

(3) phases. Certification of Phase II cell closure was issued

December 11, 1989. Certification of Phase III cell closure was issued May 24, 1990. Certification of Phase III cell closure

was issued December March 5, 1990.

### 1. GENERAL LANDFILL INFORMATION REPORT

- The closed portions Class I Sanitary Landfill located at the Sumter County Landfill a solid waste management facility with facility is approx- macriticy imately one (1) mile east Interstate Highway No. 275 cate High in Section 15, Township 20 South, Range 22 East, in Sumter County, Florida. Groundwater Management System identification number is 4060C00092 macris 4060C0009
- b. Name, address and phone number of primary contact

Mr. Garry Breeden, Director Sumter County Public Works Department 222 East McCollum Avenue Bushnell, Florida 33513 (904) 793-0240

- c. Closure plan prepared by Springstead Engineering, Inc. 727 South 14th Street Leesburg, Florida 43748 (904) 787-1414
- The landfill is owned, fee simple, by the Sumter County Board of County Commissioners.

  The landfill is operated by the Sumter County Board of County Commissioners and the American Recycling Company, Inc (Amerecycle).
- e. Locations of the landfill is
  Section 15, Township 20 South, Range 22 East,
  latitude 28° 44′ 30" North, longitude 82° 05′ 20"
  West.
- Waste disposal area = 19.84 acres area = 19.84 acres Landfill property = 30 acres property = 120 acres
- g. Legal Description of landfill property: Indianate Property
  Strong Set of Set of Set
  AND
  - E. 20 feet of N 417 55 2 feet eof on N of 7SE } 200 feet of N of SI AND
  - E. 50 feet of S 902.45 feet of NWA of SEA TO SEA TO SEA TO SEA
  - E. 50 feet of SW of SE

AND

All in Section 15, Township 20 South, Range 22 East, Sumter County, Florida.

- History of landfill construction and operation Landfilling was accomplished by the trench fill method of disposal. Trench work began on the eastern side of the property in June, 1975 and progressed westward. Cells were opened from the north to the south as needed. The trenches were opened to a width of approximately 35 feet with a width varying between 15 and 25 feet. consists of residential and commercial solid waste (see question "i", below", we High rising operations the rising were begun on the site in 1987 using on stockpiled on site and off site material as daily cover. landfill operations were continuous until closure.
- i. Identity of types of waste disposal of in completed landfill

Sumter County contracted with TIA Solid Waste Management Consultants to conduct a study of the uct a study of the uct a study of the uct a study composition of the county's municipal solid waste as the composition of the study were submitted to the submit Sumter County Board of County Commissioners in a commissioner titled Sumter County Waste Composition Study & County Commissioner Study

- January 1991

Table 3-5 of the above report identified the types

1.	Newsprint	7.9%
2.	Fine Paper	4.2%
3.	Misc. Paper	9.0%
4.	Corrugated	8.7%

and percentages of waste as follows:

- January 1991

5.	Plastic Film	4.4%
6.	Plastic (PET)	0.8%
7.	Plastic (HDPE)	0.5%
8.	Plastic (BOT)	1.4%
9.	Plastic (Other)	3.8%
10.	Textiles	1.5%
11.	Yard Waste	13.8%
12.	Food Waste	5.4%
13.	Wood Lumber	0.5%
14.	Glass	4.1%
15.	Rubber	0.4%
16.	Steel Cans	3.1%
17.	Other Ferrous	0.5%
18.	Non-Ferrous (Aluminum)	0.5%
19.	OBW	0.0%
20.	Construction	15.6%
21.	Sweepings	0.0%
22.	Other	14.0%

Also, footnote 3 in Table 3-5 indicated the source of waste as follows:

1.	Residential	54%
2.	Commercial / Industrial	43%
3.	Institutional	3%

### 2. AREA INFORMATION REPORT

### a. Topography

The topography is karstic as indicated by the numerous closed depressions near the landfill site and knowledge of the characteristics of the under-

lying limestone formations known at the landfill site.

### b. Hydrology

Report of Investigations No. 42, titled Hydrology of Green Swamp Area in Central Florida, (1966), prepared by the United States Geological Survey indicates that the groundwater supply in the area of the landfill originates with precipitation. The area around the landfill is karstic having a poorly developed surface adrainage systeme and acceptable are developed subsurface drainage system. Runoff from rainfall is directed to the numerous closed depressions. Some of the water ultimately enters the zone of saturation, recharging the aquifers. The groundwater moves within the aquifers under the influence of gravity toward areas of discharge such as streams, lakes, springs, wells and the oceans.

### c. Geology

Basically, the geology of the site may be described as a layer of clastic material (sand, silt and clay) overlying carbonates (limestone and dolo-massion mite). The thickness of the layer of clastic rayer material is less than fifty (50) feet. The lime stone is several thousand feet thick. The upper, more recently deposited limestones makeup the Floridan Aquifer. The thickness of the Floridan Aquifer probably nears one-thousand-five-hundred feet in this area. The limestone formations beneath the site listed from youngest to oldest are:

- 1. The Ocala Group of the Late Eocene Epoch dated approximately 38 million years old. The Ocala Group is made up of the Crystal River Formation and the Williston Formation. Some sources also include the Inglis Formation.
- 2. The Avon Park Limestone of the Middle Eocene Epoch dated approximately 41 to 48 million years old.
- The Oldsmar Limestone of the Middle and Early

  Eocene Epoch dated approximately 48 to 53
- 4. The Cedar Keys Formation of the Late Paleocene Epoch and the Early Eocene Epoch dated 53 to 60 million years old.

The Oldsmar Limestone and the Cedar Keys Formation are not considered to be part of the Floridan Aquifer. Some sources include the Lake City Limestone as a part of the Floridan Aquifer, placed between the Avon Park Limestone and the Oldsmar Limestone. References used in the Geology section are:

- 1. Column No. 30, Gulf Coast Region Chart, Corresponding lation of Stratigraphic Units of North America to the (COSUNA) Project American Association of Petroleum Geologist.
- Geologic Highway Map of the Southeastern Region, The American Association of Petroleum Geologist and the United States Geologic Survey.

Hydrology of Lake of Sumter County, Florida,
 United States Geological Survey.

### d. Hydrogeology

According to a report titled <u>Water-Resources Information for the Withlacoochee River Region</u>, <u>West-Central Florida</u>, (1981), published by the United States Geologic Survey, the site is located in the Western Valley Physiographic Area. Valleys are characterized by large lakes, flat terrain and relatively high runoff.

According to the <u>Soil Survey of Sumter County</u>, <u>Florida</u>, published by the United States Department of Agriculture Soil Conservation Service the soil types present at the subject are: Astatula fine sand, rolling, Lake fine sand, 0 to 5 percent slopes and Apopka fine sand, 0 to 5 percent slopes.

Astatula fine sand, rolling is moderately sloping to strongly sloping and is excessively and the day drained. It is onether sand hills in Sumterate the County.

Typically, the surface layer is dark gray fine sand about 3 inches thick underlain by pale brown and grayish brown fine sand to a depth of about 6 inches. The upper part of the underlying material, to a depth of about 27 inches, is light yellowish brown fine sand.

The middle part, to a depth of about 40 inches, is pale brown fine sand. The lower part to a depth of more than 80 inches is very pale brown fine sand.

This soil does not have a high water table within 80 inches of the surface. The available water capacity is very low. Permeability is very rapid. Natural fertility is very low.

Lake fine sand, 0 to 5 percent slopes is nearly level to gently sloping and is excessively drained. It is on ridges and knolls in the broad upland areas.

Typically, the surface layer is very dark grayish brown fine sand about 9 inches thick.

The upper part of the underlying material, to a depth of about 63 inches, brown, yellowish brown and strong brown fine sand. The lower sand part to a depth of more than 80 inches or more is brownish yellow fine sand.

This soil does not have a high water table within 80 inches of the surface. The available water capacity is low throughout. Permeability is rapid or very rapid. Natural fertility is low.

Apopka fine sand, 0 to 5 percent slopes is nearly level to gently sloping and is well drained. It is on the upland.

Typically, the surface layer is dark gray fine sand about 8 inches thick. The subsurface layer, to a depth of about 54 inches, is pale brown and very pale brown fine sand. The upper part of the subsoil to a depth of about 63 inches or more, is brownish yellow sandy loam. The lower part to a depth of about 80 inches is reddish yellow sandy loam.

This soil does not have a high water table within 72 inches of the surface in most years.

The available water capacity is low. Permeability is rapid in the surface and subsurface layers and is moderate in the subsoil. Natural fertility is low.

Water quality is a generalized expression which encompasses the concentrations and measurements of many constituents and physical characteristics associated with the chemistry of water. The report titled Water-Resources Information for the Withlacochee River Region, WestCentral Florida, (1981), published by the United States Geologic Survey, provided the following information for water in streams:

- (1) The chemical type of stream water during lowflow conditions is calcium and magnesium carbonate type;
- (2) The average dissolved-solids concentrations of stream water estimated from specific conductance data was 100 to 200 mg/L;
- (3) The maximum observed specific conductance for stream water was 250 to 500 micromhos per centimeter at 25°C;
- (4) The average total nitrogen concentration in stream water was less than 0.60 mg/L;
- (5) The maximum orthophosphate concentration in stream water was 0.2 to 0.5 mg/L;
- (6) The maximum color of stream water was 200 to 300 Platinum-Cobalt units;
- (7) The minimum pH of stream water was 6.0 to 7.0 pH units.

The water quality data given for Fenney Springs was:

Dissolved solids was 175 mg/L;

Specific Conductance was 230 \( \mu\) mhos/cm;

Hardness as CaCO<sub>3</sub> was 120 mg/L;

Chloride was 1.2 mg/L

### f. Land use information

The Sumter County Planning and Zoning Department was contacted regarding the zoning of the facility. The current zoning is INDUSTRIAL DISTRICT as is all adjacent property. Sumter County is currently in a

transition period due to the recent adoption of <u>Sumter County Comprehensive Plan, 1991 - 2001</u>, adopted by the Sumter County Board of County Commissioners on February 3, 1992. The facility will be permitted or authorized under the Comprehensive Plan, regardless the facility is vested. Map VII-19 titled Future Land Use, Sumter County, 2001 in the Comprehensive Plan, presented in Appendix I, shows and area encompassing the present facility and areas in Sections 22 and 23 slated for set aside for industrial uses. These areas are slated for expansion of the facility.

### 3. GROUNDWATER MONITORING PLAN

A copy of the Groundwater Monitoring Plan for the Sumter Count Landfill dated June 14, 1984 and Florida Department of Environmental Regulation's letter of approval, dated March 22, 1985 are enclosed and may be found in Appendix J.

### 4. GAS MIGRATION INVESTIGATION

The purpose of measuring gas generated at the Sumter County Landfill site was to determine if landfill gas was moving laterally, possibly causing a threat of explosion due to a buildup of gas in nearby structures or migration to off-site locations. A copy of Gas <u>Migration Investigation</u>, <u>Sumter County Landfill</u> is presented in Appendix K.

Porous soils formerly used for daily cover in the closed portions of the landfill should allow generated gas to

easily move vertically. These soils do not indicate the possibility of the creation of a trap or seal forcing the generated gas to move laterally.

The results of a field test for gas migration were given in a report dated February 2, 1988. The gas readings were reported negative; therefore, it was assumed that the landfill gas being generated by decomposing materials was being liberated vertically through porous soils and not migrating laterally, possibly to off-site locations.

5. ASSESSMENT OF THE EFFECTIVENESS OF EXISTING LANDFILL DESIGN AND OPERATION

This section applies to pre-closure of sanitary landfills; however, answers to some questions do have a bearing on the long-term care of a closed sanitary landfill.

a. Effectiveness and results of groundwater investigation

Quarterly monitoring reports have been submitted to the Florida Department of Environmental Regulation, Southwest District office in Tampa. No comments have been received concerning groundwater impact.

b. Effects of surface water runoff, drainage patterns and existing stormwater controls

Based on the highly porous soils found on site and perimeter stormwater collection, stormwater has not effected on site or off site properties, operations or area drainage patterns.

- c. Extent and effects of methane gas migration

  See Gas Migration Investigation, Sumter County

  Landfill, presented in Appendix K.
- d. Type and condition of existing cover and effectiveness as leachate control mechanism
  The soils found on site are Type A soils. Type A
  soils have rapid infiltration rates and low runoff
  potential. Type A soils are not suitable for
  leachate control. An impervious top liner was
  installed to control leachate infiltration into the
  buried solid waste.
- e. Nature and characteristics of waste disposed of at the landfill

Sumter County is primarily a small rural, agriculture based area generating a corresponding quantity of residential, commercial, agricultural and non-hazardous industrial and yard trash waste for a population in excess of 30,000. Bio-hazardous or potentially harmful waste are not accepted and are prohibited at this site.

### 6. CLOSURE DESIGN PLAN

- a. Phasing of site closingThis section does not apply to this application.
- Existing topography and proposed final grades
   This section does not apply to this application.
- c. Final cover installation plans
  This section does not apply to this application.
- d. Proposed method of leachate controlThis section does not apply to this application.

- e. Compliance with groundwater protection requirements
  This section does not apply to this application.
- f. Proposed method of gas and odor control

  This section does not apply to this application.
- g. Proposed method of stormwater control
  This section does not apply to this application.
- h. Proposed method of access controlThis section does not apply to this application.
- i. Proposed final use of landfill propertyThis section does not apply to this application.

### 7. CLOSURE OPERATION PLAN

- a. Describe actions which will be taken to close the landfill
  - This section does not apply to this application.
- b. Time schedule for completion of closure and long term care
  - This section does not apply to this application.
- c. Proposed method for demonstrating financial responsibility for long term monitoring and maintenance
  This section does not apply to this application.
- d. Equipment and personnel needs to complete closure.

  This section does not apply to this application.

### REQUIREMENTS FOR LONG TERM CARE

1. Establish Long Term Care Period From Date of Closing
The closed Class I Sanitary Landfill is on a site being
used as a modern solid waste management system. Monitoring of groundwater is required for several of the
opertions being performed.

2. Acquire Right of Access Agreement Between Operator and Property Owner for Closing and Long-Term Care. Sumter County Board of County Commissioners are the operators and owners of the Sumter County Landfill and the closed Class I Sanitary Landfill; therefore no right of access agreement is necessary.