

OPERATION PLAN

for the

HARDEE COUNTY SANITARY LANDFILL

Airport Road

HARDEE COUNTY, FLORIDA

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FILE

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SOUTH WEST DISTRICT
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TABLE OF CONTENTS

Introduction	Page
A. Designation of Responsible Persons	2
B. Contingency Operations	2
C. Controlling the Type of Waste Received at the Site	2
D. Measuring Waste	3
E. Vehicle Traffic Control and Unloading	3
F. Method and Sequence of Filling Waste	4
G. Waste Compaction and Application of Cover	7
H. Gas, Leachate and Stormwater Control	7
I. Ground Water Monitoring	8
J. All Weather Access Road	8
K. Effective Barrier	9
L. Signs	9
M. Dust Control	9
N. Litter Control	9
O. Fire Protection and Fire Fighting Facilities	10
P. Attendant	10
Q. Communication Facilities	10
R. In Service and Reserve Equipment	11
S. Safety Devices	11

Introduction

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

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

A. Designation of Responsible Persons

A Solid Waste Superintendent has been assigned by the Board of County Commissioners over the operation of the Landfill. Commissioner Maurice Henderson was appointed by the Board of County Commissioners to be the liaison Commissioner to the Landfill. A senior operator is designated as being in charge of the site. The Solid Waste Superintendent directs the senior operator where the waste is to be placed.

B. Contingency Operations

The Landfill has one dozer, one end loader, one dragline and a diesel pump. Should any one piece of equipment be disabled, the Landfill could continue to operate. In addition, equipment from the Hardee County Public Works Road and Bridge Section could be loaned to the Solid Waste Division for use during an emergency.

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

C. Controlling the Type of Waste Received at the Site

The Landfill specifically excludes hazardous waste. The first line of defense against this waste is the Gate Guards. Each hauler must stop and sign their name certifying that the materials hauled are not hazardous material. The Gate Attendant also makes a visual check of the load and records the approximate cubic yards of refuse. The second line of defense is the senior operator at the dump site. If a suspicious material has already been dumped, it is kept separate from other wastes and the Solid Waste Superintendent is called to the site to determine its suitability for the Landfill. The ultimate decision on whether to accept or reject the material is made by the Solid Waste Superintendent.

The Landfill will not accept closed or sealed containers; all drums, tanks, and cans must have one end open and have been flushed. The Landfill will not accept septic tank sludge, used oil, paint thinners, contaminated gasoline or like liquids; human waste from hospitals, doctor's offices or clinics or personal homes as a result of surgery or contamination. The Landfill will not accept any materials which the hauler can not identify the composition of the material nor supply certification that the material is non-hazardous waste. The Landfill will not accept solid waste generated from outside the borders of Hardee County without prior written approval from the Board of County Commissioners or their designee.

All Landfill employees are trained to look for liquid waste, drums, waste in sealed containers, unusual odors or fumes. If the material is suspicious to the gate guards, it will not be permitted to enter the Landfill until the Solid Waste Superintendent comes to the site and identifies the material and determines its suitability for Landfilling

D. Measuring Waste

All vehicles taking waste to the Landfill are required to stop at the Gate House to sign in. The gate attendant makes a visual check of the amount and estimates the cubic yards of refuse.

E. Vehicle Traffic Control and Unloading

Signs clearly indicate the way to the working face. The operator at the site directs the driver where to unload. The face is approximately 100 feet wide and is organized to allow smooth flow of traffic for vehicles arriving, unloading, and departing. The on site roads are adequate for two-way traffic, and speed limits are clearly marked.

Scavenging of materials at the Landfill is strictly prohibited.

F. Method and Sequence of Filling Waste

The site is operated as a vertical high rise and excavated below grade cells. The soil from the below grade cells is used for cover for the high rise cells. By staggered operation of the fill sequences, materials are readily available for cover. County surveyors are used to provide spot elevations to measure the Landfill's progress. The below grade cells are excavated to approximately 12 to 15 feet. The above grade cells (high rise) are filled to a height of 10 feet. See attached maps for sequence of filling.

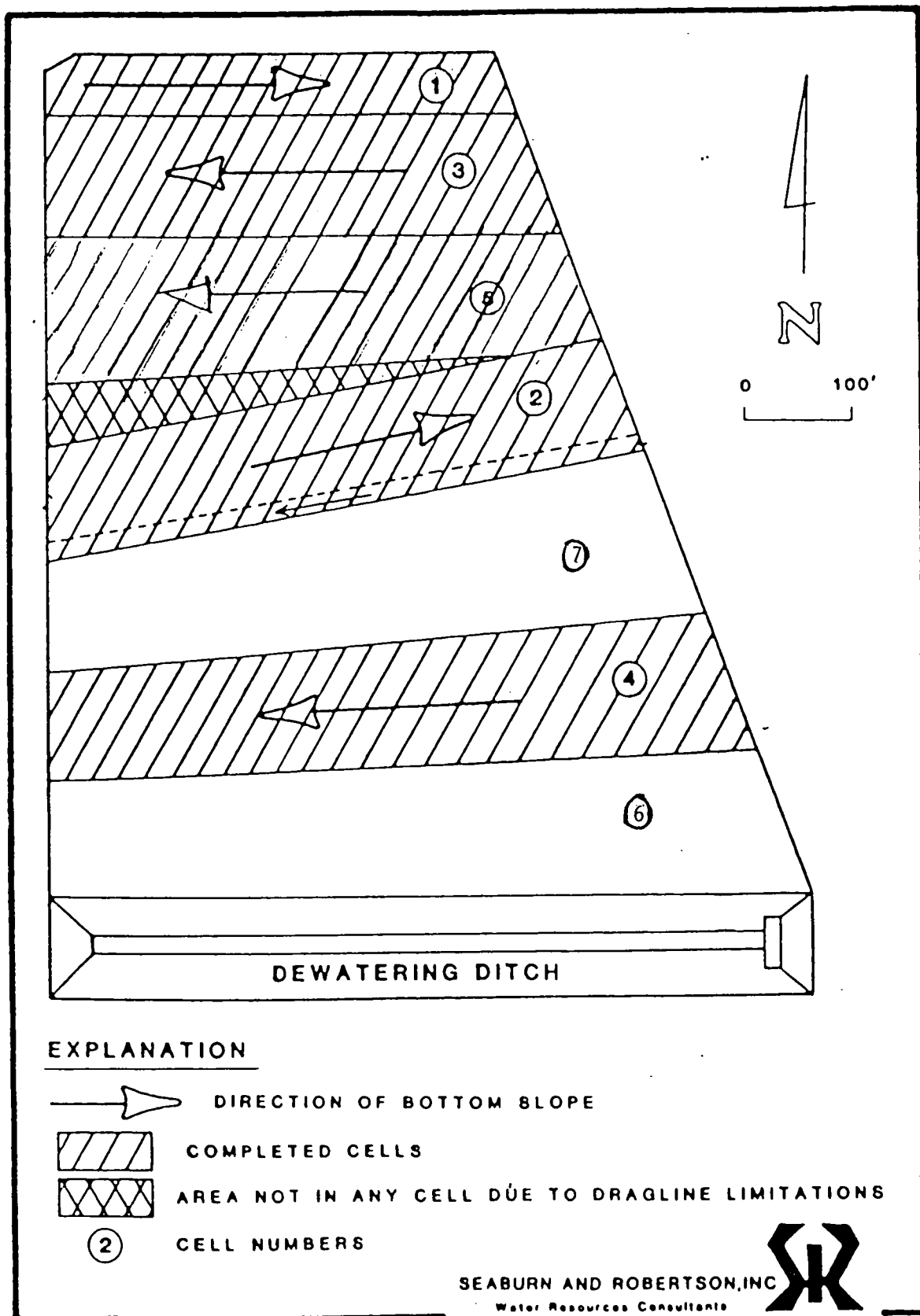


FIGURE 1.- SITE PLAN FOR HARDEE COUNTY LANDFILL - PHASE 1

MAP UPDATED - MARCH, 1987

J. R. PRESTRIDGE

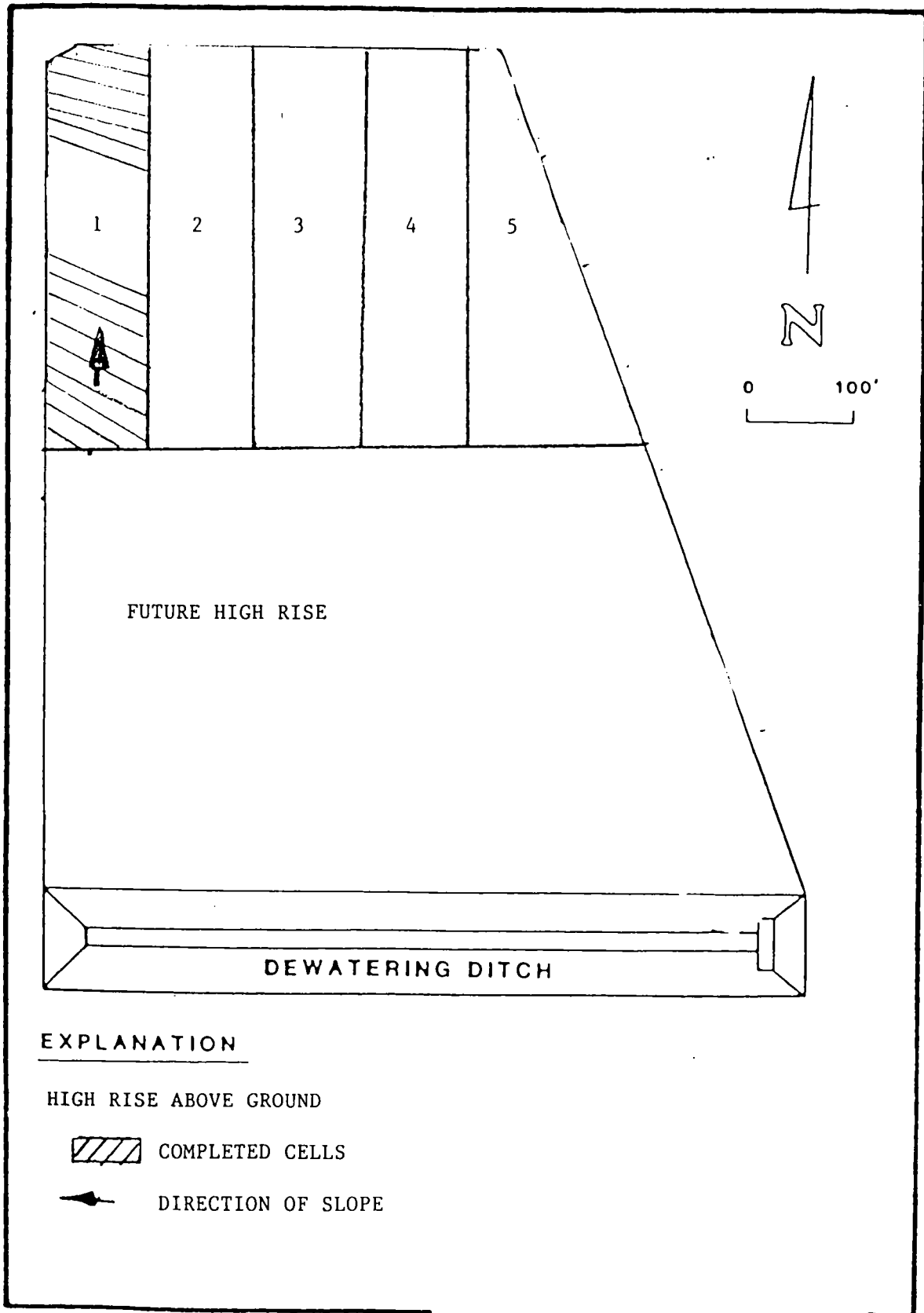


FIGURE 1.- SITE PLAN FOR HARDEE COUNTY LANDFILL - PHASE 1

MARCH, 1987

J. R. PRESTRIDGE

G. Waste Compaction and Application of Cover

The incoming waste is deposited at the working face. The working face is approximately 100 feet wide. The refuse is then spread in thin layers approximately one foot thick and then compacted with the dozer.

Cover material is taken from the excavated materials of the below grade cells and placed at the working face by the end loader. At the end of each day of operation, a cover of six inches is placed over the compacted trash and spread with the dozer.

H. Gas, Leachate and Stormwater Control

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

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

There is no formal method of gas control at the site. The gas presently escapes through the cover material and vents into the atmosphere. The Landfill is surrounded by stormwater ditches and a synthetic liner on three sides. This should prevent any gas from migrating from the site. The under drains should also act as a method of gas control.

Leachate generated at the Landfill will be collected by under drains installed on the North, East, and West perimeter, adjacent to the side wall

liner. The Leachate collected will be deposited in the dewatering ditch on the South end of the Landfill site. The leachate collected will then be sprayed on a 5.4 acre site south of the dewatering ditch.

Spray Field Operation:

The pumps should be operated one day a week, preferable near the beginning of the week.

The number of hours to pump should be based on the irrigation needs of the cover crop. Until actual operating date is collected, the enclosed table may be used as a guide. It should be pointed out that the actual rainfall crop growth, and leachate production in any given month could be substantially different. The numbers in the table are not a very precise basis of operation. If the spray field appears to be saturated, the number of hours of irrigation for that month should be cut back. It is expected that water levels in the dewatering ditch will fluctuate. They should not be allowed to go above 77.4 elevation and by July or August should be lowered to 74.2. The low level cut off for the pump is anticipated to be set at 72.0.

I. Ground Water Monitoring

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

J. All Weather Access Roads

The onsite roads are shelled base roads with drainage swales on both sides.

The roads are slightly elevated above surrounding grades and are crowned to promote drainage. The roads are routinely graded by the Hardee County Public Works Department.

K. Effective Barrier

The entire property is surrounded by a fence. Vehicular traffic must pass the gate house to get to the Landfill. When the Landfill is not in operation, the gates are kept locked.

L. Signs

A large sign on State Road 636 indicates the landfill is run by Hardee County and the days and hours of operation. There are many other signs throughout the Landfill to indicate traffic flow, types of waste that are not acceptable speed limits, and under ground liner signs, etc.

The manholes will be marked with a warning sign stating " This Manhole Contains Toxic & Explosive Gases. Do Not Enter With Out Proper Ventilation".

M. Dust Control

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

N. Litter Control

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

O. Fire Protection and Fire Fighting Facilities

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

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

P. Attendant

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

Q. Communication Facilities

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

R. In Service and Reserve Equipment

The Landfill has one dozer, one end loader, one dragline (one cubic yard). Should any one piece of equipment be disabled, the Landfill could continue to operate. In an emergency, the Hardee County Road and Bridge Department also has equipment which could be loaned to the Division of Solid Waste for use during an emergency.

S. Safety Devices

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

PROJECTED PUMP RUNNING TIMES FOR IRRIGATION

	Monthly Irrigation Requirement In Inches	Monthly Irrigation In Gallons	Pump Operating Hours per Month	Water Level in Ditch
JANUARY	1.04	152,500	6.9	
FEBRUARY	0.73	107,000	4.8	
MARCH	1.71	250,800	11.3	77.4
APRIL	3.61	529,400	23.8	
MAY	5.85	857,900	38.6	
JUNE	3.55	520,600	23.5	
JULY	3.37	494,200	22.3	74.2
AUGUST	3.01	441,400	19.9	
SEPTEMBER	2.11	309,400	13.9	
OCTOBER	3.01	441,400	19.9	
NOVEMBER	2.63	385,700	17.4	
DECEMBER	1.23	180,400	8.1	
TOTAL	31.85	4,670,700	210.4	